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# Amazon Elastic Compute Cloud

## CLI Reference

API Version 2013-10-01



## Amazon Elastic Compute Cloud: CLI Reference

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# Welcome

This is the *Amazon Elastic Compute Cloud Command Line Reference*. It provides descriptions, syntax, and usage examples for each of the commands for Amazon EC2 and Amazon Virtual Private Cloud (Amazon VPC). The commands wrap the Amazon EC2 API actions.

How Do I?	Relevant Topics
Get set up to use the command line tools	<a href="#">Getting Set Up (p. 2)</a>
Get the alphabetical list of commands	<a href="#">Commands (CLI Tools) (p. 13)</a> <a href="#">Commands (AMI Tools) (p. 665)</a>
Get the list of the common options for the commands	<a href="#">Common Options for CLI Tools (p. 663)</a> <a href="#">Common Options for AMI Tools (p. 692)</a>
Get descriptions of the error codes	<a href="#">Error Codes</a> (in the <i>Amazon Elastic Compute Cloud API Reference</i> )
Get the list of regions and endpoints	<a href="#">Regions and Endpoints</a>

If you prefer, you can use one of these command line interfaces instead:

## AWS Command Line Interface (CLI)

Provides commands for a broad set of AWS products, and is supported on Windows, Mac, and Linux/UNIX. To get started, see [AWS Command Line Interface User Guide](#). For more information about the commands for Amazon EC2, see [ec2](#).

## AWS Tools for Windows PowerShell

Provides commands for a broad set of AWS products for those who script in the PowerShell environment. To get started, see [AWS Tools for Windows PowerShell User Guide](#).

# Getting Set Up

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Before you can start using the Amazon EC2 command line interface (CLI) tools, you must download them, configure them, and ensure that Java is installed and configured.

For more information about setting up the Amazon EC2 CLI tools, see the following documentation:

- [Setting Up the Amazon EC2 Command Line Interface Tools on Linux/UNIX](#) (in the *Amazon Elastic Compute Cloud User Guide*)
- [Installing the Amazon EC2 Command Line Interface Tools on Windows](#) (in the *Amazon Elastic Compute Cloud Microsoft Windows Guide*)

# Launching an Instance Using the Amazon EC2 CLI

---

Let's use the Amazon EC2 command line interface (CLI) tools to launch an instance.

Before you can launch your instance, you must create a key pair and a security group. Your key pair is required to decrypt login information for when you connect to your instance. A security group acts as a firewall that controls the traffic allowed to reach your instance. You must add a rule to your security group that enables you to access your instance. For more information, see [Amazon EC2 Key Pairs](#) and [Amazon EC2 Security Groups](#) in the *Amazon Elastic Compute Cloud User Guide*.

## To get started using an instance

1. [Create a key pair \(p. 3\)](#)
2. [Create a security group \(p. 4\)](#)
3. [Add a rule to your security group \(p. 5\)](#)
4. [Launch an instance \(p. 5\)](#)
5. [Connect to your instance \(p. 6\)](#)

## Creating a Key Pair

To create a key pair named `my-key-pair`, use the [ec2-create-keypair \(p. 112\)](#) command as follows:

```
ec2-create-keypair my-key-pair
```

The following is example output:

```
KEYPAIR my-key-pair 1f:51:ae:28:bf:89:e9:d8:1f:25:5d:37:2d:7d:b8:ca:9f:f5:f1:6f
---- BEGIN RSA PRIVATE KEY ----
MIICiTCCAfICCCQD6m7oRw0uXOjANBgkqhkiG9w0BAQUFADCBiDELMAkGA1UEBhMC
VVMxCzAJBgNVBAGTAldBMRAdDgYDVQQHEwdTZWF0dGx1MQ8wDQYDVQQKEwZBbWF6
b24xFDASBgNVBAstC01BTSBDb25zb2x1MRIwEAYDVQQDEw1UZXR0Q21sYWMxH2Ad
BgkqhkiG9w0BCQEWEG5vb25lQGFTYXpvi5jb20wHhcNMTEwNDI1MjA0NTIxWhcN
```



```
MTIwNDI0MjA0NTIxWjCBiDELMAkGA1UEBhMCVVMxZzAJBgNVBAgTaldBMRAwDgYD
VQQHEwdTZWF0dGx1MQ8wDQYDVQQKEwZBbWF6b24xZDASBgNVBAStC01BTSBDb25z
b2x1MRIwEAYDVQQDEw1UZXXN0Q21sYWMxHZAAdBgkqhkiG9w0BCQEWEG5vb251QGft
YXpvi5jb20wgZ8wDQYJKoZIhvcNAQEBBQADgY0AMIGJAoGBAMaK0dn+a4GmWIWJ
21uUSfwfEvySWtC2XADZ4nB+BLYgVIk60CpiwsZ3G93vUEIO3IyNoH/f0wYK8m9T
rDHudUZg3qX4waLG5M43q7Wgc/MbQITxOUSQv7c7ugFFDzQGBzZswY6786m86gpE
Ibb3OhjZnzcVQAaRHhd1QWIMm2nrAgMBAAEwDQYJKoZIhvcNAQEFBQADgYEAtCu4
nUhVVxYUntned9+h8Mg9q6q+auNKyExzyLwaxlAoo7TJHidbtS4J5iNmZgXL0Fkb
FFBjvSfpJI1J00zbhNYS5f6GuoEDmFJl0ZxBHjJnyp378OD8uTs7fLvJx79LjSTb
NYiytVbZPQUQ5Yaxu2jXnimvw3rrszlaEXAMPLE
-----END RSA PRIVATE KEY-----
```

Make a note of the fingerprint for the private key of the key pair displayed on the first line. You can use the fingerprint to verify that your private key is a correct match with the public key stored in AWS. You do this by comparing the fingerprint for the private key with the fingerprint of the public key. They should be identical.

Create a file named `my-key-pair.pem` and paste the entire key, including the following lines:

```
"-----BEGIN RSA PRIVATE KEY-----"
"-----END RSA PRIVATE KEY-----"
```

Save the file with ASCII encoding so that it can be read by an SSH client when you connect to your instance.

If you're using an SSH client on a Linux computer to connect to your instance, use the following command to set the permissions of your private key file so that only you can read it.

```
chmod 400 my-key-pair.pem
```

## Creating a Security Group

To create a security group, use the `ec2-create-group` (p. 96) command.

You create a security group for either EC2-Classic or EC2-VPC. For more information, see [Supported Platforms](#) in the *Amazon Elastic Compute Cloud User Guide*.

### EC2-Classic

The following command creates a security group named `my-security-group` for EC2-Classic:

```
ec2-create-group my-security-group -d "My security group"
```

The following is example output:

```
GROUP    sg-xxxxxxxx    my-security-group    My security group
```

### EC2-VPC

The following command creates a security group named `my-security-group` for EC2-VPC:

```
ec2-create-group my-security-group -d "My security group" -c vpc-xxxxxxxx
```

The following is example output:

```
GROUP    sg-xxxxxxxx  my-security-group  My security group
```

## Adding a Rule to Your Security Group

If you're launching a Windows instance, you must add a rule to `my-security-group` to allow inbound traffic on TCP port 3389 (RDP). If you're launching a Linux instance, you must add a rule to allow inbound traffic on TCP port 22 (SSH). Use the [ec2-authorize \(p. 51\)](#) command to add a rule to your security group. One of the required parameters of this command is the public IP address of your computer, in CIDR notation.

### Tip

You can get the public IP address of your local computer using a service. For example, we provide the following service: <http://checkip.amazonaws.com/>. To locate another service that provides your IP address, use the search phrase "what is my IP address". If you are connecting through an ISP or from behind your firewall without a static IP address, you need to find out the range of IP addresses used by client computers.

## EC2-Classic

The following command adds a rule for RDP to a security group for EC2-Classic:

```
ec2-authorize my-security-group -p 3389 -s 203.0.113.25/32
```

The following command adds a rule for SSH to a security group for EC2-Classic:

```
ec2-authorize my-security-group -p 22 -s 203.0.113.25/32
```

## EC2-VPC

The following command adds a rule for RDP to a security group for EC2-VPC:

```
ec2-authorize sg-xxxxxxxx -P tcp -p 3389 -s 203.0.113.25/32
```

The following command adds a rule for SSH to a security group for EC2-VPC:

```
ec2-authorize sg-xxxxxxxx -P tcp -p 22 -s 203.0.113.25/32
```

## Launching an Instance

To launch an Amazon EC2 instance, you need the key pair and security group that you created. You also need to select an Amazon Machine Image (AMI) and note its AMI ID (`ami-xxxxxxxx`). You can find an AMI using the Amazon EC2 console, or you can go to [Amazon Machine Images \(AMI\)](#).

Use the `ec2-run-instances` (p. 628) command to launch an instance into either EC2-Classic or EC2-VPC.

## EC2-Classic

The following command launches a `t1.micro` instance in EC2-Classic:

```
ec2-run-instances ami-xxxxxxxx -t t1.micro -k my-key-pair -g my-security-group
```

The following is example output for EC2-Classic:

```
RESERVATION    r-xxxxxxxx    111122223333    my-security-group
INSTANCE      i-xxxxxxxx    ami-xxxxxxxx    pending my-key-pair    0
              t1.micro
2013-09-25T22:25:43+0000    us-east-1d    windows    monitoring-disabled
              ebs
hvm          xen          sg-xxxxxxxx    default false
```

## EC2-VPC

The following command launches a `t1.micro` instance in EC2-VPC:

```
ec2-run-instances ami-xxxxxxxx -t t1.micro -s subnet-xxxxxxxx -k my-key-pair -g sg-xxxxxxxx
```

The following is example output for EC2-VPC:

```
RESERVATION    r-xxxxxxxx    111122223333
INSTANCE      i-xxxxxxxx    ami-xxxxxxxx    ip-10-0-1-153.ec2.internal
              pending
my-key-pair    0            t1.micro        2013-09-25T22:25:43+0000
              us-east-1d    windows
monitoring-disabled    10-0-1-153    vpc-xxxxxxxx    ebs          hvm
              xen
sg-xxxxxxxx    default false
NIC          eni-xxxxxxxx    subnet-xxxxxxxx    vpc-xxxxxxxx    111122223333    in-use
10.0.1.153    ip-10-0-1-153.ec2.internal    true
NICATTACHMENT    eni-attach-xxxxxxxx    0            attaching    2013-09-
25T16:10:56-0800    true
GROUP        sg-xxxxxxxx    my-security-group
PRIVATEIPADDRESS    10.0.1.153    ip-10-0-1-153.ec2.internal
```

## Connecting to Your Instance

Initially, your instance is in the `pending` state, but will be in the `running` state in a few minutes. Then, you can view updated information about the instance using the `ec2-describe-instances` (p. 311) command, such as the updated state, the root volume, the public and private IP addresses, and the public DNS name.

While your instance is running, you can connect to it and use it just as you'd use a computer sitting in front of you. For more information, see [Connect to Your Amazon EC2 Instance](#) in the *Amazon Elastic Compute Cloud User Guide*.

# List of Commands by Function

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## Amazon DevPay

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# Commands (CLI Tools)

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# ec2-allocate-address

## Description

Acquires an Elastic IP address.

An Elastic IP address is for use either in the EC2-Classic platform or in a VPC. For more information, see [Elastic IP Addresses](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2allocaddr**.

## Syntax

**ec2-allocate-address** [-d *domain*]

## Options

Name	Description
-d, --domain <i>domain</i>	Set to <code>vpc</code> to allocate the address for use with instances in a VPC. Type: String Valid values: <code>vpc</code> Default: The address is for use in EC2-Classic. Required: Conditional Condition: Required when allocating the address for use in a VPC. Example: <code>-d vpc</code>

## Common Options

Option	Description
--region <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
-U, --url <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
-O, --aws-access-key <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ADDRESS identifier
- The Elastic IP address for use with your account
- Indicates whether this Elastic IP address is for use with instances in EC2-Classic (`standard`) or instances in a VPC (`vpc`).
- [EC2-VPC] The allocation ID (an ID that Amazon EC2 assigns to represent the allocation of an address for use in a VPC)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command allocates an Elastic IP address for use with instances in EC2-Classic.

```
PROMPT> ec2-allocate-address  
ADDRESS 192.0.2.1      standard
```

### Example 2

This example command allocates an Elastic IP address for use with instances in a VPC.

```
PROMPT> ec2-allocate-address -d vpc  
ADDRESS 198.51.100.1    vpc      eipalloc-5723d13e
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [AllocateAddress](#)



## Related Commands

- [ec2-associate-address](#) (p. 25)
- [ec2-describe-addresses](#) (p. 250)
- [ec2-disassociate-address](#) (p. 474)
- [ec2-release-address](#) (p. 569)

# ec2-assign-private-ip-addresses

## Description

Assigns one or more secondary private IP addresses to the specified network interface. You can specify one or more specific secondary IP addresses, or you can specify the number of secondary IP addresses to be automatically assigned within the subnet's CIDR block range. The number of secondary IP addresses that you can assign to an instance varies by instance type. For information about instance types, see [Instance Types](#) in the *Amazon Elastic Compute Cloud User Guide*. For more information about Elastic IP addresses, see [Elastic IP Addresses](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2apip**.

## Syntax

```
ec2-assign-private-ip-addresses --network-interface interface_id
{[--secondary-private-ip-address-count count] | [--secondary-private-ip-address
ip_address]}
```

## Options

Name	Description
<code>-n, --network-interface <i>interface_id</i></code>	The ID of the network interface. Type: String Default: None Required: Yes Example: <code>-n eni-bc7299d4</code>
<code>--secondary-private-ip-address <i>ip_address</i></code>	The IP address to be assigned as a secondary private IP address to the network interface. This option can be used multiple times to assign multiple secondary IP addresses to the network interface.  If you don't specify an IP address, Amazon EC2 selects an IP address within the subnet range. Type: String Default: None Required: Conditional Condition: You can't specify this parameter when also specifying <code>--secondary-private-ip-address-count</code> . Example: <code>--secondary-private-ip-address 10.0.2.18</code> <code>--secondary-private-ip-address 10.0.2.28</code>
<code>--secondary-private-ip-address-count <i>count</i></code>	The number of secondary IP addresses to assign to the network interface. Type: Integer Default: None Required: Conditional Condition: You can't specify this parameter when also specifying <code>--secondary-private-ip-address</code> . Example: <code>--secondary-private-ip-address-count 2</code>

Name	Description
<code>--allow-reassignment</code>	Specifies whether to allow an IP address that is already assigned to another network interface to be reassigned to the specified network interface. Type: Boolean Default: <code>false</code> Required: No

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token <i>delegation_token</i></code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout <i>timeout</i></code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout <i>timeout</i></code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.

Option	Description
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns true if the operation succeeds or an error if the operation does not succeed.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command assigns two secondary private IP addresses (10.0.0.118 and 10.0.0.119) to the network interface `eni-c08a35a9`.

```
PROMPT> ec2-assign-private-ip-addresses --network-interface eni-c08a35a9
--secondary-private-ip-address 10.0.0.118 --secondary-private-ip-address
10.0.0.119
RETURN true
```

## Example 2

This example command assigns two secondary private IP addresses to the network interface `eni-c08a35a9`. Amazon EC2 automatically assigns these IP addresses from the available IP addresses within the subnet's CIDR block range.

```
PROMPT> ec2-assign-private-ip-addresses --network-interface eni-c08a35a9
--secondary-private-ip-address-count 2
RETURN true
```

## Example 3

This example command assigns a secondary private IP address of `10.0.0.82` to the network interface `eni-73e05a1`.

```
PROMPT> ec2-assign-private-ip-addresses --network-interface eni-73e05a1
--secondary-private-ip-address 10.0.0.82
RETURN true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [AssignPrivateIpAddresses](#)

### Related Commands

- [ec2-unassign-private-ip-addresses](#) (p. 651)

## ec2-associate-address

### Description

Associates an Elastic IP address with an instance or a network interface. For more information about Elastic IP addresses, see [Elastic IP Addresses](#) in the *Amazon Elastic Compute Cloud User Guide*.

[EC2-Classic, default VPC] If the Elastic IP address is already associated with a different instance, it is disassociated from that instance and associated with the specified instance.

[EC2-VPC] If you do not specify a private IP address, the Elastic IP address is associated with the primary IP address. If the Elastic IP address is already associated with a different instance or a network interface, you get an error unless you specify the `--allow-reassociation` option.

This is an idempotent operation. If you perform the operation more than once, Amazon EC2 doesn't return an error.

The short version of this command is `ec2assocaddr`.

### Syntax

```
ec2-associate-address [-i instance_id | -n interface_id] [ip_address | -a allocation_id] [--private-ip-address private_ip_address] [--allow-reassociation]
```

### Options

Name	Description
<code>-i, --instance <i>instance_id</i></code>	The ID of the instance. Type: String Default: None Required: Conditional Condition: Required for EC2-Classic. For EC2-VPC, you can specify either an instance ID or a network interface ID, but not both. Example: <code>-i i-43a4412a</code>
<code><i>ip_address</i></code>	The Elastic IP address. Type: String Default: None Required: Conditional Condition: Required for EC2-Classic. Example: <code>192.0.2.1</code>
<code>-a, --allocation-id <i>allocation_id</i></code>	[EC2-VPC] The allocation ID. Type: String Default: None Required: Conditional Condition: Required for EC2-VPC. Example: <code>-a eipalloc-5723d13e</code>

Name	Description
<code>-n, --network-interface</code> <i>interface_id</i>	[EC2-VPC] The ID of the network interface. Association fails when specifying an instance ID unless exactly one interface is attached. Type: String Default: None Required: Conditional Condition: If the instance has more than one network interface, you must specify a network interface ID. Example: <code>-n eni-bc7299d4</code>
<code>-p, --private-ip-address</code> <i>private_ip_address</i>	[EC2-VPC] The primary or secondary private IP address to associate with the Elastic IP address. If no private IP address is specified, the Elastic IP address is associated with the primary private IP address. Type: String Default: None Required: No Example: <code>-p 10.0.0.45</code>
<code>--allow-reassociation</code>	[EC2-VPC] Allows an Elastic IP address that is already associated with an instance or a network interface to be re-associated with the specified instance or network interface. Otherwise, the operation fails. Type: Boolean Default: The operation fails if the address is already associated. Required: No Example: <code>--allow-reassociation</code>

## Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key</code> <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>



Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ADDRESS identifier
- The Elastic IP address
- The instance or network interface to which the Elastic IP address is associated
- [EC2-VPC] The allocation ID
- [EC2-VPC] If specified, the private IP address associated with the Elastic IP address

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command associates an Elastic IP address with an instance in EC2-Classic.

```
PROMPT> ec2-associate-address 203.0.113.0 -i i-43a4412a
ADDRESS 203.0.113.0 i-43a4412a
```

### Example 2

This example command associates an Elastic IP address with an instance in a VPC.

```
PROMPT> ec2-associate-address -a eipalloc-5723d13e -i i-4fd2431a
ADDRESS i-43a4412a eipalloc-5723d13e eipassoc-fc5ca095
```

### Example 3

This example command associates an Elastic IP address with a network interface.

```
PROMPT> ec2-associate-address -a eipalloc-4a4c6c23 -n eni-1001fa78
ADDRESS i-1ae1ae78 eipalloc-4a4c6c23 eipassoc-1841907a
```

### Example 4

This example command associates an Elastic IP address with a private IP address for the specified instance in a VPC. The `allow-reassociation` option allows the Elastic IP address to be associated with the specified instance even if it's already associated with a different instance or a network interface.

```
PROMPT> ec2-associate-address -a eipalloc-bf66dcd6 -i i-ba6a0dee -p 10.0.0.85
--allow-reassociation

ADDRESS          i-ba6a0dee          eipalloc-bf66dcd6          eipassoc-9c66dcf5
 10.0.0.85
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [AssociateAddress](#)

### Related Commands

- [ec2-allocate-address](#) (p. 17)
- [ec2-describe-addresses](#) (p. 250)
- [ec2-disassociate-address](#) (p. 474)
- [ec2-release-address](#) (p. 569)

# ec2-associate-dhcp-options

## Description

Associates a set of DHCP options (that you've previously created) with the specified VPC, or associates no DHCP options with the VPC.

After you associate the options with the VPC, any existing instances and all new instances that you launch in that VPC use the options. You don't need to restart or relaunch the instances. They automatically pick up the changes within a few hours, depending on how frequently the instance renews its DHCP lease. You can explicitly renew the lease using the operating system on the instance.

For more information, see [DHCP Options Sets](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2assocdopt**.

## Syntax

```
ec2-associate-dhcp-options { dhcp_options_id | default } -c vpc_id
```

## Options

Name	Description
<i>dhcp_options_id</i>	The ID of the DHCP options set, or <code>default</code> to associate no DHCP options with the VPC. Type: String Default: None Required: Yes Example: <code>dopt-7a8b9c2d</code>
<code>-c vpc_id</code>	The ID of the VPC. Type: String Default: None Required: Yes Example: <code>-c vpc-1a2b3c4d</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.

**Amazon Elastic Compute Cloud CLI Reference**  
**Common Options**

Option	Description
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the EC2_PRIVATE_KEY environment variable. Example: -K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the EC2_CERT environment variable. Example: -C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem

## Output

This command returns a table that contains the following information:

- The DHCPOPTIONS identifier
- The ID of the DHCP options (or `default` if no DHCP options are associated with the VPC)
- The ID of the VPC

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command associates the DHCP options set with the ID `dopt-7a8b9c2d` with the VPC with the ID `vpc-1a2b3c4d`.

```
PROMPT> ec2-associate-dhcp-options dopt-7a8b9c2d -c vpc-1a2b3c4d
DHCOPTIONS dopt-7a8b9c2d vpc-1a2b3c4d
```

### Example 2

This example command changes the VPC with the ID `vpc-1a2b3c4d` to have no associated DHCP options set.

```
PROMPT> ec2-associate-dhcp-options default -c vpc-1a2b3c4d
DHCOPTIONS default vpc-1a2b3c4d
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [AssociateDhcpOptions](#)

### Related Commands

- [ec2-create-dhcp-options](#) (p. 92)
- [ec2-delete-dhcp-options](#) (p. 180)
- [ec2-describe-dhcp-options](#) (p. 272)

## ec2-associate-route-table

### Description

Associates a subnet with a route table. The subnet and route table must be in the same VPC. This association causes traffic originating from the subnet to be routed according to the routes in the route table. The action returns an association ID, which you need in order to disassociate the route table from the subnet later. A route table can be associated with multiple subnets.

For more information about route tables, see [Route Tables](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2assocrtb**.

### Syntax

```
ec2-associate-route-table route_table_id -s subnet_id
```

### Options

Name	Description
<i>route_table_id</i>	The ID of the route table. Type: String Default: None Required: Yes Example: rtb-6aa34603
-s <i>subnet_id</i>	The ID of the subnet. Type: String Default: None Required: Yes Example: -s subnet-92a045fb

### Common Options

Option	Description
--region <i>region</i>	The region. Overrides the default region, the region specified by the EC2_URL environment variable, and the URL specified by the -U option. Default: The region specified by the EC2_URL environment variable, or us-east-1 if EC2_URL isn't set.
-U, --url <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the EC2_URL environment variable, or https://ec2.amazonaws.com if EC2_URL isn't set.

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).



Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ASSOCIATION identifier
- The route table association ID (needed to disassociate the route table)
- The ID of the route table

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command associates the route-table with the ID `rtb-6aa34603` with the subnet with the ID `subnet-92a045fb`.

```
PROMPT> ec2-associate-route-table rtb-6aa34603 -s subnet-92a045fb
ASSOCIATION rtbassoc-61a34608 rtb-6aa34603 subnet-92a045fb
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [AssociateRouteTable](#)

### Related Commands

- [ec2-create-route-table](#) (p. 140)
- [ec2-delete-route-table](#) (p. 212)
- [ec2-describe-route-tables](#) (p. 380)
- [ec2-disassociate-route-table](#) (p. 478)

- [ec2-replace-route-table-association](#) (p. 584)

# ec2-attach-internet-gateway

## Description

Attaches an Internet gateway to a VPC, enabling connectivity between the Internet and the VPC. For more information about your VPC and Internet gateway, see the [Amazon Virtual Private Cloud User Guide](#).

The short version of this command is **ec2attigw**.

## Syntax

`ec2-attach-internet-gateway internet_gateway_id -c vpc_id`

## Options

Name	Description
<i>internet_gateway_id</i>	The ID of the Internet gateway. Type: String Default: None Required: Yes Example: igw-c3a643aa
<code>-c, --vpc <i>vpc_id</i></code>	The ID of the VPC. Type: String Default: None Required: Yes Example: -c vpc-d9a045b0

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXLIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ATTACHMENT identifier
- The ID of the VPC
- The attachment state (`attaching`, `attached`, `detached`, `detaching`, `error`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command attaches the Internet gateway with the ID `igw-eaad4883` to the VPC with the ID `vpc-11ad4878`.

```
PROMPT> ec2-attach-internet-gateway igw-eaad4883 -c vpc-11ad4878
ATTACHMENT      vpc-11ad4878    attaching
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [AttachInternetGateway](#)

### Related Commands

- [ec2-create-internet-gateway](#) (p. 109)
- [ec2-delete-internet-gateway](#) (p. 190)
- [ec2-describe-internet-gateways](#) (p. 324)
- [ec2-detach-internet-gateway](#) (p. 458)

# ec2-attach-network-interface

## Description

Attaches a network interface to an instance.

The short version of this command is **ec2attnic**.

## Syntax

```
ec2-attach-network-interface interface_id -i, --instance instance_id -d,  
--device-index device_index
```

## Options

Name	Description
<i>interface_id</i>	The ID of the network interface. Type: String Default: None Required: Yes Example: eni-b35da6da
-i, --instance <i>instance_id</i>	The ID of the instance. Type: String Default: None Required: Yes Example: -i i-640a3c17
-d, --device-index <i>device_index</i>	The index of the device for the network interface attachment. Type: String Default: None Required: Yes Example: -d 1

## Common Options

Option	Description
--region <i>region</i>	The region. Overrides the default region, the region specified by the EC2_URL environment variable, and the URL specified by the -U option. Default: The region specified by the EC2_URL environment variable, or us-east-1 if EC2_URL isn't set.
-U, --url <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the EC2_URL environment variable, or https://ec2.amazonaws.com if EC2_URL isn't set.

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns the ID of the network interface attachment.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command attaches the specified network interface to the specified instance.

```
PROMPT> ec2-attach-network-interface eni-b35da6da -i i-640a3c17 -d 1
eni-attach-dd3fdab4
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [AttachNetworkInterface](#)

### Related Commands

- [ec2-create-network-interface](#) (p. 124)
- [ec2-delete-network-interface](#) (p. 203)
- [ec2-describe-network-interface-attribute](#) (p. 337)
- [ec2-describe-network-interfaces](#) (p. 341)
- [ec2-detach-network-interface](#) (p. 461)
- [ec2-modify-network-interface-attribute](#) (p. 532)
- [ec2-reset-network-interface-attribute](#) (p. 611)



# ec2-attach-volume

## Description

Attaches an Amazon EBS volume to a running or stopped instance and exposes it to the instance with the specified device name.

For a list of supported device names, see [Attaching the Volume to an Instance](#). Any device names that aren't reserved for instance store volumes can be used for Amazon EBS volumes. For more information, see [Amazon EC2 Instance Store](#) in the *Amazon Elastic Compute Cloud User Guide*.

### Note

If a volume has an AWS Marketplace product code:

- The volume can only be attached to the root device of a stopped instance.
- You must be subscribed to the AWS Marketplace code that is on the volume.
- The configuration (instance type, operating system) of the instance must support that specific AWS Marketplace code. For example, you cannot take a volume from a Windows instance and attach it to a Linux instance.
- AWS Marketplace product codes are copied from the volume to the instance.

For an overview of the AWS Marketplace, see <https://aws.amazon.com/marketplace/help/200900000>. For details on how to use the AWS Marketplace, see [AWS Marketplace](#).

The short version of this command is **ec2attvol**.

## Syntax

```
ec2-attach-volume volume_id --instance instance_id --device device
```

## Options

Name	Description
<code>volume_id</code>	The ID of the Amazon EBS volume. The volume and instance must be within the same Availability Zone. Type: String Default: None Required: Yes Example: vol-4d826724
<code>-i, --instance instance_id</code>	The ID of the instance. Type: String Default: None Required: Yes Example: -i i-6058a509

Name	Description
<code>-d, --device device</code>	The device name to expose to the instance (for example, <code>/dev/sdh</code> or <code>xvdh</code> ). Type: String Default: None Required: Yes Example: <code>-d /dev/sdf</code> (for Linux/UNIX) or <code>-d xvdf</code> (for Windows)

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.

Option	Description
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ATTACHMENT identifier
- The ID of the volume
- The ID of the instance
- The device name
- The attachment state of the volume (`attaching` | `attached` | `detaching` | `detached`)
- The time stamp when the attachment initiated
- Whether the volume is set to delete on termination (`true` or `false`)

Amazon EC2 command line tools display errors using `stderr`.

## Examples

### Example

This example command attaches the volume with the ID `vol-1a2b3c4d` to the instance with the ID `i-1a2b3c4d` and exposes it as `/dev/sdh`.

```
PROMPT> ec2-attach-volume vol-1a2b3c4d -i i-1a2b3c4d -d /dev/sdh  
ATTACHMENT vol-1a2b3c4d i-1a2b3c4d /dev/sdh attaching YYYY-MM-DDTHH:MM:SS+0000
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [AttachVolume](#)

### Related Commands

- [ec2-create-volume](#) (p. 158)
- [ec2-delete-volume](#) (p. 228)
- [ec2-describe-volumes](#) (p. 432)
- [ec2-detach-volume](#) (p. 464)

## ec2-attach-vpn-gateway

### Description

Attaches a virtual private gateway to a VPC. For more information, see [Adding a Hardware Virtual Private Gateway to Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2attvgw**.

### Syntax

```
ec2-attach-vpn-gateway vpn_gateway_id -c vpc_id
```

### Options

Name	Description
<i>vpn_gateway_id</i>	The ID of the virtual private gateway. Type: String Default: None Required: Yes Example: vgw-8db04f81
<code>-c</code> , <code>--vpc</code> <i>vpc_id</i>	The ID of the VPC. Type: String Default: None Required: Yes Example: -c vpc-1a2b3c4d

### Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U</code> , <code>--url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O</code> , <code>--aws-access-key</code> <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The VGWATTACHMENT identifier
- The ID of the attached VPC
- The state of the attachment (`attaching`, `attached`, `detaching`, `detached`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command attaches the virtual private gateway with the ID `vgw-8db04f81` to the VPC with the ID `vpc-1a2b3c4d`.

```
PROMPT> ec2-attach-vpn-gateway vgw-8db04f81 -c vpc-1a2b3c4d
VGWATTACHMENT vpc-1a2b3c4d attaching
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [AttachVpnGateway](#)

### Related Commands

- [ec2-create-vpn-gateway](#) (p. 174)
- [ec2-describe-vpn-gateways](#) (p. 453)
- [ec2-detach-vpn-gateway](#) (p. 468)
- [ec2-create-vpc](#) (p. 162)
- [ec2-create-vpn-connection](#) (p. 166)

# ec2-authorize

## Description

Adds a rule to a security group.

### Important

EC2-Classic: You can have up to 100 rules per group.

EC2-VPC: You can have up to 50 rules per group (covering both ingress and egress).

Rule changes are propagated to affected instances as quickly as possible. However, a small delay might occur.

A security group is for use with instances either in the EC2-Classic platform or in a specific VPC. EC2-Classic doesn't support rules for egress traffic. For more information, see [Amazon EC2 Security Groups](#) in the *Amazon Elastic Compute Cloud User Guide* and [Security Groups for Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

EC2-Classic: This command either gives one or more CIDR IP address ranges permission to access a security group for your account, or it gives one or more security groups (called the *source groups*) permission to access a security group for your account. A source group can be for your own AWS account, or another.

EC2-VPC: For ingress rules, this command either gives one or more CIDR IP address ranges permission to access a security group for your VPC, or it gives one or more other security groups (called the *source groups*) permission to access a security group for your VPC. The groups must all be in the same VPC. For egress rules, this command permits instances in the VPC to send traffic to either one or more destination CIDR IP address ranges, or to one or more destination security groups for the same VPC.

The short version of this command is **ec2auth**.

## Syntax

```
ec2-authorize group [--egress] [-P protocol] (-p port_range | -t icmp_type_code)
[-u source_or_dest_group_owner ...] [-o source_or_dest_group ...] [-s
source_or_dest_cidr ...]
```

## Options

Name	Description
<i>group</i>	[EC2-Classic, default VPC] The name or ID of the security group.  [Nondefault VPC] The ID of the security group. Type: String Default: None Required: Yes Example: webserv
--egress	[EC2-VPC] Designates the rule as an egress rule (controls traffic leaving the VPC). Default: If this option is not specified, the rule applies to ingress traffic for the specified security group.



Name	Description
<p><code>-P, --protocol <i>protocol</i></code></p>	<p>The IP protocol name or number (see <a href="#">Protocol Numbers</a>). Security groups for EC2-Classic can have rules only for TCP, UDP, and ICMP, whereas security groups for EC2-VPC can have rules assigned to any protocol number.</p> <p>When you use <a href="#">ec2-describe-group</a> (p. 280), the protocol value returned is the number. Exception: For TCP, UDP, and ICMP, the value returned is the name (<code>tcp</code>, <code>udp</code>, or <code>icmp</code>).</p> <p>Type: String</p> <p>Valid values for EC2-Classic: <code>tcp</code>   <code>udp</code>   <code>icmp</code> or the corresponding protocol number (6   17   1).</p> <p>Default for EC2-Classic: Defaults to TCP if source CIDR is specified (or implied by default), or all three protocols (TCP, UDP, and ICMP) if source group is specified (to ensure backwards compatibility).</p> <p>Valid values for EC2-VPC: <code>tcp</code>   <code>udp</code>   <code>icmp</code> or any protocol number (see <a href="#">Protocol Numbers</a>). Use <code>all</code> to specify all protocols.</p> <p>Required: Required for EC2-VPC.</p> <p>Example: <code>-P udp</code></p>
<p><code>-p <i>port_range</i></code></p>	<p>For TCP or UDP: The range of ports to allow.</p> <p>Type: String</p> <p>Valid values: A single integer or a range (min-max). You can specify <code>-1</code> to mean all ports (for example, port range 0-65535).</p> <p>Default: None</p> <p>Required: Required if specifying <code>tcp</code> or <code>udp</code> (or the equivalent number) for the protocol.</p> <p>Example: <code>-p 80-84</code></p>
<p><code>-t <i>icmp_type_code</i></code></p>	<p>For ICMP: The ICMP type and code. Use the format <code>type:code</code>, where both are integers. You can use <code>-1</code> for the type or code to mean all types or all codes.</p> <p>Type: String</p> <p>Default: None</p> <p>Required: Required if specifying <code>icmp</code> (or the equivalent number) for the protocol.</p> <p>Example: <code>-t -1:-1</code></p>
<p><code>-o <i>source_or_dest_group</i></code></p>	<p>The source security group (for ingress rules), or destination security group (for egress rules). You can't use this option when using the <code>-s</code> option.</p> <p>[Nondefault VPC] You must specify the ID of the group (for example, <code>sg-1a2b3c4d</code>) instead of its name.</p> <p>Type: String</p> <p>Default: None</p> <p>Required: No</p> <p>Example: <code>-o headoffice</code></p>

Name	Description
<code>-u, source_or_dest_group_owner</code>	[EC2-Classic] The ID of the AWS account that owns the source security group, if it's not the current AWS account. Type: String Default: None Required: No Example: <code>-u 111122223333</code>
<code>-s, --cidr source_or_dest_cidr</code>	The CIDR IP address range. You can't use this option when using the <code>-o</code> option. Type: String Default: <code>0.0.0.0/0</code> Constraints: A valid CIDR IP address range. Required: No Example: <code>-s 205.192.8.45/24</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>

Option	Description
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key <i>ec2_private_key</i></code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert <i>ec2_cert</i></code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

A line containing the group information. Some of these fields may be blank.

- The GROUP identifier

- The ID of the security group
- The AWS account ID of the owner of the security group
- The name of the security group
- A description of the security group
- [EC2-VPC] The ID of the VPC the group belongs to

One of each of the following lines for each permission defined by the group:

- The PERMISSION identifier
- The AWS account ID of the owner of the security group
- The name of the security group granting permission
- The type of rule. Currently, only `ALLAWS` rules are supported
- The protocol to allow (for example, `tcp` and `udp`)
- The start of port range
- The end of port range
- `FROM` for an ingress rule or `TO` for an egress rule
- The source type (for ingress rules) or destination type (for egress rules)
- The source (for ingress rules) or destination (for egress rules)
- [USER only] The name of the source or destination entity
- [USER only] The ID of the security group
- Whether the rule is ingress rule or an egress rule

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example 1

This example command grants TCP port 80 access from the `192.0.2.0/24` address range to the security group for EC2-Classic named `webserv`.

```
PROMPT> ec2-authorize webserv -P tcp -p 80 -s 192.0.2.0/24
GROUP webserv
PERMISSION webserv ALLAWS tcp 80 80 FROM CIDR 192.0.2.0/24 ingress
```

### Example 2

This example command grants TCP port 80 access from the source group for EC2-Classic named `OtherAccountGroup` (in AWS account `111122223333`) to the security group for EC2-Classic named `webserv`.

```
PROMPT> ec2-authorize webserv -P tcp -p 80 -u 111122223333 -o OtherAccountGroup
GROUP webserv
PERMISSION webserv ALLAWS tcp 80 80 FROM USER 111122223333 NAME OtherAccountGroup
ingress
```

## Example 3

This example command grants TCP port 80 access from the 192.0.2.0/24 address range to the security group for EC2-VPC with the ID `sg-1a2b3c4d`.

```
PROMPT> ec2-authorize sg-1a2b3c4d -P tcp -p 80 -s 192.0.2.0/24
GROUP      sg-1a2b3c4d
PERMISSION  ALLOWS tcp 80 80 FROM CIDR 192.0.2.0/24 ingress
```

## Example 4

This example command grants egress access from the security group for EC2-VPC with the ID `sg-1a2b3c4d` to the destination security group with the ID `sg-2a2b3c4d` on TCP port 1433.

```
PROMPT> ec2-authorize --egress sg-1a2b3c4d -P tcp -p 1433 -o sg-2a2b3c4d
GROUP      sg-1a2b3c4d
PERMISSION  ALLOWS tcp 1433 1433 TO USER ID sg-2a2b3c4d egress
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Actions

- [AuthorizeSecurityGroupEgress](#)
- [AuthorizeSecurityGroupIngress](#)

### Related Commands

- [ec2-create-group](#) (p. 96)
- [ec2-delete-group](#) (p. 186)
- [ec2-describe-group](#) (p. 280)
- [ec2-revoke](#) (p. 622)

## ec2-bundle-instance

### Description

Bundles an Amazon instance store-backed Windows instance.

During bundling, only the root device volume (C:\) is bundled. Data on other instance store volumes is not preserved.

**Note**

This procedure is not applicable for Linux/UNIX instances or Windows instances that are backed by Amazon EBS.

The short version of this command is **ec2bundle**.

### Syntax

```
ec2-bundle-instance instance_id -b bucket -p prefix -o access_key_id {-c policy
| -s policy_signature | -w owner_secret_access_key} [-x hours] [--location
location] [-B]
```

### Options

Name	Description
<i>instance_id</i>	The ID of the instance to bundle. Type: String Default: None Required: Yes Example: i-5e73d509
-b, --bucket <i>bucket</i>	The bucket in which to store the AMI. You can specify a bucket that you already own or a new bucket that Amazon EC2 creates on your behalf. If you specify a bucket that belongs to someone else, Amazon EC2 returns an error. Type: String Default: None Required: Yes Example: -b myawsbucket
-p, --prefix <i>prefix</i>	The prefix for the image component names being stored in Amazon S3. Type: String Default: None Required: Yes Example: -p winami
-o, --owner-akid <i>access_key_id</i>	The access key ID of the owner of the Amazon S3 bucket. Type: String Default: None Required: Yes Example: -o AKIAIOSFODNN7EXAMPLE

Name	Description
<p><code>-c, --policy <i>policy</i></code></p>	<p>A Base64-encoded Amazon S3 upload policy that gives Amazon EC2 permission to upload items into Amazon S3 on the user's behalf. If you provide this parameter, you must also provide either a policy signature, or your secret access key, so we can create a policy signature for you (the secret access key is not passed to Amazon EC2). If you do not provide this parameter, the <code>--owner-sak</code> is required, and we generate an upload policy and policy signature for you automatically. For more information about upload policies and how to sign them, see the sections about policy construction and signatures in the <a href="#">Amazon Simple Storage Service Developer Guide</a>.</p> <p>Type: String Default: None Required: Conditional Example: <code>-c upload-policy</code></p>
<p><code>-s, --policy-signature <i>policy_signature</i></code></p>	<p>The Base-64 encoded signature for the S3 upload policy. If you provide <code>--policy</code> but not <code>--policy-signature</code>, then <code>--owner-sak</code> is required, and we use it to automatically sign the policy.</p> <p>Type: String Default: None Required: Conditional Example: <code>-s upload-policy</code></p>
<p><code>-w, --owner-sak <i>owner_secret_access_key</i></code></p>	<p>The AWS secret access key for the owner of the Amazon S3 bucket specified in the <code>-b</code> parameter. This parameter is required in either of these cases:</p> <ul style="list-style-type: none"> <li>• If you don't provide the <code>--policy</code> parameter</li> <li>• If you provide the <code>--policy</code> parameter, but don't provide the <code>--policy-signature</code> parameter</li> </ul> <p>The command line tools client uses the secret access key to sign a policy for you, but does not send the secret access key to Amazon EC2.</p> <p>Type: String Default: None Required: Conditional Example: <code>-w wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code></p>
<p><code>-x, --expires <i>hours</i></code></p>	<p>The validity period, in hours, for a generated upload policy.</p> <p>Type: String Default: 24 Required: No Example: <code>-x 8</code></p>

Name	Description
<code>--location bucket_location</code>	The location of the destination Amazon S3 bucket. Type: String Default: None Required: No Example: <code>--location my-bucket-location</code>
<code>-B, --no-bucket-setup</code>	Indicates that no Amazon S3 bucket should be created if one doesn't already exist, and that no attempt should be made to fix incorrect permissions. Type: Boolean Default: <code>false</code> Required: No Example: <code>-B</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.



Option	Description
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key <i>ec2_private_key</i></code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert <i>ec2_cert</i></code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The BUNDLE identifier
- The ID of the bundle
- The ID of the instance
- The bucket name

- The bundle prefix
- The bundle start time
- The bundle update time
- The current state (usually `pending`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command bundles the specified instance.

```
PROMPT> ec2-bundle-instance i-12345678 -b myawsbucket -p winami -o AKIAIOSFOD
NN7EXAMPLE -w wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY
BUNDLE bun-c1a540a8 i-12345678 myawsbucket winami 2008-09-15T17:15:20+0000
pending
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [BundleInstance](#)

### Related Commands

- [ec2-cancel-bundle-task](#) (p. 62)
- [ec2-create-image](#) (p. 100)
- [ec2-describe-bundle-tasks](#) (p. 259)

# ec2-cancel-bundle-task

## Description

Cancels a bundling operation for an instance store-backed Windows instance.

The short version of this command is **ec2cbun**.

## Syntax

`ec2-cancel-bundle-task bundle_id`

## Options

Name	Description
<i>bundle_id</i>	The ID of the bundle task. Type: String Default: None Required: Yes Example: bun-cla432a3

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token <i>delegation_token</i></code>	The AWS delegation token. Default: The value of the environment variable (if set).

Option	Description
<code>--connection-timeout</code> <i>timeout</i>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The BUNDLE identifier
- The ID of the bundle
- The ID of the instance
- The bucket name
- The cancel status
- The prefix
- The start time
- The update time
- The status (*cancelling*)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command cancels the specified bundle task.

```
PROMPT> ec2-cancel-bundle-task bun-cla322b9  
BUNDLE bun-cla322b9 i-2674d22r myawsbucket winami 2008-09-15T17:15:20+0000 2008-  
09-15T17:15:20+0000 cancelling
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CancelBundleTask](#)

### Related Commands

- [ec2-bundle-instance](#) (p. 57)
- [ec2-describe-bundle-tasks](#) (p. 259)

# ec2-cancel-conversion-task

## Description

Cancels an active conversion task. The task can be the import of an instance or volume. The command removes all artifacts of the conversion, including a partially uploaded volume or instance. If the conversion is complete or is in the process of transferring the final disk image, the command fails and returns an exception.

For more information, see [Using the Command Line Tools to Import Your Virtual Machine to Amazon EC2](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2cct**.

## Syntax

`ec2-cancel-conversion-task task_id`

## Options

Name	Description
<i>task_id</i>	The ID of the conversion task. Type: String Default: None Required: Yes Example: import-i-fh95npoc

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The `CONVERSION-TASK` identifier
- The ID of the conversion task

Amazon EC2 command line tools display errors on `stderr`.

## Example

### Example

This example command cancels the conversion task with the ID `import-i-fh95npoc`.

```
PROMPT> ec2-cancel-conversion-task import-i-fh95npoc  
CONVERSION-TASK import-i-fh95npoc
```

If the task fails, you receive the following error:

```
Client.DeleteConversionTask Error: Failed to delete conversion task import-i-fh95npoc
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- `CancelConversionTask`

### Related Commands

- `ec2-delete-disk-image` (p. 183)
- `ec2-describe-conversion-tasks` (p. 264)
- `ec2-import-instance` (p. 498)
- `ec2-import-volume` (p. 509)
- `ec2-resume-import` (p. 617)



# ec2-cancel-export-task

## Description

Cancels an active export task. The command removes all artifacts of the export, including any partially created Amazon S3 objects. If the export task is complete or is in the process of transferring the final disk image, the command fails and returns an error.

The short version of this command is **ec2cxt**.

## Syntax

`ec2-cancel-export-task task_id`

## Options

Name	Description
<i>task_id</i>	The ID of the export task. This is the ID returned by <code>ec2-create-instance-export-task</code> . Type: String Default: None Required: Yes Example: export-i-fgelt0i7

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The EXPORT-TASK identifier
- The ID of the export task

Amazon EC2 command line tools display errors on stderr.

## Example

### Example

This example command cancels the export task with the ID `export-i-fgelt0i7`.

```
PROMPT> ec2-cancel-export-task export-i-fgelt0i7  
EXPORT-TASK    export-i-fgelt0i7
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CancelExportTask](#)

### Related Commands

- [ec2-create-instance-export-task](#) (p. 105)
- [ec2-describe-export-tasks](#) (p. 277)

# ec2-cancel-reserved-instances-listing

## Description

Cancels the specified Reserved Instance listing in the Reserved Instance Marketplace.

For more information about Reserved Instance Marketplace, see [Reserved Instance Marketplace](#) in the *Amazon Elastic Compute Cloud User Guide*.

## Syntax

`ec2-cancel-reserved-instances-listing` *LISTING*

## Options

Name	Description
<i>LISTING</i>	The ID of the Reserved Instance listing to be canceled. Type: String Required: Yes Default: None

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).

Option	Description
<code>--connection-timeout</code> <i>timeout</i>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns a table that contains the following information:

The listing information

- The LISTING identifier
- Reserved Instance listing ID
- Reserved Instance ID
- Create Date
- Update Date
- Status
- Status Message

One or more rows that contain instance count information

- The INSTANCE-COUNT identifier
- The instance count state
- The instance count

One or more rows that contain price schedule information

- The PRICE-SCHEDULE identifier
- The term
- The price
- Whether or not the schedule is active

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command cancels a Reserved Instance listing in the Reserved Instance Marketplace.

```
PROMPT> ec2-cancel-reserved-instances-listing 095c0e18-c9e6-4692-97e5-653e0example
```

Amazon EC2 returns output similar to the following:

```
PROMPT> ec2-cancel-reserved-instances-listing
Type ReservedInstancesListingId ReservedInstancesId CreateDate UpdateDate Status
  StatusMessage
LISTING 095c0e18-c9e6-4692-97e5-653e0example b847fa93-c736-4eae-bca1-e3147example
  Tue Aug 28 18:21:07 PDT 2012 Tue Aug 28 18:21:07 PDT 2012 cancelled cancelled
INSTANCE-COUNT available 0
INSTANCE-COUNT sold 0
INSTANCE-COUNT cancelled 1
INSTANCE-COUNT pending 0
PRICE-SCHEDULE 5 $1.2 true
```

```
PRICE-SCHEDULE 4 $1.2 false  
PRICE-SCHEDULE 3 $1.2 false  
PRICE-SCHEDULE 2 $1.2 false  
PRICE-SCHEDULE 1 $1.2 true
```

## Related Operations

- [ec2-describe-reserved-instances-listings](#) (p. 362)
- [ec2-create-reserved-instances-listing](#) (p. 132)
- [ec2-describe-reserved-instances](#) (p. 356)

# ec2-cancel-spot-instance-requests

## Description

Cancels one or more Spot Instance requests. Spot Instances are instances that Amazon EC2 starts on your behalf when the maximum price that you specify exceeds the current Spot Price. Amazon EC2 periodically sets the Spot Price based on available Spot Instance capacity and current Spot Instance requests. For more information about Spot Instances, see [Spot Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

### Important

Canceling a Spot Instance request does not terminate running Spot Instances associated with the request.

The short version of this command is **ec2csir**.

## Syntax

```
ec2-cancel-spot-instance-requests request_id [request_id...]
```

## Options

Name	Description
<i>request_id</i>	One or more Spot Instance request IDs. Type: String Default: None Required: Yes Example: sir-8456a32b

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>



Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The SPOTINSTANCEREQUEST identifier
- The Spot Instance request ID
- The current state

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command cancels a Spot Instance request.

```
PROMPT> ec2-cancel-spot-instance-requests sir-1a2b3c4d sir-2a2b3c4d  
SPOTINSTANCEREQUEST sir-1a2b3c4d cancelled  
SPOTINSTANCEREQUEST sir-2a2b3c4d cancelled
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CancelSpotInstanceRequests](#)

### Related Commands

- [ec2-describe-spot-instance-requests](#) (p. 398)
- [ec2-describe-spot-price-history](#) (p. 406)
- [ec2-request-spot-instances](#) (p. 593)

# ec2-confirm-product-instance

## Description

Determines whether a product code is associated with an instance. This command can only be run by the owner of the product code. It is useful when a product code owner needs to verify whether another user's instance is eligible for support.

The short version of this command is **ec2cpi**.

## Syntax

`ec2-confirm-product-instance product_code -i instance_id`

## Options

Name	Description
<code>product_code</code>	The product code. Type: String Default: None Required: Yes Example: 774F4FF8
<code>-i instance_id</code>	The instance. Type: String Default: None Required: Yes Example: -i i-10a64379

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The product code
- The ID of the instance
- A Boolean value indicating whether the product code is attached to the instance
- The account ID of the instance owner (if the product code is attached)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command determines whether the specified product code is associated with the specified instance.

```
PROMPT> ec2-confirm-product-instance 774F4FF8 -i i-10a64379
774F4FF8 i-10a64379 true 111122223333
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ConfirmProductInstance](#)

### Related Commands

- [ec2-describe-instances](#) (p. 311)
- [ec2-run-instances](#) (p. 628)

## ec2-copy-image

### Description

Initiates the copy of an AMI from the specified source region to the current region.

**Tip**

You can specify the destination region by using its endpoint when making the request.

The short version of this command is **ec2cpimg**.

### Syntax

At a command prompt, switch to the destination region, and then type the following:

```
ec2-copy-image -r source_region -s source_ami_id [-n ami_name] [-d ami_description] [-c token]
```

### Options

Name	Description
-r, --source-region <i>source_region</i>	The name of the region that contains the AMI to copy. Type: String Default: None Required: Yes Example: us-west-2
-s, --source-ami-id <i>source_ami_id</i>	The ID of the AMI to copy. Type: String Default: None Required: Yes Example: ami-4fa54026
-n, --name <i>ami_name</i>	The name of the new AMI in the destination region. Type: String Default: Same name as the AMI being copied. Required: No Example: My-Standard-AMI
-d, --description <i>ami_description</i>	A description for the new AMI in the destination region. Type: String Default: Same description as the AMI being copied. Constraints: Up to 255 characters. Required: No Example: -d "This is the new version of My-Standard-AMI"

Name	Description
<code>-c, --client-token token</code>	Unique, case-sensitive identifier you provide to ensure idempotency of the request. For more information, see <a href="#">How to Ensure Idempotency</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String Default: None Constraints: Up to 255 characters Required: No Example: 550e8400-e29b-41d4-a716-446655440000

## Output

This command returns a table that contains the following information:

- The IMAGE identifier
- The ID of the new image

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command copies the AMI with the ID `ami-4d3c2b1a` in region `us-west-2`, naming the new AMI `My-Standard-AMI`:

```
PROMPT> ec2-copy-image -r us-west-2 -i ami-4d3c2b1a -n "My-Standard-AMI" -d  
"This is a copy of ami-4fa54026 --My-standard-AMI-- from us-west-2" -c 550e8400-  
e29b-41d4-a716-46655440001  
IMAGE ami-1a2b3c4d
```

### Example 2

This example command copies the AMI with the ID `ami-4d3c2b1a` in region `us-east-1` to `ap-northeast-1`, naming the new AMI `My-Standard-AMI`:

```
PROMPT> ec2-copy-image -r us-east-1 --region ap-northeast-1 -i ami-4d3c2b1a -n  
"My-Standard-AMI" -d "This is a copy of ami-4fa54026 --My-Standard-AMI-- from  
us-east-1" -c 550e8400-e29b-41d4-a716-46655440000  
IMAGE ami-1a2b3c4d
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CopyImage](#)

### Related Commands

- [ec2-describe-images](#) (p. 290)
- [ec2-deregister](#) (p. 243)



# ec2-copy-snapshot

## Description

Copies a point-in-time snapshot of an Amazon Elastic Block Store (Amazon EBS) volume and stores it in Amazon Simple Storage Service (Amazon S3). You can copy the snapshot within the same region or from one region to another. You can use the snapshot to create Amazon EBS volumes or Amazon Machine Images (AMIs). For more information about Amazon EBS, see [Amazon Elastic Block Store \(Amazon EBS\)](#).

The short version of this command is **ec2cpsnap**.

## Syntax

```
ec2-copy-snapshot -r source_region -s source_snapshot_id [-d description]
```

## Options

Name	Description
-r, --source-region <i>source_region</i>	The name of the region that contains the snapshot to be copied. Type: String Default: None Required: Yes Example: us-west-1
-s, --source-snapshot-id <i>source_snapshot_id</i>	The ID of the Amazon EBS snapshot to copy. Type: String Default: None Required: Yes Example: snap-4d826724
-d, --description <i>description</i>	A description for the destination Amazon EBS snapshot. Type: String Default: The source's snapshot description or "[Copied from SOURCE_REGION]" if source snapshot doesn't have a description. Constraints: Up to 255 characters. Required: No Example: -d "Copy of user data from us-west-1"

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The SNAPSHOT identifier
- The ID of the new snapshot

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command copies the snapshot in the us-west-1 region with the ID `snap-1a2b3c4d`.

```
PROMPT> ec2-copy-snapshot -r us-west-1 -s snap-1a2b3c4d --description "Copy of
user data from us-west-1"
SNAPSHOT snap-2a2b3c4d
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CopySnapshot](#)

### Related Commands

- [ec2-create-snapshot](#) (p. 143)
- [ec2-delete-snapshot](#) (p. 215)
- [ec2-describe-snapshots](#) (p. 389)

## ec2-create-customer-gateway

### Description

Provides information to AWS about your VPN customer gateway device. The customer gateway is the appliance at your end of the VPN connection. (The device on the AWS side of the VPN connection is the virtual private gateway.) You must provide the Internet-routable IP address of the customer gateway's external interface. The IP address must be static and can't be behind a device performing network address translation (NAT).

You must provide the Internet-routable IP address of the customer gateway's external interface. The IP address must be static and can't be behind a device performing network address translation (NAT).

For devices that use Border Gateway Protocol (BGP), you can also provide the device's BGP Autonomous System Number (ASN). You can use an existing ASN assigned to your network. If you don't have an ASN already, you can use a private ASN (in the 64512 - 65534 range).

#### Note

Amazon EC2 supports all 2-byte ASN numbers in the range of 1 - 65534, with the exception of 7224, which is reserved in the US East (Northern Virginia) Region, and 9059, which is reserved in the EU (Ireland) Region.

For more information about ASNs, see the [Wikipedia article](#).

For more information about VPN customer gateways, see [Adding a Hardware Virtual Private Gateway to Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2addcgw**.

### Syntax

```
ec2-create-customer-gateway -t type -i ip_address -b bgp_asn
```

### Options

Name	Description
-t <i>type</i>	The type of VPN connection this customer gateway supports. Type: String Valid values: <code>ipsec.1</code> Default: None Required: Yes Example: <code>-t ipsec.1</code>
-i <i>ip_address</i>	The Internet-routable IP address for the customer gateway's outside interface. The address must be static. Type: String Default: None Required: Yes Example: <code>-i 12.1.2.3</code>

Name	Description
<code>-b <i>bgp_asn</i></code>	For devices that support BGP, the customer gateway's Border Gateway Protocol (BGP) Autonomous System Number (ASN). Type: Integer Default: None Required: Yes Example: <code>-b 65534</code>

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token <i>delegation_token</i></code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout <i>timeout</i></code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout <i>timeout</i></code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.

Option	Description
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The CUSTOMERGATEWAY identifier
- The customer gateway ID, which uniquely identifies the customer gateway
- The current state of the customer gateway (`pending`, `available`, `deleting`, `deleted`)
- The type of VPN connection the customer gateway supports
- The Internet-routable IP address for the customer gateway's outside interface
- The customer gateway's BGP ASN

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command passes information to AWS about the customer gateway with the IP address 12.1.1.2.3 and ASN 65534.

```
PROMPT> ec2-create-customer-gateway -t ipsec.1 -i 12.1.2.3 -b 65534  
CUSTOMERGATEWAY cgw-b4dc3961 pending ipsec.1 12.1.2.3 65534
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateCustomerGateway](#)

### Related Commands

- [ec2-delete-customer-gateway](#) (p. 177)
- [ec2-describe-customer-gateways](#) (p. 267)



# ec2-create-dhcp-options

## Description

Creates a set of DHCP options for your VPC. After creating the set, you must associate it with the VPC, causing all existing and new instances that you launch in the VPC to use this set of DHCP options. The following table lists the individual DHCP options you can specify. For more information about the options, see [RFC 2132](#).

DHCP Option Name	Description
domain-name-servers	The IP addresses of up to four domain name servers, or AmazonProvidedDNS. The default DHCP option set specifies AmazonProvidedDNS.
domain-name	If you're using AmazonProvidedDNS in US East (Northern Virginia) Region, specify <code>compute-1.amazonaws.com</code> . If you're using AmazonProvidedDNS in another region, specify <code>region.compute.amazonaws.com</code> . Otherwise, specify a domain name (for example, <code>MyCompany.com</code> ).
ntp-servers	The IP addresses of up to four Network Time Protocol (NTP) servers.
netbios-name-servers	The IP addresses of up to four NetBIOS name servers.
netbios-node-type	The NetBIOS node type (1, 2, 4, or 8). We recommend that you specify 2 (broadcast and multicast are not currently supported). For more information about these node types, see <a href="#">RFC 2132</a> .

### Important

By default, your VPC has a set of DHCP options that includes only a DNS server that we provide (AmazonProvidedDNS). If you create a set of DHCP options, and your VPC has an Internet gateway, make sure to set the `domain-name-servers` option either to AmazonProvidedDNS or to a domain name server of your choice.

For more information about DHCP options sets, see [DHCP Options Sets](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is `ec2adddopt`.

## Syntax

```
ec2-create-dhcp-options name=value[,value...] [ name=value[,value...] ... ]
```

## Options

Name	Description
<code>name=value,value</code>	<p>The DHCP option (including the option's name and its value). You can specify more than one option in the request, and more than one value per option. If you're using the command line tools on a Windows system, you might need to use quotation marks (for example, "name=value,value").</p> <p>Type: String Default: None Required: Yes Example: "domain-name-servers=10.2.5.1,10.2.5.2"</p>

## Common Options

Option	Description
<code>--region region</code>	<p>The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option.</p> <p>Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.</p>
<code>-U, --url url</code>	<p>The uniform resource locator (URL) of the Amazon EC2 web service entry point.</p> <p>Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.</p>
<code>-O, --aws-access-key aws_access_key_id</code>	<p>Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a>.</p> <p>Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option.</p> <p>Example: <code>-O AKIAIOSFODNN7EXAMPLE</code></p>
<code>-W, --aws-secret-key aws_secret_access_key</code>	<p>Your secret access key.</p> <p>Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option.</p> <p>Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code></p>
<code>-T, --security-token delegation_token</code>	<p>The AWS delegation token.</p> <p>Default: The value of the environment variable (if set).</p>
<code>--connection-timeout timeout</code>	<p>The connection timeout, in seconds.</p> <p>Example: <code>--connection-timeout 30</code></p>
<code>--request-timeout timeout</code>	<p>The request timeout, in seconds.</p> <p>Example: <code>--request-timeout 45</code></p>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .

Option	Description
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The DHCPOPTIONS identifier
- The ID of the DHCP options set
- The OPTION identifier
- The name of the option and its value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command creates a set of DHCP options with a domain name `mydomain.com` and two DNS servers (`10.2.5.1` and `10.2.5.2`).

```
PROMPT> ec2-create-dhcp-options "domain-name=mydomain.com" "domain-name-servers=10.2.5.1,10.2.5.2"
DHCPOPTIONS dopt-7a8b9c2d
OPTION domain-name mydomain.com
OPTION domain-name-servers 10.2.5.1,10.2.5.2
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateDhcpOptions](#)

### Related Commands

- [ec2-associate-dhcp-options](#) (p. 30)
- [ec2-delete-dhcp-options](#) (p. 180)
- [ec2-describe-dhcp-options](#) (p. 272)

# ec2-create-group

## Description

Creates a security group.

### Important

EC2-Classic: You can create up to 500 security groups.

EC2-VPC: You can create up to 100 security groups per VPC.

A security group is for use with instances either in the EC2-Classic platform or in a specific VPC. For more information, see [Amazon EC2 Security Groups](#) in the *Amazon Elastic Compute Cloud User Guide* and [Security Groups for Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

When you create a security group, you specify a friendly name of your choice. You can have a security group for use in EC2-Classic with the same name as a security group for use in a VPC. However, you can't have two security groups for use in EC2-Classic with the same name or two security groups for use in a VPC with the same name.

You have a default security group for EC2-Classic and a default security group for your VPC. If you don't specify a security group when you launch an instance, the instance is launched into the appropriate default security group. A default security group includes a default rule that grants instances unrestricted network access to each other.

You can add or remove rules from your security groups using the `ec2-authorize` and `ec2-revoke` commands.

The short version of this command is `ec2addgrp`.

## Syntax

```
ec2-create-group group_name -d description [-c vpc_id]
```

## Options

Name	Description
<i>group_name</i>	The name of the security group. Type: String Default: None Constraints: Up to 255 characters in length Constraints for EC2-Classic: ASCII characters Constraints for EC2-VPC: a-z, A-Z, 0-9, spaces, and ._-:/()#,@[]+=&:{}!\$* Required: Yes Example: webserv

Name	Description
<code>-d, --description <i>description</i></code>	A description for the security group. This is informational only. Type: String Default: None Constraints: Up to 255 characters in length Constraints for EC2-Classic: ASCII characters Constraints for EC2-VPC: a-z, A-Z, 0-9, spaces, and <code>._-:/()#,@[]+=&amp;:{}!\$*</code> Required: Yes Example: <code>-d "Web Servers"</code>
<code>-c, --vpc <i>vpc_id</i></code>	[EC2-VPC] The ID of the VPC. Type: String Default: None Required: Conditional Condition: Required for EC2-VPC Example: <code>-c vpc-1a2b3c4d</code>

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token <i>delegation_token</i></code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout <i>timeout</i></code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>

Option	Description
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The GROUP identifier
- The ID of the new security group
- The name of the security group
- The description of the security group

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command creates a security group named `webserv` for EC2-Classic.

```
PROMPT> ec2-create-group webserv -d "Web Servers"  
GROUP sg-1a2b3c4d webserv Web Servers
```

### Example 2

This example command creates a security group named `WebServerSG` for the specified VPC.

```
PROMPT> ec2-create-group WebServerSG -d "Web Servers" -c vpc-3325caf2  
GROUP sg-0a42d66a WebServerSG Web Servers
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateSecurityGroup](#)

### Related Commands

- [ec2-authorize](#) (p. 51)
- [ec2-delete-group](#) (p. 186)
- [ec2-describe-group](#) (p. 280)
- [ec2-revoke](#) (p. 622)
- [ec2-run-instances](#) (p. 628)



# ec2-create-image

## Description

Creates an Amazon EBS-backed AMI from an Amazon EBS-backed instance that is either running or stopped.

### Note

If you customized your instance with instance store volumes or Amazon EBS volumes in addition to the root device volume, the new AMI contains block device mapping information for those volumes. When you launch an instance from this new AMI, the instance automatically launches with those additional volumes.

For more information, see [Creating Amazon EBS-Backed Linux AMIs](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2cim**.

## Syntax

```
ec2-create-image instance_id --name name [--description description]  
[--no-reboot] [-b, --blockdevicemapping mapping]
```

## Options

Name	Description
<i>instance_id</i>	The ID of the instance. Type: String Default: None Required: Yes Example: i-10a64379
-n, --name <i>name</i>	A name for the new image. Type: String Default: None Constraints: 3-128 alphanumeric characters, parenthesis (), periods (.), slashes (/), dashes (-), or underscores(_). Allows spaces if the name is enclosed in quotation marks. Required: Yes Example: -n "Standard Web Server"
-d, --description <i>description</i>	A description for the new image. Type: String Default: None Constraints: Up to 255 ASCII characters Required: No Example: -d Fedora_v11

Name	Description
<p><code>--no-reboot</code></p>	<p>When this option is absent, Amazon EC2 attempts to cleanly shut down the instance before image creation and reboots the instance. When this option is used, Amazon EC2 doesn't shut down the instance before creating the image; therefore, file system integrity on the created image can't be guaranteed.</p> <p>Type: Boolean Default: <code>false</code> Required: No Example: <code>--no-reboot</code></p>
<p><code>-b, --block-device-mapping <i>mapping</i></code></p>	<p>The block device mapping for the instance. This argument is passed in the form of <code>&lt;devicename&gt;=&lt;blockdevice&gt;</code>. The <i>devicename</i> is the device name of the physical device on the instance to map. The <i>blockdevice</i> can be one of the following values:</p> <ul style="list-style-type: none"> <li><code>none</code> - Suppresses an existing mapping of the device from the AMI used to launch the instance. For example: <code>"/dev/sdc=none"</code>.</li> <li><code>ephemeral[0..3]</code> - An instance store volume to be mapped to the device. For example: <code>"/dev/sdc=ephemeral0"</code>.</li> <li><code>[<i>snapshot-id</i>]:[<i>volume-size</i>]:[<i>true false</i>]:[<i>standard io1</i>]:[<i>iops</i>]</code> - An EBS volume to be mapped to the device. [<i>snapshot-id</i>] To create a volume from a snapshot, specify the snapshot ID. [<i>volume-size</i>] To create an empty EBS volume, omit the snapshot ID and specify a volume size instead. For example: <code>"/dev/sdh=:20"</code>. [<i>delete-on-termination</i>] To prevent the volume from being deleted on termination of the instance, specify <code>false</code>. The default is <code>true</code>. [<i>volume-type</i>] To create a Provisioned IOPS volume, specify <code>io1</code>. The default volume type is <code>standard</code>. If the volume type is <code>io1</code>, you can also provision the number of IOPS that the volume supports. For example, <code>"/dev/sdh=snap-7eb96d16::false:io1:500"</code>.</li> </ul> <p>You can specify multiple <i>blockdevicemapping</i> arguments in one call.</p> <p>For more information, see <a href="#">Block Device Mapping</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>Type: String Default: None Required: No Example: <code>-b "/dev/sdc=snap-7eb96d16:100:false:io1:500"</code></p> <p><b>Note</b> On Windows, the <i>mapping</i> argument must be enclosed in double quotes, as shown in the example.</p>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The IMAGE identifier
- The ID of the new AMI

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command creates an AMI from the specified instance.

```
PROMPT> ec2-create-image i-10a64379 --name "Standard Web Server" --description
"Standard web server AMI"
IMAGE ami-4fa54026
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateImage](#)

### Related Commands

- [ec2-describe-instances](#) (p. 311)
- [ec2-run-instances](#) (p. 628)
- [ec2-terminate-instances](#) (p. 648)

# ec2-create-instance-export-task

## Description

Exports a running or stopped instance to an Amazon S3 bucket. For information about the supported operating systems, image formats, and known limitations for the types of instances you can export, see [Exporting EC2 Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2addixt**.

## Syntax

```
ec2-create-instance-export-task instance_id -e target_environment -f
disk_image_format [-c container_format] -b S3_bucket [-p S3_prefix] [-d
description]
```

## Options

Name	Description
<i>instance_id</i>	The ID of the instance. Required: Yes
-e, --target-environment <i>target_environment</i>	The target environment. VMware supports VMware 4 and 5. Citrix supports Xen 6. Microsoft supports Microsoft Hyper-V. Type: String Valid values: VMware   Citrix   Microsoft Required: Yes
-f, --disk-image-format <i>disk_image_format</i>	The disk image file format used to represent the exported disk. Type: String Valid values: vmdk   vhd Default: If -e = vmware, then -f = vmdk; otherwise vhd Required: No
-c, --container-format <i>container_format</i>	The container format used to combine disk images with metadata (such as OVF). If absent, only the disk image will be exported. Type: String Valid values: OVA Default: If -e = VMware, then -c = OVA; otherwise empty Required: No
-b, --bucket <i>S3_bucket</i>	The name of the destination Amazon S3 bucket where the file will be exported. The destination bucket must exist and grant WRITE and READ_ACL permissions to the AWS account <code>vm-import-export@amazon.com</code> . Type: String Required: Yes

Name	Description
<code>-p, --prefix <i>S3_prefix</i></code>	The prefix for the Amazon S3 key (object name) used for the exported file. The maximum length is 1000 bytes of UTF-8 character encoding. The final key is composed from this prefix (if specified), the export task ID, and other relevant parameters. Type: String Required: No Example: <code>my-export-</code> , <code>incoming/vm-export/</code>
<code>-d, --description <i>description</i></code>	A description for the conversion task or the resource being exported. The maximum length is 255 bytes. Type: String Required: No

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token <i>delegation_token</i></code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout <i>timeout</i></code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout <i>timeout</i></code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.

Option	Description
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key <i>ec2_private_key</i></code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert <i>ec2_cert</i></code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The `EXPORTTASK` identifier
- The ID of the export task
- The state of the conversion task (`active` | `cancelling` | `cancelled` | `completed`)
- The instance being exported



- The target virtualization environment (`vmware` | `citrix`)
- The format for the exported image (`vmdk` | `vhd`)
- The Amazon S3 bucket for the destination image.

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command creates a task to export an instance.

```
PROMPT> ec2-create-instance-export-task i-38e485d8 -e vmware -f vmdk -c ova -b
myexportbucket
EXPORTTASK      export-i-fgelt0i7      active      i-38e485d8      vmware      vmdk
myexportbucket  export-i-fgelt0i7.vmdk
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateInstanceExportTask](#)

### Related Commands

- [ec2-cancel-export-task](#) (p. 68)
- [ec2-describe-export-tasks](#) (p. 277)

## ec2-create-internet-gateway

### Description

Creates an Internet gateway for use with a VPC. After creating the Internet gateway, you attach it to a VPC using `ec2-attach-internet-gateway`.

For more information about your VPC and Internet gateway, see the [Amazon Virtual Private Cloud User Guide](#).

The short version of this command is `ec2addigw`.

### Syntax

`ec2-create-internet-gateway`

### Options

This command has no options.

### Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>

Option	Description
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The INTERNETGATEWAY identifier
- The ID of the Internet gateway

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command creates an Internet gateway.

```
PROMPT> ec2-create-internet-gateway  
INTERNETGATEWAY igw-c0a643a9
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateInternetGateway](#)

### Related Commands

- [ec2-attach-internet-gateway](#) (p. 38)
- [ec2-delete-internet-gateway](#) (p. 190)
- [ec2-describe-internet-gateways](#) (p. 324)
- [ec2-detach-internet-gateway](#) (p. 458)

# ec2-create-keypair

## Description

Creates a 2048-bit RSA key pair with the specified name. Amazon EC2 stores the public key and displays the private key for you to save to a file. The private key is returned as an unencrypted PEM encoded PKCS#8 private key. If a key with the specified name already exists, Amazon EC2 returns an error.

You can have up to five thousand key pairs per region.

### Tip

The key pair returned to you is available only in the region in which you create it. To create a key pair that is available in all regions, use [ec2-import-keypair](#) (p. 505).

For more information about key pairs, see [Key Pairs](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2addkey**.

## Syntax

```
ec2-create-keypair key
```

## Options

Name	Description
<i>key</i>	A unique name for the key pair. Type: String Default: None Constraints: Up to 255 ASCII characters. Required: Yes Example: my-key-pair

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The KEYPAIR identifier
- The name of the key pair
- The private key fingerprint
- The private key contents

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command creates a key pair named `my-key-pair`.

```
PROMPT> ec2-create-keypair my-key-pair
KEYPAIR my-key-pair 1f:51:ae:28:bf:89:e9:d8:1f:25:5d:37:2d:7d:b8:ca:9f:f5:f1:6f
---- BEGIN RSA PRIVATE KEY ----
MIICiTCCAfICCD6m7oRw0uXOjANBgkqhkiG9w0BAQUFADCBiDELMAkGA1UEBhMC
VVMxCzAJBgNVBAGTAldBMRAdGyYDVQQHEwdTZWF0dGx1MQ8wDQYDVQQKEwZBbWF6
b24xFDASBgNVBASTC0lBTSBDb25zb2x1MRIwEAYDVQQDEw1UZXR0Q2lsYWMxHAd
BgkqhkiG9w0BCQEWEG5vb25lQGFTYXpvbi5jb20wHhcNMTEwNDI1MjA0NTIxWhcN
MTIwNDI0MjA0NTIxWjCBiDELMAkGA1UEBhMCVVMxCzAJBgNVBAGTAldBMRAdGyYD
VQQHEwdTZWF0dGx1MQ8wDQYDVQQKEwZBbWF6b24xFDASBgNVBASTC0lBTSBDb25z
b2x1MRIwEAYDVQQDEw1UZXR0Q2lsYWMxHAdBgkqhkiG9w0BCQEWEG5vb25lQGFT
YXpvbi5jb20wgZ8wDQYJKoZIhvcNAQEBBQADgY0AMIGJAoGBAMaK0dn+a4GmWIWJ
21uUSfwfEvySWtC2XADZ4nB+BLYgVIk60CpiwsZ3G93vUEIO3IyNoH/f0wYK8m9T
rDHudUZg3qX4waLG5M43q7Wgc/MbQITxOUSQv7c7ugFFDzQGBzZswY6786m86gpE
Ibb3OhjZnzcVQAaRHhd1QWIMm2nrAgMBAAEwDQYJKoZIhvcNAQEFBQADgYEAtCu4
nUhVVxYUntneD9+h8Mg9q6q+auNKyExzyLwaxlAoo7TJHidbtS4J5iNmZgXL0Fkb
FFBjvSfpJI1J00zbnNYS5f6GuoEDmFJl0ZxBHjJnyp378OD8uTs7fLvJx79LjSTb
NYiytVbZPQUQ5Yaxu2jXnimvw3rrszlaEXAMPLE
-----END RSA PRIVATE KEY-----
```

Create a file named `my-key-pair.pem` and paste the entire key from the response into this file, including the following lines.

```
"-----BEGIN RSA PRIVATE KEY -----"  
"-----END RSA PRIVATE KEY-----"
```

Confirm that the file contents are similar to the following and save the file to a local directory.

```
-----BEGIN RSA PRIVATE KEY -----  
MIICiTCcAfICcQD6m7oRw0uXOjANBgkqhkiG9w0BAQUFADCBiDELMAKGA1UEBhMC  
VVMxZCzAJBgNVBAGTAldBMRAwDgYDVQQHEwdTZWF0dGx1MQ8wDQYDVQQKEwZBbWF6  
b24xZDASBgNVBAsTC0lBTSBDb25zb2xlMRlWZAYDVQQDEw1UZXR0Q2lsYWVxHAd  
BgkqhkiG9w0BCQEWEG5vb25lQGftYXpvbi5jb20wHhcNMTEwNDI1MjA0NTIxWhcN  
MTIwNDI0MjA0NTIxWjCBiDELMAKGA1UEBhMCVVMxZCzAJBgNVBAGTAldBMRAwDgYD  
VQQHEwdTZWF0dGx1MQ8wDQYDVQQKEwZBbWF6b24xZDASBgNVBAsTC0lBTSBDb25z  
b2xlMRlWZAYDVQQDEw1UZXR0Q2lsYWVxHAdBgkqhkiG9w0BCQEWEG5vb25lQGft  
YXpvbi5jb20wZ8wDQYJKoZIhvcNAQEBBQADgY0AMIGJAoGBAMaK0dn+a4GmWIWJ  
21uUSfwfEvySWtC2XADZ4nB+BLYgVik60CpiwsZ3G93vUEIO3IyNoH/f0wYK8m9T  
rDHudUZg3qX4waLG5M43q7Wgc/MbQITxOUSQv7c7ugFFDzQGBzZswY6786m86gpE  
Ibb3OhjZnzcvcQAaRHhd1QWIMm2nrAgMBAAEwDQYJKoZIhvcNAQEFBQADgYEAtCu4  
nUhVVxYUntned9+h8Mg9q6q+auNKyExzyLwaxlAoo7TJHidbtS4J5iNmZgXL0Fkb  
FFBjvSfpJiLJ00zbhNYS5f6GuoEDmFJl0ZxBHjJnyp378OD8uTs7fLvJx79LjSTb  
NYiytVbZPQUQ5Yaxu2jXnimvw3rrszlaEXAMPLE  
-----END RSA PRIVATE KEY-----
```

Keep this file in a safe place; it is required to decrypt login information when you connect to an instance that you launched using this key pair.

If you're using an SSH client on a Linux computer to connect to your instance, use the following command to set the permissions of your private key file so that only you can read it.

```
$ chmod 400 my-key-pair.pem
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateKeyPair](#)

### Related Commands

- [ec2-delete-keypair](#) (p. 193)
- [ec2-describe-keypairs](#) (p. 328)
- [ec2-run-instances](#) (p. 628)



## ec2-create-network-acl

### Description

Creates a network ACL in a VPC. Network ACLs provide an optional layer of security (in addition to security groups) for the instances in your VPC.

For more information about network ACLs, see [Network ACLs](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2addnacl**.

### Syntax

`ec2-create-network-acl vpc_id`

### Options

Name	Description
<code>vpc_id</code>	The ID of the VPC. Type: String Default: None Required: Yes Example: vpc-9ea045f7

### Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The NETWORKACL identifier
- The ACL ID
- The ID of the VPC for the network ACL
- The default ENTRY elements

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command creates a network ACL in the specified VPC. The response includes a default entry for egress, and another for ingress, each with a very high rule number (32767). These are the last entries that we process to decide whether traffic is allowed into our out of an associated subnet. If the traffic doesn't match any rules with a lower rule number, then these default entries ultimately deny the traffic. The `-1` means all protocols and ports.

```
PROMPT> ec2-create-network-acl vpc-11ad4878  
NETWORKACL acl-5fb85d36 vpc-11ad4878  
ENTRY egress 32767 deny 0.0.0.0/0 all  
ENTRY ingress 32767 deny 0.0.0.0/0 all
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateNetworkAcl](#)

### Related Commands

- [ec2-delete-network-acl](#) (p. 196)
- [ec2-describe-network-acls](#) (p. 332)
- [ec2-replace-network-acl-association](#) (p. 573)

## ec2-create-network-acl-entry

### Description

Creates an entry (a rule) in a network ACL with the specified rule number. Each network ACL has a set of numbered ingress rules and a separate set of numbered egress rules. When determining whether a packet should be allowed in or out of a subnet associated with the ACL, we process the entries in the ACL according to the rule numbers, in ascending order. Each network ACL has a set of ingress rules and a separate set of egress rules.

#### Tip

We recommend that you leave room between the rule numbers (for example, 100, 110, 120, ...), and not number them one right after the other (for example, 101, 102, 103, ...). This makes it easier to add a rule between existing ones without having to renumber the rules.

After you add an entry, you can't modify it; you must either replace it or create an entry and delete the old one.

For more information about network ACLs, see [Network ACLs](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2addnae**.

### Syntax

```
ec2-create-network-acl-entry acl_id -n rule_number [--egress] -P protocol -r cidr [-p port_range] [-t icmp_type_code] { --allow | --deny }
```

### Options

Name	Description
<i>acl_id</i>	The ID of the ACL for the entry. Type: String Default: None Required: Yes Example: acl-5fb85d36
-n, --rule-number <i>rule_number</i>	The rule number for the entry (for example, 100). ACL entries are processed in ascending order by rule number. Type: Number Default: None Constraints: Positive integer from 1 to 32766 Required: Yes Example: -n 100
--egress	Indicates that the rule be applied to traffic leaving the subnet. Default: If not specified, the rule applies to ingress traffic into the subnet. Required: No

Name	Description
<code>-P, --protocol protocol</code>	The IP protocol. You can specify <code>all</code> or <code>-1</code> to mean all protocols. Type: String Valid values: <code>all</code>   <code>-1</code>   <code>tcp</code>   <code>udp</code>   <code>icmp</code> or any protocol number (for a list, see <a href="#">Protocol Numbers</a> ). Required: Yes Example: <code>-P 6</code>
<code>-r, --cidr cidr</code>	The CIDR range to allow or deny, in CIDR notation. Type: String Default: None Required: Yes Example: <code>-r 172.16.0.0/24</code>
<code>-p, --port-range port_range</code>	For TCP or UDP: The range of ports to allow. Type: String Valid values: A single integer or a range (min-max). You can specify <code>-1</code> to mean all ports (for example, port range 0-65535). Default: None Required: Conditional Condition: Required if specifying <code>tcp</code> or <code>udp</code> (or the equivalent number) for the protocol. Example: <code>-p 80-84</code>
<code>-t, --icmp-type-code icmp_type_code</code>	For ICMP: The ICMP type and code using format <code>type:code</code> , where both are integers. You can use <code>-1</code> for the type or code to mean all types or all codes Type: String Default: None Required: Conditional Condition: Required if specifying <code>icmp</code> (or the equivalent number) for the protocol. Example: <code>-t -1:-1</code>
<code>--allow</code>	Specifies that any traffic matching the rule is allowed. Required: Conditional Condition: You must specify either <code>--allow</code> or <code>--deny</code> , but not both options.
<code>--deny</code>	Specifies that any traffic matching the rule is denied. Required: Conditional Condition: You must specify either <code>--allow</code> or <code>--deny</code> , but not both.

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ENTRY identifier
- The traffic allowed or denied (`ingress` | `egress`)
- The rule number
- Indicates what to do with the traffic (`allow` | `deny`)
- The CIDR range to allow or deny
- The protocol
- The first port in the range
- The last port in the range

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command creates an entry with rule number 100 in the network ACL with the ID `acl-2cb85d45`. The rule allows ingress traffic from anywhere (`0.0.0.0/0`) on UDP port 53 into any associated subnet.

```
PROMPT> ec2-create-network-acl-entry acl-2cb85d45 -n 100 -r 0.0.0.0/0 -P udp -  
p 53 --allow  
ENTRY    ingress 100      allow  0.0.0.0/0      udp      53  
53
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateNetworkAclEntry](#)

### Related Commands

- [ec2-delete-network-acl-entry](#) (p. 199)
- [ec2-describe-network-acls](#) (p. 332)
- [ec2-replace-network-acl-entry](#) (p. 576)



# ec2-create-network-interface

## Description

Creates a network interface in the specified subnet.

For more information about network interfaces, see [Elastic Network Interfaces](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2addnic**.

## Syntax

```
ec2-create-network-interface -d, --description description [--private-ip-address ip_address] [--secondary-private-ip-address ip_address] [--secondary-private-ip-address-count address_count] [-g, --group security_group_id]
```

## Options

Name	Description
<code>-d, --description <i>description</i></code>	A description for the network interface. Type: String Default: None Required: No Example: -d "My ENI"
<code>--private-ip-address <i>ip_address</i></code>	The primary private IP address of the network interface. If you don't specify an IP address, Amazon EC2 selects one from the subnet range. Type: String Default: None Required: No Example: --private-ip-address 10.0.2.17
<code>--secondary-private-ip-address <i>ip_address</i></code>	The IP address to be assigned as a secondary private IP address to the network interface. You can use this option multiple times to assign multiple secondary IP addresses to the network interface.  If you don't specify an IP address, Amazon EC2 selects one from the subnet range.  You can't specify this parameter when also specifying <code>--secondary-private-ip-address-count</code> . Type: String Default: None Required: No Example: --secondary-private-ip-address 10.0.2.18 -secondary-private-ip-address 10.0.2.28

Name	Description
<code>--secondary-private-ip-address-count</code> <i>address_count</i>	<p>The number of secondary IP addresses to assign to the network interface. For more information, see <a href="#">Private IP Addresses Per ENI Per Instance Type</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>You can't specify this parameter when you also specify <code>--secondary-private-ip-address</code>.</p> <p>Type: Integer Default: None Required: No Example: <code>--secondary-private-ip-address-count 2</code></p>
<code>-g, --group</code> <i>security_group_id</i>	<p>A security group to add to the network interface. You can use this option multiple times to add multiple groups.</p> <p>Type: String Default: None. If no security group is specified, the interface will become a member of the default security group. Required: No Example: <code>-g sg-bba1bcd7 -g sg-6d495601</code></p>

## Common Options

Option	Description
<code>--region</code> <i>region</i>	<p>The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option.</p> <p>Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.</p>
<code>-U, --url</code> <i>url</i>	<p>The uniform resource locator (URL) of the Amazon EC2 web service entry point.</p> <p>Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.</p>
<code>-O, --aws-access-key</code> <i>aws_access_key_id</i>	<p>Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a>.</p> <p>Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option.</p> <p>Example: <code>-O AKIAIOSFODNN7EXAMPLE</code></p>
<code>-W, --aws-secret-key</code> <i>aws_secret_access_key</i>	<p>Your secret access key.</p> <p>Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option.</p> <p>Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code></p>
<code>-T, --security-token</code> <i>delegation_token</i>	<p>The AWS delegation token.</p> <p>Default: The value of the environment variable (if set).</p>

Option	Description
<code>--connection-timeout</code> <i>timeout</i>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns the ENI ID for the network interface that was created, along with the subnet ID, VPC ID, Availability Zone, private IP addresses, and security group membership.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command creates a network interface in the specified subnet.

```
PROMPT> ec2-create-network-interface -d "My ENI" -g sg-bbalbcd7 --private-ip-  
address 10.0.2.17 subnet-fd04ff94  
NETWORKINTERFACE eni-3b9f6552 My ENI subnet-fd04ff94 vpc-e604ff8f us-east-  
1b 089818748305 false pending 02:1a:80:41:52:9c 10.0.2.17 true  
GROUP sg-bbalbcd7 default  
PRIVATEIPADDRESS 10.0.2.17
```

### Example 2

This example command creates a network interface address with a primary private IP address of 10.0.0.117, and two secondary private IP addresses: one secondary private IP address of 10.0.0.118 and another secondary private IP address that is selected by Amazon EC2.

```
PROMPT> ec2-create-network-interface -d "My ENI" -g sg-b1b508d8 --private-ip-  
address 10.0.0.117 --secondary-private-ip-address 10.0.0.118 subnet-b1b508d8  
NETWORKINTERFACE eni-f907b890 My ENI subnet-b1b508d8 vpc-a2b508cb ap-  
southeast-1a 013274050172 false pending 02:75:42:60:6c:05  
10.0.0.117 true  
GROUP sg-82b3alee default  
PRIVATEIPADDRESS 10.0.0.117  
PRIVATEIPADDRESS 10.0.0.118
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateNetworkInterface](#)

### Related Commands

- [ec2-attach-network-interface](#) (p. 41)
- [ec2-delete-network-interface](#) (p. 203)
- [ec2-describe-network-interface-attribute](#) (p. 337)

- [ec2-describe-network-interfaces](#) (p. 341)
- [ec2-detach-network-interface](#) (p. 461)
- [ec2-modify-network-interface-attribute](#) (p. 532)
- [ec2-reset-network-interface-attribute](#) (p. 611)

# ec2-create-placement-group

## Description

Creates a placement group that you launch cluster instances into. You must give the group a name that's unique within the scope of your account.

For more information about placement groups and cluster instances, see [Cluster Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is `ec2addpgrp`.

## Syntax

```
ec2-create-placement-group placement_group -s strategy
```

## Options

Name	Description
<i>placement_group</i>	A name for the placement group. Type: String Default: None Required: Yes Constraints: Up to 255 ASCII characters. Example: XYZ-cluster
<code>-s strategy</code>	The placement strategy. Type: String Valid values: <code>cluster</code> Default: <code>cluster</code> Required: Yes Example: <code>-s cluster</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The `PLACEMENTGROUP` identifier
- The placement group name
- The placement strategy
- The state of the placement group

## Examples

### Example

This example command creates a placement group named `XYZ-cluster`.

```
PROMPT> ec2-create-placement-group XYZ-cluster -s cluster
PLACEMENTGROUP XYZ-cluster cluster available
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreatePlacementGroup](#)

### Related Commands

- [ec2-delete-placement-group](#) (p. 206)
- [ec2-describe-placement-groups](#) (p. 348)



# ec2-create-reserved-instances-listing

## Description

Creates a listing for Amazon EC2 Reserved Instances that will be sold in the Reserved Instance Marketplace. You can submit one Reserved Instance listing at a time.

The Reserved Instance Marketplace matches sellers who want to resell Reserved Instance capacity that they no longer need with buyers who want to purchase additional capacity. Reserved Instances bought from third-party sellers through the Reserved Instance Marketplace work like any other Reserved Instances.

If you want to sell your Reserved Instances, you must first register as a Seller in the Reserved Instance Marketplace. After completing the registration process, you can create a Reserved Instance Marketplace listing of some or all of your Reserved Instances, and specify the upfront price you want to receive for them. Your Reserved Instance listings then become available for purchase.

For more information about Reserved Instance Marketplace, see [Reserved Instance Marketplace](#) in the *Amazon Elastic Compute Cloud User Guide*.

## Syntax

```
ec2-create-reserved-instances-listing --reserved-instance RESERVED-INSTANCE
--instance-count INSTANCE-COUNT [--client-token TOKEN] MONTH:PRICE
[MONTH:PRICE...]
```

## Options

Name	Description
--reserved-instance <i>RESERVED-INSTANCE</i>	The ID of the active Reserved Instance. Type: String Default: None Required: Yes
--instance-count <i>INSTANCE-COUNT</i>	The number of instances that are a part of a Reserved Instance account that will be listed in the Reserved Instance Marketplace. This number should be less or equal to the instance count associated with the Reserved Instance ID specified in this command. Type: Integer Default: Total number of Reserved Instances active for the account Required: Yes
<i>MONTH:PRICE</i>	The price and schedule entry, using the format MONTH:PRICE, where MONTH is the number of months and PRICE is the numerical part of the price you want for the specified months of the term. For example, 14:12.34 means you want to sell 14 months at the price of \$12.34. Type: String Default: None Required: Yes

Name	Description
<code>--client-token</code> <i>TOKEN</i>	Unique, case-sensitive identifier you provide to ensure idempotency of your listings. This helps avoid duplicate listings. For more information, see <a href="#">Ensuring Idempotency</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String Default: None Required: No

## Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key</code> <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key</code> <i>aws_secret_access_key</i>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token</code> <i>delegation_token</i>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <i>timeout</i>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.

Option	Description
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns a table that contains the following information:

The listing information

- The LISTING identifier
- Reserved Instance listing ID
- Reserved Instance ID
- Create Date
- Update Date
- Status
- Status Message

One or more rows that contain instance count information

- The INSTANCE-COUNT identifier
- The instance count state
- The instance count

One or more rows that contain price schedule information

- The PRICE-SCHEDULE identifier
- The term
- The price
- Whether or not the schedule is active

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command creates a Reserved Instance Marketplace listing from the existing Reserved Instance `b847fa93-c736-4eae-bca1-e3147example`, which has 5 months remaining in its term. In this example, we set the upfront price at \$1.20.

The command looks like this:

```
PROMPT> ec2-create-reserved-instances-listing --reserved-instance b847fa93-c736-4eae-bca1-3147example --instance-count 1 05:01.20
```

Amazon EC2 returns output similar to the following:

```
Type ReservedInstancesListingId ReservedInstancesId CreateDate UpdateDate Status
StatusMessage
LISTING 095c0e18-c9e6-4692-97e5-653e0example b847fa93-c736-4eae-bca1-e3147example
Tue Aug 28 18:21:07 PDT 2012 Tue Aug 28 18:21:07 PDT 2012 active active
INSTANCE-COUNT available 1
INSTANCE-COUNT sold 0
INSTANCE-COUNT cancelled 0
INSTANCE-COUNT pending 0
PRICE-SCHEDULE 5 $1.2 true
PRICE-SCHEDULE 4 $1.2 false
PRICE-SCHEDULE 3 $1.2 false
PRICE-SCHEDULE 2 $1.2 false
PRICE-SCHEDULE 1 $1.2 true
```

## Related Operations

- [ec2-cancel-reserved-instances-listing](#) (p. 71)
- [ec2-describe-reserved-instances-listings](#) (p. 362)

## ec2-create-route

### Description

Creates a route in a route table within a VPC. The route's target can be an Internet gateway attached to the VPC or a NAT instance in the VPC.

When determining how to route traffic, we use the route with the most specific match. For example, let's say the traffic is destined for 192.0.2.3, and the route table includes the following two routes:

- 192.0.2.0/24 (goes to some target A)
- 192.0.2.0/28 (goes to some target B)

Both routes apply to the traffic destined for 192.0.2.3. However, the second route in the list covers a smaller number of IP addresses and is therefore more specific, so we use that route to determine where to target the traffic.

For more information about route tables, see [Route Tables](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2addr**.

### Syntax

```
ec2-create-route route_table_id -r cidr {-g gateway_id | -i instance_id | -n interface_id}
```

### Options

Name	Description
<i>route_table_id</i>	The ID of the route table for the route. Type: String Default: None Required: Yes Example: rtb-5da34634
-r, --cidr <i>cidr</i>	The CIDR address block used for the destination match. Routing decisions are based on the most specific match. Type: String Default: None Required: Yes Example: -r 0.0.0.0/0
-g, --gateway <i>gateway_id</i>	The ID of an Internet gateway attached to your VPC. Type: String Default: None Required: Conditional Condition: You must specify one of the following: --gateway, --instance, or --network-interface. Example: -g igw-68a34601

Name	Description
<code>-i, --instance <i>instance_id</i></code>	The ID of a NAT instance in your VPC. The operation fails if you specify an instance ID unless exactly one network interface is attached. Type: String Default: None Required: Conditional Condition: You must specify one of the following: <code>--gateway</code> , <code>--instance</code> , or <code>--network-interface</code> . Example: <code>-i i-a7c871e3</code>
<code>-n, --network-interface <i>interface_id</i></code>	The network interface associated with the route. Type: String Default: None Required: Conditional Condition: You must specify one of the following: <code>--gateway</code> , <code>--instance</code> , or <code>--network-interface</code> . Example: <code>-n eni-5b729933</code>

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token <i>delegation_token</i></code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout <i>timeout</i></code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>

Option	Description
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ROUTE identifier
- The ID of the target

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command creates a route in the route table with the ID `rtb-e4ad488d`. The route matches all traffic (`0.0.0.0/0`) and routes it to the Internet gateway with the ID `igw-eaad4883`.

```
PROMPT> ec2-create-route rtb-e4ad488d -r 0.0.0.0/0 -g igw-eaad4883
ROUTE    igw-eaad4883    0.0.0.0/0
```

### Example 2

This example command creates a route in the route table with the ID `rtb-g8ff4ea2`. The route sends all traffic (`0.0.0.0/0`) to the NAT instance with the ID `i-1a2b3c4d`.

```
PROMPT> ec2-create-route rtb-g8ff4ea2 -r 0.0.0.0/0 -i i-1a2b3c4d
ROUTE    i-1a2b3c4d     0.0.0.0/0
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateRoute](#)

### Related Commands

- [ec2-delete-route](#) (p. 209)
- [ec2-describe-route-tables](#) (p. 380)
- [ec2-replace-route](#) (p. 580)



## ec2-create-route-table

### Description

Creates a route table for the specified VPC. After you create a route table, you can add routes and associate the table with a subnet.

For more information about route tables, see [Route Tables](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2addrtb**.

### Syntax

`ec2-create-route-table` *vpc\_id*

### Options

Name	Description
<i>vpc_id</i>	The ID of the VPC. Type: String Default: None Required: Yes Example: vpc-9ea045f7

### Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key</code> <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert <i>ec2_cert</i></code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ROUTETABLE identifier
- The ID of the route table
- The ID of the VPC
- Information about the default route for every new route table

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command creates a route table for the VPC with the ID `vpc-9ea045f7`.

```
PROMPT> ec2-create-route-table vpc-9ea045f7  
ROUTETABLE rtb-6aa34603 vpc-9ea045f7  
ROUTE local active 172.16.0.0/16
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateRouteTable](#)

### Related Commands

- [ec2-associate-route-table](#) (p. 34)
- [ec2-create-route](#) (p. 136)
- [ec2-delete-route-table](#) (p. 212)
- [ec2-describe-route-tables](#) (p. 380)
- [ec2-disassociate-route-table](#) (p. 478)
- [ec2-replace-route-table-association](#) (p. 584)

# ec2-create-snapshot

## Description

Creates a snapshot of an Amazon EBS volume and stores it in Amazon S3. You can use snapshots for backups, to make copies of instance store volumes, and to save data before shutting down an instance.

When a snapshot is created, any AWS Marketplace product codes from the volume are propagated to the snapshot.

You can take a snapshot of an attached volume that is in use. However, snapshots only capture data that has been written to your Amazon EBS volume at the time the snapshot command is issued. This may exclude any data that has been cached by any applications or the operating system. If you can pause any file writes to the volume long enough to take a snapshot, your snapshot should be complete. However, if you can't pause all file writes to the volume, you should unmount the volume from within the instance, issue the snapshot command, and then remount the volume to ensure a consistent and complete snapshot. You may remount and use your volume while the snapshot status is `pending`.

To create a snapshot for Amazon EBS volumes that serve as root devices, you should stop the instance before taking the snapshot.

To unmount the volume in Linux/UNIX, use the following command:

```
umount -d device_name
```

Where *device\_name* is the device name (for example, `/dev/sdh`).

To unmount the volume in Windows, open Disk Management, right-click the volume to unmount, and select **Change Drive Letter and Path**. Select the mount point to remove, and then click **Remove**.

For more information about Amazon EBS, see [Amazon Elastic Block Store](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is `ec2addsnap`.

## Syntax

```
ec2-create-snapshot volume_id [-d description]
```

## Options

Name	Description
<i>volume_id</i>	The ID of the Amazon EBS volume. Type: String Default: None Required: Yes Example: vol-4d826724

Name	Description
<code>-d, --description <i>description</i></code>	A description for the snapshot. Type: String Default: None Constraints: Up to 255 characters Required: No Example: <code>-d "Daily backup"</code>

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token <i>delegation_token</i></code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout <i>timeout</i></code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout <i>timeout</i></code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.

Option	Description
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The SNAPSHOT identifier
- The ID of the snapshot
- The ID of the volume
- The state of the snapshot (`pending`, `completed`, `error`)
- The time stamp when the snapshot initiated
- The percentage of completion
- The ID of the snapshot owner
- The size of the volume
- The description of the snapshot

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command creates a snapshot of the volume with the ID `vol-1a2b3c4d`.

```
PROMPT> ec2-create-snapshot vol-1a2b3c4d --description "Daily Backup"  
SNAPSHOT snap-1a2b3c4d vol-1a2b3c4d pending YYYY-MM-DDTHH:MM:SS+0000  
111122223333 30 Daily Backup
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateSnapshot](#)

### Related Commands

- [ec2-delete-snapshot](#) (p. 215)
- [ec2-describe-snapshots](#) (p. 389)

# ec2-create-spot-datafeed-subscription

## Description

Creates the data feed for Spot Instances, enabling you to view Spot Instance usage logs. You can create one data feed per account. For more information about Spot Instances, see [Spot Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2addsds**.

## Syntax

```
ec2-create-spot-datafeed-subscription --bucket bucket [--prefix prefix]
```

## Options

Name	Description
<code>-b, --bucket <i>bucket</i></code>	The Amazon S3 bucket in which to store the Spot Instance datafeed. Type: String Default: None Constraints: Must be a valid bucket associated with your account. Required: Yes Example: <code>-b myawsbucket</code>
<code>-p, --prefix <i>bucket</i></code>	A prefix for the datafeed file names. Type: String Default: None Required: No Example: <code>-p spotdata_</code>

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.



Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The SPOTDATAFEEDSUBSCRIPTION identifier
- The AWS account ID of the owner
- The Amazon S3 bucket where the data feed is located
- The prefix for the data feed file names
- The state (`Active` | `Inactive`)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command creates the data feed for the account.

```
PROMPT> ec2-create-spot-datafeed-subscription -b myawsbucket -p spotdata_
SPOTDATAFEEDSUBSCRIPTION 111122223333 myawsbucket spotdata_ Active
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateSpotDatafeedSubscription](#)

### Related Commands

- [ec2-delete-spot-datafeed-subscription](#) (p. 218)
- [ec2-describe-spot-datafeed-subscription](#) (p. 395)

# ec2-create-subnet

## Description

Creates a subnet in an existing VPC.

When you create each subnet, you provide the ID of the VPC and the CIDR block you want for the subnet. After you create a subnet, you can't change its CIDR block. The subnet's CIDR block can be the same as the VPC's CIDR block (assuming you want only a single subnet in the VPC), or a subset of the VPC's CIDR block. If you create more than one subnet in a VPC, the subnets' CIDR blocks must not overlap. The smallest subnet (and VPC) you can create uses a /28 netmask (16 IP addresses), and the largest uses a /16 netmask (65,536 IP addresses).

### Important

We reserve both the first four and the last IP address in each subnet's CIDR block. They're not available for use.

If you add more than one subnet to a VPC, they're set up in a star topology with a logical router in the middle. By default, you can create up to 20 subnets in a VPC. If you need more than 20 subnets, you can request more by going to [Request to Increase Amazon VPC Limits](#).

If you launch an instance in a VPC using an Amazon EBS-backed AMI, the IP address doesn't change if you stop and restart the instance (unlike a similar instance launched outside a VPC, which gets a new IP address when restarted). It's therefore possible to have a subnet with no running instances (they're all stopped), but no remaining IP addresses available. For more information about Amazon EBS-backed AMIs, see [AMI Basics](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2addsubnet**.

## Syntax

```
ec2-create-subnet -c vpc_id -i cidr [ -z zone ]
```

## Options

Name	Description
-c <i>vpc_id</i>	The ID of the VPC. Type: String Default: None Required: Yes Example: -c vpc-1a2b3c4d
-i <i>cidr</i>	The CIDR block for the subnet. Type: String Default: None Required: Yes Example: -i 10.0.1.0/24

Name	Description
<code>-z zone</code>	The Availability Zone for the subnet. Type: String Default: Amazon EC2 selects one for you (recommended). Required: No Example: <code>-z us-east-1a</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.

Option	Description
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The SUBNET identifier
- The ID of the subnet
- The current state of the subnet (`pending` or `available`)
- The ID of the VPC the subnet is in
- The CIDR block assigned to the subnet
- The number of IP addresses in the subnet that are available
- The Availability Zone the subnet is in

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command creates a subnet with CIDR block 10.0.1.0/24 in the VPC with the ID vpc-1a2b3c4d.

```
PROMPT> ec2-create-subnet -c vpc-1a2b3c4d -i 10.0.1.0/24  
SUBNET subnet-9d4a7b6c pending vpc-1a2b3c4d 10.0.1.0/24 251 us-east-1a
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateSubnet](#)

### Related Commands

- [ec2-delete-subnet](#) (p. 221)
- [ec2-describe-subnets](#) (p. 412)

## ec2-create-tags

### Description

Adds or overwrites one or more tags for the specified resource or resources. Each resource can have a maximum of 10 tags. Each tag consists of a key and optional value. Tag keys must be unique per resource.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2addtag**.

### Syntax

```
ec2-create-tags resource_id [resource_id ...] --tag key[=value] [--tag key[=value] ...]
```

### Options

Name	Description
<i>resource_id</i>	The IDs of one or more resources to tag. Type: String Default: None Required: Yes Example: ami-1a2b3c4d
--tag <i>key</i> or <i>key=value</i>	The key and optional value of the tag, separated by an equals sign (=). If you don't include a value, we set the value to an empty string.  If you're using the command line tools on a Windows system, you might need to use quotation marks (for example, "key=value"). Type: String Default: None Constraints: The maximum tag key length is 127 Unicode characters, and may not begin with <code>aws:</code> . The maximum tag value length is 255 Unicode characters. Tag keys and values are case sensitive. Required: Yes Example: --tag "stack=Production"

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.



Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The TAG identifier
- The resource type identifier
- The ID of the resource
- The tag key
- The tag value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command adds (or overwrites) two tags for an AMI and an instance. One of the tags contains just a key (`webserver`), with no value (we set the value to an empty string). The other tag consists of a key (`stack`) and value (`Production`).

```
PROMPT> ec2-create-tags ami-1a2b3c4d i-7d3e5a2f --tag webserver --tag
"stack=Production"
TAG image ami-1a2b3c4d webserver
TAG image ami-1a2b3c4d stack Production
TAG instance i-7d3e5a2f webserver
TAG instance i-7d3e5a2f stack Production
```

## Example 2

The following example changes the value of the `stack` tag for one of your AMIs from `Production` to `Test`.

```
PROMPT> ec2-create-tags ami-1a2b3c4d --tag "stack=Test"
TAG ami-1a2b3c4d image stack Test
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateTags](#)

### Related Commands

- [ec2-delete-tags](#) (p. 224)
- [ec2-describe-tags](#) (p. 417)

# ec2-create-volume

## Description

Creates an Amazon EBS volume that can be attached to any instance in the same Availability Zone.

Any AWS Marketplace product codes from the snapshot are propagated to the volume.

For more information about Amazon EBS, see [Amazon Elastic Block Store](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2addvol**.

## Syntax

```
ec2-create-volume [--size size | --snapshot snapshot_id [--size size]]
--availability-zone zone [--type type [--iops iops]]
```

## Options

Name	Description
<code>-s, --size <i>size</i></code>	The size of the volume, in GiBs. Type: String Valid values: 1-1024 Constraints: If the volume type is <code>io1</code> , the minimum size of the volume is 10 GiB. Default: If you're creating the volume from a snapshot and don't specify a volume size, the default is the snapshot size. Condition: Required unless you're creating the volume from a snapshot. Required: Conditional Example: <code>-s 80</code>
<code>--snapshot <i>snapshot_id</i></code>	The snapshot from which to create the volume. Type: String Default: None Required: Conditional Condition: Required if you are creating a volume from a snapshot. Example: <code>--snapshot snap-78a54011</code>
<code>-z, --availability-zone <i>zone</i></code>	The Availability Zone in which to create the volume. Use <a href="#">ec2-describe-availability-zones (p. 255)</a> to list the Availability Zones that are currently available to you. Type: String Default: None Required: Yes Example: <code>-z us-east-1a</code>

Name	Description
<code>-t, --type type</code>	The volume type. Type: String Valid values: <code>standard</code>   <code>io1</code> Default: <code>standard</code> Required: No Example: <code>-t io1</code>
<code>-i, --iops iops</code>	The number of I/O operations per second (IOPS) that the volume supports. Type: Integer Valid values: Range is 100 to 4000. Default: None Required: Conditional Condition: Required when the volume type is <code>io1</code> ; not used with <code>standard</code> volumes. Example: <code>-iops 500</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>

Option	Description
<code>--request-timeout</code> <code>timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <code>ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <code>ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The VOLUME identifier
- The ID of the volume
- The size of the volume, in GiBs
- The snapshot from which the volume was created, if applicable
- The Availability Zone in which the volume was created
- The volume state (`creating`, `available`, `in-use`, `deleting`, `deleted`, `error`)
- The time stamp when volume creation was initiated
- The EBS volume type
- The I/O operations per second (IOPS) of a provisioned IOPS volume

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command creates a 20 GiB volume in the Availability Zone `us-east-1a`.

```
PROMPT> ec2-create-volume --size 20 --availability-zone us-east-1a  
VOLUME vol-1a2b3c4d 20 us-east-1a creating YYYY-MM-DDTHH:MM:SS+0000 standard
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateVolume](#)

### Related Commands

- [ec2-attach-volume](#) (p. 44)
- [ec2-delete-volume](#) (p. 228)
- [ec2-describe-availability-zones](#) (p. 255)
- [ec2-describe-volumes](#) (p. 432)
- [ec2-detach-volume](#) (p. 464)

## ec2-create-vpc

### Description

Creates a VPC with the CIDR block you specify.

The smallest VPC you can create uses a /28 netmask (16 IP addresses), and the largest uses a /16 netmask (65,536 IP addresses). To help you decide how big to make your VPC, see [Your VPC and Subnets](#) in the *Amazon Virtual Private Cloud User Guide*.

By default, each instance you launch in the VPC has the default DHCP options, which includes only a default DNS server that we provide (AmazonProvidedDNS).

For more information about DHCP options, see [DHCP Options Sets](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2addvpc**.

### Syntax

```
ec2-create-vpc cidr [tenancy]
```

### Options

Name	Description
<i>cidr</i>	The CIDR block for the VPC. Type: String Default: None Required: Yes Example: 10.0.0.0/16
<i>tenancy</i>	The supported tenancy options for instances launched into the VPC. A value of <code>default</code> means instances can be launched with any tenancy; a value of <code>dedicated</code> means all instances launched into the VPC are launched as dedicated tenancy instances regardless of the tenancy assigned to the instance at launch. Dedicated tenancy instances run on single-tenant hardware. Type: String Valid values: <code>default</code>   <code>dedicated</code> Default: <code>default</code> Required: No

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.



Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The VPC identifier
- The ID of the VPC
- The CIDR block of the VPC
- The current state of the VPC (`pending` or `available`)
- The ID of the DHCP options associated with the VPC (or `default` if none)
- The supported tenancy options for instances launched into the VPC (`default` or `dedicated`).

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example 1

This example command creates a VPC with the CIDR block `10.0.0.0/16`.

```
PROMPT> ec2-create-vpc 10.0.0.0/16
VPC vpc-1a2b3c4d pending 10.0.0.0/16 dopt-1a2b3c4d default
```

## Example 2

This example command creates a VPC with the `dedicated` tenancy option.

```
PROMPT> ec2-create-vpc 10.0.0.0/16 --tenancy dedicated
VPC vpc-1a2b3c4d pending 10.0.0.0/16 dopt-1a2b3c4d dedicated
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateVpc](#)

### Related Commands

- [ec2-associate-dhcp-options](#) (p. 30)
- [ec2-create-dhcp-options](#) (p. 92)
- [ec2-delete-vpc](#) (p. 231)
- [ec2-describe-vpcs](#) (p. 442)

## ec2-create-vpn-connection

### Description

Creates a VPN connection between an existing virtual private gateway and customer gateway. The only supported connection type is `ipsec.1`.

The output includes information that you need to give to your network administrator to configure your customer gateway. The underlying native format of this information is XML; however, with the **ec2-create-vpn-connection** command, you can transform the information into a different format based on the vendor that makes your customer gateway (for example, Cisco or Juniper). If you use a vendor other than Cisco or Juniper, you can set the `--format` option to `generic`, and the information is formatted in a human readable format for your network administrator. If you want to see the native XML, you can specify `xml` as the value of the `--format` option. If you want to write your own stylesheet, you can use the `--stylesheet` option to specify that stylesheet and receive the output in your own format. Whereas the **ec2-create-vpn-connection** command lets you choose a format for the configuration information, the corresponding API action (`CreateVpnConnection`) returns only the native XML.

If you decide to shut down your VPN connection for any reason and later create a new one, you must reconfigure your customer gateway with the new information returned from this command.

For more information about VPN connections, see [Adding a Hardware Virtual Private Gateway to Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2addvpn**.

### Syntax

```
ec2-create-vpn-connection -t type --customer-gateway customer_gateway_id  
--vpn-gateway vpn_gateway_id [--format format] | [--stylesheet your_stylesheet]
```

### Options

Name	Description
<code>-t <i>type</i></code>	The type of VPN connection. Type: String Valid values: <code>ipsec.1</code> Default: None Required: Yes Example: <code>-t ipsec.1</code>
<code>--customer-gateway <i>customer_gateway_id</i></code>	The ID of the customer gateway. Type: String Default: None Required: Yes Example: <code>--customer-gateway cgw-b4dc3961</code>

Name	Description
<code>--vpn-gateway <i>vpn_gateway_id</i></code>	The ID of the virtual private gateway. Type: String Default: None Required: Yes Example: <code>--vpn-gateway vgw-8db04f81</code>
<code>--format <i>format</i></code>	Includes customer gateway configuration information in the response, in the format specified. The returned information can be formatted for various devices, including a Cisco device ( <code>cisco-ios-isr</code> ) or Juniper device ( <code>juniper-junos-j</code> ), in human readable format ( <code>generic</code> ), or in the native XML format ( <code>xml</code> ). Type: String Valid values: <code>cisco-ios-isr</code>   <code>juniper-junos-j</code>   <code>juniper-screenos-6.2</code>   <code>juniper-screenos-6.1</code>   <code>generic</code>   <code>xml</code> Default: None Required: No Example: <code>--format cisco-ios-isr</code>
<code>--stylesheet <i>your_stylesheet</i></code>	Includes customer gateway configuration information in the response, formatted according to the custom XSL stylesheet specified. Type: String Default: None Required: No Example: <code>--stylesheet c:\my_stylesheet.xsl</code>
<code>--static-routes-only</code>	Indicates whether the VPN connection requires static routes. If you are creating a VPN connection for a device that does not support BGP, you must specify this value as true. Type: Boolean Default: <code>false</code> Required: No

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The VPNCONNECTION identifier
- The ID of the VPN connection
- The current state of the VPN connection (`pending`, `available`, `deleting`, `deleted`)
- The type of VPN connection (`ipsec.1`)
- The ID of the customer gateway
- The ID of the virtual private gateway
- The configuration information for the customer gateway

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command creates a VPN connection between the virtual private gateway with the ID `vgw-8db04f81` and the customer gateway with the ID `cgw-b4dc3961`. The example specifies that the configuration information be formatted as needed for a Cisco customer gateway. Because it's a long set of information, we haven't included the complete output here. To see an example of the configuration information returned, see the [Amazon Virtual Private Cloud Network Administrator Guide](#).

```
PROMPT> ec2-create-vpn-connection -t ipsec.1 --customer-gateway cgw-b4dc3961 -
-vpn-gateway
vgw-8db04f81 --format cisco-ios-isr
VPNCONNECTION vpn-44a8938f pending ipsec.1 cgw-b4dc3961 vgw-8db04f81
...Customer gateway configuration data in escaped XML format...
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

## Related Action

- [CreateVpnConnection](#)

## Related Commands

- [ec2-attach-vpn-gateway](#) (p. 48)
- [ec2-create-subnet](#) (p. 150)
- [ec2-create-vpc](#) (p. 162)
- [ec2-delete-vpn-connection](#) (p. 234)
- [ec2-describe-vpn-connections](#) (p. 447)

## ec2-create-vpn-connection-route

### Description

Creates a static route associated with a VPN connection between an existing virtual private gateway and a VPN customer gateway. The static route allows traffic to be routed from the virtual private gateway to the VPN customer gateway.

For more information about VPN connections, see [Adding a Hardware Virtual Private Gateway to Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2cvcr**.

### Syntax

```
ec2-create-vpn-connection-route --vpn-connection vpn_connection_id --cidr cidr_block
```

### Options

Name	Description
<code>--vpn-connection <i>vpn_connection_id</i></code>	The ID of the VPN connection. Type: String Default: None Required: Yes
<code>--cidr <i>cidr_block</i></code>	The CIDR block associated with the local subnet of the customer network. Type: String Default: None Required: Yes

### Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.



## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns `true` if the operation succeeds or an error if the operation does not succeed.

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command creates a static route to the VPN connection for the VPN connection with the ID `vpn-83ad48ea` to the destination CIDR block `11.12.0.0/16`.

```
PROMPT> ec2-create-vpn-connection-route --cidr "11.12.0.0/16" --vpn-connection  
vpn-83ad48ea  
RETURN true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateVpnConnectionRoute](#)

## ec2-create-vpn-gateway

### Description

Creates a virtual private gateway. A virtual private gateway is the endpoint on the VPC side of your VPN connection. You can create a virtual private gateway before creating the VPC itself.

For more information about virtual private gateways, see [Adding a Hardware Virtual Private Gateway to Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is `ec2addvgw`.

### Syntax

```
ec2-create-vpn-gateway -t type
```

### Options

Name	Description
<code>-t <i>type</i></code>	The type of VPN connection this virtual private gateway supports. Type: String Valid values: <code>ipsec.1</code> Default: None Required: Yes Example: <code>-t ipsec.1</code>

### Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The VPNGATEWAY identifier
- The ID of the virtual private gateway
- The current state of the virtual private gateway (`pending`, `available`, `deleting`, `deleted`)
- The type of VPN connection the virtual private gateway supports (`ipsec.1`)
- The Availability Zone for the virtual private gateway
- Information about VPCs attached to the virtual private gateway (there are none attached when you first create a virtual private gateway)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command creates a virtual private gateway.

```
PROMPT> ec2-create-vpn-gateway -t ipsec.1
VPNGATEWAY vgw-8db04f81 pending ipsec.1
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [CreateVpnGateway](#)

### Related Commands

- [ec2-attach-vpn-gateway](#) (p. 48)
- [ec2-delete-vpn-gateway](#) (p. 240)
- [ec2-describe-vpn-gateways](#) (p. 453)
- [ec2-detach-vpn-gateway](#) (p. 468)

# ec2-delete-customer-gateway

## Description

Deletes the specified customer gateway. You must delete the VPN connection before you can delete the customer gateway.

For more information about VPN customer gateways, see [Adding a Hardware Virtual Private Gateway to Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2delcgw**.

## Syntax

`ec2-delete-customer-gateway` *customer\_gateway\_id*

## Options

Name	Description
<i>customer_gateway_id</i>	The ID of the customer gateway. Type: String Default: None Required: Yes Example: cgw-b4dc3961

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The CUSTOMERGATEWAY identifier
- The ID of the customer gateway

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command deletes the specified customer gateway.

```
PROMPT> ec2-delete-customer-gateway cgw-b4dc3961  
CUSTOMERGATEWAY cgw-b4dc3961
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteCustomerGateway](#)

### Related Commands

- [ec2-create-customer-gateway](#) (p. 88)
- [ec2-describe-customer-gateways](#) (p. 267)



# ec2-delete-dhcp-options

## Description

Deletes the specified set of DHCP options. You must disassociate the set of DHCP options before you can delete it. You can disassociate the set of DHCP options by associating either a new set of options or the default set of options with the VPC.

For more information about DHCP options sets, see [DHCP Options Sets](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2deldopt**.

## Syntax

`ec2-delete-dhcp-options` *dhcp\_options\_id*

## Options

Name	Description
<i>dhcp_options_id</i>	The ID of the DHCP options set. Type: String Default: None Required: Yes Example: dopt-7a8b9c2d

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The DHCP\_OPTIONS identifier
- The ID of the DHCP options set

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command deletes the specified set of DHCP options.

```
PROMPT> ec2-delete-dhcp-options dopt-7a8b9c2d  
DHCP_OPTIONS dopt-7a8b9c2d
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteDhcpOptions](#)

### Related Commands

- [ec2-associate-dhcp-options](#) (p. 30)
- [ec2-create-dhcp-options](#) (p. 92)
- [ec2-describe-dhcp-options](#) (p. 272)

## ec2-delete-disk-image

### Description

Deletes the specified partially or fully uploaded disk image for conversion from Amazon S3. You can specify either the conversion task ID or the URL to the import manifest file in Amazon S3. For more information, see [Using the Command Line Tools to Import Your Virtual Machine to Amazon EC2](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2ddi**.

### Syntax

```
ec2-delete-disk-image { -t task_id | -u url } -o owner_access_key_id -w
owner_secret_access_key [--ignore-active-task]
```

### Options

Name	Description
<code>-t, --task <i>task_id</i></code>	The Task ID of the conversion task that is no longer active. Type: String Default: None Required: Conditional Condition: Either the task ID or the URL to the manifest is required. Example: <code>-t import-i-fh95npoc</code>
<code>-u, --manifest-url <i>url</i></code>	The URL for an existing import manifest file. Use this option to delete the uploaded disk image even if one or more active conversion tasks still reference the manifest. Type: String Default: None Required: Conditional Condition: Either the task ID or the URL to the manifest is required. Example: <code>-u http://s3.example.com/mydisk-to-delete.vmdk</code>
<code>-o, --owner-akid <i>owner_access_key_id</i></code>	The access Key ID of the owner of the bucket containing the uploaded disk image to be deleted. This parameter value is not sent to Amazon EC2. Type: String Default: None Required: Yes Example: <code>-o AKIAIOSFODNN7EXAMPLE</code>

Name	Description
<code>-w, --owner-sak owner_secret_access_key</code>	The AWS secret access key of the owner of the bucket containing the uploaded disk image to be deleted. This parameter value is not sent to Amazon EC2. Type: String Default: None Required: Yes Example: <code>-w wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>--ignore-active-task</code>	Delete the uploaded disk image despite having an active task. Using this option may cause active tasks to fail. Use this option at your own risk. Type: String Default: None Required: No Example: <code>--ignore-active-task</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>

Option	Description
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ID of the task

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command deletes the disk image with the ID `import-i-fh95npoc`.

```
PROMPT> ec2-delete-disk-image -t import-i-fh95npoc -o AKIAIOSFODNN7EXAMPLE -w
wJa1rXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY
DELETE-TASK import-i-fh95npoc
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Commands

- [ec2-cancel-conversion-task](#) (p. 65)
- [ec2-import-instance](#) (p. 498)
- [ec2-import-volume](#) (p. 509)
- [ec2-resume-import](#) (p. 617)

## ec2-delete-group

### Description

Deletes the specified security group.

#### Important

If you attempt to delete a security group that is associated with an instance, or is referenced by another security group, the operation fails with `InvalidGroup.InUse` for EC2-Classic or `DependencyViolation` for EC2-VPC.

The short version of this command is `ec2delgrp`.

### Syntax

```
ec2-delete-group { group_name | group_id }
```

## Options

Name	Description
<i>group_name</i>	[EC2-Classic, default VPC] The name of the security group. Type: String Default: None Required: Conditional Condition: For EC2-Classic and default VPCs, you can specify either <i>group_name</i> or <i>group_id</i> . Example: <code>webserv</code>
<i>group_id</i>	The ID of the security group. Type: String Default: None Required: Conditional Condition: Required for a nondefault VPC; for EC2-Classic or a default VPC, you can specify either <i>group_name</i> or <i>group_id</i> . Example: <code>sg-32fa9d3e</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).



Option	Description
<code>--connection-timeout</code> <i>timeout</i>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Success status (`true` or `false`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example 1

This example command deletes the specified security group for EC2-Classic.

```
PROMPT> ec2-delete-group webserv
RETURN true
```

### Example 2

This example command deletes the specified security group for EC2-VPC.

```
PROMPT> ec2-delete-group sg-1a2b3c4d
RETURN true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- `DeleteSecurityGroup`

### Related Commands

- `ec2-authorize` (p. 51)
- `ec2-create-group` (p. 96)
- `ec2-describe-group` (p. 280)
- `ec2-revoke` (p. 622)

## ec2-delete-internet-gateway

### Description

Deletes the specified Internet gateway. You must detach the Internet gateway from the VPC before you can delete it. For more information about your VPC and Internet gateway, see the [Amazon Virtual Private Cloud User Guide](#).

The short version of this command is **ec2deligw**.

### Syntax

`ec2-delete-internet-gateway` *internet\_gateway\_id*

### Options

Name	Description
<i>internet_gateway_id</i>	The ID of the Internet gateway. Type: String Default: None Required: Yes Example: igw-8db04f81

### Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key</code> <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key</code> <i>aws_secret_access_key</i>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Success status (`true` or `false`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command deletes the specified Internet gateway.

```
PROMPT> ec2-delete-internet-gateway igw-eaad4883  
RETURN true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteInternetGateway](#)

### Related Commands

- [ec2-attach-internet-gateway](#) (p. 38)
- [ec2-create-internet-gateway](#) (p. 109)
- [ec2-describe-internet-gateways](#) (p. 324)
- [ec2-detach-internet-gateway](#) (p. 458)

## ec2-delete-keypair

### Description

Deletes the specified key pair, by removing the public key from Amazon EC2. You must own the key pair.

The short version of this command is **ec2delkey**.

### Syntax

`ec2-delete-keypair` *key\_pair*

### Options

Name	Description
<i>key_pair</i>	The name of the key pair. Type: String Default: None Required: Yes Example: primary_keypair

### Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key</code> <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key</code> <i>aws_secret_access_key</i>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token</code> <i>delegation_token</i>	The AWS delegation token. Default: The value of the environment variable (if set).

Option	Description
<code>--connection-timeout</code> <i>timeout</i>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The KEYPAIR identifier
- The name of the deleted key pair

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command deletes the key pair named `my-key-pair`.

```
PROMPT> ec2-delete-keypair my-key-pair  
KEYPAIR my-key-pair
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteKeyPair](#)

### Related Commands

- [ec2-create-keypair](#) (p. 112)
- [ec2-describe-keypairs](#) (p. 328)



## ec2-delete-network-acl

### Description

Deletes the specified network ACL. You can't delete the ACL if it's associated with any subnets. You can't delete the default network ACL. For more information about network ACLs, see [Network ACLs](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2delnacl**.

### Syntax

`ec2-delete-network-acl acl_id`

### Options

Name	Description
<i>acl_id</i>	The ID of the network ACL. Type: String Default: None Required: Yes Example: acl-2cb85d45

### Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Success status (`true` or `false`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command deletes the specified network ACL.

```
PROMPT> ec2-delete-network-acl acl-2cb85d45  
RETURN    true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteNetworkAcl](#)

### Related Commands

- [ec2-create-network-acl](#) (p. 116)
- [ec2-describe-network-acls](#) (p. 332)
- [ec2-replace-network-acl-association](#) (p. 573)

# ec2-delete-network-acl-entry

## Description

Deletes the specified ingress or egress entry (rule) from the specified network ACL. For more information about network ACLs, see [Network ACLs](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2delnae**.

## Syntax

```
ec2-delete-network-acl-entry acl_id -n rule_number [--egress]
```

## Options

Name	Description
<i>acl_id</i>	The ID of the network ACL. Type: String Default: None Required: Yes Example: acl-5fb85d36
<code>-n, --rule-number</code> <i>rule_number</i>	The rule number of the entry to delete. Type: Number Default: None Required: Yes Example: 100
<code>--egress</code>	Indicates that the rule is an egress rule. Default: If not specified, the rule is an ingress rule. Required: No

## Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Success status (`true` or `false`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example 1

This example command deletes ingress rule number 100 from the specified network ACL.

```
PROMPT> ec2-delete-network-acl-entry acl-2cb85d45 -n 100
RETURN true
```

### Example 2

This example command deletes the egress entry with rule number 200 from the network ACL with the ID `acl-2cb85d45`.

```
PROMPT> ec2-delete-network-acl-entry acl-2cb85d45 -n 200 --egress
RETURN true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteNetworkAclEntry](#)

## Related Commands

- [ec2-create-network-acl-entry](#) (p. 119)
- [ec2-describe-network-acls](#) (p. 332)
- [ec2-replace-network-acl-entry](#) (p. 576)

# ec2-delete-network-interface

## Description

Deletes the specified network interface. You must detach the network interface before you can delete it.

The short version of this command is **ec2delnic**.

## Syntax

**ec2-delete-network-interface** *interface\_id*

## Options

Name	Description
<i>interface_id</i>	The ID of the network interface. Type: String Default: None Required: Yes Example: eni-3a9f6553

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).



Option	Description
<code>--connection-timeout</code> <i>timeout</i>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The NETWORKINTERFACE identifier
- The ID of the network interface that you deleted

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command deletes the specified network interface.

```
PROMPT> ec2-delete-network-interface eni-3a9f6553  
NETWORKINTERFACE      eni-3a9f6553
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteNetworkInterface](#)

### Related Commands

- [ec2-attach-network-interface](#) (p. 41)
- [ec2-create-network-interface](#) (p. 124)
- [ec2-describe-network-interface-attribute](#) (p. 337)
- [ec2-describe-network-interfaces](#) (p. 341)
- [ec2-detach-network-interface](#) (p. 461)
- [ec2-modify-network-interface-attribute](#) (p. 532)
- [ec2-reset-network-interface-attribute](#) (p. 611)

## ec2-delete-placement-group

### Description

Deletes the specified placement group. You must terminate all instances in a placement group before you can delete the placement group. For more information about placement groups and cluster instances, see [Cluster Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2delpgrp**.

### Syntax

`ec2-delete-placement-group` *placement\_group*

### Options

Name	Description
<i>placement_group</i>	The name of the placement group. Type: String Default: None Required: Yes Example: XYZ-cluster

### Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U</code> , <code>--url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O</code> , <code>--aws-access-key</code> <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W</code> , <code>--aws-secret-key</code> <i>aws_secret_access_key</i>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns the following information:

- The PLACEMENTGROUP identifier
- The name of the placement group
- The status of the placement group (`deleted`)

## Examples

### Example

This example command deletes the placement group named `XYZ-cluster`.

```
PROMPT> ec2-delete-placement-group XYZ-cluster  
PLACEMENTGROUP XYZ-cluster deleted
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeletePlacementGroup](#)

### Related Commands

- [ec2-create-placement-group](#) (p. 129)
- [ec2-describe-placement-groups](#) (p. 348)

## ec2-delete-route

### Description

Deletes the specified route from the specified route table. For more information about route tables, see [Route Tables](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2delrt**.

### Syntax

```
ec2-delete-route route_table_id -r cidr
```

### Options

Name	Description
<i>route_table_id</i>	The ID of the route table. Type: String Default: None Required: Yes Example: rtb-5da34634
-r, --cidr <i>cidr</i>	The CIDR range for the route. The value you specify must match the CIDR for the route exactly. Type: String Default: None Required: Yes Example: 0.0.0.0/0

### Common Options

Option	Description
--region <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
-U, --url <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
-O, --aws-access-key <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXLIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Success status (`true` or `false`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command deletes the route with the destination CIDR `172.16.1.0/24` from the specified route table.

```
PROMPT> ec2-delete-route rtb-e4ad488d -r 172.16.1.0/24
RETURN          true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteRoute](#)

### Related Commands

- [ec2-create-route](#) (p. 136)
- [ec2-describe-route-tables](#) (p. 380)
- [ec2-replace-route](#) (p. 580)



## ec2-delete-route-table

### Description

Deletes the specified route table. You must disassociate the route table from any subnets before you can delete it. You can't delete the main route table. For more information about route tables, see [Route Tables](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2delrtb**.

### Syntax

`ec2-delete-route-table` *route\_table\_id*

### Options

Name	Description
<i>route_table_id</i>	The ID of the route table. Type: String Default: None Required: Yes Example: rtb-7aa34613

### Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U</code> , <code>--url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O</code> , <code>--aws-access-key</code> <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W</code> , <code>--aws-secret-key</code> <i>aws_secret_access_key</i>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Success status (`true` or `false`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command deletes the specified route table.

```
PROMPT> ec2-delete-route-table rtb-7aa34613  
RETURN true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteRouteTable](#)

### Related Commands

- [ec2-associate-route-table](#) (p. 34)
- [ec2-create-route-table](#) (p. 140)
- [ec2-describe-route-tables](#) (p. 380)
- [ec2-disassociate-route-table](#) (p. 478)
- [ec2-replace-route-table-association](#) (p. 584)

# ec2-delete-snapshot

## Description

Deletes the specified snapshot.

### Note

- If you make periodic snapshots of a volume, the snapshots are incremental so that only the blocks on the device that have changed since your last snapshot are saved in the new snapshot. Even though snapshots are saved incrementally, the snapshot deletion process is designed so that you need to retain only the most recent snapshot in order to restore the volume.
- You cannot delete a snapshot of the root device of an EBS volume used by a registered AMI. You must first de-register the AMI before you can delete the snapshot.

The short version of this command is **ec2delsnap**.

## Syntax

`ec2-delete-snapshot snapshot_id`

## Options

Name	Description
<i>snapshot_id</i>	The ID of the Amazon EBS snapshot. Type: String Default: None Required: Yes Example: snap-78a54011

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The SNAPSHOT identifier
- The ID of the snapshot

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command deletes the snapshot with the ID `snap-1a2b3c4d`.

```
PROMPT> ec2-delete-snapshot snap-1a2b3c4d
SNAPSHOT snap-1a2b3c4d
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteSnapshot](#)

### Related Commands

- [ec2-create-snapshot](#) (p. 143)
- [ec2-describe-snapshots](#) (p. 389)

# ec2-delete-spot-datafeed-subscription

## Description

Deletes the data feed for Spot Instances. For more information about Spot Instances, see [Spot Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2delsds**.

## Syntax

`ec2-delete-spot-datafeed-subscription`

## Options

This command has no options.

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>

Option	Description
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key <i>ec2_private_key</i></code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert <i>ec2_cert</i></code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns no output.

Amazon EC2 command line tools display errors on `stderr`.



## Examples

### Example

This example command deletes the data feed for the account.

```
PROMPT> ec2-delete-spot-datafeed-subscription  
-
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteSpotDatafeedSubscription](#)

### Related Commands

- [ec2-create-spot-datafeed-subscription](#) (p. 147)
- [ec2-describe-spot-datafeed-subscription](#) (p. 395)

# ec2-delete-subnet

## Description

Deletes the specified subnet. You must terminate all running instances in the subnet before you can delete the subnet.

The short version of this command is **ec2delsubnet**.

## Syntax

`ec2-delete-subnet` *subnet\_id*

## Options

Name	Description
<i>subnet_id</i>	The ID of the subnet. Type: String Default: None Required: Yes Example: subnet-9d4a7b6c

## Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U</code> , <code>--url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O</code> , <code>--aws-access-key</code> <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W</code> , <code>--aws-secret-key</code> <i>aws_secret_access_key</i>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The SUBNET identifier
- The ID of the subnet

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command deletes the specified subnet.

```
PROMPT> ec2-delete-subnet subnet-9d4a7b6c  
SUBNET subnet-9d4a7b6c
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteSubnet](#)

### Related Commands

- [ec2-create-subnet](#) (p. 150)
- [ec2-describe-subnets](#) (p. 412)

## ec2-delete-tags

### Description

Deletes the specified set of tags from the specified set of resources. This command is designed to follow the `ec2-describe-tags` command.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is `ec2deltag`.

### Syntax

```
ec2-delete-tags resource_id [resource_id ... ] --tag key[=value] [--tag key[=value] ... ]
```

### Options

Name	Description
<i>resource_id</i>	One or more resource IDs. Type: String Default: None Required: Yes Example: i-1a2b3c4d
--tag <i>key</i> or <i>key=value</i>	The key and optional value of the tag, separated by an equals sign (=). You can specify more than one tag to remove. Type: String Default: None Required: Yes Example: --tag "stack=Production"

### Common Options

Option	Description
--region <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
-U, --url <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information for tags that were deleted:

- The TAG identifier
- The resource type identifier
- The ID of the resource
- The tag key
- The tag value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example deletes the tags for the AMI with the ID `ami-1a2b3c4d`. First, get a list of the tags using the following command.

```
PROMPT> ec2-describe-tags --filter "resource-id=ami-1a2b3c4d"  
TAG ami-1a2b3c4d image webserver  
TAG ami-1a2b3c4d image stack Production
```

Next, delete the tags.

```
PROMPT> ec2-delete-tags ami-1a2b3c4d --tag webserver --tag "stack=Production"
```

It's optional to specify the value for any tag with a value. If you specify a value for the key, the tag is deleted only if the tag's value matches the one you specified. If you specify the empty string as the value, the tag is deleted only if the tag's value is the empty string. The following example specifies the empty string as the value for the tag to delete (notice the equals sign after `Owner`).

```
PROMPT> ec2-delete-tags snap-4dfg39a --tag "Owner="
```

### Example 2

This example command deletes the `stack` tag from two particular instances.

```
PROMPT> ec2-delete-tags i-5f4e3d2a i-12345678 --tag stack
```

### Example 3

You can specify a tag key without a corresponding tag value if you want to delete the tag regardless of its value. This example command deletes all tags for the specified resources that have a key of `Purpose`, regardless of the tag value.

```
PROMPT> ec2-delete-tags i-5f4e3d2a i-4d5h8a9b i-1d3d4fae --tag Purpose
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteTags](#)

### Related Commands

- [ec2-create-tags](#) (p. 154)
- [ec2-describe-tags](#) (p. 417)



# ec2-delete-volume

## Description

Deletes the specified Amazon EBS volume. The volume must be in the `available` state (not attached to an instance). For more information about Amazon EBS, see [Amazon Elastic Block Store](#) in the *Amazon Elastic Compute Cloud User Guide*.

### Note

The volume remains in the `deleting` state for several minutes after you run this command.

The short version of this command is `ec2delvol`.

## Syntax

`ec2-delete-volume` *volume\_id*

## Options

Name	Description
<i>volume_id</i>	The ID of the volume. Type: String Default: None Required: Yes Example: vol-4282672b

## Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U</code> , <code>--url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O</code> , <code>--aws-access-key</code> <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The VOLUME identifier
- The ID of the volume that was deleted

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command deletes the volume with the ID `vol-1a2b3c4d`.

```
PROMPT> ec2-delete-volume vol-1a2b3c4d  
VOLUME vol-1a2b3c4d
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteVolume](#)

### Related Commands

- [ec2-attach-volume](#) (p. 44)
- [ec2-create-volume](#) (p. 158)
- [ec2-describe-volumes](#) (p. 432)
- [ec2-detach-volume](#) (p. 464)

## ec2-delete-vpc

### Description

Deletes the specified VPC. You must detach or delete all gateways and resources that are associated with the VPC before you can delete it. For example, you must terminate all instances running in the VPC, delete all security groups associated with the VPC (except the default one), delete all route tables associated with the VPC (except the default one), and so on.

The short version of this command is **ec2delvpc**.

### Syntax

`ec2-delete-vpc vpc_id`

### Options

Name	Description
<code>vpc_id</code>	The ID of the VPC. Type: String Default: None Required: Yes Example: vpc-1a2b3c4d

### Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The VPC identifier
- The ID of the VPC

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command deletes the specified VPC.

```
PROMPT> ec2-delete-vpc vpc-1a2b3c4d  
VPC vpc-1a2b3c4d
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteVpc](#)

### Related Commands

- [ec2-create-vpc](#) (p. 162)
- [ec2-describe-vpcs](#) (p. 442)

# ec2-delete-vpn-connection

## Description

Deletes the specified VPN connection.

If you're deleting the VPC and its associated components, we recommend that you detach the virtual private gateway from the VPC and delete the VPC before deleting the VPN connection.

Another reason to delete the VPN connection is if you believe that the tunnel credentials for your VPN connection have been compromised. In that situation, you can delete the VPN connection and create a new one that has new keys, without needing to delete the VPC or virtual private gateway. If you create a new VPN connection, you must reconfigure the customer gateway using the new configuration information returned with the new VPN connection ID.

For more information about VPN connections, see [Adding a Hardware Virtual Private Gateway to Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2delvpn**.

## Syntax

```
ec2-delete-vpn-connection vpn_connection_id
```

## Options

Name	Description
<i>vpn_connection_id</i>	The ID of the VPN connection. Type: String Default: None Required: Yes Example: vpn-44a8938f

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).



Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The `VPNCONNECTION` identifier
- The ID of the VPN connection

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command deletes the specified VPN connection.

```
PROMPT> ec2-delete-vpn-connection vpn-44a8938f
VPNCONNECTION vpn-44a8938f
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteVpnConnection](#)

### Related Commands

- [ec2-create-vpn-connection](#) (p. 166)
- [ec2-delete-vpc](#) (p. 231)
- [ec2-describe-vpn-connections](#) (p. 447)
- [ec2-detach-vpn-gateway](#) (p. 468)

## ec2-delete-vpn-connection-route

### Description

Deletes the specified static route associated with a VPN connection between an existing virtual private gateway and a VPN customer gateway. The static route allows traffic to be routed from the virtual private gateway to the VPN customer gateway.

The short version of this command is **ec2dvcr**.

### Syntax

```
ec2-delete-vpn-connection-route --vpn-connection vpn_connection_id --cidr cidr_block
```

### Options

Name	Description
<code>--vpn-connection</code> <i>vpn_connection_id</i>	The ID of the VPN connection. Type: String Default: None Required: Yes
<code>--cidr</code> <i>cidr_block</i>	The CIDR block associated with the local subnet of the customer network. Type: String Default: None Required: Yes

### Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key</code> <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXLIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns true if the operation succeeds or an error if the operation does not succeed.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command deletes a static route to the destination CIDR block `11.12.0.0/16` associated with the VPN connection with the ID `vpn-83ad48ea`.

```
PROMPT> ec2-delete-vpn-connection-route--cidr "11.12.0.0/16" --vpn-connection  
vpn-83ad48ea  
RETURN true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteVpnConnectionRoute](#)

## ec2-delete-vpn-gateway

### Description

Deletes the specified virtual private gateway. We recommend that before you delete a virtual private gateway, you detach it from the VPC and delete the VPN connection. Note that you don't need to delete the virtual private gateway if you plan to delete and recreate the VPN connection between your VPC and your network.

The short version of this command is **ec2delvgw**.

### Syntax

`ec2-delete-vpn-gateway` *vpn\_gateway\_id*

### Options

Name	Description
<i>vpn_gateway_id</i>	The ID of the virtual private gateway. Type: String Default: None Required: Yes Example: vgw-8db04f81

### Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The VPNGATEWAY identifier
- The ID of the virtual private gateway

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command deletes the specified virtual private gateway.

```
PROMPT> ec2-delete-vpn-gateway vgw-8db04f81  
VPNGATEWAY vgw-8db04f81
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeleteVpnGateway](#)

### Related Commands

- [ec2-create-vpn-gateway](#) (p. 174)
- [ec2-delete-vpn-connection](#) (p. 234)
- [ec2-describe-vpn-gateways](#) (p. 453)

## ec2-deregister

### Description

Deregisters the specified AMI. After you deregister an AMI, it can't be used to launch new instances.

**Note**

This command does not delete the AMI. To delete the AMI, use [ec2-delete-bundle](#) (p. 675) for Amazon S3-backed AMIs, or [ec2-delete-snapshot](#) (p. 215) for Amazon EBS-backed AMIs.

The short version of this command is **ec2dereg**.

### Syntax

`ec2-deregister` *ami\_id*

### Options

Name	Description
<i>ami_id</i>	The ID of the AMI. Type: String Default: None Required: Yes Example: ami-4fa54026

### Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U</code> , <code>--url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O</code> , <code>--aws-access-key</code> <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>



Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The IMAGE identifier
- The ID of the AMI

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command deregisters the specified AMI.

```
PROMPT> ec2-deregister ami-1a2b3c4d  
IMAGE ami-1a2b3c4d
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DeregisterImage](#)

### Related Commands

- [ec2-describe-images](#) (p. 290)
- [ec2-register](#) (p. 563)

# ec2-describe-account-attributes

## Description

Describes the specified attribute of your AWS account.

The short version of this command is **ec2daa**.

## Syntax

```
ec2-describe-account-attributes { supported-platforms | default-vpc }
```

## Options

Name	Description
supported-platforms	Indicates whether your account can launch instances into EC2-Classic and EC2-VPC, or only into EC2-VPC. For more information, see <a href="#">Supported Platforms</a> . Required: No
default-vpc	The ID of the default VPC for your account, or <code>none</code> . For more information, see <a href="#">Your Default VPC and Subnets</a> . Required: No

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ACCOUNTATTRIBUTE identifier
- The attribute name
- The VALUE identifier
- The attribute value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes the platforms that are supported by your AWS account.

```
PROMPT> ec2-describe-account-attributes supported-platforms
```

The following is example output for an account that must launch instances into a VPC, such as the default VPC.

```
ACCOUNTATTRIBUTE supported-platforms  
VALUE EC2-VPC
```

The following is example output for an account that can launch instances into EC2-Classic or into a VPC.

```
ACCOUNTATTRIBUTE supported-platforms  
VALUE EC2-Classic  
VALUE EC2-VPC
```

### Example 2

This example command describes the ID of the default VPC.

```
PROMPT> ec2-describe-account-attributes default-vpc
```

The following is example output for an account with a default VPC.

```
ACCOUNTATTRIBUTE default-vpc  
VALUE vpc-1a2b3c4d
```

The following is example output for an account without a default VPC.

```
ACCOUNTATTRIBUTE default-vpc  
VALUE none
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeAccountAttributes](#)

# ec2-describe-addresses

## Description

Describes one or more of your Elastic IP addresses.

An Elastic IP address is for use in either the EC2-Classical platform or in a VPC. For more information, see [Elastic IP Addresses](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2daddr**.

## Syntax

```
ec2-describe-addresses [public_ip ... | allocation_id ...] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>public_ip</i>	[EC2-Classical] One or more Elastic IP addresses. Type: String Default: Describes all your Elastic IP addresses. Required: No Example: 198.51.100.1
<i>allocation_id</i>	[EC2-VPC] One or more allocation IDs. Type: String Default: Describes all your Elastic IP addresses. Required: No Example: eipalloc-9558a4fc
<code>-F, --filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your Elastic IP addresses, or only those you specified. Required: No Example: --filter "instance-id=i-1a2b3c4d"

## Supported Filters

You can specify filters so that the response includes information for only certain Elastic IP addresses. For example, you can use a filter to specify that you're interested in addresses that have a specific tag. You can specify multiple values for a filter. The response includes information for an address only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify addresses of a specific value that have a specific tag. The response includes information for an address only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**domain**

Indicates whether the address is for use in a VPC.

Type: String

Valid values: `standard` | `vpc`

**instance-id**

The instance the address is associated with (if any).

Type: String

**public-ip**

The Elastic IP address.

Type: String

**allocation-id**

The allocation ID for the address (VPC only).

Type: String

**association-id**

The association ID for the address (VPC only).

Type: String

**network-interface-id**

The network interface (if any) that the address is associated with (VPC only).

Type: String

**network-interface-owner-id**

The owner IID.

Type: String

**private-ip-address**

The private IP address associated with the Elastic IP address (VPC only).

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.



Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ADDRESS identifier
- The Elastic IP address
- The ID of the instance to which the IP address is associated, if any
- The domain of the Elastic IP address (`standard` or `vpc`)
- [EC2-VPC] The allocation ID
- [EC2-VPC] The association ID
- [EC2-VPC] The private IP address associated with the Elastic IP address

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes the Elastic IP address `192.0.2.1`, which is assigned to an instance in EC2-Classic with the ID `i-f15ebb98`.

```
PROMPT> ec2-describe-addresses 192.0.2.1
ADDRESS 192.0.2.1 i-f15ebb98 standard
```

### Example 2

This example command describes the Elastic IP address with the allocation ID `eipalloc-282d9641`, which is assigned to an instance in EC2-VPC with the ID `i-7a00642`.

```
PROMPT> ec2-describe-addresses eipalloc-9258a4fb
Type      Address      Instance      Domain      AllocationId
AssociationId      NetworkInterfaceID
PrivateIP ADDRESS 203.0.113.0 i-7a00642e vpc eipalloc-282d9641
eipassoc-252d964c eni-d83388b1 10.0.0.14 4
```

### Example 3

This example command describes all your Elastic IP addresses (for both platforms).

```
PROMPT> ec2-describe-addresses
ADDRESS 203.0.113.12    i-f15ebb98    standard
ADDRESS 203.0.113.22    i-9e9da4e9    vpc          eipalloc-9258a4fb    eipassoc-
0659a56f
ADDRESS 203.0.113.32    vpc          eipalloc-9558a4fc
```

## Example 4

This example command describes your Elastic IP addresses for EC2-VPC only.

```
PROMPT> ec2-describe-addresses --filter "allocation-id=*" -H
ec2-describe-addresses -H
Type          Address          Instance          Domain  AllocationId
AssociationId NetworkInterfaceID
PrivateIP     ADDRESS 203.0.113.10    vpc          eipalloc-1b5fe072
eipassoc-eb5fe082    eni-0689366f    10.0.1.35
                ADDRESS 203.0.113.20    i-c844219c    vpc          eipalloc-b463dcdd
eipassoc-d218a3bb    eni-ea67dc83    10.0.0.174
                ADDRESS 203.0.113.140    i-ba6a0d      vpc          eipalloc-1266dd7b
eipassoc-39e15b50    eni-73e05a1a    10.0.0.85
                ADDRESS 203.0.113.140    i-7a00642    vpc          eipalloc-f38a359a
eipassoc-1f239876    eni-d83388b1    10.0.0.12
                ADDRESS 203.0.113.177    i-7a00642e    vpc          eipalloc-282d9641
eipassoc-252d964c    eni-d83388b1    10.0.0.14
```

## Example 5

This example command describes the Elastic IP address associated with a particular private IP address in EC2-VPC.

```
PROMPT> ec2-describe-addresses --filter "private-ip-address=10.0.0.94"
ADDRESS 203.0.113.155    vpc          eipalloc-fdfc4394    eipassoc-52fa453b
eni-66fc430f    10.0.0.94
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeAddresses](#)

### Related Commands

- [ec2-allocate-address](#) (p. 17)
- [ec2-associate-address](#) (p. 25)
- [ec2-disassociate-address](#) (p. 474)
- [ec2-release-address](#) (p. 569)

# ec2-describe-availability-zones

## Description

Describes one or more of the Availability Zones that are available to you. The results include Availability Zones only for the region you're currently using. If there is an event impacting an Availability Zone, you can use this command to view the state and any provided message for that Availability Zone.

### Note

Availability Zones are not the same across accounts. The Availability Zone us-east-1a for account A is not necessarily the same as us-east-1a for account B. Availability Zone assignments are mapped independently for each account.

The short version of this command is **ec2daz**.

## Syntax

```
ec2-describe-availability-zones [zone_name ...] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>zone_name</i>	One or more Availability Zone names. Type: String Default: Describes all Availability Zones in the region. Required: No Example: us-east-1a
<i>-F, --filter name=value</i>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space (" <i>name=value example</i> "). On a Windows system, use quotation marks even without a space in the value string (" <i>name=valueexample</i> "). Type: String Default: Describes all Availability Zones in the region, or only those you specified. Required: No Example: <i>--filter "region-name=ap-southeast-1"</i>

## Supported Filters

You can specify filters so that the response includes information for only certain Availability Zones. For example, you can use a filter to specify that you're interested in Availability Zones in the `available` state. You can specify multiple values for a filter. The response includes information for an Availability Zone only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify Availability Zones that are in a particular region and are in the `available` state. The response includes information for an Availability Zone only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**message**

Information about the Availability Zone.

Type: String

**region-name**

The region for the Availability Zone (for example, us-east-1).

Type: String

**state**

The state of the Availability Zone

Type: String

Valid values: available | impaired | unavailable

**zone-name**

The name of the zone.

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>

Option	Description
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information for each Availability Zone retrieved:

- The AVAILABILITYZONE identifier
- The name of the Availability Zone
- The state of the Availability Zone
- The region that the Availability Zone belongs to
- Any messages associated with the Availability Zone

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes the Availability Zones that are available to you. The output includes Availability Zones only for the current region.

```
PROMPT> ec2-describe-availability-zones  
AVAILABILITYZONE us-east-1a available us-east-1  
AVAILABILITYZONE us-east-1b available us-east-1  
AVAILABILITYZONE us-east-1c available us-east-1
```

### Example 2

This example command describes the Availability Zones that are available to you in the `us-east-1` region.

```
PROMPT> ec2-describe-availability-zones --region us-east-1  
AVAILABILITYZONE us-east-1a available us-east-1  
AVAILABILITYZONE us-east-1b available us-east-1  
AVAILABILITYZONE us-east-1c available us-east-1  
AVAILABILITYZONE us-east-1d available us-east-1
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeAvailabilityZones](#)

### Related Commands

- [ec2-describe-regions](#) (p. 352)
- [ec2-run-instances](#) (p. 628)

# ec2-describe-bundle-tasks

## Description

Describes one or more of your bundling tasks.

### Note

Completed bundle tasks are listed for only a limited time. If your bundle task is no longer in the list, you can still register an AMI from it. Just use the `ec2-register` command with the Amazon S3 bucket name and image manifest name you provided to the bundle task.

The short version of this command is **ec2dbun**.

## Syntax

```
ec2-describe-bundle-tasks [bundle ...] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>bundle</i>	One or more bundle task IDs. Type: String Default: Describes all your bundle tasks. Required: No Example: bun-cla432a3
<code>-F, --filter <i>name=value</i></code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space (" <i>name=value example</i> "). On a Windows system, use quotation marks even without a space in the value string (" <i>name=valueexample</i> "). Type: String Default: Describes all your bundle tasks, or only those you specified. Required: No Example: --filter "state=pending"

## Supported Filters

You can specify filters so that the response includes information for only certain bundle tasks. For example, you can use a filter to specify that you're interested in the bundle tasks in the `complete` state. You can specify multiple values for a filter. The response includes information for a bundle task only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify bundles that are stored in a specific Amazon S3 bucket and are in the `complete` state. The response includes information for a bundle task only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.



You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**bundle-id**

The ID of the bundle task.

Type: String

**error-code**

If the task failed, the error code returned.

Type: String

**error-message**

If the task failed, the error message returned.

Type: String

**instance-id**

The ID of the instance that was bundled.

Type: String

**progress**

The level of task completion, as a percentage (for example, 20%).

Type: String

**s3-bucket**

The Amazon S3 bucket to store the AMI.

Type: String

**s3-prefix**

The beginning of the AMI name.

Type: String

**start-time**

The time the task started (for example, 2008-09-15T17:15:20.000Z).

Type: DateTime

**state**

The state of the task.

Type: String

Valid values: `pending` | `waiting-for-shutdown` | `bundling` | `storing` | `cancelling` | `complete` | `failed`

**update-time**

The time of the most recent update for the task (for example, 2008-09-15T17:15:20.000Z).

Type: DateTime

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.

**Amazon Elastic Compute Cloud CLI Reference**  
**Common Options**

Option	Description
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the EC2_PRIVATE_KEY environment variable. Example: -K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the EC2_CERT environment variable. Example: -C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem

## Output

This command returns a table that contains the following information:

- The BUNDLE identifier
- The ID of the bundle
- The ID of the instance
- The bucket name
- The prefix
- The start time
- The update time
- The current state (pending, waiting-for-shutdown, bundling, storing, cancelling, complete, failed)
- The progress as a % if state is bundling

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes the status of the specified bundle task.

```
PROMPT> ec2-describe-bundle-tasks bun-c1a540a8
BUNDLE bun-c1a540a8 i-2674d22r myawsbucket winami 2008-09-15T17:15:20.000Z
2008-09-15T17:15:20.000Z bundling 3%
```

## Example 2

This example filters the response to include only bundle tasks whose state is either `complete` or `failed`, and in addition are targeted for the Amazon S3 bucket named `myawsbucket`.

```
PROMPT> ec2-describe-bundle-tasks --filter "s3-bucket=myawsbucket" --filter
"state=complete" --filter "state=failed"
BUNDLE bun-1a2b3c4d i-8765abcd myawsbucket linuxami 2008-09-14T08:32:43.000Z
2008-09-14T08:32:43.000Z complete
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeBundleTasks](#)

### Related Commands

- [ec2-bundle-instance](#) (p. 57)
- [ec2-cancel-bundle-task](#) (p. 62)

# ec2-describe-conversion-tasks

## Description

Describes one or more of your conversion tasks. For more information, see [Using the Command Line Tools to Import Your Virtual Machine to Amazon EC2](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2dct**.

## Syntax

```
ec2-describe-conversion-tasks [task_id ...] [--show-transfer-details]
```

## Options

Name	Description
<i>task_id</i>	One or more conversion task IDs. Type: String Default: Describes all your conversion tasks. Required: No Example: import-i-ffvko9js
--show-transfer-details	Any additional details for uploading the disk image. The <code>ec2-upload-disk-image</code> command automatically returns this information. Required: No Example: --show-transfer-details

## Common Options

Option	Description
--region <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
-U, --url <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
-O, --aws-access-key <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: -O AKIAIOSFODNN7EXAMPLE

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns the following information:

- Information about the task, such as the task ID, task type, expiration, status, and number of bytes received
- Information about the image, such as the image size, format, volume ID, and volume size

Amazon EC2 command line tools display errors on stderr.

## Example

### Example

This example command shows the status of your import instance task.

```
PROMPT> ec2-describe-conversion-tasks import-i-ffvko9js
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeConversionTasks](#)

### Related Commands

- [ec2-cancel-conversion-task](#) (p. 65)
- [ec2-delete-disk-image](#) (p. 183)
- [ec2-import-instance](#) (p. 498)
- [ec2-import-volume](#) (p. 509)
- [ec2-resume-import](#) (p. 617)

# ec2-describe-customer-gateways

## Description

Describes one or more of your customer gateways.

For more information about VPN customer gateways, see [Adding a Hardware Virtual Private Gateway to Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2dcgw**.

## Syntax

```
ec2-describe-customer-gateways [ customer_gateway_id ... ] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>customer_gateway_id</i>	One or more customer gateway IDs. Type: String Default: Describes all your customer gateways. Required: No Example: cgw-b4dc3961
<code>-F, --filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your customer gateways, or only those you specified. Required: No Example: --filter "tag-key=Production"

## Supported Filters

You can specify filters so that the response includes information for only certain customer gateways. For example, you can use a filter to specify that you're interested in customer gateways in the `pending` or `available` state. You can specify multiple values for a filter. The response includes information for a customer gateway only if it matches at least one of the of the filter values that you specified.

You can specify multiple filters; for example, specify customer gateways that have a specific IP address for the Internet-routable external interface and are in the `pending` or `available` state. The response includes information for a customer gateway only if it matches all the filters that you specified. If there's no match, no special message is returned, the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.



The following are the available filters.

**bgp-asn**

The customer gateway's Border Gateway Protocol (BGP) Autonomous System Number (ASN).

Type: String

**customer-gateway-id**

The ID of the customer gateway.

Type: String

**ip-address**

The IP address of the customer gateway's Internet-routable external interface (for example, 12.1.2.3).

Type: String

**state**

The state of the customer gateway.

Type: String

Valid values: pending | available | deleting | deleted

**type**

The type of customer gateway. Currently, the only supported type is `ipsec.1`.

Type: String

Valid values: ipsec.1

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `tag-key=Purpose` and the filter `tag-value=X`, you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where `Purpose` is `X`, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:key=value**

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag `Purpose=X`, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag `Purpose=X` or the tag `Purpose=Y`, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.

**Amazon Elastic Compute Cloud CLI Reference**  
**Common Options**

Option	Description
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the EC2_PRIVATE_KEY environment variable. Example: -K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the EC2_CERT environment variable. Example: -C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem

## Output

This command returns a table that contains the following information:

- The CUSTOMERGATEWAY identifier
- The ID of the customer gateway
- The state of the customer gateway (pending, available, deleting, deleted)
- The type of VPN connection the customer gateway supports (ipsec.1)
- The Internet-routable IP address of the customer gateway's outside interface
- The customer gateway's Border Gateway Protocol (BGP) Autonomous System Number (ASN)
- Any tags assigned to the customer gateway

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes the specified customer gateway.

```
PROMPT> ec2-describe-customer-gateways cgw-b4dc3961
CUSTOMERGATEWAY cgw-b4dc3961 available ipsec.1 12.1.2.3 65534
```

### Example 2

This example command uses filters to describe any customer gateway you own whose IP address is 12.1.2.3, and whose state is either pending or available.

```
PROMPT> ec2-describe-customer-gateways --filter "ip-address=12.1.2.3" --filter  
"state=pending" --filter "state=available"  
CUSTOMERGATEWAY cgw-b4dc3961 available ipsec.1 12.1.2.3 65534
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeCustomerGateways](#)

### Related Commands

- [ec2-create-customer-gateway](#) (p. 88)
- [ec2-delete-customer-gateway](#) (p. 177)

# ec2-describe-dhcp-options

## Description

Describes one or more of your DHCP options sets.

For more information about DHCP options sets, see [DHCP Options Sets](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2ddopt**.

## Syntax

```
ec2-describe-dhcp-options [ dhcp_options_id ... ] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>dhcp_options_id</i>	The IDs of one or more DHCP options sets. Type: String Default: Describes all your DHCP options sets. Required: No Example: dopt-7a8b9c2d
<code>-F, --filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your DHCP options sets, or only those you specified. Required: No Example: --filter "tag-key=Production"

## Supported Filters

You can specify filters so that the response includes information for only certain sets of DHCP options. For example, you can use a filter to specify that you're interested in sets of DHCP options with a particular value for the `domain-name` option. You can specify multiple values for a filter. The response includes information for a set of DHCP options only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify sets of DHCP options that have a specific value for the `domain-name` option and a specific tag. The response includes information for a set of DHCP options only if it matches all the filters that you specified. If there's no match, no special message is returned, the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**dhcp-options-id**

The ID of a set of DHCP options.

Type: String

**key**

The key for one of the options (for example, domain-name).

Type: String

**value**

The value for one of the options.

Type: String

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `tag-key=Purpose` and the filter `tag-value=X`, you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where `Purpose` is `X`, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:key=value**

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag `Purpose=X`, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag `Purpose=X` or the tag `Purpose=Y`, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The DHCPOPTIONS identifier
- The ID of the DHCP options set
- The name and values for each option in the set
- Any tags assigned to the set

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes the specified DHCP options set.

```
PROMPT> ec2-describe-dhcp-options dopt-7a8b9c2d
DHCOPTIONS dopt-7a8b9c2d
OPTION domain-name mydomain.com
OPTION domain-name-servers 10.2.5.1,10.2.5.2
```

### Example 2

This example command uses filters to describe any DHCP options set that includes a `domain-name` option whose value includes the string `example`.

```
PROMPT> ec2-describe-dhcp-options --filter "key=domain-name" --filter
"value=*example*"
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeDhcpOptions](#)



## Related Commands

- [ec2-associate-dhcp-options](#) (p. 30)
- [ec2-create-dhcp-options](#) (p. 92)
- [ec2-delete-dhcp-options](#) (p. 180)

## ec2-describe-export-tasks

### Description

Describes one or more of your export tasks, including the most recent canceled and completed tasks.

The short version of this command is **ec2dxt**.

### Syntax

```
ec2-describe-export-tasks [ task_id ... ]
```

### Options

Name	Description
<i>task_id</i>	One or more export task IDs. These are returned by <code>ec2-create-instance-export-task</code> . Type: String Default: Describes all your export tasks. Required: No

### Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token <i>delegation_token</i></code>	The AWS delegation token. Default: The value of the environment variable (if set).

Option	Description
<code>--connection-timeout</code> <i>timeout</i>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns information about the export task including:

- The EXPORTTASK identifier
- The ID of the task
- The status of the task
- The export progress

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command describes the export task with the ID `export-i-fgelt0i7`.

```
PROMPT> ec2-describe-export-tasks export-i-fgelt0i7  
EXPORTTASK    export-i-fgelt0i7    active    i-81428ee7    vmware    vmdk  
myexportbucket    export-i-fgelt0i7.vmdk
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeExportTasks](#)

### Related Commands

- [ec2-cancel-export-task](#) (p. 68)
- [ec2-create-instance-export-task](#) (p. 105)

# ec2-describe-group

## Description

Describes one or more of your security groups.

A security group is for use with instances either in the EC2-Classical platform or in a specific VPC. For more information, see [Amazon EC2 Security Groups](#) in the *Amazon Elastic Compute Cloud User Guide* and [Security Groups for Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2dgrp**.

## Syntax

```
ec2-describe-group [ec2_group_name_or_id | vpc_group_id ...] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>ec2_group_name_or_id</i> or <i>vpc_group_id</i>	<p>EC2-Classical, default VPC: One or more security group names or IDs.</p> <p>Nondefault VPC: One more security group IDs. Type: String Default: Describes all your security groups. Required: No Example: webserv</p>
-F, --filter <i>name=value</i>	<p>A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your security groups, or only those you specified. Required: No Example: --filter "group-name=*webserver*"</p>

## Supported Filters

You can specify filters so that the response includes information for only certain security groups. For example, you can use a filter to specify that you're interested in groups whose name contains a specific string. You can specify multiple values for a filter. The response includes information for a security group only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify group's whose name contains a specific string, and that give permission to another security group with a different string in its name. The response includes information for a group only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

### Important

Filters are based on literal strings only. This is important to remember when you want to use filters to return only security groups with access allowed on a specific port number or numbers. For example, suppose that you want to get all groups that have access on port 22, and that GroupA gives access on a range of ports using `fromPort=20` and `toPort=30`. If you filter with `ip-permission.from-port=22` or `ip-permission.to-port=22` (or both), the response does not contain information for GroupA. You get information for GroupA only if you specify `ip-permission.from-port=20` or `ip-permission.to-port=30` (or both).

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

#### **description**

The description of the security group.

Type: String

#### **group-id**

The ID of the security group.

Type: String

#### **group-name**

The name of the security group.

Type: String

#### **ip-permission.cidr**

The CIDR range that has been granted the permission.

Type: String

#### **ip-permission.from-port**

The start of port range for the TCP and UDP protocols, or an ICMP type number.

Type: String

#### **ip-permission.group-name**

The name of security group that has been granted the permission.

Type: String

#### **ip-permission.protocol**

The IP protocol for the permission.

Type: String

Valid values: `tcp` | `udp` | `icmp` or a protocol number

#### **ip-permission.to-port**

The end of port range for the TCP and UDP protocols, or an ICMP code.

Type: String

#### **ip-permission.user-id**

The ID of an AWS account that has been granted the permission.

Type: String

#### **owner-id**

The AWS account ID of the owner of the security group.

Type: String

#### **tag-key**

The key of a tag assigned to the security group.

Type: String

#### **tag-value**

The value of a tag assigned to the security group.

Type: String

**vpc-id**

Only returns the security groups that belong to the specified EC2-VPC ID.

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .

Option	Description
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

A line containing the group information

- The GROUP identifier
- The ID of the security group
- The AWS account ID of the owner of the security group
- The name of the security group
- A description of the security group
- [EC2-VPC] The ID of the VPC the group belongs to

One of each of the following lines for each permission defined by the group:

- The PERMISSION identifier
- The AWS account ID of the owner of the security group
- The name of the security group granting permission
- The type of rule. Currently, only `ALLAWS` rules are supported



- The protocol to allow (for example, `tcp` and `udp`)
- The start of port range
- The end of port range
- FROM for an ingress rule or TO for an egress rule
- The source type (for ingress rules) or destination type (for egress rules)
- The source (for ingress rules) or destination (for egress rules)
- [USER only] The name of the source or destination entity
- [USER only] The ID of the security group
- Whether the rule is ingress rule or an egress rule

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example 1

This example command describes the security group for EC2-Classic named `StandardGroup`.

```
PROMPT> ec2-describe-group StandardGroup
GROUP sg-1a2b3c4d 111122223333 StandardGroup A standard EC2 group
PERMISSION 111122223333 StandardGroup ALLOWS tcp 80 80 FROM CIDR 102.11.43.32/32
ingress
```

### Example 2

This example command describes the security group for EC2-VPC with the ID `sg-1a2b3c4d`.

```
PROMPT> ec2-describe-group sg-1a2b3c4d
GROUP sg-1a2b3c4d 111122223333 WebServerSG web servers vpc-1a2b3c4d
PERMISSION 111122223333 WebServerSG ALLOWS tcp 80 80 FROM CIDR 162.5.5.5/32
ingress
PERMISSION 111122223333 WebServerSG ALLOWS tcp 80 80 FROM USER 111122223333
NAME default ID sg-1a2b3c4d ingress
PERMISSION 111122223333 WebServerSG ALLOWS tcp 443 443 FROM USER 111122223333
NAME default ID sg-1a2b3c4d ingress
PERMISSION 111122223333 WebServerSG ALLOWS all TO CIDR 0.0.0.0/0 egress
PERMISSION 111122223333 WebServerSG ALLOWS tcp 433 433 TO USER 111122223333
NAME default ID sg-1a2b3c4d egress
```

### Example 3

This example describes all security groups that grant access over TCP specifically on port 22 from instances in either the `app_server_group` or `database_group`.

```
PROMPT> ec2-describe-group --filter "ip-permission.protocol=tcp"
--filter "ip-permission.from-port=22" --filter "ip-permission.to-port=22"
--filter "ip-permission.group-name=app_server_group" --filter "ip-permission.group-name=database_group"
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeSecurityGroups](#)

### Related Commands

- [ec2-authorize](#) (p. 51)
- [ec2-create-group](#) (p. 96)
- [ec2-delete-group](#) (p. 186)
- [ec2-revoke](#) (p. 622)

# ec2-describe-image-attribute

## Description

Describes the specified attribute of the specified AMI. You can specify only one attribute at a time.

The short version of this command is **ec2dimatt**.

## Syntax

```
ec2-describe-image-attribute ami_id {-l | -p | -B | --kernel | --ramdisk}
```

## Options

Name	Description
<i>ami_id</i>	The ID of the AMI. Type: String Default: None Required: Yes Example: ami-4fa54026
-l, --launch-permission	The launch permissions of the AMI. Type: String Default: None Required: No Example: -l
-p, --product-code	The product codes associated with the AMI. Type: String Default: None Required: No Example: -p
-B, --block-device-mapping	The block device mapping for the AMI. Type: String Default: None Required: No Example: -B
--kernel	The ID of the kernel for the AMI.  <b>Important</b> We recommend that you use PV-GRUB instead of kernels and RAM disks. For more information, see <a href="#">PV-GRUB: A New Amazon Kernel Image</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String Default: None Required: No Example: --kernel

Name	Description
<code>--ramdisk</code>	The ID of the RAM disk for the AMI. Type: String Default: None Required: No Example: <code>--ramdisk</code>

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token <i>delegation_token</i></code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout <i>timeout</i></code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout <i>timeout</i></code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.

Option	Description
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The attribute type identifier
- The ID of the AMI
- Information about the attribute

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example 1

This example command describes the launch permissions for the specified AMI.

```
PROMPT> ec2-describe-image-attribute ami-1a2b3c4d -l  
launchPermission ami-1a2b3c4d group all  
launchPermission ami-1a2b3c4d userId 111122223333
```

### Example 2

This example command describes the product code for the specified AMI.

```
PROMPT> ec2-describe-image-attribute ami-1a2b3c4d -p  
productCodes ami-1a2b3c4d productCode [marketplace: a1b2c3d4e5f6g7h8i9j10k11]
```

### Example 3

This example command describes the RAM disk for the AMI with the ID `ami-1a2b3c4d` using the `--show-empty-fields` option.

```
PROMPT> ec2-describe-image-attribute ami-1a2b3c4d --ramdisk --show-empty-fields  
ramdisk ami-1a2b3c4d (nil) ari-96c527ff
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeImageAttribute](#)

### Related Commands

- [ec2-describe-images](#) (p. 290)
- [ec2-modify-image-attribute](#) (p. 521)
- [ec2-reset-image-attribute](#) (p. 604)

# ec2-describe-images

## Description

Describes one or more of the images (AMIs, AKIs, and ARIs) available to you. Images available to you include public images, private images that you own, and private images owned by other AWS accounts but for which you have explicit launch permissions.

Launch permissions fall into three categories.

Launch Permission	Description
public	The owner of the image granted launch permissions for the image to the <code>all</code> group. All AWS accounts have launch permissions for these images.
explicit	The owner of the image granted launch permissions to a specific AWS account.
implicit	An AWS account has implicit launch permissions for all the images it owns.

The list of images returned can be modified by specifying IDs, owners, or AWS accounts with launch permissions. If no options are specified, Amazon EC2 returns all images for which you have launch permissions.

If you specify one or more image IDs, only images that have the specified IDs are returned. If you specify an image to which you don't have access, it's not included in the returned results.

If you specify one or more owners, only images from the specified owners and to which you have access are returned. The results can include the account IDs of the specified owners—`amazon` for images owned by Amazon, `aws-marketplace` for images owned by AWS Marketplace, or `self` for images that you own.

### Note

For an overview of the AWS Marketplace, see <https://aws.amazon.com/marketplace/help/200900000>. For details on how to use the AWS Marketplace, see [AWS Marketplace](#).

If you specify a list of users with launch permissions, only images with launch permissions for those users are returned. You can specify account IDs (if you own the images), `self` for images that you own or have explicit permissions for, or `all` for public images.

### Note

Deregistered images are included in the returned results for an unspecified interval after deregistration.

The short version of this command is `ec2dim`.

## Syntax

```
ec2-describe-images [ami_id ...] [-a] [-o owner ...] [-x user_id ...] [--filter "name=value" ...]
```

## Options

Name	Description
<code>ami_id</code>	One or more image IDs. Type: String Default: Describes all images available to you. Required: No Example: <code>ami-78a54011</code>
<code>-a, --all</code>	Describes all images available to you. Type: String Default: None Required: No Example: <code>-a</code>
<code>-o, --owner owner</code>	Describes images owned by the specified owners. Use the IDs <code>amazon</code> , <code>aws-marketplace</code> , and <code>self</code> to describe images owned by Amazon, AWS Marketplace, or you, respectively. Type: String Valid values: <code>amazon</code>   <code>aws-marketplace</code>   <code>self</code>   <code>AWS account ID</code>   <code>all</code> Default: None Required: No Example: <code>-o self</code>
<code>-x, --executable-by user_id</code>	Describes images for which the specified user has explicit launch permissions. The user can be an AWS account ID, <code>self</code> to return images for which the sender of the request has explicit launch permissions, or <code>all</code> to return images with public launch permissions. Type: String Valid values: <code>all</code>   <code>self</code>   <code>AWS account ID</code> Default: None Required: No Example: <code>-x self</code>
<code>-F, --filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space (" <code>name=value example</code> "). On a Windows system, use quotation marks even without a space in the value string (" <code>name=valueexample</code> "). Type: String Default: Describes all images available to you, or only those you specified. Required: No Example: <code>--filter "tag-value=Production"</code>



## Supported Filters

You can specify filters so that the response includes information for only certain images. For example, you can use a filter to specify that you're interested in images that use a specific kernel. You can specify multiple values for a filter. The response includes information for an image only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify images that use a specific kernel and use an Amazon EBS volume as the root device. The response includes information for an image only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**architecture**

The image architecture.

Type: String

Valid values: `i386` | `x86_64`

**block-device-mapping.delete-on-termination**

Whether the Amazon EBS volume is deleted on instance termination.

Type: Boolean

**block-device-mapping.device-name**

The device name (for example, `/dev/sdh`) for the Amazon EBS volume.

Type: String

**block-device-mapping.snapshot-id**

The ID of the snapshot used for the Amazon EBS volume.

Type: String

**block-device-mapping.volume-size**

The volume size of the Amazon EBS volume, in GiB.

Type: Integer

**block-device-mapping.volume-type**

The volume type of the Amazon EBS volume.

Type: String

Valid values: `standard` | `io1`

**description**

The description of the image (provided during image creation).

Type: String

**image-id**

The ID of the image.

Type: String

**image-type**

The image type.

Type: String

Valid values: `machine` | `kernel` | `ramdisk`

**is-public**

Whether the image is public.

Type: Boolean

**kernel-id**  
The kernel ID.  
Type: String

**manifest-location**  
The location of the image manifest.  
Type: String

**name**  
The name of the AMI (provided during image creation).  
Type: String

**owner-alias**  
The AWS account alias (for example, `amazon`).  
Type: String

**owner-id**  
The AWS account ID of the image owner.  
Type: String

**platform**  
The platform. To only list Windows-based AMIs, use `windows`.  
Type: String  
Valid value: `windows`

**product-code**  
The product code.  
Type: String

**product-code.type**  
The type of the product code.  
Type: String  
Valid values: `devpay` | `marketplace`

**ramdisk-id**  
The RAM disk ID.  
Type: String

**root-device-name**  
The name of the root device volume (for example, `/dev/sda1`).  
Type: String

**root-device-type**  
The type of the root device volume.  
Type: String  
Valid values: `ebs` | `instance-store`

**state**  
The state of the image.  
Type: String  
Valid values: `available` | `pending` | `failed`

**state-reason-code**  
The reason code for the state change.  
Type: String

**state-reason-message**  
The message for the state change.  
Type: String

**tag-key**  
The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `tag-key=Purpose` and the filter `tag-value=X`, you get any

resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where Purpose is `X`, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:key=value**

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag `Purpose=X`, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag `Purpose=X` or the tag `Purpose=Y`, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

**virtualization-type**

The virtualization type.

Type: String

Valid values: `paravirtual` | `hvm`

**hypervisor**

The hypervisor type.

Type: String

Valid values: `ovm` | `xen`

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following rows of information for each image. Each field is separated by a comma. Some of these values may be empty.

1. The image information

- The IMAGE identifier
- The ID of the image
- The source of the image
- The ID of the image owner
- The status of the image
- The visibility of the image (`public` or `private`)
- The product codes, if any, that are attached to the instance
- The architecture of the image (`i386` or `x86_64`)
- The image type (`machine`, `kernel`, or `ramdisk`)
- The ID of the kernel associated with the image (machine images only)
- The ID of the RAM disk associated with the image (machine images only)

**Important**

This applies only to legacy AKIs; we recommend that you use PV-GRUB instead of kernels and RAM disks. For more information, see [PV-GRUB: A New Amazon Kernel Image](#) in the *Amazon Elastic Compute Cloud User Guide*.

- The platform of the image
  - The type of root device (`ebs` or `instance-store`)
  - The virtualization type (`paravirtual` or `hvm`)
  - The Hypervisor type (`xen` or `ovm`)
2. Any Amazon EBS volumes associated with the instance. There will be one of the following for each volume
- The BLOCKDEVICE identifier
  - The device name
  - The ID of the snapshot
  - The volume size
  - Indicates whether the volume is deleted on instance termination (`true` or `false`)
  - The volume type
  - The maximum IOPS of the volume
3. Any tags associated with the instance. There will be one of the following for each tag
- The TAG identifier
  - The resource type identifier
  - The ID of the resource
  - The tag key
  - The tag value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes the specified AMI.

```
PROMPT> ec2-describe-images ami-1a2b3c4d

IMAGE ami-1a2b3c4d amazon/getting-started-with-ebs-boot amazon available public
      i386 machine aki-a13667e4 ari-a33667e6 ebs paravirtual xen
BLOCKDEVICEMAPPING /dev/sda1 snap-1a2b3c4d 15 standard
```

### Example 2

This example filters the response to include only the public Windows images with an x86\_64 architecture.

```
PROMPT> ec2-describe-images --filter "is-public=true" --filter "architec
ture=x86_64" --filter "platform=windows"

IMAGE   ami-1a2b3c4d   amazon/getting-started-with-ebs-boot amazon available
public  x86_64 machine   windows ebs hvm xen
IMAGE   ami-2a2b3c4d   amazon/SqlSvrStd2003r2-x86_64-Win-v1.07 amazon available
public  x86_64 machine   windows instance-store hvm xen
...
```

### Example 3

This example filters the results to display only images with an AWS Marketplace product code.

```
PROMPT> ec2-describe-images -F product-code.type=marketplace -o self

IMAGE ami-1a2b3c4d 111122223333/My MP Image 111122223333 available private
[marketplace: alb2c3d4e5f6g7h8i9j10k11] i386 machine   ebs paravirtual xen
BLOCKDEVICEMAPPING /dev/sda1 snap-2de0d457 15 standard
BLOCKDEVICEMAPPING /dev/sdb snap-27e0d45d 100 standard
...
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeImages](#)

### Related Commands

- [ec2-describe-image-attribute](#) (p. 286)

- [ec2-describe-instances](#) (p. 311)

# ec2-describe-instance-attribute

## Description

Describes the specified attribute of the specified instance. You can specify only one attribute at a time.

The short version of this command is **ec2dinatt**.

## Syntax

```
ec2-describe-instance-attribute instance_id { --block-device-mapping |
--ebs-optimized | --disable-api-termination | --group-id |
--instance-initiated-shutdown-behavior | --instance-type | --kernel |
--product-code | --ramdisk | --root-device-name | --source-dest-check |
--user-data }
```

## Options

Name	Description
<i>instance_id</i>	The ID of the instance. Type: String Required: Yes Example: i-43a4412a
-b, --block-device-mapping	The block device mapping for the instance. Type: String Required: No Example: -b
--disable-api-termination	Indicates whether the instance can be terminated using the Amazon EC2 console, CLI, and API. Type: Boolean Required: No Example: --disable-api-termination
--ebs-optimized <i>Boolean</i>	Indicates whether the instance is optimized for EBS I/O. Type: Boolean Required: No Example: --ebs-optimized
-g, --group-id	The security groups associated with the instance. Type: String Required: No Example: -g
-p, --product-code	The product codes associated with an instance. Each product code includes a product code and type. Type: String Required: No Example: -p



## Amazon Elastic Compute Cloud CLI Reference Options

Name	Description
<code>--instance-initiated-shutdown-behavior</code>	Indicates whether an instance stops or terminates when you initiate shutdown from the instance (using the operating system command for system shutdown). Type: String Required: No Example: <code>--instance-initiated-shutdown-behavior</code>
<code>-t, --instance-type</code>	The instance type of the instance. For more information, see <a href="#">Instance Types</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String Required: No Example: <code>-t</code>
<code>--kernel</code>	The ID of the kernel associated with the AMI. <b>Important</b> We recommend that you use PV-GRUB instead of kernels and RAM disks. For more information, see <a href="#">PV-GRUB: A New Amazon Kernel Image</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String Required: No Example: <code>--kernel</code>
<code>--ramdisk</code>	The ID of the RAM disk associated with the AMI. Type: String Required: No Example: <code>--ramdisk</code>
<code>--root-device-name</code>	The name of the root device (for example, <code>/dev/sda1</code> ). Type: String Required: No Example: <code>--root-device-name</code>
<code>--source-dest-check</code>	Indicates whether source/destination checking is enabled. A value of <code>true</code> means checking is enabled, and <code>false</code> means checking is disabled. This value must be <code>false</code> for a NAT instance to perform NAT. For more information, see <a href="#">NAT Instances</a> in the <i>Amazon Virtual Private Cloud User Guide</i> . Type: String Required: No Example: <code>--source-dest-check</code>
<code>--user-data</code>	Any user data made available to the instance. Type: String Required: No Example: <code>--user-data</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- If the `--block-device-mapping` attribute is requested, one of the following for each Amazon EBS volume:
  - The `BLOCKDEVICE` identifier
  - The device name
  - The ID of the volume
  - The timestamp
  - The `DeleteOnTermination` attribute value
- For all other attributes:
  - The attribute type identifier
  - The ID of the instance
  - The attribute or attribute list item value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes the instance type of the specified instance.

```
PROMPT> ec2-describe-instance-attribute i-10a64379 --instance-type  
instanceType i-10a64379 t1.micro
```

### Example 2

This example command lists the current value of the `InstanceInitiatedShutdownBehavior` attribute for the specified instance.

```
PROMPT> ec2-describe-instance-attribute i-10a64379 --initiated-shutdown-behavior  
instanceInitiatedShutdownBehavior i-10a64379 stop
```

### Example 3

This example command lists the current value of the `DisableApiTermination` attribute for the specified instance.

```
PROMPT> ec2-describe-instance-attribute i-10a64379 --disable-api-termination  
disableApiTermination i-10a64379 false
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeInstanceAttribute](#)

### Related Commands

- [ec2-describe-instances](#) (p. 311)
- [ec2-modify-instance-attribute](#) (p. 526)
- [ec2-reset-instance-attribute](#) (p. 607)

# ec2-describe-instance-status

## Description

Describes the status of one or more instances, including any scheduled events.

Instance status has two main components:

- System Status reports impaired functionality that stems from issues related to the systems that support an instance, such as hardware failures and network connectivity problems. The `DescribeInstanceStatus` response elements report such problems as impaired reachability.
- Instance Status reports impaired functionality that arises from problems internal to the instance. The `DescribeInstanceStatus` response elements report such problems as impaired reachability.

Instance status provides information about four types of scheduled events for an instance that may require your attention:

- Scheduled Reboot: When Amazon EC2 determines that an instance must be rebooted, the instances status returns one of two event codes: `system-reboot` or `instance-reboot`. System reboot commonly occurs if certain maintenance or upgrade operations require a reboot of the underlying host that supports an instance. Instance reboot commonly occurs if the instance must be rebooted, rather than the underlying host. Rebooting events include a scheduled start and end time.
- System Maintenance: When Amazon EC2 determines that an instance requires maintenance that requires power or network impact, the instance's status will return an event code called `system-maintenance`. System maintenance is either power maintenance or network maintenance. For power maintenance, your instance will be unavailable for a brief period of time and then rebooted. For network maintenance, your instance will experience a brief loss of network connectivity. System maintenance events include a scheduled start and end time. You will also be notified by email if one of your instances is set for system maintenance. The email message indicates when your instance is scheduled for maintenance.
- Scheduled Retirement: When Amazon EC2 determines that an instance must be shut down, the instance's status returns an event code called `instance-retirement`. Retirement commonly occurs when the underlying host is degraded and must be replaced. Retirement events include a scheduled start and end time. You will also be notified by email if one of your instances is set to retiring. The email message indicates when your instance will be permanently retired.
- Scheduled Stop: When Amazon EC2 determines that an instance must be shut down, the instances status returns an event code called `instance-stop`. Stop events include a scheduled start and end time. You will also be notified by email if one of your instances is set to stop. The email message indicates when your instance will be stopped.

When your instance is retired, it will either be terminated (if its root device type is the instance-store) or stopped (if its root device type is an EBS volume). Instances stopped due to retirement will not be restarted, but you can do so manually. You can also avoid retirement of EBS-backed instances by manually restarting your instance when its event code is `instance-retirement`. This ensures that your instance is started on a different underlying host.

The short version of this command is `ec2dins`.

## Syntax

```
ec2-describe-instance-status [instance_id ...] [-I, --hide-healthy ...] [-A, --include-all-instances ...] [--filter "name=value" ...]
```

## Options

Name	Description
<code>instance_id</code>	One or more instance IDs. Type: String Default: Describes all your instances. Constraints: Maximum 100 explicitly specified instance IDs. Required: No Example: <code>i-15a4417c</code>
<code>-I, --hide-healthy</code>	Hide instances where all status checks pass. Required: No
<code>-A, --include-all-instances</code>	Describes all running and non-running instances. Required: No
<code>-F, --filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your instances, or only those you specified. Required: No Example: <code>--filter "system-status.status=impaired"</code>

## Supported Filters

You can specify filters so that the response includes information for only certain instances. For example, you can use a filter to specify that you're interested in instances in a specific Availability Zone. You can specify multiple values for a filter. The response includes information for an instance only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify instances that are in a specific Availability Zone and have a status of `retiring`. The response includes information for an instance only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?`.

The following are the available filters.

### **availability-zone**

The Availability Zone of the instance.

Type: String

### **event.code**

The code identifying the type of event.

Type: String

Valid values: `instance-reboot` | `system-reboot` | `system-maintenance` | `instance-retirement` | `instance-stop`

**event.description**

A description of the event.

Type: String

**event.not-after**

The latest end time for the scheduled event.

Type: DateTime

**event.not-before**

The earliest start time for the scheduled event.

Type: DateTime

**instance-state-name**

The state of the instance.

Type: String

Valid values: `pending` | `running` | `shutting-down` | `terminated` | `stopping` | `stopped`

**instance-state-code**

A code representing the state of the instance. The high byte is an opaque internal value and should be ignored. The low byte is set based on the state represented

Type: Integer (16-bit unsigned integer)

Valid values: 0 (`pending`) | 16 (`running`) | 32 (`shutting-down`) | 48 (`terminated`) | 64 (`stopping`) | 80 (`stopped`)

**system-status.status**

The system status of the instance.

Type: String

Valid values: `ok` | `impaired` | `initializing` | `insufficient-data` | `not-applicable`

**system-status.reachability**

Filters on system status where the name is `reachability`.

Type: String

Valid values: `passed` | `failed` | `initializing` | `insufficient-data`

**instance-status.status**

The status of the instance.

Type: String

Valid values: `ok` | `impaired` | `initializing` | `insufficient-data` | `not-applicable`

**instance-status.reachability**

Filters on instance status where the name is `reachability`.

Type: String

Valid values: `passed` | `failed` | `initializing` | `insufficient-data`

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.

**Amazon Elastic Compute Cloud CLI Reference**  
**Common Options**

Option	Description
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.



## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

The instance information

- The INSTANCE identifier
- The ID of the instance
- The availability zone of the instance
- The state name of the instance
- The state code of the instance
- The status of the instance
- The host system status
- The instance retirement status
- The instance retirement date

The host system status information

- The SYSTEMSTATUS identifier
- The host system status name
- The host system status
- The date and time that the host system became impaired, if applicable

The instance status information

- The INSTANCESSYSTEMSTATUS identifier
- The instance status name
- The instance status
- The date and time that the instance became impaired, if applicable

Any events scheduled for the instance

- The EVENT identifier
- The event type
- The date and time of the opening of the event window
- The date and time of the closing of the event window
- The event description

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command describes the current state of the instances you own.

```
ec2-describe-instance-status
```

```
INSTANCE i-1a2b3c4d us-east-1d running 16 ok ok active
SYSTEMSTATUS reachability passed
INSTANCESTATUS reachability passed
INSTANCE i-2a2b3c4d us-east-1d running 16 ok ok active
SYSTEMSTATUS reachability passed
INSTANCESTATUS reachability passed
INSTANCE i-3a2b3c4d us-east-1d running 16 ok ok active
SYSTEMSTATUS reachability passed
INSTANCESTATUS reachability passed
INSTANCE i-4a2b3c4d us-east-1d running 16 ok ok retiring YYYY-MM-DDTHH:MM:SS+0000
SYSTEMSTATUS reachability passed
INSTANCESTATUS reachability passed
EVENT instance-stop YYYY-MM-DDTHH:MM:SS+0000 The instance is running on degraded
hardware
INSTANCE i-5a2b3c4d us-east-1d running 16 ok ok retiring YYYY-MM-DDTHH:MM:SS+0000
SYSTEMSTATUS reachability passed
INSTANCESTATUS reachability passed
EVENT instance-retiring YYYY-MM-DDTHH:MM:SS+0000 The instance is running on
degraded hardware
INSTANCE i-6a2b3c4d us-east-1d running 16 ok ok retiring YYYY-MM-DDTHH:MM:SS+0000
SYSTEMSTATUS reachability passed
INSTANCESTATUS reachability passed
EVENT instance-stop YYYY-MM-DDTHH:MM:SS+0000 The instance is running on degraded
hardware
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

## Related Action

- [DescribeInstanceStatus](#)

## Related Commands

- [ec2-report-instance-status](#) (p. 588)

# ec2-describe-instances

## Description

Describes one or more of your instances.

If you specify one or more instance IDs, Amazon EC2 returns information for those instances. If you do not specify instance IDs, Amazon EC2 returns information for all relevant instances. If you specify an instance that you do not own, it's not included in the output.

Recently terminated instances might appear in the output. This interval is usually less than one hour.

The short version of this command is **ec2din**.

## Syntax

```
ec2-describe-instances [instance_id ...] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>instance_id</i>	One or more instance IDs. Type: String Default: Describes all your instances. Required: No Example: i-15a4417c
<code>-F, --filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your instances, or only those you specified. Required: No Example: --filter "tag-key=Production"

## Supported Filters

You can specify filters so that the response includes information for only certain instances. For example, you can use a filter to specify that you're interested in instances launched with a specific key pair. You can specify multiple values for a filter. The response includes information for an instance only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify instances that are launched with a specific key pair and use an Amazon EBS volume as the root device. The response includes information for an instance only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**architecture**

The instance architecture.

Type: String

Valid values: `i386` | `x86_64`

**availability-zone**

The Availability Zone of the instance.

Type: String

**block-device-mapping.attach-time**

The attach time for an Amazon EBS volume mapped to the instance (for example, 2010-09-15T17:15:20.000Z)

Type: DateTime

**block-device-mapping.delete-on-termination**

Indicates whether the Amazon EBS volume is deleted on instance termination.

Type: Boolean

**block-device-mapping.device-name**

The device name (for example, `/dev/sdh`) for the Amazon EBS volume.

Type: String

**block-device-mapping.status**

The status for the Amazon EBS volume.

Type: String

Valid values: `attaching` | `attached` | `detaching` | `detached`

**block-device-mapping.volume-id**

The volume ID of the Amazon EBS volume.

Type: String

**client-token**

The idempotency token you provided when you launched the instance.

Type: String

**dns-name**

The public DNS name of the instance.

Type: String

**group-id**

The ID of the security group for the instance. If the instance is in EC2-Classic or a default VPC, you can use `group-name` instead.

Type: String

**group-name**

The name of the security group for the instance. If the instance is in a nondefault VPC, you must use `group-id` instead.

Type: String

**image-id**

The ID of the image used to launch the instance.

Type: String

**instance-id**

The ID of the instance.

Type: String

**instance-lifecycle**

Indicates whether this is a Spot Instance.

Type: String

Valid values: `spot`

**instance-state-code**

The state of the instance. The high byte is an opaque internal value and should be ignored. The low byte is set based on the state represented.

Type: Integer (16-bit unsigned integer)

Valid values: 0 (pending) | 16 (running) | 32 (shutting-down) | 48 (terminated) | 64 (stopping) | 80 (stopped)

**instance-state-name**

The state of the instance.

Type: String

Valid values: `pending` | `running` | `shutting-down` | `terminated` | `stopping` | `stopped`

**instance-type**

The type of instance (for example, `m1.small`).

Type: String

**instance.group-id**

The ID of the security group for the instance. If the instance is in EC2-Classic or a default VPC, you can use `instance.group-name` instead.

Type: String

**instance.group-name**

The name of the security group for the instance. If the instance is in a nondefault VPC, you must use `instance.group-id` instead.

Type: String

**ip-address**

The public IP address of the instance.

Type: String

**kernel-id**

The kernel ID.

Type: String

**key-name**

The name of the key pair used when the instance was launched.

Type: String

**launch-index**

When launching multiple instances, this is the index for the instance in the launch group (for example, 0, 1, 2, and so on).

Type: String

**launch-time**

The time when the instance was launched (for example, 2010-08-07T11:54:42.000Z).

Type: DateTime

**monitoring-state**

Indicates whether monitoring is enabled for the instance.

Type: String

Valid values: `disabled` | `enabled`

**owner-id**

The AWS account ID of the instance owner.

Type: String

**placement-group-name**

The name of the placement group for the instance.

- Type: String
- platform**  
The platform. Use `windows` if you have Windows based instances; otherwise, leave blank.  
Type: String  
Valid value: `windows`
- private-dns-name**  
The private DNS name of the instance.  
Type: String
- private-ip-address**  
The private IP address of the instance.  
Type: String
- product-code**  
The product code associated with the AMI used to launch the instance.  
Type: String
- product-code.type**  
The type of product code.  
Type: String  
Valid values: `devpay` | `marketplace`
- ramdisk-id**  
The RAM disk ID.  
Type: String
- reason**  
The reason for the current state of the instance (for example, shows "User Initiated [date]" when you stop or terminate the instance). Similar to the state-reason-code filter.  
Type: String
- requester-id**  
The ID of the entity that launched the instance on your behalf (for example, AWS Management Console, Auto Scaling, and so on)  
Type: String
- reservation-id**  
The ID of the instance's reservation. A reservation ID is created any time you launch an instance. A reservation ID has a one-to-one relationship with an instance launch request, but can be associated with more than one instance if you launch multiple instances using the same launch request. For example, if you launch one instance, you'll get one reservation ID. If you launch ten instances using the same launch request, you'll also get one reservation ID.  
Type: String
- root-device-name**  
The name of the root device for the instance (for example, `/dev/sda1`).  
Type: String
- root-device-type**  
The type of root device that the instance uses.  
Type: String  
Valid values: `ebs` | `instance-store`
- source-dest-check**  
Indicates whether the instance performs source/destination checking. A value of `true` means that checking is enabled, and `false` means checking is disabled. The value must be `false` for the instance to perform network address translation (NAT) in your VPC.  
Type: Boolean
- spot-instance-request-id**  
The ID of the Spot Instance request.

Type: String

**state-reason-code**

The reason code for the state change.

Type: String

**state-reason-message**

A message that describes the state change.

Type: String

**subnet-id**

The ID of the subnet for the instance.

Type: String

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `tag-key=Purpose` and the filter `tag-value=X`, you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where `Purpose` is `X`, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:key=value**

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag `Purpose=X`, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag `Purpose=X` or the tag `Purpose=Y`, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

**virtualization-type**

The virtualization type of the instance.

Type: String

Valid values: `paravirtual` | `hvm`

**vpc-id**

The ID of the VPC that the instance is running in.

Type: String

**hypervisor**

The hypervisor type of the instance.

Type: String

Valid values: `ovm` | `xen`

**network-interface.description**

The description of the network interface.

Type: String

**network-interface.subnet-id**

The ID of the subnet for the network interface.

Type: String

**network-interface.vpc-id**

The ID of the VPC for the network interface.

Type: String

**network-interface.network-interface-id**

The ID of the network interface.



- Type: String
- network-interface.owner-id**  
The ID of the owner of the network interface.  
Type: String
- network-interface.availability-zone**  
The Availability Zone for the network interface.  
Type: String
- network-interface.requester-id**  
The requester ID for the network interface.  
Type: String
- network-interface.requester-managed**  
Indicates whether the network interface is being managed by AWS.  
Type: Boolean
- network-interface.status**  
The status of the network interface.  
Type: String  
Valid values: available | in-use
- network-interface.mac-address**  
The MAC address of the network interface.  
Type: String  
Valid values: available | in-use
- network-interface-private-dns-name**  
The private DNS name of the network interface.  
Type: String
- network-interface.source-destination-check**  
Whether the network interface performs source/destination checking. A value of `true` means checking is enabled, and `false` means checking is disabled. The value must be `false` for the network interface to perform network address translation (NAT) in your VPC.  
Type: Boolean
- network-interface.group-id**  
The ID of a security group associated with the network interface.  
Type: String
- network-interface.group-name**  
The name of a security group associated with the network interface.  
Type: String
- network-interface.attachment.attachment-id**  
The ID of the interface attachment.  
Type: String
- network-interface.attachment.instance-id**  
The ID of the instance to which the network interface is attached.  
Type: String
- network-interface.attachment.instance-owner-id**  
The owner ID of the instance to which the network interface is attached.  
Type: String
- network-interface.addresses.private-ip-address**  
The private IP address associated with the network interface.  
Type: String
- network-interface.attachment.device-index**  
The device index to which the network interface is attached.

Type: Integer
<b>network-interface.attachment.status</b> The status of the attachment. Type: String Valid values: attaching   attached   detaching   detached
<b>network-interface.attachment.attach-time</b> The time that the network interface was attached to an instance. Type: Date
<b>network-interface.attachment.delete-on-termination</b> Specifies whether the attachment is deleted when an instance is terminated. Type: Boolean
<b>network-interface.addresses.primary</b> Specifies whether the IP address of the network interface is the primary private IP address. Type: Boolean
<b>network-interface.addresses.association.public-ip</b> The ID of the association of an Elastic IP address with a network interface. Type: String
<b>network-interface.addresses.association.ip-owner-id</b> The owner ID of the private IP address associated with the network interface. Type: String
<b>association.public-ip</b> The address of the Elastic IP address bound to the network interface. Type: String
<b>association.ip-owner-id</b> The owner of the Elastic IP address associated with the network interface. Type: String
<b>association.allocation-id</b> The allocation ID returned when you allocated the Elastic IP address for your network interface. Type: String
<b>association.association-id</b> The association ID returned when the network interface was associated with an IP address. Type: String

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following rows of information for each instance. Each field is separated by a comma. Some of these values may be empty.

1. The reservation information
  - The RESERVATION identifier
  - The ID of the reservation
  - The AWS account ID of the instance owner
  - The name of each security group the instance is in
2. The instance information
  - The INSTANCE identifier
  - The ID of the instance
  - The AMI ID of the image on which the instance is based
  - The public DNS name associated with the instance. This is only present for instances in the running state.
  - The private DNS name associated with the instance. This is only present for instances in the running state.
  - The state of the instance
  - The key name. If a key was associated with the instance at launch, its name will appear.
  - The AMI launch index
  - The product codes associated with the instance
  - The instance type
  - The instance launch time
  - The Availability Zone
  - The ID of the kernel
  - The ID of the RAM disk
  - The platform (`windows` or `empty`)
  - The monitoring state
  - The public IP address
  - The private IP address
  - [EC2-VPC] The ID of the VPC
  - [EC2-VPC] The ID of the subnet
  - The type of root device (`ebs` or `instance-store`)
  - The instance lifecycle
  - The Spot Instance request ID

- The instance license
  - The placement group the cluster instance is in
  - The virtualization type (`paravirtual` or `hvm`)
  - The hypervisor type (`xen` or `ovm`)
  - The client token
  - The ID of each security group the instance is in
  - The tenancy of the instance (`default` or `dedicated`)
  - Whether or not the instance is EBS optimized (`true` or `false`)
  - The [Amazon Resource Name](#) (ARN) of the IAM role
3. Any Amazon EBS volumes associated with the instance. There will be one of the following for each volume
- The BLOCKDEVICE identifier
  - The device name
  - The ID of the volume
  - The volume attach timestamp
  - Indicates whether the volume is deleted on instance termination (`true` or `false`)
  - The volume type
  - The I/O operations per second (IOPS)
4. [EC2-VPC] The network interface information. There will be a set of the following for each network interface
- a. The network interface information
    - The NIC identifier
    - The ID of the network interface
    - The ID of the subnet
    - The ID of the VPC
    - The owner ID
    - The network interface status
    - The private IP address of the network interface
    - The private DNS name
    - Whether or not source destination check is enabled (`true` or `false`)
  - b. The network interface attachment information
    - The NICATTACHMENT identifier
    - The attachment ID
    - The device index
    - The device status
    - The attachment timestamp
    - Whether or not the attachment is deleted on termination (`true` or `false`)
  - c. The network interface association information
    - The NICASSOCIATION identifier
    - The public IP address
    - The public IP address owner
    - The private IP address
  - d. The security group information
    - The GROUP identifier
    - The security group identifier
    - The security group name

- e. The private IP address information
  - The PRIVATEIPADDRESS identifier
  - The private IP address
- 5. Any tags associated with the instance. There will be one of the following for each tag
  - The TAG identifier
  - The resource type identifier
  - The ID of the resource
  - The tag key
  - The tag value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes all instances you own.

```
PROMPT> ec2-describe-instances

RESERVATION r-1a2b3c4d 111122223333 my-security-group
INSTANCE i-1a2b3c4d ami-1a2b3c4d ec2-203-0-113-25.compute-1.amazonaws.com ip-
10-251-50-12.ec2.internal running my-key-pair 0 t1.micro YYYY-MM-
DDTHH:MM:SS+0000 us-west-2a aki-1a2b3c4d monitoring-disabled 184.73.10.99
10.254.170.223 ebs paravirtual xen ABCDE1234567890123 sg-1a2b3c4d default
false
BLOCKDEVICE /dev/sda1 vol-1a2b3c4d YYYY-MM-DDTHH:MM:SS.SSSZ true
RESERVATION r-2a2b3c4d 111122223333 another-security-group
INSTANCE i-2a2b3c4d ami-2a2b3c4d ec2-203-0-113-25.compute-1.amazonaws.com ip-
10-251-50-12.ec2.internal running my-key-pair 0 t1.micro YYYY-MM-
DDTHH:MM:SS+0000 us-west-2c windows monitoring-disabled 50.112.203.9
10.244.168.218 ebs hvm xen ABCDE1234567890123 sg-2a2b3c4d default false
BLOCKDEVICE /dev/sda1 vol-2a2b3c4d YYYY-MM-DDTHH:MM:SS.SSSZ true
```

### Example 2

This example describes only the instances that have the `m1.small` or `m1.large` instance type and an attached Amazon EBS volume that will be deleted on termination.

```
PROMPT> ec2-describe-instances --filter "instance-type=m1.small" --filter "in
stance-type=m1.large" --filter "block-device-mapping.status=attached" --filter
"block-device-mapping.delete-on-termination=true"

RESERVATION r-1a2b3c4d 111122223333 my-security-group
INSTANCE i-1a2b3c4d ami-1a2b3c4d ec2-203-0-113-25.compute-1.amazonaws.com ip-
10-251-50-12.ec2.internal running my-key-pair 0 t1.micro YYYY-MM-
DDTHH:MM:SS+0000 us-west-2a aki-1a2b3c4d monitoring-disabled 184.73.10.99
10.254.170.223 ebs paravirtual xen ABCDE1234567890123 sg-1a2b3c4d default
false
BLOCKDEVICE /dev/sdb vol-1a2b3c4d YYYY-MM-DDTHH:MM:SS.SSSZ true
```

## Example 3

This example command describes all your instances that are running in a VPC.

```
PROMPT> ec2-describe-instances --filter "vpc-id=*"
RESERVATION r-1a2b3c4d 111122223333
INSTANCE i-1a2b3c4d ami-1a2b3c4d running my-key-pair 0 m1.small YYYY-MM-DDTHH:MM:SS+0000 us-west-2b windows monitoring-disabled 50.112.172.209 10.0.0.167 vpc-1a2b3c4d subnet-1a2b3c4d ebs hvm xen ABCDE1234567890123 sg-1a2b3c4d default false
BLOCKDEVICE /dev/sdb vol-1a2b3c4d YYYY-MM-DDTHH:MM:SS.SSSZ true
NIC eni-1a2b3c4d subnet-1a2b3c4d vpc-1a2b3c4d 111122223333 in-use 10.0.1.167 true
NICATTACHMENT eni-attach-1a2b3c4d 0 attached YYYY-MM-DDTHH:MM:SS+0000 true
GROUP sg-1a2b3c4d my-security-group
PRIVATEIPADDRESS 10.0.1.167
PRIVATEIPADDRESS 10.0.1.12
TAG instance i-1a2b3c4d Name Windows
RESERVATION r-2a2b3c4d 111122223333
INSTANCE i-2a2b3c4d ami-2a2b3c4d running my-key-pair 0 c1.medium YYYY-MM-DDTHH:MM:SS+0000 us-west-2b aki-1a2b3c4d monitoring-disabled 50.112.172.209 10.0.0.233 vpc-1a2b3c4d subnet-1a2b3c4d ebs hvm xen ABCDE1234567890123 sg-1a2b3c4d default false
BLOCKDEVICE /dev/sda1 vol-2a2b3c4d YYYY-MM-DDTHH:MM:SS.SSSZ true
NIC eni-2a2b3c4d subnet-1a2b3c4d vpc-1a2b3c4d 111122223333 in-use 10.0.1.233 true
NICATTACHMENT eni-attach-2a2b3c4d 0 attached YYYY-MM-DDTHH:MM:SS+0000 true
GROUP sg-1a2b3c4d my-security-group
PRIVATEIPADDRESS 10.0.1.233
PRIVATEIPADDRESS 10.0.1.20
TAG instance i-1a2b3c4d Name Linux
```

## Example 4

This example command describes any instances with a network interface that has a private IP address of 10.0.0.120.

```
PROMPT> ec2-describe-instances --filter "network-interface.addresses.private-ip-address=10.0.0.120"
RESERVATION r-1a2b3c4d 111122223333
INSTANCE i-1a2b3c4d ami-1a2b3c4d running my-key-pair 0 c1.medium YYYY-MM-DDTHH:MM:SS+0000 us-west-2b aki-1a2b3c4d monitoring-disabled 50.112.172.209 10.0.0.98 vpc-1a2b3c4d subnet-1a2b3c4d ebs hvm xen ABCDE1234567890123 sg-1a2b3c4d default false
BLOCKDEVICE /dev/sdb vol-1a2b3c4d YYYY-MM-DDTHH:MM:SS.SSSZ true
NIC eni-1a2b3c4d subnet-1a2b3c4d vpc-1a2b3c4d 111122223333 in-use 10.0.1.98 true
NICATTACHMENT eni-attach-1a2b3c4d 0 attached YYYY-MM-DDTHH:MM:SS+0000 true
GROUP sg-1a2b3c4d my-security-group
PRIVATEIPADDRESS 10.0.0.98
PRIVATEIPADDRESS 10.0.0.120
```

## Example 5

This example command describes any instances that have a tag with the key `Owner` and the value `DbAdmin`.

```
PROMPT> ec2-describe-instances --filter "tag:Owner=DbAdmin"
RESERVATION r-1a2b3c4d 111122223333
INSTANCE    i-1a2b3c4d ami-1a2b3c4d  running my-key-pair 0  c1.medium YYYY-MM-
DDTHH:MM:SS+0000 us-west-2b aki-1a2b3c4d  monitoring-disabled 50.112.172.209
10.0.0.98 vpc-1a2b3c4d subnet-1a2b3c4d ebs      hvm xen ABCDE1234567890123 sg-
1a2b3c4d default false
BLOCKDEVICE /dev/sdb          vol-1a2b3c4d  YYYY-MM-DDTHH:MM:SS.SSSZ true
TAG         instance    i-1a2b3c4d  Owner      DbAdmin
```

To list all instances that have a tag with the key `Owner`, regardless of the value of the tag, use the following command.

```
PROMPT> ec2-describe-instances --filter "tag-key=Owner"
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeInstances](#)

### Related Commands

- [ec2-run-instances](#) (p. 628)
- [ec2-start-instances](#) (p. 641)
- [ec2-stop-instances](#) (p. 644)
- [ec2-terminate-instances](#) (p. 648)



# ec2-describe-internet-gateways

## Description

Describes one or more of your Internet gateways.

The short version of this command is **ec2digw**.

## Syntax

```
ec2-describe-internet-gateways [internet_gateway_id ...] [--filter "name=value"]  
...]
```

## Options

Name	Description
<i>internet_gateway_id</i>	One or more Internet gateway IDs. Type: String Default: Describes all your Internet gateways. Required: No Example: igw-15a4417c
<code>-F, --filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your Internet gateways, or only those you specified. Required: No Example: --filter "tag-key=Production"

## Supported Filters

You can specify filters so that the response includes information for only certain Internet gateways. For example, you can use a filter to specify that you're interested in the Internet gateways with particular tags. You can specify multiple values for a filter. The response includes information for an Internet gateway only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify Internet gateways that are attached to a specific VPC and have a specific tag. The response includes information for an Internet gateway only if it matches all the filters that you specified. If there's no match, no special message is returned, the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?.`

The following are the available filters.

**attachment.state**

The current state of the attachment between the gateway and the VPC. Returned only if a VPC is attached.

Type: String

Valid value: `available`

**attachment.vpc-id**

The ID of an attached VPC.

Type: String

**internet-gateway-id**

The ID of the Internet gateway.

Type: String

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `tag-key=Purpose` and the filter `tag-value=X`, you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where `Purpose` is `X`, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:key=value**

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag `Purpose=X`, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag `Purpose=X` or the tag `Purpose=Y`, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The INTERNETGATEWAY identifier
- The ID of the Internet gateway
- The ATTACHMENT identifier
- The ID of the VPC (if the gateway is attached to a VPC)
- The state of the attachment (`attaching`, `attached`, `detaching`, `detached`)
- Any tags assigned to the Internet gateway

## Examples

### Example

This example command describes your Internet gateways.

```
PROMPT> ec2-describe-internet-gateways  
INTERNETGATEWAY igw-dfa045b6  
ATTACHMENT      vpc-d9a045b0      available
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeInternetGateways](#)

### Related Commands

- [ec2-attach-internet-gateway](#) (p. 38)
- [ec2-create-internet-gateway](#) (p. 109)
- [ec2-delete-internet-gateway](#) (p. 190)
- [ec2-detach-internet-gateway](#) (p. 458)

# ec2-describe-keypairs

## Description

Describes one or more of your key pairs.

The short version of this command is **ec2dkey**.

## Syntax

```
ec2-describe-keypairs [keypair_name ...] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>keypair_name</i>	One or more key pair names. Type: String Default: Describes all your key pairs. Required: No Example: my-key-pair
<code>-F, --filter <i>name=value</i></code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space (" <i>name=value example</i> "). On a Windows system, use quotation marks even without a space in the value string (" <i>name=valueexample</i> "). Type: String Default: Describes all your key pairs, or only those you specified. Required: No Example: <code>--filter "tag-name=*Dave*"</code>

## Supported Filters

You can specify filters so that the response includes information for only certain key pairs. For example, you can use a filter to specify that you're interested in key pairs whose names include the string `Dave`. You can specify multiple values for a filter. The response includes information for a key pair only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify key pairs whose names include the string `Dave` and whose fingerprint is a specific value. The response includes information for a key pair only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?.`

The following are the available filters.

**fingerprint**

The fingerprint of the key pair.

Type: String

**key-name**

The name of the key pair.

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.

Option	Description
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains one of the following for each key pair:

- The KEYPAIR identifier
- The key pair name
- The private key fingerprint

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command describes the key pair named my-key-pair.

```
PROMPT> ec2-describe-keypairs my-key-pair  
KEYPAIR my-key-pair 1f:51:ae:28:bf:89:e9:d8:1f:25:5d:37:2d:7d:b8:ca:9f:f5:f1:6f
```

### Example Request

This example filters the response to include only key pairs whose names include the string Dave.

```
PROMPT> ec2-describe-keypairs --filter "key-name=*Dave*"
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeKeyPairs](#)

### Related Commands

- [ec2-create-keypair](#) (p. 112)
- [ec2-delete-keypair](#) (p. 193)
- [ec2-import-keypair](#) (p. 505)



# ec2-describe-network-acls

## Description

Describes one or more of your network ACLs.

For more information about network ACLs, see [Network ACLs](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2dnac1**.

## Syntax

```
ec2-describe-network-acls [network_acl_id...] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>network_acl_id</i>	One or more network ACL IDs. Type: String Default: Describes all your network ACLs. Required: No Example: acl-7aa34613
<code>-F</code> , <code>--filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space (" <i>name=value example</i> "). On a Windows system, use quotation marks even without a space in the value string (" <i>name=valueexample</i> "). Type: String Default: Describes all network ACLs in the VPC, or only those you specified. Required: No Example: <code>--filter "tag-key=Production"</code>

## Supported Filters

You can specify filters so that the response includes information for only certain ACLs. For example, you can use a filter to specify that you're interested in the ACLs associated with a particular subnet. You can specify multiple values for a filter. The response includes information for an ACL only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify ACLs that are associated with a specific subnet and have an egress entry that denies traffic to a specific port. The response includes information for an ACL only if it matches all the filters that you specified. If there's no match, no special message is returned, the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**association.association-id**

The ID of an association ID for the ACL.

Type: String

**association.network-acl-id**

The ID of the network ACL involved in the association.

Type: String

**association.subnet-id**

The ID of the subnet involved in the association.

Type: String

**default**

Indicates whether the ACL is the default network ACL for the VPC.

Type: Boolean

**entry.cidr**

The CIDR range specified in the entry.

Type: String

**entry.egress**

Indicates whether the entry applies to egress traffic.

Type: Boolean

**entry.icmp.code**

The ICMP code specified in the entry, if any.

Type: Integer

**entry.icmp.type**

The ICMP type specified in the entry, if any.

Type: Integer

**entry.port-range.from**

The start of the port range specified in the entry.

Type: Integer

**entry.port-range.to**

The end of the port range specified in the entry.

Type: Integer

**entry.protocol**

The protocol specified in the entry.

Type: String

Valid values: `tcp` | `udp` | `icmp` or a protocol number

**entry.rule-action**

Allows or denies the matching traffic.

Type: String

Valid values: `allow` | `deny`

**entry.rule-number**

The number of an entry (in other words, rule) in the ACL's set of entries.

Type: Integer

**network-acl-id**

The ID of the network ACL.

Type: String

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `tag-key=Purpose` and the filter `tag-value=X`, you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag

value `x` (regardless of what the tag's key is). If you want to list only resources where Purpose is `X`, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:key=value**

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag Purpose=`X`, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag Purpose=`X` or the tag Purpose=`Y`, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

**vpc-id**

The ID of the VPC for the network ACL.

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>

Option	Description
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The NETWORKACL, ENTRY, ASSOCIATION identifier
- The network ACL's ID, the ID of the VPC the ACL is in, and whether the ACL is the default ACL in the VPC
- The entries (in other words, rules) contained in the ACL
- Associations between the ACL and any subnets
- Any tags assigned to the ACL

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command describes all your network ACLs.

```
PROMPT> ec2-describe-network-acls
NETWORKACL    acl-5566953c    vpc-5266953b    default
ENTRY    egress    100    allow    0.0.0.0/0    all
ENTRY    egress    32767    deny    0.0.0.0/0    all
ENTRY    ingress    100    allow    0.0.0.0/0    all
ENTRY    ingress    32767    deny    0.0.0.0/0    all
NETWORKACL    acl-5d659634    vpc-5266953b
ENTRY    egress    110    allow    0.0.0.0/0    6    49152    65535
ENTRY    egress    32767    deny    0.0.0.0/0    all
ENTRY    ingress    110    allow    0.0.0.0/0    6    80    80
ENTRY    ingress    120    allow    0.0.0.0/0    6    443    443
ENTRY    ingress    32767    deny    0.0.0.0/0    all
ASSOCIATION    aclassoc-5c659635    subnet-ff669596
ASSOCIATION    aclassoc-c26596ab    subnet-f0669599
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeNetworkAcls](#)

### Related Commands

- [ec2-create-network-acl](#) (p. 116)
- [ec2-delete-network-acl](#) (p. 196)
- [ec2-replace-network-acl-association](#) (p. 573)
- [ec2-create-network-acl-entry](#) (p. 119)
- [ec2-delete-network-acl-entry](#) (p. 199)
- [ec2-replace-network-acl-entry](#) (p. 576)

# ec2-describe-network-interface-attribute

## Description

Describes a network interface attribute. You can specify only one attribute at a time.

The short version of this command is **ec2dnicatt**.

## Syntax

```
ec2-describe-network-interface-attribute interface_id --description description  
--source-dest-check --group-set --attachment
```

## Options

Name	Description
<i>interface_id</i>	The ID of the network interface. Type: String Default: None Required: Yes Example: eni-bc7299d4
<code>-d, --description <i>description</i></code>	Describes the network interface. Type: String Required: Yes
<code>--source-dest-check</code>	Indicates whether source/destination checking is enabled. Type: String Required: Yes
<code>--group-set</code>	The security groups associated with the network interface. Type: String Required: Yes
<code>-a, --attachment</code>	The attachment (if any) of the network interface. Type: String Required: Yes

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.

**Amazon Elastic Compute Cloud CLI Reference**  
**Common Options**

Option	Description
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the EC2_PRIVATE_KEY environment variable. Example: -K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the EC2_CERT environment variable. Example: -C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem

## Output

This command returns the specified network interface attribute.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example command describes the specified network interface.

```
PROMPT> ec2-describe-network-interface-attribute eni-b35da6da -d
NETWORKINTERFACE      eni-b35da6da      description
DESCRIPTION          My ENI
```

This example command enables source/destination checking on traffic across the specified network interface.

```
PROMPT> ec2-describe-network-interface-attribute eni-b35da6da --source-dest-  
check
NETWORKINTERFACE      eni-b35da6da      sourceDestCheck
SOURCEDESTCHECK      true
```

This example command describes the security groups for the specified network interface.

```
PROMPT> ec2-describe-network-interface-attribute eni-b35da6da --group-set
NETWORKINTERFACE      eni-b35da6da      group
GROUP                 sg-8ealbce2       default
```



## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeNetworkInterfaceAttribute](#)

### Related Commands

- [ec2-create-network-interface](#) (p. 124)
- [ec2-delete-network-interface](#) (p. 203)
- [ec2-describe-network-interfaces](#) (p. 341)
- [ec2-attach-network-interface](#) (p. 41)
- [ec2-detach-network-interface](#) (p. 461)
- [ec2-modify-network-interface-attribute](#) (p. 532)
- [ec2-reset-network-interface-attribute](#) (p. 611)

# ec2-describe-network-interfaces

## Description

Describes one or more of your network interfaces.

The short version of this command is **ec2dnic**.

## Syntax

```
ec2-describe-network-interfaces [interface_id ...] [--filter "name=value"]  
...]
```

## Options

Name	Description
<i>interface_id</i>	One or more network interface IDs. Type: String Default: Describes all your network interfaces. Required: No Example: eni-bc7299d4
<code>-F, --filter <i>name=value</i></code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space (" <i>name=value example</i> "). On a Windows system, use quotation marks even without a space in the value string (" <i>name=valueexample</i> "). Type: String Default: Describes all your network interfaces, or only those you specified. Required: No Example: <code>-F "description=My ENI"</code>

## Supported Filters

You can specify filters so that the response includes information for only certain network interfaces. For example, you can use a filter to specify that you're interested in network interfaces launched in a specific Availability Zone. You can specify multiple values for a filter. The response includes information for a network interface only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify network interfaces in a specific Availability Zone, and that have a specific owner ID. The response includes information for a network interface only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**addresses.private-ip-address**

The private IP addresses associated with the network interface.

Type: String

**addresses.primary**

Whether the private IP address is the primary IP address associated with the network interface.

Type: Boolean

**addresses.association.public-ip**

The association ID returned when the network interface was associated with the Elastic IP address.

Type: String

**addresses.association.owner-id**

The owner ID of the addresses associated with the network interface.

Type: String

**association.association-id**

The association ID returned when the network interface was associated with an IP address.

Type: String

**association.allocation-id**

The allocation ID returned when you allocated the Elastic IP address for your network interface.

Type: String

**association.ip-owner-id**

The owner of the Elastic IP address associated with the network interface.

Type: String

**association.public-ip**

The address of the Elastic IP address bound to the network interface.

Type: String

**attachment.attachment-id**

The ID of the interface attachment.

Type: String

**attachment.instance-id**

The ID of the instance to which the network interface is attached.

Type: String

**attachment.instance-owner-id**

The owner ID of the instance to which the network interface is attached.

Type: String

**attachment.device-index**

The device index to which the network interface is attached.

Type: Integer

**attachment.status**

The status of the attachment.

Type: String

Valid values: `attaching` | `attached` | `detaching` | `detached`

**attachment.attach.time**

The time that the network interface was attached to an instance.

Type: DateTime

**attachment.delete-on-termination**

Indicates whether the attachment is deleted when an instance is terminated.

Type: Boolean

**availability-zone**

The Availability Zone of the network interface.

Type: String

**description**

The description of the network interface.

Type: String

**group-id**

The ID of a security group associated with the network interface.

Type: String

**group-name**

The name of a security group associated with the network interface.

Type: String

**mac-address**

The MAC address of the network interface.

Type: String

**network-interface-id**

The ID of the network interface.

Type: String

**owner-id**

The AWS account ID of the network interface owner.

Type: String

**private-ip-address**

The private IP address or addresses of the network interface.

Type: String

**private-dns-name**

The private DNS name of the network interface.

Type: String

**requester-id**

The ID of the entity that launched the instance on your behalf (for example, AWS Management Console, Auto Scaling, and so on).

Type: String

**requester-managed**

Indicates whether the network interface is being managed by an AWS service (for example, AWS Management Console, Auto Scaling, and so on).

Type: Boolean

**source-dest-check**

Indicates whether the network interface performs source/destination checking. A value of `true` means checking is enabled, and `false` means checking is disabled. The value must be `false` for the network interface to perform Network Address Translation (NAT) in your VPC.

Type: Boolean

**status**

The status of the network interface. If the network interface is not attached to an instance, the status shows `available`; if a network interface is attached to an instance the status shows `in-use`.

Type: String

Valid values: `available` | `in-use`

**subnet-id**

The ID of the subnet for the network interface.

Type: String

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `tag-key=Purpose` and the filter `tag-value=X`, you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where Purpose is X, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:*key*=*value***

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag `Purpose=X`, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag `Purpose=X` or the tag `Purpose=Y`, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

**vpc-id**

The ID of the VPC for the network interface.

Type: String

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token <i>delegation_token</i></code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout <i>timeout</i></code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout <i>timeout</i></code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>

Option	Description
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key <i>ec2_private_key</i></code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert <i>ec2_cert</i></code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns a table that contains the following information for each network interface.

- The `NETWORKINTERFACE` identifier
- The ID of the network interface
- The ID of the subnet

- The ID of the VPC
- The Availability Zone
- A description
- The ID of the account that created the network interface
- The ID of the entity that launched the instance on your behalf
- Indicates whether the network interface is being managed by AWS
- The status (*available*, *attaching*, *in-use*, *detaching*)
- The MAC address
- The private IP address
- The private DNS name
- Indicates whether traffic to or from the instance is validated
- The GROUP identifier
- The ID of the security group
- The name of the security group
- The ATTACHMENT identifier
- The ID of the instance
- The ID of the attachment
- The ASSOCIATION identifier
- The Elastic IP address
- The ID of the owner of the Elastic IP address
- The ID of the account that created the network association
- The ID of the association
- The private IP address
- The PRIVATEIPADDRESS identifier
- The private IP address

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example lists all your network interfaces.

```
PROMPT> ec2-describe-network-interfaces
NETWORKINTERFACE      eni-5e318a37          subnet-c53c87ac vpc-cc3c87a5
ap-southeast-1b 053230519467          false in-use 02:81:60:c7:15:3d
10.0.0.79              true
GROUP sg-084b5664      quick-start-4
ATTACHMENT i-5a0f6b0e           eni-attach-59bf7430 attached true
PRIVATEIPADDRESS     10.0.0.79
PRIVATEIPADDRESS     10.0.0.183
PRIVATEIPADDRESS     10.0.0.184
NETWORKINTERFACE      eni-236dd74a         My ENI subnet-c88a35a1 vpc-f28a359b
ap-southeast-1a 053230519467          false available 02:78:d7:32:3f:ba
10.0.0.117            true
GROUP sg-854954e9     LinuxGroup
PRIVATEIPADDRESS     10.0.0.117
NETWORKINTERFACE      eni-69ce7500         Primary network interface subnet-
```

```
c
d8a35a4 vpc-f28a359b ap-southeast-1b 053230519467 false in-use
02:78:d7:18:ad:f0 10.0.1.152 true GROUP sg-dc4c51b0
quick-start-2
ATTACHMENT i-e0841fb4 eni-attach-696ba300 attached true
PRIVATEIPADDRESS 10.0.1.152
PRIVATEIPADDRESS 10.0.1.12
NETWORKINTERFACE eni-f25de69b subnet-c88a35a1 vpc-f28a359b
ap-southeast-1a 053230519467 false in-use 02:78:d7:2d:16:5b
10.0.0.133 true
```

This example filters for a network interface with the private IP address of 10.0.0.26.

```
PROMPT> ec2-describe-network-interfaces --filter "addresses.private-ip-ad
dress=10.0.0.26"
NETWORKINTERFACE eni-4cba0725 subnet-73ba071a vpc-6bba0702
ap-southeast-1b 013274050172 false available
02:75:3f:8e:3a:d3 10.0.0.26 true
GROUP sg-8fb3ale3 default ASSOCIATION 203.0.113.12 013274050172
eipassoc-f008b799 10.0.0.26
PRIVATEIPADDRESS 10.0.0.26
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeNetworkInterfaces](#)

### Related Commands

- [ec2-create-network-interface](#) (p. 124)
- [ec2-delete-network-interface](#) (p. 203)
- [ec2-describe-network-interface-attribute](#) (p. 337)
- [ec2-attach-network-interface](#) (p. 41)
- [ec2-detach-network-interface](#) (p. 461)
- [ec2-modify-network-interface-attribute](#) (p. 532)
- [ec2-reset-network-interface-attribute](#) (p. 611)



# ec2-describe-placement-groups

## Description

Describes one or more of your placement groups. For more information about placement groups and cluster instances, see [Cluster Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2dpgrp**.

```
ec2-describe-placement-groups [group_name ...] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>group_name</i>	One or more placement group names. Type: String Default: Describes all placement groups you own. Required: No Example: XYZ-cluster
<code>-F, --filter name=value</code>	A filter for limiting the results. For more information, see the <a href="#">Supported Filters</a> section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your placement groups, or only those you specified. Required: No Example: --filter "group-name=*Project*"

## Supported Filters

You can specify a filter so that the response includes information for only certain placement groups. For example, you can use a filter to specify that you're interested in groups in the `deleted` state. You can specify multiple values for a filter. The response includes information for a placement group only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify group's that are in the `deleted` state and have a name that includes the string `Project`. The response includes information for a group only if it matches all your filters. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**group-name**  
The name of the placement group.  
Type: String

**state**

The state of the placement group.

Type: String

Valid values: `pending` | `available` | `deleting` | `deleted`

**strategy**

The strategy of the placement group.

Type: String

Valid value: `cluster`

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.

Option	Description
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns the following information:

- The `PLACEMENTGROUP` identifier
- The placement group name
- The placement strategy
- The state of the placement group

## Examples

### Example 1

This example command describes all your placement groups.

```
PROMPT> ec2-describe-placement-groups  
PLACEMENTGROUP XYZ-cluster cluster available  
PLACEMENTGROUP ABC-cluster cluster available
```

### Example 2

This example filters the response to include only placement groups that include the string `Project` in the name.

```
PROMPT> ec2-describe-placement-groups --filter "group-name=*Project*"  
PLACEMENTGROUP Project-cluster cluster available
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribePlacementGroups](#)

### Related Commands

- [ec2-create-placement-group](#) (p. 129)
- [ec2-delete-placement-group](#) (p. 206)

## ec2-describe-regions

### Description

Describes one or more of the regions that are available to you.

For a list of the regions supported by Amazon EC2, see [Regions and Endpoints](#).

The short version of this command is **ec2dre**.

### Syntax

```
ec2-describe-regions [region...] [--filter "name=value"] ...]
```

### Options

Name	Description
<i>region</i>	One or more region names. Type: String Default: Describes all your regions. Required: No Example: eu-west-1
<code>-F, --filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your regions, or only those you specified. Required: No Example: --filter "endpoint=*ap**"

### Supported Filters

You can specify filters so that the response includes information for only certain regions.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**endpoint**

The endpoint of the region (for example, ec2.us-east-1.amazonaws.com).

Type: String

**region-name**

The name of the region.

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The REGION identifier
- The name of the region
- The service endpoint for the region

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes all the regions that are available to you.

```
PROMPT> ec2-describe-regions
REGION us-east-1 ec2.us-east-1.amazonaws.com
REGION ap-northeast-1 ec2.ap-northeast-1.amazonaws.com
REGION ap-southeast-1 ec2.ap-southeast-1.amazonaws.com
..
```

## Example 2

This example displays information about all regions that have the string `ap` in the endpoint.

```
PROMPT> ec2-describe-regions --filter "endpoint=*ap*"  
REGION ap-southeast-1 ec2.us-east-1.amazonaws.com
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeRegions](#)

### Related Commands

- [ec2-describe-availability-zones](#) (p. 255)
- [ec2-run-instances](#) (p. 628)



# ec2-describe-reserved-instances

## Description

Describes the Reserved Instances that you purchased.

Starting with the 2011-11-01 API version, AWS expanded its offering for Amazon EC2 Reserved Instances to address a range of projected instance use. There are three types of Reserved Instances based on customer utilization levels: *Heavy Utilization*, *Medium Utilization*, and *Light Utilization*. The Medium Utilization offering type is equivalent to the Reserved Instance offering available before API version 2011-11-01. If you are using tools that predate the 2011-11-01 API version, you only have access to the *Medium Utilization* Reserved Instance offering type.

For more information about Reserved Instances, see [Reserved Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2dri**.

## Syntax

```
ec2-describe-reserved-instances [reservation_id ...] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>reservation_id</i>	The IDs of the Reserved Instances. Type: String Default: Describes all your Reserved Instances. Required: No Example: 4b2293b4-5813-4cc8-9ce3-1957fexample
<code>-F, --filter <i>name=value</i></code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space (" <i>name=value example</i> "). On a Windows system, use quotation marks even without a space in the value string (" <i>name=valueexample</i> "). Type: String Default: Describes all your Reserved Instances, or only those you specified. Required: No Example: <code>--filter "tag-key=Production"</code>

## Supported Filters

You can specify a filter so that the response includes information for only certain Reserved Instances. For example, you can use a filter to specify that you're interested in Reserved Instances in a specific Availability Zone. You can specify multiple values for a filter. The response includes information for a Reserved Instance only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify Reserved Instances that are in a specific Availability Zone and have a specific tag. The response includes information for a Reserved Instance only if it matches all of the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**availability-zone**

The Availability Zone where the Reserved Instance can be used.

Type: String

**duration**

The duration of the Reserved Instance (one year or three years), in seconds.

Type: Long

Valid values: 31536000 | 94608000

**end**

The time when the Reserved Instance expires.

Type: DateTime

**fixed-price**

The purchase price of the Reserved Instance (for example, 9800.0).

Type: Double

**instance-type**

The instance type on which the Reserved Instance can be used.

Type: String

**product-description**

The product description of the Reserved Instance.

Type: String

Valid values: Linux/UNIX | Linux/UNIX (Amazon VPC) | Windows | Windows (Amazon VPC)

**reserved-instances-id**

The ID of the Reserved Instance.

Type: String

**start**

The time at which the Reserved Instance purchase request was placed (for example, 2010-08-07T11:54:42.000Z).

Type: DateTime

**state**

The state of the Reserved Instance.

Type: String

Valid values: pending-payment | active | payment-failed | retired

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `tag-key=Purpose` and the filter `tag-value=X`, you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where `Purpose` is `X`, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag: *key=value***

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag Purpose=X, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag Purpose=X or the tag Purpose=Y, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

**usage-price**

The usage price of the Reserved Instance, per hour (for example, 0.84).

Type: Double

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token <i>delegation_token</i></code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout <i>timeout</i></code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout <i>timeout</i></code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .

Option	Description
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The `RESERVEDINSTANCES` identifier
- The ID of the Reserved Instance
- The Availability Zone in which the Reserved Instance can be used
- The instance type
- The Reserved Instance description (Linux/UNIX, Windows, Linux/UNIX (Amazon VPC), or Windows (Amazon VPC))

- The duration of the Reserved Instance
- The upfront fee (fixed price) you pay for the Reserved Instance
- The fee (usage price) you pay per hour for using your Reserved Instance
- The number of Reserved Instances purchased
- The start date of the Reserved Instance term
- The time when the Reserved Instance expires.
- The state of the Reserved Instance purchase (`payment-pending`, `active`, `payment-failed`)
- The currency of the Reserved Instance purchased. It's specified using ISO 4217 standard code (for example, USD, JPY).
- The tenancy of the reserved instance purchased. An instance with a tenancy of `dedicated` runs on single-tenant hardware.
- The instance offering type

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example 1

This example command describes the Reserved Instances you own.

```
PROMPT> ec2-describe-reserved-instances
RESERVEDINSTANCES 1ba8e2e3-2538-4a35-b749-1f444example us-east-1a m1.small
Linux/UNIX 3y 350.0 0.03 1 2009-03-13T16:01:39+0000 payment-pending USD default
Light Utilization
RESERVEDINSTANCES af9f760e-c1c1-449b-8128-1342dexample us-east-1d m1.xlarge
Linux/UNIX 1y 1820.0 0.24 1 2009-03-13T16:01:39+0000 active USD default Medium
Utilization
```

### Example 2

This example filters the response to include only one-year, `m1.small` Linux/UNIX Reserved Instances. If you want Linux/UNIX Reserved Instances specifically for use with a VPC, set the product description to `Linux/UNIX (Amazon VPC)`.

```
PROMPT> ec2-describe-reserved-instances --filter "duration=31536000" --filter
"instance-type=m1.small" --filter "product-description=Linux/UNIX"
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeReservedInstances](#)

## Related Commands

- [ec2-describe-reserved-instances-offerings](#) (p. 372)
- [ec2-purchase-reserved-instances-offering](#) (p. 556)
- [ec2-describe-reserved-instances-modifications](#) (p. 367)
- [ec2-modify-reserved-instances](#) (p. 537)

# ec2-describe-reserved-instances-listings

## Description

Describes your account's Reserved Instance listings in the Reserved Instance Marketplace. This call returns information about your listings, such as the identifiers of the Reserved Instances that are associated with the Reserved Instances listings.

The Reserved Instance Marketplace matches sellers who want to resell Reserved Instance capacity that they no longer need with buyers who want to purchase additional capacity. Reserved Instances bought and sold through the Reserved Instance Marketplace work like any other Reserved Instances.

As a seller, you choose to list some or all of your Reserved Instances, and you specify the upfront price you want to receive for them. Your Reserved Instances are then listed in the Reserved Instance Marketplace and are available for purchase.

As a buyer, you specify the configuration of the Reserved Instance you want to purchase, and the Marketplace will match what you're searching for with what's available. The Marketplace will first sell the lowest priced Reserved Instances to you, and continue to sell the available Reserved Instance listings to you until your demand is met. You will be charged based on the total upfront price of all the Reserved Instances that you purchase.

For more information about Reserved Instance Marketplace, see [Reserved Instance Marketplace](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2dril**.

## Syntax

```
ec2-describe-reserved-instances-listings [listing [listing [...]]] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>listing</i>	The ID of the Reserved Instance listing. Type: String Default: None Required: No
<code>-F, --filter FILTER name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your Reserved Instances listings, or only those you specified. Required: No Example: <code>--filter "status=pending"</code>

## Supported Filters

Our policy is to provide filters for all `ec2-describe` calls so that you can limit the response to your specified criteria. Therefore, you can use filters to limit the response when describing Reserved Instances listings, even though you can use other options instead.

For example, you can use a filter or an option to get the listing of Reserved Instances that are in an active state. You can also specify multiple options or filters (for example, to limit the response to the Reserved Instances listings that are in the closed state with a specific status message). The response includes information for a listing only if it matches all options or filters. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?`.

The following are the available filters.

### **status**

Status of the Reserved Instance listing.

Valid values: `pending` | `active` | `cancelled` | `closed`

Type: String

### **status-message**

Reason for the status.

Type: String

### **reserved-instances-listing-id**

The ID of the Reserved Instances listing.

Type: String

### **reserved-instances-id**

The ID of the Reserved Instances.

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>



## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns a table that contains the following information:

The listing information

- The LISTING identifier
- Reserved Instance listing ID
- Reserved Instance ID
- Create Date
- Update Date
- Status
- Status Message

One or more rows that contain instance count information

- The INSTANCE-COUNT identifier
- The instance count state
- The instance count

One or more rows that contain price schedule information

- The PRICE-SCHEDULE identifier
- The term
- The price
- Whether or not the schedule is active

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command describes a Reserved Instance listing that you own.

```
PROMPT> ec2-describe-reserved-instances-listings 095c0e18-c9e6-4692-97e5-653e0example
```

Amazon EC2 returns output similar to the following:

```
PROMPT> ec2-describe-reserved-instances-listings 095c0e18-c9e6-4692-97e5-653e0example
Type ReservedInstancesListingId ReservedInstancesId CreateDate UpdateDate Status
  StatusMessage
LISTING 095c0e18-c9e6-4692-97e5-653e0example b847fa93-c736-4eae-bca1-e3147example
  Tue Aug 28 18:21:07 PDT 2012 Tue Aug 28 18:21:07 PDT 2012 active active
INSTANCE-COUNT available 1
INSTANCE-COUNT sold 0
INSTANCE-COUNT cancelled 0
INSTANCE-COUNT pending 0
PRICE-SCHEDULE 5 $1.2 false
PRICE-SCHEDULE 4 $1.2 true
PRICE-SCHEDULE 3 $1.2 false
PRICE-SCHEDULE 2 $1.2 false
PRICE-SCHEDULE 1 $1.2 true
```

## Related Operations

- [ec2-create-reserved-instances-listing](#) (p. 132)
- [ec2-cancel-reserved-instances-listing](#) (p. 71)
- [ec2-describe-reserved-instances](#) (p. 356)

# ec2-describe-reserved-instances-modifications

## Description

Describes the modifications made to your Reserved Instances. If no parameter is specified, information about all your Reserved Instances modification requests will be returned. If a modification ID is specified, only information about the specific modification will be returned.

For more information, see [Modifying Reserved Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2drim**.

## Syntax

```
ec2-describe-reserved-instances-modifications [modification-id [modification-id [...]]] [--filter "name=value" ] ...]
```

## Options

Name	Description
<i>modification-id</i>	The IDs of the modification requests for which you want information. Type: String Default: Describes all your modification requests. Required: No Example: rimod-594f08ad-d0a4-41bc-a2c0-3d8e7example
<code>-F, --filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your Reserved Instance modification requests, or it describes only those modification requests that you specified. Required: No Example: --filter "tag-key=Production"

## Supported Filters

Our policy is to provide filters for all `ec2-describe` calls so that you can limit the response to your specified criteria. Therefore, you can use filters to limit the response when describing Reserved Instances modifications, even though you can also use other options instead.

For example, you can use a filter or an option to get the listing of Reserved Instances that are in an active state. You can also specify multiple options or filters (for example, to limit the response to the Reserved Instances listings that are in the closed state with a specific status message). The response includes information for a listing only if it matches all options or filters. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**client-token**

The idempotency token for the modification request.

Type: String

**create-date**

Time when the modification request was created.

Type: DateTime

**effective-date**

Time when the modification becomes effective.

Type: DateTime

**modification-result.reserved-instances-id**

ID for the Reserved Instances created as part of the modification request. This ID is only available when the status of the modification is `fulfilled`.

Type: String

**modification-result.target-configuration.availability-zone**

The Availability Zone for the new Reserved Instances.

Type: String

**modification-result.target-configuration.instance-count**

The number of new Reserved Instances.

Type: Integer

**modification-result.target-configuration.instance-type**

Instance type of the new Reserved Instances.

Type: String

**modification-result.target-configuration.platform**

The network platform of the new Reserved Instances.

Type: String

Valid values: `EC2-Classic`, `EC2-VPC`

**reserved-instances-id**

The ID of the Reserved Instances modified.

Type: String

**reserved-instances-modification-id**

ID of the modification request.

Type: String

**status**

The status of the Reserved Instances modification request.

Type: String

Valid values: `processing` | `fulfilled` | `failed`

**status-message**

The reason for the status.

Type: String

**update-date**

Time when the modification request was last updated.

Type: DateTime

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

The modification request information:

- The Reserved Instances modification request ID
- The ID of the Reserved Instances submitted for modification
- The client token
- The create date
- The update date
- The effective date
- The status of the Reserved Instance modification request (processing, fulfilled, or failed)
- A status message

The modified Reserved Instances information:

- The Availability Zone for the new Reserved Instances.
- The network platform in which the new Reserved Instances will be launched. Either EC2-Classic or EC2-VPC.
- The instance type of the new Reserved Instances.
- The number of Reserved Instances created as a result of the modification.

- The ID of the Reserved Instances created as a result of the modification. Only available if the modification request was successful, and its status is `fulfilled`.

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example 1

This example command describes all the Reserved Instances modification requests that have been submitted for your account.

```
PROMPT> ec2-describe-reserved-instances-modifications --headers

Type ReservedInstancesModificationId ClientToken CreateDate UpdateDate Effect
iveDate Status StatusMessage
RESERVEDINSTANCESMODIFICATION rimod-1a4087c4-4f31-49ff-b364-7b035example
d3d95824-afe3-47b6-82d4-cf25fexample 2013-08-30T21:34:30+0000 2013-08-
30T21:52:34+0000 2013-08-30T21:00:00+0000 fulfilled
Type ReservedInstancesId
RESERVEDINSTANCES d16f7a91-e134-45ff-869c-23179example
Type AvailabilityZone InstanceCount Platform InstanceType ReservedInstancesId
MODIFICATION-RESULT us-east-1e 3 EC2-Classic
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeReservedInstancesModifications](#)

### Related Commands

- [ec2-modify-reserved-instances](#) (p. 537)
- [ec2-describe-reserved-instances](#) (p. 356)



# ec2-describe-reserved-instances-offerings

## Description

Describes Reserved Instance offerings that are available for purchase. With Amazon EC2 Reserved Instances, you purchase the right to launch instances for a period of time. During that time period you will not receive insufficient capacity errors, and you will pay a lower usage rate than the rate charged for On-Demand instances for the actual time used.

Starting with the 2011-11-01 API version, AWS expanded its offering of Amazon EC2 Reserved Instances to address a range of projected instance usage. There are three types of Reserved Instances based on customer utilization levels: *Heavy Utilization*, *Medium Utilization*, and *Light Utilization*. You determine the type of the Reserved Instance offerings by including the optional *offeringType* parameter when calling `ec2-describe-reserved-instances-offerings`. The Medium Utilization offering type is equivalent to the Reserved Instance offering available before API version 2011-11-01. If you are using tools that predate the 2011-11-01 API version, `ec2-describe-reserved-instances-offerings` will only list information about the `Medium Utilization` Reserved Instance offering type.

For information about Reserved Instances Pricing Tiers, see [Understanding Reserved Instance Pricing Tiers](#) in the *Amazon Elastic Compute Cloud User Guide*. For more information about Reserved Instances, see [Reserved Instances](#) also in the *Amazon Elastic Compute Cloud User Guide*.

Starting with the 2012-08-15 API version, AWS offers the Reserved Instance Marketplace, where you can buy and sell Reserved Instances. The Reserved Instance Marketplace makes it easy to buy and sell Amazon EC2 Reserved Instances by matching sellers who own capacity that they no longer need with buyers who are looking to purchase additional capacity. Reserved Instances bought and sold through the Reserved Instance Marketplace work like any other Reserved Instances.

By default, with the 2012-08-15 API version, `ec2-describe-reserved-instances-offerings` returns information about Amazon EC2 Reserved Instances available directly from AWS, plus instance offerings available from third-party sellers, on the Reserved Instance Marketplace. If you are using tools that predate the 2012-08-15 API version, `ec2-describe-reserved-instances-offerings` will only list information about Amazon EC2 Reserved Instances available directly from AWS.

For more information about the Reserved Instance Marketplace, see [Reserved Instance Marketplace](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is `ec2drrio`.

## Syntax

```
ec2-describe-reserved-instances-offerings [offering_id ...] [--type instance_type ...] [--offering-type offering] [--availability-zone zone ...] [--description description ...] [--filter "name=value" ...] [--tenancy tenancy] [--exclude-marketplace] [--min-duration min_duration] [--max-duration max_duration]
```

## Options

Name	Description
<code>offering_id</code>	The ID of a Reserved Instance offering. Type: String Default: None Required: No Example: 438012d3-4967-4ba9-aa40-cbb1dexample
<code>-t, --type instance_type</code>	The instance type on which the Reserved Instance can be used. Type: String Default: None Required: No Example: -t m1.small
<code>--offering-type offering-type</code>	The Reserved Instance offering type. Type: String Valid values: "Heavy Utilization"   "Medium Utilization"   "Light Utilization" Default: None Required: No Example: --offering-type "Medium Utilization"
<code>-z, --availability-zone zone</code>	The Availability Zone in which the Reserved Instance can be used. Type: String Default: None Required: No Example: -z us-east-1a
<code>-d, --description description</code>	The Reserved Instance description. Instances that include (Amazon VPC) in the description are for use with Amazon VPC. Type: String Valid values: Linux/UNIX   Linux/UNIX (Amazon VPC)   SUSE Linux   SUSE Linux (Amazon VPC)   Red Hat Enterprise Linux   Red Hat Enterprise Linux (Amazon VPC)   Windows   Windows (Amazon VPC)   Windows with SQL Server Standard   Windows with SQL Server Standard (Amazon VPC)   Windows with SQL Server Web   Windows with SQL Server Web (Amazon VPC) Default: None Required: No Example: -d Linux/UNIX

Name	Description
<code>-F, --filter FILTER name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your Reserved Instances offerings, or those you specified. Required: No Example: <code>--filter "instance-type=m1.small"</code>
<code>--tenancy tenancy</code>	Specifies the tenancy of the Reserved Instance offering. A Reserved Instance with tenancy of <code>dedicated</code> will run on single-tenant hardware and can only be launched within a VPC. Type: String Valid values: <code>default   dedicated</code> Default: <code>default</code> Required: No
<code>--exclude-marketplace</code>	Excludes the Reserved Instance Marketplace offerings in the response. Required: No
<code>--min-duration min_duration</code>	Specifies that only offerings that have a duration of at least <i>min_duration</i> months should be returned. Type: String Default: None Required: No
<code>--max-duration max_duration</code>	Specifies that only offerings that have a duration of at most <i>max_duration</i> months should be returned. Type: String Default: None Required: No

## Supported Filters

Our policy is to provide filters for all `ec2-describe` calls so that you can limit the response to your specified criteria. Therefore, you can use filters to limit the response when describing Reserved Instances offerings, even though you can use other options instead.

For example, you could use an option or a filter to get the offerings for a specific instance type. You can specify multiple options or filters (for example, limit the response to the `m2.xlarge` instance type, and only for Windows instances). The response includes information for an offering only if it matches all options or filters. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**availability-zone**

The Availability Zone where the Reserved Instance can be used.

Type: String

**duration**

The duration of the Reserved Instance (for example, one year or three years), in seconds.

Type: Long

Valid values: 31536000 | 94608000

**fixed-price**

The purchase price of the Reserved Instance (for example, 9800.0).

Type: Double

**instance-type**

The instance type on which the Reserved Instance can be used.

Type: String

**marketplace**

Set to `true` to show only Reserved Instance Marketplace offerings. When this filter is not used, which is the default behavior, all offerings from AWS and Reserved Instance Marketplace are listed.

Type: Boolean

**product-description**

The description of the Reserved Instance.

Type: String

Valid values: Linux/UNIX | Linux/UNIX (Amazon VPC) | Windows | Windows (Amazon VPC)

**reserved-instances-offering-id**

The Reserved Instances offering ID.

Type: String

**usage-price**

The usage price of the Reserved Instance, per hour (for example, 0.84).

Type: Double

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns a table that contains the following information:

The offering information

- The OFFERING identifier
- The source of the offering (AWS or 3rd Party)
- The offering ID
- The Availability Zone in which the Reserved Instance can be used
- The instance type
- The duration of the Reserved Instance
- The purchase price of the Reserved Instance. This may be contained in one or more subsequent PRICING\_DETAIL rows
- The usage price of the Reserved Instance, per hour. This may be contained in one or more subsequent RECURRING-CHARGE rows
- The Reserved Instance description
- The currency of the Reserved Instance. It's specified using ISO 4217 standard (for example, USD). At this time, the only supported currency is USD.
- The tenancy of the Reserved Instance.
- The instance offering type ("Heavy Utilization" | "Medium Utilization" | "Light Utilization")

One or more rows that contain the recurring charge information, if any

- The RECURRING-CHARGE identifier
- The recurring charge frequency
- The recurring charge amount

One or more rows that contain the purchase price detail information, if any

- The PRICING\_DETAIL identifier
- The number of times the purchase price must be paid
- The purchase price of the Reserved Instance

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

Check to see what `m1.small` Reserved Instances are available in a specific region.

```
PROMPT> ec2-describe-reserved-instances-offerings -t m1.small -z sa-east-1b -d  
Linux/UNIX --headers
```

Amazon EC2 returns output similar to the following example:

```
PROMPT> ec2-describe-reserved-instances-offerings
Type Source ReservedInstancesOfferingId AvailabilityZone InstanceType Duration
FixedPrice UsagePrice ProductDescription Currency InstanceTenancy OfferingType
OFFERING AWS 4b2293b4-3236-49f5-978d-a74c3example sa-east-1b m1.small 3y 574.0
0.0 Linux/UNIX USD default Heavy Utilization
Type Frequency Amount
RECURRING-CHARGE Hourly 0.021
OFFERING AWS 3a98bf7d-07e1-4b33-8e11-e5314example sa-east-1b m1.small 3y 473.0
0.031 Linux/UNIX USD default Medium Utilization
OFFERING AWS 438012d3-5fc5-4e49-a88e-273edexample sa-east-1b m1.small 3y 203.0
0.055 Linux/UNIX USD default Light Utilization
OFFERING AWS d586503b-bb92-41fa-9065-e5b90example sa-east-1b m1.small 1y 372.94
0.0 Linux/UNIX USD default Heavy Utilization
Type Frequency Amount
RECURRING-CHARGE Hourly 0.03
OFFERING AWS ceb6a579-b235-41e2-9aad-15a23example sa-east-1b m1.small 1y 307.13
0.04 Linux/UNIX USD default Medium Utilization
OFFERING AWS 649fd0c8-4ffb-443d-824d-eae3fexample sa-east-1b m1.small 1y 131.63
0.07 Linux/UNIX USD default Light Utilization
OFFERING 3rd Party b6121943-9faf-4350-8047-bc6d4example sa-east-1b m1.small 10m
- 0.032 Linux/UNIX USD default Medium Utilization
Type Count Price
PRICING_DETAIL 2 $1.2
OFFERING 3rd Party 08edcff2-8143-4c1d-b23c-e4c11example sa-east-1b m1.small 5m
- 0.032 Linux/UNIX USD default Medium Utilization
Type Count Price
PRICING_DETAIL 19 $1.2
PRICING_DETAIL 4 $1.23
```

The preceding output shows a part of the overall offerings that are available.

**Tip**

You can filter this list to return only certain types of Reserved Instances offerings of interest to you.

## Example Request

This example filters the response to include only one-year, `m1.small` or `m1.large` Linux/UNIX Reserved Instances. If you want Linux/UNIX Reserved Instances specifically for use with a VPC, set the product description to Linux/UNIX (Amazon VPC).

```
PROMPT> ec2-describe-reserved-instances-offerings --filter "duration=31536000"
--filter "instance-type=m1.small" --filter "instance-type=m1.large" --filter
"product-description=Linux/UNIX" -H
Type ReservedInstancesOfferingId AvailabilityZone InstanceType Duration Fixed
Price UsagePrice ProductDescription Currency InstanceTenancy OfferingType
OFFERING 649fd0c8-7d25-4e81-959e-0e1bcexample us-east-1c m1.large 1y 910.0
0.12 Linux/UNIX USD default Medium Utilization
OFFERING 438012d3-278f-4ad6-9cb9-e2318example us-east-1b m1.large 1y 910.0
0.12 Linux/UNIX USD default Medium Utilization
OFFERING 4b2293b4-20f5-4b3d-9969-46341example us-east-1d m1.large 1y 910.0
```

```
0.12 Linux/UNIX USD default Medium Utilization
OFFERING 3a98bf7d-abc6-47a0-870e-e2459example us-east-1a m1.large 1y 910.0
0.12 Linux/UNIX USD default Medium Utilization
OFFERING ceb6a579-757c-474b-b09b-52c84example us-east-1c m1.small 1y 227.5
0.03 Linux/UNIX USD default Medium Utilization
OFFERING 60dcfab3-06bb-4b68-9503-53bf8example us-east-1b m1.small 1y 227.5
0.03 Linux/UNIX USD default Medium Utilization
OFFERING 438012d3-80c7-42c6-9396-a209cexample us-east-1d m1.small 1y 227.5
0.03 Linux/UNIX USD default Medium Utilization
OFFERING 649fd0c8-5d76-4881-a522-fe522example us-east-1a m1.small 1y 227.5
0.03 Linux/UNIX USD default Medium Utilization
...
```

## Related Operations

- [ec2-purchase-reserved-instances-offering](#) (p. 556)
- [ec2-describe-reserved-instances](#) (p. 356)



# ec2-describe-route-tables

## Description

Describes one or more of your route tables.

For more information about route tables, see [Route Tables](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2drtb**.

## Syntax

```
ec2-describe-route-tables [route_table_id...] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>route_table_id</i>	One or more route table IDs. Type: String Default: Describes all your route tables. Required: No Example: rtb-7aa34613
<code>-F</code> , <code>--filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space (" <i>name=value example</i> "). On a Windows system, use quotation marks even without a space in the value string (" <i>name=valueexample</i> "). Type: String Default: Describes all your route tables, or only those you specified. Required: No Example: <code>--filter "tag-key=Production"</code>

## Supported Filters

You can specify filters so that the response includes information for only certain tables. For example, you can use a filter to specify that you're interested in the tables associated with a particular subnet. You can specify multiple values for a filter. The response includes information for a table only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify tables that have a specific route and are associated with a specific subnet. The response includes information for a table only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**association.route-table-association-id**

The ID of an association ID for the route table.

Type: String

**association.route-table-id**

The ID of the route table involved in the association.

Type: String

**association.subnet-id**

The ID of the subnet involved in the association.

Type: String

**association.main**

Indicates whether the route table is the main route table for the VPC.

Type: Boolean

**route-table-id**

The ID of the route table.

Type: String

**route.destination-cidr-block**

The CIDR range specified in a route in the table.

Type: String

**route.gateway-id**

The ID of a gateway specified in a route in the table.

Type: String

**route.instance-id**

The ID of an instance specified in a route in the table.

Type: String

**route.origin**

Describes how the route was created.

Type: String

Valid values: `CreateRouteTable` | `CreateRoute` | `EnableVgwRoutePropagation`

`CreateRouteTable` indicates that the route was automatically created when the route table was created.

`CreateRoute` indicates that the route was manually added to the route table.

`EnableVgwRoutePropagation` indicates that the route was propagated by route propagation.

**route.state**

The state of a route in the route table. The `blackhole` state indicates that the route's target isn't available (for example, the specified gateway isn't attached to the VPC, the specified NAT instance has been terminated, and so on).

Type: String

Valid values: `active` | `blackhole`

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `"tag-key=Purpose"` and the filter `"tag-value=X"`, you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where `Purpose` is `X`, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:** *key=value*

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag Purpose=X, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag Purpose=X or the tag Purpose=Y, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

**vpc-id**

The ID of the VPC for the route table.

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.

Option	Description
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ROUTETABLE identifier
- The ID of the route table
- The ID of the VPC the route table is in
- The ROUTE identifier
- The route's forwarding target (gateway or NAT instance)
- The route's state (`active` or `blackhole`). Blackhole means the route's forwarding target isn't available (for example, the gateway is detached, the NAT instance is terminated)
- The route's destination CIDR range
- The ASSOCIATION identifier

- The association ID representing the association of the route table to a subnet (or to the VPC if it's the main route table)
- Any tags assigned to the route table
- Network interfaces associated with the route.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command describes the specified route table.

```
PROMPT> ec2-describe-route-tables rtb-6aa34603
ROUTEABLE rtb-6aa34603 vpc-9ea045f7
ec2-describe-route-tables
ROUTEABLE rtb-7f6e8217 vpc-7d6e8215
ROUTE vgw-56clf422 active 13.4.5.0/24 CreateRoute
ROUTE local active 12.12.12.0/24 CreateRouteTable
ROUTE igw-906e82f8 active 0.0.0.0/0 CreateRoute
ROUTE vgw-56clf422 active 13.0.0.0/8 EnableVgwRoutePropagation
ROUTE vgw-56clf422 active 11.0.0.0/8 EnableVgwRoutePropagation
ROUTE vgw-56clf422 active 10.0.0.0/8 EnableVgwRoutePropagation
PROPAGATINGVGW vgw-56clf422
ASSOCIATION rtbassoc-706e8218 main
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeRouteTables](#)

### Related Commands

- [ec2-associate-route-table](#) (p. 34)
- [ec2-delete-route-table](#) (p. 212)
- [ec2-disassociate-route-table](#) (p. 478)
- [ec2-replace-route-table-association](#) (p. 584)

# ec2-describe-snapshot-attribute

## Description

Describes an attribute of a snapshot. You can specify only one attribute at a time.

The short version of this command is **ec2dsnapatt**.

## Syntax

`ec2-describe-snapshot-attribute` *snapshot\_id attribute*

## Options

Name	Description
<i>snapshot_id</i>	The ID of the Amazon EBS snapshot. Type: String Default: None Required: Yes Example: snap-78a54011
<code>-c, --create-volume-permission</code>	Describes the create volume permissions of the snapshot. If you don't specify this attribute, you must specify another attribute. Type: String Default: None Required: Conditional Example: -c
<code>-p, --product-code</code>	Describes the product codes associated with the snapshot. Each product code contains a product code and a type. If you don't specify this attribute, you must specify another attribute. Type: String Default: None Required: Conditional Example: -p

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.

**Amazon Elastic Compute Cloud CLI Reference**  
**Common Options**

Option	Description
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The attribute type identifier
- The ID of the snapshot
- The attribute value type
- The attribute value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command describes the permissions for the snapshot with the ID `snap-1a2b3c4d`.

```
PROMPT> ec2-describe-snapshot-attribute snap-1a2b3c4d -c  
createVolumePermission snap-1a2b3c4d userId 111122223333
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeSnapshotAttribute](#)



## Related Commands

- [ec2-create-snapshot](#) (p. 143)
- [ec2-describe-snapshots](#) (p. 389)
- [ec2-modify-snapshot-attribute](#) (p. 542)
- [ec2-reset-snapshot-attribute](#) (p. 614)

# ec2-describe-snapshots

## Description

Describes one or more of the Amazon EBS snapshots available to you. Snapshots available to you include public snapshots available for any AWS account to launch, private snapshots you own, and private snapshots owned by another AWS account but for which you've been given explicit create volume permissions.

The create volume permissions fall into the following categories.

Permission	Description
public	The owner of the snapshot granted create volume permissions for the snapshot to the <code>all</code> group. All AWS accounts have create volume permissions for these snapshots.
explicit	The owner of the snapshot granted create volume permissions to a specific AWS account.
implicit	An AWS account has implicit create volume permissions for all snapshots it owns.

You can modify the list of snapshots returned by specifying snapshot IDs, snapshot owners, or AWS accounts with create volume permissions. If you don't specify any options, Amazon EC2 returns all snapshots for which you have create volume permissions.

If you specify one or more snapshot IDs, only snapshots that have the specified IDs are returned. If you specify an invalid snapshot ID, an error is returned. If you specify a snapshot ID for which you do not have access, it will not be included in the returned results.

If you specify one or more snapshot owners, only snapshots from the specified owners and for which you have access are returned. The results can include the AWS account IDs of the specified owners, `amazon` for snapshots owned by Amazon, or `self` for snapshots that you own.

If you specify a list of restorable users, only snapshots with create snapshot permissions for those users are returned. You can specify AWS account IDs (if you own the snapshots), `self` for snapshots for which you own or have explicit permissions, or `all` for public snapshots.

### Tip

Use the `--help` option to view examples of ways to use this command.

The short version of this command is `ec2dsnap`.

## Syntax

```
ec2-describe-snapshots [snapshot_id ...] [-a] [-o owner ...] [-r user_id]  
[--filter "name=value"] ...]
```

## Options

Name	Description
<code>snapshot_id</code>	One or more snapshot IDs. Type: String Default: Describes all snapshots for which you have launch permissions. Required: No Example: snap-78a54011
<code>-a, --all owner</code>	Describe all snapshots (public, private or shared) to which you have access. Type: String Default: None Required: No Example: -a
<code>-o, --owner owner</code>	Describes snapshots owned by the specified owner. Multiple owners can be specified. Type: String Valid values: <code>self</code>   <code>amazon</code>   <i>AWS account ID</i> Default: None Required: No Example: -o AKIAIOSFODNN7EXAMPLE
<code>-r, --restorable-by user_id</code>	The ID of an AWS account that can create volumes from the snapshot. Type: String Valid values: <code>self</code>   <code>all</code>   <i>AWS account ID</i> Default: None Required: No Example: -r self
<code>-F, --filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all snapshots for which you have launch permissions, or only those you specified. Required: No Example: --filter "tag-key=Production"

## Supported Filters

You can specify filters so that the response includes information for only certain snapshots. For example, you can use a filter to specify that you're interested in snapshots whose status is `pending`. You can specify multiple values for a filter. The response includes information for a snapshot only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify snapshot's that have a `pending` status, and have a specific tag. The response includes information for a snapshot only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**description**

A description of the snapshot.

Type: String

**owner-alias**

The AWS account alias (for example, `amazon`) that owns the snapshot.

Type: String

**owner-id**

The ID of the AWS account that owns the snapshot.

Type: String

**progress**

The progress of the snapshot, as a percentage (for example, `80%`).

Type: String

**snapshot-id**

The snapshot ID.

Type: String

**start-time**

The time stamp when the snapshot was initiated.

Type: DateTime

**status**

The status of the snapshot.

Type: String

Valid values: `pending` | `completed` | `error`

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `"tag-key=Purpose"` and the filter `"tag-value=X"`, you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where `Purpose` is `X`, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:key=value**

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag `Purpose=X`, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag `Purpose=X` or the tag `Purpose=Y`, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

**volume-id**

The ID of the volume the snapshot is for.

Type: String

**volume-size**

The size of the volume, in GiB (for example, 20).

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .

Option	Description
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The snapshot information
  - The SNAPSHOT identifier
  - The ID of the snapshot
  - The ID of the volume
  - The state of the snapshot (`pending`, `completed`, `error`)
  - The time stamp when the snapshot initiated
  - The percentage of completion
  - The ID of the snapshot owner
  - The size of the volume
  - The description of the snapshot
- Any tags associated with the snapshot
  - The TAG identifier
  - The resource type identifier
  - The ID of the resource

- The tag key
- The tag value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes the snapshot with the ID `snap-1a2b3c4d`.

```
PROMPT> ec2-describe-snapshots snap-1a2b3c4d  
SNAPSHOT snap-1a2b3c4d vol-1a2b3c4d completed YYYY-MM-DDTHH:MM:SS.SSSZ 100%  
111122223333 15 Daily Backup  
TAG snapshot snap-1a2b3c4d Name Test
```

### Example 2

This example filters the response to include only snapshots with the `pending` status, and that are also tagged with a value that includes the string `db_`.

```
PROMPT> ec2-describe-snapshots --filter "status=pending" --filter "tag-value=*db_*  
SNAPSHOT snap-1a2b3c4d vol-1a2b3c4d pending YYYY-MM-DDTHH:MM:SS.SSSZ 30%  
111122223333 15 demo_db_14_backup  
TAG snapshot snap-1a2b3c4d Purpose db_14
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeSnapshots](#)

### Related Commands

- [ec2-create-snapshot](#) (p. 143)
- [ec2-delete-snapshot](#) (p. 215)

# ec2-describe-spot-datafeed-subscription

## Description

Describes the datafeed for Spot Instances. For more information about Spot Instances, see [Spot Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2dsds**.

## Syntax

```
ec2-describe-spot-datafeed-subscription
```

## Options

This command has no options.

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>



Option	Description
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key <i>ec2_private_key</i></code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert <i>ec2_cert</i></code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The SPOTDATAFEEDSUBSCRIPTION identifier
- The AWS account ID of the owner
- The Amazon S3 bucket where the data feed is located

- The prefix for the data feed file names
- The state (`Active` | `Inactive`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command describes the datafeed for the account.

```
PROMPT> ec2-describe-spot-datafeed-subscription  
SPOTDATAFEEDSUBSCRIPTION 111122223333 myawsbucket spotdata_ Active
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeSpotDatafeedSubscription](#)

### Related Commands

- [ec2-create-spot-datafeed-subscription](#) (p. 147)
- [ec2-delete-spot-datafeed-subscription](#) (p. 218)

# ec2-describe-spot-instance-requests

## Description

Describes the Spot Instance requests that belong to your account. Spot Instances are instances that Amazon EC2 starts on your behalf when the maximum price that you specify exceeds the current Spot Price. Amazon EC2 periodically sets the Spot Price based on available Spot Instance capacity and current Spot Instance requests. For more information about Spot Instances, see [Spot Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2dsir**.

## Syntax

```
ec2-describe-spot-instance-requests [request_id ...] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>request_id</i>	The ID of the Spot Instance request. Type: String Default: None Required: No Example: <code>sir-1a2b3c4d</code>
<code>-F, --filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your Spot Instance requests, or those you specified. Required: No Example: <code>--filter "tag-key=Production"</code>

## Supported Filters

You can specify filters so that the response includes information for only certain Spot Instance requests. For example, you can use a filter to specify that you're interested in requests where the Spot Price is a specific value. (You can't use a greater than or less than comparison, however you can use \* and ? wildcards.) You can specify multiple values for a filter. The response includes information for a Spot Instance request only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify that the Spot Price is a specific value, and that the instance type is m1.small. The response includes information for a request only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**availability-zone-group**

The Availability Zone group. If you specify the same Availability Zone group for all Spot Instance requests, all Spot Instances are launched in the same Availability Zone.

Type: String

**create-time**

The time stamp when the Spot Instance request was created.

Type: String

**fault-code**

The fault code related to the request.

Type: String

**fault-message**

The fault message related to the request.

Type: String

**instance-id**

The ID of the instance that fulfilled the request.

Type: String

**launch-group**

The Spot Instance launch group. Launch groups are Spot Instances that launch together and terminate together.

Type: String

**launch.block-device-mapping.delete-on-termination**

Whether the Amazon EBS volume is deleted on instance termination.

Type: Boolean

**launch.block-device-mapping.device-name**

The device name (for example, `/dev/sdh`) for the Amazon EBS volume.

Type: String

**launch.block-device-mapping.snapshot-id**

The ID of the snapshot used for the Amazon EBS volume.

Type: String

**launch.block-device-mapping.volume-size**

The volume size of the Amazon EBS volume, in GiB.

Type: String

**launch.block-device-mapping.volume-type**

The volume type of the Amazon EBS volume.

Type: String

Valid values: `standard` | `io1`

**launch.group-id**

The security group for the instance.

Type: String

**launch.image-id**

The ID of the AMI.

Type: String

**launch.instance-type**

The type of instance (for example, `m1.small`).

Type: String

- launch.kernel-id**  
The kernel ID.  
Type: String
- launch.key-name**  
The name of the key pair the instance launched with.  
Type: String
- launch.monitoring-enabled**  
Whether monitoring is enabled for the Spot Instance.  
Type: Boolean
- launch.ramdisk-id**  
The RAM disk ID.  
Type: String
- launch.network-interface.network-interface-id**  
The ID of the network interface.  
Type: String
- launch.network-interface.device-index**  
The index of the device for the network interface attachment on the instance.  
Type: Integer
- launch.network-interface.subnet-id**  
The ID of the subnet for the instance.  
Type: String
- launch.network-interface.description**  
A description of the network interface.  
Type: String
- launch.network-interface.private-ip-address**  
The primary private IP address of the network interface.  
Type: String
- launch.network-interface.delete-on-termination**  
Indicates whether the network interface is deleted when the instance is terminated.  
Type: Boolean
- launch.network-interface.group-id**  
The ID of the security group associated with the network interface.  
Type: String
- launch.network-interface.group-name**  
The name of the security group associated with the network interface.  
Type: String
- launch.network-interface.addresses.primary**  
Indicates whether the IP address is the primary private IP address.  
Type: String
- product-description**  
The product description associated with the instance.  
Type: String  
Valid values: Linux/UNIX | Windows
- spot-instance-request-id**  
The Spot Instance request ID.  
Type: String
- spot-price**  
The maximum hourly price for any Spot Instance launched to fulfill the request.  
Type: String

**state**

The state of the Spot Instance request. Spot bid status information can help you track your Amazon EC2 Spot Instance requests. For information, see [Tracking Spot Requests with Bid Status Codes](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

Valid values: open | active | closed | cancelled | failed

**status-code**

The short code describing the most recent evaluation of your Spot Instance request. For more information, see [Spot Bid Status](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**status-message**

The message explaining the status of the Spot Instance request.

Type: String

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `tag-key=Purpose` and the filter `tag-value=X`, you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where `Purpose` is `X`, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:key=value**

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag `Purpose=X`, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag `Purpose=X` or the tag `Purpose=Y`, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

**type**

The type of Spot Instance request.

Type: String

Valid values: one-time | persistent

**launched-availability-zone**

The Availability Zone in which the bid is launched.

Type: String

**valid-from**

The start date of the request.

Type: DateTime

**valid-until**

The end date of the request.

Type: DateTime

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

The Spot Instance request information

- The SPOTINSTANCEREQUEST identifier
- The ID of the Spot Instance request
- The Spot Instance bid price
- The Spot Instance type (`one-time` or `persistent`)
- The product description (`Linux/UNIX` or `Windows`)
- The state of the Spot Instance request (`active`, `open`, `closed`, `cancelled`, `failed`)
- The date and time the request was created
- The date and time that the request is valid until
- The date and time the request will be held until
- The launch group
- The Availability Zone group
- The ID of the instance
- The ID of the image
- The instance type
- The key pair name



- Any security groups the request belongs to
- The Availability Zone the instance belongs to
- The kernel ID of the instance
- The RAM disk ID of the instance
- The monitoring status
- The ID of the subnet
- The Availability Zone the instance was launched to
- The IAM profile

Any Spot Instance faults

- The SPOTINSTANCEFAULT identifier
- The Spot Instance fault code
- The Spot Instance fault message

The Spot Instance status information

- The SPOTINSTANCESTATUS identifier
- The Spot Instance status
- The date and time of the last update
- The Spot Instance status message

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes all of your Spot Instance requests.

```
PROMPT> ec2-describe-spot-instance-requests
SPOTINSTANCEREQUEST sir-1a2b3c4d 0.040000 one-time Linux/UNIX active YYYY-MM-
DDTHH:MM:SS-0800 i-1a2b3c4d ami-1a2b3c4d m1.small my-key-pair sg-1a2b3c4d
monitoring-disabled us-west-2c
SPOTINSTANCESTATUS fulfilled YYYY-MM-DDTHH:MM:SS-0800 Your Spot request is
fulfilled.
SPOTINSTANCEREQUEST sir-2a2b3c4d 0.040000 one-time Linux/UNIX active YYYY-MM-
DDTHH:MM:SS-0800 i-2a2b3c4d ami-1a2b3c4d m1.small my-key-pair sg-1a2b3c4d
monitoring-disabled us-west-2c
SPOTINSTANCESTATUS fulfilled YYYY-MM-DDTHH:MM:SS-0800 Your Spot request is
fulfilled.
SPOTINSTANCEREQUEST sir-3a2b3c4d 0.040000 one-time Linux/UNIX active YYYY-MM-
DDTHH:MM:SS-0800 i-3a2b3c4d ami-1a2b3c4d m1.small my-key-pair sg-1a2b3c4d
monitoring-disabled us-west-2c
SPOTINSTANCESTATUS fulfilled YYYY-MM-DDTHH:MM:SS-0800 Your Spot request is
fulfilled.
```

## Example 2

This example describes all persistent Spot Instance requests that have resulted in the launch of at least one `m1.small` instance, that has been fulfilled in the `us-east-1a` Availability Zone, and that also has monitoring enabled.

```
PROMPT> ec2-describe-spot-instance-requests --filter "type=persistent" --filter  
"launch.instance-type=m1.small" --filter "launch.monitoring-enabled=true"
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeSpotInstanceRequests](#)

### Related Commands

- [ec2-cancel-spot-instance-requests](#) (p. 75)
- [ec2-describe-spot-price-history](#) (p. 406)
- [ec2-request-spot-instances](#) (p. 593)

# ec2-describe-spot-price-history

## Description

Describes the Spot Price history. Spot Instances are instances that Amazon EC2 starts on your behalf when the maximum price that you specify exceeds the current Spot Price. Amazon EC2 periodically sets the Spot Price based on available Spot Instance capacity and current Spot Instance requests. For more information about Spot Instances, see [Spot Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

When you use the `availability-zone` option, this command describes the price history for the specified Availability Zone with the most recent set of prices listed first. If you don't specify an Availability Zone, the command returns the prices across all Availability Zones, starting with the most recent set. However, if you use this command with versions of the API earlier than the 2011-05-15 version, this command returns the lowest price across the region for the given time period. The prices returned are listed in chronological order — from the oldest to the most recent.

The short version of this command is `ec2dsph`.

## Syntax

```
ec2-describe-spot-price-history [--start-time timestamp] [--end-time timestamp]
[--instance-type type] [--product-description description] [--filter
"name=value"] ...] [--availability-zone zone]
```

## Options

Name	Description
<code>-s, --start-time <i>timestamp</i></code>	The start date and time of the Spot Instance price history data. Type: DateTime Default: None Required: No Example: <code>-s 2009-12-01T11:51:50.000Z</code>
<code>-e, --end-time <i>timestamp</i></code>	The end date and time of the Spot Instance price history data. Type: DateTime Default: None Required: No Example: <code>-e 2009-12-31T11:51:50.000Z</code>
<code>-t, --instance-type <i>type</i></code>	The instance type to return. Type: String Valid values: <code>t1.micro   m1.small   m1.medium   m1.large   m1.xlarge   m3.xlarge   m3.2xlarge   c1.medium   c1.xlarge   m2.xlarge   m2.2xlarge   m2.4xlarge   cr1.8xlarge   cc1.4xlarge   cc2.8xlarge   cg1.4xlarge</code> . For more information, see <a href="#">Instance Types</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Default: None Required: No Example: <code>-t m1.large</code>

Name	Description
<code>-d, --product-description <i>description</i></code>	Filters the results by basic product description. Type: String Valid values: Linux/UNIX   SUSE Linux   Windows   Linux/UNIX (Amazon VPC)   SUSE Linux (Amazon VPC)   Windows (Amazon VPC) Default: None Required: No Example: <code>-d Linux/UNIX</code>
<code>-F, --filter <i>name=value</i></code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Lists all available history information, or just the information you requested. Required: No Example: <code>--filter "product-description=Linux/UNIX"</code>
<code>-a, --availability-zone <i>zone</i></code>	The Availability Zone for which you want to get the price history. Type: String Default: None Required: No Example: <code>-a us-east-1a</code>

## Supported Filters

### Note

Our policy is to provide filters for all `ec2-describe` calls so you can limit the response to your specified criteria. Therefore, you can use filters to limit the response when describing Spot Price histories, even though you can use the options instead.

For example, you could use an option or a filter to get the history for a particular instance type. You can specify multiple request parameters or filters (for example, limit the response to the `m2.xlarge` instance type, and only for Windows instances). The response includes information for a price history only if it matches all your options or filters. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

#### **instance-type**

The type of instance (for example, `m1.small`).

Type: String

#### **product-description**

The product description for the Spot Price.

Type: String

Valid values: Linux/UNIX | SUSE Linux | Windows | Linux/UNIX (Amazon VPC) | SUSE Linux (Amazon VPC) | Windows (Amazon VPC)

**spot-price**

The Spot Price. The value must match exactly (or use wildcards; greater than or less than comparison is not supported).

Type: String

**timestamp**

The timestamp of the Spot Price history (for example, 2010-08-16T05:06:11.000Z). You can use wildcards (\* and ?). Greater than or less than comparison is not supported.

Type: DateTime

**availability-zone**

The Availability Zone for which prices should be returned.

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.

Option	Description
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key <i>ec2_private_key</i></code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert <i>ec2_cert</i></code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The `SPOTINSTANCEPRICE` identifier
- The Spot Instance price
- The date and time of the request
- The instance type

- The product description (for example, Linux/UNIX)
- The Availability Zone (for example, us-east-1a)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command returns the Spot Price history for `m1.xlarge` instances for a particular day in May.

```
PROMPT> ec2-describe-spot-price-history -H --instance-type m1.xlarge --start-time 2011-05-06T07:08:09 --end-time 2011-05-06T08:09:10
Type Price Timestamp InstanceType ProductDescription AvailabilityZone
SPOTINSTANCEPRICE 0.417000 2011-05-06T05:54:03-0800 m1.xlarge Windows us-east-1b
SPOTINSTANCEPRICE 0.417000 2011-05-06T05:54:03-0800 m1.xlarge Windows us-east-1d
SPOTINSTANCEPRICE 0.417000 2011-05-06T05:54:03-0800 m1.xlarge Windows us-east-1a
...
```

This example command uses filters instead of request options to get the same results.

```
PROMPT> ec2-describe-spot-price-history -H --instance-type m1.xlarge --start-time 2011-05-06T07:08:09 --end-time 2011-05-06T08:09:10 --product-description 'Linux/UNIX'
Type Price Timestamp InstanceType ProductDescription AvailabilityZone
SPOTINSTANCEPRICE 0.234000 2011-05-06T05:08:03-0800 m1.xlarge Linux/UNIX us-east-1b
SPOTINSTANCEPRICE 0.234000 2011-05-06T05:08:03-0800 m1.xlarge Linux/UNIX us-east-1c
SPOTINSTANCEPRICE 0.234000 2011-05-06T05:08:03-0800 m1.xlarge Linux/UNIX us-east-1d
...
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeSpotPriceHistory](#)

### Related Commands

- [ec2-cancel-spot-instance-requests](#) (p. 75)
- [ec2-describe-spot-instance-requests](#) (p. 398)

- [ec2-request-spot-instances](#) (p. 593)



# ec2-describe-subnets

## Description

Describes one or more of your subnets.

For more information about subnets, see [Your VPC and Subnets](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2ds subnet**.

## Syntax

```
ec2-describe-subnets [ subnet_id ... ] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>subnet_id</i>	One or more subnet IDs. Type: String Default: Describes all your subnets. Required: No Example: subnet-9d4a7b6c
-F, --filter name=value	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your subnets, or only those you specified. Required: No Example: --filter "tag-key=Production"

## Supported Filters

You can specify filters so that the response includes information for only certain subnets. For example, you can use a filter to specify that you're interested in the subnets in the `available` state. You can specify multiple values for a filter. The response includes information for a subnet only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify subnets that are in a specific VPC and are in the `available` state. The response includes information for a subnet only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?.`

The following are the available filters.

**availability-zone**

The Availability Zone for the subnet.

Type: String

**available-ip-address-count**

The number of IP addresses in the subnet that are available.

Type: String

**cidr**

The CIDR block of the subnet. The CIDR block you specify must exactly match the subnet's CIDR block for information to be returned for the subnet.

Type: String

Constraints: Must contain the slash followed by one or two digits (for example, /28).

**defaultForAz**

Indicates whether this is the default subnet for the Availability Zone.

Type: Boolean

**state**

The state of the subnet.

Type: String

Valid values: pending | available

**subnet-id**

The ID of the subnet.

Type: String

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `tag-key=Purpose` and the filter `tag-value=X`, you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where `Purpose` is `X`, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:key=value**

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag `Purpose=X`, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag `Purpose=X` or the tag `Purpose=Y`, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

**vpc-id**

The ID of the VPC for the subnet.

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information for each subnet:

- The SUBNET identifier
- The ID of the subnet
- The current state of the subnet (`pending` or `available`)
- The ID of the VPC the subnet is in
- The CIDR block assigned to the subnet
- The number of IP addresses in the subnet that are available
- The Availability Zone the subnet is in
- Default subnet for the Availability Zone (`true` or `false`)
- Instances launched in this subnet receive a public IP address (`true` or `false`)
- Any tags assigned to the subnet

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes the subnets with the IDs `subnet-9d4a7b6c` and `subnet-6e7f829e`.

```
PROMPT> ec2-describe-subnets subnet-9d4a7b6c subnet-6e7f829e
SUBNET subnet-9d4a7b6c  available  vpc-1a2b3c4d  10.0.1.0/24  251  us-east-
1a  false  false
SUBNET subnet-6e7f829e  available  vpc-1a2b3c4d  10.0.0.0/24  251  us-east-
1a  false  false
```

### Example 2

This example command uses filters to describe any subnet you own that is in the VPC with the ID `vpc-1a2b3c4d` or `vpc-6e7f8a92`, and whose state is `available`. The response indicates that the VPC with the ID `vpc-6e7f8a92` doesn't have any subnets that match.

```
PROMPT> ec2-describe-subnets --filter "vpc-id=vpc-1a2b3c4d" --filter "vpc-id=vpc-
6e7f8a92" --filter "state=available"
SUBNET subnet-9d4a7b6c  available  vpc-1a2b3c4d  10.0.1.0/24  251  us-east-
1a  false  false
SUBNET subnet-6e7f829e  available  vpc-1a2b3c4d  10.0.0.0/24  251  us-east-
1a  false  false
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeSubnets](#)

### Related Commands

- [ec2-create-subnet](#) (p. 150)
- [ec2-delete-subnet](#) (p. 221)

## ec2-describe-tags

### Description

Describes the tags for your Amazon EC2 resources. For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2dtag**.

### Syntax

```
ec2-describe-tags [--filter "name=value"] ...]
```

### Options

Name	Description
<code>-F, --filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your tags. Required: No Example: --filter "resource-type=instance"

### Supported Filters

You can specify filters to limit the response when describing tags. For example, you can use a filter to get only the tags for a specific resource type. You can specify multiple values for a filter. The response includes information for a tag only if it matches at least one of the filter values that you specified.

You can specify multiple filters (for example, specify a specific resource type and tag values that contain the string `database`). The response includes information for a tag only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?.`

The following are the available filters.

**key**

The tag key.

Type: String

**resource-id**

The resource ID.

Type: String

**resource-type**

The resource type.

Type: String

Valid values: customer-gateway | dhcp-options | image | instance | internet-gateway | network-acl | network-interface | reserved-instances | route-table | security-group | snapshot | spot-instances-request | subnet | volume | vpc | vpn-connection | vpn-gateway

**value**

The tag value.

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.

Option	Description
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The TAG identifier
- The resource type identifier
- The ID of the resource
- The tag key
- The tag value

Amazon EC2 command line tools display errors on `stderr`.



## Examples

### Example 1

This example command describes all your tags.

```
PROMPT> ec2-describe-tags
TAG ami-1a2b3c4d image webserver
TAG ami-1a2b3c4d image stack Production
TAG i-5f4e3d2a instance webserver
TAG i-5f4e3d2a instance stack Production
TAG i-12345678 instance database_server
TAG i-12345678 instance stack Test
```

### Example 2

This example command describes the tags for your resource with ID ami-1a2b3c4d.

```
PROMPT> ec2-describe-tags --filter "resource-id=ami-1a2b3c4d"
TAG ami-1a2b3c4d image webserver
TAG ami-1a2b3c4d image stack Production
```

### Example 3

This example command describes the tags for all your instances.

```
PROMPT> ec2-describe-tags --filter "resource-type=instance"
TAG i-5f4e3d2a instance webserver
TAG i-5f4e3d2a instance stack Production
TAG i-12345678 instance database_server
TAG i-12345678 instance stack Test
```

### Example 4

This example command describes the tags for all your instances that have a tag with the key `webserver`.

```
PROMPT> ec2-describe-tags --filter "resource-type=instance" --filter "key=webserver"
TAG i-5f4e3d2a instance webserver
```

### Example 5

This example command describes the tags for all your instances that have a tag with the key `stack` and a value of either `Test` or `Production`.

```
PROMPT> ec2-describe-tags --filter "resource-type=instance" --filter "key=stack"
--filter "value=Test" --filter "value=Production"
TAG i-5f4e3d2a instance stack Production
TAG i-12345678 instance stack Test
```

## Example 6

This example command describes the tags for all your instances that have a tag with the key `Purpose` and no value.

```
PROMPT> ec2-describe-tags --filter "resource-type=instance" --filter  
"key=Purpose" --filter "value="
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeTags](#)

### Related Commands

- [ec2-create-tags](#) (p. 154)
- [ec2-delete-tags](#) (p. 224)

# ec2-describe-volume-attribute

## Description

Describes an attribute of a volume. You can specify only one attribute at a time.

The short version of this command is **ec2dvolatt**.

## Syntax

```
ec2-describe-volume-attribute volume_id ... { --auto-enable-io | --product-code
}
```

## Options

Name	Description
<i>volume_id</i>	The ID of the volume. Type: String Required: Yes Example: vol-4282672b
<i>-a, --auto-enable-io</i>	Whether auto-enable-io is enabled. Type: Boolean Required: No Example: --auto-enable-io
<i>-p, --product-code</i>	The product codes. Type: String Required: No Example: --product-code

## Common Options

Option	Description
<i>--region region</i>	The region. Overrides the default region, the region specified by the EC2_URL environment variable, and the URL specified by the <i>-U</i> option. Default: The region specified by the EC2_URL environment variable, or us-east-1 if EC2_URL isn't set.
<i>-U, --url url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the EC2_URL environment variable, or https://ec2.amazonaws.com if EC2_URL isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ID of the volume
- Information about the attribute

Amazon EC2 command line tools display errors on stderr.

## Example

### Example 1

This example command describes the `autoEnableIo` attribute of the volume with the ID `vol-999999`.

```
PROMPT> ec2-describe-volume-attribute vol-999999 -a
VolumeId      Attribute
vol-999999    autoEnableIo
AUTO-ENABLE-IO true
```

### Example 2

This example command describes the `productCodes` attribute of the volume with the ID `vol-777777`.

```
PROMPT> ec2-describe-volume-attribute vol-777777 -p
VolumeId      Attribute
vol-777777    productCodes
PRODUCT_CODES [marketplace: a1b2c3d4e5f6g7h8i9j10k11]
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

## Related Action

- [DescribeVolumeAttribute](#)

## Related Commands

- [ec2-describe-volume-status](#) (p. 426)
- [ec2-enable-volume-io](#) (p. 484)
- [ec2-modify-volume-attribute](#) (p. 546)

# ec2-describe-volume-status

## Description

Describes the status of one or more volumes. Volume status provides the result of the checks performed on your volumes to determine events that can impair the performance of your volumes. The performance of a volume can be affected if an issue occurs on the volume's underlying host. If the volume's underlying host experiences a power outage or system issue, once the system is restored, there could be data inconsistencies on the volume. Volume events notify you if this occurs. Volume action notifies you if any action needs to be taken in response to the event.

The `DescribeVolumeStatus` operation provides the following information about the specified volumes:

**Status:** Reflects the current status of the volume. The possible values are `ok`, `impaired`, or `insufficient-data`. If all checks pass, the overall status of the volume is `ok`. If the check fails, the overall status is `impaired`. If the status is `insufficient-data`, then the checks may still be taking place on your volume at the time. We recommend you retry the request. For more information on volume status, see [Monitoring the Status of Your Volumes](#).

**Events:** Reflect the cause of a volume status and may require you to take an action. For example, if your volume returns an `impaired` status, then the volume event might be `potential-data-inconsistency`. This means that your volume has been impacted by an issue with the underlying host, has all I/O operations disabled, and may have inconsistent data.

**Actions:** Reflect the actions you may have to take in response to an event. For example, if the status of the volume is `impaired` and the volume event shows `potential-data-inconsistency`, then the action will show `enable-volume-io`. This means that you may want to enable the I/O operations for the volume by issuing the [ec2-enable-volume-io](#) (p. 484) command and then check the volume for data consistency.

### Note

Volume status is based on the volume status checks, and does not reflect the volume state. Therefore, volume status does not indicate volumes in the `error` state (for example, when a volume is incapable of accepting I/O.)

The short version of this command is `ec2dvs`.

## Syntax

```
ec2-describe-volume-status [volume_id ...] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>volume_id</i>	One or more volume IDs. Type: String Default: Describes the status of all your volumes. Required: No Example: vol-4282672b

Name	Description
<code>-F, --filter name=value</code>	<p>A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample").</p> <p>Type: String</p> <p>Default: Describes all your volumes, or only those you specified.</p> <p>Required: No</p> <p>Example: <code>--filter "volume-status.status=Ok"</code></p>

## Supported Filters

You can specify filters so that the response includes information for only certain volumes. For example, you can use a filter to specify that you're interested in volumes that have `impaired` status. You can specify multiple values for a filter. The response includes information for a volume only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify volumes that are in a specific Availability Zone and have the status `impaired`. The response includes information for a volume only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

### **availability-zone**

The Availability Zone of the instance.

Type: String

### **volume-status.status**

The status of the volume.

Type: String

Valid values: `ok` | `impaired` | `warning` | `insufficient-data`

### **volume-status.details-name**

The cause for the `volume-status.status`.

Type: String

Valid values: `io-enabled` | `io-performance`

### **volume-status.details-status**

The status of the `volume-status.details-name`.

Type: String

Valid values for `io-enabled`: `passed` | `failed`

Valid values for `io-performance`: `normal` | `degraded` | `severely-degraded` | `stalled`

### **event.description**

A description of the event.

Type: String

### **event.not-after**

The latest end time for the event.

Type: DateTime



**event.not-before**  
The earliest start time for the event.  
Type: DateTime

**event.event-id**  
The event ID.  
Type: String

**event.event-type**  
The event type.  
Type: String  
Valid values for io-enabled: potential-data-inconsistency  
Valid values for io-performance: io-performance:degraded | io-performance:severely-degraded | io-performance:stalled

**action.code**  
The action code for the event, for example, enable-volume-io  
Type: String

**action.event-id**  
The event ID associated with the action.  
Type: String

**action.description**  
A description of the action.  
Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).

Option	Description
<code>--connection-timeout</code> <i>timeout</i>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The VOLUME identifier
- The ID of the volume
- The Availability Zone in which the volume launched
- The volume status name(Ok, impaired, io-enabled, insufficient-data)
- The EVENT identifier
- The ID of the event
- The event type (potential-data-inconsistencies)
- The description of the event
- notBefore (the earliest start time of the event)
- notAfter (the latest end time of the event)
- The ACTION identifier
- The action code (enable-volume-io)
- The ID of the event associated with the action
- The event type associated with the action (potential-data-inconsistency)
- The description of the event associated with the action

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes the status of the volumes with the IDs `vol-111111` and `vol-222222`.

```
PROMPT> ec2-describe-volume-status vol-111111 vol-222222
Type          VolumeId  AvailabilityZone  VolumeStatus
VOLUME        vol-111111 us-east-1a       ok
VOLUME        vol-222222 us-east-1b       impaired
Type          Name      Status
VOLUMESTATUS io-enabled failed
Type  EventType      NotBefore          NotAfter  EventId  EventDescription
EVENT potential-data-inconsistency 2011-12-01T14:00:00.000Z          evol-61a54008 This is an example
Type  ActionCode          EventId  EventType
      EventDescription
ACTION enable-volume-io          evol-61a54008 potential-data-inconsistency
      This is an example
```

### Example 2

This example command describes the volumes you own that have failing I/O operations.

```
PROMPT> ec2-describe-volume-status --filter "volume-status.details-name=io-enabled" --filter "volume-status.details-status=failed"
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeVolumeStatus](#)

### Related Commands

- [ec2-describe-volume-attribute](#) (p. 422)
- [ec2-enable-volume-io](#) (p. 484)
- [ec2-modify-volume-attribute](#) (p. 546)

# ec2-describe-volumes

## Description

Describes one or more of your Amazon EBS volumes. For more information about Amazon EBS, see [Amazon Elastic Block Store](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2dvol**.

## Syntax

```
ec2-describe-volumes [volume_id ...] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>volume_id</i>	One or more volume IDs. Type: String Default: Describes all your volumes. Required: No Example: vol-4282672b
<code>-F, --filter <i>name=value</i></code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space (" <i>name=value example</i> "). On a Windows system, use quotation marks even without a space in the value string (" <i>name=valueexample</i> "). Type: String Default: Describes all your volumes, or only those you specified. Required: No Example: <code>--filter "tag-key=Production"</code>

## Supported Filters

You can specify filters so that the response includes information for only certain volumes. For example, you can use a filter to specify that you're interested in volumes whose status is `available`. You can specify multiple values for a filter. The response includes information for a volume only if it matches at least one of the filter values that you specified.

You can specify multiple filters (for example, specify that the volume is `available`, and has a specific tag). The response includes information for a volume only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?`.

The following are the available filters.

**attachment.attach-time**

The time stamp when the attachment initiated.

Type: DateTime

**attachment.delete-on-termination**

Whether the volume is deleted on instance termination.

Type: Boolean

**attachment.device**

The device name that is exposed to the instance (for example, /dev/sda1).

Type: String

**attachment.instance-id**

The ID of the instance the volume is attached to.

Type: String

**attachment.status**

The attachment state.

Type: String

Valid values: attaching | attached | detaching | detached

**availability-zone**

The Availability Zone in which the volume was created.

Type: String

**create-time**

The time stamp when the volume was created.

Type: DateTime

**size**

The size of the volume, in GiB (for example, 20).

Type: String

**snapshot-id**

The snapshot from which the volume was created.

Type: String

**status**

The status of the volume.

Type: String

Valid values: creating | available | in-use | deleting | deleted | error

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `tag-key=Purpose` and the filter `tag-value=X`, you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where `Purpose` is `X`, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:key=value**

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag `Purpose=X`, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag `Purpose=X` or the tag `Purpose=Y`, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

**volume-id**

The volume ID.

Type: String

**volume-type**

The Amazon EBS volume type. If the volume is an `io1` volume, the response includes the IOPS as well.

Type: String

Valid values: `standard` | `io1`

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.

Option	Description
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The volume information
  - The VOLUME identifier
  - The ID of the volume
  - The size of the volume, in GiBs
  - The ID of the snapshot the volume was created from
  - The Availability Zone of the volume
  - The volume status (`creating`, `available`, `in-use`, `deleting`, `deleted`, `error`)
  - The time stamp when volume creation was initiated
  - The EBS volume type
  - The I/O operations per second (IOPS) of a provisioned IOPS volume



2. Any attachments for the volume
  - The ATTACHMENT identifier
  - The ID of the volume
  - The ID of the instance
  - The device name
  - The attachment state of the volume (`attaching` | `attached` | `detaching` | `detached`)
  - The time stamp when the attachment initiated
  - Whether the volume is set to delete on termination (`true` or `false`)
3. Any tags associated with the volume
  - The TAG identifier
  - The resource type identifier
  - The ID of the resource
  - The tag key
  - The tag value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes all your volumes.

```
PROMPT> ec2-describe-volumes
VOLUME vol-1a2b3c4d 30 snap-1a2b3c4d us-west-2a available YYYY-MM-
DDTHH:MM:SS+0000 standard
TAG volume vol-1a2b3c4d Name Volume Name
VOLUME vol-2a2b3c4d 8 snap-2a2b3c4d us-west-2a in-use YYYY-MM-DDTHH:MM:SS+0000
standard
ATTACHMENT vol-2a2b3c4d i-1a2b3c4d /dev/sda1 attached YYYY-MM-DDTHH:MM:SS+0000
true
TAG volume vol-2a2b3c4d Name Second Volume Name
```

### Example 2

This example command describes all volumes that are both attached to the instance with the ID `i-1a2b3c4d` and set to delete when the instance terminates.

```
PROMPT> ec2-describe-volumes --filter "attachment.instance-id=i-1a2b3c4d" --
filter "attachment.delete-on-termination=true"
VOLUME vol-2a2b3c4d 8 snap-2a2b3c4d us-west-2a in-use YYYY-MM-DDTHH:MM:SS+0000
standard
ATTACHMENT vol-2a2b3c4d i-1a2b3c4d /dev/sda1 attached YYYY-MM-DDTHH:MM:SS+0000
true
TAG volume vol-2a2b3c4d Name Second Volume Name
```

### Example 3

This example describes volumes and filters the results by tag. The filter name you use is `tag:key`. This command lists just the volumes belonging to either TeamA or TeamB that contain log data. You can use

a wildcard to find the volumes that have a tag with the `Purpose` key and that have a value that contains `Log`.

```
PROMPT> ec2-describe-volumes --filter tag:Owner=TeamA --filter tag:Owner=TeamB
--filter tag:Purpose=*Log*
VOLUME vol-4562dabf 5 us-east-1b available 2010-02-22T22:50:43+0000
Owner TeamA Purpose RawLogData
VOLUME vol-3b3a4c4d 12 us-east-1b available 2010-05-01T13:09:27+0000
Owner TeamB Purpose Logs
```

## Example 4

This example lists only volumes that are in the `us-east-1b` Availability Zone and have a status of `available`.

```
PROMPT> ec2-describe-volumes --filter "availability-zone=us-east-1b" --filter
"status=available"
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeVolumes](#)

### Related Commands

- [ec2-create-snapshot](#) (p. 143)
- [ec2-delete-snapshot](#) (p. 215)

# ec2-describe-vpc-attribute

## Description

Describes the specified attribute of the specified VPC. You can specify only one attribute at a time.

The short version of this command is **ec2dva**.

## Syntax

```
ec2-describe-vpc-attribute vpc-id { --dns-support | --dns-hostname }
```

## Options

Name	Description
<i>vpc-id</i>	The ID of the VPC. Type: String Required: Yes Example: vpc-1a2b3c4d
-s, --dns-support	Indicates whether DNS resolution is enabled for the VPC. If this attribute is <code>true</code> , the Amazon DNS server resolves DNS hostnames for your instances to their corresponding IP addresses; otherwise, it does not. Type: String Required: No Example: -s
-d, --dns-hostnames	Indicates whether the instances launched in the VPC get DNS hostnames. If this attribute is <code>true</code> , instances in the VPC get DNS hostnames; otherwise, they do not. Type: String Required: No Example: -d

## Common Options

Option	Description
--region <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
-U, --url <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns the specified VPC attribute.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes the `EnableDnsSupport` attribute for the specified VPC.

```
PROMPT> ec2-describe-vpc-attribute vpc-1a2b3c4d --dns-support
```

This example output indicates that DNS resolution is enabled.

```
RETURNtrue
```

### Example 2

This example command describes the `EnableDnsHostnames` attribute for the specified VPC.

```
PROMPT> ec2-describe-vpc-attribute vpc-1a2b3c4d --dns-hostnames
```

This example output indicates that DNS hostnames are enabled.

```
RETURNtrue
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeVpcAttribute](#)

## Related Commands

- [ec2-modify-vpc-attribute](#) (p. 550)

# ec2-describe-vpcs

## Description

Describes one or more of your VPCs.

The short version of this command is **ec2dvpc**.

## Syntax

```
ec2-describe-vpcs [ vpc_id ... ] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>vpc_id</i>	One or more VPC IDs. Type: String Default: Describes all your VPCs. Required: No Example: vpc-1a2b3c4d
<code>-F, --filter <i>name=value</i></code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space (" <i>name=value example</i> "). On a Windows system, use quotation marks even without a space in the value string (" <i>name=valueexample</i> "). Type: String Default: Describes all your VPCs, or only those you specified. Required: No Example: <code>--filter "tag-key=Production"</code>

## Supported Filters

You can specify filters so that the response includes information for only certain VPCs. For example, you can use a filter to specify that you're interested in VPCs in the `available` state. You can specify multiple values for a filter. The response includes information for a VPC only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify VPCs that use one of several sets of DHCP options and are in the `available` state. The results include information for a VPC only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

### **cidr**

The CIDR block of the VPC. The CIDR block you specify must exactly match the VPC's CIDR block for information to be returned for the VPC.

Type: String

Constraints: Must contain the slash followed by one or two digits (for example, /28)

**dhcp-options-id**

The ID of a set of DHCP options.

Type: String

**isDefault**

Indicates whether the VPC is the default VPC.

Type: Boolean

**state**

The state of the VPC.

Type: String

Valid values: pending | available

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `tag-key=Purpose` and the filter `tag-value=X`, you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where `Purpose` is `X`, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:key=value**

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag `Purpose=X`, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag `Purpose=X` or the tag `Purpose=Y`, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

**vpc-id**

The ID of the VPC.

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.



## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information for each VPC:

- The VPC identifier
- The ID of the VPC
- The current state of the VPC (`pending` or `available`)
- The CIDR block of the VPC
- The ID of the DHCP options associated with the VPC (or `default` if none)
- Any tags assigned to the VPC
- The allowed tenancy of instances launched into the VPC (`default` or `dedicated`)
- Default VPC (`true` or `false`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example 1

This example command describes the specified VPC.

```
PROMPT> ec2-describe-vpcs vpc-1a2b3c4d
VPC vpc-1a2b3c4d available 10.0.0.0/23 dopt-7a8b9c2d default false
```

### Example 2

This example command uses filters to describe any VPC you own that uses the set of DHCP options with the ID `dopt-7a8b9c2d` or `dopt-2b2a3d3c` and whose state is `available`.

```
PROMPT> ec2-describe-vpcs --filter "dhcp-options-id=dopt-7a8b9c2d" --filter
"dhcp-options-id=dopt-2b2a3d3c" --filter "state=available"
VPC vpc-1a2b3c4d available 10.0.0.0/23 dopt-7a8b9c2d default false
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeVpcs](#)

### Related Commands

- [ec2-create-vpc](#) (p. 162)
- [ec2-delete-vpc](#) (p. 231)
- [ec2-associate-dhcp-options](#) (p. 30)
- [ec2-create-dhcp-options](#) (p. 92)

# ec2-describe-vpn-connections

## Description

Describes one or more of your VPN connections.

For VPN connections in the `pending` or `available` state only, you can also optionally get the configuration information for the VPN connection's customer gateway. You do this by specifying a format with the `--format` option, or by specifying an XSL stylesheet of your own design with the `--stylesheet` option (you were also able to do this when you created the VPN connection).

For more information about VPN connections, see [Adding a Hardware Virtual Private Gateway to Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is `ec2dvpn`.

## Syntax

```
ec2-describe-vpn-connections [vpn_connection_id ... ] [{"--format format} |
{"--stylesheet your_stylesheet"}] [{"--filter "name=value"} ...]
```

## Options

Name	Description
<code>vpn_connection_id</code>	One or more VPN connection IDs. Type: String Default: Describes all your VPN connections. Required: No Example: vpn-44a8938f
<code>--format format</code>	Includes customer gateway configuration information in the response, in the format specified by this option. The information is returned only if the VPN connection is in the pending or available state. The returned information can be formatted for various devices, including a Cisco device (cisco-ios-isr) or Juniper device (juniper-junos-j), in human readable format (generic), or in the native XML format (xml). Type: String Valid values: cisco-ios-isr   juniper-junos-j   juniper-screenos-6.2   juniper-screenos-6.1   generic   xml Default: None Required: No Example: --format cisco-ios-isr

Name	Description
<code>--stylesheet <i>your_stylesheet</i></code>	Includes customer gateway configuration information in the response, formatted according to the custom XSL stylesheet you specify with this option. The information is returned only if the VPN connection is in the pending or available state. Type: String Default: None Required: No Example: <code>--stylesheet c:\my_stylesheet.xml</code>
<code>-F, --filter <i>name=value</i></code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space (" <code>name=value example</code> "). On a Windows system, use quotation marks even without a space in the value string (" <code>name=valueexample</code> "). Type: String Default: Describes all your VPN connections, or only those you specified. Required: No Example: <code>--filter "tag-key=Production"</code>

## Supported Filters

You can specify filters so that the response includes information for only certain VPN connections. For example, you can use a filter to specify that you're interested in the VPN connections in the `pending` or `available` state. You can specify multiple values for a filter. The response includes information for a VPN connection only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify VPN connections that are associated with a specific virtual private gateway, and the gateway is in the `pending` or `available` state. The response includes information for a VPN connection only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?`.

The following are the available filters.

### **customer-gateway-configuration**

The configuration information for the customer gateway.

Type: String

### **customer-gateway-id**

The ID of a customer gateway associated with the VPN connection.

Type: String

### **state**

The state of the VPN connection.

Type: String

Valid values: `pending` | `available` | `deleting` | `deleted`

### **option.static-routes-only**

Indicates whether the connection has static routes only. Used for devices that do not support Border Gateway Protocol (BGP).

Type: Boolean

**route.destination-cidr-block**

The destination CIDR block. This corresponds to the subnet used in a customer data center.

Type: String

**bgp-asn**

The BGP Autonomous System Number (ASN) associated with a BGP device.

Type: Integer

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter `tag-key=Purpose` and the filter `tag-value=X`, you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where `Purpose` is `X`, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:key=value**

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag `Purpose=X`, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag `Purpose=X` or the tag `Purpose=Y`, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

**type**

The type of VPN connection. Currently the only supported type is `ipsec.1`.

Type: String

Valid values: `ipsec.1`

**vpn-connection-id**

The ID of the VPN connection.

Type: String

**vpn-gateway-id**

The ID of a virtual private gateway associated with the VPN connection.

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The VPNCONNECTION identifier
- The ID of the VPN connection
- The type of VPN connection
- The ID of the customer gateway
- The ID of the virtual private gateway
- The state of the VPN connection (`pending`, `available`, `deleting`, `deleted`)
- Configuration information for the customer gateway (optional and available only if the VPN connection is in the `pending` or `available` state)
- Any tags assigned to the VPN connection

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes the specified VPN connection. The example specifies that the configuration information be formatted as needed for a Cisco customer gateway. Because it's a long set of information, we haven't displayed it here in the output. To see an example of the configuration information, see the [Amazon Virtual Private Cloud Network Administrator Guide](#).

```
PROMPT> ec2-describe-vpn-connections vpn-44a8938f --format cisco-ios-isr
VPNCONNECTION vpn-44a8938f ipsec.1 vgw-8db04f81 cgw-b4dc3961 available
<Long customer gateway configuration data formatted for Cisco device... >
```

### Example 2

This example command uses filters to describe any VPN connection you own that is associated with the customer gateway with the ID `cgw-b4dc3961`, and whose state is either `pending` or `available`. Note that it doesn't use the option that causes the output to include the customer gateway configuration.

```
PROMPT> ec2-describe-vpn-connections --filter "customer-gateway-id=cgw-b4dc3961"
--filter "state=pending" --filter "state=available"
VPNCONNECTION vpn-44a8938f ipsec.1 vgw-8db04f81 cgw-b4dc3961 available
```



## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeVpnConnections](#)

### Related Commands

- [ec2-create-vpn-connection](#) (p. 166)
- [ec2-delete-vpn-connection](#) (p. 234)

# ec2-describe-vpn-gateways

## Description

Describes the specified virtual private gateways.

For more information about virtual private gateways, see [Adding a Hardware Virtual Private Gateway to Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2dvgw**.

## Syntax

```
ec2-describe-vpn-gateways [vpn_gateway_id ... ] [--filter "name=value"] ...]
```

## Options

Name	Description
<i>vpn_gateway_id</i>	One or more virtual private gateway IDs. Type: String Default: Describes all your virtual private gateways. Required: No Example: vgw-8db04f81
<code>-F, --filter name=value</code>	A filter for limiting the results. For more information, see the Supported Filters section. Use quotation marks if the value string has a space ("name=value example"). On a Windows system, use quotation marks even without a space in the value string ("name=valueexample"). Type: String Default: Describes all your virtual private gateways, or only those you specified. Required: No Example: --filter "tag-key=Production"

## Supported Filters

You can specify filters so that the response includes information for only certain virtual private gateways. For example, you can use a filter to specify that you're interested in the virtual private gateways in the `pending` or `available` state. You can specify multiple values for a filter. The response includes information for a virtual private gateway only if it matches at least one of the filter values that you specified.

You can specify multiple filters; for example, specify virtual private gateways that are in a specific Availability Zone and are in the `pending` or `available` state. The response includes information for a virtual private gateway only if it matches all the filters that you specified. If there's no match, no special message is returned; the response is simply empty.

You can use wildcards in a filter value. An asterisk (\*) matches zero or more characters, and a question mark (?) matches exactly one character. You can escape special characters using a backslash (\) before the character. For example, a value of `\*amazon\?\` searches for the literal string `*amazon?\`.

The following are the available filters.

**attachment.state**

The current state of the attachment between the gateway and the VPC.

Type: String

Valid values: attaching | attached | detaching | detached

**attachment.vpc-id**

The ID of an attached VPC.

Type: String

**availability-zone**

The Availability Zone for the virtual private gateway.

Type: String

**state**

The state of the virtual private gateway.

Type: String

Valid values: pending | available | deleting | deleted

**tag-key**

The key of a tag assigned to the resource. This filter is independent of the `tag-value` filter. For example, if you use both the filter "tag-key=Purpose" and the filter "tag-value=X", you get any resources assigned both the tag key `Purpose` (regardless of what the tag's value is), and the tag value `X` (regardless of what the tag's key is). If you want to list only resources where Purpose is X, see the `tag:key=value` filter.

For more information about tags, see [Tagging Your Resources](#) in the *Amazon Elastic Compute Cloud User Guide*.

Type: String

**tag-value**

The value of a tag assigned to the resource. This filter is independent of the `tag-key` filter.

Type: String

**tag:key=value**

The key/value combination of a tag assigned to the resource.

Example: To list the resources with the tag Purpose=X, use:

```
--filter tag:Purpose=X
```

Example: To list resources with the tag Purpose=X or the tag Purpose=Y, use:

```
--filter tag:Purpose=X --filter tag:Purpose=Y
```

**type**

The type of virtual private gateway. Currently the only supported type is `ipsec.1`.

Type: String

Valid values: ipsec.1

**vpn-gateway-id**

The ID of the virtual private gateway.

Type: String

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The VPNGATEWAY identifier
- The ID of the virtual private gateway
- The state of the virtual private gateway (`pending`, `available`, `deleting`, `deleted`)
- The Availability Zone where the virtual private gateway was created
- The type of VPN connection the virtual private gateway supports
- The VGWATTACHMENT identifier
- The ID of each attached VPC and the state of each attachment (`attaching`, `attached`, `detaching`, `detached`)
- Any tags assigned to the virtual private gateway

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command describes the specified virtual private gateway.

```
PROMPT> ec2-describe-vpn-gateways vgw-8db04f81  
VPNGATEWAY vgw-8db04f81 available us-east-1a ipsec.1  
VGWATTACHMENT vpc-1a2b3c4d attached
```

## Example 2

This example command uses filters to describe any virtual private gateway you own that is in the us-east-1a Availability Zone, and whose state is either `pending` or `available`.

```
PROMPT> ec2-describe-vpn-gateways --filter "availability-zone=us-east-1a" --  
filter "state=pending" --filter "state=available"  
VPNGATEWAY vgw-8db04f81 available ipsec.1  
VGWATTACHMENT vpc-1a2b3c4d attached
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeVpnGateways](#)

### Related Commands

- [ec2-create-vpn-gateway](#) (p. 174)
- [ec2-delete-vpn-gateway](#) (p. 240)

## ec2-detach-internet-gateway

### Description

Detaches the specified Internet gateway from the specified VPC, disabling connectivity between the Internet and the VPC. The VPC must not contain a running instance with an Elastic IP address.

The short version of this command is **ec2detigw**.

### Syntax

```
ec2-detach-internet-gateway vpn_gateway_id -c vpc_id
```

### Options

Name	Description
<i>vpn_gateway_id</i>	The ID of the Internet gateway. Type: String Default: None Required: Yes Example: igw-8db04f81
<code>-c, --vpc <i>vpc_id</i></code>	The ID of the VPC. Type: String Default: None Required: Yes Example: -c vpc-1a2b3c4d

### Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIBH3HXV4ZBEXAMPLE.pem</code>



Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Success status (`true` or `false`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command detaches the specified Internet gateway from the specified VPC.

```
PROMPT> ec2-detach-internet-gateway igw-eaad4883 -c vpc-11ad4878  
RETURN true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DetachInternetGateway](#)

### Related Commands

- [ec2-detach-internet-gateway](#) (p. 38)
- [ec2-create-internet-gateway](#) (p. 109)
- [ec2-delete-internet-gateway](#) (p. 190)
- [ec2-describe-internet-gateways](#) (p. 324)

# ec2-detach-network-interface

## Description

Detaches the specified network interface from the specified instance.

The short version of this command is **ec2detnic**.

## Syntax

`ec2-detach-network-interface attachment_id [--force]`

## Options

Name	Description
<code>attachment_id</code>	The ID of the network attachment. Type: String Default: None Required: Yes Example: eni-attach-083fda61
<code>-f, --force</code>	Forces the detachment. Type: String Default: None Required: No

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXLIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert <i>ec2_cert</i></code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ATTACHMENT identifier
- The ID of the network interface
- The attachment state of the volume (`attaching` | `attached` | `detaching` | `detached`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command detaches the specified network interface from the instance it's attached to.

```
PROMPT> ec2-detach-network-interface eni-attach-083fda61  
  
ATTACHMENT    eni-attach-083fda61    detaching
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DetachNetworkInterface](#)

### Related Commands

- [ec2-attach-network-interface](#) (p. 41)
- [ec2-create-network-interface](#) (p. 124)
- [ec2-delete-network-interface](#) (p. 203)
- [ec2-describe-network-interface-attribute](#) (p. 337)
- [ec2-describe-network-interfaces](#) (p. 341)
- [ec2-modify-network-interface-attribute](#) (p. 532)
- [ec2-reset-network-interface-attribute](#) (p. 611)

# ec2-detach-volume

## Description

Detaches the specified Amazon EBS volume from an instance. Make sure to unmount any file systems on the device within your operating system before detaching the volume. Failure to do so will result in the volume being stuck in "busy" state while detaching.

### Note

If an Amazon EBS volume is the root device of an instance, it can't be detached while the instance is in the `running` state. To detach the root volume, stop the instance first.

If the root volume is detached from an instance with an AWS Marketplace product code, then the AWS Marketplace product codes from that volume are no longer associated with the instance.

For more information about Amazon EBS, see [Amazon Elastic Block Store](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is `ec2detvol`.

## Syntax

```
ec2-detach-volume volume_id [--instance instance_id [--device device]] [--force]
```

## Options

Name	Description
<code>volume_id</code>	The ID of the volume. Type: String Default: None Required: Yes Example: vol-4282672b
<code>-i, --instance <i>instance_id</i></code>	The ID of the instance. Type: String Default: None Required: No Example: -i i-6058a509
<code>-d, --device <i>device</i></code>	The device name. Type: String Default: None Required: No Example: -d /dev/sdh

Name	Description
<code>-f, --force</code>	<p>Forces detachment if the previous detachment attempt did not occur cleanly (logging into an instance, unmounting the volume, and detaching normally). This option can lead to data loss or a corrupted file system. Use this option only as a last resort to detach a volume from a failed instance. The instance will not have an opportunity to flush file system caches or file system metadata. If you use this option, you must perform file system check and repair procedures.</p> <p>Type: Boolean Default: None Required: No Example: <code>-f</code></p>

## Common Options

Option	Description
<code>--region <i>region</i></code>	<p>The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option.</p> <p>Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.</p>
<code>-U, --url <i>url</i></code>	<p>The uniform resource locator (URL) of the Amazon EC2 web service entry point.</p> <p>Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.</p>
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	<p>Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a>.</p> <p>Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option.</p> <p>Example: <code>-O AKIAIOSFODNN7EXAMPLE</code></p>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	<p>Your secret access key.</p> <p>Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option.</p> <p>Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code></p>
<code>-T, --security-token <i>delegation_token</i></code>	<p>The AWS delegation token.</p> <p>Default: The value of the environment variable (if set).</p>
<code>--connection-timeout <i>timeout</i></code>	<p>The connection timeout, in seconds.</p> <p>Example: <code>--connection-timeout 30</code></p>
<code>--request-timeout <i>timeout</i></code>	<p>The request timeout, in seconds.</p> <p>Example: <code>--request-timeout 45</code></p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>

Option	Description
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key <i>ec2_private_key</i></code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert <i>ec2_cert</i></code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ATTACHMENT identifier
- The ID of the volume
- The ID of the instance
- The device name

- The attachment state of the volume (`attaching` | `attached` | `detaching` | `detached`)
- The time stamp when the attachment initiated
- Whether the volume is set to delete on termination (`true` or `false`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command detaches the volume with the ID `vol-1a2b3c4d` from the instance it's attached to.

```
PROMPT> ec2-detach-volume vol-1a2b3c4d  
ATTACHMENT vol-1a2b3c4d i-1a2b3c4d /dev/sdh detaching YYYY-MM-DDTHH:MM:SS+0000
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DetachVolume](#)

### Related Commands

- [ec2-attach-volume](#) (p. 44)
- [ec2-create-volume](#) (p. 158)
- [ec2-delete-volume](#) (p. 228)
- [ec2-describe-volumes](#) (p. 432)



## ec2-detach-vpn-gateway

### Description

Detaches the specified virtual private gateway from a VPC. You do this if you're planning to turn off the VPC and not use it anymore. You can confirm a virtual private gateway has been completely detached from a VPC by describing the virtual private gateway (any attachments to the virtual private gateway are also described).

You must wait for the attachment's state to switch to `detached` before you can delete the VPC or attach a different VPC to the virtual private gateway.

The short version of this command is `ec2detvgw`.

### Syntax

```
ec2-detach-vpn-gateway -p vpn_gateway_id -c vpc_id
```

### Options

Name	Description
<code>-p <i>vpn_gateway_id</i></code>	The ID of the virtual private gateway. Type: String Default: None Required: Yes Example: <code>-p vgw-8db04f81</code>
<code>-c <i>vpc_id</i></code>	The ID of the VPC. Type: String Default: None Required: Yes Example: <code>-c vpc-1a2b3c4d</code>

### Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The VPNGATEWAY identifier
- The ID of the VPC
- The state of detachment (`attaching`, `attached`, `detaching`, `detached`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command detaches the specified virtual private gateway from the specified VPC.

```
PROMPT> ec2-detach-vpn-gateway -p vgw-8db04f81 -c vpc-1a2b3c4d
VGWATTACHMENT    vpc-1a2b3c4d    detaching
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DetachVpnGateway](#)

### Related Commands

- [ec2-attach-vpn-gateway](#) (p. 48)
- [ec2-describe-vpn-gateways](#) (p. 453)

# ec2-disable-vgw-route-propagation

## Description

Disables the specified virtual private gateway (VGW) from propagating routes to the routing tables of the VPC.

The short version of this command is **ec2drp**.

## Syntax

```
ec2-disable-vgw-route-propagation --route-table route_table_id --vgw vgw_id
```

## Options

Name	Description
<code>--route-table <i>route_table_id</i></code>	The ID of the routing table. Type: String Default: None Required: Yes
<code>--vgw <i>vgw_id</i></code>	The ID of the virtual private gateway. Type: String Default: None Required: Yes

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns true if the operation succeeds or an error if the operation does not succeed.

Amazon EC2 command line tools display errors on stderr.

## Example

### Example

This example command disables the virtual private gateway with the ID `vgw-2acfb1` from propagating routes to route table with the ID `rtb-5c6de435`.

```
PROMPT> ec2-disable-vgw-route-propagation --route-table rtb-5c6de435 --vgw
vgw-2acfb1
RETURN true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DisableVgwRoutePropagation](#)

## ec2-disassociate-address

### Description

Disassociates the specified Elastic IP address from the instance or network interface it's associated with.

An Elastic IP address is for use either in the EC2-Classic platform or in a VPC. For more information, see [Elastic IP Addresses](#) in the *Amazon Elastic Compute Cloud User Guide*.

This is an idempotent action. If you perform the operation more than once, Amazon EC2 doesn't return an error.

The short version of this command is **ec2disaddr**.

### Syntax

```
ec2-disassociate-address { ip_address | -a association_id }
```

### Options

Name	Description
<i>ip_address</i>	[EC2-Classic] The Elastic IP address. Type: String Default: None Required: Conditional Condition: Required for EC2-Classic. Example: 192.0.2.1
-a, --association-id <i>association_id</i>	[EC2-VPC] The association ID. Type: String Default: None Required: Conditional Condition: Required for EC2-VPC. Example: -a eipassoc-fc5ca095

### Common Options

Option	Description
--region <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
-U, --url <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).



Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ADDRESS identifier
- [EC2-Classic] The Elastic IP address
- [EC2-VPC] The association ID.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command disassociates the specified Elastic IP address from the instance it's associated with in EC2-Classic.

```
PROMPT> ec2-disassociate-address 192.0.2.1  
ADDRESS 192.0.2.1
```

### Example 2

This example command disassociates the Elastic IP address with the association ID `eipassoc-048c746d` from the instance it's associated with in a VPC.

```
PROMPT> ec2-disassociate-address -a eipassoc-048c746d  
ADDRESS eipassoc-048c746d
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DisassociateAddress](#)

## Related Commands

- [ec2-allocate-address](#) (p. 17)
- [ec2-associate-address](#) (p. 25)
- [ec2-describe-addresses](#) (p. 250)
- [ec2-release-address](#) (p. 569)

# ec2-disassociate-route-table

## Description

Disassociates the specified subnet from its associated route table.

After you perform this action, the subnet no longer uses the routes in the route table. Instead, it uses the routes in the main route table of the VPC.

The short version of this command is **ec2disrtnb**.

## Syntax

`ec2-disassociate-route-table` *route\_table\_association\_id*

## Options

Name	Description
<i>route_table_association_id</i>	The association ID representing the current association between the route table and subnet. Type: String Default: None Required: Yes Example: rtbassoc-61a34608

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Success status (`true` or `false`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command disassociates the route table with the association ID `rtbassoc-fdad4894` from the subnet it's associated with.

```
PROMPT> ec2-disassociate-route-table rtbassoc-fdad4894  
RETURN      true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DisassociateRouteTable](#)

### Related Commands

- [ec2-associate-route-table](#) (p. 34)
- [ec2-create-route-table](#) (p. 140)
- [ec2-delete-route-table](#) (p. 212)
- [ec2-describe-route-tables](#) (p. 380)
- [ec2-replace-route-table-association](#) (p. 584)

# ec2-enable-vgw-route-propagation

## Description

Enables the specified virtual private gateway (VGW) to propagate routes to the routing tables of the VPC.

The short version of this command is **ec2erp**.

## Syntax

```
ec2-enable-vgw-route-propagation --route-table route_table_id --vgw vgw_id
```

## Options

Name	Description
<code>--route-table <i>route_table_id</i></code>	The ID of the routing table. Type: String Default: None Required: Yes
<code>--vgw <i>vgw_id</i></code>	The ID of the virtual private gateway. Type: String Default: None Required: Yes

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns true if the operation succeeds or an error if the operation does not succeed.

Amazon EC2 command line tools display errors on stderr.

## Example

### Example

This example command enables the virtual private gateway with the ID `vgw-2acfb1` to propagate static routes to the route table with the ID `rtb-5c6de435`.

```
PROMPT> ec2-enable-vgw-route-propagation --route-table rtb-5c6de435 --vgw vgw-2acfb1  
RETURN true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [EnableVgwRoutePropagation](#)



## ec2-enable-volume-io

### Description

Enables I/O operations for the specified volume that had its I/O operations disabled because the data on the volume was potentially inconsistent.

The short version of this command is **ec2evio**.

### Syntax

`ec2-enable-volume-io` *volume\_id*

### Options

Name	Description
<i>volume_id</i>	The ID of the volume. Type: String Default: None Required: Yes Example: vol-43a4412a

### Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U</code> , <code>--url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O</code> , <code>--aws-access-key</code> <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W</code> , <code>--aws-secret-key</code> <i>aws_secret_access_key</i>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a Boolean value indicating whether the request succeeded.

- Boolean value representing whether the call succeeded.

Amazon EC2 command line tools display errors on stderr.

## Example

### Example

This example command enables I/O operations for the volume with the ID `vol-232323`.

```
PROMPT> ec2-enable-volume-io vol-232323  
RETURN true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [EnableVolumeIO](#)

### Related Commands

- [ec2-describe-volume-status](#) (p. 426)

## ec2-fingerprint-key

### Description

Computes and displays the fingerprint for a private key produced by Amazon EC2.

This operation is performed entirely on the client-side. Network access is not required.

The short version of this command is **ec2fp**.

### Syntax

`ec2-fingerprint-key keyfile`

### Options

Name	Description
<i>keyfile</i>	The path to a file containing an unencrypted PEM-encoded PKCS#8 private key. Type: String Default: None Required: Yes Example: mykey.pem

### Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- A key fingerprint. This is formatted as a hash digest with each octet separated by a colon

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command computes and displays the fingerprint of the private key for the key pair named my-key-pair.

```
PROMPT> ec2-fingerprint-key my-key-pair.pem  
1f:51:ae:28:bf:89:e9:d8:1f:25:5d:37:2d:7d:b8:ca:9f:f5:f1:6f
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Commands

- [ec2-describe-keypairs](#) (p. 328)

# ec2-get-console-output

## Description

Gets the console output for the specified instance.

Instances do not have a physical monitor through which you can view their console output. They also lack physical controls that allow you to power up, reboot, or shut them down. To allow these actions, we provide them through the Amazon EC2 API and command line interface.

Instance console output is buffered and posted shortly after instance boot, reboot, and termination. Amazon EC2 preserves the most recent 64 KB output which will be available for at least one hour after the most recent post.

For Linux/UNIX instances, the instance console output displays the exact console output that would normally be displayed on a physical monitor attached to a machine. This output is buffered because the instance produces it and then posts it to a store where the instance's owner can retrieve it.

For Windows instances, the instance console output displays the last three system event log errors.

The short version of this command is **ec2gcons**.

## Syntax

```
ec2-get-console-output instance_id [-r]
```

## Options

Name	Description
<i>instance_id</i>	The ID of the instance. Type: String Default: None Required: Yes Example: i-10a64379
-r, --raw-console-output	Returns raw output without escapes to facilitate reading. Type: String Default: Disabled Required: No Example: -r

## Common Options

Option	Description
--region <i>region</i>	The region. Overrides the default region, the region specified by the EC2_URL environment variable, and the URL specified by the -U option. Default: The region specified by the EC2_URL environment variable, or us-east-1 if EC2_URL isn't set.

**Amazon Elastic Compute Cloud CLI Reference**  
**Common Options**

Option	Description
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.



## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the EC2_PRIVATE_KEY environment variable. Example: -K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the EC2_CERT environment variable. Example: -C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem

## Output

This command returns a table that contains the following information:

- The ID of the instance
- A timestamp indicating the time of the last update
- The instance console output. By default the ^ESC character is escaped and duplicate new-lines are removed to facilitate reading

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command retrieves the console output for the specified Linux/UNIX instance.

```
PROMPT> ec2-get-console-output i-10a64379
i-10a64379
2010-04-08T09:20:29+0000
Linux version 2.6.21.7-2.ec2.v1.2.fc8xen (root@domU-12-34-56-0A-78-01) (gcc
version 4.1.2 20070925 (Red Hat 4.1.2-33)) #1 SMP Fri Nov 20 19:22:36 EST 2009
BIOS-provided physical RAM map:
sanitize start
sanitize bail 0
copy_e820_map() start: 0000000000000000 size: 000000006ac00000 end:
000000006ac00000 type: 1
Xen: 0000000000000000 - 000000006ac00000 (usable)
980MB HIGHMEM available.
727MB LOWMEM available.
NX (Execute Disable) protection: active
...
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [GetConsoleOutput](#)

### Related Commands

- [ec2-run-instances](#) (p. 628)

## ec2-get-password

### Description

Retrieves and decrypts the administrator password for the instances running Windows.

The Windows password is only generated the first time an AMI is launched. It is not generated for rebundled AMIs or after the password is changed on an instance.

The password is encrypted using the key pair that you specified when you launched the instance. You must provide the corresponding key pair file.

Password generation and encryption takes a few moments. Please wait up to 15 minutes after launching an instance before trying to retrieve the generated password.

The short version of this command is **ec2gpas**.

### Syntax

```
ec2-get-password instance_id -k key_file
```

### Options

Name	Description
<i>instance_id</i>	The ID of a Windows instance. Type: String Default: None Required: Yes Example: i-9b76d0f3
<code>-k</code> , <code>--priv-launch-key</code> <i>key_file</i>	The file that contains the private key used to launch the instance. Type: String Default: None Required: Yes Example: -k windows-keypair.pem

### Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.

**Amazon Elastic Compute Cloud CLI Reference**  
**Common Options**

Option	Description
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The Windows administrator password

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command returns the administrator password for the specified Windows instance.

```
PROMPT> ec2-get-password i-2574e22a -k windows-keypair.pem
q96A40B9w
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [GetPasswordData](#)

## Related Commands

- [ec2-run-instances](#) (p. 628)
- [ec2-describe-instances](#) (p. 311)

## ec2-import-instance

### Description

Creates an import instance task using metadata from the specified disk image, and imports the image to Amazon EC2. For more information about prerequisites for importing an instance, see [Before You Get Started](#) and [Using the Command Line Tools to Import Your Virtual Machine to Amazon EC2](#) in the *Amazon Elastic Compute Cloud User Guide*.

If the upload task doesn't complete, use `ec2-resume-import` to resume the import from where it was interrupted.

The short version of this command is `ec2iin`.

### Syntax

```
ec2-import-instance -t instance_type [-g group] -f file_format -a architecture
[-p platform_name] -b s3_bucket_name [-o owner] -w secret_key [--prefix prefix]
[--manifest-url url] [-s volume_size] [-z availability_zone] [-d description]
[--user-data user_data] [--user-data-file disk_image_filename] [--subnet
subnet_id] [--private-ip-address ip_address] [--monitor]
[--instance-initiated-shutdown-behavior behavior] [--x days]
[--ignore-region-affinity] [--dry-run] [--no-upload] [--dont-verify-format]
```

### Options

Name	Description
-t, --instance-type <i>instance_type</i>	<p>The type of instance to be launched. For more information, see <a href="#">Instance Types</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>Type: String Default: <code>m1.small</code> Required: Yes Example: <code>-t m1.small</code></p> <p><b>Note</b> The <code>-a</code> option is only honored if the <code>-t</code> option is passed. If the <code>-t</code> option is not passed, then <code>-a</code> is treated as <code>i386</code>. If the <code>-t</code> option is not passed, the instance type defaults to <code>m1.small</code>.</p>
-g, --group <i>group</i>	<p>The security group within which the instances should be run. Determines the ingress firewall rules that are applied to the launched instances. Only one security group is supported for an instance.</p> <p>Type: String Default: Your default security group Required: No Example: <code>-g myGroup</code></p>

**Amazon Elastic Compute Cloud CLI Reference**  
**Options**

Name	Description
<code>-f, --format <i>file_format</i></code>	The file format of the disk image. Type: String Valid values: VMDK   RAW   VHD Default: None Required: Yes Example: -f VMDK
<code>-a, --architecture <i>architecture</i></code>	The architecture of the image. Using this option ensures that your image is imported as the expected instance type. Type: String Valid values: i386   x86_64 Default: i386 Required: Yes Condition: Required if instance type is specified; otherwise defaults to i386.  <b>Note</b> The <b>-a</b> option is only honored if the <b>-t</b> option is passed. If the <b>-t</b> option is not passed, then <b>-a</b> is treated as <b>i386</b> . If the <b>-t</b> option is not passed, the instance type defaults to <code>m1.small</code> . Example: -a i386
<code>-p, --platform <i>platform_name</i></code>	The operating system of the instance. Type: String Default: None Valid value: windows Required: No
<code>-b, --bucket <i>s3_bucket_name</i></code>	The Amazon S3 destination bucket for the manifest. Type: String Default: None Required: Conditional Condition: The <code>--manifest-url</code> parameter is not specified. Example: myawsbucket
<code>-o, --owner-akid <i>access_key_id</i></code>	The access key ID of the bucket owner. Type: String Default: None Required: No Example: AKIAIOSFODNN7EXAMPLE
<code>-w, --owner-sak <i>secret_access_key</i></code>	The secret access key of the bucket owner. Type: String Default: None Required: Yes Example: wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY



Amazon Elastic Compute Cloud CLI Reference  
Options

Name	Description
<code>--prefix <i>prefix</i></code>	The prefix for the manifest file and disk image file parts within the Amazon S3 bucket. Type: String Default: None Required: No Example: <code>--prefix MyDiskParts</code>
<code>--manifest-url <i>url</i></code>	The URL for an existing import manifest file already uploaded to Amazon S3. Type: String Default: None. This option can't be specified if the <code>--bucket</code> option is present. Required: No Example: <code>my-ami.manifest.xml</code>
<code>-s, --volume-size <i>volume_size</i></code>	The size of the Amazon EBS volume, in GiB (2 <sup>30</sup> bytes), that will hold the converted image. If not specified, Amazon EC2 calculates the value using the disk image file. Type: String Default: None Required: No Example: <code>-s 30</code>
<code>-z, --availability-zone <i>availability_zone</i></code>	The Availability Zone for the converted VM. Type: String Valid values: Use <code>ec2-describe-availability-zones</code> for a list of values Default: None Required: No Example: <code>-z us-east-1a</code>
<code>-d, --description <i>description</i></code>	An optional, free-form comment returned verbatim during subsequent calls to <code>ec2-describe-conversion-tasks</code> . Type: String Default: None Constraint: Maximum length of 255 characters Required: No Example: <code>-d Test of ec2-import-instance</code>
<code>--user-data <i>user_data</i></code>	User data to be made available to the imported instance. Type: String Default: None Required: No Example: <code>--user-data This is user data</code>

**Amazon Elastic Compute Cloud CLI Reference**  
**Options**

Name	Description
<code>--user-data-file</code> <i>disk_image_filename</i>	The file containing user data made available to the imported instance. Type: String Default: None Required: No Example: <code>--user-data-file my_data_file</code>
<code>--subnet</code> <i>subnet_id</i>	[EC2-VPC] The ID of the subnet into which you're launching the instance. Type: String Default: None Required: No Example: <code>--subnet subnet-f3e6ab83</code>
<code>--private-ip-address</code> <i>ip_address</i>	[EC2-VPC] The specific IP address within <i>subnet</i> to use for the instance. Type: String Default: None Required: No Example: <code>--private-ip-address 10.0.0.3</code>
<code>--monitor</code>	Enables monitoring of the specified instances. Type: String Default: None Required: No Example: <code>--monitor</code>
<code>--instance-initiated-shutdown-behavior</code> <i>behavior</i>	Indicates whether an instance stops or terminates when you initiate shutdown from the instance (using the operating system command for system shutdown). Type: String Valid values: <code>stop   terminate</code> Default: None Required: No Example: <code>--instance-initiated-shutdown-behavior stop</code>
<code>-x, --expires</code> <i>days</i>	The validity period for the signed Amazon S3 URLs that allow Amazon EC2 to access the manifest. Type: String Default: 30 days Required: No Example: <code>-x 10</code>
<code>--ignore-region-affinity</code>	Ignores the verification check to determine whether the bucket's region matches the region where the conversion task is created. Type: None Default: None Required: No Example: <code>--ignore-region-affinity</code>

Name	Description
<code>--dry-run</code>	Validates that the disk image matches a known type, without creating an import task. Type: None Default: None Required: No Example: <code>--dry-run</code>
<code>--dont-verify-format</code>	Skips verifying the file format. We don't recommend this option because it can result in a failed conversion. Type: None Default: None Required: No Example: <code>--dont-verify-format</code>
<code>--no-upload</code>	Creates an import task, without uploading a disk image to Amazon S3. To complete the import task and upload the disk image, use <code>ec2-resume-import</code> . Type: None Default: None Required: No Example: <code>--no-upload</code>

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token <i>delegation_token</i></code>	The AWS delegation token. Default: The value of the environment variable (if set).

Option	Description
<code>--connection-timeout</code> <i>timeout</i>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns the following information:

- Task ID, which you will use in other commands
- General information about the disk image, such as the size and format
- General information about the import operation, such as the status, bytes received, and expiration deadline

Amazon EC2 command line tools display errors on stderr.

## Example

### Example

This example command creates an import instance task that migrates a Windows Server 2008 SP2 (32-bit) VM into the us-east-1 region.

```
PROMPT> ec2-import-instance -t m1.xlarge ./WinSvr8-disk1.vmdk -f VMDK -o AKI  
AIOSFODNN7EXAMPLE -w wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY -b myawsbucket
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ImportInstance](#)

### Related Commands

- [ec2-cancel-conversion-task](#) (p. 65)
- [ec2-delete-disk-image](#) (p. 183)
- [ec2-describe-conversion-tasks](#) (p. 264)
- [ec2-import-volume](#) (p. 509)
- [ec2-resume-import](#) (p. 617)

# ec2-import-keypair

## Description

Imports the public key from an RSA key pair that you created with a third-party tool. Compare this with `ec2-create-keypair`, in which AWS creates the key pair and gives the keys to you (AWS keeps a copy of the public key). With `ec2-import-keypair`, you create the key pair and give AWS just the public key. The private key is never transferred between you and AWS.

You can easily create an RSA key pair on Windows and Linux using the `ssh-keygen` command line tool (provided with the standard OpenSSH installation). Standard library support for RSA key pair creation is also available in Java, Ruby, Python, and many other programming languages.

Supported formats:

- OpenSSH public key format (the format in `~/.ssh/authorized_keys`)
- Base64 encoded DER format
- SSH public key file format as specified in [RFC4716](#)

DSA keys are not supported. Make sure your key generator is set up to create RSA keys.

Supported lengths: 1024, 2048, and 4096.

Note that you can have up to five thousand key pairs per region.

The short version of this command is `ec2ikey`.

## Syntax

```
ec2-import-keypair key_name --public-key-file key_file
```

## Options

Name	Description
<code><i>key_name</i></code>	A unique name for the key pair. Type: String Default: None Required: Yes Example: my-key-pair
<code>-f, --public-key-file <i>key_file</i></code>	The path and name of the file containing the public key. Type: String Default: None Required: Yes Example: -f C:\keys\my-key-pair.pub

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns a table that contains the following information:

- The KEYPAIR identifier
- The name of the key pair
- The MD5 public key fingerprint as specified in section 4 of [RFC 4716](#)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command imports the public key from the file `C:\keys\my-key-pair.pub`.

```
PROMPT> ec2-import-keypair my-key-pair --public-key-file C:\keys\my-key-pair.pub
KEYPAIR my-key-pair 1f:51:ae:28:bf:89:e9:d8:1f:25:5d:37:2d:7d:b8:ca:9f:f5:f1:6f
```



## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ImportKeyPair](#)

### Related Commands

- [ec2-create-keypair](#) (p. 112)
- [ec2-delete-keypair](#) (p. 193)
- [ec2-describe-keypairs](#) (p. 328)

# ec2-import-volume

## Description

Creates an import volume task using metadata from the specified disk image, and imports the image to Amazon EC2. For more information about prerequisites for importing a volume, see [Before You Get Started](#) and [Using the Command Line Tools to Import Your Virtual Machine to Amazon EC2](#) in the *Amazon Elastic Compute Cloud User Guide*.

If the upload task doesn't complete, use `ec2-resume-import` to resume the import from where it was interrupted.

The short version of this command is `ec2ivol`.

## Syntax

```
ec2-import-volume disk_image -f file_format [-s volume_size] -z availability_zone
[-b s3_bucket_name] [-o owner] -w secret_key [--prefix prefix] [--manifest-url
url] [-d description] [--x days] [--ignore-region-affinity] [--dry-run]
[--no-upload] [--dont-verify-format]
```

## Options

Name	Description
<i>disk_image</i>	The local file name of the disk image. Type: String Default: None Required: Yes Example: WinSvr8-64-disk1.vmdk
<code>-f, --format</code> <i>file_format</i>	The file format of the disk image. Type: String Valid values: vmdk   raw   vhd Default: None Required: Yes Example: <code>-f vmdk</code>
<code>-s, --volume-size</code> <i>volume_size</i>	The size, in GB (2 <sup>30</sup> bytes), of an Amazon EBS volume that will hold the converted image. If not specified, Amazon EC2 calculates the value using the disk image file. Type: String Default: None Required: No Example: <code>-s 30</code>

**Amazon Elastic Compute Cloud CLI Reference  
Options**

Name	Description
<code>-z, --availability-zone zone</code>	The Availability Zone for the converted VM. Type: String Valid values: Use <code>ec2-describe-availability-zones</code> for a list of values. Required: No Example: <code>-z us-east-1a</code>
<code>-b, --bucket bucket</code>	The Amazon S3 destination bucket for the manifest. Type: String Default: None Condition: Required when the <code>--manifest-url</code> parameter is not specified. Required: Yes Example: <code>-b myawsbucket</code>
<code>-o, --owner-akid access_key_id</code>	The access key ID of the bucket owner. Type: String Default: None Required: No Example: <code>AKIAIOSFODNN7EXAMPLE</code>
<code>-w, --owner-sak secret_access_key</code>	The secret access key of the bucket owner. Type: String Default: None Required: Yes Example: <code>wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>--prefix prefix</code>	The prefix for the manifest file and disk image file parts within the Amazon S3 bucket. Type: String Default: None Required: No Example: <code>--prefix MyDiskParts</code>
<code>--manifest-url url</code>	The URL for an existing import manifest file already uploaded to Amazon S3. Type: String Default: None Condition: This option can't be specified if the <code>--bucket</code> option is present. Required: No Example: <code>my-ami.manifest.xml</code>

## Amazon Elastic Compute Cloud CLI Reference Options

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Name	Description
<code>-d, --description <i>description</i></code>	An optional, free-form comment returned verbatim during subsequent calls to <code>ec2-describe-conversion</code> tasks. Type: String Default: None Constraint: Maximum length of 255 characters Required: No Example: <code>-d Test of ec2-import-instance</code>
<code>-x, --expires <i>days</i></code>	The validity period for the signed Amazon S3 URLs that allow Amazon EC2 to access the manifest. Type: String Default: 30 days Required: No Example: <code>-x 10</code>
<code>--ignore-region-affinity</code>	Ignores the verification check to determine whether the bucket's region matches the region where the conversion-task is created. Type: None Default: None Required: No Example: <code>--ignore-region-affinity</code>
<code>--dry-run</code>	Does not create an import task, only validates that the disk image matches a known type. Type: None Default: None Required: No Example: <code>--dry-run</code>
<code>--no-upload</code>	Does not upload a disk image to Amazon S3, only creates an import task. To complete the import task and upload the disk image, use <code>ec2-resume-import</code> . Type: None Default: None Required: No Example: <code>--no-upload</code>
<code>--dont-verify-format</code>	Does not verify the file format. We don't recommend this option because it can result in a failed conversion. Type: None Default: None Required: No Example: <code>--dont-verify-format</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns the following information:

- The percentage of the import completed
- The checksum value
- Information about the volume, such as the size and format

Amazon EC2 command line tools display errors on stderr.

## Example

### Example

This example command creates an import volume task that migrates a Windows Server 2008 (32-bit) volume into the us-east-1 region.

```
PROMPT> ec2-import-volume 123M.vmdk -f VMDK -z us-east-1a -s 9 -b myawsbucket
-o AKIAIOSFODNN7EXAMPLE -w wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ImportVolume](#)

### Related Commands

- [ec2-cancel-conversion-task](#) (p. 65)
- [ec2-delete-disk-image](#) (p. 183)
- [ec2-describe-conversion-tasks](#) (p. 264)
- [ec2-import-instance](#) (p. 498)
- [ec2-resume-import](#) (p. 617)

# ec2-migrate-image

## Description

Copies a bundled AMI from one region to another.

### Important

This tool does not work with AMIs backed by Amazon EBS.

### Note

This tool replaces [ec2-migrate-bundle](#) (p. 681).

The short version of this command is **ec2mim**.

## Syntax

```
ec2-migrate-image --private-key private_key --cert cert -U url --owner-akid
access_key_id --owner-sak secret_access_key --bucket source_s3_bucket
--destination-bucket destination_s3_bucket --manifest manifest_path --acl acl
--location {US | EU} --ec2cert ec2_cert_path [--kernel kernel-id] [--ramdisk
ramdisk_id] [--no-mapping] --region mapping_region_name
```

## Options

Name	Description
-K, --private-key <i>private_key</i>	The path to your PEM-encoded RSA key file. Type: String Default: Uses the EC2_PRIVATE_KEY environment variable Required: No
-C, --cert <i>cert</i>	The user's PEM encoded RSA public key certificate file. Type: String Default: Uses the EC2_CERT environment variable Required: No Example: -C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem
-U, --url <i>url</i>	The URL to use as the web service URL. Type: String Default: https://ec2.amazonaws.com Required: No Example: -U https://ec2.amazonaws.com
-o, --owner-akid <i>access_key_id</i>	The access key ID of the bucket owner. Type: String Default: None Required: Yes Example: -o AKIAIOSFODNN7EXAMPLE



**Amazon Elastic Compute Cloud CLI Reference**  
**Options**

Name	Description
<p><code>-w, --owner-sak</code> <i>secret_access_key</i></p>	<p>The secret access key of the bucket owner. Type: String Default: None Required: Yes Example: -w wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</p>
<p><code>--bucket</code> <i>source_s3_bucket</i></p>	<p>The source Amazon S3 bucket where the AMI is located, followed by an optional '/'-delimited path prefix. Type: String Default: None Required: Yes Example: --bucket myawsbucket</p>
<p><code>--destination-bucket</code> <i>destination_s3_bucket</i></p>	<p>The destination Amazon S3 bucket, followed by an optional '/'-delimited path prefix. If the destination bucket does not exist, it is created. Type: String Default: None Required: Yes Example: --destination-bucket myotherawsbucket</p>
<p><code>--manifest</code> <i>manifest</i></p>	<p>The location of the Amazon S3 source manifest. Type: String Default: None Required: Yes Example: --manifest my-ami.manifest.xml</p>
<p><code>--location</code> {US   EU}</p>	<p>The location of the destination Amazon S3 bucket. Type: String Valid values: US   EU Default: US Required: No Example: --location EU</p>
<p><code>--acl</code> <i>acl</i></p>	<p>The access control list policy of the bundled image. Type: String Valid values: public-read   aws-exec-read Default: None Required: Yes Example: --acl public-read</p>

Name	Description
<code>--kernel</code>	<p>The ID of the kernel to select.</p> <p><b>Important</b> We recommend that you use PV-GRUB instead of kernels and RAM disks. For more information, see <a href="#">PV-GRUB: A New Amazon Kernel Image</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>Type: String Default: None Required: No Example: <code>--kernel aki-ba3adfd3</code></p>
<code>--ramdisk</code>	<p>The ID of the RAM disk to select.</p> <p>Type: String Default: None Required: No Example: <code>--ramdisk ari-badbad00</code></p>
<code>--no-mapping</code>	<p>Disables automatic mapping of kernels and RAM disks.</p> <p>Type: String Default: Mapping is enabled. Required: No Example: <code>--no-mapping</code></p>
<code>--region <i>region</i></code>	<p>The region to look up in the mapping file.</p> <p>Type: String Default: Amazon EC2 attempts to determine the region from the location of the Amazon S3 bucket. Required: No Example: <code>--region eu-west-1</code></p>

## Common Options

Option	Description
<code>--region <i>region</i></code>	<p>The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option.</p> <p>Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.</p>
<code>-U, --url <i>url</i></code>	<p>The uniform resource locator (URL) of the Amazon EC2 web service entry point.</p> <p>Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.</p>

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Status messages describing the stages and status of the migration

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command copies the AMI specified in the `my-ami.manifest.xml` manifest from the US to the EU.

```
PROMPT> ec2-migrate-image --cert cert-THUMBPRINT.pem --private-key pk-THUMBPRINT.pem --owner-akid AKIAIOSFODNN7EXAMPLE --owner-sak wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY --bucket myawsbucket --destination-bucket my-eu-bucket --manifest my-ami.manifest.xml --acl aws-exec-read --location EU
Copying 'my-ami.part.00'...
Copying 'my-ami.part.01'...
Copying 'my-ami.part.02'...
Copying 'my-ami.part.03'...
Copying 'my-ami.part.04'...
Copying 'my-ami.part.05'...
Copying 'my-ami.part.06'...
Copying 'my-ami.part.07'...
Copying 'my-ami.part.08'...
Copying 'my-ami.part.09'...
Copying 'my-ami.part.10'...
Your new bundle is in S3 at the following location:
my-eu-bucket/my-ami.manifest.xml
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

## Related Action

- There is no underlying API action for this command.

## Related Commands

- [ec2-register](#) (p. 563)
- [ec2-run-instances](#) (p. 628)

# ec2-modify-image-attribute

## Description

Modifies the specified attribute of the specified AMI. You can specify only one attribute at a time.

### Note

AWS Marketplace product codes cannot be modified. Images with an AWS Marketplace product code cannot be made public.

The short version of this command is **ec2mimatt**.

## Syntax

```
ec2-modify-image-attribute ami_id {-l (-a entity | -r entity) | --product-code code}
```

## Options

Name	Description
<i>ami_id</i>	The ID of the AMI. Type: String Default: None Required: Yes Example: ami-2bb65342
-p, --product-code <i>code</i>	The product code to add to the specified instance store-backed AMI. After you add a product code to an AMI, it can't be removed. Type: String Default: None Required: No Example: -p D662E989
-l, --launch-permission	Used with the --add or --remove flags to grant or revoke launch permissions. Type: String Default: None Required: Yes Example: --launch-permission
-a, --add <i>entity</i>	Adds a launch permission for the specified AWS account or for all accounts. Type: String Valid values: <i>AWS account ID</i>   all Default: None Required: Yes Example: --launch-permission --add all

Name	Description
<code>-r, --remove entity</code>	Removes a launch permission for the specified AWS account or for all users. Type: String Valid values: <i>AWS account ID</i>   <code>all</code> Default: None Required: Yes Example: <code>--launch-permission --remove all</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.

Option	Description
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key <i>ec2_private_key</i></code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert <i>ec2_cert</i></code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The attribute type identifier
- The ID of the AMI on which attributes are being modified
- The action performed on the attribute
- The attribute or attribute list item value type
- The attribute or attribute list item value

Amazon EC2 command line tools display errors on `stderr`.



## Examples

### Example 1

This example command makes the specified AMI public (for example, so that any AWS account can use it).

```
PROMPT> ec2-modify-image-attribute ami-1a2b3c4d -l -a all  
launchPermission ami-1a2b3c4d ADD group all
```

### Example 2

This example command makes the specified AMI private (for example, so that only you as the owner can use it).

```
PROMPT> ec2-modify-image-attribute ami-1a2b3c4d -l -r all  
launchPermission ami-1a2b3c4d REMOVE group all
```

### Example 3

This example command grants launch permission to the AWS account with the ID 444455556666.

```
PROMPT> ec2-modify-image-attribute ami-2bb65342 -l -a 444455556666  
launchPermission ami-2bb65342 ADD userId 444455556666
```

### Example 4

This example command removes launch permission from the AWS account with the ID 444455556666.

```
PROMPT> ec2-modify-image-attribute ami-1a2b3c4d -l -r 444455556666  
launchPermission ami-1a2b3c4d REMOVE userId 444455556666
```

### Example 5

This example command adds the 774F4FF8 product code to the AMI with the ID ami-1a2b3c4d.

```
PROMPT> ec2-modify-image-attribute ami-1a2b3c4d -p 774F4FF8  
productcodes ami-1a2b3c4d productCode 774F4FF8
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ModifyImageAttribute](#)

## Related Commands

- [ec2-reset-image-attribute](#) (p. 604)
- [ec2-describe-image-attribute](#) (p. 286)

# ec2-modify-instance-attribute

## Description

Modifies the specified attribute of the specified instance. You can specify only one attribute at a time.

### Note

To modify some attributes, the instance must be stopped. For more information, see [Modifying Attributes of a Stopped Instance](#) in the *Amazon Elastic Compute Cloud User's Guide*.

The short version of this command is **ec2minatt**.

## Syntax

```
ec2-modify-instance-attribute instance_id { --block-device-mapping mapping |
--disable-api-termination | --ebs-optimized Boolean | --group-id group_id [...]
| --instance-initiated-shutdown-behavior behavior | --instance-type type |
--kernel kernel_id | --ramdisk ramdisk_id | --source-dest-check Boolean |
--user-data user_data }
```

## Options

Name	Description
<i>instance_id</i>	The ID of the instance. Type: String Default: None Required: Yes Example: i-43a4412a
-b, --block-device-mapping <i>mapping</i>	Modifies the <code>DeleteOnTermination</code> attribute for volumes that are currently attached. The volume must be owned by the caller. If no value is specified for <code>DeleteOnTermination</code> , the volume is deleted when the instance is terminated.  To add instance store volumes to an Amazon EBS-backed instance, you must add them when you launch the instance. For more information, see <a href="#">Updating the Block Device Mapping when Launching an Instance</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: BlockDeviceMapping Required: No Example: -b "/dev/sdb=:false"
--disable-api-termination <i>Boolean</i>	If this option is specified, you can't terminate the instance using the Amazon EC2 console, CLI, and API; otherwise, you can. Type: Boolean Default: <code>false</code> Required: No Example: --disable-api-termination true

Name	Description
<code>--ebs-optimized</code> <i>Boolean</i>	Indicates whether the instance is optimized for EBS I/O. This optimization provides dedicated throughput to Amazon EBS and an optimized configuration stack to provide optimal EBS I/O performance. This option isn't available on all instance types. Additional usage charge apply when using this option. Type: Boolean Default: <code>false</code> Required: No Example: <code>--ebs-optimized true</code>
<code>-g, --group-id</code> <i>group_id</i>	[EC2-VPC] Modify the security groups associated with an instance. The set of security groups that you specify replaces the current set. You must specify at least one group, even if it's just the default security group for the VPC. You must specify the security group by ID and not by name. Type: String Default: None Required: No Example: <code>-g sg-1a1a1a1a -g sg-9b9b9b9b</code>
<code>--instance-initiated-shutdown-behavior</code> <i>behavior</i>	Indicates whether an instance stops or terminates when you initiate shutdown from the instance (using the operating system command for system shutdown). Type: String Valid values: <code>stop   terminate</code> Default: <code>stop</code> Required: No Example: <code>--instance-initiated-shutdown-behavior stop</code>
<code>-t, --instance-type</code> <i>type</i>	The type of the instance. For more information, see <a href="#">Instance Types</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . An <code>InvalidInstanceAttributeValue</code> error will be returned if the instance type is not valid. Type: String Default: <code>m1.small</code> Required: No Example: <code>-t m1.large</code>
<code>--kernel</code> <i>kernel_id</i>	The ID of the kernel. <b>Important</b> We recommend that you use PV-GRUB instead of kernels and RAM disks. For more information, see <a href="#">PV-GRUB: A New Amazon Kernel Image</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String Default: None Required: No Example: <code>--kernel aki-1a2b3c4d</code>

Name	Description
<code>--ramdisk <i>ramdisk_id</i></code>	The ID of the RAM disk. Type: String Default: None Required: No Example: <code>--ramdisk ari-1a2b3c4d</code>
<code>--source-dest-check <i>Boolean</i></code>	Indicates whether source/destination checking is enabled. A value of <code>true</code> means checking is enabled, and <code>false</code> means checking is disabled. This value must be <code>false</code> for a NAT instance to perform NAT. For more information, see <a href="#">NAT Instances</a> in the <i>Amazon Virtual Private Cloud User Guide</i> . Type: Boolean Default: <code>true</code> Required: No Example: <code>--source-dest-check false</code>
<code>--user-data <i>user_data</i></code>	The Base64-encoded MIME user data. Type: String Default: None Required: No Example: <code>--user-data "My user data"</code>

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The attribute type identifier
- The ID of the instance on which attributes are being modified
- The new attribute value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command changes the instance type of the specified instance. The instance must be in the `stopped` state.

```
PROMPT> ec2-modify-instance-attribute i-10a64379 --instance-type m1.small  
instanceType i-10a64379 m1.small
```

### Example 2

This example command changes the `InstanceInitiatedShutdownBehavior` attribute of the specified instance.

```
PROMPT> ec2-modify-instance-attribute i-10a64379 --instance-initiated-shutdown-  
behavior terminate  
instanceInitiatedShutdownBehavior i-10a64379 terminate
```

### Example 3

This example command changes the `DisableApiTermination` attribute of the specified instance.

```
PROMPT> ec2-modify-instance-attribute i-10a64379 --disable-api-termination true  
disableApiTermination i-10a64379 true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ModifyInstanceAttribute](#)

## Related Commands

- [ec2-describe-instance-attribute](#) (p. 299)
- [ec2-reset-instance-attribute](#) (p. 607)



# ec2-modify-network-interface-attribute

## Description

Modifies the specified network interface attribute. You can specify only one attribute at a time.

The short version of this command is **ec2mnicatt**.

## Syntax

```
ec2-modify-network-interface-attribute interface_id -d, --description description  
-a, --attachment attachment_id --delete-on-termination Boolean  
--source-dest-check Boolean --group-id group_id
```

## Options

Name	Description
<i>interface_id</i>	The ID of the network interface. Type: String Default: None Required: Yes Example: eni-b35da6da
-d, --description <i>description</i>	Changes the description of the network interface. Type: String Default: None Required: Yes Example: -d "My Second ENI"
-a, --attachment <i>attachment_id</i>	Changes properties of the attachment. Type: String Default: None Constraints: Must be used in conjunction with --delete-on-termination. Required: Yes Example: -a eni-attach-09703260
--delete-on-termination <i>Boolean</i>	Sets whether the network interface shall be deleted when the network interface is detached. Type: String Default: None Constraints: Must be used in conjunction with --attachment. Required: Yes Example: -delete-on-termination false

Name	Description
<code>--source-dest-check</code> <i>Boolean</i>	Indicates whether to enable source/destination checking. The value must be <code>false</code> for a NAT instance to perform NAT. Type: String Valid values: <code>true</code>   <code>false</code> Default: None Required: Yes Example: <code>--source-dest-check false</code>
<code>--group-id</code> <i>group_id</i>	Replaces the security groups for this network interface. You must specify at least one security group, even if it's just the default security group in the VPC. You must specify the ID of the security group, not its name. Type: String Default: None Required: Yes Example: <code>--group-id sg-b90619d5 --group-id sg-a92639c9</code>

## Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key</code> <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key</code> <i>aws_secret_access_key</i>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token</code> <i>delegation_token</i>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <i>timeout</i>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>

Option	Description
<code>--request-timeout</code> <code>timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <code>ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <code>ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The NETWORKINTERFACE identifier
- The ID of the network interface
- The name of the attribute
- The attribute type identifier
- The new attribute value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command adds a description to the network interface.

```
PROMPT> ec2-modify-network-interface-attribute eni-b35da6da -d "This is an ENI"
NETWORKINTERFACE      eni-b35da6da      description
```

### Example 2

This example command turns off source/destination checking.

```
PROMPT> ec2-modify-network-interface-attribute eni-b35da6da --source-dest-check
false
NETWORKINTERFACE      eni-b35da6da      sourceDestCheck
SOURCEDESTCHECK      false
```

### Example 3

This example command changes the security group for the specified network interface.

```
PROMPT> ec2-modify-network-interface-attribute eni-b35da6da --group-id sg-
8ea1bce2
NETWORKINTERFACE      eni-b35da6da      group
GROUPID               sg-8ea1bce2
```

### Example 4

This example command retains the network interface when it is detached from an instance.

```
PROMPT> ec2-modify-network-interface-attribute eni-b35da6da --delete-on-termin
ation false -a eni-attach-083fda61
NETWORKINTERFACE      eni-b35da6da      attachment
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

## Related Action

- [ModifyNetworkInterfaceAttribute](#)

## Related Commands

- [ec2-attach-network-interface](#) (p. 41)
- [ec2-create-network-interface](#) (p. 124)
- [ec2-delete-network-interface](#) (p. 203)
- [ec2-describe-network-interface-attribute](#) (p. 337)
- [ec2-describe-network-interfaces](#) (p. 341)
- [ec2-detach-network-interface](#) (p. 461)
- [ec2-reset-network-interface-attribute](#) (p. 611)

# ec2-modify-reserved-instances

## Description

Modifies the Availability Zone, instance count, network platform (EC2-Classic or EC2-VPC), or instance type of your Reserved Instances. The Reserved Instances to be modified must have identical configurations, except for Availability Zone, network platform, and instance type.

For more information, see [Modifying Reserved Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2mri**.

## Syntax

```
ec2-modify-reserved-instances reserved-instances-id [reserved-instances-id [...]] [--client-token token] -c target-configuration [-c target-configuration [...]]
```

## Options

Name	Description
<i>reserved-instances-id</i>	The ID of the Reserved Instances to modify. IDs must refer to Reserved Instances that are identical, except for Availability Zone, instance type, and network platform. Type: String Default: None Required: Yes Example: 9d5cb137-8aba-4639-a0d5-d4d10example
--client-token <i>token</i>	The client token for this request to make the call idempotent. A random client token is generated if this is not provided. Required: No

Name	Description
<code>-c target-configuration</code>	<p>New configuration settings for the Reserved Instances. Each configuration is specified by comma-separated, key-value pairs in double quotes. Key names are zone, count, platform, and instance-type. Zone and count are required. Network platform is optional if your account supports EC2-VPC; it must be specified if your account supports EC2-Classic. Instance type must be the same instance family as the input Reserved Instances and defaults to the instance type of the input Reserved Instances when not specified.</p> <p>Default: None</p> <p>Required: Yes</p> <p>Example 1: (modifying Reserved Instances to one configuration) <code>ec2mri reserved-instances-id -c "zone=us-east-1a,count=1,platform=EC2-VPC,instance-type=m1.medium"</code></p> <p>Example 2: (modifying multiple Reserved Instances to multiple configurations) <code>ec2mri reserved-instances-id-1 reserved-instances-id-2 -c "zone=us-east-1a,count=1,platform=EC2-VPC,instance-type=m1.medium" -c "zone=us-east-1b,count=2,platform=EC2-Classic,instance-type=m1.medium"</code></p>

## Common Options

Option	Description
<code>--region region</code>	<p>The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option.</p> <p>Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.</p>
<code>-U, --url url</code>	<p>The uniform resource locator (URL) of the Amazon EC2 web service entry point.</p> <p>Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.</p>
<code>-O, --aws-access-key aws_access_key_id</code>	<p>Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a>.</p> <p>Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option.</p> <p>Example: <code>-O AKIAIOSFODNN7EXAMPLE</code></p>
<code>-W, --aws-secret-key aws_secret_access_key</code>	<p>Your secret access key.</p> <p>Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option.</p> <p>Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code></p>
<code>-T, --security-token delegation_token</code>	<p>The AWS delegation token.</p> <p>Default: The value of the environment variable (if set).</p>

Option	Description
<code>--connection-timeout</code> <i>timeout</i>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>



## Output

This command returns the ID of the Reserved Instances modification request.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example changes the Availability Zone and platform of a Reserved Instance.

```
PROMPT> ec2-modify-reserved-instances f127bd27-b0fc-4568-8e3a-0e7b5example -c
"zone=us-east-1a,count=1,platform=EC2-VPC"
ReservedInstancesModification rimod-9939282f-3674-49b1-bc18-a77b4example
```

### Example 2

This example moves a subset of Reserved Instances to another Availability Zone.

```
PROMPT> ec2-modify-reserved-instances f127bd27-b0fc-4568-8e3a-0e7b5example
bbcd9749-c569-475c-9ba6-c3056example -c "zone=us-east-1a,count=1" -c "zone=us-
east-1b,count=1"
ReservedInstancesModification rimod-92b82c77-b62c-42d7-94c9-5e675example
```

### Example 3

This example modifies a Reserved Instance that has 25 m1.small instances so that 20 m1.small instances become 5 m1.large instances in us-east-1a, and the remaining 5 instances are migrated to EC2-VPC in us-east-1b.

```
PROMPT> ec2-modify-reserved-instances 93bbbca2-b117-4653-823f-312ae4b8bad8 -c
"zone=us-east-1b,platform=EC2-VPC,count=5,instance-type=m1.small" -c "zone=us-
e
ast-1a,platform=EC2-Classic,count=5,instance-type=m1.large"
ReservedInstancesModification rimod-2d1d3ce0-71de-4cc7-ab60-5bdd7example
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [DescribeReservedInstancesModifications](#)

## Related Commands

- [ec2-describe-reserved-instances](#) (p. 356)
- [ec2-describe-reserved-instances-modifications](#) (p. 367)

# ec2-modify-snapshot-attribute

## Description

Adds or remove permission settings for the specified snapshot.

The short version of this command is **ec2msnapatt**.

### Note

Snapshots with AWS Marketplace product codes cannot be made public.

## Syntax

```
ec2-modify-snapshot-attribute snapshot_id -c [--add entity | --remove entity]
```

## Options

Name	Description
<i>snapshot_id</i>	The ID of the snapshot. Type: String Default: None Required: Yes Example: snap-78a54011
-c, --create-volume-permission	Modifies the create volume permissions of the snapshot. Type: String Default: None Required: Yes Example: -c
-a, --add <i>entity</i>	Adds a permission for the specified AWS account or for all accounts. Type: String Valid values: <i>AWS account ID</i>   all Default: None Required: No Example: -c --add all
--remove <i>entity</i>	Removes a permission for the specified AWS account or for all accounts. Type: String Valid values: <i>AWS account ID</i>   all Default: None Required: No Example: -c --remove all

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The createVolumePermission identifier
- The ID of the snapshot
- The action performed on the attribute
- The attribute or attribute list item value type
- The attribute or attribute list item value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command makes the snapshot with the ID `snap-1a2b3c4d` public.

```
PROMPT> ec2-modify-snapshot-attribute snap-1a2b3c4d -c --add all
createVolumePermission snap-1a2b3c4d ADD group all
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ModifySnapshotAttribute](#)

### Related Commands

- [ec2-create-snapshot](#) (p. 143)
- [ec2-describe-snapshot-attribute](#) (p. 385)
- [ec2-describe-snapshots](#) (p. 389)
- [ec2-reset-snapshot-attribute](#) (p. 614)

# ec2-modify-volume-attribute

## Description

Modifies a volume attribute.

By default, all I/O operations for the volume are suspended when the data on the volume is determined to be potentially inconsistent, to prevent undetectable, latent data corruption. The I/O access to the volume can be resumed by first issuing the [ec2-enable-volume-io](#) (p. 484) command to enable I/O access and then checking the data consistency on your volume.

You can change the default behavior to resume I/O operations without issuing the [ec2-enable-volume-io](#) (p. 484) command by setting the `auto-enable-io` attribute of the volume to `true`. We recommend that you change this attribute only for volumes that are stateless or disposable, or for boot volumes.

The short version of this command is `ec2mvolatt`.

## Syntax

`ec2-modify-volume-attribute` *volume\_id* ... `--auto-enable-io` *value*

## Options

Name	Description
<i>volume_id</i>	The ID of the volume. Type: String Required: Yes Example: vol-4282672b
<code>-a --auto-enable-io</code> <i>value</i>	Specifies whether the volume should be auto-enabled for I/O operations. Type: Boolean Required: Yes Example: <code>--auto-enable-io true</code>

## Common Options

Option	Description
<code>--region</code> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url</code> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).



Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ID of the volume
- The attribute name
- The attribute type identifier
- The attribute value

Amazon EC2 command line tools display errors on stderr.

## Example

### Example

This example command modifies the `autoEnableIo` attribute of the volume with the ID `vol-999999`.

```
PROMPT> ec2-modify-volume-attribute vol-999999 --auto-enable-io true
VolumeId      Attribute
vol-999999    autoEnableIo
AUTO-ENABLE-IO true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ModifyVolumeAttribute](#)

### Related Commands

- [ec2-describe-volume-attribute](#) (p. 422)
- [ec2-describe-volume-status](#) (p. 426)

- [ec2-enable-volume-io](#) (p. 484)

# ec2-modify-vpc-attribute

## Description

Modifies the specified attribute of the specified VPC.

## Syntax

```
ec2-modify-vpc-attribute --vpc vpc-id [--dns-support {true|false}]
[--dns-hostname {true|false}]
```

## Options

Name	Description
<code>-c, --vpc <i>vpc-id</i></code>	The ID of the VPC. Type: String Required: Yes Example: <code>vpc-1a2b3c4d</code>
<code>-s, --dns-support {true false}</code>	Specifies whether DNS resolution is supported for the VPC. If this attribute is <code>true</code> , the Amazon DNS server resolves DNS hostnames for your instances to their corresponding IP addresses; otherwise, it does not. Type: Boolean Default: <code>true</code> Required: No Example: <code>--dns-support true</code>
<code>-d, --dns-hostnames {true false}</code>	Specifies whether the instances launched in the VPC get DNS hostnames. If this attribute is <code>true</code> , instances in the VPC get DNS hostnames; otherwise, they do not. You can only set <code>--dns-hostname</code> to <code>true</code> if you also set <code>--dns-support</code> to <code>true</code> . Type: Boolean Default: <code>true</code> Required: No Example: <code>--dns-hostnames false</code>

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.

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**Common Options**

Option	Description
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the EC2_PRIVATE_KEY environment variable. Example: -K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the EC2_CERT environment variable. Example: -C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem

## Output

This command returns `true` if the command succeeded and `false` otherwise.

## Examples

### Example

This example command disables support for DNS hostnames in the specified VPC.

```
PROMPT> ec2-modify-vpc-attribute --vpc vpc-1a2b3c4d --dns-hostnames false
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ModifyVpcAttribute](#)

### Related Commands

- [ec2-describe-vpc-attribute](#) (p. 438)

## ec2-monitor-instances

### Description

Enables monitoring for a running instance. For more information, see [Monitoring Your Instances and Volumes](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2min**.

### Syntax

```
ec2-monitor-instances instance_id [instance_id...]
```

### Options

Name	Description
<i>instance_id</i>	One or more instance IDs. Type: String Default: None Required: Yes Example: i-43a4412a

### Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ID of the instance
- The monitoring state

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command enables monitoring for the two instances.

```
PROMPT> ec2-monitor-instances i-43a4412a i-23a3397d
i-43a4412a monitoring-pending
i-23a3397d monitoring-pending
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [MonitorInstances](#)

### Related Commands

- [ec2-run-instances](#) (p. 628)
- [ec2-unmonitor-instances](#) (p. 654)



# ec2-purchase-reserved-instances-offering

## Description

Purchases a Reserved Instance for use with your account. With Amazon EC2 Reserved Instances, you obtain a capacity reservation for a certain instance configuration over a specified period of time. You pay a lower usage rate than with On-Demand instances for the time that you actually use the capacity reservation.

Starting with the 2011-11-01 API version, AWS expanded its offering of Amazon EC2 Reserved Instances to address a range of projected instance usage. There are three types of Reserved Instances based on customer utilization levels: *Heavy Utilization*, *Medium Utilization*, and *Light Utilization*.

The Medium Utilization offering type is equivalent to the Reserved Instance offering available before API version 2011-11-01. If you are using tools that predate the 2011-11-01 API version, `ec2-describe-reserved-instances-offerings` will only list information about the Medium Utilization Reserved Instance offering type.

For information about Reserved Instance pricing tiers, see [Understanding Reserved Instance pricing tiers](#) in the *Amazon Elastic Compute Cloud User Guide*. For more information about Reserved Instances, see [Reserved Instances](#) also in the *Amazon Elastic Compute Cloud User Guide*.

You determine the type of the Reserved Instances offerings by including the optional `offeringType` parameter when calling `ec2-describe-reserved-instances-offerings`. After you've identified the Reserved Instance with the offering type you want, specify its `ReservedInstancesOfferingId` when you call `ec2-purchase-reserved-instances-offering`.

Starting with the 2012-08-15 API version, you can also purchase Reserved Instances from the Reserved Instance Marketplace. The Reserved Instance Marketplace matches sellers who want to resell Reserved Instance capacity that they no longer need with buyers who want to purchase additional capacity. Reserved Instances bought from third parties through the Reserved Instance Marketplace work like any other Reserved Instances.

By default, with the 2012-08-15 API version, `ec2-describe-reserved-instances-offerings` returns information about Amazon EC2 Reserved Instances available directly from AWS, plus instance offerings available from third parties, on the Reserved Instance Marketplace. If you are using tools that predate the 2012-08-15 API version, the `ec2-describe-reserved-instances-offerings` action will only list information about Amazon EC2 Reserved Instances available directly from AWS.

For more information about the Reserved Instance Marketplace, see [Reserved Instance Marketplace](#) in the *Amazon Elastic Compute Cloud User Guide*.

You determine the Reserved Instance Marketplace offerings by specifying `true` for the optional `includeMarketplace` parameter when calling `ec2-describe-reserved-instances-offerings`. After you've identified the Reserved Instance with the offering type you want, specify its `reservedInstancesOfferingId` when you call `ec2-purchase-reserved-instances-offering`.

The short version of this command is `ec2prio`.

## Syntax

```
ec2-purchase-reserved-instances-offering --offering offering --instance-count count [-1 limit-price]
```

## Options

Name	Description
<code>-o, --offering offering</code>	The offering ID of the Reserved Instance to purchase. Type: String Default: None Required: Yes Example: <code>-o 4b2293b4-5813-4cc8-9ce3-1957fexample</code>
<code>-c, --instance-count count</code>	The number of Reserved Instances to purchase. Type: Integer Default: None Required: Yes Example: <code>-c 5</code>
<code>-l limit-price</code>	The maximum price that you are willing to pay. Type: Integer Default: None Required: Yes Example: <code>-c 5</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).

Option	Description
<code>--connection-timeout</code> <i>timeout</i>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns a table that contains the following information:

- RESERVEDINSTANCES identifier
- The ID of the purchased Reserved Instances

Amazon EC2 command line tools display errors on stderr.

## Examples

This example command illustrates a purchase of a Reserved Instances offering.

```
PROMPT> ec2-purchase-reserved-instances-offering --offering 649fd0c8-becc-49d9-  
b259-fc8e2example --instance-count 3  
RESERVEDINSTANCES b847fa93-0c31-405b-b745-b6bf0example
```

## Related Operations

- [ec2-describe-reserved-instances-offerings](#) (p. 372)
- [ec2-describe-reserved-instances](#) (p. 356)

## ec2-reboot-instances

### Description

Requests a reboot of one or more instances. This operation is asynchronous; it only queues a request to reboot the specified instances. The operation will succeed if the instances are valid and belong to you. Requests to reboot terminated instances are ignored.

#### Note

If a Linux/UNIX instance does not cleanly shut down within four minutes, Amazon EC2 will perform a hard reboot.

The short version of this command is `ec2reboot`.

### Syntax

```
ec2-reboot-instances instance_id [instance_id ...]
```

### Options

Name	Description
<i>instance_id</i>	One or more instance IDs. Type: String Default: None Required: Yes Example: i-3ea74257

### Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXI1BH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- This command displays no output on success

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command reboots an instance.

```
PROMPT> ec2-reboot-instances i-28a64341  
-
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [RebootInstances](#)

### Related Commands

- [ec2-run-instances](#) (p. 628)

## ec2-register

### Description

Registers an AMI. When you're creating an AMI, this is the final step you must complete before you can launch an instance from the AMI. For more information about creating AMIs, see [Creating Your Own AMIs](#) in the *Amazon Elastic Compute Cloud User Guide*.

**Note**

For Amazon EBS-backed instances, the `ec2-create-image` command creates and registers the AMI in a single request, so you don't have to register the AMI yourself.

You can also use `ec2-register` to create an Amazon EBS-backed AMI from a snapshot of a root device volume. For more information, see [Launching an Instance from a Snapshot](#) in the *Amazon Elastic Compute Cloud User Guide*.

If needed, you can deregister an AMI at any time. Any modifications you make to an AMI backed by instance storage invalidates its registration. If you make changes to an image, deregister the previous image and register the new image.

The short version of this command is **ec2reg**.

**Note**

You cannot register an image where a secondary (non-root) snapshot has AWS Marketplace product codes.

### Syntax

```
ec2-register { [manifest] -n name [-a architecture] [-b mapping [...]] [-d description] [-s snapshot_id] [--kernel kernel_id] [--ramdisk ramdisk_id] [--root-device-name name] }
```

### Options

Name	Description
<i>manifest</i>	The full path to your AMI manifest in Amazon S3 storage. Type: String Default: None Required: Conditional Condition: Required if registering an instance store-backed AMI. Example: myawsbucket/image.manifest.xml
-n, --name <i>name</i>	A name for your AMI. Type: String Default: None Constraints: 3-128 alphanumeric characters, parentheses (()), commas (,), slashes (/), dashes (-), or underscores(_) Required: Yes Example: -n "Standard Web Server"



Name	Description
<p><code>-d, --description <i>description</i></code></p>	<p>A description for your AMI. Type: String Default: None Constraints: Up to 255 characters. Required: No Example: <code>-d "Standard Web Server AMI"</code></p>
<p><code>-a, --architecture <i>architecture</i></code></p>	<p>The architecture of the image. Type: String Valid values: <code>i386   x86_64</code> Default: None Required: No Example: <code>-a i386</code></p>
<p><code>--kernel</code></p>	<p>The ID of the kernel associated with the image.</p> <p><b>Important</b> We recommend that you use PV-GRUB instead of kernels and RAM disks. For more information, see <a href="#">PV-GRUB: A New Amazon Kernel Image</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>Type: String Default: None Required: No Example: <code>--kernel aki-ba3adfd3</code></p>
<p><code>--ramdisk</code></p>	<p>The ID of the RAM disk to associate with the image. Type: String Default: None Required: No Example: <code>--ramdisk ari-badbad00</code></p>
<p><code>--root-device-name <i>name</i></code></p>	<p>The name of the root device (for example, <code>/dev/sda1</code> or <code>xvda</code>). Type: String Default: <code>/dev/sda1</code> Condition: Required if registering an Amazon EBS-backed AMI. Required: No Example: <code>--root-device-name /dev/sda1</code></p>

Name	Description
<p><code>-b, --block-device-mapping <i>mapping</i></code></p>	<p>The block device mapping for the instance. This argument is passed in the form of <code>&lt;devicename&gt;=&lt;blockdevice&gt;</code>. The <i>devicename</i> is the name of the device within Amazon EC2. The <i>blockdevice</i> can be one of the following values:</p> <ul style="list-style-type: none"> <li>• <code>none</code> - Suppresses an existing mapping of the device from the AMI used to launch the instance. For example: <code>"/dev/sdc=none"</code>.</li> <li>• <code>ephemeral[0..3]</code> - An instance store volume to be mapped to the device. For example: <code>"/dev/sdc=ephemeral0"</code>.</li> <li>• <code>[snapshot-id]:[volume-size]:[true false]:[standard io1[:iops]]</code> - An EBS volume to be mapped to the device. <i>[snapshot-id]</i> To create a volume from a snapshot, specify the snapshot ID. <i>[volume-size]</i> To create an empty EBS volume, omit the snapshot ID and specify a volume size instead. For example: <code>"/dev/sdh=:20"</code>. <i>[delete-on-termination]</i> To prevent the volume from being deleted on termination of the instance, specify <code>false</code>. The default is <code>true</code>. <i>[volume-type]</i> To create a Provisioned IOPS volume, specify <code>io1</code>. The default volume type is <code>standard</code>. If the volume type is <code>io1</code>, you can also provision the number of IOPS that the volume supports. For example, <code>"/dev/sdh=snap-7eb96d16::false:io1:500"</code>.</li> </ul> <p>You can specify multiple <i>block-device-mapping</i> arguments in one call.</p> <p>For more detailed information about block device mapping, see <a href="#">Block Device Mapping</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>Type: String Default: None Required: Conditional</p> <p>Condition: If registering an Amazon EBS-backed AMI from a snapshot, at a minimum you must specify a block device mapping entry for the root device. Be sure to include the device name (<code>/dev/sda1</code> or <code>xvda</code>) and the snapshot ID.</p> <p>Example: <code>-b "/dev/sda1=snap-7eb96d16"</code></p> <p><b>Note</b> On Windows, the <i>mapping</i> argument must be enclosed in double quotes, as shown in the example.</p>
<p><code>-s, --snapshot <i>snapshot</i></code></p>	<p>The ID of the Amazon EBS snapshot to be used as the root device.</p> <p>Type: String Default: None Required: No</p> <p>Example: <code>-s snap-78a54011</code></p>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The IMAGE identifier
- The ID of the newly registered machine image

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command registers the AMI specified in the `image.manifest.xml` manifest file, located in the bucket named `myawsbucket`.

```
PROMPT> ec2-register myawsbucket/image.manifest.xml -n MyImage
IMAGE ami-1a2b3c4d
```

### Example 2

This example command registers an Amazon EBS snapshot to create an AMI backed by Amazon EBS.

```
PROMPT> ec2-register -n MyImage -s snap-1a2b3c4d  
IMAGE ami-1a2b3c4d
```

### Example 3

This example command registers the AMI with an Amazon EBS snapshot as the root device, a separate snapshot as a secondary device, and an empty 100 GiB Amazon EBS volume as a storage device.

```
PROMPT> ec2-register -n MyImage -s snap-1a2b3c4d -b /dev/sdb=snap-2a2b3c4d -b  
/dev/sdc=:100  
IMAGE ami-1a2b3c4d
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [RegisterImage](#)

### Related Commands

- [ec2-deregister](#) (p. 243)
- [ec2-describe-images](#) (p. 290)
- [ec2-run-instances](#) (p. 628)

# ec2-release-address

## Description

Releases the specified Elastic IP address.

### Important

After releasing an Elastic IP address, it is released to the public IP address pool for the platform and might be unavailable to you. Make sure to update your DNS records and any servers or devices that communicate with the address. If you attempt to release an Elastic IP address that you already released, you'll get an `AuthFailure` error if the address is already allocated to another AWS account.

An Elastic IP address is for use either in the EC2-Classic platform or in a VPC. For more information, see [Elastic IP Addresses](#) in the *Amazon Elastic Compute Cloud User Guide*.

[EC2-Classic, default VPC] Releasing an Elastic IP address automatically disassociates it from any instance that it's associated with. To disassociate an Elastic IP address without releasing it, use the `ec2-disassociate-address` command.

[Nondefault VPC] You must use the `ec2-disassociate-address` command to disassociate the Elastic IP address before you try to release it. Otherwise, Amazon EC2 returns an error (`InvalidIPAddress.InUse`).

The short version of this command is `ec2reladdr`.

## Syntax

```
ec2-release-address [ip_address | -a allocation_id]
```

## Options

Name	Description
<i>ip_address</i>	[EC2-Classic] The Elastic IP address. Type: String Default: None Required: Conditional Condition: Required for EC2-Classic. Example: 192.0.2.1
-a, --allocation-id <i>allocation_id</i>	[EC2-VPC] The allocation ID. Type: String Default: None Required: Conditional Condition: Required for EC2-VPC. Example: -a eipalloc-5723d13e

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ADDRESS identifier
- [EC2-Classic] The Elastic IP address
- [EC2-VPC] The allocation ID

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command releases an Elastic IP address for EC2-Classic.

```
PROMPT> ec2-release-address 192.0.2.1
ADDRESS 192.0.2.1
```



## Example 2

This example command releases an Elastic IP address for EC2-VPC.

```
PROMPT> ec2-release-address -a eipalloc-5723d13e  
ADDRESS      eipalloc-5723d13e
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ReleaseAddress](#)

### Related Commands

- [ec2-allocate-address](#) (p. 17)
- [ec2-associate-address](#) (p. 25)
- [ec2-describe-addresses](#) (p. 250)
- [ec2-disassociate-address](#) (p. 474)

# ec2-replace-network-acl-association

## Description

Changes which network ACL a subnet is associated with. By default when you create a subnet, it's automatically associated with the default network ACL. For more information about network ACLs, see [Network ACLs](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2reprenaclassoc**.

## Syntax

```
ec2-replace-network-acl-association network_acl_association_id -a network_acl_id
```

## Options

Name	Description
<i>network_acl_association_id</i>	The ID of the current association between the original network ACL and the subnet. Type: String Default: None Required: Yes Example: aclassoc-33ae4b5a
-a, --network-acl <i>network_acl_id</i>	The ID of the new ACL to associate with the subnet. Type: String Default: None Required: Yes Example: -a acl-10b95c79

## Common Options

Option	Description
--region <i>region</i>	The region. Overrides the default region, the region specified by the EC2_URL environment variable, and the URL specified by the -U option. Default: The region specified by the EC2_URL environment variable, or us-east-1 if EC2_URL isn't set.
-U, --url <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the EC2_URL environment variable, or https://ec2.amazonaws.com if EC2_URL isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ASSOCIATION identifier
- The new association ID
- The ID of the network ACL

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command starts with a network ACL associated with a subnet, and the corresponding association ID `aclassoc-e5b95c8c`. You want to associate a different network ACL (with the ID `acl-5fb85d36`) with the subnet. The result is a new association ID that represents the new association.

```
PROMPT> ec2-replace-network-acl-association aclassoc-e5b95c8c -a acl-5fb85d36
ASSOCIATION      aclassoc-17b85d7e acl-5fb85d36
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ReplaceNetworkAclAssociation](#)

### Related Commands

- [ec2-create-network-acl](#) (p. 116)
- [ec2-delete-network-acl](#) (p. 196)
- [ec2-describe-network-acls](#) (p. 332)

# ec2-replace-network-acl-entry

## Description

Replaces an entry (rule) in a network ACL. For more information about network ACLs, see [Network ACLs](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2repnae**.

## Syntax

```
ec2-replace-network-acl-entry acl_id -n rule_number [--egress] -P protocol -r cidr [-p port_range] [-t icmp_type_code] { --allow | --deny }
```

## Options

Name	Description
<i>acl_id</i>	The ID of the ACL. Type: String Default: None Required: Yes Example: acl-5fb85d36
-n, --rule-number <i>rule_number</i>	The rule number of the entry to replace. Type: Number Default: None Required: Yes Example: -n 100
--egress	Optional flag to indicate whether to replace the egress rule. Default: If no value is specified, we replace the ingress rule Required: No
-P, --protocol <i>protocol</i>	The IP protocol. You can specify <code>all</code> or <code>-1</code> to mean all protocols. Type: String Valid values: <code>all</code>   <code>-1</code>   <code>tcp</code>   <code>udp</code>   <code>icmp</code> or any protocol number (for a list, see <a href="#">Protocol Numbers</a> ). Required: Yes Example: -P 6
-r, --cidr <i>cidr</i>	The CIDR range to allow or deny, in CIDR notation. Type: String Default: None Required: Yes Example: -r 172.16.0.0/24

Name	Description
<code>-p, --port-range port_range</code>	For TCP or UDP: The range of ports to allow. Type: String Valid values: A single integer or a range (min-max). You can specify -1 to mean all ports (for example, port range 0-65535). Default: None Condition: Required if specifying <code>tcp</code> or <code>udp</code> (or the equivalent number) for the protocol. Required: Conditional Example: <code>-p 80-84</code>
<code>-t, --icmp-type-code icmp_type_code</code>	For ICMP: The ICMP type and code using format <code>type:code</code> , where both are integers. You can use -1 for the type or code to mean all types or all codes Type: String Default: None Required: Conditional Condition: Required if specifying <code>icmp</code> (or the equivalent number) for the protocol. Example: <code>-t -1:-1</code>
<code>--allow</code>	Allows any traffic matching the rule. Required: Conditional Condition: Either <code>--allow</code> or <code>--deny</code> must be specified, but not both.
<code>--deny</code>	Denies any traffic matching the rule. Required: Conditional Condition: Either <code>--allow</code> or <code>--deny</code> must be specified, but not both.

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Success status (`true` or `false`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command replaces the egress entry numbered 110 in the network ACL with the ID `acl-2cb85d45`. The new rule denies egress traffic destined for anywhere (`0.0.0.0/0`) on TCP port 139.

```
PROMPT> ec2-replace-network-acl-entry acl-2cb85d45 -n 110 --egress -r 0.0.0.0/0  
-P tcp -p 139 --deny  
RETURN true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ReplaceNetworkAclEntry](#)

### Related Commands

- [ec2-create-network-acl-entry](#) (p. 119)
- [ec2-delete-network-acl-entry](#) (p. 199)
- [ec2-describe-network-acls](#) (p. 332)



## ec2-replace-route

### Description

Replaces an existing route within a route table in a VPC. For more information about route tables, see [Route Tables](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2reprt**.

### Syntax

```
ec2-replace-route route_table_id -r cidr {-g gateway_id | -i instance_id | -n,
--network-interface interface_id}
```

### Options

Name	Description
<i>route_table_id</i>	The ID of the route table. Type: String Default: None Required: Yes Example: rtb-5da34634
<code>-r, --cidr <i>cidr</i></code>	The CIDR address block used for the destination match. The value you provide must match the CIDR of an existing route in the table. Type: String Default: None Required: Yes Example: -r 0.0.0.0/0
<code>-g, --gateway <i>gateway_id</i></code>	The ID of an Internet gateway attached to your VPC. Type: String Default: None Required: Conditional Condition: You must provide one of the following: a gateway ID, instance ID, or network interface ID. Example: -g igw-68a34601
<code>-i, --instance <i>instance_id</i></code>	The ID of a NAT instance in your VPC. Type: String Default: None Required: Conditional Condition: You must provide one of the following: a gateway ID, instance ID, or a network interface ID. Example: -i i-a7c871e3

Name	Description
<code>-n, --network-interface interface_id</code>	The ID of a network interface associated with the route. Type: String Default: None Required: Conditional Condition: You must provide one of the following: a gateway ID, instance ID, or a network interface. Example: <code>-n eni-5b729933</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.

Option	Description
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key <i>ec2_private_key</i></code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert <i>ec2_cert</i></code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Success status (`true` or `false`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command replaces a route in the specified route table. The new route matches the CIDR `10.0.0.0/8` and sends the traffic to the virtual private gateway with the ID `vgw-1d00376e`.

```
PROMPT> ec2-replace-route rtb-e4ad488d -r 10.0.0.0/8 -g vgw-1d00376e  
RETURN true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ReplaceRoute](#)

### Related Commands

- [ec2-create-route](#) (p. 136)
- [ec2-delete-route](#) (p. 209)
- [ec2-describe-route-tables](#) (p. 380)

# ec2-replace-route-table-association

## Description

Changes the route table associated with a subnet in a VPC. After the operation completes, the subnet uses the routes in the new route table it's associated with.

You can also use this command to change which table is the main route table in the VPC. You just specify the main route table's association ID and the route table that you want to be the new main route table.

For more information about route tables, see [Route Tables](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is **ec2reprtassoc**.

## Syntax

`ec2-replace-route-table-association` *route\_table\_association\_id* **-r** *route\_table\_id*

## Options

Name	Description
<i>route_table_association_id</i>	The association ID. Type: String Default: None Required: Yes Example: rtbassoc-93a045fa
<b>-r</b> <i>route_table_id</i>	The ID of the new route table to associate with the subnet. Type: String Default: None Required: Yes Example: -r rtb-6aa34603

## Common Options

Option	Description
<b>--region</b> <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<b>-U</b> , <b>--url</b> <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ASSOCIATION identifier
- The new association ID
- The ID of the route table

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command starts with a route table associated with a subnet, and the corresponding association ID `rtbassoc-f8ad4891`. You want to associate a different route table (with the ID `rtb-f9ad4890`) to the subnet. The result is a new association ID that represents the new association.

```
PROMPT> ec2-replace-route-table-association rtbassoc-f8ad4891 -r rtb-f9ad4890
ASSOCIATION    rtbassoc-61a34608 rtb-f9ad4890
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ReplaceRouteTableAssociation](#)

### Related Commands

- [ec2-create-route-table](#) (p. 140)
- [ec2-delete-route-table](#) (p. 212)
- [ec2-describe-route-tables](#) (p. 380)

- [ec2-disassociate-route-table](#) (p. 478)
- [ec2-replace-route-table-association](#) (p. 584)



# ec2-report-instance-status

## Description

Reports the status of the instance.

This command works only for instances that are in the `running` state. If you disagree with the instance status returned by the `ec2-report-instance-status` action, use `ec2-report-instance-status` command to report a more accurate status. Amazon EC2 collects this information to improve the accuracy of status checks.

### Note

Use of this action does not change the value returned by `ec2-report-instance-status`.

To report an instance's status, specify an instance ID with the `INSTANCE` parameter and a reason code with the `--reason` parameter that applies to that instance. The following table contains descriptions of all available reason codes.

### **instance-stuck-in-state**

My instance is stuck in a state.

### **unresponsive**

My instance is unresponsive.

### **not-accepting-credentials**

My instance is not accepting my credentials.

### **password-not-available**

A password is not available for my instance.

### **performance-network**

My instance is experiencing performance problems which I believe are network related.

### **performance-instance-store**

My instance is experiencing performance problems which I believe are related to the instance stores.

### **performance-ebs-volume**

My instance is experiencing performance problems which I believe are related to an EBS volume.

### **performance-other**

My instance is experiencing performance problems.

### **other**

Other, explained in the submitted description parameter.

The short version of this command is `ec2rep`.

## Syntax

```
ec2-report-instance-status instance_id --status value --reason value  
[--start-time date] [--end-time date] [--description description]
```

## Options

Name	Description
<code>instance_id</code>	One or more instance IDs. Type: String Required: Yes Example: i-15a4417c
<code>--status value</code>	The status of all instances listed in the <code>instance_id</code> parameter. Type: String Valid values: ok   impaired Required: Yes
<code>--reason value</code>	A reason code that describes a specific instance's health state. Each code you supply corresponds to an instance ID that you supply with the <code>InstanceID.n</code> parameter. See the <a href="#">Description (p. 588)</a> section for descriptions of each reason code. Type: String Valid values: instance-stuck-in-state   unresponsive   not-accepting-credentials   password-not-available   performance-network   performance-instance-store   performance-ebs-volume   performance-other   other Required: Yes
<code>--start-time date</code>	The time at which the reported instance health state began.  The date uses the format: yyyy-MM-dd'T'HH:mm:ss Type: DateTime Required: No Example: 2011-07-25T14:00:00
<code>--end-time date</code>	The time at which the reported instance health state ended.  The date uses the format: yyyy-MM-dd'T'HH:mm:ss Type: DateTime Required: No Example: 2011-07-25T14:00:00
<code>--description description</code>	Descriptive text about the instance health state. Type: String Default: None Required: No

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The request ID
- A Boolean return value that indicates whether Amazon EC2 accepted the values.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command reports the current state of the instance as `impaired`.

```
PROMPT> ec2-report-instance-status i-15a4417c --status="impaired" --reason="unresponsive"
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ReportInstanceStatus](#)

### Related Commands

- [ec2-describe-instance-status](#) (p. 304)

## ec2-request-spot-instances

### Description

Creates a Spot Instance request. Spot Instances are instances that Amazon EC2 starts on your behalf when the maximum price that you specify exceeds the current Spot Price. Amazon EC2 periodically sets the Spot Price based on available Spot Instance capacity and current Spot Instance requests. For more information about Spot Instances, see [Spot Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2rsi**.

### Syntax

```
ec2-request-spot-instances ami_id --addressing addressing_type --price price
[--instance-count count] [--type type] [--valid-from timestamp] [--valid-until
timestamp] [--launch-group group] [--availability-zone-group group] [--user-data
data | --user-data-file data-file] [--group group [--group group ...]] [--key
key-pair] [--instance-type type] [--subnet subnet_id] [--availability-zone zone]
[--kernel kernel] [--ramdisk ramdisk] [--block-device-mapping mapping]
[--monitor] [--iam-profile arn | name] [--network-interface NETWORKINTERFACE]
[--secondary-private-ip-address IP_ADDRESS] |
[--secondary-private-ip-address-count COUNT]] [--ebs-optimized]
[--associate-public-ip-address Boolean]
```

### Options

Name	Description
<i>ami_id</i>	The ID of the AMI. Type: String Default: None Required: Yes Example: ami-2bb65342
-p, --price <i>price</i>	The maximum hourly price for any Spot Instance launched to fulfill the request. Type: String Default: None Required: Yes Example: -p .15
-n, --instance-count <i>count</i>	The maximum number of Spot Instances to launch. Type: xs:integer Default: 1 Required: No Example: -n 10

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Options

---

Name	Description
<code>-r, --type type</code>	The Spot Instance request type. Type: String Valid values: <code>one-time   persistent</code> Default: <code>one-time</code> Required: No Example: <code>-r persistent</code>
<code>-s, --subnet subnet_id</code>	The ID of the subnet in which to launch the Spot Instance. Type: String Default: None Required: No Example: <code>-s subnet-baab943d3</code>
<code>--valid-from date</code>	The start date of the request. If this is a one-time request, the request becomes active at this date and time and remains active until all instances launch, the request expires, or the request is canceled. If the request is persistent, the request becomes active at this date and time and remains active until it expires or is canceled. Type: DateTime Default: Request is effective indefinitely. Required: No Example: <code>--valid-from 2009-12-31T11:51:50</code>
<code>--valid-until date</code>	The end date of the request. If this is a one-time request, the request remains active until all instances launch, the request is canceled, or this date is reached. If the request is persistent, it remains active until it is canceled or this date and time is reached. Type: DateTime Default: Request is effective indefinitely. Required: No Example: <code>--valid-until 2009-12-31T11:51:50</code>
<code>--launch-group group</code>	The instance launch group. Launch groups are Spot Instances that launch together and terminate together. Type: String Default: Instances are launched and terminated individually. Required: No Example: <code>--launch-group Skynet</code>

Name	Description
<p><code>--availability-zone-group group</code></p>	<p>The user-specified name for a logical grouping of bids.</p> <p>When you specify <code>--availability-zone-group</code> in a Spot Instance request, all Spot Instances in the request are launched in the same Availability Zone. Instance proximity is maintained with this parameter, but choice of Availability Zone is not. <code>--availability-zone-group</code> applies only to bids for Spot Instances of the same instance type. Any additional Spot Instance requests that are specified with the same <code>--availability-zone-group</code> name will be launched in that same Availability Zone, as long as at least one instance from the group is still active.</p> <p>If there is no active instance running in the Availability Zone group that you specify for a new Spot Instance request (for example, all instances are terminated, the bid is expired, or the bid falls below current market), then Amazon EC2 will launch the instance in any Availability Zone where the constraint can be met. Consequently, the subsequent set of Spot Instances could be placed in a different zone from the original request, even if the same <code>--availability-zone-group</code> name was specified.</p> <p>To ensure that all Spot Instances across all bids are launched into a particular Availability Zone, specify <code>LaunchSpecification.Placement.AvailabilityZone</code> in the API or <code>--availability-zone</code> in the CLI.</p> <p>Type: String Default: Instances are launched in any available Availability Zone. Required: No Example: <code>--availability-zone-group batchGroup01</code></p>
<p><code>--placement-group group_name</code></p>	<p>The name of an existing placement group you want to launch the instance into (for cluster instances).</p> <p>Type: String Default: Instances are launched in the default placement group. Required: No Example: <code>--placement-group default</code></p>
<p><code>-d, --user-data user_data</code></p>	<p>The user data to make available to the instances.</p> <p>Type: String Default: None Required: No Example: <code>-d "My user data"</code></p>
<p><code>-g, --group group</code></p>	<p>The ID of the security group.</p> <p>Type: String Default: User's default group. Required: No Example: <code>-g sg-1a2b3c4d</code></p>



Name	Description
<code>-k, --key key_name</code>	The name of the key pair. Type: String Default: None Required: No Example: <code>-k my-key-pair</code>
<code>-t, --instance-type instance_type</code>	The instance type. Type: String Valid values: <code>t1.micro   m1.small   m1.medium   m1.large   m1.xlarge   m3.xlarge   m3.2xlarge   c1.medium   c1.xlarge   m2.xlarge   m2.2xlarge   m2.4xlarge   cr1.8xlarge   cc1.4xlarge   cc2.8xlarge   cg1.4xlarge</code> . For more information, see <a href="#">Instance Types</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Default: <code>m1.small</code> Required: No Example: <code>-t m1.large</code>
<code>-z, --availability-zone zone</code>	The placement constraint (for example, a specific Availability Zone) for launching the instances.  Specify whether you want all of the Spot Instances in all of your bids to be launched in a particular Availability Zone. Specifying this option requires Amazon EC2 to find capacity in the specified Availability Zone instead of letting Amazon EC2 pick the best Availability Zone available; this can potentially delay the fulfillment of your bid, and/or require a higher bid price. Type: String Default: Amazon EC2 selects an Availability Zone in the current region. Required: No Example: <code>-z us-east-1b</code>
<code>--kernel kernel</code>	The ID of the kernel to select.  <b>Important</b> We recommend that you use PV-GRUB instead of kernels and RAM disks. For more information, see <a href="#">PV-GRUB: A New Amazon Kernel Image</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String Default: None Required: No Example: <code>--kernel aki-ba3adfd3</code>
<code>--ramdisk ramdisk</code>	The ID of the RAM disk to select. Type: String Default: None Required: No Example: <code>--ramdisk ari-badbad00</code>

Name	Description
<p><code>-b, --block-device-mapping <i>mapping</i></code></p>	<p>The block device mapping for the instance. This argument is passed in the form of <code>&lt;devicename&gt;=&lt;blockdevice&gt;</code>. The <i>devicename</i> is the name of the device within Amazon EC2. The <i>blockdevice</i> can be one of the following values:</p> <ul style="list-style-type: none"> <li>• <code>none</code> - Suppresses an existing mapping of the device from the AMI used to launch the instance. For example: <code>"/dev/sdc=none"</code>.</li> <li>• <code>ephemeral[0..3]</code> - An instance store volume to be mapped to the device. For example: <code>"/dev/sdc=ephemeral0"</code>.</li> <li>• <code>[snapshot-id]:[volume-size]:[true false]:[standard io1[:iops]]</code> - An EBS volume to be mapped to the device. <i>[snapshot-id]</i> To create a volume from a snapshot, specify the snapshot ID. <i>[volume-size]</i> To create an empty EBS volume, omit the snapshot ID and specify a volume size instead. For example: <code>"/dev/sdh=:20"</code>. <i>[delete-on-termination]</i> To prevent the volume from being deleted on termination of the instance, specify <code>false</code>. The default is <code>true</code>. <i>[volume-type]</i> To create a Provisioned IOPS volume, specify <code>io1</code>. The default volume type is <code>standard</code>. If the volume type is <code>io1</code>, you can also provision the number of IOPS that the volume supports. For example, <code>"/dev/sdh=snap-7eb96d16::false:io1:500"</code>.</li> </ul> <p>You can specify multiple <i>block-device-mapping</i> arguments in one call.</p> <p>For more detailed information about block device mapping, see <a href="#">Block Device Mapping</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>Type: String Default: None Required: No Example: <code>-b "/dev/sdb=snap-92d333fb::false"</code></p> <p><b>Note</b> On Windows, the <i>mapping</i> argument must be enclosed in double quotes, as shown in the example.</p>
<p><code>--monitor</code></p>	<p>Enables monitoring for the instance.</p> <p>Type: String Default: Disabled Required: No Example: <code>--monitor</code></p>

Name	Description
<code>--iam-profile <i>arn/name</i></code>	<p>The IAM instance profile to associate with the launched instances. IAM instance profiles enable you to manage permissions for applications running on EC2. This is either the Amazon Resource Name (ARN) of the instance profile (for example, <code>arn:aws:iam::111111111111:instance-profile/s3access</code>) or the name of the role (for example, <code>s3access</code>).</p> <p>Type: String            Default: None            Required: No            Example:  <code>arn:aws:iam::111111111111:instance-profile/s3access</code></p>
<code>-a, --network-interface <i>NETWORKINTERFACE</i></code>	<p>[EC2-VPC] The network attachment for the launched instance. The format of the <code>NETWORKINTERFACE</code> definition is as follows:</p> <p>For an existing <code>NETWORKINTERFACE</code> - <code>eni :dev index</code></p> <p>For a new <code>NETWORKINTERFACE</code> - <code>dev index : subnet [: description [":&lt;priv IP&gt;":&lt;SGs&gt;[:&lt;DOT&gt;[:SIP count[:&lt;SIPs&gt;]]]]]]</code>, where <code>SGs</code> is a comma separated list of security group IDs, <code>DOT</code> is either true or false, denoting whether to delete the interface on terminate, <code>SIP count</code> is the number of secondary IP addresses to assign, <code>SIPs</code> is a list of secondary IP addresses. You can't specify both <code>SIP count</code> and <code>SIPs</code>.</p> <p>Type: String            Default: None            Required: No</p>

Name	Description
<code>--secondary-private-ip-address</code> <i>IP_ADDRESS</i>	<p>Assigns the specified IP address as a secondary private IP address to the network interface or instance. This option can be used multiple times to assign multiple secondary IP addresses. This option is only available for instances running in a VPC. You can't specify this parameter when also specifying <code>--secondary-private-ip-address-count</code>.</p> <p>You can do one of the following:</p> <ul style="list-style-type: none"> <li>• Use the <code>--secondary-private-ip-address</code> option without a value and AWS will automatically assign a secondary private IP address within the subnet range.</li> <li>• Use the <code>--secondary-private-ip-address</code> option and provide a specific IP address that you want to assign.</li> </ul> <p><b>Note</b> On Windows clients, you must enclose IP addresses in quotes.</p> <p>Type: String Default: None Required: No</p> <p>Example: <code>--secondary-private-ip-address "10.0.2.18" --secondary-private-ip-address "10.0.2.28"</code></p>
<code>--secondary-private-ip-address-count</code> <i>COUNT</i>	<p>The number of secondary IP addresses to assign to the network interface or instance. You can't specify this parameter when also specifying <code>--secondary-private-ip-address</code>. This option is only available for instances running in a VPC.</p> <p>Type: Integer Default: None Required: No</p> <p>Example: <code>--secondary-private-ip-address-count 2</code></p>
<code>--associate-public-ip-address</code> <i>Boolean</i>	<p>Indicates whether to assign an AWS public IP address to the instance that will be launched. Instances launched into a default subnet are assigned a public IP address by default. For information about instance IP addressing, see <a href="#">Amazon EC2 Instance IP Addressing</a>.</p> <p>Type: Boolean Default: If launching into a default subnet, the default value is <code>true</code>. If launching into a nondefault subnet, the default value is <code>false</code>. Required: No</p> <p>Example: <code>--associate-public-ip-address true</code></p>

Name	Description
<code>--ebs-optimized</code>	Enables EBS optimization for the instance. This optimization provides dedicated throughput to Amazon EBS and an optimized configuration stack to provide optimal EBS I/O performance. This option isn't available on all instance types. Additional usage charges apply when using this option. Type: Boolean Default: Disabled Required: No Example: <code>--ebs-optimized</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.

Option	Description
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key <i>ec2_private_key</i></code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert <i>ec2_cert</i></code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information for each Spot Instance request:

The Spot Instance request information

- The SPOTINSTANCEREQUEST identifier
- The ID of the Spot Instance request
- The Spot Instance bid price
- The Spot Instance type (one-time or persistent)
- The product description (Linux/UNIX or Windows)
- The state of the Spot Instance request (active, open, closed, cancelled, failed)

- The date and time the request was created
- The date and time that the request is valid until
- The date and time the request will be held until
- The launch group
- The Availability Zone group
- The ID of the instance
- The ID of the image
- The instance type
- The key pair name
- Any security groups the request belongs to
- The Availability Zone the instance belongs to
- The kernel ID of the instance
- The RAM disk ID of the instance
- The monitoring status
- The ID of the subnet
- The Availability Zone the instance was launched to
- The IAM profile

#### Any Spot Instance faults

- The SPOTINSTANCEFAULT identifier
- The Spot Instance fault code
- The Spot Instance fault message

#### The Spot Instance status information

- The SPOTINSTANCESTATUS identifier
- The Spot Instance status
- The date and time of the last update
- The Spot Instance status message

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command creates a Spot Instances request for three `m1.small` instances.

```
PROMPT> ec2-request-spot-instances ami-1a2b3c4d -p 0.04 --key my-key-pair --
group default --instance-type m1.small -n 3 --type one-time
SPOTINSTANCEREQUEST sir-1a2b3c4d 0.040000 one-time Linux/UNIX open YYYY-MM-
DDTHH:MM:SS-0800      ami-1a2b3c4d m1.small my-key-pair sg-1a2b3c4d  monitor
ing-disabled
SPOTINSTANCESTATUS pending-evaluation YYYY-MM-DDTHH:MM:SS-0800 Your Spot request
has been submitted for review, and is pending evaluation.
SPOTINSTANCEREQUEST sir-2a2b3c4d 0.040000 one-time Linux/UNIX open YYYY-MM-
DDTHH:MM:SS-0800      ami-1a2b3c4d m1.small my-key-pair sg-1a2b3c4d  monitor
ing-disabled
```

```
SPOTINSTANCESTATUS pending-evaluation YYYY-MM-DDTHH:MM:SS-0800 Your Spot request
has been submitted for review, and is pending evaluation.
SPOTINSTANCEREQUEST sir-3a2b3c4d 0.040000 one-time Linux/UNIX open YYYY-MM-
DDTHH:MM:SS-0800      ami-1a2b3c4d ml.small my-key-pair sg-1a2b3c4d  monitor
ing-disabled
SPOTINSTANCESTATUS pending-evaluation YYYY-MM-DDTHH:MM:SS-0800 Your Spot request
has been submitted for review, and is pending evaluation.
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [RequestSpotInstances](#)

### Related Commands

- [ec2-cancel-spot-instance-requests](#) (p. 75)
- [ec2-describe-spot-instance-requests](#) (p. 398)
- [ec2-describe-spot-price-history](#) (p. 406)



# ec2-reset-image-attribute

## Description

Resets an attribute of an AMI to its default value.

### Note

The productCodes attribute can't be reset.

The short version of this command is **ec2rimatt**.

## Syntax

```
ec2-reset-image-attribute ami_id [-l]
```

## Options

Name	Description
<i>ami_id</i>	The ID of the AMI. Type: String Default: None Required: Yes Example: ami-15a4417c
-l, --launch-permission	Resets the launch permissions of the AMI. Type: String Default: None Required: No Example: -l

## Common Options

Option	Description
--region <i>region</i>	The region. Overrides the default region, the region specified by the EC2_URL environment variable, and the URL specified by the -U option. Default: The region specified by the EC2_URL environment variable, or us-east-1 if EC2_URL isn't set.
-U, --url <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the EC2_URL environment variable, or https://ec2.amazonaws.com if EC2_URL isn't set.

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The attribute type identifier
- The ID of the AMI
- The action identifier (`RESET`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command resets the `launchPermission` attribute for the specified AMI.

```
PROMPT> ec2-reset-image-attribute ami-1a2b3c4d -l  
launchPermission ami-1a2b3c4d RESET
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ResetImageAttribute](#)

### Related Commands

- [ec2-describe-image-attribute](#) (p. 286)
- [ec2-modify-image-attribute](#) (p. 521)

# ec2-reset-instance-attribute

## Description

Resets an attribute of an instance to its default value. To reset the kernel or RAM disk, the instance must be in a stopped state. To reset the `SourceDestCheck`, the instance can be either running or stopped.

The `SourceDestCheck` attribute controls whether source/destination checking is enabled. The default value is `true`, which means checking is enabled. This value must be `false` for a NAT instance to perform NAT. For more information, see [NAT Instances](#) in the *Amazon Virtual Private Cloud User Guide*.

The short version of this command is `ec2rinatt`.

## Syntax

```
ec2-reset-instance-attribute instance_id { --kernel kernel_id | --ramdisk  
ramdisk_id | --source-dest-check }
```

## Options

Name	Description
<i>instance_id</i>	The ID of the instance. Type: String Default: None Required: Yes Example: i-43a4412a
--kernel	Resets the ID of the kernel. Type: String Default: None Required: No Example: --kernel
--ramdisk	Resets the ID of the RAM disk. Type: String Default: None Required: No Example: --ramdisk
--source-dest-check	Resets the <code>SourceDestCheck</code> flag to <code>true</code> (source/destination checking is enabled). Type: String Default: None Required: No Example: --source-dest-check

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The attribute type identifier
- The ID of the instance
- The action identifier (RESET)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command resets the `SourceDestCheck` attribute for the specified instance.

```
PROMPT> ec2-reset-instance-attribute i-10a64379 --source-desk-check
sourceDestCheck i-10a64379 RESET
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ResetInstanceAttribute](#)

### Related Commands

- [ec2-describe-instance-attribute](#) (p. 299)
- [ec2-modify-instance-attribute](#) (p. 526)

# ec2-reset-network-interface-attribute

## Description

Resets a network interface attribute. You can specify only one attribute at a time.

The short version of this command is **ec2rnicatt**.

## Syntax

```
ec2-reset-network-interface-attribute interface_id --source-dest-check Boolean
```

## Options

Name	Description
<i>interface_id</i>	The ID of the network interface. Type: String Default: None Required: Yes Example: -n eni-b35da6da
--source-dest-check <i>Boolean</i>	Resets the <code>SourceDestCheck</code> flag to <code>true</code> (source/destination checking is enabled). Type: String Required: Yes Example: --source-dest-check

## Common Options

Option	Description
--region <i>region</i>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U</code> , --url <i>url</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O</code> , --aws-access-key <i>aws_access_key_id</i>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>



Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The attribute type identifier
- The ID of the network interface
- The action identifier (`RESET`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command resets the `sourceDestCheck` attribute for the specified network interface.

```
PROMPT> ec2-reset-network-interface-attribute eni-b35da6da --source-dest-check  
sourceDestCheck eni-b35da6da RESET
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ResetNetworkInterfaceAttribute](#)

### Related Commands

- [ec2-attach-network-interface](#) (p. 41)
- [ec2-create-network-interface](#) (p. 124)
- [ec2-delete-network-interface](#) (p. 203)
- [ec2-describe-network-interface-attribute](#) (p. 337)
- [ec2-describe-network-interfaces](#) (p. 341)
- [ec2-detach-network-interface](#) (p. 461)
- [ec2-modify-network-interface-attribute](#) (p. 532)

# ec2-reset-snapshot-attribute

## Description

Resets permission settings for the specified snapshot.

The short version of this command is **ec2rsnapatt**.

## Syntax

```
ec2-reset-snapshot-attribute snapshot_id -c
```

## Options

Name	Description
<code>--snapshot <i>snapshot</i></code>	The ID of the snapshot. Type: String Default: None Required: Yes Example: snap-1a2b3c4d
<code>-c, --create-volume-permission</code>	Resets the create volume permissions of the snapshot. Type: String Default: None Required: Yes Example: -c

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>

Option	Description
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXLIBH3HXV4ZBEXAMPLE.pem</code>

Option	Description
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The attribute type identifier
- The ID of the snapshot
- The action identifier (`RESET`)

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command resets the permissions for the snapshot with the ID `snap-1a2b3c4d`, making it a private snapshot that can only be used by the account that created it.

```
PROMPT> ec2-reset-snapshot-attribute snap-1a2b3c4d -c  
createVolumePermission snap-1a2b3c4d RESET
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [ResetSnapshotAttribute](#)

### Related Commands

- [ec2-modify-snapshot-attribute](#) (p. 542)
- [ec2-describe-snapshot-attribute](#) (p. 385)
- [ec2-describe-snapshots](#) (p. 389)
- [ec2-create-snapshot](#) (p. 143)

## ec2-resume-import

### Description

Resumes the upload of a disk image associated with an import instance or import volume task ID. Amazon EC2 supports import of VMDK, RAW, and VHD disk images.

If the upload task stops without completing, use this command to resume this upload. The upload task will resume from where it left off. For more information, see [Using the Command Line Tools to Import Your Virtual Machine to Amazon EC2](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2rim**.

### Syntax

```
ec2-resume-import -t task_id -o owner -w secret_key [-x days] [--user-threads threads] [--part-size partsize] [--dry-run] [--dont-verify-format] disk_image_filename
```

### Options

Name	Description
<i>disk_image_filename</i>	The local file name of the disk image. Type: String Default: None Required: Yes Example: WinSvr8-32-disk1.vmdk
-t, --task <i>task_id</i>	The conversion task ID for the upload. Type: String Default: None Required: Yes Example: -t import-i-ffvko9js
-o, --owner-akid <i>access_key_id</i>	The access key ID of the bucket owner. Type: String Default: None Required: Yes Example: AKIAIOSFODNN7EXAMPLE
-w, --owner-sak <i>secret_access_key</i>	The secret access key of the bucket owner. Type: String Default: None Required: Yes Example: wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY

Name	Description
<code>-x, --expires <i>days</i></code>	The validity period for the signed Amazon S3 URLs that allow Amazon EC2 to access your file. Type: String Default: 30 days Required: No Example: <code>-x 10</code>
<code>--user-threads <i>threads</i></code>	The maximum number of threads to concurrently upload the file with. Type: String Default: 20 Required: No Example: <code>--user-threads 15</code>
<code>--part-size <i>partsize</i></code>	The size of each individual file part (in MB) that will be uploaded. The file will be split into multiple parts at most as large as the <i>partsize</i> parameter. Type: String Default: 8 Required: No Example: <code>--part-size 3</code>
<code>--dry-run</code>	Does not upload the file, only validates that the disk image matches a known type. Type: None Default: None Required: No Example: <code>--dry-run</code>
<code>--dont-verify-format</code>	Does not verify the file format. We don't recommend this option because it can result in a failed conversion. Type: None Default: None Required: No Example: <code>--dont-verify-format</code>

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.

**Amazon Elastic Compute Cloud CLI Reference**  
**Common Options**

Option	Description
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.



## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the EC2_PRIVATE_KEY environment variable. Example: -K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the EC2_CERT environment variable. Example: -C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem

## Output

This command returns the following information:

- The disk image size and format
- The converted volume size
- The EBS volume size
- The percentage of the upload completed

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command uploads the corresponding disk image of the Windows Server 2008 (32-bit) VM you want to migrate.

```
PROMPT> ec2-resume-import ./WinSvr8-32-disk1.vmdk -t import-i-ffvko9js -o AKI
AIOFODNN7EXAMPLE -w wJalrXUtnFEMI/K7MDENG/bPxrRfiCYEXAMPLEKEY
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Commands

- [ec2-cancel-conversion-task](#) (p. 65)

- [ec2-delete-disk-image](#) (p. 183)
- [ec2-describe-conversion-tasks](#) (p. 264)
- [ec2-import-instance](#) (p. 498)
- [ec2-import-volume](#) (p. 509)

## ec2-revoke

### Description

Removes a rule from a security group.

A security group is for use with instances either in the EC2-Classical platform or in a specific VPC. For more information, see [Amazon EC2 Security Groups](#) in the *Amazon Elastic Compute Cloud User Guide* and [Security Groups for Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

The values that you specify in the revoke request (ports, and so on) must match the existing rule's values in order for the rule to be removed.

Each rule consists of the protocol (for example, TCP), plus either a CIDR range, or a source group (for ingress rules) or destination group (for egress rules). For TCP and UDP, you must also specify the destination port or port ranges. You can specify -1 to mean all ports (for example, port range 0-65535). For ICMP, you must also specify the ICMP type and code. You can use -1 for the type or code to mean all types or all codes.

Rule changes are propagated to affected instances as quickly as possible. However, a small delay might occur.

The short version of this command is **ec2revoke**.

### Syntax

```
ec2-revoke group [--egress] [-P protocol] (-p port_range | -t icmp_type_code)
[-u source_or_dest_group_owner ...] [-o source_or_dest_group ...] [-s
source_or_dest_cidr ...]
```

### Options

Name	Description
<i>group</i>	[EC2-Classical, default VPC] The name or ID of the security group.  [Nondefault VPC] The ID of the security group. Type: String Default: None Required: Yes Example: webserv (name), sg-1a2b3c4d (ID)
--egress	[EC2-VPC] Indicates that the rule is an egress rule (applies to traffic leaving the VPC). Default: If this option is not specified, the rule is an ingress rule (applies to traffic entering the VPC) Required: No

Name	Description
<p><code>-P, --protocol protocol</code></p>	<p>The name or number of the IP protocol to revoke (see <a href="#">Protocol Numbers</a>). Security groups for EC2-Classic can have rules only for TCP, UDP, and ICMP, whereas security groups for EC2-VPC can have rules assigned to any protocol number.</p> <p>When you call <code>ec2-describe-group</code>, the protocol value returned is the number. Exception: For TCP, UDP, and ICMP, the value returned is the name (<code>tcp</code>, <code>udp</code>, or <code>icmp</code>).</p> <p>Type: String</p> <p>Valid values for EC2-Classic: <code>tcp</code>   <code>udp</code>   <code>icmp</code> or the corresponding protocol number (6   17   1).</p> <p>Default for EC2-Classic: TCP if the source CIDR is specified (or implied by default), or all three protocols (TCP, UDP, and ICMP) if the source group is specified (to ensure backwards compatibility).</p> <p>Valid values for EC2-VPC: <code>tcp</code>   <code>udp</code>   <code>icmp</code> or any protocol number. Use <code>all</code> to specify all protocols.</p> <p>Required: Required for EC2-VPC.</p> <p>Example: <code>-P udp</code></p>
<p><code>-p port_range</code></p>	<p>For TCP or UDP: The range of ports to revoke.</p> <p>Type: String</p> <p>Valid values: A single integer or a range (min-max). You can specify -1 to mean all ports (for example, port range 0-65535).</p> <p>Default: None</p> <p>Required: Required if specifying <code>tcp</code> or <code>udp</code> (or the equivalent number) for the protocol.</p> <p>Example: <code>-p 80-84</code></p>
<p><code>-t icmp_type_code</code></p>	<p>For ICMP: The ICMP type and code to revoke. This must be specified in the format <code>type:code</code> where both are integers. You can use -1 for the type or code to mean all types or all codes.</p> <p>Type: String</p> <p>Default: None</p> <p>Required: Required if specifying <code>icmp</code> (or the equivalent number) for the protocol.</p> <p>Example: <code>-t -1:-1</code></p>
<p><code>-u, source_or_dest_group_owner</code></p>	<p>The ID of the AWS account that owns the source security group (for ingress rules) or destination security group (for egress rules), if it's not the current AWS account.</p> <p>Type: String</p> <p>Default: None</p> <p>Required: No</p> <p>Example: <code>-u 111122223333</code></p>

Name	Description
<code>-o source_or_dest_group</code>	The source security group (for ingress rules), or destination security group (for egress rules). When revoking a rule for a security group for EC-VPC, you must specify the ID of the security group (for example, <code>sg-9d4e5f6g</code> ) instead of its name. You can't specify this option when specifying the <code>-s</code> option. Type: String Default: None Required: No Example: <code>-o headoffice</code>
<code>-s, --cidr source_or_dest_cidr</code>	The CIDR IP address range. You can't specify this option when specifying the <code>-o</code> option. Type: String Default: <code>0.0.0.0/0</code> Constraints: A valid CIDR IP address range. Required: No Example: <code>-s 205.192.8.45/24</code>

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>

Option	Description
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

A line containing the group information. Some of these fields may be blank.

- The GROUP identifier
- The ID of the security group
- The AWS account ID of the owner of the security group
- The name of the security group
- A description of the security group
- [EC2-VPC] The ID of the VPC the group belongs to

One of each of the following lines for each permission defined by the group:

- The PERMISSION identifier
- The AWS account ID of the owner of the security group
- The name of the security group granting permission
- The type of rule. Currently, only `ALLOWS` rules are supported
- The protocol to allow (for example, `tcp` and `udp`)
- The start of port range
- The end of port range
- FROM for an ingress rule or TO for an egress rule
- The source type (for ingress rules) or destination type (for egress rules)
- The source (for ingress rules) or destination (for egress rules)
- [USER only] The name of the source or destination entity
- [USER only] The ID of the security group
- Whether the rule is ingress rule or an egress rule

Amazon EC2 command line tools display errors on `stderr`.

## Examples

### Example

This example command revokes TCP port 80 access from the `205.192.0.0/16` address range for the security group named `webserv`.

```
PROMPT> ec2-revoke webserv -P tcp -p 80 -s 205.192.0.0/16  
GROUP    webserv  
PERMISSION webserv ALLOWS tcp 80 80 FROM CIDR 205.192.0.0/16 ingress
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [RevokeSecurityGroupEgress](#)
- [RevokeSecurityGroupIngress](#)

## Related Commands

- [ec2-authorize](#) (p. 51)
- [ec2-create-group](#) (p. 96)
- [ec2-delete-group](#) (p. 186)
- [ec2-describe-group](#) (p. 280)



# ec2-run-instances

## Description

Launches the specified number of instances using an AMI for which you have permissions.

When you launch an instance, it enters the `pending` state. After the instance is ready for you, it enters the `running` state. To check the state of your instance, use the [ec2-describe-instances](#) (p. 311) command.

If you don't specify a security group when launching an instance, Amazon EC2 uses the default security group. For more information, see [Security Groups](#) in the *Amazon Elastic Compute Cloud User Guide*.

Linux instances have access to the public key of the key pair at boot. You can use this key to provide secure access to the instance. Amazon EC2 public images use this feature to provide secure access without passwords. For more information, see [Key Pairs](#) in the *Amazon Elastic Compute Cloud User Guide*.

You can provide optional user data when launching an instance. For more information, see [Instance Metadata](#) in the *Amazon Elastic Compute Cloud User Guide*.

### Warning

If any of the AMIs have a product code attached for which the user has not subscribed, `ec2-run-instances` fails.

The short version of this command is `ec2run`.

## Syntax

```
ec2-run-instances ami_id [-n instance_count] [-k keypair] [-g group [-g group
...]] [-d user_data | -f filename] [--instance-type instance_type]
[--availability-zone zone] [--placement-group group_name] [--tenancy tenancy]
[--kernel kernel_id] [--ramdisk ramdisk_id] [--block-device-mapping mapping]
[--monitor] [--subnet subnet_id] [--disable-api-termination]
[--instance-initiated-shutdown-behavior behavior] [--private-ip-address
ip_address] [--client-token token] [--secondary-private-ip-address ip_address
| --secondary-private-ip-address-count count] [--network-attachment attachment]
[--iam-profile arn | name] [--ebs-optimized] [--associate-public-ip-address
Boolean]
```

## Options

Name	Description
<i>ami_id</i>	The ID of the AMI, which you can get by calling <code>ec2-describe-images</code> . Type: String Default: None Required: Yes Example: <code>ami-5da964c3</code>

**Amazon Elastic Compute Cloud CLI Reference  
Options**

Name	Description
<p><code>-n , --instance-count <i>min</i>[-<i>max</i>]</code></p>	<p>The number of instances to launch. If you specify a minimum that is more instances than Amazon EC2 can launch in the target Availability Zone, Amazon EC2 launches no instances. If you specify a range (min-max), Amazon EC2 tries to launch the maximum number in the target Availability Zone, but launches no fewer than the minimum number.</p> <p>Type: String Default: 1</p> <p>Constraints: Between 1 and the maximum number allowed for your account (the default for each account is 20, but this limit can be increased).</p> <p>Required: No Example: <code>-n 5-10</code></p>
<p><code>-k, --key <i>keypair</i></code></p>	<p>The name of the key pair. You can create a key pair using <code>ec2-create-keypair</code> or <code>ec2-import-keypair</code>.</p> <p><b>Important</b> If you launch an instance without specifying a key pair, you can't connect to the instance.</p> <p>Type: String Default: None Required: No Example: <code>-k my-key-pair</code></p>
<p><code>-g, --group <i>group</i></code></p>	<p>One or more security groups. For a nondefault VPC, you must specify the security group by ID. For EC2-Classic or a default VPC, you can specify the security group by name or ID. You can create a security group using <code>ec2-create-group</code>.</p> <p>Type: String Default: Amazon EC2 uses the default security group Required: No Example: <code>-g my-security-group</code></p>
<p><code>-d, --user-data <i>user_data</i></code></p>	<p>The Base64-encoded MIME user data for the instances.</p> <p>Type: String Default: None Required: No Example: <code>-d s3-bucket:my-logs</code></p>
<p><code>-f, --user-data-file <i>filename</i></code></p>	<p>The file name of the user data for the instances.</p> <p>Type: String Default: None Required: No Example: <code>-f user-data.txt</code></p>

**Amazon Elastic Compute Cloud CLI Reference**  
**Options**

Name	Description
<p><code>-t, --instance-type</code> <i>instance_type</i></p>	<p>The instance type. For more information, see <a href="#">Instance Types</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>Type: String</p> <p>Valid values: <code>m1.small</code>   <code>m1.medium</code>   <code>m1.large</code>   <code>m1.xlarge</code>   <code>m3.xlarge</code>   <code>m3.2xlarge</code>   <code>c1.medium</code>   <code>c1.xlarge</code>   <code>cc2.8xlarge</code>   <code>m2.xlarge</code>   <code>m2.2xlarge</code>   <code>m2.4xlarge</code>   <code>cr1.8xlarge</code>   <code>hi1.4xlarge</code>   <code>hs1.8xlarge</code>   <code>t1.micro</code>   <code>cg1.4xlarge</code>   <code>g2.2xlarge</code></p> <p>Default: <code>m1.small</code></p> <p>Required: No</p> <p>Example: <code>-t m1.large</code></p>
<p><code>--z, --availability-zone</code> <i>zone</i></p>	<p>The Availability Zone for the instance.</p> <p>Type: String</p> <p>Default: Amazon EC2 selects the Availability Zone</p> <p>Required: No</p> <p>Example: <code>--availability-zone us-east-1a</code></p>
<p><code>--placement-group</code> <i>group_name</i></p>	<p>The name of an existing placement group.</p> <p>Type: String</p> <p>Valid values: <code>cluster</code></p> <p>Default: None</p> <p>Required: No</p> <p>Example: <code>--placement-group my-placement-group</code></p>
<p><code>--tenancy</code> <i>tenancy</i></p>	<p>The tenancy of the instance. An instance with a tenancy of <code>dedicated</code> runs on single-tenant hardware and can only be launched into a VPC.</p> <p>Type: String</p> <p>Valid values: <code>default</code>   <code>dedicated</code></p> <p>Default: <code>default</code></p> <p>Required: No</p> <p>Example: <code>--tenancy dedicated</code></p>
<p><code>--kernel</code> <i>kernel_id</i></p>	<p>The ID of the kernel for the instance.</p> <p><b>Important</b></p> <p>We recommend that you use PV-GRUB instead of kernels and RAM disks. For more information, see <a href="#">PV-GRUB: A New Amazon Kernel Image</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>Type: String</p> <p>Default: None</p> <p>Required: No</p> <p>Example: <code>--kernel aki-ba3adfd3</code></p>
<p><code>--ramdisk</code> <i>ramdisk_id</i></p>	<p>The ID of the RAM disk.</p> <p>Type: String</p> <p>Default: None</p> <p>Required: No</p> <p>Example: <code>--ramdisk ari-abcdef01</code></p>

Name	Description
<p><code>-b, --block-device-mapping <i>mapping</i></code></p>	<p>The block device mapping for the instance. This argument is passed in the form of <code>&lt;devicename&gt;=&lt;blockdevice&gt;</code>. The <i>devicename</i> is the device name of the physical device on the instance to map. The <i>blockdevice</i> can be one of the following values:</p> <ul style="list-style-type: none"> <li><code>none</code> - Suppresses an existing mapping of the device from the AMI used to launch the instance. For example: <code>/dev/sdc=none</code>.</li> <li><code>ephemeral[0..3]</code> - An instance store volume to be mapped to the device. For example: <code>/dev/sdc=ephemeral0</code>.</li> <li><code>[snapshot-id]:[volume-size]:[true false]:[standard io1[:iops]]</code> - An EBS volume to be mapped to the device. <i>[snapshot-id]</i> To create a volume from a snapshot, specify the snapshot ID. <i>[volume-size]</i> To create an empty EBS volume, omit the snapshot ID and specify a volume size instead. For example: <code>/dev/sdh=:20</code>. <i>[delete-on-termination]</i> To prevent the volume from being deleted on termination of the instance, specify <code>false</code>. The default is <code>true</code>. <i>[volume-type]</i> To create a Provisioned IOPS volume, specify <code>io1</code>. The default volume type is <code>standard</code>. If the volume type is <code>io1</code>, you can also provision the number of IOPS that the volume supports. For example, <code>/dev/sdh=snap-7eb96d16::false:io1:500</code>.</li> </ul> <p>You can specify multiple <i>blockdevicemapping</i> parameters in one call.</p> <p>For more detailed information about block device mapping, see <a href="#">Block Device Mapping</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>Type: String Default: None Required: No Example: <code>-b "/dev/sdb=snap-92d333fb::false"</code></p> <p><b>Note</b> On Windows, the <i>mapping</i> argument must be enclosed in double quotes, as shown in the example.</p>
<p><code>-m, --monitor</code></p>	<p>Enables monitoring for the instance.</p> <p>Type: Boolean Default: Disabled Required: No Example: <code>--monitor</code></p>
<p><code>-s, --subnet <i>subnet_id</i></code></p>	<p>[EC2-VPC] The ID of the subnet to launch the instance into.</p> <p>Type: String Default: None Required: No Example: <code>-s subnet-f3e6ab83</code></p>

Name	Description
<code>--disable-api-termination</code>	<p>If you enable this option, you can't terminate the instance using the Amazon EC2 console, CLI, or API; otherwise, you can. If you specify this option and then later want to be able to terminate the instance, you must first change the value of the <code>disableApiTermination</code> attribute to <code>false</code> using <code>ec2-modify-instance-attribute</code>. Alternatively, if you set <code>--instance-initiated-shutdown-behavior</code> to <code>terminate</code>, you can terminate the instance by running the shutdown command from the instance.</p> <p>Type: Boolean            Default: Disabled            Required: No            Example: <code>--disable-api-termination</code></p>
<code>--instance-initiated-shutdown-behavior <i>behavior</i></code>	<p>Indicates whether an instance stops or terminates when you initiate shutdown from the instance (using the operating system command for system shutdown).</p> <p>Type: String            Valid values: <code>stop</code>   <code>terminate</code>            Default: <code>stop</code>            Required: No            Example: <code>--instance-initiated-shutdown-behavior stop</code></p>
<code>--private-ip-address <i>ip_address</i></code>	<p>[EC2-VPC] The primary private IP address. You must specify a value from the IP address range of the subnet.</p> <p>Type: String            Default: We select an IP address from the IP address range of the subnet            Required: No            Example: <code>--private-ip-address 10.0.0.25</code></p>
<code>--client-token <i>token</i></code>	<p>Unique, case-sensitive identifier you provide to ensure idempotency of the request. For more information, see <a href="#">How to Ensure Idempotency</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>Type: String            Default: None            Constraints: Maximum 64 ASCII characters            Required: No            Example: <code>--client-token 550e8400-e29b-41d4-a716-446655440000</code></p>

Name	Description
<code>--secondary-private-ip-address</code> <i>ip_address</i>	<p>[EC2-VPC] A secondary private IP address for the network interface or instance. You can specify this multiple times to assign multiple secondary IP addresses.</p> <p>You can do one of the following:</p> <ul style="list-style-type: none"> <li>• Use the <code>--secondary-private-ip-address</code> option without a value, and AWS will automatically assign a secondary private IP address within the subnet range.</li> <li>• Use the <code>--secondary-private-ip-address</code> option and provide a specific IP address that you want to assign. On Windows clients, you must enclose the IP addresses in quotes.</li> </ul> <p>You can't specify this parameter when also specifying <code>--secondary-private-ip-address-count</code>.</p> <p>Type: String            Default: None            Required: No            Example: <code>--secondary-private-ip-address "10.0.2.18"</code>  <code>--secondary-private-ip-address "10.0.2.28"</code></p>
<code>--secondary-private-ip-address-count</code> <i>count</i>	<p>[EC2-VPC] The number of secondary IP addresses to assign to the network interface or instance.</p> <p>You can't specify this parameter when also specifying <code>--secondary-private-ip-address</code></p> <p>Type: Integer            Default: None            Required: No            Example: <code>--secondary-private-ip-address-count 2</code></p>

Name	Description
<p><code>-a, --network-attachment <i>attachment</i></code></p>	<p>The network attachment for the instance.</p> <p>The format when creating a network interface is as follows: :<i>index</i>[:<i>subnet</i>[:<i>desc</i>[:<i>IP</i>[:<i>groups</i>[:<i>DOT</i>[:<i>count</i>[:<i>SIPs</i>]]]]]]]</p> <ul style="list-style-type: none"> <li>• <i>index</i> - The device index</li> <li>• <i>subnet</i> - The ID of the subnet</li> <li>• <i>desc</i> - A description</li> <li>• <i>IP</i> - The primary private IP address</li> <li>• <i>groups</i> - A comma-separated list of security group IDs</li> <li>• <i>DOT</i> - A Boolean value that indicates whether to delete the network interface on instance termination</li> <li>• <i>count</i> - The count of secondary IP addresses. You can't specify both <i>count</i> and <i>SIPs</i>.</li> <li>• <i>SIPs</i> - A comma-separated list of secondary IP addresses</li> </ul> <p>The format when using an existing network interface is as follows: <i>eni_id</i>:<i>index</i> Type: String Default: None Required: No Examples:</p> <p>Use an existing network interface for index 0: <code>-a eni-d2b24dbb:0</code></p> <p>Use existing network interfaces for index 0 and index 1: <code>-a eni-d2b24dbb:0 -a eni-12345678:1</code></p> <p>Create a network interface for index 0 and use an existing network interface for index 1: <code>-a :0:subnet-15ca247d:"My ENI" -a eni-12345678:1</code></p> <p>Use an existing network interface for index 0 and create a network interface for index 1: <code>-a eni-12345678:0 -a :1:subnet-15ca247d:"My ENI":"10.0.0.10":sg-123456,sg-654321:false</code></p> <p>Use an existing network interface for index 0 with specific secondary IP addresses: <code>-a eni-12345678:0 -a :1:subnet-15ca247d:"My ENI"::::"10.0.0.18,10.0.0.25"</code></p>

Name	Description
<code>-p, --iam-profile arn/name</code>	<p>The IAM instance profile to associate with the instances. This is either the Amazon Resource Name (ARN) of the instance profile or the name of the role.</p> <p>Type: String Default: None Required: No Example: arn:aws:iam::111111111111:instance-profile/s3access Example: s3access</p>
<code>--ebs-optimized</code>	<p>Enables EBS optimization for the instance. This optimization provides dedicated throughput to Amazon EBS and an optimized configuration stack to provide optimal EBS I/O performance. This option isn't available with all instance types. Additional usage charge apply when using this option.</p> <p>Type: Boolean Default: Disabled Required: No Example: <code>--ebs-optimized</code></p>
<code>--associate-public-ip-address</code> <i>Boolean</i>	<p>[EC2-VPC] Indicates whether to assign a public IP address to an instance. The public IP address is associated with a specific network interface. If set to true, the following rules apply:</p> <ul style="list-style-type: none"> <li>• Can only be associated with a single network interface with the device index of 0. You can't associate a public IP address with a second network interface, and you can't associate a public IP address if you are launching with more than one network interface.</li> <li>• Can only be associated with a new network interface, not an existing one.</li> </ul> <p>Type: Boolean Default: If launching into a default subnet, the default value is <code>true</code>. If launching into a nondefault subnet, the default value is <code>false</code>. Required: No Example: <code>--associate-public-ip-address true</code></p>

## Common Options

Option	Description
<code>--region region</code>	<p>The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option.</p> <p>Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.</p>



**Amazon Elastic Compute Cloud CLI Reference**  
**Common Options**

Option	Description
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the EC2_PRIVATE_KEY environment variable. Example: -K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the EC2_CERT environment variable. Example: -C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem

## Output

This command returns a table that contains the following rows of information for each instance. Each field is separated by a comma. Some of these values may be empty.

- The reservation information
  - The RESERVATION identifier
  - The ID of the reservation
  - The AWS account ID of the instance owner
  - The name of each security group the instance is in
- The instance information
  - The INSTANCE identifier
  - The ID of the instance
  - The AMI ID of the image on which the instance is based
  - The public DNS name associated with the instance. This is only present for instances in the running state.
  - The private DNS name associated with the instance. This is only present for instances in the running state.
  - The state of the instance
  - The key name. If a key was associated with the instance at launch, its name will appear.
  - The AMI launch index
  - The product codes associated with the instance
  - The instance type
  - The instance launch time
  - The Availability Zone
  - The ID of the kernel
  - The ID of the RAM disk
  - The platform (*windows* or *empty*)
  - The monitoring state
  - The public IP address

- The private IP address
  - [EC2-VPC] The ID of the VPC
  - [EC2-VPC] The ID of the subnet
  - The type of root device (*ebs* or *instance-store*)
  - The instance lifecycle
  - The Spot Instance request ID
  - The instance license
  - The placement group the cluster instance is in
  - The virtualization type (*paravirtual* or *hvm*)
  - The hypervisor type (*xen* or *ovm*)
  - The client token
  - The ID of each security group the instance is in
  - The tenancy of the instance (*default* or *dedicated*)
  - Whether or not the instance is EBS optimized (*true* or *false*)
  - The [Amazon Resource Name](#) (ARN) of the IAM role
3. [EC2-VPC] The network interface information. There will be a set of the following for each network interface
- a. The network interface information
    - The NIC identifier
    - The ID of the network interface
    - The ID of the subnet
    - The ID of the VPC
    - The owner ID
    - The network interface status
    - The private IP address of the network interface
    - The private DNS name
    - Whether or not source destination check is enabled (*true* or *false*)
  - b. The network interface attachment information
    - The NICATTACHMENT identifier
    - The attachment ID
    - The device index
    - The device status
    - The attachment timestamp
    - Whether or not the attachment is deleted on termination (*true* or *false*)
  - c. The network interface association information
    - The NICASSOCIATION identifier
    - The public IP address
    - The public IP address owner
    - The private IP address
  - d. The security group information
    - The GROUP identifier
    - The security group identifier
    - The security group name
  - e. The private IP address information
    - The PRIVATEIPADDRESS identifier
    - The private IP address

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example 1

This example command launches three instances using the AMI with the ID `ami-1a2b3c4d` AMI.

```
PROMPT> ec2-run-instances ami-1a2b3c4d -n 3 -k my-key-pair --availability-zone us-east-1a  
RESERVATION r-1a2b3c4d 111122223333  
INSTANCE i-1a2b3c4d ami-1a2b3c4d pending my-key-pair 0 m1.small YYYY-MM-DDTHH:MM:SS+0000 us-east-1a aki-1a2b3c4d monitoring-disabled ebs paravirtual xen sg-1a2b3c4d default false  
INSTANCE i-2a2b3c4d ami-1a2b3c4d pending my-key-pair 1 m1.small YYYY-MM-DDTHH:MM:SS+0000 us-east-1a aki-1a2b3c4d monitoring-disabled ebs paravirtual xen sg-1a2b3c4d default false  
INSTANCE i-3a2b3c4d ami-1a2b3c4d pending my-key-pair 2 m1.small YYYY-MM-DDTHH:MM:SS+0000 us-east-1a aki-1a2b3c4d monitoring-disabled ebs paravirtual xen sg-1a2b3c4d default false
```

### Example 2

This example command launches an Amazon EBS-based Windows image (with the ID `ami-2879f118`) and provides a block device mapping that mounts a public snapshot with the ID `snap-1a2b3c4d`.

```
PROMPT> ec2-run-instances ami-2879f118 -k my-key-pair -b "/dev/sdb=snap-1a2b3c4d::false"  
RESERVATION r-1a2b3c4d 111122223333  
INSTANCE i-1a2b3c4d ami-84db39ed pending my-key-pair 0 m1.small YYYY-MM-DDTHH:MM:SS+0000 us-east-1c windows monitoring-disabled ebs hvm xen sg-1a2b3c4d default false
```

### Example 3

This example command launches an instance with a primary IP address of `10.0.0.146` and two secondary private IP addresses of `10.0.0.148` and of `10.0.0.150` in the subnet with the ID `subnet-1a2b3c4d`.

```
PROMPT> ec2-run-instances ami-1a2b3c4d -k my-key-pair -s subnet-1a2b3c4d -t c1.medium --private-ip-address 10.0.0.146 --secondary-private-ip-address 10.0.0.148 --secondary-private-ip-address 10.0.0.150  
RESERVATION r-1a2b3c4d 111122223333  
INSTANCE i-1a2b3c4d ami-1a2b3c4d pending my-key-pair 0 c1.medium YYYY-MM-DDTHH:MM:SS+0000 us-west-2a windows monitoring-disabled 10.0.0.146 vpc-1a2b3c4d subnet-1a2b3c4d ebs hvm xen sg-1a2b3c4d dedicated false  
NIC eni-1a2b3c4d subnet-1a2b3c4d vpc-1a2b3c4d 111122223333 in-use 10.0.1.146 true  
NICATTACHMENT eni-attach-1a2b3c4d 0 attaching YYYY-MM-DDTHH:MM:SS+0000 true  
GROUP sg-1a2b3c4d default  
PRIVATEIPADDRESS 10.0.0.146  
PRIVATEIPADDRESS 10.0.0.148  
PRIVATEIPADDRESS 10.0.0.150
```

## Example 4

This example command launches a Dedicated Instance into the specified subnet.

```
PROMPT> ec2-run-instances ami-1a2b3c4d -k my-key-pair --tenancy dedicated -s subnet-1a2b3c4d
```

## Example 5

This example command launches an instance into a nondefault subnet, and requests a public IP address. The public IP address will be associated with the eth0 network interface.

```
PROMPT> ec2-run-instances ami-1a2b3c4d -k my-key-pair -s subnet-1a2b3c4d --associate-public-ip-address true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [RunInstances](#)

### Related Commands

- [ec2-describe-instances](#) (p. 311)
- [ec2-stop-instances](#) (p. 644)
- [ec2-start-instances](#) (p. 641)
- [ec2-terminate-instances](#) (p. 648)
- [ec2-authorize](#) (p. 51)
- [ec2-revoke](#) (p. 622)
- [ec2-create-keypair](#) (p. 112)
- [ec2-create-group](#) (p. 96)
- [ec2-describe-group](#) (p. 280)

# ec2-start-instances

## Description

Starts an instance that uses an Amazon EBS volume as its root device.

Instances that use Amazon EBS volumes as their root devices can be quickly stopped and started. When an instance is stopped, the compute resources are released and you are not billed for hourly instance usage. However, your root partition Amazon EBS volume remains, continues to persist your data, and you are charged for Amazon EBS volume usage. You can restart your instance at any time. Each time you transition an instance from stopped to started, we charge a full instance hour, even if transitions happen multiple times within a single hour.

Before stopping an instance, make sure it is in a state from which it can be restarted. Stopping an instance does not preserve data stored in RAM.

Performing this operation on an instance that uses an instance store as its root device returns an error.

You can't start or stop Spot Instances.

For more information, see [Stopping Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2start**.

## Syntax

```
ec2-start-instances instance_id [instance_id...]
```

## Options

Name	Description
<i>instance_id</i>	One or more instance IDs. Type: String Default: None Required: Yes Example: i-43a4412a

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- INSTANCE identifier
- The ID of the instance
- The previous state of the instance
- The new state of the instance

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command starts the specified instance.

```
PROMPT> ec2-start-instances i-10a64379  
INSTANCE i-10a64379 stopped pending
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [StartInstances](#)

### Related Commands

- [ec2-describe-instances](#) (p. 311)
- [ec2-run-instances](#) (p. 628)
- [ec2-stop-instances](#) (p. 644)
- [ec2-terminate-instances](#) (p. 648)



# ec2-stop-instances

## Description

Stops an instance that uses an Amazon EBS volume as its root device. Each time you transition an instance from stopped to started, we charge a full instance hour, even if transitions happen multiple times within a single hour.

You can't start or stop Spot Instances.

Instances that use Amazon EBS volumes as their root devices can be quickly stopped and started. When an instance is stopped, the compute resources are released and you are not billed for hourly instance usage. However, your root partition Amazon EBS volume remains, continues to persist your data, and you are charged for Amazon EBS volume usage. You can restart your instance at any time.

Before stopping an instance, make sure it is in a state from which it can be restarted. Stopping an instance does not preserve data stored in RAM.

Performing this operation on an instance that uses an instance store as its root device returns an error.

You can stop, start, and terminate Amazon EBS-backed instances. You can only terminate instance store-backed instances. What happens to an instance differs if you stop it or terminate it. For example, when you stop an instance, the root device and any other devices attached to the instance persist. When you terminate an instance, the root device and any other devices attached during the instance launch are automatically deleted. For more information about the differences between stopping and terminating instances, see [Instance Lifecycle](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2stop**.

## Syntax

```
ec2-stop-instances instance_id [instance_id...] [--force]
```

## Options

Name	Description
<i>instance_id</i>	One or more instance IDs. Type: String Default: None Required: Yes Example: i-43a4412a
-f, --force	Forces the instances to stop. The instances will not have an opportunity to flush file system caches or file system metadata. If you use this option, you must perform file system check and repair procedures. This option is not recommended for Windows instances. Type: Boolean Default: None Required: No Example: None

## Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.

Option	Description
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The INSTANCE identifier
- The ID of the instance
- The previous state of the instance
- The new state of the instance

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command stops the specified instance.

```
PROMPT> ec2-stop-instances i-10a64379
INSTANCE i-10a64379 running stopping
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [StopInstances](#)

### Related Commands

- [ec2-describe-instances](#) (p. 311)
- [ec2-run-instances](#) (p. 628)
- [ec2-start-instances](#) (p. 641)
- [ec2-terminate-instances](#) (p. 648)

# ec2-terminate-instances

## Description

Shuts down one or more instances. This operation is idempotent; if you terminate an instance more than once, each call succeeds.

Terminated instances remain visible after termination (approximately one hour).

### Note

By default, Amazon EC2 deletes all Amazon EBS volumes that were attached when the instance launched. Volumes attached after instance launch persist.

You can stop, start, and terminate Amazon EBS-backed instances. You can only terminate instance store-backed instances. What happens to an instance differs if you stop it or terminate it. For example, when you stop an instance, the root device and any other devices attached to the instance persist. When you terminate an instance, the root device and any other devices attached during the instance launch are automatically deleted. For more information about the differences between stopping and terminating instances, see [Instance Lifecycle](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2kill**.

## Syntax

```
ec2-terminate-instances instance_id [instance_id ...]
```

## Options

Name	Description
<i>instance_id</i>	One or more instance IDs. Type: String Default: None Required: Yes Example: i-43a4412a

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.

Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The INSTANCE identifier
- The instance ID of the instance being terminated
- The state of the instance prior to being terminated
- The new state of the instance

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command terminates the specified instance.

```
PROMPT> ec2-terminate-instances i-1a2b3c4d  
INSTANCE i-1a2b3c4d running shutting-down
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [TerminateInstances](#)

### Related Commands

- [ec2-describe-instances](#) (p. 311)
- [ec2-run-instances](#) (p. 628)

# ec2-unassign-private-ip-addresses

## Description

Unassigns one or more secondary private IP addresses from a network interface.

The short version of this command is **ec2upip**.

## Syntax

```
ec2-unassign-private-addresses --network-interface interface_id  
--secondary-private-ip-address ip_address [--secondary-private-ip-address  
ip_address ...]
```

## Options

Name	Description
<code>--n, --network-interface <i>interface_id</i></code>	The ID of the network interface. Type: String Default: None Required: Yes Example: <code>-n eni-bc7299d4</code>
<code>--secondary-private-ip-address <i>ip_address</i></code>	The secondary private IP addresses that you want to unassign from the network interface. You can specify this option multiple times to unassign more than IP address. Type: String Default: None Required: Yes Example: <code>--secondary-private-ip-address 10.0.2.18</code> <code>--secondary-private-ip-address 10.0.2.28</code>

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.



Option	Description
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns a true value if the operation succeeds or an error if the operation fails.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command unassigns the two secondary private IP addresses from the specified network interface.

```
PROMPT> ec2-unassign-private-ip-addresses --network-interface eni-c08a35a9 --secondary-private-ip-address 10.0.0.118 --secondary-private-ip-address 10.0.0.119  
RETURN true
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [UnassignPrivateIpAddresses](#)

### Related Commands

- [ec2-assign-private-ip-addresses](#) (p. 21)

# ec2-unmonitor-instances

## Description

Disables monitoring for a running instance. For more information, see [Monitoring Your Instances and Volumes](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2umin**.

## Syntax

`ec2-unmonitor-instances instance_id [instance_id...]`

## Options

Name	Description
<i>instance_id</i>	One or more instance IDs. Type: String Default: None Required: Yes Example: i-43a4412a

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url <i>url</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key <i>aws_access_key_id</i></code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key <i>aws_secret_access_key</i></code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

Option	Description
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key ec2_private_key</code>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert ec2_cert</code>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ID of the instance.
- The monitoring state

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example

This example command disables monitoring for the specified instances.

```
PROMPT> ec2-unmonitor-instances i-43a4412a i-23a3397d  
i-43a4412a monitoring-disabling  
i-23a3397d monitoring-disabling
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Action

- [UnmonitorInstances](#)

### Related Commands

- [ec2-monitor-instances](#) (p. 553)
- [ec2-run-instances](#) (p. 628)

# ec2-upload-disk-image

## Description

Deprecated. Instead, use the `ec2-import-instance` and `ec2-import-volume` commands (included in the command line tools as of 2011-09-15) to create the import task and upload the image to Amazon EC2. For more information, see [Using the Command Line Tools to Import Your Virtual Machine to Amazon EC2](#) in the *Amazon Elastic Compute Cloud User Guide*.

Uploads the disk image associated with an import instance or an import volume task ID. Amazon EC2 supports import of VMDK, RAW, and VHD disk images.

If the upload task doesn't complete, use `ec2-resume-import` to resume the import from where it was interrupted.

The short version of this command is `ec2udi`.

## Syntax

```
ec2-upload-disk-image -t task_id -o owner -w secret_key [-x days] [--user-threads threads] [--part-size partsize] [--dry-run] [--dont-verify-format] disk_image
```

## Options

Name	Description
<i>disk_image</i>	The local file name of the disk image that you want to upload. Type: String Default: None Required: Yes Example: WinSvr8-32-disk1.vmdk
<code>-t, --task <i>task_id</i></code>	The conversion task ID for the upload. Type: String Default: None Required: Yes Example: -t import-i-ffvko9js
<code>-o, --owner-akid <i>access_key_id</i></code>	The access key ID of the bucket owner. Type: String Default: None Required: Yes Example: AKIAIOSFODNN7EXAMPLE
<code>-w, --owner-sak <i>secret_access_key</i></code>	The secret access key of the bucket owner. Type: String Default: None Required: Yes Example: wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY

Name	Description
<code>-x, --expires <i>days</i></code>	The validity period for the signed Amazon S3 URLs that allow Amazon EC2 to access your file. Type: String Default: 30 days Required: No Example: <code>-x 10</code>
<code>--user-threads <i>threads</i></code>	The maximum number of threads to concurrently upload the file with. Type: String Default: 20 Required: No Example: <code>--user-threads 15</code>
<code>--part-size <i>partsize</i></code>	The size of each individual file part (in MB) that will be uploaded. The file will be split into multiple parts at most as large as the <i>partsize</i> parameter. Type: String Default: 8 Required: No Example: <code>--part-size 3</code>
<code>--dry-run</code>	Does not upload the file, only validates that the disk image matches a known type. Type: None Default: None Required: No Example: <code>--dry-run</code>
<code>--dont-verify-format</code>	Does not verify the file format. We don't recommend this option because it can result in a failed conversion. Type: None Default: None Required: No Example: <code>--dont-verify-format</code>

## Common Options

Option	Description
<code>--region <i>region</i></code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.

**Amazon Elastic Compute Cloud CLI Reference**  
**Common Options**

Option	Description
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout timeout</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout timeout</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.



## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the EC2_PRIVATE_KEY environment variable. Example: -K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the EC2_CERT environment variable. Example: -C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem

## Output

This command returns the following information:

- The disk image size and format
- The converted volume size
- The EBS volume size
- The percentage of the upload completed

Amazon EC2 command line tools display errors on stderr.

## Example

### Example

This example command uploads the corresponding disk image of the Windows Server 2008 (32-bit) VM you want to migrate.

```
PROMPT> ec2-upload-disk-image ./WinSvr8-32-disk1.vmdk -t import-i-ffvko9js -o
AKIAIOSFODNN7EXAMPLE -w wJalrXUtnFEMI/K7MDENG/bPxrFicYEXAMPLEKEY
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

### Related Commands

- [ec2-delete-disk-image](#) (p. 183)

- [ec2-import-instance](#) (p. 498)
- [ec2-import-volume](#) (p. 509)
- [ec2-resume-import](#) (p. 617)
- [ec2-cancel-conversion-task](#) (p. 65)
- [ec2-describe-conversion-tasks](#) (p. 264)

## ec2-version

### Description

Describes the build and API versions of the CLI tools.

The short version of this command is **ec2ver**.

### Syntax

`ec2-version`

### Options

This command has no options.

### Common Options

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code>-T, --security-token delegation_token</code>	The AWS delegation token. Default: The value of the environment variable (if set).

Option	Description
<code>--connection-timeout</code> <i>timeout</i>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <i>timeout</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</code>
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as <code>(nil)</code> .
<code>--hide-tags</code>	Omits tags for tagged resources.
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-D, --auth-dry-run</code>	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
<code>-v, --verbose</code>	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
<code>-</code>	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
<code>-?, --help, -h</code>	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (`-O, --aws-access-key`) and secret access key (`-W, --aws-secret-key`) now, as the private key (`-K, --private-key`) and X.509 certificate (`-C, --cert`) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
<code>-K, --private-key</code> <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: <code>-K pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-C, --cert</code> <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: <code>-C cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command displays the build and API version information.

Amazon EC2 command line tools display errors on stderr.

## Example

### Example

This example command displays the version information for the version of the CLI tools that you're using.

```
PROMPT> ec2-version
1.6.7.2 2013-02-01
```

## Related Topics

### Download

- [Getting Started with the Command Line Tools](#)

## Common Options for CLI Tools

Most Amazon EC2 commands support the options described in the following table.

Option	Description
<code>--region region</code>	The region. Overrides the default region, the region specified by the <code>EC2_URL</code> environment variable, and the URL specified by the <code>-U</code> option. Default: The region specified by the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.
<code>-U, --url url</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The endpoint specified by the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.
<code>-O, --aws-access-key aws_access_key_id</code>	Your access key ID. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the <code>AWS_ACCESS_KEY</code> environment variable. If <code>AWS_ACCESS_KEY</code> isn't set, you must specify this option. Example: <code>-O AKIAIOSFODNN7EXAMPLE</code>
<code>-W, --aws-secret-key aws_secret_access_key</code>	Your secret access key. Default: The value of the <code>AWS_SECRET_KEY</code> environment variable. If <code>AWS_SECRET_KEY</code> isn't set, you must specify this option. Example: <code>-W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

Option	Description
-T, --security-token <i>delegation_token</i>	The AWS delegation token. Default: The value of the environment variable (if set).
--connection-timeout <i>timeout</i>	The connection timeout, in seconds. Example: --connection-timeout 30
--request-timeout <i>timeout</i>	The request timeout, in seconds. Example: --request-timeout 45
-H, --headers	Includes column headers in the command output.
--show-empty-fields	Shows empty columns as (nil).
--hide-tags	Omits tags for tagged resources.
--debug	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
-D, --auth-dry-run	Checks whether you have the required permissions for the command, without actually running the command. If you have the required permissions, the command returns <code>DryRunOperation</code> ; otherwise, it returns <code>UnauthorizedOperation</code> .
-v, --verbose	Displays verbose output, including the API request and response on the command line. This is useful if you are building tools to talk directly to the Query API.
-	Reads arguments from standard input. This is useful when piping the output from one command to the input of another. Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code>
-?, --help, -h	Displays usage information for the command.

## Deprecated Options

For a limited time, you can still use the private key and X.509 certificate instead of your access key ID and secret access key. However, we recommend that you start using your access key ID (-O, --aws-access-key) and secret access key (-W, --aws-secret-key) now, as the private key (-K, --private-key) and X.509 certificate (-C, --cert) won't be supported after the transition period elapses. For more information, see [Tell the Tools Who You Are](#).

Option	Description
-K, --private-key <i>ec2_private_key</i>	The private key to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_PRIVATE_KEY</code> environment variable. Example: -K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem
-C, --cert <i>ec2_cert</i>	The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the <code>EC2_CERT</code> environment variable. Example: -C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem

# Commands (AMI Tools)

---

You install and run the AMI tools on an Amazon EC2 instance-store backed instance to manage your instance-store backed AMIs. The AMI tools are distinct from the API tools, which are used to manage your other Amazon EC2 and Amazon VPC resources (instances, security groups, volumes, and so on). For more information, see the [API Tools Reference](#).

**Note**

Currently, the AMI tools are compatible only with Ruby 1.8x.

**Topics**

- [ec2-bundle-image](#) (p. 666)
- [ec2-bundle-vol](#) (p. 670)
- [ec2-delete-bundle](#) (p. 675)
- [ec2-download-bundle](#) (p. 678)
- [ec2-migrate-bundle](#) (p. 681)
- [ec2-migrate-manifest](#) (p. 685)
- [ec2-unbundle](#) (p. 688)
- [ec2-upload-bundle](#) (p. 690)
- [Common Options for AMI Tools](#) (p. 692)

# ec2-bundle-image

## Description

Creates an AMI from an operating system image created in a loopback file. For more information, see [Creating AMIs from a Loopback](#).

To get the AMI tools, go to [Amazon EC2 AMI Tools](#).

### Note

Scripts that require a copy of the public key from the launch key pair must obtain the key from the instance's metadata (not the key file in the instance store) for instances bundled with the 2007-08-29 AMI tools and later. AMIs bundled before this release will continue to work normally.

## Syntax

```
ec2-bundle-image -k private_key -c cert -u user_id -i image_path -r {i386 | x86_64} [-d destination] [-p ami_prefix] [--ec2cert cert_path] [--kernel kernel-id] [--ramdisk ramdisk_id] [--block-device-mapping block_device_mapping]
```

### Note

When the image is for an Ubuntu Linux distribution, you must manually add the following syntax to this command:

```
--ec2cert /etc/ec2/amitools/cert-ec2.pem
```

## Options

Option	Description
-k, --privatekey <i>private_key</i>	The path to the user's PEM-encoded RSA key file. Required: Yes Example: -k pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem
-c, --cert <i>cert</i>	The user's PEM encoded RSA public key certificate file. Required: Yes Example: -c cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem
-u, --user <i>user_id</i>	The user's AWS account ID without dashes. Do not use the Access Key ID. Required: Yes Example: -u 111122223333
-i, --image <i>image_path</i>	The path to the image to bundle. Required: Yes Example: -i /var/spool/my-image/version-2/debian.img

## Amazon Elastic Compute Cloud CLI Reference

### Options

Option	Description
<code>-r, --arch <i>architecture</i></code>	Image architecture. If you don't provide this on the command line, you'll be prompted to provide it when the bundling starts. Valid Values: <code>i386</code>   <code>x86_64</code> Required: Yes Example: <code>-r x86_64</code>
<code>-d, --destination <i>destination</i></code>	The directory in which to create the bundle. Default: <code>/tmp</code> Required: No Example: <code>-d /var/run/my-bundle</code>
<code>-p, --prefix <i>ami_prefix</i></code>	The filename prefix for bundled AMI files. Default: The name of the image file. For example, if the image path is <code>/var/spool/my-image/version-2/debian.img</code> , then the default prefix is <code>debian.img</code> . Required: No Example: <code>-p my-image-is-special</code>
<code>--ec2cert <i>cert_path</i></code>	The path to the Amazon EC2 X.509 public key certificate. Default: <code>/etc/ec2/amitools/cert-ec2.pem</code> (varies, depending on tools) Required: No Example: <code>--ec2cert /etc/ec2/amiutil/cert-ec2.pem</code>
<code>--kernel <i>kernel_id</i></code>	The ID of the kernel to select. Default: <code>2.6.16-xenU</code> Required: No Example: <code>--kernel aki-ba3adfd3</code>
<code>--ramdisk <i>ramdisk_id</i></code>	The ID of the RAM disk to select. <b>Note</b> It is recommended that PV-GRUB be used instead of kernels and RAM disks. For more information, see <a href="#">PV-GRUB: A New Amazon Kernel Image</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Required: No Example: <code>--ramdisk ari-badbad00</code>



Option	Description
<code>--block-device-mapping <i>mappings</i></code>	<p>Default block-device-mapping scheme with which to launch the AMI. This defines how block devices are exposed to an instance of this AMI if the instance type supports the specified device.</p> <p>The scheme is a comma-separated list of key=value pairs, where each key is a virtual name and each value is the desired device name. Virtual names include:</p> <ul style="list-style-type: none"> <li>• <b>ami</b>—The root file system device, as seen by the instance</li> <li>• <b>root</b>—The root file system device, as seen by the kernel</li> <li>• <b>swap</b>—The swap device, as seen by the instance</li> <li>• <b>ephemeralN</b>—The Nth ephemeral store</li> </ul> <p>Required: No</p> <p>Example: <code>--block-device-mapping ami=sda1,root=/dev/sda1,ephemeral0=sda2,swap=sda3</code></p> <p>Example: <code>--block-device-mapping ami=0,root=/dev/dsk/c0d0s0,ephemeral0=1</code></p>
<code>--no-filter</code>	<p>Do not use the default filtered files list.</p> <p>Required: No</p>
Common options	<p>For options common to most of the AMI Tools, see <a href="#">Common Options for AMI Tools (p. 692)</a>.</p>

## Output

Status messages describing the stages and status of the bundling process.

## Example

This example creates a bundled AMI from an operating system image that was created in a loopback file.

```
$ ec2-bundle-image -k pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem -c cert-HKZYK
TAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem -u 111122223333 -i image.img -d bundled/ -p
fred -r x86_64
Please specify a value for arch [i386]:
Bundling image file...
Splitting bundled/fred.gz.crypt...
Created fred.part.00
Created fred.part.01
Created fred.part.02
Created fred.part.03
Created fred.part.04
Created fred.part.05
Created fred.part.06
Created fred.part.07
Created fred.part.08
Created fred.part.09
Created fred.part.10
```

```
Created fred.part.11
Created fred.part.12
Created fred.part.13
Created fred.part.14
Generating digests for each part...
Digests generated.
Creating bundle manifest...
ec2-bundle-image complete.
```

## Related Topics

- [ec2-bundle-vol](#) (p. 670)
- [ec2-unbundle](#) (p. 688)
- [ec2-upload-bundle](#) (p. 690)
- [ec2-download-bundle](#) (p. 678)
- [ec2-delete-bundle](#) (p. 675)

## ec2-bundle-vol

### Description

Creates a bundled AMI by compressing, encrypting and signing a snapshot of the local machine's root file system.

Amazon EC2 attempts to inherit product codes, kernel settings, RAM disk settings, and block device mappings from the instance.

By default, the bundle process excludes files that might contain sensitive information. These files include \*.sw, \*.swo, \*.swp, \*.pem, \*.priv, \*id\_rsa\*, \*id\_dsa\* \*.gpg, \*.jks, \*/.ssh/authorized\_keys, and \*/.bash\_history. To include all of these files, use the --no-filter option. To include some of these files, use the --include option.

To use ec2-bundle-vol, first you must install the AMI tools on the instance you are bundling, then run ec2-bundle-vol on that instance, not on a local system.

To get the AMI tools, go to [Amazon EC2 AMI Tools](#).

### Syntax

```
ec2-bundle-vol -k private_key -u user_id -c cert -r architecture [-s size] [-d destination] [-e exclude_directory_1,exclude_directory_2,...] [-i include_file_1,include_file_2,...] [-p ami_prefix] [-v volume] [--ec2cert cert_path] [--fstab fstab_path] [--generate-fstab] [--kernel kernel-id] [--ramdisk ramdisk_id] [--block-device-mapping block_device_mapping] [--[no-]inherit] [--productcodes product_code]
```

### Options

Option	Description
-k, --privatekey <i>private_key</i>	The path to the user's PEM-encoded RSA key file. Required: Yes Example: -k pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem
-u, --user <i>user_id</i>	The user's AWS account ID without dashes. Do not use the Access Key ID. Required: Yes Example: -u 111122223333
-c, --cert <i>cert</i>	The user's PEM encoded RSA public key certificate file. Required: Yes Example: -c cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem

**Amazon Elastic Compute Cloud CLI Reference  
Options**

Option	Description
<code>-r, --arch <i>architecture</i></code>	The image architecture. If you don't provide this on the command line, you'll be prompted to provide it when the bundling starts. Valid Values: <code>i386   x86_64</code> Required: Yes Example: <code>-r x86_64</code>
<code>-s, --size <i>size</i></code>	The size, in MB (1024 * 1024 bytes), of the image file to create. The maximum size is 10240 MB. Default: 10240 Required: No Example: <code>-s 2048</code>
<code>-d, --destination <i>destination</i></code>	The directory in which to create the bundle. Default: <code>/tmp</code> Required: No Example: <code>-d /var/run/my-bundle</code>
<code>-e, --exclude <i>directory_1,directory_2,...</i></code>	A list of absolute directory paths and files to exclude from the bundle operation. This parameter overrides the <code>--all</code> option. When exclude is specified, the directories and subdirectories listed with the parameter will not be bundled with the volume. Required: No Example: Assuming the mount point of the volume is <code>-v /foo</code> , and you want to exclude directories <code>/foo/bar</code> and <code>/foo/baz</code> , specify <code>-e /bar,/baz</code> .
<code>-i, --include <i>file_1,file_2,...</i></code>	A list of files to include in the bundle operation. The specified files would otherwise be excluded from the AMI because they might contain sensitive information. Required: No Example: If the volume mount point is <code>/mnt/myvol/</code> and you want to include the file <code>/mnt/myvol/foo/bar.pem</code> , specify <code>-i /foo/bar.pem</code> .
<code>--no-filter</code>	If specified, we won't exclude files from the AMI because they might contain sensitive information. Required: No Example: <code>--no-filter</code>
<code>-p, --prefix <i>ami_prefix</i></code>	The file name prefix for bundled AMI files. Default: <code>image</code> Required: No Example: <code>-p my-image-is-special</code>
<code>-v, --volume <i>volume</i></code>	The absolute path to the mounted volume from which to create the bundle. Default: The root directory ( <code>/</code> ) Required: No Example: <code>-v /mnt/my-customized-ami</code>

Amazon Elastic Compute Cloud CLI Reference  
Options

---

Option	Description
<code>-a, --all</code>	Bundle all directories, including those on remotely mounted file systems. Required: No Example: <code>-a</code>
<code>--ec2cert cert_path</code>	The path to the Amazon EC2 X.509 public key certificate. Default: <code>/etc/ec2/amitools/cert-ec2.pem</code> (varies, depending on tools) Required: No Example: <code>--ec2cert /etc/ec2/amiutil/cert-ec2.pem</code>
<code>--fstab fstab_path</code>	The path to the fstab to bundle into the image. If this is not specified, Amazon EC2 bundles <code>/etc/fstab</code> . Required: No Example: <code>--fstab /etc/fstab</code>
<code>--generate-fstab</code>	Causes Amazon EC2 to bundle the volume using an Amazon EC2-provided fstab. Required: No Example: <code>--generate-fstab</code>
<code>--kernel kernel_id</code>	The ID of the kernel to select. Required: No Example: <code>--kernel aki-ba3adfd3</code>
<code>--ramdisk ramdisk_id</code>	The ID of the RAM disk to select. <b>Note</b> It is recommended that PV-GRUB be used instead of kernels and RAM disks. For more information, see <a href="#">PV-GRUB: A New Amazon Kernel Image</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Required: No Example: <code>--ramdisk ari-badbad00</code>

Option	Description
<code>--block-device-mapping <i>mappings</i></code>	<p>Default block-device-mapping scheme with which to launch the AMI. This defines how block devices are exposed to an instance of this AMI if the instance type supports the specified device.</p> <p>The scheme is a comma-separated list of key=value pairs, where each key is a virtual name and each value is the desired device name. Virtual names include:</p> <ul style="list-style-type: none"> <li>• <b>ami</b>—The root file system device, as seen by the instance</li> <li>• <b>root</b>—The root file system device, as seen by the kernel</li> <li>• <b>swap</b>—The swap device, as seen by the instance</li> <li>• <b>ephemeralN</b>—The Nth ephemeral store</li> </ul> <p>Required: No            Example: <code>--block-device-mapping ami=sda1,root=/dev/sda1,ephemeral0=sda2,swap=sda3</code>            Example: <code>--block-device-mapping ami=0,root=/dev/dsk/c0d0s0,ephemeral0=1</code></p>
<code>--[no-]inherit</code>	<p>Whether the image should inherit the instance's metadata (the default is to inherit). Bundling will fail if you enable inherit but the instance metadata is not accessible.</p> <p>Required: No            Example: <code>--inherit</code></p>
<code>--productcodes <i>product_code</i></code>	<p>Product code to attach to the image at registration time.</p> <p>Required: No            Example: <code>--productcodes 1234abcd</code></p>
Common options	<p>For options common to most of the AMI Tools, see <a href="#">Common Options for AMI Tools (p. 692)</a>.</p>

## Output

Status messages describing the stages and status of the bundling.

## Example

This example creates a bundled AMI by compressing, encrypting and signing a snapshot of the local machine's root file system.

```
$ ec2-bundle-vol -d /mnt -k pk-HKZYKTAIG2ECMXIYBH3HXV4ZBEXAMPLE.pem -c cert-
HKZYKTAIG2ECMXIYBH3HXV4ZBEXAMPLE.pem -u 111122223333 -r x86_64
Copying / into the image file /mnt/image...
Excluding:
  sys
  dev/shm
  proc
  dev/pts
```

```
proc/sys/fs/binfmt_misc
dev
media
mnt
proc
sys
tmp/image
mnt/img-mnt
1+0 records in
1+0 records out
mke2fs 1.38 (30-Jun-2005)
warning: 256 blocks unused.

Splitting /mnt/image.gz.crypt...
Created image.part.00
Created image.part.01
Created image.part.02
Created image.part.03
...
Created image.part.22
Created image.part.23
Generating digests for each part...
Digests generated.
Creating bundle manifest...
Bundle Volume complete.
```

## Related Topics

- [ec2-bundle-image](#) (p. 666)
- [ec2-unbundle](#) (p. 688)
- [ec2-upload-bundle](#) (p. 690)
- [ec2-download-bundle](#) (p. 678)
- [ec2-delete-bundle](#) (p. 675)

# ec2-delete-bundle

## Description

Deletes the specified bundle from Amazon S3 storage.

To get the AMI tools, go to [Amazon EC2 AMI Tools](#).

## Syntax

```
ec2-delete-bundle -b s3_bucket -a access_key_id -s secret_key [-m manifest_path]
[-p ami_prefix] [--url url] [--retry] [-y] [--clear]
```

## Options

Option	Description
<code>-b, --bucket <i>s3_bucket</i></code>	The name of the Amazon S3 bucket containing the bundled AMI, followed by an optional '/'-delimited path prefix Required: Yes Example: <code>-b myawsbucket/ami-001</code>
<code>-a, --access-key <i>access_key_id</i></code>	The AWS access key ID. Required: Yes Example: <code>-a AKIAIOSFODNN7EXAMPLE</code>
<code>-s, --secret-key <i>secret_key</i></code>	The AWS secret access key. Required: Yes Example: <code>-s wJalrXUtnFEMI/K7MDENG/bPxrFicYEXAMPLEKEY</code>
<code>-m, --manifest <i>manifest_path</i></code>	The path to the unencrypted manifest file. Required: Conditional Condition: You must specify <code>--prefix</code> or <code>--manifest</code> . Example: <code>-m /var/spool/my-first-bundle/image.manifest.xml</code>
<code>-p, --prefix <i>ami_prefix</i></code>	The bundled AMI filename prefix. Provide the entire prefix. For example, if the prefix is <code>image.img</code> , use <code>-p image.img</code> and not <code>-p image</code> . Required: Conditional Condition: You must specify <code>--prefix</code> or <code>--manifest</code> . Example: <code>-p image.img</code>
<code>--url <i>url</i></code>	The Amazon S3 service URL. Default: <code>https://s3.amazonaws.com</code> Required: No Example: <code>--url https://s3.example.com</code>



Option	Description
<code>--retry</code>	Automatically retries on all Amazon S3 errors, up to five times per operation. Required: No Example: <code>--retry</code>
<code>-y, --yes</code>	Automatically assumes the answer to all prompts is 'yes'. Required: No Example: <code>-y</code>
<code>--clear</code>	Deletes the specified bundle from the Amazon S3 bucket and deletes the bucket, if empty. Required: No Example: <code>--clear</code>
Common options	For options common to most of the AMI Tools, see <a href="#">Common Options for AMI Tools (p. 692)</a> .

## Output

Amazon EC2 displays status messages indicating the stages and status of the delete process.

## Example

This example deletes a bundle from Amazon S3.

```
$ ec2-delete-bundle -b myawsbucket -a AKIAIOSFODNN7EXAMPLE -s wJalrXUtn
FEMI/K7MDENG/bPxrFiCYEXAMPLEKEY -p fred
Deleting files:
myawsbucket/fred.manifest.xml
myawsbucket/fred.part.00
myawsbucket/fred.part.01
myawsbucket/fred.part.02
myawsbucket/fred.part.03
myawsbucket/fred.part.04
myawsbucket/fred.part.05
myawsbucket/fred.part.06
Continue? [y/n]
y
Deleted myawsbucket/fred.manifest.xml
Deleted myawsbucket/fred.part.00
Deleted myawsbucket/fred.part.01
Deleted myawsbucket/fred.part.02
Deleted myawsbucket/fred.part.03
Deleted myawsbucket/fred.part.04
Deleted myawsbucket/fred.part.05
Deleted myawsbucket/fred.part.06
ec2-delete-bundle complete.
```

## Related Topics

- [ec2-bundle-image \(p. 666\)](#)

- [ec2-bundle-vol](#) (p. 670)
- [ec2-unbundle](#) (p. 688)
- [ec2-upload-bundle](#) (p. 690)
- [ec2-download-bundle](#) (p. 678)

# ec2-download-bundle

## Description

Downloads the specified bundles from S3 storage.

To get the AMI tools, go to [Amazon EC2 AMI Tools](#).

## Syntax

```
ec2-download-bundle -b s3_bucket [-m manifest] -a access_key_id -s secret_key
-k private_key [-p ami_prefix] [-d directory] [--retry] [--url url]
```

## Options

Option	Description
-b, --bucket <i>s3_bucket</i>	The name of the Amazon S3 bucket where the bundle is located, followed by an optional '/'-delimited path prefix. Required: Yes Example: -b myawsbucket/ami-001
-m, --manifest <i>manifest</i>	The manifest filename (without the path). We recommend you specify either the manifest (option -m), or the filename prefix (option -p). Required: No Example: -m my-image.manifest.xml
-a, --access-key <i>access_key_id</i>	Your AWS access key ID. Required: Yes Example: -a AKIAIOSFODNN7EXAMPLE
-s, --secret-key <i>secret_key</i>	Your AWS secret access key. Required: Yes Example: -s wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY
-k, --privatekey <i>private_key</i>	The private key used to decrypt the manifest. Required: Yes Example: -k pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem
-p, --prefix <i>ami_prefix</i>	The filename prefix for the bundled AMI files. Default: image Required: No Example: -p my-image

Option	Description
<code>-d, --directory <i>directory</i></code>	The directory where the downloaded bundle is saved. The directory must exist. Default: The current working directory. Required: No Example: <code>-d /tmp/my-downloaded-bundle</code>
<code>--retry</code>	Automatically retries on all Amazon S3 errors, up to five times per operation. Required: No Example: <code>--retry</code>
<code>--url <i>url</i></code>	The S3 service URL. Default: <code>https://s3.amazonaws.com</code> Required: No Example: <code>--url https://s3.example.com</code>
Common options	For options common to most of the AMI Tools, see <a href="#">Common Options for AMI Tools (p. 692)</a> .

## Output

Status messages indicating the various stages of the download process are displayed.

## Example

This example creates the `bundled` directory and downloads the bundle from the `myawsbucket` Amazon S3 bucket.

```
$ mkdir bundled
$ ec2-download-bundle -b myawsbucket -m fred.manifest.xml -a AKIAIOSFODNN7EXAMPLE
-s wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY -k pk-HKZYKTAIG2ECMXY
IBH3HXV4ZBEXAMPLE.pem -d bundled
downloading manifest https://s3.amazonaws.com/myawsbucket/image.manifest.xml
to bundled/image.manifest.xml ...
downloading part https://s3.amazonaws.com/myawsbucket/image.part.00 to
bundled/image.part.00 ...
Downloaded image.part.00 from https://s3.amazonaws.com/myawsbucket.
downloading part https://s3.amazonaws.com/myawsbucket/image.part.01 to
bundled/image.part.01 ...
Downloaded image.part.01 from https://s3.amazonaws.com/myawsbucket.
downloading part https://s3.amazonaws.com/myawsbucket/image.part.02 to
bundled/image.part.02 ...
Downloaded image.part.02 from https://s3.amazonaws.com/myawsbucket.
downloading part https://s3.amazonaws.com/myawsbucket/image.part.03 to
bundled/image.part.03 ...
Downloaded image.part.03 from https://s3.amazonaws.com/myawsbucket.
downloading part https://s3.amazonaws.com/myawsbucket/image.part.04 to
bundled/image.part.04 ...
Downloaded image.part.04 from https://s3.amazonaws.com/myawsbucket.
downloading part https://s3.amazonaws.com/myawsbucket/image.part.05 to
bundled/image.part.05 ...
```

```
Downloaded image.part.05 from https://s3.amazonaws.com/myawsbucket.  
downloading part https://s3.amazonaws.com/myawsbucket/image.part.06 to  
bundled/image.part.06 ...  
Downloaded image.part.06 from https://s3.amazonaws.com/myawsbucket.  
Download Bundle complete.
```

**Note**

This example uses the Linux and UNIX `mkdir` command.

## Related Topics

- [ec2-bundle-image](#) (p. 666)
- [ec2-bundle-vol](#) (p. 670)
- [ec2-unbundle](#) (p. 688)
- [ec2-upload-bundle](#) (p. 690)
- [ec2-delete-bundle](#) (p. 675)

# ec2-migrate-bundle

## Description

Copies a bundled AMI from one region to another.

### Note

This tool is replaced by [ec2-migrate-image](#) (p. 515).

To get the AMI tools, go to [Amazon EC2 AMI Tools](#).

### Note

After copying a bundled AMI to a new region, make sure to register it as a new AMI. During migration, Amazon EC2 replaces the kernel and RAM disk in the manifest file with a kernel and RAM disk designed for the destination region. Unless the `--no-mapping` parameter is given, `ec2-migrate-bundle` might use the Amazon EC2 `DescribeRegions` and `DescribeImages` operations to perform automated mappings. It is recommended that PV-GRUB be used instead of kernels and RAM disks. For more information, see [PV-GRUB: A New Amazon Kernel Image](#) in the *Amazon Elastic Compute Cloud User Guide*.

## Syntax

```
ec2-migrate-bundle -k private_key -c cert -a access_key_id -s secret_key --bucket source_s3_bucket --destination-bucket destination_s3_bucket --manifest manifest_path [--location location] [--ec2cert ec2_cert_path] [--kernel kernel-id] [--ramdisk ramdisk_id] [--no-mapping] [--region mapping_region_name]
```

## Options

Option	Description
<code>-k, --privatekey <i>private_key</i></code>	The path to the user's PEM-encoded RSA key file. Required: Yes Example: <code>-k pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-c, --cert <i>cert</i></code>	The user's PEM encoded RSA public key certificate file. Required: Yes Example: <code>-c cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-a, --access-key <i>access_key_id</i></code>	The AWS access key ID. Required: Yes Example: <code>-a AKIAIOSFODNN7EXAMPLE</code>
<code>-s, --secret-key <i>secret_key</i></code>	The AWS secret access key. Required: Yes Example: <code>-s wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>

**Amazon Elastic Compute Cloud CLI Reference**  
**Options**

Option	Description
<code>-b, --bucket <i>source_s3_bucket</i></code>	The source Amazon S3 bucket where the AMI is located, followed by an optional '/'-delimited path prefix. Required: Yes Example: <code>--bucket myawsbucket</code>
<code>-d, --destination-bucket <i>destination_s3_bucket</i></code>	The destination Amazon S3 bucket, followed by an optional '/'-delimited path prefix. If the destination bucket does not exist, it is created. Required: Yes Example: <code>--destination-bucket myotherawsbucket</code>
<code>-m, --manifest <i>manifest</i></code>	The location of the Amazon S3 source manifest. Default: None Required: Yes Example: <code>--manifest my-ami.manifest.xml</code>
<code>--location <i>location</i></code>	The location of the destination Amazon S3 bucket.  If the bucket exists and the location is specified, the tool exits with an error. If the specified location does not match the actual location. If the bucket exists and no location is specified, the tool uses the bucket's location. If the bucket does not exist and the location is specified, the tool creates the bucket in the specified location. If the bucket does not exist and location is not specified, the tool creates the bucket without a location constraint (in the US). Valid Values: US   EU   us-west-1   ap-southeast-1 Default: US Required: No Example: <code>--location EU</code>
<code>--acl {public-read   aws-exec-read}</code>	The access control list policy of the bundled image. Valid Values: public-read   aws-exec-read Default: aws-exec-read Required: No Example: <code>--acl public-read</code>
<code>--retry</code>	Automatically retries on all Amazon S3 errors, up to five times per operation. Required: No Example: <code>--retry</code>
<code>--kernel <i>kernel_id</i></code>	The ID of the kernel to select. Required: No Example: <code>--kernel aki-ba3adfd3</code>

Option	Description
<code>--ramdisk <i>ramdisk_id</i></code>	The ID of the RAM disk to select.  <b>Note</b> It is recommended that PV-GRUB be used instead of kernels and RAM disks. For more information, see <a href="#">PV-GRUB: A New Amazon Kernel Image</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> .  Required: No Example: <code>--ramdisk ari-badbad00</code>
<code>--no-mapping</code>	Disables automatic mapping of kernels and RAM disks. Required: No Example: <code>--no-mapping</code>
<code>--region</code>	Region to look up in the mapping file. If no region is specified, Amazon EC2 attempts to determine the region from the location of the Amazon S3 bucket. Required: No Example: <code>--region eu-west-1</code>
Common options	For options common to most of the AMI Tools, see <a href="#">Common Options for AMI Tools (p. 692)</a> .

## Output

Status messages describing the stages and status of the bundling process.

## Example

This example copies the AMI specified in the `my-ami.manifest.xml` manifest from the US to the EU.

```
$ ec2-migrate-bundle --cert cert-THUMBPRINT.pem --privatekey pk-THUMBPRINT.pem
--access-key AKIAIOSFODNN7EXAMPLE --secret-key wJalrXUtnFEMI/K7MDENG/bPxrFi
CYEXAMPLEKEY --bucket myawsbucket --destination-bucket myotherawsbucket --
manifest my-ami.manifest.xml --location EU
Downloading manifest my-ami.manifest.xml from myawsbucket to /tmp/ami-migration-
my-ami.manifest.xml/my-ami.manifest.xml ...
Copying 'my-ami.part.00'...
Copying 'my-ami.part.01'...
Copying 'my-ami.part.02'...
Copying 'my-ami.part.03'...
Copying 'my-ami.part.04'...
Copying 'my-ami.part.05'...
Copying 'my-ami.part.06'...
Copying 'my-ami.part.07'...
Copying 'my-ami.part.08'...
Copying 'my-ami.part.09'...
Copying 'my-ami.part.10'...
Your new bundle is in S3 at the following location:
myotherawsbucket/my-ami.manifest.xml
```



## Related Topics

- [ec2-register](#) (p. 563)
- [ec2-run-instances](#) (p. 628)

# ec2-migrate-manifest

## Description

Modifies a bundled AMI to work in a new region.

You must use this command if you are bundling in one region for use in another or if you copy a bundled AMI out of band (without using `ec2-migrate-bundle`) and want to use it in a different region.

To get the AMI tools, go to [Amazon EC2 AMI Tools](#).

### Note

This command replaces the kernel and RAM disk in the manifest file with a kernel and RAM disk designed for the destination region.

It is recommended that PV-GRUB be used instead of kernels and RAM disks. For more information, see [PV-GRUB: A New Amazon Kernel Image](#) in the *Amazon Elastic Compute Cloud User Guide*.

## Syntax

```
ec2-migrate-manifest -k private_key -c cert -m manifest_path {(-a access_key_id
-s secret_key --region mapping_region_name) | --no-mapping} [--kernel kernel-id]
[--ramdisk ramdisk_id] [--ec2cert ec2_cert_path]
```

## Options

Option	Description
<code>-k, --privatekey <i>private_key</i></code>	The path to the user's PEM-encoded RSA key file. Required: Yes Example: <code>-k pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-c, --cert <i>cert</i></code>	The user's PEM encoded RSA public key certificate file. Required: Yes Example: <code>-c cert-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem</code>
<code>-a, --access-key <i>access_key_id</i></code>	The AWS access key ID. Required: Conditional Condition: Required if using automatic mapping. Example: <code>-a AKIAIOSFODNN7EXAMPLE</code>
<code>-s, --secret-key <i>secret_key</i></code>	The AWS secret access key. Required: Conditional Condition: Required if using automatic mapping. Example: <code>-s wJalrXUtnFEMI/K7MDENG/bPxrFicYEXAMPLEKEY</code>
<code>--manifest <i>manifest_path</i></code>	The manifest file. Required: Yes Example: <code>--manifest my-ami.manifest.xml</code>

Option	Description
<code>--kernel <i>kernel_id</i></code>	The ID of the kernel to select. Required: No Example: <code>--kernel aki-ba3adfd3</code>
<code>--ramdisk <i>ramdisk_id</i></code>	The ID of the RAM disk to select. <b>Note</b> It is recommended that PV-GRUB be used instead of kernels and RAM disks. For more information, see <a href="#">PV-GRUB: A New Amazon Kernel Image</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Required: No Example: <code>--ramdisk ari-badbad00</code>
<code>--mapping-file <i>mapping_file</i></code>	Overrides the file containing kernel and RAM disk region mappings. Required: No Example: <code>--mapping-file eu-mappings</code>
<code>--mapping-url <i>url</i></code>	Overrides the file containing kernel and RAM disk region mappings from the specified hostname portion of a URL. Required: No Example: <code>--mapping-url mysite.com/eu-mappings</code>
<code>--no-mapping</code>	Disables automatic mapping of kernels and RAM disks. Required: Conditional Condition: Required if you're not providing the <code>-a</code> , <code>-s</code> , and <code>--region</code> options (which are used for automatic mapping).
<code>--region</code>	Region to look up in the mapping file. Condition: Required if using automatic mapping. Required: Conditional Example: <code>--region eu-west-1</code>
Common options	For options common to most of the AMI Tools, see <a href="#">Common Options for AMI Tools (p. 692)</a> .

## Output

Status messages describing the stages and status of the bundling process.

## Example

This example copies the AMI specified in the `my-ami.manifest.xml` manifest from the US to the EU.

```
$ ec2-migrate-manifest --manifest my-ami.manifest.xml --cert cert-HKZYKTAIG2ECMXY
IBH3HXV4ZBZQ55CLO.pem --privatekey pk-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CLO.pem --
region eu-west-1
```

```
Backing up manifest...
```

```
Successfully migrated my-ami.manifest.xml It is now suitable for use in eu-west-1.
```

## Related Topics

- [ec2-register](#) (p. 563)
- [ec2-run-instances](#) (p. 628)

## ec2-unbundle

### Description

Recreates the AMI from the bundled AMI parts.

To get the AMI tools, go to [Amazon EC2 AMI Tools](#).

### Syntax

```
ec2-unbundle -m manifest -k private_key [-d destination_directory] [-s source_directory]
```

### Options

Option	Description
-m, --manifest <i>manifest</i>	The path to the unencrypted AMI manifest file. Required: Yes Example: -m /var/spool/my-first-bundle/Manifest
-k, --privatekey <i>private_key</i>	The path to your PEM-encoded RSA key file. Required: Yes Example: -k \$HOME/pk-234242example.pem
-d, --destination <i>destination_directory</i>	The directory in which to unbundle the AMI. The destination directory must exist. Default: The current directory. Required: No Example: -d /tmp/my-image
-s, --source <i>source_directory</i>	The directory containing the bundled AMI parts. Default: The current directory. Required: No Example: -s /tmp/my-bundled-image
Common options	For options common to most of the AMI Tools, see <a href="#">Common Options for AMI Tools (p. 692)</a> .

### Example

This Linux and UNIX example unbundles the AMI specified in the `fred.manifest.xml` file.

```
$ mkdir unbundled
$ ec2-unbundle -m fred.manifest.xml -s bundled -d unbundled

$ ls -l unbundled
total 1025008
```

```
-rw-r--r-- 1 root root 1048578048 Aug 25 23:46 fred.img
```

## Output

Status messages indicating the various stages of the unbundling process are displayed.

## Related Topics

- [ec2-bundle-image](#) (p. 666)
- [ec2-bundle-vol](#) (p. 670)
- [ec2-upload-bundle](#) (p. 690)
- [ec2-download-bundle](#) (p. 678)
- [ec2-delete-bundle](#) (p. 675)

# ec2-upload-bundle

## Description

Uploads a bundled AMI to Amazon S3 storage.

To get the AMI tools, go to [Amazon EC2 AMI Tools](#).

## Syntax

```
ec2-upload-bundle -b s3_bucket -m manifest -a access_key_id -s secret_key [--acl acl] [-d directory] [--part part] [--location location] [--url url] [--retry] [--skipmanifest]
```

## Options

Option	Description
<code>-b, --bucket <i>s3_bucket</i></code>	The name of the Amazon S3 bucket in which to store the bundle, followed by an optional '/'-delimited path prefix. If the bucket doesn't exist it will be created (if the bucket name is available). Required: Yes Example: <code>-b myawsbucket/ami-001</code>
<code>-m, --manifest <i>manifest</i></code>	The path to the manifest file. The manifest file is created during the bundling process and can be found in the directory containing the bundle. Required: Yes Example: <code>-m image.manifest.xml</code>
<code>-a, --access-key <i>access_key_id</i></code>	Your AWS access key ID. Required: Yes Example: <code>-a AKIAIOSFODNN7EXAMPLE</code>
<code>-s, --secret-key <i>secret_key</i></code>	Your AWS secret access key. Required: Yes Example: <code>-s wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY</code>
<code><i>acl</i></code>	The access control list policy of the bundled image. Valid Values: <code>public-read   aws-exec-read</code> Default: <code>aws-exec-read</code> Required: No Example: <code>--acl public-read</code>
<code>-d, --directory <i>directory</i></code>	The directory containing the bundled AMI parts. Default: The directory containing the manifest file (see the <code>-m</code> option). Required: No Example: <code>-d /var/run/my-bundle</code>

Option	Description
<code>--part <i>part</i></code>	Starts uploading the specified part and all subsequent parts. Required: No Example: <code>--part 04</code>
<code>--location <i>location</i></code>	The location of the destination Amazon S3 bucket.  If the bucket exists and you specify a location that doesn't match the bucket's actual location, the tool exits with an error. If the bucket exists and you don't specify a location, the tool uses the bucket's location. If the bucket does not exist and you specify a location, the tool creates the bucket in the specified location. If the bucket does not exist and you don't specify a location, the tool creates the bucket without a location constraint (in the US). Valid Values: US   EU   us-west-1   ap-southeast-1 Default: US Required: No Example: <code>--location EU</code>
<code>--url <i>url</i></code>	The S3 service URL. Default: <code>https://s3.amazonaws.com</code> Required: No Example: <code>--url https://s3.example.com</code>
<code>--retry</code>	Automatically retries on all Amazon S3 errors, up to five times per operation. Required: No Example: <code>--retry</code>
<code>--skipmanifest</code>	Does not upload the manifest. Required: No Example: <code>--skipmanifest</code>
Common options	For options common to most of the AMI Tools, see <a href="#">Common Options for AMI Tools (p. 692)</a> .

## Output

Amazon EC2 displays status messages that indicate the stages and status of the upload process.

## Example

This example uploads the bundle specified by the `bundled/fred.manifest.xml` manifest.

```
$ ec2-upload-bundle -b myawsbucket -m bundled/fred.manifest.xml -a AKIAIOSFOD
NN7EXAMPLE -s wJalrXUtnFEMI/K7MDENG/bPxrFfiCYEXAMPLEKEY
Creating bucket...
Uploading bundled image parts to the S3 bucket myawsbucket ...
Uploaded fred.part.00
Uploaded fred.part.01
```



```
Uploaded fred.part.02
Uploaded fred.part.03
Uploaded fred.part.04
Uploaded fred.part.05
Uploaded fred.part.06
Uploaded fred.part.07
Uploaded fred.part.08
Uploaded fred.part.09
Uploaded fred.part.10
Uploaded fred.part.11
Uploaded fred.part.12
Uploaded fred.part.13
Uploaded fred.part.14
Uploading manifest ...
Uploaded manifest.
Bundle upload completed.
```

## Related Topics

- [ec2-bundle-image](#) (p. 666)
- [ec2-bundle-vol](#) (p. 670)
- [ec2-unbundle](#) (p. 688)
- [ec2-download-bundle](#) (p. 678)
- [ec2-delete-bundle](#) (p. 675)

## Common Options for AMI Tools

Most of the commands described in this section accept the set of optional parameters described in the following table.

Option	Description
<code>--help, -h</code>	Display the help message.
<code>--version</code>	Displays the version and copyright notice.
<code>--manual</code>	Displays the manual entry.
<code>--batch</code>	Runs in batch mode, suppressing user interaction and confirmation.
<code>--debug</code>	Prints internal debugging information. This is useful to assist us when troubleshooting problems.