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# Amazon Elastic Compute Cloud

## CLI Reference

API Version 2012-10-01



## Amazon Elastic Compute Cloud: CLI Reference

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Welcome .....	1
API Tools Reference .....	2
Common Options for API Tools .....	5
List of API Tools by Function .....	7
ec2-allocate-address .....	13
ec2-assign-private-ip-addresses .....	17
ec2-associate-address .....	21
ec2-associate-dhcp-options .....	26
ec2-associate-route-table .....	30
ec2-attach-internet-gateway .....	34
ec2-attach-network-interface .....	37
ec2-attach-volume .....	40
ec2-attach-vpn-gateway .....	44
ec2-authorize .....	48
ec2-bundle-instance .....	55
ec2-cancel-bundle-task .....	60
ec2-cancel-conversion-task .....	63
ec2-cancel-export-task .....	67
ec2-cancel-reserved-instances-listing .....	70
ec2-cancel-spot-instance-requests .....	74
ec2-confirm-product-instance .....	77
ec2-create-customer-gateway .....	80
ec2-create-dhcp-options .....	84
ec2-create-group .....	88
ec2-create-image .....	92
ec2-create-instance-export-task .....	98
ec2-create-internet-gateway .....	102
ec2-create-keypair .....	105
ec2-create-network-acl .....	109
ec2-create-network-acl-entry .....	112
ec2-create-network-interface .....	117
ec2-create-placement-group .....	122
ec2-create-reserved-instances-listing .....	125
ec2-create-route .....	129
ec2-create-route-table .....	133
ec2-create-snapshot .....	136
ec2-create-spot-datafeed-subscription .....	140
ec2-create-subnet .....	143
ec2-create-tags .....	147
ec2-create-volume .....	151
ec2-create-vpc .....	155
ec2-create-vpn-connection .....	159
ec2-create-vpn-gateway .....	164
ec2-create-vpn-connection-route .....	168
ec2-delete-customer-gateway .....	171
ec2-delete-dhcp-options .....	174
ec2-delete-disk-image .....	177
ec2-delete-group .....	181
ec2-delete-internet-gateway .....	185
ec2-delete-keypair .....	188
ec2-delete-network-acl .....	191
ec2-delete-network-acl-entry .....	194
ec2-delete-network-interface .....	198
ec2-delete-placement-group .....	201
ec2-delete-route .....	204
ec2-delete-route-table .....	207
ec2-delete-snapshot .....	210
ec2-delete-spot-datafeed-subscription .....	213

ec2-delete-subnet	216
ec2-delete-tags	219
ec2-delete-volume	223
ec2-delete-vpc	226
ec2-delete-vpn-connection	229
ec2-delete-vpn-connection-route	232
ec2-delete-vpn-gateway	235
ec2-deregister	238
ec2-describe-addresses	241
ec2-describe-availability-zones	247
ec2-describe-bundle-tasks	251
ec2-describe-conversion-tasks	256
ec2-describe-customer-gateways	259
ec2-describe-dhcp-options	264
ec2-describe-export-tasks	269
ec2-describe-group	272
ec2-describe-image-attribute	278
ec2-describe-images	282
ec2-describe-instance-attribute	290
ec2-describe-instance-status	295
ec2-describe-instances	301
ec2-describe-internet-gateways	315
ec2-describe-keypairs	320
ec2-describe-network-acls	324
ec2-describe-network-interface-attribute	330
ec2-describe-network-interfaces	334
ec2-describe-placement-groups	341
ec2-describe-regions	345
ec2-describe-reserved-instances	349
ec2-describe-reserved-instances-listings	355
ec2-describe-reserved-instances-offerings	360
ec2-describe-route-tables	368
ec2-describe-snapshot-attribute	374
ec2-describe-snapshots	378
ec2-describe-spot-datafeed-subscription	384
ec2-describe-spot-instance-requests	387
ec2-describe-spot-price-history	395
ec2-describe-subnets	401
ec2-describe-tags	406
ec2-describe-volume-attribute	411
ec2-describe-volume-status	415
ec2-describe-volumes	421
ec2-describe-vpcs	427
ec2-describe-vpn-connections	432
ec2-describe-vpn-gateways	438
ec2-detach-internet-gateway	443
ec2-detach-network-interface	446
ec2-detach-volume	449
ec2-detach-vpn-gateway	453
ec2-disable-vgw-route-propagation	456
ec2-disassociate-address	459
ec2-disassociate-route-table	463
ec2-enable-volume-io	466
ec2-enable-vgw-route-propagation	469
ec2-fingerprint-key	472
ec2-get-console-output	475
ec2-get-password	479
ec2-import-instance	483

ec2-import-keypair .....	490
ec2-import-volume .....	494
ec2-migrate-image .....	500
ec2-modify-image-attribute .....	505
ec2-modify-instance-attribute .....	510
ec2-modify-network-interface-attribute .....	515
ec2-modify-snapshot-attribute .....	519
ec2-modify-volume-attribute .....	523
ec2-monitor-instances .....	526
ec2-purchase-reserved-instances-offering .....	529
ec2-reboot-instances .....	533
ec2-register .....	536
ec2-release-address .....	542
ec2-replace-network-acl-association .....	546
ec2-replace-network-acl-entry .....	549
ec2-replace-route .....	553
ec2-replace-route-table-association .....	557
ec2-report-instance-status .....	561
ec2-request-spot-instances .....	565
ec2-reset-image-attribute .....	575
ec2-reset-instance-attribute .....	578
ec2-reset-network-interface-attribute .....	582
ec2-reset-snapshot-attribute .....	586
ec2-resume-import .....	590
ec2-revoke .....	594
ec2-run-instances .....	600
ec2-start-instances .....	611
ec2-stop-instances .....	615
ec2-terminate-instances .....	619
ec2-unassign-private-ip-addresses .....	622
ec2-unmonitor-instances .....	625
ec2-upload-disk-image .....	628
AMI Tools Reference .....	632
Common Options for AMI Tools .....	632
ec2-bundle-image .....	633
ec2-bundle-vol .....	636
ec2-delete-bundle .....	640
ec2-download-bundle .....	642
ec2-migrate-bundle .....	645
ec2-migrate-manifest .....	648
ec2-unbundle .....	650
ec2-upload-bundle .....	652
Document History .....	655

# Welcome

This is the *Amazon Elastic Compute Cloud Command Line Reference*. It provides descriptions, syntax, and usage examples for each of the tools for Amazon EC2. The API tools wrap the Amazon EC2 API actions. You install and run the API tools on an Amazon EC2 instance-store backed instance to manage the instance-store backed AMIs.

**Note**

This guide also includes the commands for Amazon Virtual Private Cloud (Amazon VPC). For more information about this service, go to the [Amazon Virtual Private Cloud User Guide](#).

How Do I?	Relevant Topics
Download the Amazon EC2 API tools.	<a href="#">Amazon EC2 API Tools</a>
Prepare a computer to use the Amazon EC2 API tools.	<a href="#">Setting Up the Command Line Tools</a>
Get an alphabetical list of the Amazon EC2 API tools.	<a href="#">Commands for API Tools (p. 7)</a>
Get a list of the common options for the API tools.	<a href="#">Common Options for API Tools (p. 5)</a>
Download the Amazon EC2 AMI tools.	<a href="#">Amazon EC2 AMI Tools</a>
Get an alphabetical list of the Amazon EC2 AMI tools.	<a href="#">Commands for AMI Tools (p. 632)</a>
Get a list of the common options for the AMI tools.	<a href="#">Common Options for AMI Tools (p. 632)</a>
Get a list of regions and endpoints for each AWS product.	<a href="#">Regions and Endpoints</a>

**Related Topics**

- [Amazon EC2 product page](#)
- [Amazon Elastic Compute Cloud User Guide](#)
- [Amazon Elastic Compute Cloud API Reference](#)

# API Tools Reference

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## Topics

- [Common Options for API Tools \(p. 5\)](#)
- [List of API Tools by Function \(p. 7\)](#)
- [ec2-allocate-address \(p. 13\)](#)
- [ec2-assign-private-ip-addresses \(p. 17\)](#)
- [ec2-associate-address \(p. 21\)](#)
- [ec2-associate-dhcp-options \(p. 26\)](#)
- [ec2-associate-route-table \(p. 30\)](#)
- [ec2-attach-internet-gateway \(p. 34\)](#)
- [ec2-attach-network-interface \(p. 37\)](#)
- [ec2-attach-volume \(p. 40\)](#)
- [ec2-attach-vpn-gateway \(p. 44\)](#)
- [ec2-authorize \(p. 48\)](#)
- [ec2-bundle-instance \(p. 55\)](#)
- [ec2-cancel-bundle-task \(p. 60\)](#)
- [ec2-cancel-conversion-task \(p. 63\)](#)
- [ec2-cancel-export-task \(p. 67\)](#)
- [ec2-cancel-reserved-instances-listing \(p. 70\)](#)
- [ec2-cancel-spot-instance-requests \(p. 74\)](#)
- [ec2-confirm-product-instance \(p. 77\)](#)
- [ec2-create-customer-gateway \(p. 80\)](#)
- [ec2-create-dhcp-options \(p. 84\)](#)
- [ec2-create-group \(p. 88\)](#)
- [ec2-create-image \(p. 92\)](#)
- [ec2-create-instance-export-task \(p. 98\)](#)
- [ec2-create-internet-gateway \(p. 102\)](#)
- [ec2-create-keypair \(p. 105\)](#)
- [ec2-create-network-acl \(p. 109\)](#)
- [ec2-create-network-acl-entry \(p. 112\)](#)
- [ec2-create-network-interface \(p. 117\)](#)
- [ec2-create-placement-group \(p. 122\)](#)

- [ec2-create-reserved-instances-listing](#) (p. 125)
- [ec2-create-route](#) (p. 129)
- [ec2-create-route-table](#) (p. 133)
- [ec2-create-snapshot](#) (p. 136)
- [ec2-create-spot-datafeed-subscription](#) (p. 140)
- [ec2-create-subnet](#) (p. 143)
- [ec2-create-tags](#) (p. 147)
- [ec2-create-volume](#) (p. 151)
- [ec2-create-vpc](#) (p. 155)
- [ec2-create-vpn-connection](#) (p. 159)
- [ec2-create-vpn-gateway](#) (p. 164)
- [ec2-create-vpn-connection-route](#) (p. 168)
- [ec2-delete-customer-gateway](#) (p. 171)
- [ec2-delete-dhcp-options](#) (p. 174)
- [ec2-delete-disk-image](#) (p. 177)
- [ec2-delete-group](#) (p. 181)
- [ec2-delete-internet-gateway](#) (p. 185)
- [ec2-delete-keypair](#) (p. 188)
- [ec2-delete-network-acl](#) (p. 191)
- [ec2-delete-network-acl-entry](#) (p. 194)
- [ec2-delete-network-interface](#) (p. 198)
- [ec2-delete-placement-group](#) (p. 201)
- [ec2-delete-route](#) (p. 204)
- [ec2-delete-route-table](#) (p. 207)
- [ec2-delete-snapshot](#) (p. 210)
- [ec2-delete-spot-datafeed-subscription](#) (p. 213)
- [ec2-delete-subnet](#) (p. 216)
- [ec2-delete-tags](#) (p. 219)
- [ec2-delete-volume](#) (p. 223)
- [ec2-delete-vpc](#) (p. 226)
- [ec2-delete-vpn-connection](#) (p. 229)
- [ec2-delete-vpn-connection-route](#) (p. 232)
- [ec2-delete-vpn-gateway](#) (p. 235)
- [ec2-deregister](#) (p. 238)
- [ec2-describe-addresses](#) (p. 241)
- [ec2-describe-availability-zones](#) (p. 247)
- [ec2-describe-bundle-tasks](#) (p. 251)
- [ec2-describe-conversion-tasks](#) (p. 256)
- [ec2-describe-customer-gateways](#) (p. 259)
- [ec2-describe-dhcp-options](#) (p. 264)
- [ec2-describe-export-tasks](#) (p. 269)
- [ec2-describe-group](#) (p. 272)
- [ec2-describe-image-attribute](#) (p. 278)
- [ec2-describe-images](#) (p. 282)
- [ec2-describe-instance-attribute](#) (p. 290)
- [ec2-describe-instance-status](#) (p. 295)



- [ec2-describe-instances](#) (p. 301)
- [ec2-describe-internet-gateways](#) (p. 315)
- [ec2-describe-keypairs](#) (p. 320)
- [ec2-describe-network-acls](#) (p. 324)
- [ec2-describe-network-interface-attribute](#) (p. 330)
- [ec2-describe-network-interfaces](#) (p. 334)
- [ec2-describe-placement-groups](#) (p. 341)
- [ec2-describe-regions](#) (p. 345)
- [ec2-describe-reserved-instances](#) (p. 349)
- [ec2-describe-reserved-instances-listings](#) (p. 355)
- [ec2-describe-reserved-instances-offerings](#) (p. 360)
- [ec2-describe-route-tables](#) (p. 368)
- [ec2-describe-snapshot-attribute](#) (p. 374)
- [ec2-describe-snapshots](#) (p. 378)
- [ec2-describe-spot-datafeed-subscription](#) (p. 384)
- [ec2-describe-spot-instance-requests](#) (p. 387)
- [ec2-describe-spot-price-history](#) (p. 395)
- [ec2-describe-subnets](#) (p. 401)
- [ec2-describe-tags](#) (p. 406)
- [ec2-describe-volume-attribute](#) (p. 411)
- [ec2-describe-volume-status](#) (p. 415)
- [ec2-describe-volumes](#) (p. 421)
- [ec2-describe-vpcs](#) (p. 427)
- [ec2-describe-vpn-connections](#) (p. 432)
- [ec2-describe-vpn-gateways](#) (p. 438)
- [ec2-detach-internet-gateway](#) (p. 443)
- [ec2-detach-network-interface](#) (p. 446)
- [ec2-detach-volume](#) (p. 449)
- [ec2-detach-vpn-gateway](#) (p. 453)
- [ec2-disable-vgw-route-propagation](#) (p. 456)
- [ec2-disassociate-address](#) (p. 459)
- [ec2-disassociate-route-table](#) (p. 463)
- [ec2-enable-volume-io](#) (p. 466)
- [ec2-enable-vgw-route-propagation](#) (p. 469)
- [ec2-fingerprint-key](#) (p. 472)
- [ec2-get-console-output](#) (p. 475)
- [ec2-get-password](#) (p. 479)
- [ec2-import-instance](#) (p. 483)
- [ec2-import-keypair](#) (p. 490)
- [ec2-import-volume](#) (p. 494)
- [ec2-migrate-image](#) (p. 500)
- [ec2-modify-image-attribute](#) (p. 505)
- [ec2-modify-instance-attribute](#) (p. 510)
- [ec2-modify-network-interface-attribute](#) (p. 515)
- [ec2-modify-snapshot-attribute](#) (p. 519)
- [ec2-modify-volume-attribute](#) (p. 523)

- [ec2-monitor-instances](#) (p. 526)
- [ec2-purchase-reserved-instances-offering](#) (p. 529)
- [ec2-reboot-instances](#) (p. 533)
- [ec2-register](#) (p. 536)
- [ec2-release-address](#) (p. 542)
- [ec2-replace-network-acl-association](#) (p. 546)
- [ec2-replace-network-acl-entry](#) (p. 549)
- [ec2-replace-route](#) (p. 553)
- [ec2-replace-route-table-association](#) (p. 557)
- [ec2-report-instance-status](#) (p. 561)
- [ec2-request-spot-instances](#) (p. 565)
- [ec2-reset-image-attribute](#) (p. 575)
- [ec2-reset-instance-attribute](#) (p. 578)
- [ec2-reset-network-interface-attribute](#) (p. 582)
- [ec2-reset-snapshot-attribute](#) (p. 586)
- [ec2-resume-import](#) (p. 590)
- [ec2-revoke](#) (p. 594)
- [ec2-run-instances](#) (p. 600)
- [ec2-start-instances](#) (p. 611)
- [ec2-stop-instances](#) (p. 615)
- [ec2-terminate-instances](#) (p. 619)
- [ec2-unassign-private-ip-addresses](#) (p. 622)
- [ec2-unmonitor-instances](#) (p. 625)
- [ec2-upload-disk-image](#) (p. 628)

## Common Options for API Tools

Most API tools described in this section accept the set of optional parameters described in the following table.

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

Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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>

## List of API Tools by Function

### Amazon DevPay

- [ec2-confirm-product-instance](#) (p. 77)

### AMIs/Images

- [ec2-create-image](#) (p. 92)
- [ec2-deregister](#) (p. 238)
- [ec2-describe-image-attribute](#) (p. 278)
- [ec2-describe-images](#) (p. 282)
- [ec2-migrate-image](#) (p. 500)
- [ec2-modify-image-attribute](#) (p. 505)
- [ec2-register](#) (p. 536)
- [ec2-reset-image-attribute](#) (p. 575)

### Availability Zones and Regions

- [ec2-describe-availability-zones](#) (p. 247)
- [ec2-describe-regions](#) (p. 345)

### Customer Gateways (Amazon VPC)

- [ec2-create-customer-gateway](#) (p. 80)
- [ec2-delete-customer-gateway](#) (p. 171)
- [ec2-describe-customer-gateways](#) (p. 259)

### DHCP Options (Amazon VPC)

- [ec2-associate-dhcp-options](#) (p. 26)
- [ec2-create-dhcp-options](#) (p. 84)

- [ec2-delete-dhcp-options](#) (p. 174)
- [ec2-describe-dhcp-options](#) (p. 264)

### **Amazon Elastic Block Store**

- [ec2-attach-volume](#) (p. 40)
- [ec2-create-snapshot](#) (p. 136)
- [ec2-create-volume](#) (p. 151)
- [ec2-delete-disk-image](#) (p. 177)
- [ec2-delete-snapshot](#) (p. 210)
- [ec2-delete-volume](#) (p. 223)
- [ec2-describe-snapshot-attribute](#) (p. 374)
- [ec2-describe-snapshots](#) (p. 378)
- [ec2-describe-volumes](#) (p. 421)
- [ec2-detach-volume](#) (p. 449)
- [ec2-import-volume](#) (p. 494)
- [ec2-modify-snapshot-attribute](#) (p. 519)
- [ec2-reset-snapshot-attribute](#) (p. 586)

### **Elastic IP Addresses**

- [ec2-allocate-address](#) (p. 13)
- [ec2-associate-address](#) (p. 21)
- [ec2-describe-addresses](#) (p. 241)
- [ec2-disassociate-address](#) (p. 459)
- [ec2-release-address](#) (p. 542)

### **Elastic Network Interfaces (Amazon VPC)**

- [ec2-attach-network-interface](#) (p. 37)
- [ec2-create-network-interface](#) (p. 117)
- [ec2-delete-network-interface](#) (p. 198)
- [ec2-describe-network-interfaces](#) (p. 334)
- [ec2-describe-network-interface-attribute](#) (p. 330)
- [ec2-detach-network-interface](#) (p. 446)
- [ec2-modify-network-interface-attribute](#) (p. 515)
- [ec2-reset-network-interface-attribute](#) (p. 582)

### **General**

- [ec2-get-console-output](#) (p. 475)

## Instances

- [ec2-describe-instance-attribute](#) (p. 290)
- [ec2-describe-instances](#) (p. 301)
- [ec2-import-instance](#) (p. 483)
- [ec2-modify-instance-attribute](#) (p. 510)
- [ec2-reboot-instances](#) (p. 533)
- [ec2-reset-instance-attribute](#) (p. 578)
- [ec2-run-instances](#) (p. 600)
- [ec2-start-instances](#) (p. 611)
- [ec2-stop-instances](#) (p. 615)
- [ec2-terminate-instances](#) (p. 619)

## Internet Gateways (Amazon VPC)

- [ec2-attach-internet-gateway](#) (p. 34)
- [ec2-create-internet-gateway](#) (p. 102)
- [ec2-delete-internet-gateway](#) (p. 185)
- [ec2-describe-internet-gateways](#) (p. 315)
- [ec2-detach-internet-gateway](#) (p. 443)

## Key Pairs

- [ec2-create-keypair](#) (p. 105)
- [ec2-delete-keypair](#) (p. 188)
- [ec2-describe-keypairs](#) (p. 320)
- [ec2-fingerprint-key](#) (p. 472)
- [ec2-import-keypair](#) (p. 490)

## Monitoring

- [ec2-monitor-instances](#) (p. 526)
- [ec2-unmonitor-instances](#) (p. 625)

## Network ACLs (Amazon VPC)

- [ec2-create-network-acl](#) (p. 109)
- [ec2-create-network-acl-entry](#) (p. 112)
- [ec2-delete-network-acl](#) (p. 191)
- [ec2-delete-network-acl-entry](#) (p. 194)
- [ec2-describe-network-acls](#) (p. 324)
- [ec2-replace-network-acl-association](#) (p. 546)
- [ec2-replace-network-acl-entry](#) (p. 549)

### Placement Groups

- [ec2-create-placement-group](#) (p. 122)
- [ec2-delete-placement-group](#) (p. 201)
- [ec2-describe-placement-groups](#) (p. 341)

### Reserved Instances

- [ec2-cancel-reserved-instances-listing](#) (p. 70)
- [ec2-create-reserved-instances-listing](#) (p. 125)
- [ec2-describe-reserved-instances](#) (p. 349)
- [ec2-describe-reserved-instances-listings](#) (p. 355)
- [ec2-describe-reserved-instances-offerings](#) (p. 360)
- [ec2-purchase-reserved-instances-offering](#) (p. 529)

### Route Tables (Amazon VPC)

- [ec2-associate-route-table](#) (p. 30)
- [ec2-create-route](#) (p. 129)
- [ec2-create-route-table](#) (p. 133)
- [ec2-delete-route](#) (p. 204)
- [ec2-delete-route-table](#) (p. 207)
- [ec2-describe-route-tables](#) (p. 368)
- [ec2-disassociate-route-table](#) (p. 463)
- [ec2-replace-route](#) (p. 553)
- [ec2-replace-route-table-association](#) (p. 557)

### Security Groups

- [ec2-authorize](#) (p. 48)
- [ec2-create-group](#) (p. 88)
- [ec2-delete-group](#) (p. 181)
- [ec2-describe-group](#) (p. 272)
- [ec2-revoke](#) (p. 594)

### Spot Instances

- [ec2-cancel-spot-instance-requests](#) (p. 74)
- [ec2-create-spot-datafeed-subscription](#) (p. 140)
- [ec2-delete-spot-datafeed-subscription](#) (p. 213)
- [ec2-describe-spot-datafeed-subscription](#) (p. 384)
- [ec2-describe-spot-instance-requests](#) (p. 387)
- [ec2-describe-spot-price-history](#) (p. 395)

- [ec2-request-spot-instances](#) (p. 565)

### **Subnets (Amazon VPC)**

- [ec2-create-subnet](#) (p. 143)
- [ec2-delete-subnet](#) (p. 216)
- [ec2-describe-subnets](#) (p. 401)

### **Tags**

- [ec2-create-tags](#) (p. 147)
- [ec2-delete-tags](#) (p. 219)
- [ec2-describe-tags](#) (p. 406)

### **VM Import**

- [ec2-cancel-conversion-task](#) (p. 63)
- [ec2-delete-disk-image](#) (p. 177)
- [ec2-describe-conversion-tasks](#) (p. 256)
- [ec2-import-instance](#) (p. 483)
- [ec2-import-volume](#) (p. 494)
- [ec2-resume-import](#) (p. 590)

### **VM Export**

- [ec2-cancel-export-task](#) (p. 67)
- [ec2-create-instance-export-task](#) (p. 98)
- [ec2-describe-export-tasks](#) (p. 269)

### **VPCs (Amazon VPC)**

- [ec2-create-vpc](#) (p. 155)
- [ec2-delete-vpc](#) (p. 226)
- [ec2-describe-vpcs](#) (p. 427)

### **VPN Connections (Amazon VPC)**

- [ec2-create-vpn-connection](#) (p. 159)
- [ec2-delete-vpn-connection](#) (p. 229)
- [ec2-describe-vpn-connections](#) (p. 432)

### **Virtual Private Gateways (Amazon VPC)**

- [ec2-attach-vpn-gateway](#) (p. 44)
- [ec2-create-vpn-gateway](#) (p. 164)



- [ec2-delete-vpn-gateway](#) (p. 235)
- [ec2-describe-vpn-gateways](#) (p. 438)
- [ec2-detach-vpn-gateway](#) (p. 453)

### **Windows**

- [ec2-bundle-instance](#) (p. 55)
- [ec2-cancel-bundle-task](#) (p. 60)
- [ec2-describe-bundle-tasks](#) (p. 251)
- [ec2-get-password](#) (p. 479)

# ec2-allocate-address

## Description

For EC2 Elastic IP addresses: Acquires an Elastic IP address for use with your AWS account. For more information about EC2 Elastic IP addresses, see [Instance Addressing](#) in the *Amazon Elastic Compute Cloud User Guide*.

For VPC addresses: Acquires an Elastic IP address for use with your VPC. For information about VPC addresses and how they differ from EC2 addresses, see [Elastic IP Addresses](#) in the *Amazon Virtual Private Cloud User Guide*.

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

## Syntax

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

## Options

Name	Description	Required
<code>-d, --domain <i>domain</i></code>	Set to <code>vpc</code> to allocate the address for use with VPC instances. Type: String Default: Address is standard (allocated to EC2). Valid values: <code>vpc</code> Condition: Required when allocating an address for use with VPC instances. Example: <code>-d vpc</code>	Conditional

## Common Options

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

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token</code> TOKEN <i>AWS_DELEGATION_TOKEN</i>	<p>The AWS delegation token.</p> <p>Default: The value of the environment variable (if set).</p>
<code>--connection-timeout</code> <i>TIMEOUT</i>	<p>The connection timeout, in seconds.</p> <p>Example: <code>--connection-timeout 30</code></p>
<code>--request-timeout</code> <i>TIMEOUT</i>	<p>The request timeout, in seconds.</p> <p>Example: <code>--request-timeout 45</code></p>
<code>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

## 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 ADDRESS identifier
- The Elastic IP address for use with your account
- The address's domain (standard or vpc)
- The allocation ID (an ID that AWS assigns to represent the allocation of the address for use with Amazon VPC; returned only for VPC Elastic IP addresses)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example returns an EC2 Elastic IP address for use with the account.

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

### Example Request

This example returns a VPC Elastic IP address for use with your 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. 21)
- [ec2-describe-addresses](#) (p. 241)
- [ec2-disassociate-address](#) (p. 459)
- [ec2-release-address](#) (p. 542)

# ec2-assign-private-ip-addresses

## Description

Assigns one or more secondary private IP addresses to a network interface in Amazon VPC. You can specify one or more specific secondary IP addresses that you want to assign, or you can specify a 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 on Amazon EC2 instance types, see [Available Instance Types](#) in the *Amazon Elastic Compute Cloud User Guide*. For more information about Elastic IP addresses for Amazon VPC, see [Elastic IP Addresses](#) in the *Amazon Virtual Private Cloud User Guide*.

This command is only available in Amazon VPC.

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

## Syntax

```
ec2-assign-private-ip-addresses --network-interface NetworkInterface
{[--secondary-private-ip-address-count COUNT] | [--secondary-private-ip-address
IP Address]}
```

## Options

Name	Description	Required
-n, --network-interface <i>interface_id</i>	The network interface to associate with the IP address. Type: String Default: None Example: -n eni-bc7299d4	Yes
<del>--secondary-private-ip-address</del> <i>IP_ADDRESS</i>	Assigns the specified IP address as a secondary private IP address to the network interface. This option can be used multiple times to assign multiple secondary IP addresses. You can do one of the following: <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> You cannot specify this parameter when also specifying <code>--secondary-private-ip-address-count</code> Type: String Default: None Example: <code>--secondary-private-ip-address 10.0.2.18</code> <code>--secondary-private-ip-address 10.0.2.28</code>	Conditional

Name	Description	Required
<del>--secondary-private-ip-address-count</del> <i>COUNT</i>	The number of secondary IP addresses to assign to the network interface. You cannot specify this parameter when also specifying <code>--secondary-private-ip-address</code> . Type: Integer Default: None Example: <code>--secondary-private-ip-address-count 2</code>	Conditional
<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: False	No

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
-T, --security-token TOKEN <i>AWS_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: <code>--connection-timeout 30</code>
--request-timeout <i>TIMEOUT</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
-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.
-?, --help, -h	Displays usage information for the command.
-	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>

## 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

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 Request

This example 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 Request

This example assigns two secondary private IP addresses to the network interface `eni-c08a35a9`. The IP addresses are automatically assigned 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 Request

This example 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

- [UnAssignPrivateIpAddresses](#)

## ec2-associate-address

### Description

This action applies to both Amazon EC2 Elastic IP addresses and Amazon VPC Elastic IP addresses.

For Amazon EC2 addresses: Associates an Elastic IP address with an instance in your AWS account. If the IP address is currently assigned to another instance, the IP address is assigned to the new instance. For more information about EC2 Elastic IP addresses, see [Instance Addressing](#) in the *Amazon Elastic Compute Cloud User Guide*.

For Amazon VPC addresses: This action associates a VPC Elastic IP address with a primary or secondary private IP address of an instance or a network interface in your VPC. If the Elastic IP address is currently assigned to another instance or a network interface, Amazon EC2 returns an error unless you specify the `--allow-reassociation` option.

If you do not specify a private IP address, the Elastic IP address is associated with the primary IP address.

For information about VPC addresses and how they differ from EC2 addresses, see [Elastic IP Addresses](#) in the *Amazon Virtual Private Cloud User Guide*.

This is an idempotent operation. If you enter it more than once, Amazon EC2 does not return an error.

The short version of this command is `ec2assocaddr`.

### Syntax

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

### Options

Name	Description	Required
<code>-i, --instance <i>instance_id</i></code>	The instance to associate with the IP address. Type: String Default: None Condition: Required for Amazon EC2 instances. For Amazon VPC, you can specify either an instance ID or a network interface, but not both. Example: <code>-i i-43a4412a</code>	Conditional
<code><i>ip_address</i></code>	EC2 Elastic IP address to assign to the instance. Type: String Default: None Condition: Required for EC2 Elastic IP addresses. Example: <code>192.0.2.1</code>	Conditional

Name	Description	Required
<code>-a, --allocation-id</code> <i>allocation_id</i>	The allocation ID that AWS returned when you allocated the Elastic IP address to your VPC. Type: String Default: None Condition: Required for VPC Elastic IP addresses. Example: <code>-a eipalloc-5723d13e</code>	Conditional
<code>-n, --network-interface</code> <i>interface_id</i>	The interface to associate with the IP address. This is only available in Amazon VPC. Type: String Default: None Condition: You must specify either an instance ID or a network interface, but not both. Example: <code>-n eni-bc7299d4</code>	Conditional
<code>-p, --private-ip-address</code> <i>private_IP_address</i>	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. This is only available in Amazon VPC. Type: String Default: None Example: <code>p 10.0.0.45</code>	Optional
<code>--allow-reassociation</code>	Specify this option to allow an Elastic IP address that is already associated with another network interface or instance to be re-associated with the specified instance or interface. If the Elastic IP address is associated, and this option is not specified, the operation fails. This is only available in Amazon VPC. Type: Boolean Default: False if not specified Example: <code>--allow-reassociation</code>	Optional

## Common Options

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

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	<p>The AWS delegation token.</p> <p>Default: The value of the environment variable (if set).</p>
<code>--connection-timeout</code> <code>TIMEOUT</code>	<p>The connection timeout, in seconds.</p> <p>Example: <code>--connection-timeout 30</code></p>
<code>--request-timeout</code> <code>TIMEOUT</code>	<p>The request timeout, in seconds.</p> <p>Example: <code>--request-timeout 45</code></p>
<code>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

## 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 ADDRESS identifier
- The Elastic IP address to assign to the instance
- The instance to which the IP address is assigned or network interface (in Amazon VPC)
- Association ID (returned only for Amazon VPC addresses)
- If specified, private IP address associated with the Elastic IP address (returned only for Amazon VPC addresses)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example associates an EC2 Elastic IP address with an instance.

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

### Example Request

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

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

### Example Request

This example associates a VPC Elastic IP address with a network interface in your VPC.

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

## Example Request

This example associates an Elastic IP address with a private IP address on 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 is currently associated with another instance or 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. 13)
- [ec2-describe-addresses](#) (p. 241)
- [ec2-disassociate-address](#) (p. 459)
- [ec2-release-address](#) (p. 542)

# 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. If you want, you can explicitly renew the lease using the operating system on the instance.

For more information about the supported DHCP options and using them with Amazon VPC, see [Using DHCP Options in Your VPC](#) 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	Required
<i>dhcp_options_id</i>	The ID of the DHCP options to associate with the VPC, or "default" if you don't want the VPC to use DHCP options. Type: String Default: None Example: dopt-7a8b9c2d	Yes
-c <i>vpc_id</i>	The ID of the VPC to associate the DHCP options with. Type: String Default: None Example: -c vpc-1a2b3c4d	Yes

## Common Options

Option	Description
--region <i>REGION</i>	Overrides the region specified by the EC2_URL environment variable and the URL specified by the -U option. Default: The value of the EC2_URL environment variable, or us-east-1 if EC2_URL isn't set. Example: --region eu-west-1

**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 value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>



## 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 DHCP options ID (or "default" if no DHCP options are associated with the VPC)
- The VPC ID

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

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

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

### Example Request

This example changes the VPC with ID vpc-1a2b3c4d to use no DHCP options.

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

## Related Topics

### Download

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

## Related Action

- [AssociateDhcpOptions](#)

## Related Commands

- [ec2-create-dhcp-options](#) (p. 84)
- [ec2-delete-dhcp-options](#) (p. 174)
- [ec2-describe-dhcp-options](#) (p. 264)

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

### Common Options

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

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

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

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example associates the route-table (with ID `rtb-6aa34603`) with the subnet with 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. 133)
- [ec2-delete-route-table](#) (p. 207)
- [ec2-describe-route-tables](#) (p. 368)
- [ec2-disassociate-route-table](#) (p. 463)

- [ec2-replace-route-table-association](#) (p. 557)

# 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](#).

### Note

For VPCs that existed before the 2011-01-01 API version: Before you can attach an Internet gateway, you must delete the legacy security group. For more information, see "Deleting the Legacy Security Group" in the [Security Groups](#) section of 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	Required
<i>internet_gateway_id</i>	The ID of the Internet gateway to attach. Type: String Default: None Example: igw-c3a643aa	Yes
<code>-c, --vpc <i>vpc_id</i></code>	The ID of the VPC. Type: String Default: None Example: -c vpc-d9a045b0	Yes

## Common Options

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

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token TOKEN AWS_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>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

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

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example attaches the Internet gateway with ID `igw-eaad4883` to the VPC with 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. 102)
- [ec2-delete-internet-gateway](#) (p. 185)
- [ec2-describe-internet-gateways](#) (p. 315)
- [ec2-detach-internet-gateway](#) (p. 443)

# 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** *NETWORKINTERFACE* **-i**, **--instance** *INSTANCE* **-d**, **--device-index** *DEVICEINDEX*

## Options

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

## Common Options

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

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	<p>The AWS delegation token.</p> <p>Default: The value of the environment variable (if set).</p>
<code>--connection-timeout</code> <code>TIMEOUT</code>	<p>The connection timeout, in seconds.</p> <p>Example: <code>--connection-timeout 30</code></p>
<code>--request-timeout</code> <code>TIMEOUT</code>	<p>The request timeout, in seconds.</p> <p>Example: <code>--request-timeout 45</code></p>
<code>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

## 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 the ID of the network interface that was attached.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example 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. 117)
- [ec2-delete-network-interface](#) (p. 198)
- [ec2-describe-network-interface-attribute](#) (p. 330)
- [ec2-describe-network-interfaces](#) (p. 334)
- [ec2-detach-network-interface](#) (p. 446)
- [ec2-modify-network-interface-attribute](#) (p. 515)
- [ec2-reset-network-interface-attribute](#) (p. 582)

# 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](#).

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

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

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 ATTACHMENT identifier
- The volume ID
- The instance ID
- The device name within Amazon EC2
- The attachment state (attaching, attached, detached, detaching, error)
- The time when the attachment was initiated

Amazon EC2 command line tools display errors using stderr.

## Examples

### Example Request

This example attaches volume `vol-4d826724` to instance `i-6058a509` and exposes it as `/dev/sdh`. For information on standard storage locations, see the [Amazon Elastic Compute Cloud User Guide](#).

```
PROMPT> ec2-attach-volume vol-4d826724 -i i-6058a509 -d /dev/sdh
ATTACHMENT vol-4d826724 i-6058a509 /dev/sdh attaching 2008-02-14T00:15:00+0000
```

## Related Topics

### Download

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

### Related Action

- [AttachVolume](#)

### Related Commands

- [ec2-create-volume](#) (p. 151)
- [ec2-delete-volume](#) (p. 223)
- [ec2-describe-volumes](#) (p. 421)
- [ec2-detach-volume](#) (p. 449)



## ec2-attach-vpn-gateway

### Description

Attaches a virtual private gateway to a VPC. For more information, see [Adding an IPsec 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 -p vpn_gateway_id -c vpc_id
```

### Options

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

### Common Options

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

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token TOKEN AWS_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>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

## 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 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 Request

This example attaches the virtual private gateway with ID `vgw-8db04f81` to the VPC with 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. 164)
- [ec2-describe-vpn-gateways](#) (p. 438)
- [ec2-detach-vpn-gateway](#) (p. 453)
- [ec2-create-vpc](#) (p. 155)

- [ec2-create-vpn-connection](#) (p. 159)

# ec2-authorize

## Description

Adds a rule to a security group. The rule can be for ingress traffic, or for egress traffic (only if this is a VPC security group). For information about VPC security groups and how they differ from EC2 security groups, see [Security Groups](#) in the *Amazon Virtual Private Cloud User Guide*.

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

For VPC security groups and ingress rules: This command either gives one or more CIDR IP address ranges permission to access a security group in your VPC, or it gives one or more other security groups (called the *source groups*) permission to access a security group in your VPC. The groups must all be in the same VPC.

For VPC security groups and egress rules: This command permits instances in a VPC security group to send traffic to either one or more destination CIDR IP address ranges, or to one or more destination security groups in the same VPC.

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 (i.e., 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.

Permission changes are propagated to instances within the security group as quickly as possible. However, a small delay might occur.

### Important

For EC2 security groups: You can have up to 100 rules per group.

For VPC security groups: You can have up to 50 rules total per group (covering both ingress and egress).

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	Required
<i>group</i>	<p>For EC2 groups: The name or ID of the security group to modify.</p> <p>For VPC groups: The ID of the security group to modify.</p> <p>The group must belong to your AWS account.</p> <p>Type: String</p> <p>Default: None</p> <p>Example: webserv</p>	Yes
<code>--egress</code>	<p>For VPC security groups: Designates the rule as an egress rule (i.e., controls traffic leaving the VPC security group).</p> <p>Default: If this option is not specified, the rule applies to ingress traffic for the specified security group.</p>	No
<code>-P, --protocol protocol</code>	<p>The IP protocol name or number (go to <a href="#">Protocol Numbers</a>). EC2 security groups can have rules only for TCP, UDP, and ICMP, whereas VPC security groups 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 security groups: <code>tcp   udp   icmp</code> or the corresponding protocol number (<code>6   17   1</code>).</p> <p>Default for EC2 groups: 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 VPC groups: <code>tcp   udp   icmp</code> or any protocol number (go to <a href="#">Protocol Numbers</a>). Use <code>all</code> to specify all protocols.</p> <p>Condition: Required for VPC security groups.</p> <p>Example: <code>-P udp</code></p>	Conditional
<code>-p port_range</code>	<p>For TCP or UDP: The range of ports to allow.</p> <p>Type: String</p> <p>Default: None</p> <p>Valid values: A single integer or a range (min-max). You can specify <code>-1</code> to mean all ports (i.e., port range 0-65535).</p> <p>Condition: 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>	Conditional

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

Name	Description	Required
<code>-t icmp_type_code</code>	<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 Default: None Condition: Required if specifying <code>icmp</code> (or the equivalent number) for the protocol. Example: <code>-t -1:-1</code></p>	Conditional
<code>-u, source_or_dest_group_owner</code>	<p>The ID of the AWS account that owns the source security group. If the group is in your own account, set this to your own AWS account ID. Cannot be used when specifying a CIDR IP address.</p> <p>Type: String Default: None Condition: For EC2 security groups only. Required when adding a rule that gives access to one or more source security groups. Example: <code>-u 111122223333</code></p>	Conditional
<code>-o source_or_dest_group</code>	<p>The source security group (for ingress rules), or destination security group (for egress rules). When adding a rule for a VPC security group, you must specify the group's ID (for example, <code>sg-9d4e5f6g</code>) instead of its name. Cannot be used when specifying a CIDR IP address with the <code>-s</code> option.</p> <p>Type: String Default: None Condition: Required if giving access to one or more source or destination security groups. Example: <code>-o headoffice</code></p>	Conditional
<code>-s, --cidr source_or_dest_cidr</code>	<p>The CIDR range. Cannot be used when specifying a source or destination security group with the <code>-o</code> option.</p> <p>Type: String Default: <code>0.0.0.0/0</code> Constraints: Valid CIDR IP address range. Condition: Required if giving access to one or more IP address ranges. Example: <code>-s 205.192.8.45/24</code></p>	Conditional

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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, PERMISSION identifier
- The group name for EC2 security groups; group ID for VPC security groups
- The type of rule; currently, only ALLOW rules are supported
- The protocol to allow
- The start of port range
- The end of port range
- The source (for ingress rules) or destination (for egress rules)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

EC2 security groups: This example grants TCP port 80 access from the 192.0.2.0/24 address range to the EC2 security group called *websrv*.

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

## Example Request

EC2 security groups: This example grants TCP port 80 access from the EC2 source group called *OtherAccountGroup* (in AWS account 111122223333) to your EC2 security group called *webserv*.

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

## Example Request

VPC security groups: This example grants TCP port 80 access from the 192.0.2.0/24 address range to the VPC security group with ID *sg-eea7b782*.

```
PROMPT> ec2-authorize sg-eea7b782 -P tcp -p 80 -s 192.0.2.0/24
GROUP sg-eea7b782
PERMISSION ALLOWS tcp 80 80 FROM CIDR 192.0.2.0/24 ingress
```

## Example Request

VPC security groups: This example grants egress access from the VPC group *sg-eea7b782* to the VPC destination group *sg-80aebec* on TCP destination port 1433.

```
PROMPT> ec2-authorize --egress sg-eea7b782 -P tcp -p 1433 -o sg-80aebec
GROUP sg-eea7b782
PERMISSION ALLOWS tcp 1433 1433 TO USER ID sg-80aebec egress
```

## Related Topics

### Download

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

### Related Actions

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

### Related Commands

- [ec2-create-group](#) (p. 88)
- [ec2-delete-group](#) (p. 181)
- [ec2-describe-group](#) (p. 272)

- [ec2-revoke \(p. 594\)](#)

## 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	Required
<i>instance_id</i>	The ID of the instance to bundle. Type: String Default: None Example: i-5e73d509	Yes
-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 Example: -b myawsbucket	Yes
-p, --prefix <i>prefix</i>	The prefix for the image component names being stored in Amazon S3. Type: String Default: None Example: -p winami	Yes
-o, --owner-akid <i>access_key_id</i>	The Access Key ID of the owner of the Amazon S3 bucket. Type: String Default: None Example: -o AKIAIOSFODNN7EXAMPLE	Yes

**Amazon Elastic Compute Cloud CLI Reference  
Options**

Name	Description	Required
<code>-c, --policy <i>policy</i></code>	<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 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 Example: <code>-c upload-policy</code></p>	Conditional
<code>-s, --policy-signature <i>policy_signature</i></code>	<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 Example: <code>-s upload-policy</code></p>	Conditional
<code>-w, --owner-sak <i>owner_secret_access_key</i></code>	<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 EC2.</p> <p>Type: String Default: None Example: <code>-w wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code></p>	Conditional
<code>-x, --expires <i>hours</i></code>	<p>The validity period, in hours, for a generated upload policy.</p> <p>Type: String Default: 24 Example: <code>-x 8</code></p>	No
<code>--location <i>bucket_location</i></code>	<p>The location of the destination Amazon S3 bucket.</p> <p>Type: String Default: None Example: <code>--location my-bucket-location</code></p>	No

Name	Description	Required
-B, --no-bucket-setup	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: False Example: -B	No

## Common Options

Option	Description
--region <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option.  Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.  Example: <code>--region eu-west-1</code>
-U, --url <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point.  Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.  Example: <code>-U https://ec2.amazonaws.com</code>
-O, --aws-access-key <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
-W, --aws-secret-key <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account.  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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
-T, --security-token <i>TOKEN</i> <i>AWS_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: <code>--connection-timeout 30</code>
--request-timeout <i>TIMEOUT</i>	The request timeout, in seconds.  Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example bundles an 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. 60)
- [ec2-create-image](#) (p. 92)
- [ec2-describe-bundle-tasks](#) (p. 251)



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

## Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U</code> , <code>--url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O</code> , <code>--aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.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 Request

This example cancels the `bun-cla322b9` 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. 55)
- [ec2-describe-bundle-tasks](#) (p. 251)

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

## Common Options

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

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	<p>The AWS delegation token.</p> <p>Default: The value of the environment variable (if set).</p>
<code>--connection-timeout</code> <code>TIMEOUT</code>	<p>The connection timeout, in seconds.</p> <p>Example: <code>--connection-timeout 30</code></p>
<code>--request-timeout</code> <code>TIMEOUT</code>	<p>The request timeout, in seconds.</p> <p>Example: <code>--request-timeout 45</code></p>
<code>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

## 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 the status (success or failure) of the deletion.

Amazon EC2 command line tools display errors on stderr.

## Example

### Example Request

This example deletes the conversion identified by task 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. 177)
- [ec2-describe-conversion-tasks](#) (p. 256)
- [ec2-import-instance](#) (p. 483)

- [ec2-import-volume](#) (p. 494)
- [ec2-resume-import](#) (p. 590)

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

## Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U</code> , <code>--url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O</code> , <code>--aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .



Option	Description
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns the status (success or failure) of the cancellation.

Amazon EC2 command line tools display errors on stderr.

## Example

### Example Request

This example deletes the export identified by task 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. 98)
- [ec2-describe-export-tasks](#) (p. 269)

# ec2-cancel-reserved-instances-listing

## Description

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

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

## Syntax

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

## Options

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

## Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U</code> , <code>--url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O</code> , <code>--aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns a table that contains the following information:

- LISTING
- Reserved Instances Listing ID
- Reserved Instances ID
- Create date
- Update date
- State
- Status message

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example 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
PRICE-SCHEDULE 4 $1.2
PRICE-SCHEDULE 3 $1.2
PRICE-SCHEDULE 2 $1.2
PRICE-SCHEDULE 1 $1.2
```

## Related Operations

- [ec2-describe-reserved-instances-listings \(p. 355\)](#)

- [ec2-create-reserved-instances-listing](#) (p. 125)
- [ec2-describe-reserved-instances](#) (p. 349)

# 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	Required
<i>request_id</i>	The Spot Instance request ID. Type: String Default: None Example: sir-8456a32b	Yes

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

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

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example cancels a Spot Instance request.

```
PROMPT> ec2-cancel-spot-instance-requests sir-98c16c03 sir-c1920c03
SPOTINSTANCEREQUEST    sir-98c16c03    cancelled
SPOTINSTANCEREQUEST    sir-c1920c03    cancelled
```

## Related Topics

### Download

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

### Related Action

- `CancelSpotInstanceRequests`

### Related Commands

- `ec2-describe-spot-instance-requests` (p. 387)
- `ec2-describe-spot-price-history` (p. 395)
- `ec2-request-spot-instances` (p. 565)

## 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 an EC2 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	Required
<i>product_code</i>	The product code to confirm. This must be an Amazon DevPay product code that you own. Type: String Default: None Example: 774F4FF8	Yes
-i <i>instance_id</i>	The instance to confirm. Type: String Default: None Example: -i i-10a64379	Yes

### Common Options

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

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token</code> TOKEN <i>AWS_DELEGATION_TOKEN</i>	<p>The AWS delegation token.</p> <p>Default: The value of the environment variable (if set).</p>
<code>--connection-timeout</code> <i>TIMEOUT</i>	<p>The connection timeout, in seconds.</p> <p>Example: <code>--connection-timeout 30</code></p>
<code>--request-timeout</code> <i>TIMEOUT</i>	<p>The request timeout, in seconds.</p> <p>Example: <code>--request-timeout 45</code></p>
<code>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

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

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example determines whether the product code is associated with the 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. 301)
- [ec2-run-instances](#) (p. 600)

## 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 (compared to the virtual private gateway, which is the device at the AWS side of the VPN connection)

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 also provide the device's Border Gateway Protocol (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 US East, and 9059, which is reserved in EU West.

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

For more information about Amazon Virtual Private Cloud and VPN customer gateways, see [Adding an IPsec 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	Required
-t <i>type</i>	The type of VPN connection this customer gateway supports. Type: String Default: None Valid values: <code>ipsec.1</code> Example: <code>-t ipsec.1</code>	Yes
-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 Example: <code>-i 12.1.2.3</code>	Yes

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

## Common Options

Option	Description
<code>--region <i>REGION</i></code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url <i>URL</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key <i>AWS_ACCESS_KEY</i></code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key <i>AWS_SECRET_KEY</i></code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token <i>TOKEN</i></code> <code><i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example passes information to AWS about the customer gateway with IP address 12.1.2.3 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. 171)
- [ec2-describe-customer-gateways](#) (p. 259)



## ec2-create-dhcp-options

### Description

Creates a set of DHCP options for your VPC. After creating the new set, you must associate it with the VPC, causing all existing and new instances that you launch in the VPC to use the new 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	A domain name of your choice (for example, example.com).
domain-name-servers	The IP address of a domain name server. You can specify up to four addresses.
ntp-servers	The IP address of a Network Time Protocol (NTP) server. You can specify up to four addresses.
netbios-name-servers	The IP address of a NetBIOS name server. You can specify up to four addresses.
netbios-node-type	The NetBIOS node type (1, 2, 4, or 8). For more information about the values, see <a href="#">RFC 2132</a> . We recommend you only use 2 at this time (broadcast and multicast are currently not supported).

#### Important

Your VPC automatically starts out with a set of DHCP options that includes only a DNS server that we provide (AmazonProvidedDNS). If you create a new set of options, and if 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 Amazon Virtual Private Cloud and DHCP options, see [Using DHCP Options in Your VPC](#) 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	Required
<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 Example: "domain-name-servers=10.2.5.1,10.2.5.2"</p>	Yes

## Common Options

Option	Description
<code>--region REGION</code>	<p>Overrides 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 value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.</p> <p>Example: <code>--region eu-west-1</code></p>
<code>-U, --url URL</code>	<p>The uniform resource locator (URL) of the Amazon EC2 web service entry point.</p> <p>Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.</p> <p>Example: <code>-U https://ec2.amazonaws.com</code></p>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>

Option	Description
<code>-T, --security-token TOKEN</code> <i>AWS_DELEGATION_TOKEN</i>	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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 DHCP\_OPTIONS identifier
- The DHCP options ID
- The OPTION identifier
- Each option and its corresponding value in the set of options

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example creates a new 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  
DHCP_OPTIONS 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. 26)
- [ec2-delete-dhcp-options](#) (p. 174)
- [ec2-describe-dhcp-options](#) (p. 264)

## ec2-create-group

### Description

Creates a new security group. You can create either an EC2 security group (which works only with EC2), or a VPC security group (which works only with Amazon Virtual Private Cloud). The two types of groups have different capabilities. For information about VPC security groups and how the two types of groups differ, see [Security Groups](#) in the *Amazon Virtual Private Cloud User Guide*. For information about EC2 security groups, see [Using Security Groups](#) in the *Amazon Elastic Compute Cloud User Guide*.

When you create a security group, you give it a friendly name of your choice. You can have an EC2 security group with the same name as a VPC security group (each group has a unique security group ID separate from the name). Two EC2 groups can't have the same name, and two VPC groups can't have the same name.

If you don't specify a security group when you launch an instance, the instance is launched into the default security group. This group (and only this group) includes a default rule that gives the instances in the group unrestricted network access to each other. You have a default EC2 security group for instances you launch with EC2 (i.e., outside a VPC), and a default VPC security group for instances you launch in your VPC.

You can add or remove rules from your security groups (i.e., authorize or revoke permissions) using `ec2-authorize`, and `ec2-revoke` commands.

For more information about EC2 security groups, see [Security Groups](#) in the *Amazon Elastic Compute Cloud User Guide*.

#### Important

For EC2 security groups: You can have up to 500 groups.

For VPC security groups: You can have up to 50 groups per VPC.

The short version of this command is `ec2addgrp`.

### Syntax

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

### Options

Name	Description	Required
<i>group_name</i>	The name of the security group. Type: String Default: None Constraints: Accepts alphanumeric characters, spaces, dashes, and underscores. Example: webserv	Yes
<code>-d, --description</code> <i>description</i>	The description of the group. This is informational only. Type: String Default: None Constraints: Accepts alphanumeric characters, spaces, dashes, and underscores. Example: -d "Web Servers"	Yes

Name	Description	Required
<code>-c, --vpc vpc_id</code>	The ID of the VPC. Type: String Default: None Condition: Required for VPC security groups Example: <code>-c vpc-1a2b3c4d</code>	Conditional

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 AWS-assigned ID for the group
- The group name
- The group description

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

## Examples

### Example Request

This example creates the `webserv` security group.

```
PROMPT> ec2-create-group webserv -d "Web Servers"  
GROUP sg-4def22a5 webserv Web Servers
```

### Example Request

This example creates the `MyVPCGroup` security group in the VPC with ID `vpc-3325caf2`.

```
PROMPT> ec2-create-group MyVPCGroup -d 'Group in my VPC' -c vpc-3325caf2  
GROUP sg-0a42d66a MyVPCGroup Group in my VPC
```

## Related Topics

### Download

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

### Related Action

- [CreateSecurityGroup](#)

### Related Commands

- [ec2-authorize](#) (p. 48)
- [ec2-delete-group](#) (p. 181)
- [ec2-describe-group](#) (p. 272)
- [ec2-revoke](#) (p. 594)
- [ec2-run-instances](#) (p. 600)



## ec2-create-image

### Description

Creates an Amazon EBS-backed AMI from a running or stopped instance. For more information about Amazon EBS-backed AMIs, see [Storage for the Root Device](#).

#### Note

If you customized your instance with instance store volumes or 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.

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

## Amazon Elastic Compute Cloud CLI Reference Options

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Name	Description	Required
--no-reboot	<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: False Example: --no-reboot</p>	No

Name	Description	Required
<p>-b, --block-device-mapping <i>mapping</i></p>	<p>The block device mapping for the instance. This argument is passed in the form of <b>&lt;devicename&gt;=&lt;blockdevice&gt;</b>. 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>• none - Suppresses an existing mapping of the device from the AMI used to launch the instance. For example: <code>"/dev/sdc=none"</code>.</li> <li>• ephemeral[0..3] - An instance store volume to be mapped to the device. For example: <code>"/dev/sdc=ephemeral0"</code>.</li> <li>• [<i>snapshot-id</i>]:[<i>volume-size</i>]:[true false]:[standard io1[:<i>iops</i>]] - 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 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 Example: -b <code>"/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>	<p>No</p>

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 IMAGE identifier
- The ID of the newly registered AMI

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example creates an AMI from the `i-10a64379` 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. 301)
- [ec2-run-instances](#) (p. 600)
- [ec2-terminate-instances](#) (p. 619)

# 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	Required
<i>instance_id</i>	The ID of the instance to export.	Yes
-e, --target-environment <i>target_environment</i>	The target environment. VMware supports VMware 4 and 5. Citrix target Xen 6. Type: String Valid values: VMware   Citrix	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	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	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 grant WRITE and READ_ACL permissions to the vm-import-export@amazon.com AWS account. Type: String	Yes

Name	Description	Required
<code>-p, --prefix S3_prefix</code>	The prefix for the Amazon S3 key (object name) used for the exported file. Maximum length is 1000 bytes of UTF-8 character encoding. The final key is composed from this prefix (if supplied), the <code>export-task-id</code> , and other relevant parameters. Type: String Example: <code>my-export-, incoming/vm-export/</code>	No
<code>-d, --description description</code>	A free-form comment that is returned verbatim during subsequent calls to <code>ec2-describe-export-tasks</code> . Maximum length is 255 bytes. Type: String	No

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .



Option	Description
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 EXPORTTASK identifier.
- The export task ID.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example 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. 67)
- [ec2-describe-export-tasks](#) (p. 269)

# ec2-create-internet-gateway

## Description

Creates a new 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 does not have any options.

## Common Options

Option	Description
<code>--region REGION</code>	<p>Overrides 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 value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.</p> <p>Example: <code>--region eu-west-1</code></p>
<code>-U, --url URL</code>	<p>The uniform resource locator (URL) of the Amazon EC2 web service entry point.</p> <p>Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.</p> <p>Example: <code>-U https://ec2.amazonaws.com</code></p>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>

Option	Description
<code>-T, --security-token TOKEN</code> <i>AWS_DELEGATION_TOKEN</i>	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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 INTERNETGATEWAY identifier
- The ID of the Internet gateway

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example 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. 34)
- [ec2-delete-internet-gateway](#) (p. 185)
- [ec2-describe-internet-gateways](#) (p. 315)
- [ec2-detach-internet-gateway](#) (p. 443)

## ec2-create-keypair

### Description

Creates a new 2048-bit RSA key pair with the specified name. The public key is stored by Amazon EC2 and the private key is displayed on the console. 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.

#### Tip

The key pair returned to you works only in the region you're using when you create the key pair. To create a key pair that works in all regions, use [ec2-import-keypair](#) (p. 490).

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

### Syntax

`ec2-create-keypair` *key*

### Options

Name	Description	Required
<i>key</i>	A unique name for the key pair. Type: String Default: None Constraints: Accepts alphanumeric characters, spaces, dashes, and underscores. Example: mysecretkey	Yes

### Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

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

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example creates a key pair named gsg-keypair.

```
PROMPT> ec2-create-keypair gsg-keypair
KEYPAIR
gsg-keypair1f:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00
---- BEGIN RSA PRIVATE KEY ----
MIICiTCCAfICCD6m7oRw0uXOjANBgkqhkiG9w0BAQUFADCBiDELMAkGA1UEBhMC
VVMxCzAJBgNVBAsTaldBMRAwDgYDVQQHEwdTZWF0dGx1MQ8wDQYDVQQKEwZBbWF6
b24xFDASBgNVBAStC0lBTsBDb25zb2xlMRlWEAYDVQQDEw1UZXR0Q21sYWVxHmZAd
BgkqhkiG9w0BCQEWEG5vb25lQGFTYXpvbi5jb20wHhcNMTEwNDI1MjA0NTIxWhcN
MTIwNDI1MjA0NTIxWjCBiDELMAkGA1UEBhMCVVMxCzAJBgNVBAsTaldBMRAwDgYD
VQQHEwdTZWF0dGx1MQ8wDQYDVQQKEwZBbWF6b24xFDASBgNVBAStC0lBTsBDb25z
b2xlMRlWEAYDVQQDEw1UZXR0Q21sYWVxHmZAdBgkqhkiG9w0BCQEWEG5vb25lQGFT
YXpvbi5jb20wZ8wDQYJKoZIhvcNAQEBBQADgY0AMIGJAoGBAMaK0dn+a4GmWIWJ
21uUSfwfEvySWtC2XADZ4nB+BLYgVIk60CpiwsZ3G93vUEIO3IyNoH/f0wYK8m9T
rDHudUZg3qX4waLG5M43q7Wgc/MbQITxOUSQv7c7ugFFDzQGBzZswY6786m86gpE
Ibb3OhjZnczvQAaRHhd1QWIMm2nrAgMBAAEwDQYJKoZIhvcNAQEFBQADgYEAtCu4
nUhVVxYUntned9+h8Mg9q6q+auNKyExzyLwaxlAoo7TJHidbtS4J5iNmZgXL0Fkb
FFBjvSfpJlJ00zbhNYS5f6GuoEDmFJl0ZxBHjJnyp378OD8uTs7fLvJx79LjSTb
NYiytVbZPQUQ5Yaxu2jXnimvw3rrszlaEXAMPLE=
-----END RSA PRIVATE KEY-----
```



## Related Topics

### Download

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

### Related Action

- [CreateKeyPair](#)

### Related Commands

- [ec2-delete-keypair](#) (p. 188)
- [ec2-describe-keypairs](#) (p. 320)
- [ec2-run-instances](#) (p. 600)

## ec2-create-network-acl

### Description

Creates a network ACL in a VPC. Network ACLs provide an optional layer of security (on top of 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	Required
<code>vpc_id</code>	The ID of the VPC for the network ACL. Type: String Default: None Example: vpc-9ea045f7	Yes

### Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The NETWORKACL identifier
- The ACL ID
- The VPC ID the route table has been created in
- The ENTRY elements created by default

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example creates a new network ACL in the VPC with ID `vpc-11ad4878`. Notice that 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 Amazon VPC processes 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. 191)
- [ec2-describe-network-acls](#) (p. 324)
- [ec2-replace-network-acl-association](#) (p. 546)

## 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, Amazon VPC processes 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, etc.), and not number them one right after the other (for example, 101, 102, 103, etc.). This makes it easier to add a new 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 a new 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	Required
<i>acl_id</i>	The ID of the ACL for the entry. Type: String Default: None Example: acl-5fb85d36	Yes
-n, --rule-number <i>rule_number</i>	The rule number to assign to 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 Example: -n 100	Yes
--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.	No

Name	Description	Required
<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> ). Example: <code>-P 6</code>	Yes
<code>-r, --cidr cidr</code>	The CIDR range to allow or deny, in CIDR notation. Type: String Default: None Example: <code>-r 172.16.0.0/24</code>	Yes
<code>-p, --port-range port_range</code>	For TCP or UDP: The range of ports to allow. Type: String Default: None Valid values: A single integer or a range (min-max). You can specify <code>-1</code> to mean all ports (i.e. port range 0-65535). Condition: Required if specifying <code>tcp</code> or <code>udp</code> (or the equivalent number) for the protocol. Example: <code>-p 80-84</code>	Conditional
<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 Condition: Required if specifying <code>icmp</code> (or the equivalent number) for the protocol. Example: <code>-t -1:-1</code>	Conditional
<code>--allow</code>	Specifies that any traffic matching the rule is allowed. Condition: You must specify either <code>--allow</code> or <code>--deny</code> , but not both options.	Conditional
<code>--deny</code>	Specifies that any traffic matching the rule is denied. Condition: You must specify either <code>--allow</code> or <code>--deny</code> , but not both.	Conditional

## Common Options

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

**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 value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 ENTRY identifier

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example creates an entry with rule number 100 in the network ACL with ID acl-2cb85d45. The rule allows ingress traffic from anywhere (0.0.0.0/0) on UDP port 53 into the 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. 194)
- [ec2-describe-network-acls](#) (p. 324)
- [ec2-replace-network-acl-entry](#) (p. 549)

## ec2-create-network-interface

### Description

Creates a network interface in the specified subnet. This command is supported only in Amazon VPC.

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 COUNT][-g, --group GROUP] SUBNET
```

### Options

Name	Description	Required
-d, --description <i>DESCRIPTION</i>	Set the description of the network interface. Type: String Default: None Example: -d "My ENI"	No
--private-ip-address <i>IP_ADDRESS</i>	The primary private IP address of the network interface. If an IP address is not specified, one will be auto-assigned to the interface. Type: String Default: None Example: --private-ip-address 10.0.2.17	No
--secondary-private-ip-address <i>IP_ADDRESS</i>	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. You can do one of th following: <ul style="list-style-type: none"> <li>• Use the --secondary-private-ip-address option without a value and AWS will automatically assign a secondary private IP address within the subnet range.</li> <li>• Use the --secondary-private-ip-address option and provide a specific IP address that you want to assign.</li> </ul> <p>You cannot specify this parameter when also specifying --secondary-private-ip-address-count.</p> Type: String Default: None Example: --secondary-private-ip-address 10.0.2.18 --secondary-private-ip-address 10.0.2.28	No

Name	Description	Required
<code>--secondary-private-ip-address-count COUNT</code>	The number of secondary IP addresses to assign to the network interface. You cannot specify this parameter when also specifying <code>--secondary-private-ip-address</code> . Type: Integer Default: None Example: <code>--secondary-private-ip-address-count 2</code>	No
<code>-g, --group GROUP</code>	A security group to add to the network interface. You can use this option multiple times to add multiple groups. Type: String Default: None. If no security group is specified, the interface will become a member of the default security group. Example: <code>-g sg-bba1bcd7 -g sg-6d495601</code>	No

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-T, --security-token TOKEN</code> <i>AWS_DELEGATION_TOKEN</i>	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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example creates a network interface address 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
```

### Example Request

This example 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 will be automatically assigned.

```
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. 37)
- [ec2-delete-network-interface](#) (p. 198)
- [ec2-describe-network-interface-attribute](#) (p. 330)
- [ec2-describe-network-interfaces](#) (p. 334)

- [ec2-detach-network-interface](#) (p. 446)
- [ec2-modify-network-interface-attribute](#) (p. 515)
- [ec2-reset-network-interface-attribute](#) (p. 582)

## ec2-create-placement-group

### Description

Creates a placement group that you launch cluster instances into. You must give the group a name unique within the scope of your account. For more information about placement groups and cluster instances, see [Using 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	Required
<i>placement-group</i>	A name for the placement group. Type: String Default: None Example: XYZ-cluster	Yes
<code>-s <i>strategy</i></code>	The placement strategy. Type: String Valid values: <code>cluster</code> Default: <code>cluster</code> Example: <code>-s cluster</code>	No

### Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 PLACEMENTGROUP identifier
- The placement group name
- The placement group strategy

## Examples

### Example Request

This example creates the XYZ-cluster group.

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

## Related Topics

### Download

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

### Related Action

- [CreatePlacementGroup](#)

### Related Commands

- [ec2-delete-placement-group](#) (p. 201)
- [ec2-describe-placement-groups](#) (p. 341)

# ec2-create-reserved-instances-listing

## Description

Creates a new 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, go to [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	Required
<code>--reserved-instance</code> <i>RESERVED-INSTANCE</i>	The ID of the active Reserved Instance with which the instance you want to list is associated. Type: String Default: None	Yes
<code>--instance-count</code> <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	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	Yes

Name	Description	Required
<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, go to <a href="#">Ensuring Idempotency</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String Default: None	No

## Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <i>TOKEN</i> <i>AWS_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> <i>TIMEOUT</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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:

- Reserved Instances listing ID
- Reserved Instances ID
- Create date
- Update date
- Status

- Status message
- Instance count that is available, sold, cancelled, or pending
- Price schedule that lists the upfront price at which the instance is listed for each month of its remaining term

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example creates a Reserved Instance Marketplace listing from the existing Reserved Instance named *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:

```
PROMPT>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
PRICE-SCHEDULE 4 $1.2
PRICE-SCHEDULE 3 $1.2
PRICE-SCHEDULE 2 $1.2
PRICE-SCHEDULE 1 $1.2
```

## Related Operations

- [ec2-cancel-reserved-instances-listing](#) (p. 70)
- [ec2-describe-reserved-instances-listings](#) (p. 355)

## ec2-create-route

### Description

Creates a route in a route table within a VPC. The route's target can be either a 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,
--network-interface NETWORKINTERFACE}
```

### Options

Name	Description	Required
<i>route_table_id</i>	The ID of the route table for the route. Type: String Default: None Example: rtb-5da34634	Yes
-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 Example: -r 0.0.0.0/0	Yes
-g, --gateway <i>gateway_id</i>	The ID of a gateway in your VPC. Type: String Default: None Condition: You must provide one of the following: a gateway ID, instance ID, or a network interface ID. Example: -g igw-68a34601	Conditional

Name	Description	Required
<code>-i, --instance instance_id</code>	The ID of a NAT instance in your VPC. Type: String Default: None Condition: You must provide one of the following: a gateway ID, instance ID, or a network interface ID. Example: <code>-i i-a7c871e3</code>	Conditional
<code>-n, --network-interface NETWORKINTERFACE</code>	The network interface associated with the route. Type: String Default: None Condition: You must provide one of the following: a gateway ID, instance ID, or a network interface. Example: <code>-n eni-5b729933</code>	Conditional

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-T, --security-token TOKEN</code> <i>AWS_DELEGATION_TOKEN</i>	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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 ROUTE identifier
- The Internet gateway ID

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

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

## Related Topics

### Download

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

### Related Action

- [CreateRoute](#)

### Related Commands

- [ec2-delete-route](#) (p. 204)
- [ec2-describe-route-tables](#) (p. 368)
- [ec2-replace-route](#) (p. 553)

## ec2-create-route-table

### Description

Creates a route table within a VPC. After you create a new 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	Required
<i>vpc_id</i>	The ID of the VPC for the route table. Type: String Default: None Example: vpc-9ea045f7	Yes

### Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U</code> , <code>--url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O</code> , <code>--aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The ROUTETABLE identifier
- The route table ID
- The VPC ID
- Information about the local route included in every new route table

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example creates a new route table within 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. 30)
- [ec2-create-route](#) (p. 129)
- [ec2-delete-route-table](#) (p. 207)
- [ec2-describe-route-tables](#) (p. 368)
- [ec2-disassociate-route-table](#) (p. 463)
- [ec2-replace-route-table-association](#) (p. 557)

# 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. For more information about Amazon EBS, see [Amazon Elastic Block Store](#).

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

When taking a snapshot of a file system, we recommend unmounting it first. This ensures the file system metadata is in a consistent state, that the 'mounted indicator' is cleared, and that all applications using that file system are stopped and in a consistent state. Some file systems, such as xfs, can freeze and unfreeze activity so a snapshot can be made without unmounting.

For Linux/UNIX, enter the following command from the command line to unmount the volume.

```
umount -d device_name
```

For example:

```
umount -d /dev/sdh
```

For Windows, open Disk Management, right-click the volume to unmount, and select Change Drive Letter and Path. Then, select the mount point to remove and click Remove.

The short version of this command is **ec2addsnap**.

## Syntax

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

## Options

Name	Description	Required
<i>volume_id</i>	The ID of the Amazon EBS volume to take a snapshot of. Type: String Default: None Example: vol-4d826724	Yes
-d, --description <i>description</i>	The description of the Amazon EBS snapshot. Type: String Default: None Constraints: Up to 255 characters Example: -d "Daily backup"	No

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

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

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

## Examples

### Example Request

This example creates a snapshot of volume `vol-4d826724`.

```
PROMPT> ec2-create-snapshot vol-4d826724 --description "Daily Backup"  
SNAPSHOT snap-c070c5a9 vol-9539dcfc pending 2009-09-16T14:31:29+0000  
111122223333 1 Daily Backup
```

## Related Topics

### Download

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

### Related Action

- [CreateSnapshot](#)

### Related Commands

- [ec2-delete-snapshot](#) (p. 210)
- [ec2-describe-snapshots](#) (p. 378)



# 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	Required
<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. Example: <code>-b myawsbucket</code>	Yes
<code>-p, --prefix <i>bucket</i></code>	A prefix for the datafeed files. Type: String Default: None Example: <code>-p spotdata_</code>	No

## Common Options

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

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token</code> TOKEN <i>AWS_DELEGATION_TOKEN</i>	<p>The AWS delegation token.</p> <p>Default: The value of the environment variable (if set).</p>
<code>--connection-timeout</code> <i>TIMEOUT</i>	<p>The connection timeout, in seconds.</p> <p>Example: <code>--connection-timeout 30</code></p>
<code>--request-timeout</code> <i>TIMEOUT</i>	<p>The request timeout, in seconds.</p> <p>Example: <code>--request-timeout 45</code></p>
<code>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

## 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 SPOTDATAFEEDSUBSCRIPTION identifier
- The owner's AWS account ID
- The bucket name
- The prefix
- The state (Active, Inactive)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example 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. 213)
- [ec2-describe-spot-datafeed-subscription](#) (p. 384)

# ec2-create-subnet

## Description

Creates a subnet in an existing VPC. You can create up to 20 subnets in a VPC. 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. If you need more than 20 subnets, you can request more by going to <http://aws.amazon.com/contact-us/vpc-request/>.

When you create each subnet, you provide the VPC ID and the CIDR block you want for the subnet. Once 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

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

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	Required
-c <i>vpc_id</i>	The ID of the VPC for the subnet. Type: String Default: None Example: -c vpc-1a2b3c4d	Yes
-i <i>cidr</i>	The CIDR block for the subnet to cover. Type: String Default: None Example: -i 10.0.1.0/24	Yes
-z <i>zone</i>	The Availability Zone for the subnet. Type: String Default: AWS selects a zone for you (recommended). Example: -z us-east-1a	No

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 SUBNET identifier
- The subnet ID
- 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 Request

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

```
PROMPT> ec2-create-subnet -c vpc-1a2b3c4d -i 10.0.1.0/24  
SUBNET subnet-9d4a7b6c pending vpc-1a2b3c4d 10.0.1.0/24 250 us-east-  
1a
```

## Related Topics

### Download

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

### Related Action

- [CreateSubnet](#)

### Related Commands

- [ec2-delete-subnet](#) (p. 216)
- [ec2-describe-subnets](#) (p. 401)

## 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	Required
<i>resource_id</i>	The AWS-assigned ID of the resource you want to tag. You can specify multiple resources to assign the tags to. Type: String Default: None Example: ami-1a2b3c4d	Yes
--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: Maximum tag key length is 128 characters. Maximum tag value length is 256 characters. Tag keys and values are case sensitive and accept Unicode characters. Example: --tag "stack=Production"	Yes



## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 TAG identifier
- The resource type (*instance*, *image*, and so on.)
- The resource ID
- The tag key
- The tag value

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

## Examples

### Example Request

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

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

## Related Topics

### Download

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

### Related Action

- [CreateTags](#)

### Related Commands

- [ec2-delete-tags](#) (p. 219)
- [ec2-describe-tags](#) (p. 406)

# ec2-create-volume

## Description

Creates an Amazon EBS volume that can be attached to any Amazon EC2 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](#).

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

## Syntax

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

## Options

Name	Description	Required
<code>-s, --size <i>size</i></code>	The size of the volume, in GiBs. Type: String Valid values: 1-1024 Valid values: 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. Example: <code>-s 80</code>	Conditional
<code>--snapshot <i>snapshot</i></code>	The snapshot from which to create the new volume. Type: String Default: None Condition: Required if you are creating a volume from a snapshot. Example: <code>--snapshot snap-78a54011</code>	Conditional
<code>-z, --availability-zone <i>zone</i></code>	The Availability Zone in which to create the new volume. Type: String Default: None Example: <code>-z us-east-1a</code>	Yes
<code>-t, --type <i>type</i></code>	The volume type. Type: String Valid values: <code>standard   io1</code> Default: <code>standard</code> Example: <code>-t io1</code>	

Name	Description	Required
<code>-i, --iops <i>iops</i></code>	The number of I/O operations per second (IOPS) that the volume supports. Type: Integer Valid values: Range is 100 to 2000. Condition: Required when the volume type is <code>io1</code> ; not used with <code>standard</code> volumes. Default: None Example: <code>-iops 500</code>	Conditional

## Common Options

Option	Description
<code>--region <i>REGION</i></code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url <i>URL</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key <i>AWS_ACCESS_KEY</i></code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key <i>AWS_SECRET_KEY</i></code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token <i>TOKEN</i></code> <code><i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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, error)
- The time stamp when volume creation was initiated

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

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

```
PROMPT> ec2-create-volume --size 20 --availability-zone us-east-1a
VOLUME    vol-4d826724    20    us-east-1a    creating    2008-05-07T11:51:50+0000
          standard
```

## Related Topics

### Download

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

### Related Action

- [CreateVolume](#)

### Related Commands

- [ec2-attach-volume](#) (p. 40)
- [ec2-delete-volume](#) (p. 223)
- [ec2-describe-availability-zones](#) (p. 247)
- [ec2-describe-volumes](#) (p. 421)
- [ec2-detach-volume](#) (p. 449)

## 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 that includes only a default DNS server that we provide (AmazonProvidedDNS). For more information about Amazon Virtual Private Cloud and DHCP options, see [Using DHCP Options in Your VPC](#) 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	Required
<i>cidr</i>	The CIDR block for the VPC to cover Type: String Default: None Example: 10.0.0.0/16	Yes
<i>tenancy</i>	The supported tenancy of 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 will be launched as dedicated tenancy instances regardless of the tenancy assigned to the instance at launch. Setting the instance's tenancy attribute to <code>dedicated</code> specifies that your instance will run on single-tenant hardware. Type: String Default: default Valid values: <code>default</code>   <code>dedicated</code>	No



## Common Options

Option	Description
<code>--region REGION</code>	<p>Overrides 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 value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.</p> <p>Example: <code>--region eu-west-1</code></p>
<code>-U, --url URL</code>	<p>The uniform resource locator (URL) of the Amazon EC2 web service entry point.</p> <p>Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.</p> <p>Example: <code>-U https://ec2.amazonaws.com</code></p>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token TOKEN AWS_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>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>

Option	Description
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 VPC identifier
- The VPC ID
- 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 allowed tenancy of instances launched into the VPC.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example creates a VPC with 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 default
```

## Related Topics

### Download

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

### Related Action

- [CreateVpc](#)

### Related Commands

- [ec2-associate-dhcp-options](#) (p. 26)
- [ec2-create-dhcp-options](#) (p. 84)
- [ec2-delete-vpc](#) (p. 226)
- [ec2-describe-vpcs](#) (p. 427)

## 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 response 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 Amazon VPC API operation (`CreateVpnConnection`) returns only the native XML.

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

For more information about Amazon Virtual Private Cloud and VPN connections, see [Adding an IPsec 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	Required
<code>-t <i>type</i></code>	The type of VPN connection. Type: String Default: None Valid values: <code>ipsec.1</code> Example: <code>-t ipsec.1</code>	Yes
<code>--customer-gateway <i>customer_gateway_id</i></code>	The ID of the customer gateway. Type: String Default: None Example: <code>--customer-gateway cgw-b4dc3961</code>	Yes
<code>--vpn-gateway <i>vpn_gateway_id</i></code>	The ID of the virtual private gateway. Type: String Default: None Example: <code>--vpn-gateway vgw-8db04f81</code>	Yes

Name	Description	Required
<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 Default: None Valid values: <code>cisco-ios-isr</code>   <code>juniper-junos-j</code>   <code>juniper-screensos-6.2</code>   <code>juniper-screensos-6.1</code>   <code>generic</code>   <code>xml</code> Example: <code>--format cisco-ios-isr</code>	No
<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 Example: <code>--stylesheet c:\my_stylesheet.xml</code>	No
<code>--static-routes-only</code>	Indicates whether or not 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: False	No

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

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

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example creates a VPN connection between the virtual private gateway with ID `vgw-8db04f81` and the customer gateway with 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 displayed it here in the response. To see an example of the 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  
<Long customer gateway configuration data...>
```

## Related Topics

### Download

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

## Related Action

- [CreateVpnConnection](#)

## Related Commands

- [ec2-attach-vpn-gateway](#) (p. 44)
- [ec2-create-subnet](#) (p. 143)
- [ec2-create-vpc](#) (p. 155)
- [ec2-delete-vpn-connection](#) (p. 229)
- [ec2-describe-vpn-connections](#) (p. 432)



## ec2-create-vpn-gateway

### Description

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

For more information about Amazon Virtual Private Cloud and virtual private gateway, see [Adding an IPsec 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	Required
<code>-t <i>type</i></code>	The type of VPN connection this virtual private gateway supports. Type: String Default: None Valid values: <code>ipsec.1</code> Example: <code>-t ipsec.1</code>	Yes
<code>-z <i>availability_zone</i></code>	Deprecated. The command accepts and ignores this option. Type: String Default: None	No

### Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 VPNGATEWAY identifier
- The virtual private gateway ID
- The current state of the virtual private gateway (pending, available, deleting, deleted)
- The type of VPN connection the virtual private gateway supports
- 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 Request

This example 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. 44)
- [ec2-delete-vpn-gateway](#) (p. 235)
- [ec2-describe-vpn-gateways](#) (p. 438)
- [ec2-detach-vpn-gateway](#) (p. 453)

## ec2-create-vpn-connection-route

### Description

Creates a new 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.

This command is only available in Amazon VPC.

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	Required
<code>--vpn-connection</code> <i>VPN_Connection_ID</i>	The ID of the VPN connection. Type: String Default: None	Yes
<code>--cidr</code> <i>CIDR_BLOCK</i>	The CIDR block associated with the local subnet of the customer data center. Type: String Default: None	Yes

### Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example creates a static route to the VPN connection for the VPN connection 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-delete-customer-gateway

### Description

Deletes a VPN customer gateway. You must delete the VPN connection before deleting the customer gateway.

For more information about Amazon Virtual Private Cloud and VPN customer gateways, see [Adding an IPsec 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	Required
<i>customer_gateway_id</i>	The ID of the customer gateway. Type: String Default: None Example: cgw-b4dc3961	Yes

### Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .



Option	Description
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The CUSTOMERGATEWAY identifier
- The customer gateway ID

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example deletes the customer gateway with ID `cgw-b4dc3961`.

```
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. 80)
- [ec2-describe-customer-gateways](#) (p. 259)

# ec2-delete-dhcp-options

## Description

Deletes a set of DHCP options that you specify. Amazon VPC returns an error if the set of options you specify is currently associated with a VPC. You can disassociate the set of options by associating either a new set of options or the default options with the VPC.

For more information about Amazon Virtual Private Cloud and DHCP options sets, see [Using DHCP Options in Your VPC](#) 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	Required
<i>dhcp_options_id</i>	The ID of the DHCP options. Type: String Default: None Example: dopt-7a8b9c2d	Yes

## Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The DHCPOPTIONS identifier
- The DHCP options ID

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example deletes the set of DHCP options with ID `dopt-7a8b9c2d`.

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

## Related Topics

### Download

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

### Related Action

- [DeleteDhcpOptions](#)

### Related Commands

- [ec2-associate-dhcp-options](#) (p. 26)
- [ec2-create-dhcp-options](#) (p. 84)
- [ec2-describe-dhcp-options](#) (p. 264)

## ec2-delete-disk-image

### Description

Deletes a 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	Required
-t, --task <i>task_id</i>	The Task ID of the conversion task that is no longer active. Type: String Default: None Condition: Either the task ID or the URL to the manifest is required. Example: -t import-i-fh95npoc	Conditional
-u, --manifest-url <i>url</i>	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 Condition: Either the task ID or the URL to the manifest is required. Example: -u http://some-s3-location/mydisk-to-delete.vmdk	Conditional
-o, --owner-akid <i>owner_access_key_id</i>	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 Example: -o AKIAIOSFODNN7EXAMPLE	Yes

Name	Description	Required
<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 Example: <code>-w wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>	Yes
<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 Example: <code>--ignore-active-task</code>	No

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-T, --security-token TOKEN</code> <i>AWS_DELEGATION_TOKEN</i>	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>-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 our Query API.
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as (nil).
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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:



- Task ID

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

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

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

## Related Topics

### Download

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

### Related Commands

- [ec2-cancel-conversion-task](#) (p. 63)
- [ec2-import-instance](#) (p. 483)
- [ec2-import-volume](#) (p. 494)
- [ec2-resume-import](#) (p. 590)

# ec2-delete-group

## Description

Deletes a security group. This action applies to both EC2 security groups and VPC security groups. For information about VPC security groups and how they differ from EC2 security groups, see [Security Groups](#) in the *Amazon Virtual Private Cloud User Guide*.

### Note

If you attempt to delete a security group that contains instances, or attempt to delete a security group that is referenced by another security group, an error is returned. For example, if security group B has a rule that allows access from security group A, security group A cannot be deleted until the rule is removed.

The fault returned is `InvalidGroup.InUse` for EC2 security groups, or `DependencyViolation` for VPC security groups.

The short version of this command is `ec2delgrp`.

## Syntax

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

## Options

Name	Description	Required
<i>group_name</i>	The name of the EC2 security group. Type: String Default: None Condition: Either the group name or the group ID is required. Example: webserv	Conditional
<i>group_id</i>	The ID of the security group. Type: String Default: None Condition: Required for a VPC security group. For an EC2 security group, either the group name or the group ID is required. Example: sg-32fa9d3e	Conditional

## Common Options

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

**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 value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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:

- Boolean true or false

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example deletes the EC2 security group called *websrv*.

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

### Example Request

This example deletes the VPC security group with ID sg-43eeba92.

```
PROMPT> ec2-delete-group sg-43eeba92
RETURN true
```

## Related Topics

### Download

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

## Related Action

- [DeleteSecurityGroup](#)

## Related Commands

- [ec2-authorize](#) (p. 48)
- [ec2-create-group](#) (p. 88)
- [ec2-describe-group](#) (p. 272)
- [ec2-revoke](#) (p. 594)

## ec2-delete-internet-gateway

### Description

Deletes an Internet gateway from your AWS account. The gateway must not be attached to a 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 **ec2deligw**.

### Syntax

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

### Options

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

### Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Boolean true or false

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example deletes the Internet gateway with ID `igw-eaad4883`.

```
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. 34)
- [ec2-create-internet-gateway](#) (p. 102)
- [ec2-describe-internet-gateways](#) (p. 315)
- [ec2-detach-internet-gateway](#) (p. 443)



## 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	Required
<i>key_pair</i>	The name of the key pair. Type: String Default: None Example: primary_keypair	Yes

### Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.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 Request

This example deletes the `gsg-keypair` key pair.

```
PROMPT> ec2-delete-keypair gsg-keypair  
KEYPAIR gsg-keypair
```

## Related Topics

### Download

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

### Related Action

- [DeleteKeyPair](#)

### Related Commands

- [ec2-create-keypair](#) (p. 105)
- [ec2-describe-keypairs](#) (p. 320)

## ec2-delete-network-acl

### Description

Deletes a network ACL from a VPC. The ACL must not be 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	Required
<i>acl_id</i>	The ID of the network ACL. Type: String Default: None Example: acl-2cb85d45	Yes

### Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Boolean true or false

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example deletes the network ACL with ID `acl-2cb85d45`.

```
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. 109)
- [ec2-describe-network-acls](#) (p. 324)
- [ec2-replace-network-acl-association](#) (p. 546)

# ec2-delete-network-acl-entry

## Description

Deletes an ingress or egress entry (i.e., rule) from 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 **ec2delnae**.

## Syntax

```
ec2-delete-network-acl-entry acl_id -n rule_number [--egress]
```

## Options

Name	Description	Required
<i>acl_id</i>	The ID of the network ACL. Type: String Default: None Example: acl-5fb85d36	Yes
-n, --rule-number <i>rule_number</i>	The rule number for the entry to delete. Type: Number Default: None Example: 100	Yes
--egress	Indicates that the rule is an egress rule. Default: If not specified, the rule is an ingress rule.	No

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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:

- Boolean true or false

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example deletes the ingress entry with rule number 100 from the network ACL with ID `acl-2cb85d45`.

```
PROMPT> ec2-delete-network-acl-entry acl-2cb85d45 -n 100
RETURN true
```

### Example Request

This example deletes the egress entry with rule number 200 from the network ACL with 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. 112)
- [ec2-describe-network-acls](#) (p. 324)
- [ec2-replace-network-acl-entry](#) (p. 549)

# ec2-delete-network-interface

## Description

Deletes a network interface. Network interfaces must be detached from an instance before they can be deleted.

The short version of this command is **ec2delnic**.

## Syntax

`ec2-delete-network-interface` *NETWORKINTERFACE*

## Options

Name	Description	Required
<i>NETWORKINTERFACE</i>	The network interface ID. Type: String Default: None Example: eni-3a9f6553	Yes

## Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U</code> , <code>--url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O</code> , <code>--aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns the ID of the network interface that you deleted.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example 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. 37)
- [ec2-create-network-interface](#) (p. 117)
- [ec2-describe-network-interface-attribute](#) (p. 330)
- [ec2-describe-network-interfaces](#) (p. 334)
- [ec2-detach-network-interface](#) (p. 446)
- [ec2-modify-network-interface-attribute](#) (p. 515)
- [ec2-reset-network-interface-attribute](#) (p. 582)

# ec2-delete-placement-group

## Description

Deletes a placement group in your account. You must terminate all instances in a placement group before deleting it. For more information about placement groups and cluster instances, see [Using Cluster Instances](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is **ec2delgrp**.

`ec2-delete-placement-group` *placement-group*

## Options

Name	Description	Required
<i>placement-group</i>	The name of the placement group. Type: String Default: None Example: XYZ-cluster	Yes

## Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
-W, --aws-secret-key <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
-T, --security-token TOKEN <i>AWS_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: <code>--connection-timeout 30</code>
--request-timeout <i>TIMEOUT</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
-H, --headers	Includes column headers in the command output.
--show-empty-fields	Shows empty columns as <code>(nil)</code> .
--hide-tags	Omits tags for tagged resources.
--debug	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
-?, --help, -h	Displays usage information for the command.
-	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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.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 Request

This example deletes the XYZ-cluster placement group.

```
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. 122)
- [ec2-describe-placement-groups](#) (p. 341)



## ec2-delete-route

### Description

Deletes a route from 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 **ec2delrt**.

### Syntax

```
ec2-delete-route route_table_id -r cidr
```

### Options

Name	Description	Required
<i>route_table_id</i>	The ID of the route table. Type: String Default: None Example: rtb-5da34634	Yes
-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 Example: 0.0.0.0/0	Yes

### Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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:

- Boolean true or false

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example removes the route with destination CIDR 172.16.1.0/24 from the route table with ID `rtb-e4ad488d`.

```
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. 129)
- [ec2-describe-route-tables](#) (p. 368)
- [ec2-replace-route](#) (p. 553)

# ec2-delete-route-table

## Description

Deletes a route table from a VPC. The route table must not be associated with a subnet. 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	Required
<i>route_table_id</i>	The ID of the route table. Type: String Default: None Example: rtb-7aa34613	Yes

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Boolean true or false

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example deletes the route table with ID `rtb-7aa34613`.

```
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. 30)
- [ec2-create-route-table](#) (p. 133)
- [ec2-describe-route-tables](#) (p. 368)
- [ec2-disassociate-route-table](#) (p. 463)
- [ec2-replace-route-table-association](#) (p. 557)

# ec2-delete-snapshot

## Description

Deletes a snapshot of an Amazon EBS volume.

### 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 incrementally 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.

The short version of this command is `ec2delsnap`.

## Syntax

`ec2-delete-snapshot` *snapshot\_id*

## Options

Name	Description	Required
<i>snapshot_id</i>	The ID of the Amazon EBS snapshot. Type: String Default: None Example: snap-78a54011	Yes

## Common Options

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

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token TOKEN AWS_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>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

## 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 SNAPSHOT identifier
- The ID of the snapshot

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example deletes snapshot `snap-78a54011`.

```
PROMPT> ec2-delete-snapshot snap-78a54011  
SNAPSHOT snap-78a54011
```

## Related Topics

### Download

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

### Related Action

- [DeleteSnapshot](#)

### Related Commands

- [ec2-create-snapshot](#) (p. 136)
- [ec2-describe-snapshots](#) (p. 378)

# 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 does not have any options.

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-T, --security-token TOKEN</code> <i>AWS_DELEGATION_TOKEN</i>	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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 no output.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example 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. 140)
- [ec2-describe-spot-datafeed-subscription](#) (p. 384)

## ec2-delete-subnet

### Description

Deletes a subnet from a VPC. You must terminate all running instances in the subnet before deleting it, otherwise Amazon VPC returns an error.

The short version of this command is `ec2delsubnet`.

### Syntax

`ec2-delete-subnet` *subnet\_id*

### Options

Name	Description	Required
<i>subnet_id</i>	The ID of the subnet. Type: String Default: None Example: subnet-9d4a7b6c	Yes

### Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U</code> , <code>--url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O</code> , <code>--aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.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 Request

This example deletes the subnet with ID `subnet-9d4a7b6c`.

```
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. 143)
- [ec2-describe-subnets](#) (p. 401)

## ec2-delete-tags

### Description

Deletes a specific set of tags from a specific set of EC2 resources. This command is designed to follow the `ec2-describe-tags` command. First determine what tags a resource has, then call `ec2-delete-tags` with the resource ID and the specific tags you want to delete.

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	Required
<i>resource_id</i>	The AWS-assigned identifier of the resource. You can specify more than one resource ID. Type: String Default: None Example: i-1a2b3c4d	Yes
<code>--tag <i>key</i></code> or <code><i>key</i>=<i>value</i></code>	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 Example: <code>--tag "stack=Production"</code>	Yes

### Common Options

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



Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 no output if the deletion is successful.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example deletes the tags for the AMI with ID `ami-1a2b3c4d`. You first get a list of the tags.

```
PROMPT> ec2-describe-tags --filter "resource-id=ami-1a2b3c4d"  
TAG ami-1a2b3c4d image webserver  
TAG ami-1a2b3c4d image stack Production
```

Then you delete the tags. Specifying the value for the `stack` tag is optional.

```
PROMPT> ec2-delete-tags ami-1a2b3c4d --tag webserver --tag "stack=Production"
```

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 Request

This example deletes the `stack` tag from two particular instances.

```
PROMPT> ec2-delete-tags i-5f4e3d2a i-12345678 --tag stack
```

## Example Request

You can specify a tag key without a corresponding tag value if you want to delete the tag regardless of its value. This example deletes all tags for the specified resources where key=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. 147)
- [ec2-describe-tags](#) (p. 406)

# ec2-delete-volume

## Description

Deletes an 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	Required
<i>volume_id</i>	The ID of the volume. Type: String Default: None Example: vol-4282672b	Yes

## Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U</code> , <code>--url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O</code> , <code>--aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The VOLUME identifier
- The ID of the volume

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example deletes volume `vol-4282672b`.

```
PROMPT> ec2-delete-volume vol-4282672b
VOLUME vol-4282672b
```

## Related Topics

### Download

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

### Related Action

- [DeleteVolume](#)

### Related Commands

- [ec2-attach-volume](#) (p. 40)
- [ec2-create-volume](#) (p. 151)
- [ec2-describe-volumes](#) (p. 421)
- [ec2-detach-volume](#) (p. 449)

## ec2-delete-vpc

### Description

Deletes a VPC. You must detach or delete all gateways or other objects that are dependent on the VPC first. For example, you must terminate all running instances, delete all VPC security groups (except the default), delete all route tables (except the default), and so on.

The short version of this command is **ec2delvpc**.

### Syntax

`ec2-delete-vpc` *vpc\_id*

### Options

Name	Description	Required
<i>vpc_id</i>	The ID of the VPC. Type: String Default: None Example: vpc-1a2b3c4d	Yes

### Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.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 Request

This example deletes the VPC with ID `vpc-1a2b3c4d`.

```
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. 155)
- [ec2-describe-vpcs](#) (p. 427)

# ec2-delete-vpn-connection

## Description

Deletes a VPN connection. Use this command to delete a VPC and its associated components. Another reason to use this command 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.

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.

For more information about Amazon Virtual Private Cloud and VPN connections, see [Adding an IPsec 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	Required
<i>vpn_connection_id</i>	The ID of the VPN connection. Type: String Default: None Example: vpn-44a8938f	Yes

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 VPNCONNECTION identifier
- The ID of the VPN connection

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example deletes the VPN connection with ID `vpn-44a8938f`.

```
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. 159)
- [ec2-delete-vpc](#) (p. 226)
- [ec2-describe-vpn-connections](#) (p. 432)
- [ec2-detach-vpn-gateway](#) (p. 453)

## ec2-delete-vpn-connection-route

### Description

Deletes an existing 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.

This command is only available in Amazon VPC.

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	Required
<code>--vpn-connection</code> <i>VPN_Connection_ID</i>	The ID of the VPN connection. Type: String Default: None	Yes
<code>--cidr</code> <i>CIDR_BLOCK</i>	The CIDR block associated with the local subnet of the customer data center. Type: String Default: None	Yes

### Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

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

```
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 a virtual private gateway. Use this command to delete a VPC and its associated components because you no longer need them. 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 just want to delete and recreate the VPN connection between your VPC and data center.

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

The short version of this command is **ec2delvgw**.

### Syntax

```
ec2-delete-vpn-gateway vpn_gateway_id
```

### Options

Name	Description	Required
<i>vpn_gateway_id</i>	The ID of the virtual private gateway. Type: String Default: None Example: vgw-8db04f81	Yes

### Common Options

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



## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token TOKEN AWS_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>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

## 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 VPNGATEWAY identifier
- The ID of the virtual private gateway

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example deletes the virtual private gateway with ID `vgw-8db04f81`.

```
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. 164)
- [ec2-delete-vpn-connection](#) (p. 229)
- [ec2-describe-vpn-gateways](#) (p. 438)

## 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.

The short version of this command is **ec2dereg**.

### Syntax

`ec2-deregister` *ami\_id*

### Options

Name	Description	Required
<i>ami_id</i>	The ID of the AMI. Type: String Default: None Example: ami-4fa54026	Yes

### Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.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 Request

This example deregisters the `ami-4fa54026` AMI.

```
PROMPT> ec2-deregister ami-4fa54026
IMAGE ami-4fa54026
```

## Related Topics

### Download

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

### Related Action

- [DeregisterImage](#)

### Related Commands

- [ec2-describe-images](#) (p. 282)
- [ec2-register](#) (p. 536)

# ec2-describe-addresses

## Description

Describes one or more of your Elastic IP addresses. This includes both EC2 and VPC Elastic IP addresses. For information about VPC addresses and how they differ from EC2 addresses, see [Elastic IP Addresses](#) in the *Amazon Virtual Private 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	Required
<i>public_ip</i>	One or more EC2 Elastic IP addresses. Type: String Default: Describes all your addresses. Example: 198.51.100.1	No
<i>allocation_id</i>	One or more VPC Elastic IP addresses. Type: String Default: Describes all your addresses. Example: eipalloc-9558a4fc	No
-F, --filter <i>name=value</i>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your addresses, or only those you specified by ID. Example: --filter "instance-id=i-1a2b3c4d"	No

## 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 table lists the available filters.

Filter Name	Description
<code>domain</code>	Indicates whether the address is a EC2 address, or a VPC address. Type: String Valid values: <code>standard</code>   <code>vpc</code>
<code>instance-id</code>	The instance the address is associated with (if any). Type: String
<code>public-ip</code>	The Elastic IP address. Type: String
<code>allocation-id</code>	The allocation ID for the address (VPC addresses only). Type: String
<code>association-id</code>	The association ID for the address (VPC addresses only). Type: String
<code>network-interface-id</code>	The network interface (if any) that the address is associated with. (for VPC addresses only). Type: String
<code>network-interface-owner-id</code>	The owner IID.
<code>private-ip-address</code>	The private IP address associated with the Elastic IP address (for VPC addresses only). Type: String

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 ADDRESS identifier
- The Elastic IP address
- The instance ID to which the IP address is assigned
- The domain of the address (standard or vpc)
- The allocation ID (for VPC addresses only)
- The association ID (for VPC addresses only)
- The private IP address associated with the Elastic IP address (for VPC only)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example describes the EC2 address 192.0.2.1, which is assigned to instance i-f15ebb98.

```
PROMPT> ec2-describe-addresses 192.0.2.1
ADDRESS 192.0.2.1 i-f15ebb98 standard
```

### Example Request

This example describes the VPC address with allocation ID eipalloc-282d9641, which is assigned to instance i-7a00642e.

```
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 Request

This example describes all your Elastic IP addresses (both EC2 and VPC).

```
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 Request

This example describes only your VPC Elastic IP addresses.

```
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-73e05ala    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 Request

This example describes VPC addresses associated with a particular private IP address.

```
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. 13)

- [ec2-associate-address](#) (p. 21)
- [ec2-disassociate-address](#) (p. 459)
- [ec2-release-address](#) (p. 542)

# ec2-describe-availability-zones

## Description

Describes one or more of the Availability Zones that are available to you. The results include zones only for the region you're currently using.

### 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	Required
<i>zone_name</i>	One or more Availability Zone names. Type: String Default: Describes all zones in the region. Example: <code>us-east-1a</code>	No
<code>-F, --filter <i>name=value</i></code>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value</code> "). Type: String Default: Describes all zones in the region, or only those you specified by name. Example: <code>--filter "region-name=ap-southeast-1"</code>	No

## 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 table lists the available filters.

Filter Name	Description
message	Information about the Availability Zone. Type: String
region-name	The region the Availability Zone is in (for example, us-east-1). Type: String
state	The state of the Availability Zone Type: String Valid values: available
zone-name	The name of the zone. Type: String

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The AVAILABILITYZONE identifier
- The name of the Availability Zone
- The state of the zone

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example displays information about Availability Zones that are available to the account. The response includes zones only for the region you're currently using.

```
PROMPT> ec2-describe-availability-zones  
AVAILABILITYZONE us-east-1a available  
AVAILABILITYZONE us-east-1b available  
AVAILABILITYZONE us-east-1c available  
AVAILABILITYZONE us-east-1d available
```

## Related Topics

### Download

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

### Related Action

- [DescribeAvailabilityZones](#)

### Related Commands

- [ec2-describe-regions](#) (p. 345)
- [ec2-run-instances](#) (p. 600)

# 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	Required
<i>bundle</i>	The IDs of one or more bundle tasks. Type: String Default: Describes all your bundle tasks. Example: bun-cla432a3	No
<code>-F, --filter <i>name=value</i></code>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value</i> "). Type: String Default: Describes all your bundle tasks, or only those you specified by ID. Example: <code>--filter "state=pending"</code>	No

## 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 table lists the available filters.

Filter Name	Description
<code>bundle-id</code>	The ID of the bundle task. Type: String
<code>error-code</code>	If the task failed, the error code returned. Type: String
<code>error-message</code>	If the task failed, the error message returned. Type: String
<code>instance-id</code>	The ID of the instance that was bundled. Type: String
<code>progress</code>	The level of task completion, as a percentage (for example, 20%). Type: String
<code>s3-bucket</code>	The Amazon S3 bucket to store the AMI. Type: String
<code>s3-prefix</code>	The beginning of the AMI name. Type: String
<code>start-time</code>	The time the task started (for example, 2008-09-15T17:15:20.000Z). Type: DateTime
<code>state</code>	The state of the task. Type: String Valid values: <code>pending</code>   <code>waiting-for-shutdown</code>   <code>bundling</code>   <code>storing</code>   <code>cancelling</code>   <code>complete</code>   <code>failed</code>
<code>update-time</code>	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>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>

Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example describes the status of the bun-c1a540a8 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 Request

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 called `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. 55)
- [ec2-cancel-bundle-task](#) (p. 60)

# 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	Required
<i>task_id</i>	The IDs of one or more conversion tasks for the upload. Type: String Default: Describes all your conversion tasks. Example: import-i-ffvko9js	No
--show-transfer-details	Any additional details for uploading the disk image. The <code>ec2-upload-disk-image</code> command automatically returns this information. Type: None Default: None Example: --show-transfer-details	No

## Common Options

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

Option	Description
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token TOKEN AWS_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>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

## 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 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 Request

This example 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. 63)
- `ec2-delete-disk-image` (p. 177)
- `ec2-import-instance` (p. 483)
- `ec2-import-volume` (p. 494)
- `ec2-resume-import` (p. 590)

# ec2-describe-customer-gateways

## Description

Describes one or more of your customer gateways.

For more information about Amazon Virtual Private Cloud and VPN customer gateways, see [Adding an IPsec 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	Required
<i>customer_gateway_id</i>	One or more customer gateway IDs. Type: String Default: Describes all your customer gateways. Example: cgw-b4dc3961	No
<code>-F</code> , <code>--filter name=value</code>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your customer gateways, or only those you specified by ID. Example: <code>--filter "tag-key=Production"</code>	No

## 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 table lists the available filters.

Filter Name	Description
<code>bgp-asn</code>	The customer gateway's Border Gateway Protocol (BGP) Autonomous System Number (ASN). Type: String
<code>customer-gateway-id</code>	The ID of the customer gateway. Type: String
<code>ip-address</code>	The IP address of the customer gateway's Internet-routable external interface (for example, 12.1.2.3). Type: String
<code>state</code>	The state of the customer gateway. Type: String Valid values: <code>pending</code>   <code>available</code>   <code>deleting</code>   <code>deleted</code>
<code>type</code>	The type of customer gateway. Currently the only supported type is <code>ipsec.1</code> . Type: String Valid values: <code>ipsec.1</code>
<code>tag-key</code>	The key of a tag assigned to the resource. This filter is independent of the <code>tag-value</code> filter. For example, if you use both the filter " <code>tag-key=Purpose</code> " and the filter " <code>tag-value=X</code> ", you get any resources assigned both the tag key <code>Purpose</code> (regardless of what the tag's value is), and the tag value <code>X</code> (regardless of what the tag's key is). If you want to list only resources where <code>Purpose</code> is <code>X</code> , see the <code>tag:key</code> filter later in this table. For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String
<code>tag-value</code>	The value of a tag assigned to the resource. This filter is independent of the <code>tag-key</code> filter. Type: String
<code>tag:key</code>	Filters the response based on a specific tag/value combination. Example: To list just the resources that have been assigned tag <code>Purpose=X</code> , specify: <pre>--filter tag:Purpose=X</pre> Example: To list just resources that have been assigned tag <code>Purpose=X</code> OR <code>Purpose=Y</code> , specify: <pre>--filter tag:Purpose=X --filter tag:Purpose=Y</pre>

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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
- 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 Request

This example gives a description of the customer gateway with ID `cgw-b4dc3961`.

```
PROMPT> ec2-describe-customer-gateways cgw-b4dc3961
CUSTOMERGATEWAY cgw-b4dc3961 available ipsec.1 12.1.2.3 65534
```

## Example Request

This example uses filters to give a description of 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. 80)
- [ec2-delete-customer-gateway](#) (p. 171)

# ec2-describe-dhcp-options

## Description

Describes one or more of your sets of DHCP options.

For more information about Amazon Virtual Private Cloud and DHCP options sets, see [Using DHCP Options in Your VPC](#) 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	Required
<i>dhcp_options_id</i>	The IDs of one or more sets of DHCP options. Type: String Default: Describes all your sets of DHCP options. Example: dopt-7a8b9c2d	No
-F, --filter <i>name=value</i>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your DHCP options. Example: --filter "tag-key=Production"	No

## 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 table lists the available filters.

Filter Name	Description
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: <i>key</i> filter later in this table. For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . 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: <i>key</i>	Filters the response based on a specific tag/value combination. Example: To list just the resources that have been assigned tag Purpose=X, specify: <pre>--filter tag:Purpose=X</pre> Example: To list just resources that have been assigned tag Purpose=X OR Purpose=Y, specify: <pre>--filter tag:Purpose=X --filter tag:Purpose=Y</pre>

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example gives a description of the DHCP options set with ID `dopt-7a8b9c2d`.

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

### Example Request

This example uses filters to give a description of 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. 26)
- [ec2-create-dhcp-options](#) (p. 84)
- [ec2-delete-dhcp-options](#) (p. 174)

# 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 ... ] [--filter "name=value"] ...]
```

## Options

Name	Description	Required
<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.	No

## Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U</code> , <code>--url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O</code> , <code>--aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.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 Request

This example 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. 67)
- [ec2-create-instance-export-task](#) (p. 98)

## ec2-describe-group

### Description

Describes one or more of your security groups. This includes both EC2 security groups and VPC security groups. For information about how the two types of groups differ, see [Security Groups](#) 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	Required
<i>ec2_group_name_or_id</i> or <i>vpc_group_id</i>	For EC2 security groups: The name or ID of one or more security groups. For VPC security groups: The ID of one more security groups. Type: String Default: Describes all your security groups. Example: webserv	No
-F, --filter <i>name=value</i>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your security groups, or only those you specified by ID. Example: --filter "group-name=*webserver*"	No

### 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 table lists the available filters.

Filter Name	Description
<code>description</code>	The description of the security group. Type: String
<code>group-id</code>	The ID of the security group. Type: String
<code>group-name</code>	The name of the security group. Type: String
<code>ip-permission.cidr</code>	The CIDR range that has been granted the permission. Type: String
<code>ip-permission.from-port</code>	The start of port range for the TCP and UDP protocols, or an ICMP type number. Type: String
<code>ip-permission.group-name</code>	The name of security group that has been granted the permission. Type: String
<code>ip-permission.protocol</code>	The IP protocol for the permission. Type: String Valid values: <code>tcp</code>   <code>udp</code>   <code>icmp</code> or a protocol number
<code>ip-permission.to-port</code>	The end of port range for the TCP and UDP protocols, or an ICMP code. Type: String
<code>ip-permission.user-id</code>	The ID of an AWS account that has been granted the permission. Type: String
<code>owner-id</code>	The AWS account ID of the owner of the security group. Type: String

Filter Name	Description
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

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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
- The PERMISSION identifier
- The AWS account ID of the owner of the group



- The name of the group granting permission
- The type of rule. Currently, only ALLOW rules are supported
- The protocol to allow
- The start of port range
- The end of port range
- The source (for ingress rules) or destination (for egress rules)
- Any tags assigned to the security group

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example returns information about a specific EC2 security group called *StandardGroup*.

```
PROMPT> ec2-describe-group StandardGroup
GROUP      sg-1974436d      111122223333      StandardGroup      A standard EC2 group
PERMISSION 111122223333      StandardGroup      ALLOWS tcp          80          80
FROM       CIDR      102.11.43.32/32  ingress
```

### Example Request

This example returns information about a specific VPC security group with ID *sg-eea7b782*.

```
PROMPT> ec2-describe-group sg-eea7b782
GROUP      sg-eea7b782      111122223333      WebServerSG      web servers      vpc-
5266953b
PERMISSION 111122223333      WebServerSG      ALLOWS 6          80          80
FROM       CIDR      162.5.5.5/32    ingress
PERMISSION 111122223333      WebServerSG      ALLOWS 6          80          80
FROM       USER      111122223333      ID sg-78a9b914  ingress
PERMISSION 111122223333      WebServerSG      ALLOWS 6          443         443
FROM       USER      111122223333      ID sg-78a9b914  ingress
PERMISSION 111122223333      WebServerSG      ALLOWS all
TO         CIDR      0.0.0.0/0        egress
PERMISSION 111122223333      WebServerSG      ALLOWS 6          1433        1433
TO         USER      111122223333      ID sg-80aebec   egress
```

### Example Request

This example returns information about 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. 48)
- [ec2-create-group](#) (p. 88)
- [ec2-delete-group](#) (p. 181)
- [ec2-revoke](#) (p. 594)

# ec2-describe-image-attribute

## Description

Describes the specified attribute of an 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	Required
<i>ami_id</i>	The ID of the AMI. Type: String Default: None Example: ami-4fa54026	Yes
-l, --launch-permission	The launch permissions of the AMI. Type: String Default: None Example: -l	No
-p, --product-codes	The product codes associated with the AMI. Each product code contains both a product code and a type. Type: String Default: None Example: -p	No
-B, --block-device-mapping	The block device mapping associated with the AMI. Type: String Default: None Example: -B	No
--kernel	The ID of the kernel associated with the AMI. Type: String Default: None Example: --kernel	No
--ramdisk	The ID of the RAM disk associated with the AMI. Type: String Default: None Example: --ramdisk	No

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 attribute type identifier
- The ID of the AMI
- Information about the attribute

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example lists the launch permissions for the `ami-2bb65342` AMI

```
PROMPT> ec2-describe-image-attribute ami-2bb65342 -l
launchPermission ami-2bb65342 group all
launchPermission ami-2bb65342 userId 495219933132
```

## Example Request

This example lists the product code for the ami-3bb65342 AMI.

```
PROMPT> ec2-describe-image-attribute ami-2bb65342 -p  
productCodes ami-3bb65342 productCode [marketplace: a1b2c3d4e5f6g7h8i9j10k11]
```

## Example Request

This example describes the RAM disk for the ami-d5ed03bc AMI, with the `--show-empty-fields` option.

```
PROMPT> ec2-describe-image-attribute ami-d5ed03bc --ramdisk --show-empty-fields  
ramdisk ami-d5ed03bc (nil) ari-96c527ff
```

## Related Topics

### Download

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

### Related Action

- [DescribeImageAttribute](#)

### Related Commands

- [ec2-describe-images](#) (p. 282)
- [ec2-modify-image-attribute](#) (p. 505)
- [ec2-reset-image-attribute](#) (p. 575)

# ec2-describe-images

## Description

Describes one or more of the images available to you (AMIs, AKIs, and ARIs). 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 AMI granted launch permissions for the AMI to the <code>all</code> group. All AWS accounts have launch permissions for these AMIs.
explicit	The owner of the AMI granted launch permissions to a specific AWS account.
implicit	An AWS account has implicit launch permissions for all the AMIs it owns.

The list of AMIs returned can be modified by specifying AMI IDs, AMI owners, or AWS accounts with launch permissions. If no options are specified, Amazon EC2 returns all AMIs for which you have launch permissions.

If you specify one or more AMI IDs, only AMIs that have the specified IDs are returned. If you specify an invalid AMI ID, an error is returned. If you specify an AMI ID for which you do not have access, it is not included in the returned results.

If you specify one or more AMI owners, only AMIs 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 AMIs owned by Amazon, `aws-marketplace` for AMIs owned by AWS Marketplace, or `self` for AMIs that you own.

### Note

For an overview of the AWS Marketplace, go to <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 AMIs with launch permissions for those users are returned. You can specify account IDs (if you own the AMI(s)), `self` for AMIs for which you own or have explicit permissions, or `all` for public AMIs.

### 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	Required
<i>ami_id</i>	One or more AMI IDs. Type: String Default: Describes all AMIs available to you. Example: ami-78a54011	No
<code>-a, --all</code>	Describes all AMIs available to you. Type: String Default: None Example: -a	No
<code>-o, --owner owner</code>	Describes AMIs owned by the specified owner. Multiple owner options can be specified. The IDs <i>amazon</i> , <i>aws-marketplace</i> , and <i>self</i> can be used to include AMIs owned by Amazon, AMIs owned by AWS Marketplace, or AMIs owned by you, respectively. Type: String Default: None Valid values: <i>amazon</i>   <i>aws-marketplace</i>   <i>self</i>   AWS account ID   <i>all</i> Example: -o self	No
<code>-x, --executable-by user_id</code>	Describes AMIs for which the specified user ID has explicit launch permissions. The user ID can be an AWS account ID, <i>self</i> to return AMIs for which the sender of the request has explicit launch permissions, or <i>all</i> to return AMIs with public launch permissions. Type: String Default: None Valid values: <i>all</i>   <i>self</i>   AWS account ID Example: -x self	No
<code>-F, --filter name=value</code>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all AMIs available to you, or only those you specified. Example: --filter "tag-value=Production"	No

## 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 table lists the available filters.

Filter Name	Description
<code>architecture</code>	The image architecture. Type: String Valid values: <code>i386</code>   <code>x86_64</code>
<code>block-device-mapping.delete-on-termination</code>	Whether the Amazon EBS volume is deleted on instance termination. Type: Boolean
<code>block-device-mapping.device-name</code>	The device name (for example, <code>/dev/sdh</code> ) for the Amazon EBS volume. Type: String
<code>block-device-mapping.snapshot-id</code>	The ID of the snapshot used for the Amazon EBS volume. Type: String
<code>block-device-mapping.volume-size</code>	The volume size of the Amazon EBS volume, in GiB. Type: Integer
<code>block-device-mapping.volume-type</code>	The volume type of the Amazon EBS volume. Type: String Valid values: <code>standard</code>   <code>io1</code>
<code>description</code>	The description of the image (provided during image creation). Type: String
<code>image-id</code>	The ID of the image. Type: String
<code>image-type</code>	The image type. Type: String Valid values: <code>machine</code>   <code>kernel</code>   <code>ramdisk</code>
<code>is-public</code>	Whether the image is public. Type: Boolean

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

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<b>Filter Name</b>	<b>Description</b>
<code>kernel-id</code>	The kernel ID. Type: String
<code>manifest-location</code>	The location of the image manifest. Type: String
<code>name</code>	The name of the AMI (provided during image creation). Type: String
<code>owner-alias</code>	The AWS account alias (for example, <code>amazon</code> ). Type: String
<code>owner-id</code>	The AWS account ID of the image owner. Type: String
<code>platform</code>	The platform. To only list Windows-based AMIs, use <code>windows</code> . Otherwise, leave blank. Type: String Valid value: <code>windows</code>
<code>product-code</code>	The product code. Type: String
<code>product-code.type</code>	The type of the product code. Type: String Valid values: <code>devpay</code>   <code>marketplace</code>
<code>ramdisk-id</code>	The RAM disk ID. Type: String
<code>root-device-name</code>	The name of the root device volume (for example, <code>/dev/sda1</code> ). Type: String
<code>root-device-type</code>	The type of the root device volume. Type: String Valid values: <code>ebs</code>   <code>instance-store</code>
<code>state</code>	The state of the image. Type: String Valid values: <code>available</code>   <code>pending</code>   <code>failed</code>
<code>state-reason-code</code>	The reason code for the state change. Type: String
<code>state-reason-message</code>	The message for the state change. Type: String

Filter Name	Description
tag-key	<p>The key of a tag assigned to the resource. This filter is independent of the <code>tag-value</code> filter. For example, if you use both the filter <code>"tag-key=Purpose"</code> and the filter <code>"tag-value=X"</code>, you get any resources assigned both the tag key <code>Purpose</code> (regardless of what the tag's value is), and the tag value <code>X</code> (regardless of what the tag's key is). If you want to list only resources where <code>Purpose</code> is <code>X</code>, see the <code>tag:key</code> filter later in this table.</p> <p>For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>Type: String</p>
tag-value	<p>The value of a tag assigned to the resource. This filter is independent of the <code>tag-key</code> filter.</p> <p>Type: String</p>
tag: <i>key</i>	<p>Filters the response based on a specific tag/value combination.</p> <p>Example: To list just the resources that have been assigned tag <code>Purpose=X</code>, specify:</p> <pre>--filter tag:Purpose=X</pre> <p>Example: To list just resources that have been assigned tag <code>Purpose=X</code> OR <code>Purpose=Y</code>, specify:</p> <pre>--filter tag:Purpose=X --filter tag:Purpose=Y</pre>
virtualization-type	<p>The virtualization type.</p> <p>Type: String</p> <p>Valid values: <code>paravirtual</code>   <code>hvm</code></p>
hypervisor	<p>The hypervisor type.</p> <p>Type: String</p> <p>Valid values: <code>ovm</code>   <code>xen</code></p>

## Common Options

Option	Description
<code>--region REGION</code>	<p>Overrides 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 value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.</p> <p>Example: <code>--region eu-west-1</code></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 value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 IMAGE identifier
- The ID of the image
- The location of the manifest
- The ID of the AWS account that registered the image (or "amazon")
- The status of the image (available, pending, failed)
- 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)
- The type of root device (ebs or instance-store)
- The virtualization type (paravirtual or hvm)
- The BLOCKDEVICEMAPPING identifier (one for each Amazon EBS volume, if the AMI has a block device mapping), along with the device name, snapshot ID, and volume size
- Any tags assigned to the image
- The Hypervisor type (xen or ovm)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example describes the ami-be3adfd7 AMI.

```
PROMPT> ec2-describe-images ami-be3adfd7
IMAGE ami-78a54011 amazon/getting-started-with-ebs-boot amazon available
public i386 machine aki-a13667e4 ari-a33667e6 ebs paravirtual xen
BLOCKDEVICEMAPPING /dev/sda1 snap-8eaf78e6 15 standard
```

## Example Request

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-dd20c3b4 ec2-public-windows-images/Server2003r2-x86_64-Win-
v1.07.manifest.xml amazon available public x86_64 machine
windows instance-store hvm xen
IMAGE ami-0535d66c ec2-public-windows-images/SqlSvrStd2003r2-x86_64-Win-
v1.07.manifest.xml amazon available public x86_64 machine
windows instance-store hvm xen
...
```

## Example Request

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-987654321 089818748305/My MP Image 123456789101
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. 278)
- [ec2-describe-instances](#) (p. 301)

# 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-codes | --ramdisk | --root-device-name | --source-dest-check |
--user-data }
```

## Options

Name	Description	Required
<i>instance_id</i>	The instance ID. Type: String Example: i-43a4412a	Yes
-b, --block-device-mapping	The block device mapping for the instance. Type: String Example: -b	No
--disable-api-termination	Whether the instance can be terminated using the EC2 API. A value of <code>true</code> means you can't terminate the instance using the API (the instance is "locked"). A value of <code>false</code> means you can terminate the instance using the API (the instance is "unlocked"). Set this attribute to <code>true</code> to prevent the instance from being terminated using the EC2 API. Type: Boolean Example: --disable-api-termination	No
--ebs-optimized <i>Boolean</i>	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 Example: --ebs-optimized	No
-g, --group-id	The security groups the instance is in. Type: String Example: -g	No

**Amazon Elastic Compute Cloud CLI Reference  
Options**

Name	Description	Required
<code>-p, --product-codes</code>	The product codes associated with an instance. Each product code includes a product code and type. Type: String Example: <code>-p</code>	No
<del><code>--instance-initiated-shutdown-behavior</code></del>	Whether an instance stops or terminates when shutdown is initiated. Type: String Example: <code>--instance-initiated-shutdown-behavior</code>	No
<code>-t, --instance-type</code>	The instance type of the instance. Type: String Example: <code>-t</code>	No
<code>--kernel</code>	The ID of the kernel associated with the AMI. Type: String Example: <code>--kernel</code>	No
<code>--ramdisk</code>	The ID of the RAM disk associated with the AMI. Type: String Example: <code>--ramdisk</code>	No
<code>--root-device-name</code>	The name of the root device (for example, <code>/dev/sda1</code> ). Type: String Example: <code>--root-device-name</code>	No
<code>--source-dest-check</code>	Enables a Network Address Translation (NAT) instance in a VPC to perform NAT. The attribute controls whether source/destination checking is enabled on the instance. A value of <code>true</code> means checking is enabled, and <code>false</code> means checking is disabled. The value must be <code>false</code> for the 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 Example: <code>--source-dest-check</code>	No
<code>--user-data</code>	Any user data made available to the instance. Type: String Example: <code>--user-data</code>	No



## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 attribute type identifier
- The ID of the instance
- The attribute or attribute list item value
- The BLOCKDEVICE identifier (one for each Amazon EBS volume, if the instance has a block device mapping), along with the device name, volume ID, and timestamp

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example lists the kernel ID of the `i-10a64379` instance.

```
PROMPT> ec2-describe-instance-attribute i-10a64379 --kernel  
kernel i-10a64379 aki-f70657b2
```

## Related Topics

### Download

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

### Related Action

- [DescribeInstanceAttribute](#)

### Related Commands

- [ec2-describe-instances](#) (p. 301)
- [ec2-modify-instance-attribute](#) (p. 510)
- [ec2-reset-instance-attribute](#) (p. 578)

# ec2-describe-instance-status

## Description

Describes the status of an Amazon EC2 instance. 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 the 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 instance's status will return 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.
- Scheduled System Maintenance: When Amazon EC2 determines that an instance requires maintenance which requires power or network impact, the instance's status will return an event code called `system-maintenance`. System-maintenance is either network maintenance or power maintenance. For network maintenance, your instance will experience a brief loss of network connectivity. For power maintenance, your instance will be unavailable for a brief period and then rebooted. 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 will return 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.

When your instance is retired, it is either 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 aren't automatically 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	Required
<code>instance_id</code>	One or more instance IDs. Type: String Default: Describes all your instances. Constraints: Maximum 100 explicitly specified instance IDs. Example: i-15a4417c	No
<code>-I, --hide-healthy</code>	Hide instances where all status checks pass.	No
<code>-A, --include-all-instances</code>	Describes all running and non-running instances.	No
<code>-F, --filter name=value</code>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your instances, or only those you specified by ID. Example: --filter "system-status.status=impaired"	No

## 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 table lists the available filters.

Filter Name	Description
<code>availability-zone</code>	The Availability Zone of the instance. Type: String

**Amazon Elastic Compute Cloud CLI Reference  
Options**

<b>Filter Name</b>	<b>Description</b>
<code>event.code</code>	The code identifying the type of event. Type: String Valid values: <code>instance-reboot</code>   <code>system-reboot</code>   <code>system-maintenance</code>   <code>instance-retirement</code>
<code>event.description</code>	A description of the event. Type: String
<code>event.not-after</code>	The latest end time for the scheduled event. Type: DateTime
<code>event.not-before</code>	The earliest start time for the scheduled event. Type: DateTime
<code>instance-state-name</code>	The state of the instance. Type: String Valid values: <code>pending</code>   <code>running</code>   <code>shutting-down</code>   <code>terminated</code>   <code>stopping</code>   <code>stopped</code>
<code>instance-state-code</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)
<code>system-status.status</code>	The system status of the instance. Type: String Valid values: <code>ok</code>   <code>impaired</code>   <code>initializing</code>   <code>insufficient-data</code>   <code>not-applicable</code>
<code>system-status.reachability</code>	Filters on system status where the name is reachability. Type: String Valid values: <code>passed</code>   <code>failed</code>   <code>initializing</code>   <code>insufficient-data</code>
<code>instance-status.status</code>	The status of the instance. Type: String Valid values: <code>ok</code>   <code>impaired</code>   <code>initializing</code>   <code>insufficient-data</code>   <code>not-applicable</code>
<code>instance-status.reachability</code>	Filters on instance status where the name is reachability. Type: String Valid values: <code>passed</code>   <code>failed</code>   <code>initializing</code>   <code>insufficient-data</code>

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 for each running instance
- The Availability Zone of each instance
- The state of the instance
- The instance state code
- The system status
- The instance status

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example describes the current state of the instances owned by your AWS account.



```
PROMPT> ec2-describe-instance-status

INSTANCE      i-6d9eaa0c    us-east-1d    running 16    running ok
  active
SYSTEMSTATUS  reachability  passed
INSTANCESTATUS reachability  passed
INSTANCE      i-bf1d7cdc    us-east-1d    running 16    running ok
  active
SYSTEMSTATUS  reachability  passed
INSTANCESTATUS reachability  passed
INSTANCE      i-bd1d7cde    us-east-1d    running 16    running ok
  active
SYSTEMSTATUS  reachability  passed
INSTANCESTATUS reachability  passed
INSTANCE      i-831d7ce0    us-east-1d    running 16    running ok
  retiring    2012-01-02T10:00:00+0000
SYSTEMSTATUS  reachability  passed
INSTANCESTATUS reachability  passed
EVENT  instance-stop  2012-01-02T10:00:00+0000    The instance
is running on degraded hardware
INSTANCE      i-6de0fb0e    us-east-1d    running 16    running ok
  retiring    2012-02-10T08:30:00+0000
SYSTEMSTATUS  reachability  passed
INSTANCESTATUS reachability  passed
EVENT  instance-retiring  2012-02-10T08:30:00+0000    The instance
is running on degraded hardware
INSTANCE      i-5cf7793e    us-east-1c    running 16    running ok
  retiring    2012-01-03T00:00:00+0000
SYSTEMSTATUS  reachability  passed
INSTANCESTATUS reachability  passed
EVENT  instance-stop  2012-01-03T00:00:00+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. 561)

# 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 invalid instance ID, an error is returned. If you specify an instance that you do not own, it will not be included in the returned results.

Recently terminated instances might appear in the returned results. 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	Required
<i>instance_id</i>	One or more instance IDs. Type: String Default: Describes all your instances. Example: i-15a4417c	No
-F, --filter <i>name=value</i>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your instances, or only those you specified by ID. Example: --filter "tag-key=Production"	No

## 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 table lists the available filters.

Filter Name	Description
<code>architecture</code>	The instance architecture. Type: String Valid values: <code>i386</code>   <code>x86_64</code>
<code>availability-zone</code>	The Availability Zone of the instance. Type: String
<code>block-device-mapping.attach-time</code>	The attach time for an Amazon EBS volume mapped to the instance (for example, <code>2010-09-15T17:15:20.000Z</code> ) Type: DateTime
<code>block-device-mapping.delete-on-termination</code>	Whether the Amazon EBS volume is deleted on instance termination. Type: Boolean
<code>block-device-mapping.device-name</code>	The device name (for example, <code>/dev/sdh</code> ) for the Amazon EBS volume. Type: String
<code>block-device-mapping.status</code>	The status for the Amazon EBS volume. Type: String Valid values: <code>attaching</code>   <code>attached</code>   <code>detaching</code>   <code>detached</code>
<code>block-device-mapping.volume-id</code>	The volume ID of the Amazon EBS volume. Type: String
<code>client-token</code>	The idempotency token you provided when you launched the instance. Type: String
<code>dns-name</code>	The public DNS name of the instance. Type: String
<code>group-id</code>	The ID of a EC2 security group the instance is in. This filter does not work for VPC security groups (instead, use <code>instance.group-id</code> ). Type: String
<code>group-name</code>	The name of a EC2 security group the instance is in. This filter does not work for VPC security groups (instead, use <code>instance.group-name</code> ). Type: String
<code>image-id</code>	The ID of the image used to launch the instance. Type: String

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

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<b>Filter Name</b>	<b>Description</b>
<code>instance-id</code>	The ID of the instance. Type: String
<code>instance-lifecycle</code>	Indicates whether this is a Spot Instance. Type: String Valid values: <code>spot</code>
<code>instance-state-code</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)
<code>instance-state-name</code>	The state of the instance. Type: String Valid values: <code>pending</code>   <code>running</code>   <code>shutting-down</code>   <code>terminated</code>   <code>stopping</code>   <code>stopped</code>
<code>instance-type</code>	The type of instance (for example, <code>m1.small</code> ). Type: String
<code>instance.group-id</code>	The ID of a VPC security group the instance is in. This filter does not work for EC2 security groups (instead, use <code>group-id</code> ). Type: String
<code>instance.group-name</code>	The name of a VPC security group the instance is in. This filter does not work for EC2 security groups (instead, use <code>group-name</code> ). Type: String
<code>ip-address</code>	The public IP address of the instance. Type: String
<code>kernel-id</code>	The kernel ID. Type: String
<code>key-name</code>	The name of the key pair used when the instance was launched. Type: String
<code>launch-index</code>	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

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

---

Filter Name	Description
launch-time	The time 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 the instance is in. 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

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

---

Filter Name	Description
<code>reservation-id</code>	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
<code>root-device-name</code>	The name of the root device for the instance (for example, <code>/dev/sda1</code> ). Type: String
<code>root-device-type</code>	The type of root device the instance uses. Type: String Valid values: <code>ebs</code>   <code>instance-store</code>
<code>source-dest-check</code>	Indicates whether the instance performs source/destination checking. A value of <code>true</code> means checking is enabled, and <code>false</code> means checking is disabled. The value must be <code>false</code> for the instance to perform Network Address Translation (NAT) in your VPC. Type: Boolean
<code>spot-instance-request-id</code>	The ID of the Spot Instance request. Type: String
<code>state-reason-code</code>	The reason code for the state change. Type: String
<code>state-reason-message</code>	A message that describes the state change. Type: String
<code>subnet-id</code>	The ID of the subnet the instance is in (if using Amazon Virtual Private Cloud). Type: String

Filter Name	Description
tag-key	<p>The key of a tag assigned to the resource. This filter is independent of the <code>tag-value</code> filter. For example, if you use both the filter <code>"tag-key=Purpose"</code> and the filter <code>"tag-value=X"</code>, you get any resources assigned both the tag key <code>Purpose</code> (regardless of what the tag's value is), and the tag value <code>X</code> (regardless of what the tag's key is). If you want to list only resources where <code>Purpose</code> is <code>X</code>, see the <code>tag:key</code> filter later in this table.</p> <p>For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>Type: String</p>
tag-value	<p>The value of a tag assigned to the resource. This filter is independent of the <code>tag-key</code> filter.</p> <p>Type: String</p>
tag: <i>key</i>	<p>Filters the response based on a specific tag/value combination.</p> <p>Example: To list just the resources that have been assigned tag <code>Purpose=X</code>, specify:</p> <pre>--filter tag:Purpose=X</pre> <p>Example: To list just resources that have been assigned tag <code>Purpose=X</code> OR <code>Purpose=Y</code>, specify:</p> <pre>--filter tag:Purpose=X --filter tag:Purpose=Y</pre>
virtualization-type	<p>The virtualization type of the instance.</p> <p>Type: String</p> <p>Valid values: <code>paravirtual</code>   <code>hvm</code></p>
vpc-id	<p>The ID of the VPC the instance is in (if using Amazon Virtual Private Cloud).</p> <p>Type: String</p>
hypervisor	<p>The hypervisor type of the instance.</p> <p>Type: String</p> <p>Valid values: <code>ovm</code>   <code>xen</code></p>
network-interface.description	<p>The description of the network interface (available only in Amazon Virtual Private Cloud).</p> <p>Type: String</p>
network-interface.subnet-id	<p>The ID of the subnet of the network interface (available only in Amazon Virtual Private Cloud).</p> <p>Type: String</p>
network-interface.vpc-id	<p>The ID of the Amazon VPC of the network interface. (available only in Amazon Virtual Private Cloud).</p> <p>Type: String</p>

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

Filter Name	Description
<code>network-interface.network-interface.id</code>	The ID of the network interface(available only in Amazon Virtual Private Cloud). Type: String
<code>network-interface.owner-id</code>	The ID of the owner of the network interface (available only in Amazon Virtual Private Cloud). Type: String
<code>network-interface.availability-zone</code>	The availability zone of the network interface (available only in Amazon Virtual Private Cloud). Type: String
<code>network-interface.requester-id</code>	The requester ID of the network interface(available only in Amazon Virtual Private Cloud). Type: String
<code>network-interface.requester-managed</code>	Indicates whether the network interface is being managed by an AWS service (for example, AWSManagement Console, Auto Scaling, and so on). This filter is available only in Amazon Virtual Private Cloud. Type: Boolean
<code>network-interface.status</code>	The status of the network interface (available only in Amazon Virtual Private Cloud). Type: String Valid values: available   in-use
<code>network-interface.mac-address</code>	The MAC address of the network interface (available only in Amazon Virtual Private Cloud). Type: String Valid values: available   in-use
<code>network-interface-private-dns-name</code>	The private DNS name of the network interface (available only in Amazon Virtual Private Cloud). Type: String
<code>network-interface.source-destination-check</code>	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 (available only in Amazon Virtual Private Cloud). Type: Boolean
<code>network-interface.group-id</code>	The ID of a VPC security group associated with the network interface (available only in Amazon Virtual Private Cloud). Type: String



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

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Filter Name	Description
<code>network-interface.group-name</code>	The name of a VPC security group associated with the network interface (available only in Amazon Virtual Private Cloud). Type: String
<code>network-interface.attachment.attachment-id</code>	The ID of the interface attachment (available only in Amazon Virtual Private Cloud). Type: String
<code>network-interface.attachment.instance-id</code>	The ID of the instance to which the network interface is attached (available only in Amazon Virtual Private Cloud). Type: String
<code>network-interface.attachment.instance-owner-id</code>	The owner ID of the instance to which the network interface is attached (available only in Amazon Virtual Private Cloud). Type: String
<code>network-interface.addresses.private-ip-address</code>	The private IP address associated with the network interface (available only in Amazon Virtual Private Cloud). Type: String
<code>network-interface.attachment.device-index</code>	The device index to which the network interface is attached (available only in Amazon Virtual Private Cloud). Type: Integer
<code>network-interface.attachment.status</code>	The status of the attachment. (available only in Amazon Virtual Private Cloud). Type: String Valid values: attaching   attached   detaching   detached
<code>network-interface.attachment.attach-time</code>	The time that the network interface was attached to an instance (available only in Amazon Virtual Private Cloud). Type: Date
<code>network-interface.attachment.delete-on-termination</code>	Specifies whether the attachment is deleted when an instance is terminated (available only in Amazon Virtual Private Cloud). Type: Boolean
<code>network-interface.addresses.primary</code>	Specifies whether the IP address of the network interface is the primary private IP address (available only in Amazon Virtual Private Cloud). Type: Boolean

Filter Name	Description
<code>network-interface.addresses.association.public-ip</code>	The ID representing the association of a VPC Elastic IP address with a network interface in a VPC (available only in Amazon Virtual Private Cloud). Type: String
<code>network-interface.addresses.association.ip-owner-id</code>	The owner ID of the private IP address associated with the network interface (available only in Amazon Virtual Private Cloud). Type: String
<code>association.public-ip</code>	The address of the Elastic IP address bound to the network interface (available only in Amazon Virtual Private Cloud). Type: String
<code>association.ip-owner-id</code>	The owner of the Elastic IP address associated with the network interface (available only in Amazon Virtual Private Cloud). Type: String
<code>association.allocation-id</code>	The allocation ID that AWS returned when you allocated the Elastic IP address for your network interface (available only in Amazon Virtual Private Cloud). Type: String
<code>association.association-id</code>	The association ID returned when the network interface was associated with an IP address (available only in Amazon Virtual Private Cloud). Type: String

## Common Options

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

Option	Description
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token TOKEN AWS_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>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

## 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 RESERVATION identifier
- The ID of the reservation
- The AWS account ID
- The name of each security group the instance is in (for instances not running in a VPC)
- The INSTANCE identifier
- The ID of each running 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 monitoring state
- The public IP address
- The private IP addresses associated with the instance. Multiple private IP addresses are only available in Amazon VPC.
- The tenancy of the instance (if the instance is running within a VPC). An instance with a tenancy of dedicated runs on single-tenant hardware.
- The subnet ID (if the instance is running in a VPC)
- The VPC ID (if the instance is running in a VPC)
- The type of root device (ebs or instance-store)
- The placement group the cluster instance is in
- The virtualization type (paravirtual or hvm)

- The ID of each security group the instance is in (for instances running in a VPC)
- Any tags assigned to the instance
- The hypervisor type (xen or ovm)
- The BLOCKDEVICE identifier (one for each Amazon EBS volume, if the instance has a block device mapping), along with the device name, volume ID, and timestamp

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example describes the current state of the instances owned by your AWS account.

```
PROMPT> ec2-describe-instances

RESERVATION    r-705d5818      111122223333    default
INSTANCE       i-53cb5b38      ami-b232d0db    ec2-184-73-10-99.compute-
1.amazonaws.com domU-12-31-39-00-A5-11.compute-1.internal    running
0              m1.small 2010-04-07T12:49:28+0000 us-east-1a    aki-94c527fd
ari-96c527ff      monitoring-disabled 184.73.10.99
10.254.170.223      ebs paravirtual xen
BLOCKDEVICE    /dev/sda1      vol-a36bc4ca    2010-04-07T12:28:01.000Z
BLOCKDEVICE    /dev/sdb       vol-a16bc4c8    2010-04-07T12:28:01.000Z
RESERVATION    r-705d5818      111122223333    default
INSTANCE       i-39c85852      ami-b232d0db    terminated    gsg-keypair
0              m1.small 2010-04-07T12:21:21+0000    us-east-1a
aki-94c527fd      ari-96c527ff      monitoring-disabled
ebs paravirtual xen
RESERVATION    r-9284alfa      111122223333    default
INSTANCE       i-996fc0f2      ami-3c47a355    ec2-184-73-195-182.compute-
1.amazonaws.com domU-12-31-39-09-25-62.compute-1.internal    running keypair
0              m1.small 2010-03-17T13:17:41+0000    us-east-1a
aki-a71cf9ce      ari-a51cf9cc      monitoring-disabled 184.73.195.182
10.210.42.144      instance-store paravirtual xen
```

### Example Request

This example filters the response to include only the m1.small or m1.large instances that have an Amazon EBS volume that is both attached and set to delete 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-bc7e30d7      111122223333    default
INSTANCE       i-c7cd56ad      ami-b232d0db    ec2-72-44-52-124.compute-
1.amazonaws.com domU-12-31-39-01-76-06.compute-1.internal    running
GSG_Keypair    0              m1.small 2010-08-17T01:15:16+0000
us-east-1b    aki-94c527fd      ari-96c527ff      monitoring-
disabled 72.44.52.124    10.255.121.240      ebs paravirtual
xen
BLOCKDEVICE    /dev/sda1      vol-a482c1cd    2010-08-17T01:15:26.000Z
```

## Example Request

This example describes all instances that are running only in Amazon VPC.

```
PROMPT> ec2-describe-instances --filter "vpc-id=*"
RESERVATION      r-e249f4b6      053230519467
INSTANCE         i-e0841fb4      ami-1cd4924e      running  MyVPCKey
0      c1.medium      2012-06-26T02:26:55+0000      ap-south east-1b  windows
monitoring-disabled  10.0.1.152
vpc-f28a359b      subnet-cd8a35a4 ebs      hvm      xen
wEdGG1340677614452      sg-dc4c51b0      default
BLOCKDEVICE      /dev/sdal      vol-9ad2e0f8      2012-06-26T02:27:17.000Z true
NIC      eni-69ce7500      subnet-cd8a35a4 vpc-f28a359b      053230519467      in-use
10.0.1.152      true
NICATTACHMENT    eni-attach-696ba300      0      attached      2012-06-
25T19:26:55-0700      true
GROUP      sg-dc4c51b0      quick-start-2
PRIVATEIPADDRESS      10.0.1.152
PRIVATEIPADDRESS      10.0.1.12
TAG      instance      i-e0841fb4      Name
RESERVATION      r-2c9b2478      053230519467
INSTANCE         i-886401dc      ami-3c0b4a6e      running  203.0.113.12  MyVPCkey
0      c1.medium      2012-06-27T20:08:44+0000      ap-south east-1b  aki-
fel1354ac  monitoring-disabled  10.0.1.233
vpc-f28a359b      subnet-cd8a35a4 ebs      paravirtual      xen      CQTYZ1340827723361
sg-a2a0b2ce      default
BLOCKDEVICE      /dev/sdal      vol-42373620      2012-06-27T20:09:01.000Z true
NIC      eni-a66ed5cf      subnet-cd8a35a4 vpc-f28a359b      053230519467      in-use
10.0.1.233      true
NICATTACHMENT    eni-attach-a99c57c0      0      attached      2012-06-
27T13:08:44-0700      true
GROUP      sg-a2a0b2ce      quick-start-1
PRIVATEIPADDRESS      10.0.1.233
PRIVATEIPADDRESS      10.0.1.20
TAG      instance      i-886401dc      Name      LAMI-C1
```

## Example Request

This example describes any instances with a network interface that have 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-24993a70      013274050172
INSTANCE         i-6e21ad3a      ami-be3374ec      running  0      m1.medium
2012-06-07T10:50:27+0000      ap-southeast-1a  aki-fel1354ac  monitoring-
disabled  10.0.0.98
vpc-4507bb2c      subnet-2407bb4d ebs      paravirtual      xen      sg-a5bfadc9
default
BLOCKDEVICE      /dev/sdal      vol-b24be7d0      2012-06-07T10:50:47.000Z
true
NIC      eni-3aff4053      subnet-2407bb4d vpc-4507bb2c      013274050172      in-use
10.0.0.98      true
NICATTACHMENT    eni-attach-0727e96e      0      attached      2012-06-
07T12:50:27+0200      true
GROUP      sg-a5bfadc9      default
```

```
PRIVATEIPADDRESS      10.0.0.98
PRIVATEIPADDRESS      10.0.0.120
```

## Related Topics

### Download

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

### Related Action

- [DescribeInstances](#)

### Related Commands

- [ec2-run-instances](#) (p. 600)
- [ec2-start-instances](#) (p. 611)
- [ec2-stop-instances](#) (p. 615)
- [ec2-terminate-instances](#) (p. 619)

# ec2-describe-internet-gateways

## Description

Describes one or more of your Internet gateways.

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

The short version of this command is **ec2digw**.

## Syntax

```
ec2-describe-internet-gateways [internet_gateway_id ...] [--filter "name=value"] ...]
```

## Options

Name	Description	Required
<i>internet_gateway_id</i>	One or more IDs of the internet gateways. Type: String Default: Describes all your Internet gateways. Example: igw-15a4417c	No
-F, --filter <i>name=value</i>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your Internet gateways, or only those you specified by ID. Example: --filter "tag-key=Production"	No

## 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 table lists the available filters.

Filter Name	Description
<code>attachment.state</code>	The current state of the attachment between the gateway and the VPC. Returned only if a VPC is attached. Type: String Valid value: <code>available</code>
<code>attachment.vpc-id</code>	The ID of an attached VPC. Type: String
<code>internet-gateway-id</code>	The ID of the Internet gateway. Type: String
<code>tag-key</code>	The key of a tag assigned to the resource. This filter is independent of the <code>tag-value</code> filter. For example, if you use both the filter " <code>tag-key=Purpose</code> " and the filter " <code>tag-value=X</code> ", you get any resources assigned both the tag key <code>Purpose</code> (regardless of what the tag's value is), and the tag value <code>X</code> (regardless of what the tag's key is). If you want to list only resources where <code>Purpose</code> is <code>X</code> , see the <code>tag:key</code> filter later in this table. For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String
<code>tag-value</code>	The value of a tag assigned to the resource. This filter is independent of the <code>tag-key</code> filter. Type: String
<code>tag:key</code>	Filters the response based on a specific tag/value combination. Example: To list just the resources that have been assigned tag <code>Purpose=X</code> , specify: <code>--filter tag:Purpose=X</code> Example: To list just resources that have been assigned tag <code>Purpose=X</code> OR <code>Purpose=Y</code> , specify: <code>--filter tag:Purpose=X --filter tag:Purpose=Y</code>

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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
- 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 Request

This example 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-detach-internet-gateway](#) (p. 34)

- [ec2-create-internet-gateway](#) (p. 102)
- [ec2-delete-internet-gateway](#) (p. 185)
- [ec2-detach-internet-gateway](#) (p. 443)

# 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	Required
<i>keypair_name</i>	One or more key pair names. Type: String Default: Describes all your key pairs. Example: gsg-keypair	No
-F, --filter <i>name=value</i>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your key pairs, or only those you specified by name. Example: --filter "tag-name=*Dave*"	No

## 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 table lists the available filters.

Filter Name	Description
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>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 KEYPAIR identifier
- The key pair name
- The private key fingerprint

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example describes the keypair with name `gsg-keypair`.

```
PROMPT> ec2-describe-keypairs gsg-keypair  
  
KEYPAIR    gsg-keypair  
00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00
```

### 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. 105)
- [ec2-delete-keypair](#) (p. 188)
- [ec2-import-keypair](#) (p. 490)



## ec2-describe-network-acls

### Description

Describes one or more of the network ACLs in your VPC.

For more information about Amazon Virtual Private Cloud and 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	Required
<i>network_acl_id</i>	One or more IDs of the network ACLs. Type: String Default: Describes all network ACLs in the VPC. Example: acl-7aa34613	No
-F, --filter <i>name=value</i>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all network ACLs in the VPC, or only those you specified by ID. Example: --filter "tag-key=Production"	No

### 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 table lists the available filters.

Filter Name	Description
<code>association.association-id</code>	The ID of an association ID for the ACL. Type: String
<code>association.network-acl-id</code>	The ID of the network ACL involved in the association. Type: String
<code>association.subnet-id</code>	The ID of the subnet involved in the association. Type: String
<code>default</code>	Indicates whether the ACL is the default network ACL in the VPC. Type: Boolean
<code>entry.cidr</code>	The CIDR range specified in the entry. Type: String
<code>entry.egress</code>	Indicates whether the entry applies to egress traffic. Type: Boolean
<code>entry.icmp.code</code>	The ICMP code specified in the entry, if any. Type: Integer
<code>entry.icmp.type</code>	The ICMP type specified in the entry, if any. Type: Integer
<code>entry.port-range.from</code>	The start of the port range specified in the entry. Type: Integer
<code>entry.port-range.to</code>	The end of the port range specified in the entry. Type: Integer
<code>entry.protocol</code>	The protocol specified in the entry. Type: String Valid values: <code>tcp</code>   <code>udp</code>   <code>icmp</code> or a protocol number
<code>entry.rule-action</code>	Indicates whether the entry allows or denies the matching traffic. Type: String Valid values: <code>allow</code>   <code>deny</code>
<code>entry.rule-number</code>	The number of an entry (i.e., rule) in the ACL's set of entries. Type: Integer
<code>network-acl-id</code>	The ID of the network ACL. Type: String

Filter Name	Description
tag-key	<p>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 filter later in this table.</p> <p>For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>Type: String</p>
tag-value	<p>The value of a tag assigned to the resource. This filter is independent of the tag-key filter.</p> <p>Type: String</p>
tag:key	<p>Filters the response based on a specific tag/value combination.</p> <p>Example: To list just the resources that have been assigned tag Purpose=X, specify:</p> <pre>--filter tag:Purpose=X</pre> <p>Example: To list just resources that have been assigned tag Purpose=X OR Purpose=Y, specify:</p> <pre>--filter tag:Purpose=X --filter tag:Purpose=Y</pre>
vpc-id	<p>The ID of the VPC the network ACL is in.</p> <p>Type: String</p>

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 NETWORKACL, ENTRY, ASSOCIATION identifier
- The network ACL's ID, the VPC ID the ACL is in, and whether the ACL is the default ACL in the VPC
- The entries (i.e., 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 Request

This example describes all the network ACLs in your VPC.

```
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. 109)
- [ec2-delete-network-acl](#) (p. 191)
- [ec2-replace-network-acl-association](#) (p. 546)
- [ec2-create-network-acl-entry](#) (p. 112)
- [ec2-delete-network-acl-entry](#) (p. 194)
- [ec2-replace-network-acl-entry](#) (p. 549)

# 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 NETWORKINTERFACE -d, --description
--source-dest-check --group-set -a, --attachment
```

## Options

Name	Description	Required
-d, --description	Describes the network interface. Type: String	Yes
--source-dest-check	Whether to enable the source/dest check on traffic through this network interface. Type: String	Yes
--group-set	Describes the security groups for the network interface. Type: String	Yes
-a, --attachment	Describes the attachment (if any) of the network interface. Type: String	Yes

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 the specified network interface attribute.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example lists the network interface's description.

```
PROMPT> ec2-describe-network-interface-attribute eni-b35da6da -d
NETWORKINTERFACE      eni-b35da6da      description
DESCRIPTION           My ENI
```

This example 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 lists 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. 117)
- [ec2-delete-network-interface](#) (p. 198)
- [ec2-describe-network-interfaces](#) (p. 334)
- [ec2-attach-network-interface](#) (p. 37)
- [ec2-detach-network-interface](#) (p. 446)
- [ec2-modify-network-interface-attribute](#) (p. 515)
- [ec2-reset-network-interface-attribute](#) (p. 582)

# 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 --filter FILTER`

## Options

Name	Description	Required
<code>-F, --filter name=value</code>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: None Example: <code>-F "description=My ENI"</code>	No

## 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 table lists the available filters.

Filter Name	Description
<code>addresses.private-ip-address</code>	The private IP addresses associated with the network interface. Type: String

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

Filter Name	Description
<code>addresses.primary</code>	Whether the private IP address is the primary IP address associated with the network interface. Type: Boolean Valid values: true   false
<code>addresses.association.public-ip</code>	The association ID returned when the network interface was associated with the Elastic IP address. Type: String
<code>addresses.association.owner-id</code>	The owner ID of the addresses associated with the network interface. Type: String
<code>association.association-id</code>	The association ID returned when the network interface was associated with an IP address. Type: String
<code>association.allocation-id</code>	The allocation ID that AWS returned when you allocated the Elastic IP address for your network interface. Type: String
<code>association.ip-owner-id</code>	The owner of the Elastic IP address associated with the network interface. Type: String
<code>association.public-ip</code>	The address of the Elastic IP address bound to the network interface. Type: String
<code>attachment.attachment-id</code>	The ID of the interface attachment. Type: String
<code>attachment.instance-id</code>	The ID of the instance to which the network interface is attached. Type: String
<code>attachment.instance-owner-id</code>	The owner ID of the instance to which the network interface is attached. Type: String
<code>attachment.device-index</code>	The device index to which the network interface is attached. Type: Integer
<code>attachment.status</code>	The status of the attachment. Type: String Valid values: attaching   attached   detaching   detached

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

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<b>Filter Name</b>	<b>Description</b>
<code>attachment.attach.time</code>	The time that the network interface was attached to an instance. Type: DateTime
<code>attachment.delete-on-termination</code>	Indicates whether the attachment is deleted when an instance is terminated. Type: Boolean
<code>availability-zone</code>	The Availability Zone of the network interface. Type: String
<code>description</code>	The description of the network interface. Type: String
<code>group-id</code>	The ID of a VPC security group associated with the network interface. Type: String
<code>group-name</code>	The name of a VPC security group associated with the network interface. Type: String
<code>mac-address</code>	The MAC address of the network interface. Type: String
<code>network-interface-id</code>	The ID of the network interface. Type: String
<code>owner-id</code>	The AWS account ID of the network interface owner. Type: String
<code>private-ip-address</code>	The private IP address or addresses of the network interface. Type: String
<code>private-dns-name</code>	The private DNS name of the network interface. Type: String
<code>requester-id</code>	The ID of the entity that launched the instance on your behalf (for example, AWS Management Console, Auto Scaling, and so on). Type: String
<code>requester-managed</code>	Indicates whether the network interface is being managed by an AWS service (for example, AWS Management Console, Auto Scaling, and so on). Type: Boolean

Filter Name	Description
source-dest-check	Indicates whether the network interface performs source/destination checking. A value of <code>true</code> means checking is enabled, and <code>false</code> means checking is disabled. The value must be <code>false</code> 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 <code>available</code> ; if a network interface is attached to an instance the status shows <code>in-use</code> . Type: String Valid values: <code>available</code>   <code>in-use</code>
subnet-id	The ID of the subnet that the network interface is in. Type: String
tag-key	The key of a tag assigned to the resource. This filter is independent of the <code>tag-value</code> filter. For example, if you use both the filter <code>"tag-key=Purpose"</code> and the filter <code>"tag-value=X"</code> , you get any resources assigned both the tag key <code>Purpose</code> (regardless of what the tag's value is), and the tag value <code>X</code> (regardless of what the tag's key is). If you want to list only resources where <code>Purpose</code> is <code>X</code> , see the <code>tag:key</code> filter later in this table. For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String
tag-value	The value of a tag assigned to the resource. This filter is independent of the <code>tag-key</code> filter. Type: String
tag: <i>key</i>	Filters the response based on a specific tag/value combination. Example: To list just the resources that have been assigned tag <code>Purpose=X</code> , specify: <code>--filter tag:Purpose=X</code> Example: To list just resources that have been assigned tag <code>Purpose=X</code> OR <code>Purpose=Y</code> , specify: <code>--filter tag:Purpose=X --filter tag:Purpose=Y</code>
vpc-id	The ID of the VPC that the network interface is in. Type: String

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 lists information about the specified network interfaces.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example lists all network interfaces that you own.

```
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-8fb3a1e3      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. 117)
- [ec2-delete-network-interface](#) (p. 198)
- [ec2-describe-network-interface-attribute](#) (p. 330)
- [ec2-attach-network-interface](#) (p. 37)
- [ec2-detach-network-interface](#) (p. 446)
- [ec2-modify-network-interface-attribute](#) (p. 515)
- [ec2-reset-network-interface-attribute](#) (p. 582)

# ec2-describe-placement-groups

## Description

Describes one or more of your placement groups. For more information about placement groups and cluster instances, see [Using 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	Required
<i>group_name</i>	One or more placement group names. Type: String Default: Describes all placement groups you own. Example: XYZ-cluster	No
-F, --filter <i>name=value</i>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your placement groups, or only those you specified by name. Example: --filter "group-name=*Project"	No

## Supported Filters

You can specify 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 table lists the available filters.

Filter Name	Description
group-name	The name of the placement group. Type: String

Filter Name	Description
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>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 the following information:

- The PLACEMENTGROUP identifier
- The name of the placement group
- The placement group strategy
- The status of the placement group (`pending`, `available`, `deleting`, `deleted`)

## Examples

### Example Request

This example describes all your placement groups.

```
PROMPT> ec2-describe-placement-groups  
PLACEMENTGROUP XYZ-cluster cluster available  
PLACEMENTGROUP ABC-cluster cluster available
```

### Example Request

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*"
```

## Related Topics

### Download

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

### Related Action

- [DescribePlacementGroups](#)

### Related Commands

- [ec2-create-placement-group](#) (p. 122)
- [ec2-delete-placement-group](#) (p. 201)

## 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	Required
<i>region</i>	One or more region names. Type: String Default: Describes all your regions. Example: eu-west-1	No
<code>-F, --filter name=value</code>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your regions, or only those you specified by name. Example: --filter "endpoint=*ap*"	No

### 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 table lists the available filters.

Filter Name	Description
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>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 REGION identifier
- The name of the region
- The service endpoint to which you make requests

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example displays information about all the regions that are available to the account.

```
PROMPT> ec2-describe-regions
REGION  ap-northeast-1      ec2.ap-northeast-1.amazonaws.com
REGION  ap-southeast-1     ec2.ap-southeast-1.amazonaws.com
..
```



## Example Request

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.ap-southeast-1.amazonaws.com
```

## Related Topics

### Download

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

### Related Action

- [DescribeRegions](#)

### Related Commands

- [ec2-describe-availability-zones](#) (p. 247)
- [ec2-run-instances](#) (p. 600)

# 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	Required
<i>reservation_id</i>	The IDs of the Reserved Instances. Type: String Default: Describes all your Reserved Instances. Example: 4b2293b4-5813-4cc8-9ce3-1957fexample	No
-F, --filter <i>name=value</i>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your Reserved Instances, or only those you specified by ID. Example: --filter "tag-key=Production"	No

## Supported Filters

You can specify 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 table lists the available filters.

Filter Name	Description
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
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 filter later in this table. For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String

Filter Name	Description
tag-value	The value of a tag assigned to the resource. This filter is independent of the tag-key filter. Type: String
tag: <i>key</i>	Filters the response based on a specific tag/value combination. Example: To list just the resources that have been assigned tag Purpose=X, specify: --filter tag:Purpose=X Example: To list just resources that have been assigned tag Purpose=X OR Purpose=Y, specify: --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
--region <i>REGION</i>	Overrides the region specified by the EC2_URL environment variable and the URL specified by the -U option. Default: The value of the EC2_URL environment variable, or us-east-1 if EC2_URL isn't set. Example: --region eu-west-1
-U, --url <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the EC2_URL environment variable, or https://ec2.amazonaws.com if EC2_URL isn't set. Example: -U https://ec2.amazonaws.com
-O, --aws-access-key <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the AWS_ACCESS_KEY environment variable. If AWS_ACCESS_KEY isn't set, you must specify this option. Example: -O AKIAIOSFODNN7EXAMPLE <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
-W, --aws-secret-key <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. Default: The value of the AWS_SECRET_KEY environment variable. If AWS_SECRET_KEY isn't set, you must specify this option. Example: -W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-T, --security-token TOKEN</code> <i>AWS_DELEGATION_TOKEN</i>	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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example describes Reserved Instances owned by your account.

```
PROMPT> ec2-describe-reserved-instances
RESERVEDINSTANCES    lba8e2e3-2538-4a35-b749-1f444example    us-east-1a
m1.small    Linux/UNIX    3y    0.03    350.0    1    2009-03-13T16:01:39+0000
    payment-pending
RESERVEDINSTANCES    af9f760e-c1c1-449b-8128-1342dexample    us-east-1d
m1.xlarge    Linux/UNIX    1y    0.24    1820.0    1    2009-03-13T16:01:39+0000
    active
```

### Example Request

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 Amazon 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. 360)
- [ec2-purchase-reserved-instances-offering](#) (p. 529)

# 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, go to [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	Required
<i>LISTING</i>	The ID of the Reserved Instance listing. Type: String Default: None	No
-F, --filter FILTER <i>name=value</i>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your Reserved Instances listings, or only those you specified by ID. Example: --filter "status=pending"	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 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 table lists the available filters.

Filter Name	Description
<code>status</code>	Status of the Reserved Instance listing. Valid values: pending   active   cancelled   closed. Type: String
<code>status-message</code>	Reason for the status. Type: String
<code>reserved-instances-listing-id</code>	The ID of the Reserved Instances listing. Type: String
<code>reserved-instances-id</code>	The ID of the Reserved Instances. Type: String

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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

The command returns a table that contains the following information:

- Reserved Instance listing ID
- Reserved Instances ID
- Create Date
- Update Date
- Status
- Status Message
- Instance Count that is available, sold, cancelled, or pending.
- Price schedule that lists the upfront price at which the instance is listed for each month of its remaining term.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example describes a Reserved Instance listing owned by your account.

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

## Related Operations

- [ec2-create-reserved-instances-listing](#) (p. 125)
- [ec2-cancel-reserved-instances-listing](#) (p. 70)
- [ec2-describe-reserved-instances](#) (p. 349)

# 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 Amazon EC2 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, go to [Understanding Reserved Instance Pricing Tiers](#) in the *Amazon Elastic Compute Cloud User Guide*. For more information about Reserved Instances, go to [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, go to [Reserved Instance Marketplace](#) in the *Amazon Elastic Compute Cloud User Guide*.

The short version of this command is `ec2drio`.

## 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	Required
<code>offering_id</code>	The ID of a Reserved Instance offering. Type: String Default: None Example: 438012d3-4967-4ba9-aa40-cbb1dexample	No
<code>-t, --type instance_type</code>	The instance type on which the Reserved Instance can be used. Type: String Default: None Example: -t m1.small	No
<code>--offering-type offering-type</code>	The Reserved Instance offering type. Type: String Default: None Valid Values: "Heavy Utilization"   "Medium Utilization"   "Light Utilization" Example: --offering-type "Medium Utilization"	No
<code>-z, --availability-zone zone</code>	The Availability Zone in which the Reserved Instance can be used. Type: String Default: None Example: -z us-east-1a	No
<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 Default: None Valid Values: Linux/UNIX   Linux/UNIX (Amazon VPC)   Windows   Windows (Amazon VPC) Example: -d Linux/UNIX	No
<code>-F, --filter FILTER name=value</code>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your Reserved Instances offerings, or those you specified by ID. Example: --filter "instance-type=m1.small"	No

Name	Description	Required
<code>--tenancy <i>TENANCY</i></code>	Specifies the tenancy of the Reserved Instance offering. A Reserved Instance with tenancy of dedicated will run on single-tenant hardware and can only be launched within a VPC. Type: String Default: default Valid Values: default   dedicated	No
<code>--exclude-marketplace</code>	Excludes the Reserved Instance Marketplace offerings in the response. Type: Boolean Default: false Valid Values: true   false	No
<code>--min-duration <i>MIN-DURATION</i></code>	Specifies that only offerings that have a duration of at least <i>MIN-DURATION</i> months should be returned. Type: String Default: None Valid Values:	No
<code>--max-duration <i>MAX-DURATION</i></code>	Specifies that only offerings that have a duration of at most <i>MAX-DURATION</i> months should be returned. Type: String Default: None Valid Values:	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 table lists the available filters.

Filter Name	Description
<code>availability-zone</code>	The Availability Zone where the Reserved Instance can be used. Type: String

Filter Name	Description
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 Amazon EC2 instance type on which the Reserved Instance can be used. Type: String
marketplace	Set to <code>true</code> 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>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>



Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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

The command returns a table that contains the following information:

- The source of the offering
- OFFERING identifier
- ID of the offer
- 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
- The usage price of the Reserved Instance, per hour
- The Reserved Instance description (Linux/UNIX, Windows, Linux/UNIX (Amazon VPC), or Windows (Amazon VPC))
- 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
- The type of charge
- The frequency of charge
- The price charged

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-ee3fexample 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 Amazon 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. 529)
- [ec2-describe-reserved-instances](#) (p. 349)

# ec2-describe-route-tables

## Description

Describes one or more of your route tables.

For more information about Amazon Virtual Private Cloud and 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...*]

## Options

Name	Description	Required
<i>route_table_id</i>	One or more route table IDs. Type: String Default: Describes all your route tables. Example: rtb-7aa34613	No
<code>-F</code> , <code>--filter name=value</code>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your route tables, or only those you specified by ID. Example: <code>--filter "tag-key=Production"</code>	No

## 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 table lists the available filters.

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

---

Filter Name	Description
<code>association.route-table-association-id</code>	The ID of an association ID for the route table. Type: String
<code>association.route-table-id</code>	The ID of the route table involved in the association. Type: String
<code>association.subnet-id</code>	The ID of the subnet involved in the association. Type: String
<code>association.main</code>	Indicates whether the route table is the main route table in the VPC. Type: Boolean
<code>route-table-id</code>	The ID of the route table. Type: String
<code>route.destination-cidr-block</code>	The CIDR range specified in a route in the table. Type: String
<code>route.gateway-id</code>	The ID of a gateway specified in a route in the table. Type: String
<code>route.instance-id</code>	The ID of an instance specified in a route in the table. Type: String
<code>route.origin</code>	Describes how the route was created. Type: String Valid values: <code>CreateRouteTable</code>   <code>CreateRoute</code>   <code>EnableVgwRoutePropogation</code> <code>CreateRouteTable</code> indicates that route was automatically created when the route table was created. <code>CreateRoute</code> indicates that the route was manually added to the route table. <code>EnableVgwRoutePropogation</code> indicates that the route was propagated by route propagation.
<code>route.state</code>	The state of a route in the route table. The <code>blackhole</code> 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: <code>active</code>   <code>blackhole</code>

Filter Name	Description
tag-key	<p>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 filter later in this table.</p> <p>For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i>.</p> <p>Type: String</p>
tag-value	<p>The value of a tag assigned to the resource. This filter is independent of the tag-key filter.</p> <p>Type: String</p>
tag:key	<p>Filters the response based on a specific tag/value combination.</p> <p>Example: To list just the resources that have been assigned tag Purpose=X, specify:</p> <pre>--filter tag:Purpose=X</pre> <p>Example: To list just resources that have been assigned tag Purpose=X OR Purpose=Y, specify:</p> <pre>--filter tag:Purpose=X --filter tag:Purpose=Y</pre>
vpc-id	<p>The ID of the VPC the route table is in.</p> <p>Type: String</p>

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example describes the route table with ID `rtb-6aa34603`.

```
PROMPT> ec2-describe-route-tables rtb-6aa34603
ROUTETABLE rtb-6aa34603 vpc-9ea045f7
ec2-describe-route-tables
ROUTETABLE 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-56c1f422  
ASSOCIATION rtbassoc-706e8218 main
```

## Related Topics

### Download

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

### Related Action

- [DescribeRouteTables](#)

### Related Commands

- [ec2-associate-route-table](#) (p. 30)
- [ec2-delete-route-table](#) (p. 207)
- [ec2-disassociate-route-table](#) (p. 463)
- [ec2-replace-route-table-association](#) (p. 557)

## 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	Required
<code>snapshot_id</code>	The ID of the Amazon EBS snapshot. Type: String Default: None Example: snap-78a54011	Yes
<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 Example: -c	Conditional
<code>-p, --product-codes</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 Example: -p	Conditional

### Common Options

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

**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 value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 attribute type identifier
- The ID of the snapshot
- The attribute value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example describes permissions for the snap-7ddb6e14 snapshot.

```
PROMPT> ec2-describe-snapshot-attribute snap-7ddb6e14 -c
createVolumePermission snap-7ddb6e14 userId 123456789012
```

## Related Topics

### Download

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

### Related Action

- [DescribeSnapshotAttribute](#)

## Related Commands

- [ec2-create-snapshot](#) (p. 136)
- [ec2-describe-snapshots](#) (p. 378)
- [ec2-modify-snapshot-attribute](#) (p. 519)
- [ec2-reset-snapshot-attribute](#) (p. 586)

# 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 3 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 snapshot(s)), `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	Required
<code>snapshot_id</code>	One or more snapshot IDs. Type: String Default: Describes all snapshots for which you have launch permissions. Example: snap-78a54011	No
<code>-a, --all owner</code>	Describe all snapshots (public, private or shared) to which you have access. Type: String Default: None Example: -a	No
<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>   AWS Account ID Default: None Example: -o AKIAIOSFODNN7EXAMPLE	No
<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>   an AWS account ID Default: None Example: -r self	No
<code>-F, --filter name=value</code>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all snapshots for which you have launch permissions, or only those you specified by ID. Example: --filter "tag-key=Production"	No

## 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 table lists the available filters.

Filter Name	Description
<code>description</code>	A description of the snapshot. Type: String
<code>owner-alias</code>	The AWS account alias (for example, <code>amazon</code> ) that owns the snapshot. Type: String
<code>owner-id</code>	The ID of the AWS account that owns the snapshot. Type: String
<code>progress</code>	The progress of the snapshot, as a percentage (for example, <code>80%</code> ). Type: String
<code>snapshot-id</code>	The snapshot ID. Type: String
<code>start-time</code>	The time stamp when the snapshot was initiated. Type: DateTime
<code>status</code>	The status of the snapshot. Type: String Valid values: <code>pending</code>   <code>completed</code>   <code>error</code>
<code>tag-key</code>	The key of a tag assigned to the resource. This filter is independent of the <code>tag-value</code> filter. For example, if you use both the filter <code>tag-key=Purpose</code> and the filter <code>tag-value=X</code> , you get any resources assigned both the tag key <code>Purpose</code> (regardless of what the tag's value is), and the tag value <code>X</code> (regardless of what the tag's key is). If you want to list only resources where <code>Purpose</code> is <code>X</code> , see the <code>tag:key</code> filter later in this table. For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String
<code>tag-value</code>	The value of a tag assigned to the resource. This filter is independent of the <code>tag-key</code> filter. Type: String
<code>tag:key</code>	Filters the response based on a specific tag/value combination. Example: To list just the resources that have been assigned tag <code>Purpose=X</code> , specify: <code>--filter tag:Purpose=X</code> Example: To list just resources that have been assigned tag <code>Purpose=X</code> OR <code>Purpose=Y</code> , specify: <code>--filter tag:Purpose=X --filter tag:Purpose=Y</code>
<code>volume-id</code>	The ID of the volume the snapshot is for. Type: String

Filter Name	Description
volume-size	The size of the volume, in GiB (for example, 20). Type: String

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.

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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 owner
- The size of the volume
- The description of the snapshot
- Any tags assigned to the snapshot

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example describes snapshot `snap-7ddb6e14`.

```
PROMPT> ec2-describe-snapshots snap-7ddb6e14
SNAPSHOT snap-7ddb6e14 vol-9539dcfc completed 2009-09-15T22:06:15.000Z 100%
111122223333 1 Daily Backup
```

### Example Request

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-8875daef pending 2010-07-29T04:12:01.000Z 30%
111122223333 15 demo_db_14_backup
```

## Related Topics

### Download

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

### Related Action

- [DescribeSnapshots](#)

### Related Commands

- [ec2-create-snapshot](#) (p. 136)
- [ec2-delete-snapshot](#) (p. 210)

# 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 does not have any options.

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<code>-H, --headers</code>	Includes column headers in the command output.
<code>--show-empty-fields</code>	Shows empty columns as (nil).
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 files
- The state of the data feed (Active or Inactive)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example 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. 140)
- [ec2-delete-spot-datafeed-subscription](#) (p. 213)

# 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	Required
<i>request_id</i>	The ID of the Spot Instance request. Type: String Default: None Example: sir-8456a32b	No
<code>-F, --filter <i>name=value</i></code>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value</i> "). Type: String Default: Describes all your Spot Instance requests, or those you specified by ID. Example: <code>--filter "tag-key=Production"</code>	No

## 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 table lists the available filters.

Filter Name	Description
<code>availability-zone-group</code>	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
<code>create-time</code>	The time stamp when the Spot Instance request was created. Type: String
<code>fault-code</code>	The fault code related to the request. Type: String
<code>fault-message</code>	The fault message related to the request. Type: String
<code>instance-id</code>	The ID of the instance that fulfilled the request. Type: String
<code>launch-group</code>	The Spot Instance launch group. Launch groups are Spot Instances that launch together and terminate together. Type: String
<code>launch.block-device-mapping.delete-on-termination</code>	Whether the Amazon EBS volume is deleted on instance termination. Type: Boolean
<code>launch.block-device-mapping.device-name</code>	The device name (for example, <code>/dev/sdh</code> ) for the Amazon EBS volume. Type: String
<code>launch.block-device-mapping.snapshot-id</code>	The ID of the snapshot used for the Amazon EBS volume. Type: String
<code>launch.block-device-mapping.volume-size</code>	The volume size of the Amazon EBS volume, in GiB. Type: String
<code>launch.block-device-mapping.volume-type</code>	The volume type of the Amazon EBS volume. Type: String Valid values: <code>standard</code>   <code>io1</code>
<code>launch.group-id</code>	The security group the instance is in. Type: String
<code>launch.image-id</code>	The ID of the AMI. Type: String

**Amazon Elastic Compute Cloud CLI Reference  
Options**

Filter Name	Description
<code>launch.instance-type</code>	The type of instance (for example, m1.small). Type: String
<code>launch.kernel-id</code>	The kernel ID. Type: String
<code>launch.key-name</code>	The name of the key pair the instance launched with. Type: String
<code>launch.monitoring-enabled</code>	Whether monitoring is enabled for the Spot Instance. Type: Boolean
<code>launch.ramdisk-id</code>	The RAM disk ID. Type: String
<code>launch.network-interface.network-interface-id</code>	The ID of the network interface (available only in Amazon Virtual Private Cloud). Type: String
<code>launch.network-interface.device-index</code>	The index of the device for the network interface attachment on the instance (available only in Amazon Virtual Private Cloud). Type: Integer
<code>launch.network-interface.subnet-id</code>	The ID of the subnet that the instance is in (available only in Amazon Virtual Private Cloud). Type: String
<code>launch.network-interface.description</code>	A description of the network interface (available only in Amazon Virtual Private Cloud). Type: String
<code>launch.network-interface.private-ip-address</code>	The primary private IP address of the network interface (available only in Amazon Virtual Private Cloud). Type: String
<code>launch.network-interface.delete-on-termination</code>	Whether the network interface is deleted when the instance is terminated (available only in Amazon Virtual Private Cloud). Type: Boolean
<code>launch.network-interface.group-id</code>	The ID of the security group associated with the network interface (available only in Amazon Virtual Private Cloud). Type: String
<code>launch.network-interface.group-name</code>	The name of the security group associated with the network interface (available only in Amazon Virtual Private Cloud). Type: String

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

Filter Name	Description
launch.network-interface.addresses.primary	Whether the IP address is the primary private IP address (available only in Amazon Virtual Private Cloud). 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. Type: String Valid values: active   cancelled   open   closed   failed
status-code	The short code describing the most recent evaluation of your Spot Instance request. For more information, see <a href="#">Spot Bid Status</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . 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 filter later in this table. For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String
tag-value	The value of a tag assigned to the resource. This filter is independent of the tag-key filter. Type: String

Filter Name	Description
<code>tag: <i>key</i></code>	Filters the response based on a specific tag/value combination. Example: To list just the resources that have been assigned tag Purpose=X, specify: <code>--filter tag:Purpose=X</code> Example: To list just resources that have been assigned tag Purpose=X OR Purpose=Y, specify: <code>--filter tag:Purpose=X --filter tag:Purpose=Y</code>
<code>type</code>	The type of Spot Instance request. Type: String Valid values: <code>one-time</code>   <code>persistent</code>
<code>launched-availability-zone</code>	The Availability Zone in which the bid is launched. Type: String Valid values: <code>us-east-1a</code> , etc.
<code>valid-from</code>	The start date of the request. Type: DateTime
<code>valid-until</code>	The end date of the request. Type: DateTime

## Common Options

Option	Description
<code>--region <i>REGION</i></code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url <i>URL</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key <i>AWS_ACCESS_KEY</i></code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- Request ID
- Spot Price
- Type
- State (active, open, closed, cancelled, failed)
- Fault
- Valid From
- Valid Until
- Launch Group
- Availability Zone Group
- Launched Availability Zone
- Launch Specification
- Create Time
- Description
- Any tags assigned to the request
- The EBS volume type
- The I/O operations per second (IOPS) of a provisioned IOPS volume
- Bid status code
- Bid status message

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example returns information about a specific Spot Instance request.

```
PROMPT> ec2-describe-spot-instance-requests -H sir-64b4ee11
Type SpotInstanceRequestID Price RequestType ProductDescription State
Created ValidFrom ValidUntil LaunchGroup AZGroup InstanceID ImageID In
stanceType KeyName Groups AvailabilityZone KernelID RamdiskID Monitored
SubnetID LaunchedAvailabilityZone
SPOTINSTANCEREQUEST sir-64b4ee11 0.100000 one-time Linux/UNIX open 2011-
08-30T11:02:16-0800 2011-08-30T12:00:00-0800 test testAZ ami-8c1fece5
t1.micro SpotTest sg-c20e77ab us-east-1a monitoring-enabled us-east-1a
```

## Example Request

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. 74)
- [ec2-describe-spot-price-history](#) (p. 395)
- [ec2-request-spot-instances](#) (p. 565)

# 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	Required
<code>-s, --start-time <i>timestamp</i></code>	The start date and time of the Spot Instance price history data. Type: DateTime Default: None Example: <code>-s 2009-12-01T11:51:50.000Z</code>	No
<code>-e, --end-time <i>timestamp</i></code>	The end date and time of the Spot Instance price history data. Type: DateTime Default: None Example: <code>-e 2009-12-31T11:51:50.000Z</code>	No
<code>-t, --instance-type <i>type</i></code>	The instance type to return. Type: String Valid values: <code>m1.small   m1.large   m1.xlarge   c1.medium   c1.xlarge   m2.xlarge   m2.2xlarge   m2.4xlarge   t1.micro</code> Default: None Example: <code>-t m1.large</code>	No



Name	Description	Required
-d, --product-description <i>description</i>	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 Example: -d Linux/UNIX	No
-F, --filter <i>name=value</i>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Lists all available history information, or just the information you requested. Example: --filter "product-description=Linux/UNIX"	No
-a, --availability-zone <i>zone</i>	The Availability Zone for which you want to get the price history Type: String Default: None Example: us-east-1a	No

## 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 table lists the available filters.

Filter Name	Description
instance-type	The type of instance (for example, m1.small). Type: String

Filter Name	Description
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
--region <i>REGION</i>	Overrides the region specified by the EC2_URL environment variable and the URL specified by the -U option. Default: The value of the EC2_URL environment variable, or us-east-1 if EC2_URL isn't set. Example: --region eu-west-1
-U, --url <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the EC2_URL environment variable, or https://ec2.amazonaws.com if EC2_URL isn't set. Example: -U https://ec2.amazonaws.com
-O, --aws-access-key <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. For more information, see <a href="#">Tell the Tools Who You Are</a> . Default: The value of the AWS_ACCESS_KEY environment variable. If AWS_ACCESS_KEY isn't set, you must specify this option. Example: -O AKIAIOSFODNN7EXAMPLE <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
-W, --aws-secret-key <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. Default: The value of the AWS_SECRET_KEY environment variable. If AWS_SECRET_KEY isn't set, you must specify this option. Example: -W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-T, --security-token TOKEN</code> <i>AWS_DELEGATION_TOKEN</i>	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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 SPOTINSTANCEPRICE identifier
- Price
- Date and time
- Instance type
- Product description (for example, Linux/UNIX)
- Availability Zone (for example, us-east-1a)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example returns Spot Price history for m1.small 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
...
```

The following example 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. 74)
- [ec2-describe-spot-instance-requests](#) (p. 387)
- [ec2-request-spot-instances](#) (p. 565)

# ec2-describe-subnets

## Description

Describes one or more of your subnets.

The short version of this command is **ec2ds subnet**.

## Syntax

```
ec2-describe-subnets [ subnet_id ... ] [--filter "name=value"] ...]
```

## Options

Name	Description	Required
<i>subnet_id</i>	One or more subnet IDs. Type: String Default: Describes all your subnets. Example: subnet-9d4a7b6c	No
-F, --filter <i>name=value</i>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your subnets, or only those you specified by ID. Example: --filter "tag-key=Production"	No

## 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 table lists the available filters.

## Amazon Elastic Compute Cloud CLI Reference Options

Filter Name	Description
<code>availability-zone</code>	The Availability Zone the subnet is in. Type: String
<code>available-ip-address-count</code>	The number of IP addresses in the subnet that are available. Type: String
<code>cidr</code>	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)
<code>state</code>	The state of the subnet. Type: String Valid values: <code>pending</code>   <code>available</code>
<code>subnet-id</code>	The ID of the subnet. Type: String
<code>tag-key</code>	The key of a tag assigned to the resource. This filter is independent of the <code>tag-value</code> filter. For example, if you use both the filter " <code>tag-key=Purpose</code> " and the filter " <code>tag-value=X</code> ", you get any resources assigned both the tag key <code>Purpose</code> (regardless of what the tag's value is), and the tag value <code>X</code> (regardless of what the tag's key is). If you want to list only resources where <code>Purpose</code> is <code>X</code> , see the <code>tag:key</code> filter later in this table. For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String
<code>tag-value</code>	The value of a tag assigned to the resource. This filter is independent of the <code>tag-key</code> filter. Type: String
<code>tag:key</code>	Filters the response based on a specific tag/value combination. Example: To list just the resources that have been assigned tag <code>Purpose=X</code> , specify: <pre>--filter tag:Purpose=X</pre> Example: To list just resources that have been assigned tag <code>Purpose=X</code> OR <code>Purpose=Y</code> , specify: <pre>--filter tag:Purpose=X --filter tag:Purpose=Y</pre>
<code>vpc-id</code>	The ID of the VPC the subnet is in. Type: String

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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
- Any tags assigned to the subnet

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

## Examples

### Example Request

This example gives a description of two subnets with IDs `subnet-9d4a7b6c` and `subnet-6e7f829e`.

```
PROMPT> ec2-describe-subnets subnet-9d4a7b6c subnet-6e7f829e  
SUBNET subnet-9d4a7b6c available vpc-1a2b3c4d 10.0.1.0/24 250 us-east-  
1a  
SUBNET subnet-6e7f829e available vpc-1a2b3c4d 10.0.0.0/24 250 us-east-  
1a
```

### Example Request

This example uses filters to give a description of any subnet you own that is in the VPC with ID `vpc-1a2b3c4d` or `vpc-6e7f8a92`, and whose state is `available`. The response indicates that the VPC with 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 10.0.1.0/24 250 us-east-  
1a  
SUBNET subnet-6e7f829e available vpc-1a2b3c4d 10.0.0.0/24 250 us-east-  
1a
```

## Related Topics

### Download

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

### Related Action

- [DescribeSubnets](#)

### Related Commands

- [ec2-create-subnet](#) (p. 143)
- [ec2-delete-subnet](#) (p. 216)

## ec2-describe-tags

### Description

Describes one or more of the tags for your 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	Required
-F, --filter name=value	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all tags for your EC2 resources. Example: --filter "resource-type=instance"	No

### 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 table lists the available filters.

Filter Name	Description
key	The tag key. Type: String
resource-id	The resource ID. Type: String

Filter Name	Description
resource-type	The resource type. Type: String Valid values: customer-gateway   dhcp-options   image   instance   internet-gateway   network-acl   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>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 TAG identifier
- The resource type
- The resource ID
- The tag key
- The tag value

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example describes all the tags belonging to your account.

```
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 Request

This example describes the tags for the AMI 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 Request

This example 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 Request

This example describes the tags for all your instances tagged with the name *webserver*.

```
PROMPT> ec2-describe-tags --filter "resource-type=instance" --filter "key=web
server"
TAG i-5f4e3d2a instance webserver
```

### Example Request

This example describes the tags for all your instances tagged with either `stack=Test` or `stack=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 Request

This example describes the tags for all your instances tagged with Purpose=[empty string].

```
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. 147)
- [ec2-delete-tags](#) (p. 219)

# ec2-describe-volume-attribute

## Description

Describes an attribute of a volume. You can specify only one attribute at a time.

Currently, volumes have two attributes: `auto-enable-io` and `product-codes`.

The short version of this command is `ec2dvolatt`.

## Syntax

`ec2-describe-volume-attribute` *volume\_id* ... *attribute*

## Options

Name	Description	Required
<i>volume_id</i>	The ID of the volume. Type: String Example: vol-4282672b	Yes
<i>Attribute</i>	The instance attribute. Type: String Default: None Valid values: [--auto-enable-io   --product-codes] or [-a   -p] Example: --auto-enable-io Example: -p	Yes

## Common Options

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



Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 volume
- Information about the attribute

Amazon EC2 command line tools display errors on stderr.

## Example

### Example Request

This example describes the `autoEnableIo` attribute of the volume `vol-999999`.

```
PROMPT> ec2-describe-volume-attribute vol-999999 -a
VolumeId      Attribute
vol-999999    autoEnableIo
AUTO-ENABLE-IO true
```

### Example Request

This example describes the `productCodes` attribute of the volume `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. 415)
- [ec2-enable-volume-io](#) (p. 466)
- [ec2-modify-volume-attribute](#) (p. 523)

# 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. 466) 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	Required
<i>volume_id</i>	One or more volume IDs. Type: String Default: Describes the status of all your volumes. Example: vol-4282672b	No

Name	Description	Required
<code>-F, --filter name=value</code>	<p>A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value").</p> <p>Type: String</p> <p>Default: Describes all your volumes, or only those you specified by ID.</p> <p>Example: <code>--filter "volume-status.status=Ok"</code></p>	No

## 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 table lists the available filters.

Filter Name	Description
<code>availability-zone</code>	<p>The Availability Zone of the instance.</p> <p>Type: String</p>
<code>volume-status.status</code>	<p>The status of the volume.</p> <p>Type: String</p> <p>Valid values: <code>ok   impaired   warning   insufficient-data</code></p>
<code>volume-status.details-name</code>	<p>The cause for the <code>volume-status.status</code>.</p> <p>Type: String</p> <p>Valid values: <code>io-enabled   io-performance</code></p>
<code>volume-status.details-status</code>	<p>The status of the <code>volume-status.details-name</code>.</p> <p>Type: String</p> <p>Valid values for <code>io-enabled</code>: <code>passed   failed</code></p> <p>Valid values for <code>io-performance</code>: <code>normal   degraded   severely-degraded   stalled</code></p>
<code>event.description</code>	<p>A description of the event.</p> <p>Type: String</p>

Filter Name	Description
<code>event.not-after</code>	The latest end time for the event. Type: DateTime
<code>event.not-before</code>	The earliest start time for the event. Type: DateTime
<code>event.event-id</code>	The event ID. Type: String
<code>event.event-type</code>	The event type. Type: String Valid values for io-enabled: <code>potential-data-inconsistency</code> Valid values for io-performance: <code>io-performance:degraded</code>   <code>io-performance:severely-degraded</code>   <code>io-performance:stalled</code>
<code>action.code</code>	The action code for the event, for example, <code>enable-volume-io</code> Type: String
<code>action.event-id</code>	The event ID associated with the action. Type: String
<code>action.description</code>	A description of the action. Type: String

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example describes the status of the volumes 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 Request

This example describes the volumes associated with your account that have failing I/O operations.

```
PROMPT> ec2-describe-volume-status --filter "volume-status.details-name=io-en
abled" --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. 411)
- [ec2-enable-volume-io](#) (p. 466)
- [ec2-modify-volume-attribute](#) (p. 523)

# 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	Required
<i>volume_id</i>	One or more volume IDs. Type: String Default: Describes all your volumes. Example: vol-4282672b	No
-F, --filter <i>name=value</i>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your volumes, or only those you specified by ID. Example: --filter "tag-key=Production"	No

## 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 table lists the available filters.

Filter Name	Description
<code>attachment.attach-time</code>	The time stamp when the attachment initiated. Type: DateTime
<code>attachment.delete-on-termination</code>	Whether the volume is deleted on instance termination. Type: Boolean
<code>attachment.device</code>	The device name that is exposed to the instance (for example, <code>/dev/sda1</code> ). Type: String
<code>attachment.instance-id</code>	The ID of the instance the volume is attached to. Type: String
<code>attachment.status</code>	The attachment state. Type: String Valid values: <code>attaching</code>   <code>attached</code>   <code>detaching</code>   <code>detached</code>
<code>availability-zone</code>	The Availability Zone in which the volume was created. Type: String
<code>create-time</code>	The time stamp when the volume was created. Type: DateTime
<code>size</code>	The size of the volume, in GiB (for example, 20). Type: String
<code>snapshot-id</code>	The snapshot from which the volume was created. Type: String
<code>status</code>	The status of the volume. Type: String Valid values: <code>creating</code>   <code>available</code>   <code>in-use</code>   <code>deleting</code>   <code>deleted</code>   <code>error</code>
<code>tag-key</code>	The key of a tag assigned to the resource. This filter is independent of the <code>tag-value</code> filter. For example, if you use both the filter <code>"tag-key=Purpose"</code> and the filter <code>"tag-value=X"</code> , you get any resources assigned both the tag key <code>Purpose</code> (regardless of what the tag's value is), and the tag value <code>X</code> (regardless of what the tag's key is). If you want to list only resources where <code>Purpose</code> is <code>X</code> , see the <code>tag:key</code> filter later in this table.  For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String

Filter Name	Description
tag-value	The value of a tag assigned to the resource. This filter is independent of the <code>tag-key</code> filter. Type: String
tag: <i>key</i>	Filters the response based on a specific tag/value combination. Example: To list just the resources that have been assigned tag Purpose=X, specify: <code>--filter tag:Purpose=X</code> Example: To list just resources that have been assigned tag Purpose=X OR Purpose=Y, specify: <code>--filter tag:Purpose=X --filter tag:Purpose=Y</code>
volume-id	The volume ID. Type: String
volume-type	The Amazon EBS volume type. If the volume is an <code>io1</code> volume, the response includes the IOPS as well. Type: String Valid values: <code>standard   io1</code>

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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 EBS volume type
- The I/O operations per second (IOPS) of a provisioned IOPS volume
- The snapshot from which the volume was created, if applicable
- The Availability Zone in which the volume launched
- The volume state (creating, available, in-use, deleting, deleted, error)
- The time stamp when volume creation initiated
- Any tags assigned to the volume

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example describes all volumes associated with your account.

```
PROMPT> ec2-describe-volumes
VOLUME vol-4d826724 800 us-east-1a in-use 2008-02-14T00:00:00+0000 standard
ATTACHMENT vol-4d826724 i-6058a509 /dev/sdh attached 2008-02-14T00:00:17+0000
VOLUME vol-50957039 13 us-east-1a available 2008-02-09T00:00:00+0000 standard
VOLUME vol-6682670f 1 us-east-1a in-use 2008-02-11T12:00:00+0000 standard
ATTACHMENT vol-6682670f i-69a54000 /dev/sdh attached 2008-02-11T13:56:00+0000
VOLUME vol-932685fa 15 snap-a08912c9 us-east-1a in-use 2010-03-31T12:17:07+0000 standard
ATTACHMENT vol-932685fa i-71ca481a /dev/sda1 attached 2010-04-06T14:16:00+0000
VOLUME vol-8975dae0 15 snap-a08912c9 us-east-1c deleting 2010-04-07T14:59:27+0000 standard
VOLUME vol-35be105c 10 us-east-1a available 2010-04-08T07:57:15+0000 standard
```

## Example Request

This example describes all volumes that are both attached to instance i-1a2b3c4d and also set to delete when the instance terminates.

```
PROMPT> ec2-describe-volumes --filter "attachment.instance-id=i-1a2b3c4d" --  
filter "attachment.delete-on-termination=true"
```

## Related Topics

### Download

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

### Related Action

- [DescribeVolumes](#)

### Related Commands

- [ec2-create-snapshot](#) (p. 136)
- [ec2-delete-snapshot](#) (p. 210)

## 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	Required
<i>vpc_id</i>	The ID of a VPC. Type: String Default: Describes all your VPCs. Example: vpc-1a2b3c4d	No
<code>-F, --filter <i>name=value</i></code>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your VPCs, or only those you specified by ID. Example: --filter "tag-key=Production"	No

### 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 table lists the available filters.



Filter Name	Description
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
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 filter later in this table. For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . 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	Filters the response based on a specific tag/value combination. Example: To list just the resources that have been assigned tag Purpose=X, specify: <pre>--filter tag:Purpose=X</pre> Example: To list just resources that have been assigned tag Purpose=X OR Purpose=Y, specify: <pre>--filter tag:Purpose=X --filter tag:Purpose=Y</pre>
vpc-id	The ID of the VPC. Type: String

## Common Options

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

**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 value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example describes the VPC with ID `vpc-1a2b3c4d`.

```
PROMPT> ec2-describe-vpcs vpc-1a2b3c4d
VPC vpc-1a2b3c4d available 10.0.0.0/23 dopt-7a8b9c2d
```

### Example Request

This example 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
```

## Related Topics

### Download

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

### Related Action

- [DescribeVpcs](#)

### Related Commands

- [ec2-create-vpc](#) (p. 155)
- [ec2-delete-vpc](#) (p. 226)
- [ec2-associate-dhcp-options](#) (p. 26)
- [ec2-create-dhcp-options](#) (p. 84)

# 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 Amazon Virtual Private Cloud and VPN connections, see [Adding an IPsec 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	Required
<code>vpn_connection_id</code>	A VPN connection ID. You can specify more than one in the request. Type: String Default: Describes all your VPN connections. Example: vpn-44a8938f	No
<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 Default: None Valid values: cisco-ios-isr   juniper-junos-j   juniper-screensos-6.2   juniper-screensos-6.1   generic   xml Example: --format cisco-ios-isr	No

Name	Description	Required
<code>--stylesheet your_stylesheet</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 Example: <code>--stylesheet c:\my_stylesheet.xml</code>	No
<code>-F, --filter name=value</code>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your VPN connections, or only those you specified by ID. Example: <code>--filter "tag-key=Production"</code>	No

## 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 table lists the available filters.

Filter Name	Description
<code>customer-gateway-configuration</code>	The configuration information for the customer gateway. Type: String
<code>customer-gateway-id</code>	The ID of a customer gateway associated with the VPN connection. Type: String
<code>state</code>	The state of the VPN connection. Type: String Valid values: <code>pending</code>   <code>available</code>   <code>deleting</code>   <code>deleted</code>

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

Filter Name	Description
<code>option.static-routes-only</code>	Indicates whether the connection has static routes only. Used for devices that do not support Border Gateway Protocol (BGP). Type: Boolean
<code>route.destination-cidr-block</code>	The destination CIDR block. This corresponds to the subnet used in a customer data center. Type: String
<code>bgp-asn</code>	The BGP Autonomous System Number (ASN) associated with a BGP device. Type: Integer
<code>tag-key</code>	The key of a tag assigned to the resource. This filter is independent of the <code>tag-value</code> filter. For example, if you use both the filter " <code>tag-key=Purpose</code> " and the filter " <code>tag-value=X</code> ", you get any resources assigned both the tag key <code>Purpose</code> (regardless of what the tag's value is), and the tag value <code>X</code> (regardless of what the tag's key is). If you want to list only resources where <code>Purpose</code> is <code>X</code> , see the <code>tag:key</code> filter later in this table. For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String
<code>tag-value</code>	The value of a tag assigned to the resource. This filter is independent of the <code>tag-key</code> filter. Type: String
<code>tag:key</code>	Filters the response based on a specific tag/value combination. Example: To list just the resources that have been assigned tag <code>Purpose=X</code> , specify: <code>--filter tag:Purpose=X</code> Example: To list just resources that have been assigned tag <code>Purpose=X</code> OR <code>Purpose=Y</code> , specify: <code>--filter tag:Purpose=X --filter tag:Purpose=Y</code>
<code>type</code>	The type of VPN connection. Currently the only supported type is <code>ipsec.1</code> . Type: String Valid values: <code>ipsec.1</code>
<code>vpn-connection-id</code>	The ID of the VPN connection. Type: String
<code>vpn-gateway-id</code>	The ID of a virtual private gateway associated with the VPN connection. Type: String

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 VPNCONNECTION identifier
- The VPN connection ID
- The type of VPN connection
- The customer gateway ID
- The virtual private gateway ID
- 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 Request

This example gives a description of the VPN connection with ID `vpn-44a8938f`. 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 response. 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 Request

This example uses filters to give a description of any VPN connection you own associated with the customer gateway with 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. 159)
- [ec2-delete-vpn-connection](#) (p. 229)

## ec2-describe-vpn-gateways

### Description

Describes one or more of your virtual private gateways.

For more information about Amazon Virtual Private Cloud and virtual private gateways, see [Adding an IPsec 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	Required
<i>vpn_gateway_id</i>	One or more virtual private gateway IDs. Type: String Default: Describes all your virtual private gateways. Example: vgw-8db04f81	No
<code>-F, --filter name=value</code>	A filter for limiting the results. See the table in the Supported Filters section for a list of supported filters. 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=value"). Type: String Default: Describes all your virtual private gateways, or only those you specified by ID. Example: --filter "tag-key=Production"	No

### 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 table lists the available filters.

Filter Name	Description
<code>attachment.state</code>	The current state of the attachment between the gateway and the VPC. Type: String Valid values: <code>attaching</code>   <code>attached</code>   <code>detaching</code>   <code>detached</code>
<code>attachment.vpc-id</code>	The ID of an attached VPC. Type: String
<code>availability-zone</code>	The Availability Zone the virtual private gateway is in. Type: String
<code>state</code>	The state of the virtual private gateway. Type: String Valid values: <code>pending</code>   <code>available</code>   <code>deleting</code>   <code>deleted</code>
<code>tag-key</code>	The key of a tag assigned to the resource. This filter is independent of the <code>tag-value</code> filter. For example, if you use both the filter " <code>tag-key=Purpose</code> " and the filter " <code>tag-value=X</code> ", you get any resources assigned both the tag key <code>Purpose</code> (regardless of what the tag's value is), and the tag value <code>X</code> (regardless of what the tag's key is). If you want to list only resources where <code>Purpose</code> is <code>X</code> , see the <code>tag:key</code> filter later in this table. For more information about tags, see <a href="#">Tagging Your Resources</a> in the <i>Amazon Elastic Compute Cloud User Guide</i> . Type: String
<code>tag-value</code>	The value of a tag assigned to the resource. This filter is independent of the <code>tag-key</code> filter. Type: String
<code>tag:key</code>	Filters the response based on a specific tag/value combination. Example: To list just the resources that have been assigned tag <code>Purpose=X</code> , specify: <code>--filter tag:Purpose=X</code> Example: To list just resources that have been assigned tag <code>Purpose=X</code> OR <code>Purpose=Y</code> , specify: <code>--filter tag:Purpose=X --filter tag:Purpose=Y</code>
<code>type</code>	The type of virtual private gateway. Currently the only supported type is <code>ipsec.1</code> . Type: String Valid values: <code>ipsec.1</code>
<code>vpn-gateway-id</code>	The ID of the virtual private gateway. Type: String

## Common Options

Option	Description
<code>--region REGION</code>	<p>Overrides 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 value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.</p> <p>Example: <code>--region eu-west-1</code></p>
<code>-U, --url URL</code>	<p>The uniform resource locator (URL) of the Amazon EC2 web service entry point.</p> <p>Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.</p> <p>Example: <code>-U https://ec2.amazonaws.com</code></p>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token TOKEN AWS_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>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>

Option	Description
<code>--debug</code>	Displays internal debugging information. This can assist us when helping you troubleshooting problems.
<code>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 VPNGATEWAY identifier
- The virtual private gateway ID
- 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 Request

This example gives a description of the virtual private gateway with ID vgw-8db04f81.

```
PROMPT> ec2-describe-vpn-gateways vgw-8db04f81  
VPNGATEWAY vgw-8db04f81 available us-east-1a ipsec.1  
VGWATTACHMENT vpc-1a2b3c4d attached
```

### Example Request

This example uses filters to give a description of 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. 164)
- [ec2-delete-vpn-gateway](#) (p. 235)

## ec2-detach-internet-gateway

### Description

Detaches an Internet gateway from a VPC, disabling connectivity between the Internet and the VPC. The VPC must not contain any running instances with Elastic IP addresses. For more information about your VPC and Internet gateway, see the [Amazon Virtual Private Cloud User Guide](#).

The short version of this command is **ec2detigw**.

### Syntax

```
ec2-detach-internet-gateway vpn_gateway_id -c vpc_id
```

### Options

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

### Common Options

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



Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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:

- Boolean true or false

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example detaches the Internet gateway with ID `igw-eaad4883` from the VPC with ID `vpc-11ad4878`.

```
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. 34)
- [ec2-create-internet-gateway](#) (p. 102)
- [ec2-delete-internet-gateway](#) (p. 185)
- [ec2-describe-internet-gateways](#) (p. 315)

# ec2-detach-network-interface

## Description

Detaches a network interface from an instance. The NETWORKATTACHMENT parameter is the ID of the attachment.

The short version of this command is **ec2detnic**.

## Syntax

`ec2-detach-network-interface NETWORKATTACHMENT -f, --force`

## Options

Name	Description	Required
<code>-f, --force</code>	Forcefully disconnect the network interface from the instance. Type: String Default: None	No

## Common Options

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

Option	Description
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns the name of the network attachment that was detached.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example detaches the specified network interface.

```
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. 37)
- [ec2-create-network-interface](#) (p. 117)
- [ec2-delete-network-interface](#) (p. 198)
- [ec2-describe-network-interface-attribute](#) (p. 330)
- [ec2-describe-network-interfaces](#) (p. 334)
- [ec2-modify-network-interface-attribute](#) (p. 515)
- [ec2-reset-network-interface-attribute](#) (p. 582)

# ec2-detach-volume

## Description

Detaches an 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 volume being stuck in "busy" state while detaching. For more information about Amazon EBS, see [Using Amazon Elastic Block Store](#) in the *Amazon Elastic Compute Cloud User Guide*.

### Note

If an Amazon EBS volume is the root device of an instance, it cannot 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.

The short version of this command is **ec2detvol**.

## Syntax

```
ec2-detach-volume volume_id [--instance instance_id [--device device]] [--force]
```

## Options

Name	Description	Required
<i>volume_id</i>	The ID of the volume. Type: String Default: None Example: vol-4282672b	Yes
<i>-i, --instance instance_id</i>	The ID of the instance. Type: String Default: None Example: -i i-6058a509	No
<i>-d, --device device</i>	The device name. Type: String Default: None Example: -d /dev/sdh	No
<i>-f, --force</i>	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. Type: Boolean Default: None Example: -f	No

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 ATTACHMENT identifier
- The ID of the volume
- The ID of the instance
- The device name by which the volume is exposed within the instance
- The attachment state (for example, `detaching`)
- The time stamp when detaching was initiated

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example detaches volume `vol-4d826724`.



```
PROMPT> ec2-detach-volume vol-4d826724  
ATTACHMENT vol-4d826724 i-6058a509 /dev/sdh detaching 2008-02-14T00:00:17+0000
```

## Related Topics

### Download

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

### Related Action

- [DetachVolume](#)

### Related Commands

- [ec2-attach-volume](#) (p. 40)
- [ec2-create-volume](#) (p. 151)
- [ec2-delete-volume](#) (p. 223)
- [ec2-describe-volumes](#) (p. 421)

## ec2-detach-vpn-gateway

### Description

Detaches a 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.

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

The short version of this command is `ec2detvgw`.

### Syntax

```
ec2-detach-vpn-gateway -p vpn_gateway_id -c vpc_id
```

### Options

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

### Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example detaches the virtual private gateway with ID `vgw-8db04f81` from the VPC with VPC ID `vpc-1a2b3c4d`.

```
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. 44)
- [ec2-describe-vpn-gateways](#) (p. 438)

# ec2-disable-vgw-route-propagation

## Description

Disables a virtual private gateway (VGW) from propagating routes to the routing tables of an Amazon VPC. This command is only available in Amazon VPC.

The short version of this command is **ec2drp**.

## Syntax

```
ec2-disable-vgw-route-propagation --route-table ROUTE-TABLE-ID --vgw VIRTUAL PRIVATE GATEWAY ID
```

## Options

Name	Description	Required
<code>--route-table <i>table ID</i></code>	The ID of the routing table. Type: String Default: None	Yes
<code>--vgw <i>virtual private gateway ID</i></code>	The ID of the virtual private gateway. Type: String Default: None	Yes

## Common Options

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

Option	Description
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token TOKEN AWS_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>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

## 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 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 Request

This example disables the virtual private gateway, `vgw-2acfb1` from propagating routes to route table `rtb-5c6de435`.

```
PROMPT> ec2-disable-vgw-route-propagation --route-table rtb-5c6de435 --vgw-2acfb1
RETURN true
```

## Related Topics

### Download

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

### Related Action

- [DisableVgwRoutePropagation](#)

# ec2-disassociate-address

## Description

Disassociates an Elastic IP address from the instance or network interface it's assigned to.

This action applies to both EC2 Elastic IP addresses and VPC Elastic IP addresses. For information about VPC addresses and how they differ from EC2 addresses, see [Elastic IP Addresses](#) in the *Amazon Virtual Private Cloud User Guide*.

This is an idempotent action. If you enter it more than once, Amazon EC2 does not return an error.

The short version of this command is **ec2disaddr**.

## Syntax

```
ec2-disassociate-address { ip_address | -a association_id }
```

## Options

Name	Description	Required
<i>ip_address</i>	The EC2 Elastic IP address. Type: String Default: None Condition: Required for EC2 Elastic IP addresses. Example: 192.0.2.1	Conditional
-a, --association-id <i>association_id</i>	The association ID. Type: String Default: None Condition: Required for VPC Elastic IP addresses. Example: -a eipassoc-fc5ca095	Conditional

## Common Options

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



Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 ADDRESS identifier
- The Elastic IP address

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example disassociates the EC2 Elastic IP address (192.0.2.1) from the instance it's assigned to.

```
PROMPT> ec2-disassociate-address 192.0.2.1  
ADDRESS 192.0.2.1
```

### Example Request

This example disassociates the VPC Elastic IP address with association ID `eipassoc-048c746d` from the instance it's assigned to.

```
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. 13)
- [ec2-associate-address](#) (p. 21)
- [ec2-describe-addresses](#) (p. 241)
- [ec2-release-address](#) (p. 542)

# ec2-disassociate-route-table

## Description

Disassociates a subnet from a 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 VPC's 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 **ec2disrftb**.

## Syntax

`ec2-disassociate-route-table` *route\_table\_association\_id*

## Options

Name	Description	Required
<code>route_table_association_id</code>	The association ID representing the current association between the route table and subnet. Type: String Default: None Example: rtbassoc-61a34608	Yes

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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:

- Boolean true or false

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example disassociates the route table with association ID `rtbassoc-fdad4894` from the subnet it's associated to.

```
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. 30)
- [ec2-create-route-table](#) (p. 133)
- [ec2-delete-route-table](#) (p. 207)
- [ec2-describe-route-tables](#) (p. 368)
- [ec2-replace-route-table-association](#) (p. 557)

## ec2-enable-volume-io

### Description

Enables I/O operations for a volume that had 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	Required
<i>volume_id</i>	The ID of the volume. Type: String Default: None Example: vol-43a4412a	Yes

### Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U</code> , <code>--url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O</code> , <code>--aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.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 Request

This example enables the I/O operations for the volume 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. 415)

# ec2-enable-vgw-route-propagation

## Description

Enables a virtual private gateway (VGW) to propagate routes to the routing tables of an Amazon VPC. This command is only available in Amazon VPC.

The short version of this command is **ec2erp**.

## Syntax

```
ec2-enable-vgw-route-propagation --route-table ROUTE-TABLE-ID --vgw VIRTUAL PRIVATE GATEWAY ID
```

## Options

Name	Description	Required
<code>--route-table <i>table ID</i></code>	The ID of the routing table. Type: String Default: None	Yes
<code>--vgw <i>virtual private gateway ID</i></code>	The ID of the virtual private gateway. Type: String Default: None	Yes

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example enables the virtual private gateway, `vgw-2acfb1` to propagate static routes to route table `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-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	Required
<i>keyfile</i>	The path to a file containing an unencrypted PEM-encoded PKCS#8 private key. Type: String Default: None Example: mykey.pem	Yes

### Common Options

Option	Description
<code>--region <i>REGION</i></code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url <i>URL</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key <i>AWS_ACCESS_KEY</i></code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.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 Request

This example computes and displays the fingerprint for the `mykey.pem` private key.

```
PROMPT> ec2-fingerprint-key mykey.pem  
00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00
```

## Related Topics

### Download

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

### Related Commands

- [ec2-describe-keypairs](#) (p. 320)

# ec2-get-console-output

## Description

Retrieves console output for the specified instance.

Amazon EC2 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 the command line tools.

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 Amazon EC2 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 Amazon EC2 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	Required
<i>instance_id</i>	The ID of the instance. Type: String Default: None Example: i-10a64379	Yes
-r, --raw-console-output	Returns raw output without escapes to facilitate reading. Type: String Default: Disabled Example: -r	No

## Common Options

Option	Description
--region <i>REGION</i>	Overrides the region specified by the EC2_URL environment variable and the URL specified by the -U option. Default: The value of the EC2_URL environment variable, or us-east-1 if EC2_URL isn't set. Example: --region eu-west-1



**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 value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 instance ID
- 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 Request

This example retrieves the console output for the i-10a64379 Linux and 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. 600)

# ec2-get-password

## Description

Retrieves and decrypts the administrator password for the instances running Windows.

You must specify the key pair used to launch the instance.

### Note

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 provided.

There is no SOAP or Query version of the `ec2-get-password` command.

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 **ec2gpss**.

## Syntax

```
ec2-get-password instanceId -k key_file
```

## Options

Name	Description	Required
<i>instance_id</i>	A Windows instance ID. Type: String Default: None Example: i-9b76d0f3	Yes
-k, --priv-launch-key <i>key_file</i>	The file that contains the private key used to launch the instance. Type: String Default: None Example: -k windows-keypair.pem	Yes

## Common Options

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

**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 value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 Windows administrator password

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example returns the administrator password for the i-2574e22a 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. 600)

- [ec2-describe-instances](#) (p. 301)

## ec2-import-instance

### Description

Creates a new 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	Required
<code>-t, --instance-type</code> <i>instance_type</i>	The type of instance to be launched. Type: String Default: m1.small Valid values: m1.small   m1.large   m1.xlarge   c1.medium   c1.xlarge   m2.xlarge   m2.2xlarge   m2.4xlarge Example: -t m1.small  <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> .	Yes
<code>-g, --group</code> <i>group</i>	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. Type: String Default: Your default security group Example: -g myGroup	No



**Amazon Elastic Compute Cloud CLI Reference  
Options**

Name	Description	Required
<code>-f, --format file_format</code>	The file format of the disk image. Type: String Default: None Valid values: VMDK   RAW   VHD Example: -f VMDK	Yes
<code>-a, --architecture architecture</code>	The architecture of the image. Type: String Default: i386 Valid values: i386   x86_64 Condition: Required if instance type is specified; otherwise defaults to i386.  <b>Note</b> Using this option ensures that your image is imported as the expected instance type. 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 <b>m1.small</b> . Example: -a i386	Yes
<code>-p, --platform platform_name</code>	The operating system of the instance. Type: String Default: None Valid value: Windows	No
<code>-b, --bucket s3_bucket_name</code>	The Amazon S3 destination bucket for the manifest. Type: String Default: None Condition: The <code>--manifest-url</code> parameter is not specified. Example: myawsbucket	Yes
<code>-o, --owner-akid access_key_id</code>	The access key ID of the bucket owner. Type: String Default: None Example: AKIAIOSFODNN7EXAMPLE	No
<code>-w, --owner-sak secret_access_key</code>	The secret access key of the bucket owner. Type: String Default: None Example: wJairXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY	Yes
<code>--prefix prefix</code>	The prefix for the manifest file and disk image file parts within the Amazon S3 bucket. Type: String Default: None Example: --prefix MyDiskParts	No

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

Name	Description	Required
<code>--manifest-url url</code>	The URL for an existing import manifest file already uploaded to Amazon S3. Type: String Default: None. This option cannot be specified if the <code>--bucket</code> option is present. Example: <code>my-ami.manifest.xml</code>	No
<code>-s, --volume-size volume_size</code>	The size of the Amazon EBS volume, in GiB (2 <sup>30</sup> bytes), that will hold the converted image. If not specified, EC2 calculates the value using the disk image file. Type: String Default: None Example: <code>-s 30</code>	No
<code>-z, --availability-zone availability_zone</code>	The Availability Zone for the converted VM. Type: String Default: None Valid values: Use <code>ec2-describe-availability-zones</code> for a list of values Example: <code>-z us-east-1</code>	No
<code>-d, --description description</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 Example: <code>-d Test of ec2-import-instance</code>	No
<code>--user-data user_data</code>	User data to be made available to the imported instance. Type: String Default: None Example: <code>--user-data This is user data</code>	No
<code>--user-data-file disk_image_filename</code>	The file containing user data made available to the imported instance. Type: String Default: None Example: <code>--user-data-file my_data_file</code>	No
<code>--subnet subnet_id</code>	If you're using Amazon Virtual Private Cloud, this specifies the ID of the subnet into which you're launching the instance. Type: String Default: None Example: <code>--subnet subnet-f3e6ab83</code>	No

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

Name	Description	Required
<code>--private-ip-address</code> <i>ip_address</i>	If you're using Amazon Virtual Private Cloud, this specifies the specific IP address within <i>subnet</i> to use. Type: String Default: None Example: <code>--private-ip-address 10.0.0.3</code>	No
<code>--monitor</code>	Enables monitoring of the specified instance(s). Type: String Default: None Example: <code>--monitor</code>	No
<del><code>--instance-initiated-shutdown-behavior</code></del> <del><i>behavior</i></del>	If an instance shutdown is initiated, this determines whether the instance stops or terminates. Type: String Default: None Valid values: stop   terminate Example: <code>--instance-initiated-shutdown-behavior stop</code>	No
<code>-x, --expires</code> <i>days</i>	The validity period for the signed Amazon S3 URLs that allow EC2 to access the manifest. Type: String Default: 30 days Example: <code>-x 10</code>	No
<code>--ignore-region-affinity</code>	Ignores the verification check to determine whether the bucket's Amazon S3 region matches the EC2 region where the conversion task is created. Type: None Default: None Example: <code>--ignore-region-affinity</code>	No
<code>--dry-run</code>	Validates that the disk image matches a known type, without creating an import task. Type: None Default: None Example: <code>--dry-run</code>	No
<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 Example: <code>--dont-verify-format</code>	No
<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 Example: <code>--no-upload</code>	No

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example creates an import instance task that migrates a Windows Server 2008 SP2 (32-bit) VM into the AWS us-east-1 region.

```
PROMPT> ec2-import-instance ./WinSvr8-disk1.vmdk -f VMDK -o AKIAIOSFODNN7EXAMPLE
-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. 63)
- [ec2-delete-disk-image](#) (p. 177)
- [ec2-describe-conversion-tasks](#) (p. 256)
- [ec2-import-volume](#) (p. 494)
- [ec2-resume-import](#) (p. 590)

# 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 (e.g., 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.

The short version of this command is `ec2ikey`.

## Syntax

```
ec2-import-keypair key_name --public-key-file key_file
```

## Options

Name	Description	Required
<i>key_name</i>	A unique name for the key pair. Type: String Default: None Example: myfavoritekeypair	Yes
<code>-f</code> , <code>--public-key-file</code> <i>key_file</i>	The path and name of the file containing the public key. Type: String Default: None Example: -f C:\keys\myfavoritekeypair_public.ppk	Yes

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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:

- The KEYPAIR identifier
- The name of the key pair
- The MD5 public key fingerprint as specified in section 4 of [RFC4716](#)

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example imports the public key from the file `C:\keys\mykey.ppk`.

```
PROMPT> ec2-import-keypair gsg-keypair --public-key-file C:\keys\mykey.ppk
KEYPAIR gsg-keypair 00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00
```

## Related Topics

### Download

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

### Related Action

- [ImportKeyPair](#)

### Related Commands

- [ec2-create-keypair](#) (p. 105)
- [ec2-delete-keypair](#) (p. 188)
- [ec2-describe-keypairs](#) (p. 320)

# ec2-import-volume

## Description

Creates a new 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	Required
<i>disk_image</i>	The local file name of the disk image. Type: String Default: None Example: WinSvr8-64-disk1.vmdk	Yes
<code>-f, --format</code> <i>file_format</i>	The file format of the disk image. Type: String Default: None Valid values: VMDK   RAW   VHD Example: -f VMDK	Yes
<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 Example: -s 30	No
<code>-z, --availability-zone</code> <i>zone</i>	The Availability Zone for the converted VM. Type: String Valid values: Use <code>ec2-describe-availability-zones</code> for a list of values. Example: -z us-east-1	No

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

Name	Description	Required
<code>-b, --bucket <i>bucket</i></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. Example: <code>-b myawsbucket</code>	Yes
<code>-o, --owner-akid <i>access_key_id</i></code>	The access key ID of the bucket owner. Type: String Default: None Example: <code>AKIAIOSFODNN7EXAMPLE</code>	No
<code>-w, --owner-sak <i>secret_access_key</i></code>	The secret access key of the bucket owner. Type: String Default: None Example: <code>wJairXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY</code>	Yes
<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 Example: <code>--prefix MyDiskParts</code>	No
<code>--manifest-url <i>url</i></code>	The URL for an existing import manifest file already uploaded to Amazon S3. Type: String Default: None Condition: This option cannot be specified if the <code>--bucket</code> option is present. Example: <code>my-ami.manifest.xml</code>	No
<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 Example: <code>-d Test of ec2-import-instance</code>	No
<code>-x, --expires <i>days</i></code>	The validity period for the signed Amazon S3 URLs that allow EC2 to access the manifest. Type: String Default: 30 days Example: <code>-x 10</code>	No

Name	Description	Required
<code>--ignore-region-affinity</code>	<p> Ignores the verification check to determine whether the bucket's Amazon S3 region matches the Amazon EC2 region where the conversion-task is created.</p> <p>Type: None</p> <p>Default: None</p> <p>Example: <code>--ignore-region-affinity</code></p>	No
<code>--dry-run</code>	<p> Does not create an import task, only validates that the disk image matches a known type.</p> <p>Type: None</p> <p>Default: None</p> <p>Example: <code>--dry-run</code></p>	No
<code>--no-upload</code>	<p> 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>.</p> <p>Type: None</p> <p>Default: None</p> <p>Example: <code>--no-upload</code></p>	No
<code>--dont-verify-format</code>	<p> Does not verify the file format. We don't recommend this option because it can result in a failed conversion.</p> <p>Type: None</p> <p>Default: None</p> <p>Example: <code>--dont-verify-format</code></p>	No

## Common Options

Option	Description
<code>--region REGION</code>	<p> Overrides 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 value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set.</p> <p>Example: <code>--region eu-west-1</code></p>
<code>-U, --url URL</code>	<p> The uniform resource locator (URL) of the Amazon EC2 web service entry point.</p> <p>Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set.</p> <p>Example: <code>-U https://ec2.amazonaws.com</code></p>

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example creates an import volume task that migrates a Windows Server 2008 (32-bit) volume into the AWS 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. 63)
- [ec2-delete-disk-image](#) (p. 177)
- [ec2-describe-conversion-tasks](#) (p. 256)

- [ec2-import-instance](#) (p. 483)
- [ec2-resume-import](#) (p. 590)



# ec2-migrate-image

## Description

Copies a bundled AMI from one region to another.

### Note

This tool replaces [ec2-migrate-bundle](#) (p. 645).

This tool does not work with AMIs backed by Amazon EBS.

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	Required
-K, --private-key <i>private_key</i>	The path to your PEM-encoded RSA key file. Type: String Default: Uses EC2_PRIVATE_KEY environment variable	No
-C, --cert <i>cert</i>	The user's PEM encoded RSA public key certificate file. Type: String Default: Uses EC2_CERT environment variable Example: -C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem	No
-U, --url <i>url</i>	The URL to use as the web service URL. Type: String Default: https://ec2.amazonaws.com Example: -U https://ec2.amazonaws.com	No
-o, --owner-akid <i>access_key_id</i>	The access key ID of the bucket owner. Type: String Default: None Example: -o AKIAIOSFODNN7EXAMPLE	Yes
-w, --owner-sak <i>secret_access_key</i>	The secret access key of the bucket owner. Type: String Default: None Example: -w wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY	Yes

**Amazon Elastic Compute Cloud CLI Reference  
Options**

<b>Name</b>	<b>Description</b>	<b>Required</b>
<code>--bucket</code> <i>source_s3_bucket</i>	The source Amazon S3 bucket where the AMI is located, followed by an optional '/'-delimited path prefix. Type: String Default: None Example: <code>--bucket myawsbucket</code>	Yes
<code>--destination-bucket</code> <i>destination_s3_bucket</i>	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 Example: <code>--destination-bucket myotherawsbucket</code>	Yes
<code>--manifest</code> <i>manifest</i>	The location of the Amazon S3 source manifest. Type: String Default: None Example: <code>--manifest my-ami.manifest.xml</code>	Yes
<code>--location</code> {US   EU}	The location of the destination Amazon S3 bucket. Type: String Valid values: US   EU Default: US Example: <code>--location EU</code>	No
<code>--acl</code> <i>acl</i>	The access control list policy of the bundled image. Type: String Valid values: public-read   aws-exec-read Default: None Example: <code>--acl public-read</code>	Yes
<code>--kernel</code>	The ID of the kernel to select. Type: String Default: None Example: <code>--kernel aki-ba3adfd3</code>	No
<code>--ramdisk</code>	The ID of the RAM disk to select. Some kernels require additional drivers at launch. Check the kernel requirements for information on whether you need to specify a RAM disk. To find kernel requirements, refer to the Resource Center and search for the kernel ID. Type: String Default: None Example: <code>--ramdisk ari-badbad00</code>	No
<code>--no-mapping</code>	Disables automatic mapping of kernels and RAM disks. Type: String Default: Mapping is enabled. Example: <code>--no-mapping</code>	No

Name	Description	Required
<code>--region region</code>	The region to look up in the mapping file. Type: String Default: Amazon EC2 attempts to determine the region from the location of the Amazon S3 bucket. Example: <code>--region eu-west-1</code>	No

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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:

- Status messages describing the stages and status of the migration

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

## Examples

### Example Request

This example 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. 536)
- [ec2-run-instances](#) (p. 600)

# ec2-modify-image-attribute

## Description

Modifies an attribute of an AMI.

### 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-codes code}
```

## Options

Name	Description	Required
<i>ami_id</i>	The AMI ID. Type: String Default: None Example: ami-2bb65342	Yes
-p, --product-codes <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 Example: -p D662E989	No
-l, --launch-permission	Used with the --add or --remove flags to grant or revoke launch permissions. Type: String Default: None Example: --launch-permission	Yes
-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 identifier</i>   all Default: None Example: --launch-permission --add all	Yes

Name	Description	Required
<code>-r, --remove entity</code>	Removes a launch permission for the specified AWS account or for all users. Type: String Valid values: <code>AWS account identifier   all</code> Default: None Example: <code>--launch-permission --remove all</code>	Yes

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example makes the AMI public (i.e., so any AWS account can launch it).

```
PROMPT> ec2-modify-image-attribute ami-2bb65342 -l -a all
launchPermission ami-2bb65342 ADD group all
```

### Example Request

This example makes the AMI private (i.e., so only you as the owner can launch it).

```
PROMPT> ec2-modify-image-attribute ami-2bb65342 -l -r all
launchPermission ami-2bb65342 REMOVE group all
```

### Example Request

This example grants launch permission to the AWS account with ID 444455556666.

```
PROMPT> ec2-modify-image-attribute ami-2bb65342 -l -a 444455556666
launchPermission ami-2bb65342 ADD userId 444455556666
```

### Example Request

This example removes launch permission from the AWS account with ID 444455556666.

```
PROMPT> ec2-modify-image-attribute ami-2bb65342 -l -r 444455556666
launchPermission ami-2bb65342 REMOVE userId 444455556666
```

### Example Request

This example adds the 774F4FF8 product code to the ami-61a54008 AMI.

```
PROMPT> ec2-modify-image-attribute ami-61a54008 -p 774F4FF8
productcodes ami-61a54008 productCode 774F4FF8
```

## Related Topics

### Download

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

### Related Action

- [ModifyImageAttribute](#)

## Related Commands

- [ec2-reset-image-attribute](#) (p. 575)
- [ec2-describe-image-attribute](#) (p. 278)

# 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 Boolean | --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	Required
<i>instance_id</i>	The instance ID. Type: String Default: None Example: i-43a4412a	Yes
-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 Default: Example: -b "/dev/sdb=vol-7eb96d16:false"	No

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

Name	Description	Required
<code>--disable-api-termination</code> <i>Boolean</i>	<p>Whether the instance can be terminated using the EC2 API. A value of <code>true</code> means you can't terminate the instance using the API (the instance is "locked"). A value of <code>false</code> means you can terminate the instance using the API (the instance is "unlocked"). Set this attribute to <code>true</code> to prevent the instance from being terminated using the EC2 API.</p> <p>Type: Boolean            Default: <code>false</code>            Example: <code>--disable-api-termination true</code></p>	No
<code>--ebs-optimized</code> <i>Boolean</i>	<p>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.</p> <p>Type: Boolean            Default: <code>false</code>            Example: <code>--ebs-optimized true</code></p>	No
<code>-g, --group-id group_id</code>	<p>[For instances running in a VPC] Modify the security groups an instance is in. The new set of groups you specify replaces the current set. You must specify at least one group, even if it's just the default security group in the VPC. You must specify the group ID and not the group name.</p> <p>Type: String            Default: None            Example: <code>-g sg-1a1a1a1a -g sg-9b9b9b9b</code></p>	No
<code>--instance-initiated-shutdown-behavior behavior</code>	<p>Whether the instance stops or terminates when you initiate instance shutdown.</p> <p>Type: String            Valid values: <code>stop   terminate</code>            Default: <code>stop</code>            Example: <code>--instance-initiated-shutdown-behavior stop</code></p>	No
<code>-t, --instance-type type</code>	<p>The type of the instance.</p> <p>Type: String            Default: <code>m1.small</code>            Example: <code>-t m1.large</code></p>	No
<code>--kernel kernel_id</code>	<p>The ID of the kernel associated with the AMI.</p> <p>Type: String            Default: None            Example: <code>--kernel aki-1a2b3c4d</code></p>	No

Name	Description	Required
<code>--ramdisk <i>ramdisk_id</i></code>	The ID of the RAM disk associated with the AMI. Type: String Default: None Example: <code>--ramdisk ari-1a2b3c4d</code>	No
<code>--source-dest-check</code> <i>Boolean</i>	Enables a Network Address Translation (NAT) instance in a VPC to perform NAT. The attribute controls whether source/destination checking is enabled on the instance. A value of <code>true</code> means checking is enabled, and <code>false</code> means checking is disabled. The value must be <code>false</code> for the 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> Example: <code>--source-dest-check false</code>	No
<code>--user-data</code> <i>user_data</i>	The Base64-encoded MIME user data to be made available to the instance(s) in this reservation. Type: String Default: None Example: <code>--user-data "My user data"</code>	No

## Common Options

Option	Description
<code>--region <i>REGION</i></code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url <i>URL</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.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

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

## Examples

### Example Request

This example changes the kernel for the instance.

```
PROMPT> ec2-modify-instance-attribute i-10a64379 --kernel aki-f70657b2
KERNEL i-10a64379 aki-f70657b2
```

## Related Topics

### Download

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

### Related Action

- [ModifyInstanceAttribute](#)

### Related Commands

- [ec2-describe-instance-attribute](#) (p. 290)
- [ec2-reset-instance-attribute](#) (p. 578)

# ec2-modify-network-interface-attribute

## Description

Modifies a 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 NETWORKINTERFACE -d, --description DESCRIPTION -a, --attachment ATTACHMENT --delete-on-termination BOOLEAN --source-dest-check BOOLEAN --group-id GROUP_ID
```

## Options

Name	Description	Required
-d, --description <i>DESCRIPTION</i>	Changes the description of the network interface. Type: String Default: None Example: -d "My Second ENI"	Yes
-a, --attachment <i>ATTACHMENT</i>	Changes properties of the attachment. Type: String Default: None Constraints: Must be used in conjunction with --delete-on-termination. Example: -a eni-attach-09703260 --delete-on-termination false	Yes
--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. Example: -a eni-attach-09703260 --delete-on-termination false	Yes
--source-dest-check <i>BOOLEAN</i>	Sets whether to enable the source/dest check on traffic through this network interface. Type: String Default: None Constraints: Valid options are 'true' and 'false'. Example: --source-dest-check false	Yes



Name	Description	Required
<code>--group-id GROUP_ID</code>	Replaces the security groups for this network interface. Type: String Default: None Example: <code>--group-id sg-b90619d5 --group-id sg-a92639c9</code>	Yes

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 the name of the attribute that was modified.

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

## Examples

### Example Request

This example adds a description to the network interface.

```
PROMPT> ec2-modify-network-interface-attribute eni-b35da6da -d "This is an ENI"  
NETWORKINTERFACE    eni-b35da6da    description
```

This example turns off source/destination checking for network traffic across the network interface.

```
PROMPT> ec2-modify-network-interface-attribute eni-b35da6da --source-dest-check  
false  
NETWORKINTERFACE    eni-b35da6da    sourceDestCheck  
SOURCEDESTCHECK     false
```

This example 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
```

This example 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. 37)
- [ec2-create-network-interface](#) (p. 117)
- [ec2-delete-network-interface](#) (p. 198)
- [ec2-describe-network-interface-attribute](#) (p. 330)
- [ec2-describe-network-interfaces](#) (p. 334)
- [ec2-detach-network-interface](#) (p. 446)
- [ec2-reset-network-interface-attribute](#) (p. 582)

# 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	Required
<i>snapshot_id</i>	The ID of the snapshot. Type: String Default: None Example: snap-78a54011	Yes
<code>-c, --create-volume-permission</code>	Modifies the create volume permissions of the snapshot. Type: String Default: None Example: -c	Yes
<code>-a, --add <i>entity</i></code>	Adds a permission for the specified AWS account or for all accounts. Type: String Valid values: <code>AWS account identifier   all</code> Default: None Example: <code>-c --add all</code>	
<code>--remove <i>entity</i></code>	Removes a permission for the specified AWS account or for all accounts. Type: String Valid values: <code>AWS account identifier   all</code> Default: None Example: <code>-c --remove all</code>	

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 createVolumePermission Identifier
- The ID of the snapshot
- The account IDs or 'all'
- The attribute type identifier
- The ID of the snapshot 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 Request

This example makes the snap-78a54011 snapshot public.

```
PROMPT> ec2-modify-snapshot-attribute snap-7ddb6e14 -c --add 123456789012  
createVolumePermission snap-7ddb6e14 ADD userId 123456789012
```

## Related Topics

### Download

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

### Related Action

- [ModifySnapshotAttribute](#)

### Related Commands

- [ec2-create-snapshot](#) (p. 136)
- [ec2-describe-snapshot-attribute](#) (p. 374)
- [ec2-describe-snapshots](#) (p. 378)
- [ec2-reset-snapshot-attribute](#) (p. 586)

# 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. 466) 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. 466) 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* ... *--attribute\_flag* *ATTRIBUTE\_VALUE*

## Options

Name	Description	Required
<i>volume_id</i>	The ID of the volume. Type: String Example: vol-4282672b	Yes
<code>-a --auto-enable-io</code>	Determines whether the volume should be auto-enabled for I/O operations. Example: <code>--auto-enable-io true</code>	Yes

## Common Options

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



Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 volume
- A Boolean value for the attribute

Amazon EC2 command line tools display errors on stderr.

## Example

### Example Request

This example modifies the attribute of the volume 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. 411)
- [ec2-describe-volume-status](#) (p. 415)
- [ec2-enable-volume-io](#) (p. 466)

## 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	Required
<i>instance_id</i>	The instance ID. Type: String Default: None Example: i-43a4412a	Yes

### Common Options

Option	Description
<code>--region <i>REGION</i></code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url <i>URL</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key <i>AWS_ACCESS_KEY</i></code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns a table that contains the following information:

- The instance ID
- The monitoring state

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example enables monitoring for `i-43a4412a` and `i-23a3397d`.

```
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. 600)
- [ec2-unmonitor-instances](#) (p. 625)

# 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, go to [Understanding Reserved Instance Pricing Tiers](#) in the *Amazon Elastic Compute Cloud User Guide*. For more information about Reserved Instances, go to [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, go to [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	Required
<code>-o, --offering offering</code>	The offering ID of the Reserved Instance to purchase. Type: String Default: None Example: <code>-o 4b2293b4-5813-4cc8-9ce3-1957fexample</code>	Yes
<code>-c, --instance-count count</code>	The number of Reserved Instances to purchase. Type: Integer Default: None Example: <code>-c 5</code>	Yes
<code>-l limit-price</code>	The maximum price that you are willing to pay. Type: Integer Default: None Example: <code>-c 5</code>	Yes

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

The command returns a table that contains the following information:

- RESERVEDINSTANCES identifier
- The ID(s) of the purchased Reserved Instances

Amazon EC2 command line tools display errors on stderr.

## Examples

This example 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  
b847fa93-0c31-405b-b745-b6bf0example b847fa93-0c31-405b-b745-b6bf0example
```

## Related Operations

- [ec2-describe-reserved-instances-offerings](#) (p. 360)
- [ec2-describe-reserved-instances](#) (p. 349)

# 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 instance(s). 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	Required
<i>instance_id</i>	One or more instance IDs of instances. Type: String Default: None Example: i-3ea74257	Yes

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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:

- This command displays no output on success

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example 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. 600)

## ec2-register

### Description

Registers a new AMI with Amazon EC2. 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 Amazon EC2 instance store 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	Required
<i>manifest</i>	The full path to your AMI manifest in Amazon S3 storage. Type: String Default: None Condition: Required if registering an instance store-backed AMI. Example: myawsbucket/image.manifest.xml	Conditional
-n, --name <i>name</i>	A name for your AMI. Type: String Default: None Constraints: 3-128 alphanumeric characters, parenthesis (), commas (,), slashes (/), dashes (-), or underscores(_) Example: -n "Standard Web Server"	Yes

**Amazon Elastic Compute Cloud CLI Reference  
Options**

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Name	Description	Required
<p><code>-d, --description</code> <i>description</i></p>	<p>The description of the AMI. Type: String Default: None Constraints: Up to 255 characters. Example: <code>-d "Standard Web Server AMI"</code></p>	No
<p><code>-a, --architecture</code> <i>architecture</i></p>	<p>The architecture of the image. Type: String Valid values: <code>i386   x86_64</code> Default: None Example: <code>-a i386</code></p>	No
<p><code>--kernel</code></p>	<p>The ID of the kernel associated with the image. Type: String Default: None Example: <code>--kernel aki-ba3adfd3</code></p>	No
<p><code>--ramdisk</code></p>	<p>The ID of the RAM disk to associate with the image. Some kernels require additional drivers at launch. Check the kernel requirements for information on whether you need to specify a RAM disk. To find kernel requirements, refer to the Resource Center and search for the kernel ID. Type: String Default: None Example: <code>--ramdisk ari-badbad00</code></p>	No
<p><code>--root-device-name</code> <i>name</i></p>	<p>The root device name (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. Example: <code>--root-device-name /dev/sda1</code></p>	No

Name	Description	Required
<p><code>-b</code>, <code>--block-device-mapping</code> <i>mapping</i></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</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>Conditional</p>
<p><code>-s</code>, <code>--snapshot</code> <i>snapshot</i></p>	<p>The ID of the Amazon EBS snapshot to be used as the root device.</p> <p>Type: String Default: None Example: <code>-s snap-78a54011</code></p>	<p>No</p>

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 IMAGE identifier
- The ID of the newly registered machine image

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example 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-78a54011
```

## Example Request

This example registers an Amazon EBS snapshot to create an AMI backed by Amazon EBS.

```
PROMPT> ec2-register -n MyImage -s snap-65e34ab22  
IMAGE ami-78a54023
```

## Example Request

This example 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-6e3ad879 -b /dev/sdb=snap-823ea6df -b  
/dev/sdc=:100  
IMAGE ami-78a54043
```

## Related Topics

### Download

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

### Related Action

- [RegisterImage](#)

### Related Commands

- [ec2-deregister](#) (p. 238)
- [ec2-describe-images](#) (p. 282)
- [ec2-run-instances](#) (p. 600)

# ec2-release-address

## Description

Releases an Elastic IP address allocated to your account.

This command applies to both EC2 Elastic IP addresses and VPC Elastic IP addresses. For information about VPC addresses and how they differ from EC2 addresses, see [Elastic IP Addresses](#) in the *Amazon Virtual Private Cloud User Guide*.

If you run this action on an Elastic IP address that is already released, the address might be assigned to another account, which will cause Amazon EC2 to return an error (`AuthFailure`).

### Note

For EC2 addresses only: Releasing an IP address automatically disassociates it from any instance it's associated with. To disassociate an IP address without releasing it, use the `ec2-disassociate-address` command.

If you try to release a VPC address that's associated with an instance, Amazon EC2 returns an error (`InvalidIPAddress.InUse`).

### Important

After releasing an Elastic IP address, it is released to the IP address pool and might be unavailable to your account. Make sure to update your DNS records and any servers or devices that communicate with the address.

The short version of this command is `ec2reladdr`.

## Syntax

```
ec2-release-address [ip_address | -a allocation_id]
```

## Options

Name	Description	Required
<i>ip_address</i>	The EC2 Elastic IP address. Type: String Default: None Condition: Required for EC2 Elastic IP addresses. Example: 192.0.2.1	Conditional
<code>-a, --allocation-id</code> <i>allocation_id</i>	The allocation ID that AWS provided when you allocated the address for use with Amazon VPC. Type: String Default: None Condition: Required for VPC Elastic IP addresses. Example: -a eipalloc-5723d13e	Conditional

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 ADDRESS identifier
- The Elastic IP address

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example releases an EC2 Elastic IP address.

```
PROMPT> ec2-release-address 192.0.2.1
ADDRESS 192.0.2.1
```

## Example Request

This example releases a VPC Elastic IP address associated with the account.

```
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. 13)
- [ec2-associate-address](#) (p. 21)
- [ec2-describe-addresses](#) (p. 241)
- [ec2-disassociate-address](#) (p. 459)

# 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 **ec2replnaclassoc**.

## Syntax

`ec2-replace-network-acl-association network_acl_association_id -a network_acl_id`

## Options

Name	Description	Required
<code>network_acl_association_id</code>	The ID representing the current association between the original network ACL and the subnet. Type: String Default: None Example: aclassoc-33ae4b5a	Yes
<code>-a, --network-acl <i>network_acl_id</i></code>	The ID of the new ACL to associate with the subnet. Type: String Default: None Example: -a acl-10b95c79	Yes

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 ASSOCIATION identifier
- The new association ID and the network ACL ID

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example starts with a network ACL associated with a subnet, and a corresponding association ID `aclassoc-e5b95c8c`. You want to associate a different network ACL (`acl-5fb85d36`) with the subnet. The result is a new association ID representing 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. 109)
- [ec2-delete-network-acl](#) (p. 191)
- [ec2-describe-network-acls](#) (p. 324)

# ec2-replace-network-acl-entry

## Description

Replaces an entry (i.e., 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	Required
<i>acl_id</i>	The ID of the ACL. Type: String Default: None Example: acl-5fb85d36	Yes
-n, --rule-number <i>rule_number</i>	The rule number of the entry to replace. Type: Number Default: None Example: -n 100	Yes
--egress	Optional flag to indicate whether to replace the egress rule. Default: If no value is specified, we replace the ingress rule	No
-P, --protocol <i>protocol</i>	The IP protocol. You can specify <i>all</i> or <i>-1</i> to mean all protocols. Type: String Valid values: <i>all</i>   <i>-1</i>   <i>tcp</i>   <i>udp</i>   <i>icmp</i> or any protocol number (for a list, see <a href="#">Protocol Numbers</a> ). Example: -P 6	Yes
-r, --cidr <i>cidr</i>	The CIDR range to allow or deny, in CIDR notation. Type: String Default: None Example: -r 172.16.0.0/24	Yes

Name	Description	Required
<code>-p, --port-range port_range</code>	For TCP or UDP: The range of ports to allow. Type: String Default: None Valid values: A single integer or a range (min-max). You can specify -1 to mean all ports (i.e. port range 0-65535). Condition: Required if specifying <code>tcp</code> or <code>udp</code> (or the equivalent number) for the protocol. Example: <code>-p 80-84</code>	Conditional
<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 Condition: Required if specifying <code>icmp</code> (or the equivalent number) for the protocol. Example: <code>-t -1:-1</code>	Conditional
<code>--allow</code>	Allows any traffic matching the rule. Condition: Either <code>--allow</code> or <code>--deny</code> must be specified, but not both.	Conditional
<code>--deny</code>	Denies any traffic matching the rule. Condition: Either <code>--allow</code> or <code>--deny</code> must be specified, but not both.	Conditional

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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:

- Boolean true or false

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example replaces the egress entry numbered 110 in the network ACL with 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. 112)
- [ec2-delete-network-acl-entry](#) (p. 194)
- [ec2-describe-network-acls](#) (p. 324)

## 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 NETWORKINTERFACE}
```

### Options

Name	Description	Required
<i>route_table_id</i>	The ID of the route table. Type: String Default: None Example: rtb-5da34634	Yes
-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 Example: -r 0.0.0.0/0	Yes
-g, --gateway <i>gateway_id</i>	The ID of a gateway in your VPC. Type: String Default: None Condition: You must provide one of the following: a gateway ID, instance ID, or a network interface ID. Example: -g igw-68a34601	Conditional
-i, --instance <i>instance_id</i>	The ID of a NAT instance in your VPC. Type: String Default: None Condition: You must provide one of the following: a gateway ID, instance ID, or a network interface ID. Example: -i i-a7c871e3	Conditional

Name	Description	Required
-n, --network-interface <i>NETWORKINTERFACE</i>	The network interface associated with the route. Type: String Default: None Condition: You must provide one of the following: a gateway ID, instance ID, or a network interface. Example: -n eni-5b729933	Conditional

## Common Options

Option	Description
--region <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: --region eu-west-1
-U, --url <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: -U https://ec2.amazonaws.com
-O, --aws-access-key <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
-W, --aws-secret-key <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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: -W wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
-T, --security-token TOKEN <i>AWS_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

Option	Description
<code>--request-timeout</code> <i>TIMEOUT</i>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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:

- Boolean true or false

Amazon EC2 command line tools display errors on stderr.



## Examples

### Example Request

This example replaces a route in the route table with ID `rtb-e4ad488d`. The new route matches the CIDR `10.0.0.0/8` and sends it to the virtual private gateway with 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. 129)
- [ec2-delete-route](#) (p. 204)
- [ec2-describe-route-tables](#) (p. 368)

# ec2-replace-route-table-association

## Description

Changes the route table associated with a subnet in a VPC.

You can also use this 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.

After you execute this action, the subnet uses the routes in the new route table it's associated with. 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	Required
<i>route_table_association_id</i>	The ID for the existing association to replace (which was returned to you when you associated the original route table with the subnet). Type: String Default: None Example: rtbassoc-93a045fa	Yes
<b>-r</b> <i>route_table_id</i>	The ID of the new route table to associate with the subnet. Type: String Default: None Example: -r rtb-6aa34603	Yes

## Common Options

Option	Description
<b>--region</b> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>

**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 value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 ASSOCIATION identifier
- The new association ID
- The route table ID

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example starts with a route table associated with a subnet, and a corresponding association ID `rtbassoc-f8ad4891`. You want to associate a different route table (table `rtb-f9ad4890`) to the subnet. The result is a new association ID representing 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. 133)
- [ec2-delete-route-table](#) (p. 207)
- [ec2-describe-route-tables](#) (p. 368)
- [ec2-disassociate-route-table](#) (p. 463)
- [ec2-replace-route-table-association](#) (p. 557)

# ec2-report-instance-status

## Description

Reports the status for instances that you own.

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.

Reason Code	Description
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-efs-volume	My instance is experiencing performance problems which I believe are related to an EFS volume.
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 ...] [--filter "name=value"] ...]
```

## Options

Name	Description	Required
<i>instance_id</i>	The IDs of the instances. Type: String Example: i-15a4417c	Yes

Name	Description	Required
<code>--status</code>	The status of all instances listed in the <code>instance_id</code> parameter. Type: String Valid values: <code>ok</code>   <code>impaired</code>	Yes
<code>--reason</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. 561)</a> section for descriptions of each reason code. Type: String Valid values: <code>instance-stuck-in-state</code>   <code>unresponsive</code>   <code>not-accepting-credentials</code>   <code>password-not-available</code>   <code>performance-network</code>   <code>performance-instance-store</code>   <code>performance-ebs-volume</code>   <code>performance-other</code>   <code>other</code>	Yes
<code>--start-time</code>	The time at which the reported instance health state began. The date uses the format: <code>yyyy-MM-dd'T'HH:mm:ss</code> Type: DateTime Example: <code>2011-07-25T14:00:00</code>	No
<code>--end-time</code>	The time at which the reported instance health state ended. The date uses the format: <code>yyyy-MM-dd'T'HH:mm:ss</code> Type: DateTime Example: <code>2011-07-25T14:00:00</code>	No
<code>--description</code>	Descriptive text about the instance health state. Type: String Default: None	No

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example 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. 295)

## 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 Boolean]
```

### Options

Name	Description	Required
<i>ami_id</i>	The ID of the AML. Type: String Default: None Example: ami-2bb65342	Yes
-p, --price <i>price</i>	The maximum hourly price for any Spot Instance launched to fulfill the request. Type: String Default: None Example: -p .15	Yes
-n, --instance-count <i>count</i>	The maximum number of Spot Instances to launch. Type: xs:integer Default: 1 Example: -n 10	No
-r, --type <i>type</i>	The Spot Instance request type. Type: String Valid values: one-time   persistent Default: one-time Example: -r persistent	No

**Amazon Elastic Compute Cloud CLI Reference  
Options**

---

<b>Name</b>	<b>Description</b>	<b>Required</b>
<code>-s, --subnet subnet_id</code>	The ID of the Amazon VPC subnet in which to launch the Spot Instance. Type: String Default: None Example: <code>-s subnet-baab943d3</code>	No
<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. Example: <code>--valid-from 2009-12-31T11:51:50</code>	No
<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. Example: <code>--valid-until 2009-12-31T11:51:50</code>	No
<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. Example: <code>--launch-group Skynet</code>	No

**Amazon Elastic Compute Cloud CLI Reference  
Options**

Name	Description	Required
<code>--availability-zone-group group</code>	<p>The user-specified name for a logical grouping of bids. 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.</p> <p><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. If there is no active instance running in the Availability Zone group that you specify for a new Spot Instance request (i.e., 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. Example: <code>--availability-zone-group batchGroup01</code></p>	No
<code>--placement-group group_name</code>	<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. Example: <code>--placement-group default</code></p>	No
<code>-d, --user-data user_data</code>	<p>The user data to make available to the instances.</p> <p>Type: String Default: None Example: <code>-d "My user data"</code></p>	No
<code>-g, --group group</code>	<p>The ID of the security group.</p> <p>Type: String Default: User's default group. Example: <code>-g MySecurityGroupID</code></p>	No

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

Name	Description	Required
-k, --key <i>key_name</i>	The name of the key pair. Type: String Default: None Example: -k MyKeyPair	No
-t, --instance-type <i>instance_type</i>	The instance type. Type: String Valid values: m1.small   m1.large   m1.xlarge   c1.medium   c1.xlarge   m2.xlarge   m2.2xlarge   m2.4xlarge   t1.micro Default: m1.small Example: -t m1.large	No
-z, --availability-zone <i>zone</i>	The placement constraint (i.e., specific Availability Zone) for launching the instances. Specify if 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. Example: -z us-east-1b	No
--kernel <i>kernel</i>	The ID of the kernel to select. Type: String Default: None Example: --kernel aki-ba3adfd3	No
--ramdisk <i>ramdisk</i>	The ID of the RAM disk to select. Some kernels require additional drivers at launch. Check the kernel requirements for information on whether you need to specify a RAM disk and search for the kernel ID. Type: String Default: None Example: --ramdisk ari-badbad00	No

Name	Description	Required
<p><code>-b,</code> <code>--block-device-mapping</code> <code>mapping</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 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>No</p>
<p><code>--monitor</code></p>	<p>Enables monitoring for the instance.</p> <p>Type: String Default: Disabled Example: <code>--monitor</code></p>	<p>No</p>

**Amazon Elastic Compute Cloud CLI Reference  
Options**

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Name	Description	Required
<pre>--iam-profile arn/name</pre>	<p>The IAM instance profile to associate with the launched instance(s). 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, arn:aws:iam::111111111111:instance-profile/s3access) or the name of the role (for example, s3access).</p> <p>Type: String            Default: None            Example:            arn:aws:iam::111111111111:instance-profile/s3access</p>	No
<pre>-a, --network-interface NETWORKINTERFACE</pre>	<p>Specifies the network attachment for the launched instance (available only in Amazon VPC). The format of the NETWORKINTERFACE definition is as follows:</p> <p>For an existing NETWORKINTERFACE - <i>eni</i> : <i>dev index</i></p> <p>For a new NETWORKINTERFACE - <i>dev index</i> : <i>subnet</i> [: <i>description</i> ["&lt;priv IP&gt;"[:&lt;SGs&gt;[:&lt;DOT&gt;[:SIP count[:&lt;SIPs&gt;"]]]]]], where SGs is a comma separated list of security group IDs, DOT is either true or false, denoting whether to delete the interface on terminate, SIP count is the number of secondary IP addresses to assign, SIPs is a list of secondary IP addresses. You cannot specify both SIP count and SIPs.</p> <p>Type: String            Default: None</p>	No

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

Name	Description	Required
<del>--secondary-private-ip-address</del> <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 Amazon VPC. You cannot 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 Example: <code>--secondary-private-ip-address "10.0.2.18"</code> <code>--secondary-private-ip-address "10.0.2.28"</code></p>	No
<del>--secondary-private-ip-address-count</del> <i>COUNT</i>	<p>The number of secondary IP addresses to assign to the network interface or instance. You cannot specify this parameter when also specifying <code>--secondary-private-ip-address</code>. This option is only available for instances running in Amazon VPC.</p> <p>Type: Integer Default: None Example: <code>--secondary-private-ip-address-count 2</code></p>	No
<code>--ebs-optimized</code> <i>Boolean</i>	<p>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.</p> <p>Type: Boolean Default: <code>false</code> Example: <code>--ebs-optimized true</code></p>	No



## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 SPOTINSTANCEREQUEST identifier
- The ID of the Spot Instance request
- Price
- Type (one-time or persistent)
- Product description (Linux/UNIX, Windows)
- State (active, open, closed, cancelled, failed)
- Create time
- Valid from
- Valid until
- Launch group
- Availability Zone group
- Image ID
- Instance type
- Key pair name
- Security group

- Monitoring status
- Block device mapping
- EBS optimization
- Spot request status code
- Spot request status message
- Spot request status update time

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example creates a Spot Instances request for three m1.small instances.

```
PROMPT> ec2-request-spot-instances ami-b232d0db -p 0.04 --key gsg-keypair --
group default --instance-type m1.small -n 3 --type one-time
SPOTINSTANCEREQUEST      sir-7545a802      0.04      one-time      Linux/UNIX
  open      2010-04-07T16:57:04+0200
ami-b232d0db      m1.small gsg-keypair      default      mon
itoring-disabled
SPOTINSTANCEREQUEST      sir-26d36202      0.04      one-time      Linux/UNIX
  open      2010-04-07T16:57:04+0200
ami-b232d0db      m1.small gsg-keypair      default      mon
itoring-disabled
SPOTINSTANCEREQUEST      sir-63fb5402      0.04      one-time      Linux/UNIX
  open      2010-04-07T16:57:04+0200
ami-b232d0db      m1.small gsg-keypair      default      mon
itoring-disabled
```

## Related Topics

### Download

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

### Related Action

- [RequestSpotInstances](#)

### Related Commands

- [ec2-cancel-spot-instance-requests](#) (p. 74)
- [ec2-describe-spot-instance-requests](#) (p. 387)
- [ec2-describe-spot-price-history](#) (p. 395)

## ec2-reset-image-attribute

### Description

Resets an attribute of an AMI to its default value.

**Note**

The productCodes attribute cannot be reset.

The short version of this command is **ec2rimatt**.

### Syntax

```
ec2-reset-image-attribute ami_id -l
```

### Options

Name	Description	Required
<i>ami_id</i>	The ID of the AMI. Type: String Default: None Example: ami-15a4417c	Yes
-l, --launch-permission	Resets the launch permissions of the AMI. Type: String Default: None Example: -l	No

### Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 attribute type identifier
- The ID of the AMI
- The action identifier ("RESET")

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example resets the `launchPermission` attribute.

```
PROMPT> ec2-reset-image-attribute ami-6ba54002 -l  
launchPermission ami-6ba54002 RESET
```

## Related Topics

### Download

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

### Related Action

- [ResetImageAttribute](#)

### Related Commands

- [ec2-describe-image-attribute](#) (p. 278)
- [ec2-modify-image-attribute](#) (p. 505)

# 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 exists to enable a Network Address Translation (NAT) instance in a VPC to perform NAT. The attribute controls whether source/destination checking is enabled on the instance. The default value is `true`, which means checking is enabled. The value must be `false` for the 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	Required
<i>instance_id</i>	The ID of the instance. Type: String Default: None Example: i-43a4412a	Yes
--kernel	Resets the ID of the kernel. Type: String Default: None Example: --kernel	No
--ramdisk	Resets the ID of the RAM disk. Type: String Default: None Example: --ramdisk	No
--source-dest-check	Resets the <code>SourceDestCheck</code> flag to <code>true</code> (which means source/destination checking is enabled). Type: String Default: None Example: --source-dest-check	No

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 attribute type identifier
- The ID of the instance
- The action identifier ("RESET")

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example resets the `kernel` attribute.

```
PROMPT> ec2-reset-instance-attribute i-10a64379 --kernel
kernel i-10a64379 RESET
```

## Related Topics

### Download

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

### Related Action

- [ResetInstanceAttribute](#)

### Related Commands

- [ec2-describe-instance-attribute](#) (p. 290)
- [ec2-modify-instance-attribute](#) (p. 510)

# 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` *NETWORKINTERFACE* `--source-dest-check`

## Options

Name	Description	Required
<code>--source-dest-check</code>	Resets the source/dest check to the default value. Type: String Default: True Constraints: Valid options are 'true' and 'false'. Example: <code>--source-dest-check</code>	Yes

## Common Options

Option	Description
<code>--region</code> <i>REGION</i>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U</code> , <code>--url</code> <i>URL</i>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O</code> , <code>--aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## Output

This command returns the name of the network interface that was reset.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example resets network interface attributes 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 Topics

### Download

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

### Related Action

- [ResetNetworkInterfaceAttribute](#)

### Related Commands

- [ec2-attach-network-interface](#) (p. 37)
- [ec2-create-network-interface](#) (p. 117)
- [ec2-delete-network-interface](#) (p. 198)
- [ec2-describe-network-interface-attribute](#) (p. 330)

- [ec2-describe-network-interfaces](#) (p. 334)
- [ec2-detach-network-interface](#) (p. 446)
- [ec2-modify-network-interface-attribute](#) (p. 515)

# 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	Required
<code>--snapshot <i>snapshot</i></code>	The ID of the snapshot. Type: String Default: None Example: snap-78a54011	Yes
<code>-c, --create-volume-permission</code>	Resets the create volume permissions of the snapshot. Type: String Default: None Example: -c	Yes

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <code>AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 `createVolumePermission` identifier
- The ID of the snapshot
- The action identifier ("RESET")

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

## Examples

### Example Request

This example resets the permissions for `snap-78a54011`, making it a private snapshot that can only be used by the account that created it.

```
PROMPT> ec2-reset-snapshot-attribute snap-7ddb6e14  
createVolumePermission snap-7ddb6e14 RESET
```

## Related Topics

### Download

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

### Related Action

- [ResetSnapshotAttribute](#)

### Related Commands

- [ec2-modify-snapshot-attribute](#) (p. 519)
- [ec2-describe-snapshot-attribute](#) (p. 374)
- [ec2-describe-snapshots](#) (p. 378)

- [ec2-create-snapshot](#) (p. 136)

## 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	Required
<i>disk_image_filename</i>	The local file name of the disk image. Type: String Default: None Example: WinSvr8-32-disk1.vmdk	Yes
-t, --task <i>task_id</i>	The conversion task ID for the upload. Type: String Default: None Example: -t import-i-ffvko9js	Yes
-o, --owner-akid <i>access_key_id</i>	The access key ID of the bucket owner. Type: String Default: None Example: AKIAIOSFODNN7EXAMPLE	Yes
-w, --owner-sak <i>secret_access_key</i>	The secret access key of the bucket owner. Type: String Default: None Example: wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY	Yes
-x, --expires <i>days</i>	The validity period for the signed Amazon S3 URLs that allow EC2 to access your file. Type: String Default: 30 days Example: -x 10	No

Name	Description	Required
<code>--user-threads <i>threads</i></code>	The maximum number of threads to concurrently upload the file with. Type: String Default: 20 Example: <code>--user-threads 15</code>	No
<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 Example: <code>--part-size 3</code>	No
<code>--dry-run</code>	Does not upload the file, only validates that the disk image matches a known type. Type: None Default: None Example: <code>--dry-run</code>	No
<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 Example: <code>--dont-verify-format</code>	No

## Common Options

Option	Description
<code>--region <i>REGION</i></code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url <i>URL</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key <i>AWS_ACCESS_KEY</i></code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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-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-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>

## 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 Request

This example 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  
AIOSFODNN7EXAMPLE -w wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY
```

## Related Topics

### Download

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

### Related Action

- [ResumeImport](#)

### Related Commands

- [ec2-cancel-conversion-task](#) (p. 63)
- [ec2-delete-disk-image](#) (p. 177)
- [ec2-describe-conversion-tasks](#) (p. 256)
- [ec2-import-instance](#) (p. 483)
- [ec2-import-volume](#) (p. 494)

## ec2-revoke

### Description

Removes a rule from a security group. The rule can be for ingress traffic, or for egress traffic (only if this is a VPC security group).

This command applies to both EC2 security groups and VPC security groups. For information about VPC security groups and how they differ from EC2 security groups, see [Security Groups](#) 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 (i.e., 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.

Permission changes are propagated to instances within the security group 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	Required
<i>group</i>	For EC2 groups: The name or ID of the security group to modify. For VPC groups: The ID of the security group to modify (for example, sg-1a2b3c4d). The group must belong to your AWS account. Type: String Default: None Example: webserv	Yes
--egress	Optional flag applicable only to VPC security groups. The flag designates the rule is an egress rule (i.e., controls traffic leaving the VPC security group). Default: If this is not specified, the rule applies to ingress traffic for the specified security group	No

Name	Description	Required
<p><code>-P, --protocol protocol</code></p>	<p>The name or number of the IP protocol to revoke (go to <a href="#">Protocol Numbers</a>). EC2 security groups can have rules only for TCP, UDP, and ICMP, whereas VPC security groups 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 security groups: <code>tcp   udp   icmp</code> or the corresponding protocol number (<code>6   17   1</code>).</p> <p>Default for EC2 groups: 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 VPC groups: <code>tcp   udp   icmp</code> or any protocol number (go to <a href="#">Protocol Numbers</a>). Use <code>all</code> to specify all protocols.</p> <p>Condition: Required for VPC security groups.</p> <p>Example: <code>-P udp</code></p>	<p>Conditional</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>Default: None</p> <p>Valid values: A single integer or a range (min-max). You can specify <code>-1</code> to mean all ports (i.e., port range 0-65535).</p> <p>Condition: 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>Conditional</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 <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>Condition: Required if specifying <code>icmp</code> (or the equivalent number) for the protocol.</p> <p>Example: <code>-t -1:-1</code></p>	<p>Conditional</p>



Name	Description	Required
<code>-u</code> , <code>source_or_dest_group_owner</code>	The ID of the AWS account that owns the source security group (for ingress rules) or destination security group (for egress rules). If the group is in your own account, set this to your own AWS account ID. Cannot be used when specifying a CIDR IP address. Type: String Default: None Condition: Required when revoking a rule that gives access to one or more source security groups. Example: <code>-u 111122223333</code>	Conditional
<code>-o</code> <code>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 VPC security group, you must specify the group's ID (for example, <code>sg-9d4e5f6g</code> ) instead of its name. Cannot be used when specifying a CIDR IP address with the <code>-s</code> option. Type: String Default: None Condition: Required if revoking access to one or more source or destination security groups. Example: <code>-o headoffice</code>	Conditional
<code>-s</code> , <code>--cidr</code> <code>source_or_dest_cidr</code>	The CIDR range. Cannot be used when specifying a source or destination security group with the <code>-o</code> option. Type: String Default: <code>0.0.0.0/0</code> Constraints: Valid CIDR IP address range. Condition: Required if revoking access to one or more IP address ranges. Example: <code>-s 205.192.8.45/24</code>	Conditional

## Common Options

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

## Amazon Elastic Compute Cloud CLI Reference Common Options

Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token</code> TOKEN <i>AWS_DELEGATION_TOKEN</i>	<p>The AWS delegation token.</p> <p>Default: The value of the environment variable (if set).</p>
<code>--connection-timeout</code> <i>TIMEOUT</i>	<p>The connection timeout, in seconds.</p> <p>Example: <code>--connection-timeout 30</code></p>
<code>--request-timeout</code> <i>TIMEOUT</i>	<p>The request timeout, in seconds.</p> <p>Example: <code>--request-timeout 45</code></p>
<code>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

## 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, PERMISSION identifier
- The group name; currently, an empty string
- The type of rule; currently, only ALLOW rules are supported
- The protocol to allow
- The start of port range
- The end of port range
- The FROM identifier
- Source

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example revokes TCP port 80 access from the 205.192.0.0/16 address range for the `webserv` security group.

```
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
```

## Related Topics

### Download

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

### Related Action

- [RevokeSecurityGroupEgress](#)

- [RevokeSecurityGroupIngress](#)

## Related Commands

- [ec2-authorize](#) (p. 48)
- [ec2-create-group](#) (p. 88)
- [ec2-delete-group](#) (p. 181)
- [ec2-describe-group](#) (p. 272)

# ec2-run-instances

## Description

Launches a specified number of instances of an AMI for which you have permissions.

If Amazon EC2 cannot launch the minimum number of AMIs you request, no instances are launched. If there is insufficient capacity to launch the maximum number of AMIs you request, Amazon EC2 launches the minimum number specified for each AMI and allocates the remaining available instances using round robin.

### Note

Every instance is launched in a security group (which you create using the `ec2-create-group` command). If you don't specify a security group at launch time, the "default" security group is used.

You can provide an optional key pair ID in the launch request (created using the `ec2-create-keypair` or `ec2-import-keypair` command). The instances will have access to the public key at boot. You can use this key to provide secure access to an instance of an image on a per-instance basis. Amazon EC2 public images use this feature to provide secure access without passwords.

The public key material is made available to the Linux instance at boot time by placing it in the `openssh_id.pub` file on a logical device that is exposed to the instance as `/dev/sda2` (the instance store). The format of this file is suitable for use as an entry within `~/.ssh/authorized_keys` (the OpenSSH format). This can be done at boot (for example, as part of `rc.local`) allowing for secure access without passwords.

### Important

Launching public images without a key pair ID will leave them inaccessible.

You can provide optional user data in the launch request. All instances that collectively comprise the launch request have access to this data. For more information, see [Instance Metadata](#) in the *Amazon Elastic Compute Cloud User Guide*.

### Note

If any of the AMIs have a product code attached for which the user has not subscribed, the `ec2-run-instances` command fails.

The short version of this command is `ec2run`.

## Syntax

```
ec2-run-instances ami_id [-n instance_count] [-g group [-g group ...]] [-k keypair] [-d user_data | -f user_data_file] [--addressing addressing_type] [--instance-type instance_type] [--availability-zone zone] [--kernel kernel_id] [--ramdisk ramdisk_id] [--block-device-mapping block_device_mapping] [--monitor] [--disable-api-termination] [--instance-initiated-shutdown-behavior behavior] [--placement-group placement-group] [--tenancy tenancy] [--subnet subnet_id] [--private-ip-address ip_address] [--client-token token] [--network-interface networkinterface] [--secondary-private-ip-address ip_address | --secondary-private-ip-address-count count] [-p, --iam-profile arn|name] | --ebs-optimized
```

## Options

Name	Description	Required
<code>ami_id</code>	The ID of the AMI, returned by a call to <b>ec2-describe-images</b> . Type: String Default: None Example: ami-15a4417c	Yes
<code>-n , --instance-count min[-max]</code>	The number of instances to launch. If Amazon EC2 cannot launch the specified number of instances, no instances will launch. If this is specified as a range (min-max), Amazon EC2 will try to launch the maximum number, but no fewer than the minimum number. Type: String Default: 1 Constraints: Between 1 and the maximum number allowed for your account (the default for each account is 20, but this limit can be increased). Example: -n 5-10	No
<code>-g, --group group</code>	The name of the security group. Type: String Default: None Example: -g webserv	No
<code>-k, --key keypair</code>	The name of the key pair. Type: String Default: None Example: -k webserv-keypair	No
<code>-d, --user-data user_data</code>	Base64-encoded MIME user data to be made available to the instance(s) in this reservation. Type: String Default: None Example: -d s3-bucket:my-logs	No
<code>-f, --user-data-file filename</code>	The file name of the user data to be made available to the instance(s) in this reservation. Type: String Default: None Example: -f user-data.txt	No
<code>--addressing</code>	Deprecated.	

## Amazon Elastic Compute Cloud CLI Reference Options

Name	Description	Required
<code>-t, --instance-type</code> <i>instance_type</i>	The instance type. Type: String Valid values: <code>t1.micro</code>   <code>m1.small</code>   <code>m1.medium</code>   <code>m1.large</code>   <code>m1.xlarge</code>   <code>c1.medium</code>   <code>c1.xlarge</code>   <code>m2.xlarge</code>   <code>m2.2xlarge</code>   <code>m2.4xlarge</code>   <code>m3.xlarge</code>   <code>m3.2xlarge</code>   <code>hi1.4xlarge</code>   <code>cc1.4xlarge</code>   <code>cg1.4xlarge</code>   <code>cc2.8xlarge</code> Default: <code>m1.small</code> Example: <code>-t m1.large</code>	No
<code>-z,</code> <code>--availability-zone</code> <i>zone</i>	The Availability Zone in which to run the instance. Type: String Default: None Example: <code>--availability-zone us-east-1a</code>	No
<code>--kernel</code> <i>kernel</i>	The ID of the kernel with which to launch the instance. Type: String Default: None Example: <code>--kernel aki-ba3adfd3</code>	No
<code>--ramdisk</code> <i>ramdisk</i>	The ID of the RAM disk to select. Some kernels require additional drivers at launch. Check the kernel requirements for information on whether you need to specify a RAM disk. To find kernel requirements, refer to the Resource Center and search for the kernel ID. Type: String Default: None Example: <code>--ramdisk ari-abcdef01</code>	No

Name	Description	Required
<p><code>-b,</code> <code>--block-device-mapping</code> <code>mapping</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 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>No</p>
<p><code>-m, --monitor</code></p>	<p>Enables monitoring for the instance.</p> <p>Type: Boolean Default: Disabled Example: <code>--monitor</code></p>	<p>No</p>



**Amazon Elastic Compute Cloud CLI Reference  
Options**

<b>Name</b>	<b>Description</b>	<b>Required</b>
<code>--disable-api-termination</code>	Whether the instance can be terminated using the EC2 API. A value of <code>true</code> means you can't terminate the instance using the API (the instance is "locked"). A value of <code>false</code> means you can terminate the instance using the API (the instance is "unlocked"). Set this attribute to <code>true</code> to prevent the instance from being terminated using the EC2 API. Type: Boolean Default: <code>false</code> Example: <code>--disable-api-termination true</code>	No
<code>--instance-initiated-shutdown-behavior behavior</code>	If an instance shutdown is initiated, this determines whether the instance stops or terminates. Type: String Valid values: <code>stop</code>   <code>terminate</code> Default: <code>stop</code> Example: <code>--instance-initiated-shutdown-behavior stop</code>	No
<code>--placement-group placement-group</code>	The name of the placement group. Type: String Valid values: <code>cluster</code> Default: None Example: <code>--placement-group XYZ-cluster</code>	No
<code>--tenancy tenancy</code>	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. Type: String Valid values: <code>default</code>   <code>dedicated</code> Default: <code>default</code> Example: <code>--tenancy dedicated</code>	No
<code>-s, --subnet subnet_id</code>	If you're using Amazon Virtual Private Cloud, this specifies the ID of the subnet you want to launch the instance into. Type: String Default: None Example: <code>-s subnet-f3e6ab83</code>	No
<code>--private-ip-address ip_address</code>	If you're using Amazon Virtual Private Cloud, you can optionally use this parameter to assign the instance a specific available primary private IP address from the subnet. Type: String Default: Amazon VPC selects an IP address from the subnet for the instance Example: <code>--private-ip-address 10.0.0.25</code>	No

**Amazon Elastic Compute Cloud CLI Reference  
Options**

Name	Description	Required
<del>--secondary-private-ip-address</del> <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 Amazon VPC.</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 cannot specify this parameter when also specifying <code>--secondary-private-ip-address-count</code>.</p> <p>Type: String            Default: None            Example: <code>--secondary-private-ip-address "10.0.2.18"</code>  <code>--secondary-private-ip-address "10.0.2.28"</code></p>	No
<del>--secondary-private-ip-address-count</del> <i>COUNT</i>	<p>The number of secondary IP addresses to assign to the network interface or instance. This option is only available for instances running in Amazon VPC.</p> <p>You cannot specify this parameter when also specifying <code>--secondary-private-ip-address</code></p> <p>Type: Integer            Default: None            Example: <code>--secondary-private-ip-address-count 2</code></p>	No
<code>--client-token</code> <i>token</i>	<p>Unique, case-sensitive identifier you provide to ensure idempotency of the request. For more information, go to <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            Example: <code>--client-token 550e8400-e29b-41d4-a716-446655440000</code></p>	No

**Amazon Elastic Compute Cloud CLI Reference  
Options**

Name	Description	Required
<p><code>-a,</code> <code>--network-interface</code> <code>NETWORKINTERFACE</code></p>	<p>The network attachment for the launched instance. The format of the NETWORKINTERFACE definition is as follows:</p> <p>For an existing NETWORKINTERFACE - <i>eni:dev index</i></p> <p>For a new NETWORKINTERFACE - <i>dev index:subnet[:description[:priv IP[:SGs[:DOT[:SIP count [:SIPs]]]]]]</i> where SGs is a comma separated list of security group IDs; DOT is either true or false, denoting whether to delete the interface on terminate;SIP count is the number of secondary IP addresses to assign; and SIPs is a list of secondary IP addresses. You cannot specify both SIP count and SIPs.</p> <p>Type: String Default: None Examples:</p> <ul style="list-style-type: none"> <li>• Launch an instance with a specific interface for index 0 <code>ec2run ami-0644f007 -a eni-d2b24dbb:0</code></li> <li>• Launch an instance and specify interfaces for both index 0 and index 1 <code>ec2run ami-0644f007 -a eni-d2b24dbb:0 -a eni-12345678:1</code></li> <li>• Launch an instance and autocreate an interface for index 0 with details and a specific interface for index 1 <code>ec2-run-instances ami-31814f58 -a :0:subnet-15ca247d:"My ENI" -a eni-12345678:1</code></li> <li>• Launch an instance with a specific interface for index 0 and autocreate an interface for index 1 with specific values <code>ec2-run-instances ami-31814f58 -a eni-12345678:0 -a :1:subnet-15ca247d:"My ENI":"10.0.0.10":sg-123456,sg-654321:false</code></li> <li>• Launch an instance with a specific interface for index 0 with specific secondary IP addresses <code>ec2-run-instances ami-31814f58 -a eni-12345678:0 -a :1:subnet-15ca247d:"My ENI"::::"10.0.0.18,10.0.0.25"</code></li> </ul>	<p>No</p>
<p><code>-p, --iam-profile</code> <code>arn/name</code></p>	<p>The IAM instance profile to associate with the launched instance(s). 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 Example: <code>arn:aws:iam::111111111111:instance-profile/s3access</code></p>	<p>No</p>

Name	Description	Required
<code>--ebs-optimized</code> <i>Boolean</i>	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> Example: <code>--ebs-optimized true</code>	No

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <i>AWS_DELEGATION_TOKEN</i>	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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 INSTANCE identifier
- The Instance ID
- The AMI ID of the image on which the instance(s) are based
- The instance state. This is usually pending, which indicates that the instance(s) are preparing to launch
- The key pair name (if a key pair was associated with the instance at launch)

- The AMI launch index
- The product code (if the AMI has a product code)
- The instance type
- The instance launch time
- The Availability Zone
- The kernel ID
- The RAM disk ID
- The monitoring status (monitoring-enabled or monitoring-disabled)
- The root device type (ebs or instance-store)
- The placement group of the cluster instance
- The tenancy of the instance launched (if it is running within a VPC).
- The virtualization type (paravirtual or hvm)
- The hypervisor type (xen or ovm)
- Any private IP addresses associated with the instance (if it is running within a VPC)
- EBS optimization

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example launches three instances of the `ami-b232d0db` AMI.

```
PROMPT> ec2-run-instances ami-b232d0db -n 3 --availability-zone us-east-1a
RESERVATION r-385c5950 012301230123 default
INSTANCE i-5bca5a30 ami-b232d0db pending 0 m1.small 2010-04-07T12:25:47+0000
  us-east-1a aki-94c527fd ari-96c527ff monitoring-disabled ebs paravirtual
  xen
INSTANCE i-59ca5a32 ami-b232d0db pending 1 m1.small 2010-04-07T12:25:47+0000
  us-east-1a aki-94c527fd ari-96c527ff monitoring-disabled ebs paravirtual
  xen
INSTANCE i-5fca5a34 ami-b232d0db pending 2 m1.small 2010-04-07T12:25:47+0000
  us-east-1a aki-94c527fd ari-96c527ff monitoring-disabled ebs paravirtual
  xen
```

### Example Request

This example launches an Amazon EBS-based Fedora image (`ami-84db39ed`) and provides a block device mapping that mounts a public snapshot containing the 2000 US Census data.

```
PROMPT> ec2-run-instances ami-84db39ed -n 1 --b "/dev/sdb=snap-92d333fb::false"
RESERVATION r-5488ce3c 054794666394 default
INSTANCE i-770af21c ami-84db39ed pending 0 m1.small 2010-02-
25T00:08:00+0000 us-east-1c aki-94c527fd ari-96c527ff monitoring-
disabled ebs paravirtual xen
```

## Example Request

This example 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 subnet-c53c87ac.

```
PROMPT> ec2-run-instances ami-1cd4924e -k MyVPCKey -s subnet-c53c87ac -t
cl.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-68f2493c      053230519467
INSTANCE         i-22197876      ami-1cd4924e   pending   MyVPCKey      0
cl.medium        2012-07-01T21:45:27+0000   ap-southeast-1b   windows monitoring-
disabled 10.0.0.146
vpc-cc3c87a5     subnet-c53c87ac   ebs      hvm      xen          sg-3f4b5653     default
NIC              eni-0f62d866     subnet-c53c87ac vpc-cc3c87a5   053230519467   in-use
10.0.0.146      true
NICATTACHMENT    eni-attach-6537fc0c  0          attaching      2012-07-01T14:45:27-
0700          true
GROUP            sg-3f4b5653      default
PRIVATEIPADDRESS      10.0.0.146
PRIVATEIPADDRESS      10.0.0.148
PRIVATEIPADDRESS      10.0.0.150
```

## Related Topics

### Download

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

### Related Action

- [RunInstances](#)

### Related Commands

- [ec2-describe-instances](#) (p. 301)
- [ec2-stop-instances](#) (p. 615)
- [ec2-start-instances](#) (p. 611)
- [ec2-terminate-instances](#) (p. 619)
- [ec2-authorize](#) (p. 48)
- [ec2-revoke](#) (p. 594)
- [ec2-create-keypair](#) (p. 105)
- [ec2-create-group](#) (p. 88)
- [ec2-describe-group](#) (p. 272)

# 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.

### Note

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 cannot start or stop Spot Instances.

For more information, see [Using Amazon EBS-Backed AMIs and Instances](#).

The short version of this command is **ec2start**.

## Syntax

```
ec2-start-instances instance_id [instance_id...]
```

## Options

Name	Description	Required
<i>instance_id</i>	The instance ID. Type: String Default: None Example: i-43a4412a	Yes

## Common Options

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



**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 value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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:

- INSTANCE identifier
- Instance ID
- Previous state
- Current state

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example starts the i-10a64379 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. 301)
- [ec2-run-instances](#) (p. 600)
- [ec2-stop-instances](#) (p. 615)
- [ec2-terminate-instances](#) (p. 619)

## 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.

#### Important

Although Spot Instances can use Amazon EBS-backed AMIs, they don't support Stop/Start. In other words, you can't stop and start Spot Instances launched from an AMI with an Amazon EBS 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.

#### Note

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 EBS-backed instances. You can only terminate S3-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, go to the "Stop/Start" and "Instance Termination" in [Basics of Amazon EBS-Backed AMIs and Instances](#) in the Amazon EC2 User Guide.

The short version of this command is **ec2stop**.

### Syntax

```
ec2-stop-instances instance_id [instance_id...] [--force]
```

### Options

Name	Description	Required
<i>instance_id</i>	The ID of the instance. Type: String Default: None Example: i-43a4412a	Yes

Name	Description	Required
<code>-f, --force</code>	Forces the instance to stop. 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. This option is not recommended for Windows instances. Type: Boolean Default: None Example: None	No

## Common Options

Option	Description
<code>--region REGION</code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url URL</code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token TOKEN</code> <code>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 INSTANCE identifier
- The ID of the instance
- The previous state
- The current state

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example stops the i-10a64379 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. 301)
- [ec2-run-instances](#) (p. 600)
- [ec2-start-instances](#) (p. 611)
- [ec2-terminate-instances](#) (p. 619)

# 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 will remain visible after termination (approximately one hour).

### Note

By default, Amazon EC2 deletes all Amazon EBS volumes that were attached when the instance launched. Amazon EBS volumes attached after instance launch persist.

You can stop, start, and terminate EBS-backed instances. You can only terminate S3-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, go to the "Stop/Start" and "Instance Termination" in [Basics of Amazon EBS-Backed AMIS and Instances](#) in the Amazon EC2 User Guide.

The short version of this command is **ec2kill**.

## Syntax

`ec2-terminate-instances instance_id [instance_id ...]`

## Options

Name	Description	Required
<i>instance_id</i>	The IDs of instances to terminate. Type: String Default: None Example: i-43a4412a	Yes

## Common Options

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



Option	Description
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token TOKEN AWS_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>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

## 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 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 Request

This example terminates the `i-3ea74257` instance.

```
PROMPT> ec2-terminate-instances i-3ea74257  
INSTANCE i-3ea74257 running shutting-down
```

## Related Topics

### Download

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

### Related Action

- [TerminateInstances](#)

### Related Commands

- [ec2-describe-instances](#) (p. 301)
- [ec2-run-instances](#) (p. 600)

# ec2-unassign-private-ip-addresses

## Description

Unassigns one or more secondary private IP addresses from a network interface in Amazon VPC. This command is only available in Amazon VPC.

The short version of this command is **ec2upip**.

## Syntax

```
ec2-unassign-private-addresses --network-interface NetworkInterface
--secondary-private-ip-address IP ADDRESS [--secondary-private-ip-address IP ADDRESS ...]
```

## Options

Name	Description	Required
<code>--n,</code> <code>--network-interface</code> <i>interface_id</i>	The network interface from which the secondary private IP address will be unassigned. Type: String Default: None Example: -n eni-bc7299d4	Yes
<code>--secondary-private-ip-address</code> <i>IP_ADDRESS</i>	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 Example: --secondary-private-ip-address 10.0.2.18 --secondary-private-ip-address 10.0.2.28	Yes

## Common Options

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

Option	Description
<code>-O, --aws-access-key AWS_ACCESS_KEY</code>	<p>The access key ID associated with your AWS account. 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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-W, --aws-secret-key AWS_SECRET_KEY</code>	<p>The secret access key associated with your AWS account.</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> <p><b>Note</b> For more information, see the following section, <i>Deprecated Options</i>.</p>
<code>-T, --security-token TOKEN AWS_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>-v, --verbose</code>	<p>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 our Query API.</p>
<code>-H, --headers</code>	<p>Includes column headers in the command output.</p>
<code>--show-empty-fields</code>	<p>Shows empty columns as <code>(nil)</code>.</p>
<code>--hide-tags</code>	<p>Omits tags for tagged resources.</p>
<code>--debug</code>	<p>Displays internal debugging information. This can assist us when helping you troubleshooting problems.</p>
<code>-?, --help, -h</code>	<p>Displays usage information for the command.</p>
<code>-</code>	<p>Reads arguments from standard input. This is useful when piping the output from one command to the input of another.</p> <p>Example: <code>ec2-describe-instances   grep stopped   cut -f 2   ec2-start-instances -</code></p>

## 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 true value if the operation succeeds or an error if the operation fails.

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example unassigns the private IP addresses 10.0.0.118 and 10.0.0.119 from the network interface specified.

```
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. 17)

# 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	Required
<i>instance_id</i>	The ID of the instance. Type: String Default: None Example: i-43a4412a	Yes

## Common Options

Option	Description
<code>--region <i>REGION</i></code>	Overrides the region specified by the <code>EC2_URL</code> environment variable and the URL specified by the <code>-U</code> option. Default: The value of the <code>EC2_URL</code> environment variable, or <code>us-east-1</code> if <code>EC2_URL</code> isn't set. Example: <code>--region eu-west-1</code>
<code>-U, --url <i>URL</i></code>	The uniform resource locator (URL) of the Amazon EC2 web service entry point. Default: The value of the <code>EC2_URL</code> environment variable, or <code>https://ec2.amazonaws.com</code> if <code>EC2_URL</code> isn't set. Example: <code>-U https://ec2.amazonaws.com</code>
<code>-O, --aws-access-key <i>AWS_ACCESS_KEY</i></code>	The access key ID associated with your AWS account. 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>  <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .

Option	Description
<code>-W, --aws-secret-key</code> <code>AWS_SECRET_KEY</code>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> <code>TOKEN</code> <code>AWS_DELEGATION_TOKEN</code>	The AWS delegation token. Default: The value of the environment variable (if set).
<code>--connection-timeout</code> <code>TIMEOUT</code>	The connection timeout, in seconds. Example: <code>--connection-timeout 30</code>
<code>--request-timeout</code> <code>TIMEOUT</code>	The request timeout, in seconds. Example: <code>--request-timeout 45</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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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>

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 ID of the instance.
- The monitoring state

Amazon EC2 command line tools display errors on stderr.

## Examples

### Example Request

This example disables monitoring for `i-43a4412a` and `i-23a3397d`.

```
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. 526)
- [ec2-run-instances](#) (p. 600)



## 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	Required
<i>disk_image</i>	The local file name of the disk image that you want to upload. Type: String Default: None Example: WinSvr8-32-disk1.vmdk	Yes
-t, --task <i>task_id</i>	The conversion task ID for the upload. Type: String Default: None Example: -t import-i-ffvko9js	Yes
-o, --owner-akid <i>access_key_id</i>	The access key ID of the bucket owner. Type: String Default: None Example: AKIAIOSFODNN7EXAMPLE	Yes
-w, --owner-sak <i>secret_access_key</i>	The secret access key of the bucket owner. Type: String Default: None Example: wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY	Yes

Name	Description	Required
<code>-x, --expires <i>days</i></code>	The validity period for the signed Amazon S3 URLs that allow EC2 to access your file. Type: String Default: 30 days Example: <code>-x 10</code>	No
<code>--user-threads <i>threads</i></code>	The maximum number of threads to concurrently upload the file with. Type: String Default: 20 Example: <code>--user-threads 15</code>	No
<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 Example: <code>--part-size 3</code>	No
<code>--dry-run</code>	Does not upload the file, only validates that the disk image matches a known type. Type: None Default: None Example: <code>--dry-run</code>	No
<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 Example: <code>--dont-verify-format</code>	No

## Common Options

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

Option	Description
<code>-O, --aws-access-key</code> <i>AWS_ACCESS_KEY</i>	The access key ID associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-W, --aws-secret-key</code> <i>AWS_SECRET_KEY</i>	The secret access key associated with your AWS account. 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> <b>Note</b> For more information, see the following section, <i>Deprecated Options</i> .
<code>-T, --security-token</code> TOKEN <i>AWS_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>-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 our Query API.
<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>-?, --help, -h</code>	Displays usage information for the command.
<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>

## 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 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 Request

This example 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. 177)
- [ec2-import-instance](#) (p. 483)
- [ec2-import-volume](#) (p. 494)
- [ec2-resume-import](#) (p. 590)
- [ec2-cancel-conversion-task](#) (p. 63)
- [ec2-describe-conversion-tasks](#) (p. 256)

# AMI Tools Reference

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## Topics

- [Common Options for AMI Tools \(p. 632\)](#)
- [ec2-bundle-image \(p. 633\)](#)
- [ec2-bundle-vol \(p. 636\)](#)
- [ec2-delete-bundle \(p. 640\)](#)
- [ec2-download-bundle \(p. 642\)](#)
- [ec2-migrate-bundle \(p. 645\)](#)
- [ec2-migrate-manifest \(p. 648\)](#)
- [ec2-unbundle \(p. 650\)](#)
- [ec2-upload-bundle \(p. 652\)](#)

## Common Options for AMI Tools

Most AMI tools described in this section accept the set of optional parameters described in the following table.

### Note

The AMI Tools are only for use with instance store-backed AMIs.

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.

## 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	Required
-k, --privatekey <i>private_key</i>	The path to the user's PEM-encoded RSA key file. Example: -k pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem	Yes
-c, --cert <i>cert</i>	The user's PEM encoded RSA public key certificate file. Example: -c cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem	Yes
-u, --user <i>user_id</i>	The user's AWS account ID without dashes. Do not use the Access Key ID. Example: -u 111122223333	Yes
-i, --image <i>image_path</i>	The path to the image to bundle. Example: -i /var/spool/my-image/version-2/debian.img	Yes
-r, --arch <i>architecture</i>	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: i386   x86_64 Example: -r x86_64	Yes

**Amazon Elastic Compute Cloud CLI Reference  
Options**

Option	Description	Required
<code>-d, --destination destination</code>	The directory in which to create the bundle. Default: /tmp Example: <code>-d /var/run/my-bundle</code>	No
<code>-p, --prefix ami_prefix</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> . Example: <code>-p my-image-is-special</code>	No
<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) Example: <code>--ec2cert /etc/ec2/amiutil/cert-ec2.pem</code>	No
<code>--kernel kernel_id</code>	The ID of the kernel to select. Default: <code>2.6.16-xenU</code> Example: <code>--kernel aki-ba3adfd3</code>	No
<code>--ramdisk ramdisk_id</code>	The ID of the RAM disk to select. Some kernels require additional drivers at launch. Check the kernel requirements for information on whether you need to specify a RAM disk. To find kernel requirements, go to the <a href="#">Resource Center</a> and search for the kernel ID. Example: <code>--ramdisk ari-badbad00</code>	No
<code>--block-device-mapping mappings</code>	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. 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: <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> 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>	No

## 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. 636)
- [ec2-unbundle](#) (p. 650)
- [ec2-upload-bundle](#) (p. 652)
- [ec2-download-bundle](#) (p. 642)
- [ec2-delete-bundle](#) (p. 640)



## ec2-bundle-vol

### Description

Creates a bundled AMI by compressing, encrypting and signing a snapshot of the local machine's root file system.

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](#).

#### 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. On a running instance, Amazon EC2 attempts to inherit product codes, kernel settings, RAM disk settings, and block device mappings with which the instance launched.

### Syntax

```
ec2-bundle-vol -k private_key -u user_id -c cert -r architecture [-s size] [-d destination] [-e exclude_directory_1,exclude_directory_1,...] [-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	Required
<code>-k, --privatekey <i>private_key</i></code>	The path to the user's PEM-encoded RSA key file. Example: <code>-k pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>	Yes
<code>-u, --user <i>user_id</i></code>	The user's AWS account ID without dashes. Do not use the Access Key ID. Example: <code>-u 111122223333</code>	Yes
<code>-c, --cert <i>cert</i></code>	The user's PEM encoded RSA public key certificate file. Example: <code>-c cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem</code>	Yes
<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   x86_64</code> Example: <code>-r x86_64</code>	Yes
<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 Example: <code>-s 2048</code>	No

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

Option	Description	Required
<code>-d, --destination destination</code>	The directory in which to create the bundle. Default: <code>/tmp</code> Example: <code>-d /var/run/my-bundle</code>	No
<code>-e, --exclude directory_1,directory_2,...</code>	A list of absolute directory paths and files to exclude from the bundle operation. This parameter overrides the <code>--all</code> option. When <code>exclude</code> is specified, the directories and subdirectories listed with the parameter will not be bundled with the volume. 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> .	No
<code>-i, --include file_1,file_2,...</code>	A list of files to include in the bundle operation. This option overrides the exclusion of files that are by default filtered out because they might contain sensitive information. Use this option to explicitly include a file that might contain sensitive data — i.e., <code>*.sw</code> , <code>*.swo</code> , <code>*.swp</code> , <code>*.pem</code> , <code>*.priv</code> , <code>*.gpg</code> , <code>*.jks</code> , <code>*/.ssh/authorized_keys</code> , <code>*/.bash_history</code> . The files listed with the parameter will be bundled with the volume. Example: Assuming the mount point of the volume is <code>-v /mnt/myvol/</code> and you want to include file <code>/mnt/myvol/foo/bar.pem</code> , specify <code>-i /foo/bar.pem</code> .	No
<code>-p, --prefix ami_prefix</code>	The filename prefix for bundled AMI files. Default: <code>image</code> Example: <code>-p my-image-is-special</code>	No
<code>-v, --volume volume</code>	The absolute path to the mounted volume from which to create the bundle. Default: The root directory ( <code>/</code> ) Example: <code>-v /mnt/my-customized-ami</code>	No
<code>-a, --all</code>	Bundle all directories, including those on remotely mounted filesystems. Example: <code>-a</code>	No
<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) Example: <code>--ec2cert /etc/ec2/amiutil/cert-ec2.pem</code>	No
<code>--fstab fstab_path</code>	The path to the <code>fstab</code> to bundle into the image. If this is not specified, Amazon EC2 bundles <code>/etc/fstab</code> . Example: <code>--fstab /etc/fstab</code>	No

Option	Description	Required
<code>--generate-fstab</code>	Causes Amazon EC2 to bundle the volume using an Amazon EC2-provided fstab. Example: <code>--generate-fstab</code>	No
<code>--kernel <i>kernel_id</i></code>	The ID of the kernel to select. Example: <code>--kernel aki-ba3adfd3</code>	No
<code>--ramdisk <i>ramdisk_id</i></code>	The ID of the RAM disk to select. Some kernels require additional drivers at launch. Check the kernel requirements for information on whether you need to specify a RAM disk. To find the kernel requirements, go to the <a href="#">Resource Center</a> and search for the kernel ID. Example: <code>--ramdisk ari-badbad00</code>	No
<code>--block-device-mapping <i>mappings</i></code>	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. 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: <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> 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>	No
<code>--[no-]inherit</code>	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. Example: <code>--inherit</code>	No
<code>--productcodes <i>product_code</i></code>	Product code to attach to the image at registration time. Example: <code>--productcodes 1234abcd</code>	No

## 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-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem -c cert-
HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.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. 633)
- [ec2-unbundle](#) (p. 650)
- [ec2-upload-bundle](#) (p. 652)
- [ec2-download-bundle](#) (p. 642)
- [ec2-delete-bundle](#) (p. 640)

# 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	Required
-b, --bucket <i>s3_bucket</i>	The name of the Amazon S3 bucket containing the bundled AMI, followed by an optional '/'-delimited path prefix Example: -b myawsbucket/ami-001	Yes
-a, --access-key <i>access_key_id</i>	The AWS access key ID. Example: -a AKIAIOSFODNN7EXAMPLE	Yes
-s, --secret-key <i>secret_key</i>	The AWS secret access key. Example: -s wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY	Yes
-m, --manifest <i>manifest_path</i>	The path to the unencrypted manifest file. Example: -m /var/spool/my-first-bundle/image.manifest.xml Condition: You must specify --prefix or --manifest.	Conditional
-p, --prefix <i>ami_prefix</i>	The bundled AMI filename prefix. Provide the entire prefix. For example, if the prefix is image.img, use -p image.img and not -p image. Example: -p image.img Condition: You must specify --prefix or --manifest.	Conditional
--url <i>url</i>	The Amazon S3 service URL. Default: https://s3.amazonaws.com Example: --url https://s3.amazonaws.ie	No
--retry	Automatically retries on all Amazon S3 errors, up to five times per operation. Example: --retry	No

Option	Description	Required
<code>-y, --yes</code>	Automatically assumes the answer to all prompts is 'yes'. Example: <code>-y</code>	No
<code>--clear</code>	Deletes the specified bundle from the Amazon S3 bucket and deletes the bucket, if empty. Example: <code>--clear</code>	No

## 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. 633)
- [ec2-bundle-vol](#) (p. 636)
- [ec2-unbundle](#) (p. 650)
- [ec2-upload-bundle](#) (p. 652)
- [ec2-download-bundle](#) (p. 642)

# 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	Required
-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. Example: -b myawsbucket/ami-001	Yes
-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). Example: -m my-image.manifest.xml	No
-a, --access-key <i>access_key_id</i>	Your AWS access key ID. Example: -a AKIAIOSFODNN7EXAMPLE	Yes
-s, --secret-key <i>secret_key</i>	Your AWS secret access key. Example: -s wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY	Yes
-k, --privatekey <i>private_key</i>	The private key used to decrypt the manifest. Example: -k pk-HKZYKTAIG2ECMXIYIBH3HXV4ZBEXAMPLE.pem	Yes
-p, --prefix <i>ami_prefix</i>	The filename prefix for the bundled AMI files. Default: image Example: -p my-image	No
-d, --directory <i>directory</i>	The directory where the downloaded bundle is saved. The directory must exist. Default: The current working directory. Example: -d /tmp/my-downloaded-bundle	No
--retry	Automatically retries on all Amazon S3 errors, up to five times per operation. Example: --retry	No

Option	Description	Required
<code>--url url</code>	The S3 service URL. Default: <code>https://s3.amazonaws.com</code> Example: <code>--url https://s3.amazonaws.ie</code>	No

## 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. 633)
- [ec2-bundle-vol](#) (p. 636)
- [ec2-unbundle](#) (p. 650)
- [ec2-upload-bundle](#) (p. 652)



- [ec2-delete-bundle](#) (p. 640)

# ec2-migrate-bundle

## Description

Copies a bundled AMI from one Region to another.

### Note

This tool is replaced by [ec2-migrate-image](#) (p. 500).

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.

## 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	Required
-k, --privatekey <i>private_key</i>	The path to the user's PEM-encoded RSA key file. Example: -k pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem	Yes
-c, --cert <i>cert</i>	The user's PEM encoded RSA public key certificate file. Example: -c cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem	Yes
-a, --access-key <i>access_key_id</i>	The AWS access key ID. Example: -a AKIAIOSFODNN7EXAMPLE	Yes
-s, --secret-key <i>secret_key</i>	The AWS secret access key. Example: -s wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY	Yes
-b, --bucket <i>source_s3_bucket</i>	The source Amazon S3 bucket where the AMI is located, followed by an optional '/'-delimited path prefix. Example: --bucket myawsbucket	Yes
-d, --destination-bucket <i>destination_s3_bucket</i>	The destination Amazon S3 bucket, followed by an optional '/'-delimited path prefix. If the destination bucket does not exist, it is created. Example: --destination-bucket myotherawsbucket	Yes

Option	Description	Required
<code>-m, --manifest <i>manifest</i></code>	The location of the Amazon S3 source manifest. Default: None Example: <code>--manifest my-ami.manifest.xml</code>	Yes
<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 Example: <code>--location EU</code>	No
<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 Example: <code>--acl public-read</code>	No
<code>--retry</code>	Automatically retries on all Amazon S3 errors, up to five times per operation. Example: <code>--retry</code>	No
<code>--kernel <i>kernel_id</i></code>	The ID of the kernel to select. Example: <code>--kernel aki-ba3adfd3</code>	No
<code>--ramdisk <i>ramdisk_id</i></code>	The ID of the RAM disk to select. Some kernels require additional drivers at launch. Check the kernel requirements for information on whether you need to specify a RAM disk. To find kernel requirements, go to the <a href="#">Resource Center</a> and search for the kernel ID. Example: <code>--ramdisk ari-badbad00</code>	No
<code>--no-mapping</code>	Disables automatic mapping of kernels and RAM disks. Example: <code>--no-mapping</code>	No
<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. Example: <code>--region eu-west-1</code>	No

## 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. 536)
- [ec2-run-instances](#) (p. 600)

# 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.

## 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	Required
-k, --privatekey <i>private_key</i>	The path to the user's PEM-encoded RSA key file. Example: -k pk-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem	Yes
-c, --cert <i>cert</i>	The user's PEM encoded RSA public key certificate file. Example: -c cert-HKZYKTAIG2ECMXYIBH3HXV4ZBEXAMPLE.pem	Yes
-a, --access-key <i>access_key_id</i>	The AWS access key ID. Condition: Required if using automatic mapping. Example: -a AKIAIOSFODNN7EXAMPLE	Conditional
-s, --secret-key <i>secret_key</i>	The AWS secret access key. Condition: Required if using automatic mapping. Example: -s wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY	Conditional
--manifest <i>manifest_path</i>	The manifest file. Example: --manifest my-ami.manifest.xml	Yes
--kernel <i>kernel_id</i>	The ID of the kernel to select. Example: --kernel aki-ba3adfd3	No

Option	Description	Required
<code>--ramdisk <i>ramdisk_id</i></code>	The ID of the RAM disk to select. Some kernels require additional drivers at launch. Check the kernel requirements for information on whether you need to specify a RAM disk. To find kernel requirements, go to the <a href="#">Resource Center</a> and search for the kernel ID. Example: <code>--ramdisk ari-badbad00</code>	No
<code>--mapping-file <i>mapping_file</i></code>	Overrides the file containing kernel and RAM disk Region mappings. Example: <code>--mapping-file eu-mappings</code>	No
<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. Example: <code>--mapping-url mysite.com/eu-mappings</code>	No
<code>--no-mapping</code>	Disables automatic mapping of kernels and RAM disks. 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).	Conditional
<code>--region</code>	Region to look up in the mapping file. Condition: Required if using automatic mapping. Example: <code>--region eu-west-1</code>	Conditional

## 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. 536)
- [ec2-run-instances](#) (p. 600)

## 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	Required
-m, --manifest <i>manifest</i>	The path to the unencrypted AMI manifest file. Example: -m /var/spool/my-first-bundle/Manifest	Yes
-k, --privatekey <i>private_key</i>	The path to your PEM-encoded RSA key file. Example: -k \$HOME/pk-234242example.pem	Yes
-d, --destination <i>destination_directory</i>	The directory in which to unbundle the AMI. The destination directory must exist. Default: The current directory. Example: -d /tmp/my-image	No
-s, --source <i>source_directory</i>	The directory containing the bundled AMI parts. Default: The current directory. Example: -s /tmp/my-bundled-image	No

### 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. 633)
- [ec2-bundle-vol](#) (p. 636)
- [ec2-upload-bundle](#) (p. 652)
- [ec2-download-bundle](#) (p. 642)
- [ec2-delete-bundle](#) (p. 640)



## 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	Required
-b, --bucket <i>s3_bucket</i>	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). Example: -b myawsbucket/ami-001	Yes
-m, --manifest <i>manifest</i>	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. Example: -m image.manifest.xml	Yes
-a, --access-key <i>access_key_id</i>	Your AWS access key ID. Example: -a AKIAIOSFODNN7EXAMPLE	Yes
-s, --secret-key <i>secret_key</i>	Your AWS secret access key. Example: -s wJalrXUtnFEMI/K7MDENG/bPxrFicYEXAMPLEKEY	Yes
--acl <i>acl</i>	The access control list policy of the bundled image. Valid Values: public-read   aws-exec-read Default: aws-exec-read Example: --acl public-read	No
-d, --directory <i>directory</i>	The directory containing the bundled AMI parts. Default: The directory containing the manifest file (see the -m option). Example: -d /var/run/my-bundle	No
--part <i>part</i>	Starts uploading the specified part and all subsequent parts. Example: --part 04	No

Option	Description	Required
<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: <code>US</code>   <code>EU</code>   <code>us-west-1</code>   <code>ap-southeast-1</code> Default: <code>US</code> Example: <code>--location EU</code>	No
<code>--url <i>url</i></code>	The S3 service URL. Default: <code>https://s3.amazonaws.com</code> Example: <code>--url https://s3.amazonaws.ie</code>	No
<code>--retry</code>	Automatically retries on all Amazon S3 errors, up to five times per operation. Example: <code>--retry</code>	No
<code>--skipmanifest</code>	Does not upload the manifest. Example: <code>--skipmanifest</code>	No

## 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/bPxrFc1YEXAMPLEKEY
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. 633)
- [ec2-bundle-vol](#) (p. 636)
- [ec2-unbundle](#) (p. 650)
- [ec2-download-bundle](#) (p. 642)
- [ec2-delete-bundle](#) (p. 640)

# Document History

The following table describes the important changes since the last release of the Amazon EC2 documentation set.

**API version: 2012-10-01.**

**Latest documentation update: September 11, 2012.**

Change	Description	Release Date
Support for Amazon EC2 Reserved Instance Marketplace and a New API Version	<p>Added support for Amazon EC2 Reserved Instance Marketplace and a new API version: 2012-08-15. For information on the commands related to this release, see the following new commands:</p> <ul style="list-style-type: none"><li><a href="#">ec2-cancel-reserved-instances-listing</a> (p. 70)</li><li><a href="#">ec2-create-reserved-instances-listing</a> (p. 125)</li><li><a href="#">ec2-describe-reserved-instances-listings</a> (p. 355)</li></ul> <p>In addition, the following commands were updated:</p> <ul style="list-style-type: none"><li><a href="#">ec2-describe-reserved-instances-offerings</a> (p. 360)</li><li><a href="#">ec2-purchase-reserved-instances-offering</a> (p. 529)</li></ul>	11 September 2012
Support for AWS Marketplace and a New API Version	Added support for AWS Marketplace AMIs and a new API version: 2012-04-01.	19 April 2012

Change	Description	Release Date
Amazon EBS Volume Status Check	<p>Starting with API version 2012-03-01, you can check the operational status of your Amazon EBS volume. The volume status check gives you information about the I/O, also known as read/write, capability of your EBS volumes. The volume status check lets you know when an EBS volume's data is potentially inconsistent. Amazon Web Services (AWS) gives you options to handle the potentially inconsistent volume. For information on the commands related to this release, see:</p> <ul style="list-style-type: none"> <li>• <a href="#">ec2-describe-volume-status</a> (p. 415)</li> <li>• <a href="#">ec2-modify-volume-attribute</a> (p. 523)</li> <li>• <a href="#">ec2-describe-volume-attribute</a> (p. 411)</li> <li>• <a href="#">ec2-enable-volume-io</a> (p. 466)</li> </ul>	18 April 2012
Amazon EBS Volume Status Check	<p>Starting with API version 2012-03-01, you can check the operational status of your Amazon EBS volume. The volume status check gives you information about the I/O, also known as read/write, capability of your EBS volumes. The volume status check lets you know when an EBS volume's data is potentially inconsistent. Amazon Web Services (AWS) gives you options to handle the potentially inconsistent volume. For information on the commands related to this release, see:</p> <ul style="list-style-type: none"> <li>• <a href="#">ec2-describe-volume-status</a> (p. 415)</li> <li>• <a href="#">ec2-modify-volume-attribute</a> (p. 523)</li> <li>• <a href="#">ec2-describe-volume-attribute</a> (p. 411)</li> <li>• <a href="#">ec2-enable-volume-io</a> (p. 466)</li> </ul>	12 March 2012
Instance Status Checks	<p>Starting with API version 2011-12-15, you can use the <code>ec2-describe-instance-status</code> command to retrieve results of automated checks performed by Amazon EC2. These status checks detect problems that may impair an instance's ability to run your applications. You can use <code>ec2-report-instance-status</code> to send us feedback or report an inaccurate instance status.</p>	30 December 2011
Elastic Network Interfaces (ENIs) for Amazon EC2 Instances in Amazon Virtual Private Cloud	<p>Starting with API version 2011-12-01, you can attach an elastic network interface (ENI) to an EC2 instance in a VPC. For more information, see:</p> <ul style="list-style-type: none"> <li>• <a href="#">ec2-attach-network-interface</a> (p. 37)</li> <li>• <a href="#">ec2-detach-network-interface</a> (p. 446)</li> <li>• <a href="#">ec2-create-network-interface</a> (p. 117)</li> <li>• <a href="#">ec2-delete-network-interface</a> (p. 198)</li> <li>• <a href="#">ec2-describe-network-interfaces</a> (p. 334)</li> <li>• <a href="#">ec2-describe-network-interface-attribute</a> (p. 330)</li> <li>• <a href="#">ec2-modify-network-interface-attribute</a> (p. 515)</li> <li>• <a href="#">ec2-reset-network-interface-attribute</a> (p. 582)</li> </ul>	21 December 2011

Change	Description	Release Date
New Offering Types for Amazon EC2 Reserved Instances	Starting with API version 2011-11-01, you can use the new <i>offering-type</i> parameter of <code>ec2-describe-reserved-instances-offerings</code> to identify the Reserved Instance offerings that address your projected use: <i>Heavy Utilization</i> , <i>Medium Utilization</i> , and <i>Light Utilization</i> . See <a href="#">ec2-describe-reserved-instances-offerings</a> (p. 360).	01 December 2011
Support for Amazon EC2 Instance Status	The <a href="#">ec2-describe-instance-status</a> (p. 295) command allows you to view the status of your instances and any upcoming scheduled events.	14 November 2011
Support for Amazon EC2 Spot Instances in Amazon VPC	The <a href="#">ec2-request-spot-instances</a> (p. 565) command is updated with the <code>subnet</code> option, which enables you to specify an Amazon VPC subnet into which to launch your Spot Instances.	11 October 2011
Added common options table to each entry	The common options table now appears in each command description as well as on the existing <a href="#">Common Options for API Tools</a> (p. 5) page.	18 September 2011
Updates to VM import functionality	We've added <code>ec2-resume-import</code> for restarting an incomplete upload at the point the task stopped, and deprecated <code>ec2-upload-disk-image</code> because its functionality is now performed by the enhanced <code>ec2-import-instance</code> and <code>ec2-import-volume</code> . For more information, see the API actions: <ul style="list-style-type: none"> <li>• <a href="#">ec2-resume-import</a></li> <li>• <a href="#">ec2-upload-disk-image</a></li> <li>• <a href="#">ec2-import-instance</a></li> <li>• <a href="#">ec2-import-volume</a>.</li> </ul>	15 September 2011
Support for VHD file format added to the 2011-07-15 API version	We've added VHD as one of the VM file formats supported for import into Amazon EC2. See the API actions <a href="#">ImportInstance</a> and <a href="#">ImportVolume</a> , and the CLI commands <code>ec2-import-instance</code> and <code>ec2-import-volume</code> .	24 August 2011
Spot Instances Availability Zone pricing changes	We've updated several actions that explain API changes for the Spot Instances Availability Zone pricing feature. We've also added new Availability Zone pricing options as part of the information returned by Spot Instance Requests and Spot Price History API calls.	26 May 2011
Updates for the 2011-05-15 API Version	We've updated several existing actions for the 2011-05-15 API release.	26 May 2011
Dedicated Instances	As part of the Dedicated Instances feature release, we've added new options related to the tenancy attribute of instances, and the instance tenancy attribute of VPCs.	27 March 2011

Change	Description	Release Date
Updates for the 2011-02-28 API version	We've updated several existing actions for the 2011-02-28 API release.	27 March 2011
Updates for the 2011-01-01 API version	We've added new actions and updated several existing actions for the 2011-01-01 API release. The new and updated actions are related to these Amazon VPC objects: Internet gateways, route tables, network ACLs, VPC security groups, and VPC Elastic IP addresses.	11 March 2011
Merged Amazon VPC Documentation	We've merged the Amazon VPC actions into this guide.	11 March 2011
VM Import	Added the following new actions, which allow you to import a virtual machine or volume into Amazon EC2: <ul style="list-style-type: none"> <li>• <a href="#">ec2-import-instance</a> (p. 483)</li> <li>• <a href="#">ec2-import-volume</a> (p. 494)</li> <li>• <a href="#">ec2-upload-disk-image</a> (p. 628)</li> <li>• <a href="#">ec2-describe-conversion-tasks</a> (p. 256)</li> <li>• <a href="#">ec2-cancel-conversion-task</a> (p. 63)</li> </ul>	15 December 2010
Modifying Block Device Mapping	Removed information from <a href="#">ec2-modify-instance-attribute</a> (p. 510) about modifying an instance's block device mapping attribute. You currently can't modify an instance's block device mapping with this action.	20 November 2010
Filters and Tags	Added information about filters to many of the <i>describe</i> actions. Added information about creating, describing, and deleting tags. For more information about the commands for tags, see <a href="#">ec2-create-tags</a> (p. 147), <a href="#">ec2-delete-tags</a> (p. 219), and <a href="#">ec2-describe-tags</a> (p. 406).	19 September 2010
Idempotent Instance Launch	Updated <a href="#">ec2-run-instances</a> to include a <code>--client-token</code> option to ensure idempotency. For more information about the change, see <a href="#">ec2-run-instances</a> (p. 600).	19 September 2010
Import Key Pair	Added <code>ec2-import-keypair</code> . For more information, see <a href="#">ec2-import-keypair</a> (p. 490).	19 September 2010
Placement Groups for Cluster Compute Instances	Added information about placement groups, which you use with cluster compute instances. For more information about the commands for placement groups, see <a href="#">ec2-create-placement-group</a> (p. 122), <a href="#">ec2-describe-placement-groups</a> (p. 341), and <a href="#">ec2-delete-placement-group</a> (p. 201).	12 July 2010

Change	Description	Release Date
Amazon VPC IP Address Designation	Amazon VPC users can now specify the IP address to assign an instance launched in a VPC. For information about the using the <code>--private-ip-address</code> parameter with <code>ec2-run-instances</code> , see <a href="#">ec2-run-instances (p. 600)</a> .	12 July 2010
Security Group Permissions	Clarified the information about authorizing security group permissions. For more information, see <a href="#">ec2-authorize (p. 48)</a> .	28 April 2010
New Region	Amazon EC2 now supports the Asia Pacific (Singapore) Region. The new endpoint for requests to this Region is <code>ec2.ap-southeast-1.amazonaws.com</code> .	28 April 2010
Clarification about Spot Instances	Clarified that you can't stop and start Spot Instances that use an Amazon EBS root device. For more information about stopping instances, see <a href="#">ec2-stop-instances (p. 615)</a> .	1 February 2010
Spot Instances	To support customers that use Amazon EC2 instances, but have more flexible usage requirements (e.g., when instances run, how long they run, or whether usage completes within a specific timeframe), Amazon EC2 now provides Spot Instances. A Spot Instance is an instance that Amazon EC2 automatically runs for you when its maximum price is greater than the Spot Price. For conceptual information about Spot Instances, go to the <a href="#">Amazon Elastic Compute Cloud User Guide</a> .	14 December 2009