Amazon Relational Database Service

Command Line Interface Reference

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Amazon Relational Database Service: Command Line Interface Reference

Welcome

This is the *Amazon Relational Database Service Command Line Reference*. This section describes who should read this guide, how the guide is organized, and other resources related to Amazon RDS.

Amazon Relational Database Service is often referred to within this guide as "Amazon RDS"; all copyrights and legal protections still apply.

How Do I...?

How Do I?	Relevant Sections
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AWS provides two additional command line tools that each support a broad set of AWS services. The AWS Command Line Interface can be used to control and automate AWS services on Windows, Mac, and Linux. The AWS Tools for Windows PowerShell can be used with scripts in the PowerShell environment.

Setting up the Command Line Tools

Topics

This section describes the prerequisites for running the command line tools, where to get the command line tools, how to set up the tools and their environment, and includes a series of common examples of tool usage.

Prerequisites

This document assumes you can work in a Linux/UNIX or Windows environment. The Amazon RDS command line tools also work correctly on Mac OS X (which resembles the Linux and UNIX command environment), but no specific Mac OS X instructions are included in this guide.

As a convention, all command line text is prefixed with a generic `PROMPT>` command line prompt. The actual command line prompt on your machine is likely to be different. We also use `$` to indicate a Linux/UNIX specific command and `C:\>` for a Windows specific command. The example output resulting from the command is shown immediately thereafter without any prefix.

The Java Runtime Environment

The command line tools used in this guide require Java version 5 or 6 to run. Either a JRE or JDK installation is acceptable. To view and download JREs for a range of platforms, including Linux/UNIX and Windows, go to http://java.sun.com/j2se/1.5.0/.

Setting the Java Home Variable

The command line tools depend on an environment variable (`JAVA_HOME`) to locate the Java Runtime. This environment variable should be set to the full path of the directory that contains the Java Runtime. Inside this directory is a sub directory named `bin`, which contains the executable `java` (on Linux and UNIX) or `java.exe` (on Windows) executable. For example, on Windows this path could be **C:\Program Files (x86)\Java\jre6**.

To set the Java Home variable

1. Set the Java Home variable.
   - On Linux and UNIX, using the following command:

     ```
     $ export JAVA_HOME=<PATH>
     ```

   - On Windows, using the following command:

     ```
     C:\> setx JAVA_HOME=<PATH>
     ```

   - For Mac OS X versions from 10.5 and later, using the following command:

     ```
     >export JAVA_HOME="$(/usr/libexec/java_home)"
     ```

2. Confirm the path setting by running **`$JAVA_HOME/bin/java -version`** and checking the output.
   - On Linux/UNIX, you will see output similar to the following:

     ```
     $ $JAVA_HOME/bin/java -version
     java version "1.5.0_09"
     Java(TM) 2 Runtime Environment, Standard Edition (build 1.5.0_09-b03)
     Java HotSpot(TM) Client VM (build 1.5.0_09-b03, mixed mode, sharing)
     ```

   - On Windows, you will see output similar to the following:

     ```
     C:\> %JAVA_HOME%\bin\java -version
     java version "1.5.0_09"
     Java(TM) 2 Runtime Environment, Standard Edition (build 1.5.0_09-b03)
     Java HotSpot(TM) Client VM (build 1.5.0_09-b03, mixed mode, sharing)
     ```

Getting the Command Line Tools

The command line tools are available as a ZIP file on the Amazon RDS web site. These tools are written in Java, and include shell scripts for Windows 2000/XP/Vista, Linux/UNIX, and Mac OSX. The ZIP file is

self-contained and no installation is required; simply download the zip file and unzip it to a directory on your local machine.

Setting Up the Tools

The command line tools depend on an environment variable (AWS_RDS_HOME) to locate supporting libraries. You need to set this environment variable before you can use the tools. Set it to the path of the directory you unzipped the command line tools into. This directory is named RDSCli-A.B.nnnn (A, B and n are version/release numbers), and contains sub-directories named bin and lib.

To set the AWS_RDS_HOME environment variable

- Open a command line window and enter one of the following commands to set the AWS_RDS_HOME environment variable.
  - On Linux and UNIX, enter the following command:

```
$ export AWS_RDS_HOME=<path-to-tools>
```

  - On Windows, enter the following command:

```
C:\> setx AWS_RDS_HOME=<path-to-tools>
```

To make the tools easier to use, we recommend you add the tools' BIN directory to your system PATH. The rest of this guide assumes the BIN directory is in your system path.

To add the tools' BIN directory to your system path

- Enter the following commands to add the tools' BIN directory to your system PATH.
  - On Linux and UNIX, enter the following command:

```
$ export PATH=$PATH:$AWS_RDS_HOME/bin
```

  - On Windows, enter the following command:

```
C:\> setx PATH=%PATH%;%AWS_RDS_HOME%\bin
```

Note
The Windows environment variables are reset when you close the command window. You might want to set them permanently. Consult the documentation for your version of Windows for more information.

Note
Paths that contain a space must be wrapped in double quotes, for example:
"C:\Program Files\Java"

Overriding the Default Region

By default, Amazon RDS uses the `us-east-1` region when you create DB instances and other Amazon RDS objects. To temporarily specify a different region when entering an Amazon RDS command, you can use the `--url` or `--region` common command line options. For more information about common command line options, see the Common Options for API Tools (p. 9).

To avoid having to pass the URL or region with each command, you can set the EC2_REGION environment variable to the appropriate region for your use.

To override the default region

- The following example shows how to set the default region to `us-west-1`.
  - On Linux and UNIX, enter the following command:

```
$ export EC2_REGION=us-west-1
```

  - On Windows, enter the following command:

```
C:\> setx EC2_REGION=us-west-1
```

Providing Credentials for the Tools

The command line tools need the AWS Access Key and Secret Access Key provided with your AWS account. You can get them using the command line or by using the Amazon RDS console to view your account information.

The following procedure shows how to obtain your AWS access key and secret access key:

To get your access key ID and secret access key

Access keys consist of an access key ID and secret access key, which are used to sign programmatic requests that you make to AWS. If you don't have access keys, you can create them by using the AWS Management Console. We recommend that you use IAM access keys instead of AWS root account access keys. IAM lets you securely control access to AWS services and resources in your AWS account.

> **Note**
> To create access keys, you must have permissions to perform the required IAM actions. For more information, see Granting IAM User Permission to Manage Password Policy and Credentials in *Using IAM*.

1. Go to the IAM console.
2. From the navigation menu, click **Users**.
3. Select your IAM user name.
4. Click **User Actions**, and then click **Manage Access Keys**.
5. Click **Create Access Key**.

   Your keys will look something like this:

   - Access key ID example: AKIAIOSFODNN7EXAMPLE

- Secret access key example: wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY

6. Click **Download Credentials**, and store the keys in a secure location.

   Your secret key will no longer be available through the AWS Management Console; you will have the only copy. Keep it confidential in order to protect your account, and never email it. Do not share it outside your organization, even if an inquiry appears to come from AWS or Amazon.com. No one who legitimately represents Amazon will ever ask you for your secret key.

Related topics

- What Is IAM? in *Using IAM*
- AWS Security Credentials in *AWS General Reference*

The deployment includes a template file ${AWS_RDS_HOME}/credential-file-path.template that you need to edit with your information. Following are the contents of the template file:

```
AWSAccessKeyId=<Write your AWS access ID>
AWSSecretKey=<Write your AWS secret key>
```

Important
On UNIX, limit permissions to the owner of the credential file:

```
$ chmod 600 <the file created above>
```

With the credentials file setup, you'll need to set the AWS_CREDENTIAL_FILE environment variable so that the Amazon RDS tools can find your information.

To set the AWS_CREDENTIAL_FILE environment variable

1. Set the environment variable

   - On Linux and UNIX, update the variable using the following command:

     ```
     $ export AWS_CREDENTIAL_FILE=<the file created above>
     ```

   - On Windows, set the variable using the following command:

     ```
     C:\> setx AWS_CREDENTIAL_FILE=<the file created above>
     ```

2. Check that your setup works properly, run the following command:

   ```
   rds --help
   ```

   You should see the usage page for all Amazon RDS commands.

Updating to a new version of the Tools

The Amazon RDS command line tools are updated with each release of RDS. Older versions of the command line tools will no longer work with the new version of RDS. If you have a version of the command line tools that is older than the current release of RDS, you can follow these steps to install the latest version of the command line tools.

1. Download the latest version of the command line tools from the Amazon RDS web site. The download is a self-contained ZIP and no installation is required; simply download the zip file and unzip it to a directory on your local machine.
2. Copy the credentials file from your previous installation of the command line tools to the new installation directory. Update the AWS_CREDENTIAL_FILE environment variable so that the Amazon RDS tools can find your information.

   Set the environment variable

   - On Linux and UNIX, update the variable using the following command:

     ```
     $ export AWS_CREDENTIAL_FILE=<the new file location>
     ```

   - On Windows, set the variable using the following command:

     ```
     C:\> setx AWS_CREDENTIAL_FILE=<the new file location>
     ```

3. Set the AWS_RDS_HOME environment variable to the folder for the new installation directory.

   - On Linux and UNIX, enter the following command:

     ```
     $ export AWS_RDS_HOME=<new-path-to-tools>
     ```

   - On Windows, enter the following command:

     ```
     C:\> setx AWS_RDS_HOME=<new-path-to-tools>
     ```

API Command Line Tools Reference

Topics

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
`--aws-credential-file` *value*	Path to the file containing your AWS credentials. This value can be stored in the AWS_CREDENTIAL_FILE environment variable. Example: `--aws-credential-file c:\AWS\mycredemtials.pek`
`--ec2-cert-file-path` *value* `-C` *value*	Path to an AWS X.509 certificate file. Must be specified in conjunction with *`--ec2-private-key-file-path`* and must not be specified in conjunction with *`--aws-credential-file`*. This value can be set by using the `EC2_CERT` environment variable.

Option	Description
`--connection-timeout` *value*	Specifies the connection timeout in seconds. Default: 30 Example: `--connection-timeout 60`
`--debug`	Causes debug information to be displayed on error. Default: false
`--delimiter` *value*	Specifies the delimiter to use when displaying long results. Default: comma
`--headers`	Displays column headers for tabular or delimited results, or HTTP headers for XML results. Default: off
`--help`	Displays help text for the command. You can also use `help` *commandname*. Default: off
`-I` *value* `--access-key-id` *value*	Specifies the AWS access key ID to use for requests.
`-K` *value* --ec2-private-key-file-path *value*	Path to an AWS X.509 private key file. Must be specified in conjunction with *`--ec2-cert-file-path`* and must not be specified in conjunction with *`--aws-credential-file`*. This value can be set by using the EC2_PRIVATE_KEY environment variable.
`--region` *value*	Overrides the Region specified in the `EC2_REGION` environment variable. Default: The `EC2_REGION` environment variable, or `us-east-1` if the `EC2_REGION` environment variable is not set. Example: `--region eu-west-1`
`-S` *value* `--secret-key-value` *value*	Specifies the AWS secret access key to use for requests.
`--show-empty-fields`	Show empty fields and rows with a `(nil)` value.
`--show-request`	Displays the URL used to call the AWS service.
`--show-table`	Displays the results of the command in fixed column-width format. Empty fields are not displayed. This is the default output format.
`--show-long`	Displays the results of the command delimited by a character. Empty fields are shown as "`(nil)`. The default delimiter character is a comma.
`--show-xml`	Displays the results of the command as raw XML.
`--quiet`	Suppress all output from the command.

Option	Description
`-U` *value* `--url` *value*	Override the URL for the service call with the value supplied. This value is set using the `RDS_URL` environment variable. **Note** You can set the `EC2_REGION` environment variable or use the `--region` parameter to avoid having to pass the `--url` parameter to specify a different regional endpoint.

List of Command Line Operations by Function

Database Instances

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- rds-create-db-instance-read-replica (p. 46)
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- rds-delete-db-subnet-group (p. 74)

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- rds-describe-events (p. 99)

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- rds-version (p. 176)

rds-add-option-to-option-group

Description

Adds one or more options to an option group.

Most options can be added and removed from option groups. Persistent options, such as the TDE option for Microsoft SQL Server, cannot be removed from an option group while DB instances are associated with the option group. Permanent options, such as the TDE option for Oracle Advanced Security TDE, can never be removed from an option group, and that option group cannot be removed from a DB instance once it is associated with a DB instance.

Syntax

```
rds-add-option-to-option-group optiongroupname

--option-name value

[--apply-immediately]

[--security-groups value[,value2][,...]]

[--settings key1=value1;key2=value2;...]

[--port value]
[General Options]
```

Options

Name	Description	Required
optiongroupname	Name of the option group that the option will be added to.	Yes
--option-name -n	Name of the option to be added to the option group.	Yes
--apply-immediately	If supplied, the option will be applied immediately for all associated DB instances. If not supplied, the option will be applied for each DB instance during its next maintenance window.	No
--security-groups -sg	Name of the security group or groups that will be applied to the port that the option uses for communication.	Yes if the option uses a port; otherwise, no.
--settings -s	Provides additional information for the option if the option has modifiable settings. A semi-colon separated list in the form 'key1=value1; mey2=value2; etc. If no settings are provided for an option that requires one, the default values will be used.	No

Name	Description	Required
`--port`	A non-default port that the option will use for communication.	No

The following options are currently supported:

DB Engine	Option ID	Description	Settings
Oracle	`OEM`	Oracle Database Manager Database Control. Default port: 1158.	port value setting
Oracle	`XMLDB`	Oracle XML DB support	No settings
Oracle	`APEX`, `APEX-DEV`	Oracle Application Express (APEX)	No settings
Oracle	`NATIVE_NETWORK_ENCRYPTION`	Oracle native network encryption, a feature of the Oracle Advanced Security option available in Oracle Enterprise Edition.	For a description of all option settings for NATIVE_NETWORK_ENCRYPTION, see Oracle Native Network Encryption.
Oracle	`STATSPACK`	Oracle Statspack performance statistics	No settings
Oracle	`TDE`	Oracle Transparent Data Encryption (TDE)	No settings

DB Engine	Option ID	Description	Settings
Oracle	`Timezone`	Oracle time zone change	The following values are acceptable for the TIME_ZONE option setting: Africa/Cairo, Africa/Casablanca, Africa/Harare, Africa/Monrovia, Africa/Nairobi, Africa/Tripoli, Africa/Windhoek, America/Araguaina, America/Asuncion, America/Bogota, America/Caracas, America/Chihuahua, America/Cuiaba, America/Denver, America/Fortaleza, America/Guatemala, America/Halifax, America/Manaus, America/Matamoros, America/Monterrey, America/Montevideo, America/Phoenix, America/Santiago, America/Tijuana, Asia/Amman, Asia/Ashgabat, Asia/Baghdad, Asia/Baku, Asia/Bangkok, Asia/Beirut, Asia/Calcutta, Asia/Damascus, Asia/Dhaka, Asia/Irkutsk, Asia/Jerusalem, Asia/Kabul, Asia/Karachi, Asia/Kathmandu, Asia/Krasnoyarsk, Asia/Magadan, Asia/Muscat, Asia/Novosibirsk, Asia/Riyadh, Asia/Seoul, Asia/Shanghai, Asia/Singapore, Asia/Taipei, Asia/Tehran, Asia/Tokyo, Asia/Ulaanbaatar, Asia/Vladivostok, Asia/Yakutsk, Asia/Yerevan, Atlantic/Azores, Australia/Adelaide, Australia/Brisbane, Australia/Darwin, Australia/Hobart, Australia/Perth, Australia/Sydney, Canada/Newfoundland, Canada/Saskatchewan, Europe/Amsterdam, Europe/Athens, Europe/Dublin, Europe/Helsinki, Europe/Istanbul, Europe/Kaliningrad, Europe/Moscow, Europe/Paris, Europe/Prague, Europe/Sarajevo, Pacific/Auckland, Pacific/Fiji, Pacific/Guam, Pacific/Honolulu, Pacific/Samoa, US/Alaska, US/Eastern, US/East-Indiana, US/Pacific, UTC.

DB Engine	Option ID	Description	Settings
MySQL	MEMCACHED	MySQL 5.6 memcached interface to InnoDB tables	For a list and description of all the supported memcached parameters, see MySQL 5.6 memcached Support.
SQL Server	TDE	SQL Server Transparent Data Encryption	No settings

Output

The command returns a table with the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Group name—**The name of the option group.
- **Engine—**The name of the DB engine that the option group is associated with.
- **Major engine version—**The major version ID of the DB engine.
- **Option group description—**The description of the option group.
- **Option name—**The name of the option that was added.
- **Port—**The number of the port that the option will use.
- **Persistent—**Indicates if this is a persistent option. A persistent option cannot be removed from the option group once the option group is used, but this option can be removed from the db instance while modifying the related data and assigning another option group without this option.
- **Permanent—**Indicates if this is a permanent option. A permanent option cannot be removed from the option group once the option group is used, and it cannot be removed from the db instance after assigning an option group with this permanent option.
- **Option description—**A description of the option.
- **Option status—**The status of authorization.
- **Security group—**The security group assigned to the port.
- **Authorization—**Status of ingress authorization for the security group.
- **VPC Specific—**Indicates if both VPC and non-VPC instances can join this option group.
- **VPC—**Indicates if only instances in this VPC can join this option group.
- **Setting—**The setting name that the option will use.
- **Setting Description—**The description of the option setting.
- **Value—**The value of the option setting.
- **Modifiable—**Indicates if the option setting is modifiable.

Example

This example adds the Oracle Enterprise Manager Database Control option to an option group named TestOptionGroup. The default DB security group is applied to the default port:

```
PROMPT> rds-add-option-to-option-group TestOptionGroup --option-name OEM --se
curity-groups default --apply-immediately

OPTIONGROUP testoptiongroup oracle-ee 11.2 Oracle Enterprise Manager Database
Control
    OPTION OEM 1158 Oracle Enterprise Manager
        SECGROUP    default    authorized
```

This example adds the Oracle time zone option to an option group named TestOptionGroup:

```
PROMPT> rds-add-option-to-option-group TestOptionGroup --option-name Timezone
--settings "TIME_ZONE=Japan"
```

rds-add-source-identifier-to-subscription

Description

Adds a source identifier to an existing RDS event notification subscription.

Syntax

```
rds-add-source-identifier-to-subscription SubscriptionName

--SourceIdentifier value

[General Options]
```

Options

Name	Description	Required
`--SubscriptionName` *value*	The name of the subscription. Type: String Constraints: The name must be less than 255 characters. Example: `--SubscriptionName mysubscription1`	Yes
`--SourceIdentifier` *value*	The source identifier to be added to the subscription. An identifier must begin with a letter and must contain only ASCII letters, digits, and hyphens; it cannot end with a hyphen or contain two consecutive hyphens. Type: String Constraints: If the source type is a DB instance, then a DBInstanceIdentifier must be supplied. If the source type is a DB security group, a DBSecurityGroupName must be supplied. If the source type is a DB parameter group, a DBParameterGroupName must be supplied. If the source type is a DB snapshot, a DBSnapshotIdentifier must be supplied.	Yes

Output

The command returns a table with the following information:

Note
Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **CustSubscriptionId—**the Id of the event subscription
- **CustomerAwsId—**the AWS customer account associated with the Amazon RDS event notification subscription
- **Enabled—**a Boolean value indicating if the subscription is enabled. True indicates the subscription is enabled
- **EventCategoriesList—**a list of event categories for the Amazon RDS event notification subscription
- **SnsTopicArn—**the Amazon SNS topic's ARN for the RDS event notification subscription
- **SourceIdsList—**a list of source Ids for the RDS event notification subscription
- **SourceType—**the source type for the Amazon RDS event notification subscription
- **Status—**the status of the Amazon RDS event notification subscription. Can be one of the following: creating | modifying | deleting | active | no-permission | topic-not-exist

  The status "no-permission" indicates that Amazon RDS no longer has permission to post to the Amazon SNS topic. The status "topic-not-exist" indicates that the topic was deleted after the subscription was created.
- **SubscriptionCreationTime—**the time the RDS event notification subscription was created

Examples

Adding a source identifier to an event subscription

This example adds a DB instance named MyDBInstance1 to a subscription named MySubscription1.

```
PROMPT> rds-add-source-identifier-to-subscription MySubscription1 --
SourceIdentifier MyDBInstance1
```

Related Operations

- rds-create-event-subscription (p. 61)
- rds-remove-source-identifier-from-subscription (p. 153)
- rds-modify-event-subscription (p. 140)
- rds-describe-event-subscriptions (p. 105)

rds-add-tag-to-resource

Description

Adds a tag to an Amazon RDS resource. RDS resources can have up to 10 tags, but you can add only one tag at a time using the command line interface. To learn how to construct the ARN that references the DB instance to be tagged, see Constructing an RDS Amazon Resource Name (ARN).

Syntax

```
rds-add-tag-to-resource resourcename

--key value

--value value
[General Options]
```

Options

Name	Description	Required
`resourcename`	The Amazon Resource Name (ARN) of the Amazon RDS resource that the tag will be added to. To learn how to construct the ARN that references the DB instance to be tagged, see Constructing an RDS Amazon Resource Name (ARN).	Yes
`--key` `-k`	The name of the tag to be added.	Yes
`--value` `-v`	The value of the tag to be added.	No

Output

This command does not return any output.

Example

The following example adds a key named "project" with a value of "trinity" to a DB instance named mysql-db that is owned by customer 001234567890.

```
PROMPT> rds-add-tag-to-resource arn:aws:rds:us-west-2:001234567890:db:mysql-db
 -k project -v trinity
```

rds-authorize-db-security-group-ingress

Description

Authorizes network ingress for an Amazon EC2 security group or an IP address range.

Note
You cannot authorize ingress from an Amazon EC2 security group in one AWS region to an Amazon RDS DB instance in another.

Syntax

```
rds-authorize-db-security-group-ingress DBSecurityGroupName
[-s (--ec2-security-group-id) ] value
[-g (--ec2-security-group-name) value ]
[-i (--cidr-ip) value ]
[-o (--ec2-security-group-owner-id) value ]
[General Options]
```

Options

Name	Description	Required
`DBSecurityGroupName` `--db-security-group-name` *value*	The name of the Amazon RDS DB security group. This can also be passed as a named parameter using `--db-security-group-name` *value* Type: String Default: None Example: `--db-security-group-name mydbsecuritygroup`	Yes
`-s` `--ec2-security-group-id` *value*	Identifier of the Amazon EC2 security group to authorize. Type: String Default: None Constraints: This parameter must be specified if the DB security group is for a VPC. Example: `-g myec2securitygroup`	No

Name	Description	Required
`-g` `--ec2-security-group-name` *`value`*	The name of the Amazon EC2 security group. Type: String Default: None Constraints: This parameter must be specified if the *`ec2-security-group-owner`* parameter is specified. Must be an existing Amazon EC2 security group. Example: `-g myec2securitygroup` **Important** Authorizing an Amazon EC2 security group only grants access to your DB instances from the Amazon EC2 instances belonging to the Amazon EC2 security group.	No
`-o` `--ec2-security-group-owner-id` *`value`*	The AWS account number of the owner of the Amazon EC2 security group. Type: String Default: None Constraints: This parameter must be specified if the *`ec2-security-group-name`* parameter is specified. Example: `-o 123456789012`	No
`-i` `--cidr-ip` *`value`*	The IP range to allow access. Type: String Constraints: Must be a valid Classless Inter-Domain Routing (CIDR) range, in the format ddd.ddd.ddd.ddd/dd. For more information, see CIDR Notation. Default: None Constraints: This parameter must *not* be specified if the *`ec2-security-group-name`* and *`ec2-security-group-owner`* parameters are specified. Example: `-i 192.168.100.100/32` **Caution** To avoid inadvertently granting access to your DB instances, be sure to understand how CIDR ranges work. For more information about CIDR ranges, go to the *Wikipedia Tutorial* .	No

Output

The command returns a table with the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Name—**Security group name.
- **Description—**Security group description.
- **EC2 Group Name—**Name of the EC2 security group./
- **EC2 Group Id—**Identifier of the EC2 security group./
- **EC2 Owner ID—**Owner of the EC2 security group.
- **IP Range—**CIDR range for the authorized Amazon RDS security group.
- **Status—**Status of the authorization.

Examples

Authorizing Access to an EC2 Security Group

This example authorizes access to a named Amazon EC2 security group.

```
PROMPT> rds-authorize-db-security-group-ingress Default --ec2-security-group-
name mainServerGrp --ec2-security-group-owner-id 123445677890
```

Authorizing Access to a CIDR range

This example authorizes access to a CIDR range.

```
PROMPT> rds-authorize-db-security-group-ingress Default --cidr-ip
192.168.100.100/32
```

Related Operations

- rds-revoke-db-security-group-ingress (p. 172)

rds-copy-db-snapshot

Description

Creates a copy of all data and configuration associated with the specified DB snapshot. You can copy an automated DB snapshot to create a manual DB snapshot in the same region, the manual snapshot will be retained after the automated snapshot is deleted. You can also copy either a manual or automated snapshot in one region to create a manual snapshot in another region.

Copying a DB snapshot out of the source region incurs Amazon RDS data transfer charges. For more information about RDS data transfer pricing, go to Amazon Relational Database Service Pricing.

Note
You cannot copy a DB snapshot to or from the AWS GovCloud (US) Region. You also cannot copy a DB snapshot across regions if it was created from a DB instance that is using Oracle TDE.

Syntax

```
rds-copy-db-snapshot SourceDBSnapshotIdentifier

-t (--target-db-snapshot-identifier) value

[General Options]
```

Options

Name	Description	Required
SourceDBSnapshotIdentifier	Source DB snapshot identifier. This is the unique name that identifies an existing DB snapshot to copy. This parameter can also be set using **--source-db-snapshot-identifier `value`** Type: String Default: None Constraints: • Must specify a valid DB snapshot in the active state. • If the source snapshot is in the same region as the copy command, must specify a valid DB snapshot identifier. Example: `--source-db-instance-identifier mydbsnapshot` • If the source snapshot is in a different region, must specify a valid DB snapshot ARN. For more information, go to Copying a DB Snapshot. Example: `--source-db-instance-identifier arn:aws:rds:us-east-1:123456801:snapshot:mysql-instance1-snapshot-20130805`	Yes

Name	Description	Required

`-t value`
 	
`--target-db-snapshot-identifier value`
	The identifier for the target DB snapshot.
	
	Type: String
	
	Default: None
	
	Constraints: Cannot be null, empty, or blank. Cannot be a word reserved by the database engine. Must contain 1 to 255 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens.
	
	Example: `-t my-copied-snapshot-id`
		Yes

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **DBSnapshotId—**Name of the DB snapshot
- **Snapshot Created—**The time (in 24 hour UTC) when the DB snapshot was taken
- **DBInstanceId—**User-supplied database identifier; this is the unique key that identifies a DB instance
- **Instance Created—**The date and time when the DB instance was created
- **Engine—**The name and version of the database engine used
- **Storage—**The size of the DB snapshot's allocated storage (GB)
- **Status—**Status of the DB snapshot. Valid values: `creating` | `available` | `deleting`
- **Master Username—**The login name of the database's master user.
- **AZ—**The original Availability Zone of the database from which the DB snapshot was taken. This column appears only in the *`--show-long`* view
- **Port—**The original port of the database from which the DB snapshot was taken. This column appears only with the *`--show-long-view`* command option
- **Version—**The database engine's version number.
- **License—**TBD
- **Type—**TBD
- **VpcId—**TBD

Examples

Copy a Database Snapshot

This example copies an automated DB snapshot to create a manual DB snapshot in the same region.

```
PROMPT> rds-copy-db-snapshot -s rds:mydb-2012-01-15-00-01 -t snapshotdec01
```

Copy a DB Snapshot Across Regions

This example copies a manual DB snapshot in the us-east-1 region to create a manual DB snapshot in the us-west-2 region.

```
PROMPT> rds-copy-db-snapshot --source-db-snapshot-identifier arn:aws:rds:us-
east-1:123456789012:snapshot:mysql-instance1-snapshot-20130805 --region us-west-
2 --target-db-snapshot-identifier mysql-instance1-snapshot-20130805-copy
```

Related Operations

- rds-delete-db-snapshot (p. 72)
- rds-describe-db-snapshots (p. 89)
- rds-restore-db-instance-from-db-snapshot (p. 158)

rds-create-db-instance

Description

Creates a new DB instance.

Syntax

```
rds-create-db-instance DBInstanceIdentifier
[-a (--db-security-groups) value[,value...] ]
[-sg (--vpc-security-group-ids) value[,value...] ]
[-au (--auto-minor-version-upgrade) value ]
[-b (--preferred-backup-window) value ]
-c (--db-instance-class) value
[-cs (--character-set) value ]
-e (--engine) value
[-g (--db-parameter-group-name) value]
[--iops value ]
-lm (--license model) value
[-m (--multi-az) value]
[-n (--db-name) value ]
[-og (--option-group) value ]
-p (--master-user-password) value
[--port value ]
[-r (--backup-retention-period) value ]
-s (--allocated-storage) value
[-sn (--db-subnet-group-name) value ]
-u (--master-username) value
[-v (--engine-version) value ]
[-w (--preferred-maintenance-window) value]
[-pub (--publicly-accessible) value ]
[-z (--availability-zone) value ]
[General Options]
```

Options

Name	Description	Required
DBInstanceIdentifier `--db-instance-identifier` *value*	DB instance identifier. This is the unique key that identifies a DB instance. This parameter is stored as a lowercase string. This can also be passed as a named parameter using `--db-instance-identifier` *value* Type: String Default: None Constraints: Must contain from 1 to 63 (1 to 15 for SQL Server) alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens. Example: myinstance	Yes
`-c` *value* `--db-instance-class` *value*	Contains the compute and memory capacity of the DB instance. Different instance classes are available for different database engines. For information about valid values for a particular engine, use the rds-describe-orderable-db-instance-options (p. 111) command. Type: String Default: None Valid values: `db.t1.micro` | `db.m1.small` | `db.m1.medium` | `db.m1.large` | `db.m1.xlarge` | `db.m2.xlarge` | `db.m2.2xlarge` | `db.m2.4xlarge` | `db.cr1.8xlarge` | `db.m3.medium` | `db.m3.large` | `db.m3.xlarge` | `db.m3.2xlarge` Example: `--db-instance-class db.m1.xlarge` **Note** Amazon RDS does not support db.t1.micro instances in a virtual private cloud (VPC).	Yes

Name	Description	Required
`-n` *value* `--db-name` *value*	The meaning of this parameter differs according to the database engine you use. **MySQL** and **PostgreSQL** Name of a database to create when the DB instance is created. If this parameter is not specified, no database is created in the instance. Constraints: • Cannot be empty. • Must contain 1 to 64 alphanumeric characters. • Cannot be a word reserved by the specified database engine. Type: String Example: `--db-name MyDatabase` **Oracle** The Oracle System ID (SID) of the created DB instance. Constraints: • Cannot be longer than 8 characters. Type: String Example: `--db-name MYORACLE` **SQL Server** Not applicable.	No
`-e` *value* `--engine` *value*	Name of the database engine to be used for this instance. Type: String Default: None Valid values: `MySQL` | `postgres` |`oracle-se1` | `oracle-se` | `oracle-ee` | `sqlserver-ee` | `sqlserver-se` | `sqlserver-ex` | `sqlserver-web`	Yes

Name	Description	Required
`-v` *value* `--engine-version` *value*	Version number of the database engine to use. Type: String **MySQL** Example: `--engine-version 5.5.31` **PostgreSQL** Example: `--engine-version 9.3` **Oracle** Example: `--engine-version 11.2.0.2.v6` **SQL Server** Example: `--engine-version 11.00.2100.60.v1`	No
`-g` *value* `--db-parameter-group-name` *value*	Name of the DB parameter group to associate with this DB instance. If this argument is omitted, the default DBParameterGroup for the specified engine will be used. Type: String Example: `--db-parameter-group-name MyDBParameterGroup`	No
`-lm` `--license-model` *value*	License model for this DB instance. Type: String Default: None Valid values: `license-included` | `bring-your-own-license` | `general-public-license` Example: `--license-model bring-your-own`	No
`-m` *value* `--multi-az` *value*	Specifies if this is a Multi-AZ deployment. **Note** At this time, multi-AZ deployments are not supported for the Microsoft SQL Server database engine. Type: Boolean Default: `false` Constraints: The *`--availability-zone`* parameter cannot be set if the *`--multi-az`* parameter is set to `true`. Valid values: `true` | `false`	No

Name	Description	Required
--iops value	Specifies the amount of provisioned IOPS for the DB instance, expressed in I/O operations per second. Constraints: Must be an integer greater than 1000.	No
-a *value* --db-security-groups *value [,value...]*	A list of one or more DB security groups to associate with this DB instance. Type: String[] Example: `--db-security-groups mysecuritygroup1, mysecuritygroup2`	No
-sg *value* --vpc-security-group-ids *value [,value...]*	A list of the IDs of one or more VPC security groups to associate with this DB instance. Type: String[] Example: `--vpc-security-group-ids sg-e763f78e, sg-e0690405`	No

Name	Description	Required
`--port` *value*	Port number that the DB instance uses for connections. Type: Integer **MySQL** Default: 3306 Valid Values: 1150-65535 Type: Integer **PostgreSQL** Default: 5432 Valid Values: 1150-65535 Type: Integer **Oracle** Default: 1521 Valid Values: 1150-65535 Type: Integer Example: `--port 1234` **SQL Server** Default: `1433` Valid Values: `1150-65535` except for `1434`, `3389`, `47001`, `49152`, and `49152` through `49156`. Type: Integer	No

Name	Description	Required
`-s` *value* `--allocated-storage` *value*	Amount of storage to be initially allocated for the DB instance, in gigabytes. Type: String **MySQL** Constraints: Must be an integer between 5 and 1024. **Oracle** Constraints: Must be an integer between 10 and 1024. **SQL Server** Constraints: Must be an integer from 200 to 1024 (sqlserver-se and sqlserver-ee) or from 30 to 1024 (sqlserver-ex and sqlserver-web). Example: `--allocated-storage 320`	Yes
`-au` *value* `--auto-minor-version-upgrade` *value*	Indicates that minor version upgrades will be applied automatically to the DB instance during the maintenance window. Type: Boolean Default: true Example: `-au true`	No

Name	Description	Required
`-u` *value* `--master-username` *value*	The name of the master database user. Type: String **MySQL** Constraints: • Must be an alphanumeric string containing from 1 to 16 characters • First character must be a letter • Cannot be a reserved word for the chosen database engine **Oracle** Constraints: • Must be an alphanumeric string containing from 1 to 30 characters • First character must be a letter • Cannot be a reserved word for the chosen database engine **SQL Server** Constraints: • Must be 1 to 128 alphanumeric characters. • First character must be a letter. • Cannot be a reserved word for the chosen database engine. Example: `--master-username SQLDBA1`	Yes
`-og` *value* `--option-group` *value*	The name of the option group to be associated with this instance. If this parameter is not provided, the default option group for the engine specified is used. Note that persistent options, such as the TDE option for Microsoft SQL Server, cannot be removed from an option group while DB instances are associated with the option group. Permanent options, such as the TDE option for Oracle Advanced Security TDE, can never be removed from an option group, and that option group cannot be removed from a DB instance once it is associated with a DB instance.	No

Name	Description	Required
`-p` *value* `--master-user-password` *value*	Password for the master DB instance user. Can be any printable ASCII character except "/" or "@". If this parameter is not provided, the user will be prompted to enter a password. **MySQL** Constraints: Must contain from 8 to 41 characters. Type: String **Oracle** Constraints: Must contain from 8 to 30 characters. Type: String **SQL Server** Constraints: Must contain from 8 to 128 characters. Example: `--master-user-password mysecretpassword01`	No

Name	Description	Required
`-w` *value* `--preferred-maintenance-window` *value*		No

<table>
<tr><th>Name</th><th>Description</th><th>Required</th></tr>
<tr><td></td><td>Weekly time range (in UTC) during which system maintenance can occur.

Type: String

Default: A 30-minute window selected at random from an 8-hour block of time per region, occurring on a random day of the week. The following list shows the time blocks for each region from which the default maintenance windows are assigned.

Default: Depends on the Region the database was created in. The following table lists the default maintenance window for each Region.

<table>
<tr><th>Region</th><th>Time Block</th></tr>
<tr><td>US East (Northern Virginia) Region</td><td>03:00-11:00 UTC</td></tr>
<tr><td>US West (Northern California) Region</td><td>06:00-14:00 UTC</td></tr>
<tr><td>US West (Oregon) Region</td><td>06:00-14:00 UTC</td></tr>
<tr><td>EU (Ireland) Region</td><td>22:00-06:00 UTC</td></tr>
<tr><td>Asia Pacific (Tokyo) Region</td><td>17:00-03:00 UTC</td></tr>
<tr><td>Asia Pacific (Sydney) Region</td><td>12:00-20:00 UTC</td></tr>
<tr><td>Asia Pacific (Singapore) Region</td><td>14:00-22:00 UTC</td></tr>
<tr><td>South America (São Paulo) Region</td><td>00:00-08:00 UTC</td></tr>
<tr><td>AWS GovCloud (US) Region</td><td>06:00-14:00 UTC</td></tr>
</table>

Constraints:</td><td></td></tr>
</table>

Name	Description	Required
	• Must not conflict with the preferred backup window for this DB instance. • Must be at least 30 minutes. • Must be in the format `ddd:hh24:mi-ddd:hh24:mi`. • Times should be Universal Time Coordinated (UTC). See example below. Example: `--preferred-maintenance-window Tue:00:30-Tue:04:30`	

Name	Description	Required
`-b` *value* `--preferred-backup-window` *value*		No

<table>
<tr><th>Name</th><th>Description</th><th>Required</th></tr>
<tr><td></td><td>The daily time range (in UTC) during which automated backups are created if backups are enabled (using the --backup-retention-period) parameter.

Type: String

Default: A 30-minute window selected at random from an 8-hour block of time per region. The following table lists the time blocks for each region from which the default backup windows are assigned.

Default: Depends on the Region the database was created in. The following table lists the default backup window for each Region.

<table>
<tr><th>Region</th><th>Time Block</th></tr>
<tr><td>US East (Northern Virginia) Region</td><td>03:00-11:00 UTC</td></tr>
<tr><td>US West (Northern California) Region</td><td>06:00-14:00 UTC</td></tr>
<tr><td>US West (Oregon) Region</td><td>06:00-14:00 UTC</td></tr>
<tr><td>EU (Ireland) Region</td><td>22:00-06:00 UTC</td></tr>
<tr><td>Asia Pacific (Tokyo) Region</td><td>17:00-03:00 UTC</td></tr>
<tr><td>Asia Pacific (Sydney) Region</td><td>12:00-20:00 UTC</td></tr>
<tr><td>Asia Pacific (Singapore) Region</td><td>14:00-22:00 UTC</td></tr>
<tr><td>South America (São Paulo) Region</td><td>00:00-08:00 UTC</td></tr>
<tr><td>AWS GovCloud (US) Region</td><td>03:00-11:00 UTC</td></tr>
</table>
</td><td></td></tr>
</table>

Name	Description	Required
	Constraints: • Must not conflict with the preferred maintenance window for this DB instance. • Must be in the format `hh24:mi-hh24:mi`. • Times should be 24-hour Universal Time Coordinated (UTC). • Must not conflict with the *`--preferred-maintenance-window`*. • Must be at least 30 minutes.	
`-r` *`value`* `--backup-retention-period` *`value`*	The number of days automated backups are retained. Setting this parameter to a positive number enables backups. Setting this parameter to 0 disables backups. Type: Integer Default: 1 Constraints: • Must be a value from 0 to 35. • Cannot be set to 0 if the DB instance is a source to read replicas.	No
`-z` *`value`* `--availability-zone` *`value`*	The Amazon EC2 Availability Zone that the DB instance will be created in. Type: String Default: A random, system-chosen Availability Zone in the same region as the current endpoint. Constraints: The *`--availability-zone`* parameter cannot be set if the *`--multi-az`* parameter is set to `true`. Example: `--availability-zone us-east-1a`	No

Name	Description	Required
`-sn` *value* `--db-subnet-group-name` *value*	The name of the DB subnet group to associate with this DB instance. Specifying a DB subnet group will create this DB instance in the VPC associated with the DB subnet group. Type: String Default: none Constraints: Must be the name of an existing DB subnet group. Example: `--db-subnet-group-name mydbsubnetgroup`	No
`-pub` *value* `--publicly-accessible` *value*	Specifies the accessibility options for the DB instance. A value of true specifies an Internet-facing instance with a publicly resolvable DNS name, which resolves to a public IP address. A value of false specifies an internal instance with a DNS name that resolves to a private IP address.	
`-cs` *value* `--character-set` *value*	Specifies the Oracle character set that the DB instance will use. For a list of supported character sets, go to Appendix: Oracle Character Sets Supported in Amazon RDS. **Oracle only.**	

Output

The command returns a table that contains the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **DBInstanceID—**The user-supplied DB instance identifier
- **Created—**The data and time the instance was created, in 24-hour UTC
- **Class—**The compute and memory capacity of the instance
- **Engine—**Name of the database engine to be used for this DB instance
- **License Model—**The license model used for this DB instance
- **Storage—**Initially allocated storage size specified in gigabytes (GBs)
- **Master Username—**The master username for the DB instance
- **Status—**The current status of the DB instance. Valid values: `available` | `backing-up` | `creating` | `deleted` | `deleting` | `failed` | `modifying` | `rebooting` | `resetting-master-credentials` | `storage-full` | `incompatible-parameters` | `incompatible-restore`
- **Endpoint Address—**Address of the DB instance
- **Port—**Port used to connect to the DB instance
- **AZ—**The instance's Availability Zone
- **Backup Retention—**The number of days that automated backups are retained before deletion

- **PendingBackupRetention—**The backup retention period which will be applied at the next maintenance window, or which is currently being applied if the *--apply-immediately* option was specified
- **PendingClass—**The class to which the instance will be scaled during the next maintenance window, or to which it is currently being scaled if the *--apply-immediately* option was specified
- **PendingCredentials—**The (hidden) master user password that will be applied to the DB instance
- **PendingStorage—**The storage size to which the instance will be scaled during the next maintenance window, or to which it is currently being scaled if the *--apply-immediately* option was specified
- **PendingMulti-AZ—**If true, indicates the instance will be converted to run as a Multi-AZ deployment; if false, the instance will be converted to run as a standard (Single-AZ) deployment.
- **PendingVersion—**The engine version of the pending database instance.
- **SecondaryAvailabilityZone—**If present, specifies the name of the secondary Availability Zone for a DB instance with multi-AZ support.
- **Iops—**The provisioned IOPS allocated, expressed as I/O operations per second.
- **DB Name—**Name of the initial database created when the instance was created or the Oracle System ID (SID) of the created DB instance (for the Oracle engine). For SQL Server, will always be null. This column appears only in the *--show-long* view
- **Maintenance Window—**The period during which patching and instance modifications will be performed. This column appears only in the *--show-long* view
- **Backup Window—**The period during which automated backups are created. This column appears only in the *--show-long* view
- **Latest Restorable Time—**The latest time to which a database can be restored using point-in-time restore. This column appears only in the *--show-long* view.
- **Multi-AZ—**Indicates if this is a Multi-AZ DB instance.
- **Publicly Accessible—**Indicates the accessibility option of the instance. A value of true specifies an Internet-facing instance with a publicly resolvable DNS name, which resolves to a public IP address. A value of false specifies an internal instance with a DNS name that resolves to a private IP address.
- **EngineVersion—**The version number of the database engine.
- **Auto Minor Version Upgrade—**Indicates that minor version upgrades will be applied to the DB instance during the maintenance window. This column appears only in the *--show-long* view.
- **Name—**The DB security group name
- **Group Name—**Name of DB parameter group applied to
- **Apply Status—**Status of applying the parameter group. It can be either `in-sync` or `pending-reboot`
- **read replica ID—**The identifier of a DB instance which acts as a read replica of this DB instance
- **Name—**Subnet group name
- **Description—**Subnet group description
- **VpcId—**Identifier of the VPC associated with the subnet group
- **VPC Security Group Ids—**Identifier of the VPC security groups associated with the instance.
- **Subnet identifier—**Subnet group identifier
- **Subnet Availability Zone—**Availability Zone of the subnet

Examples

Create a Database Instance with Minimal Parameters

This example creates a DB instance with the minimal set of parameters.

```
PROMPT> rds-create-db-instance SimCoProd01 -s 10 -c db.m1.large -e mysql -u
```

```
master -p Kew2401Sd
```

Create an Oracle Database Instance

This example creates a DB instance with the minimal set of parameters.

```
PROMPT> rds-create-db-instance SimCoProd01 -s 10 -c db.m1.large -e oracle-se -
-db-name MYORACLE -lm bring-your-own-license -u master -p Kew2401Sd
```

Create a Database Instance and Prompt for a Password

This example creates a database, prompting for the master user password.

```
PROMPT> rds-create-db-instance SimCoProd02 -s 10 -c db.m1.large -e mysql -u
master -p
```

Related Operations

- rds-describe-db-instances (p. 78)
- rds-modify-db-instance (p. 122)
- rds-delete-db-instance (p. 67)

rds-create-db-instance-read-replica

Description

Creates a DB instance that acts as a read replica of a source DB instance.

Note
read replicas are only supported with the MySQL database engine.

All read replica DB instances are created as Single-AZ deployments with backups disabled. All other DB instance attributes (including DB security groups and DB parameter groups) are inherited from the source DB instance, except where specified otherwise.

Syntax

```
rds-create-db-instance-read-replica DBInstanceIdentifier

-s (--source-db-instance-identifier) value

[-c (--db-instance-class) value ]

[-au (--auto-minor-version-upgrade) value ]

[--iops value ]

[--pub (--publicly-accessible) value ]

[-z (--availability-zone) value ]

[-p (--port) value ]

[-n (--db-subnet-group-name) value ]

[General Options]
```

Options

Name	Description	Required
DBInstanceIdentifier `--db-instance-identifier` *value*	DB instance identifier of the read replica. This is the unique key that identifies a DB instance. This parameter is stored as a lowercase string. This can also be passed as a named parameter using `--db-instance-identifier` *value* Type: String Default: None Constraints: • Must contain from 1 to 63 alphanumeric characters or hyphens. • First character must be a letter. • Cannot end with a hyphen or contain two consecutive hyphens. Example: myinstance	Yes
`-s` *value* `--source-db-instance-identifier` *value*	The identifier of the DB instance for which this DB instance will act as a read replica. You can have up to 5 read replicas per DB instance. Type: String Constraints: • If the source DB instance is in the same region as the read replica, must be the identifier of an existing DB instance. If the source is in a different region, must specify the ARN of the source instance. For more information about ARNs, go to Constructing an Amazon RDS Amazon Resource Name (ARN). • Can specify a DB instance that is a read replica only if the source is running MySQL 5.6. • The specified source DB instance must have backups enabled, its backup retention period must be greater than 0.	Yes

Name	Description	Required
`-c` *value* `--db-instance-class` *value*	Contains the compute and memory capacity of the read replica. Type: String Default: Inherits from the source DB instance. Different instance classes are available for different database engines. For information about valid values for a particular engine, use the rds-describe-orderable-db-instance-options (p. 111) command. Valid values: `db.t1.micro` | `db.m1.small` | `db.m1.medium` | `db.m1.large` | `db.m1.xlarge` | `db.m2.xlarge` | `db.m2.2xlarge` | `db.m2.4xlarge` | `db.m3.medium` | `db.m3.large` | `db.m3.xlarge` | `db.m3.2xlarge` Example: `--db-instance-class db.m1.xlarge` **Note** Amazon RDS does not support db.t1.micro instances in a virtual private cloud (VPC).	No
`--port` *value*	Port number that the read replica uses for connections. Type: Integer Default: Inherits from the source DB instance Example: `--port 1234`	No
`-au` *value* `--auto-minor-version-upgrade` *value*	Indicates that minor engine upgrades will be applied automatically to the read replica during the maintenance window. Type: Boolean Default: Inherits from the source DB instance Example: `-au true`	No
`--iops` *value*	Specifies the amount of provisioned IOPS for the DB instance, expressed in I/O operations per second. If this parameter is not specified, the IOPS value will be taken from the master. If this parameter is set to 0, the new instance will not have provisioned IOPS. Constraints: Must be an integer greater than 1000.	No

Name	Description	Required
`-pub` *value* `--publicly-accessible` *value*	Specifies the accessibility options for the DB instance. A value of true specifies an Internet-facing instance with a publicly resolvable DNS name, which resolves to a public IP address. A value of false specifies an internal instance with a DNS name that resolves to a private IP address.	
`-z` *value* `--availability-zone` *value*	The Amazon EC2 Availability Zone that the read replica will be created in. Type: String Default: A random, system-chosen Availability Zone in the same region as the current endpoint. Constraints: The *`--availability-zone`* parameter cannot be set if the *`--multi-az`* parameter is set to `true`. Example: `--availability-zone us-east-1a`	No

`-n` *value*
 	
`--db-subnet-group-name` *value*
	The name of a DB subnet group associated with the Amazon VPC in which you want the read replica to be created. If a DB subnet group name is not specified, the read replica will be created outside of any VPC.
	
	Type: String
	
	Default: none.
	
	Constraints:
	
	• Can only be specified if *`--source-db-instance-identifier`* references an instance in another region.
	• The specified DB subnet group must be in the same region in which the command is running. For example, if you specify `--region us-west-2`, then the DB subnet group must be in the us-west-2 region.
	• All of the read replicas in one region that are created from the same source DB instance in another region must either:
	  • Specify DB subnet groups from the same VPC. These read replicas will be created in the same VPC.
	  • Not specify a DB subnet group. These read replicas will be created outside of any VPC.
		No

Output

The command returns a table that contains the following information:

Note
Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **DBInstanceID—**The user-supplied DB instance identifier
- **Created—**The data and time the instance was created, in 24-hour UTC
- **Class—**The compute and memory capacity of the instance
- **Engine—**Name of the database engine to be used for this DB instance
- **Storage—**Initially allocated storage size specified in gigabytes (GBs)
- **Master Username—**The master username for the DB instance
- **Status—**The current status of the DB instance. Valid values: `available` | `backing-up` | `creating` | `deleted` | `deleting` | `failed` | `modifying` | `rebooting` | `resetting-master-credentials` | `storage-full` | `incompatible-parameters` | `incompatible-restore`
- **Publicly Accessible—**Indicates the accessibility option of the instance. A value of true specifies an Internet-facing instance with a publicly resolvable DNS name, which resolves to a public IP address. A value of false specifies an internal instance with a DNS name that resolves to a private IP address.
- **Endpoint Address—**Address of the DB instance
- **Port—**Port used to connect to the DB instance
- **Iops—**The provisioned IOPS allocated, expressed as I/O operations per second.
- **AZ—**The instance's Availability Zone
- **Backup Retention—**The number of days that automated backups are retained before deletion
- **PendingBackupRetention—**The backup retention period that will be applied at the next maintenance window, or that is currently being applied if the *`--apply-immediately`* option was specified
- **PendingClass—**The class to which the instance will be scaled during the next maintenance window, or to which it is currently being scaled if the *`--apply-immediately`* option was specified
- **PendingCredentials—**The (hidden) master user password that will be applied to the DB instance
- **PendingStorage—**The storage size to which the instance will be scaled during the next maintenance window, or to which it is currently being scaled if the *`--apply-immediately`* option was specified
- **PendingMulti-AZ—**If true, indicates that the instance will be converted to run as a Multi-AZ deployment; if false, the instance will be converted to run as a standard (Single-AZ) deployment.
- **PendingVersion—**The engine version of the pending database instance.
- **DB Name—**Name of the initial database created when the instance was created. This column appears only in the *`--show-long`* view
- **Maintenance Window—**The period during which patching and instance modifications will be performed. This column appears only in the *`--show-long`* view
- **Backup Window—**The period during which automated backups are created. This column appears only in the *`--show-long`* view
- **Latest Restorable Time—**The latest time to which a database can be restored using point-in-time restore. This column appears only in the *`--show-long`* view.
- **Multi-AZ—**Indicates if this is a Multi-AZ DB instance.
- **EngineVersion—**The version number of the database engine.
- **Auto Minor Version Upgrade—**Indicates that minor version upgrades will be applied to the DB instance during the maintenance window. This column appears only in the *`--show-long`* view.
- **Name—**The DB security group name
- **Status—**Status of authorization. Valid values: `authorizing` | `authorized` | `revoking`
- **Group Name—**Name of DB parameter group applied to
- **Apply Status—**Status of applying the parameter group. It can be either `in-sync` or `pending-reboot`

- **read replica ID—**The identifier of the source DB instance for which this DB instance acts as a read replica

Examples

Create a read replica with Minimal Parameters

This example creates a read replica with the minimal set of parameters.

```
PROMPT> rds-create-db-instance-read-replica SimCoProd01Replica01 -s SimcoProd01


DBINSTANCE  simcoprod01replica01  db.m1.large  mysql  10  master  creating
   us-east-1b  0  n  5.1.50  simcoprod01
SECGROUP  default  active
PARAMGRP  default.mysql5.1  in-sync
```

Create a read replica and Specify an Availability Zone

This example creates a read replica, specifying an availability zone.

```
PROMPT> rds-create-db-instance-read-replica SimCoProd01Replica02 -s SimCoProd01-
z us-east-1a


DBINSTANCE  simcoprod01replica02  db.m1.large  mysql  10  master  creating
   us-east-1a  0  n  5.1.50  simcoprod01
SECGROUP  default  active
PARAMGRP  default.mysql5.1  in-sync
```

Related Operations

- rds-create-db-instance (p. 28)
- rds-describe-db-instances (p. 78)
- rds-modify-db-instance (p. 122)
- rds-delete-db-instance (p. 67)

rds-create-db-parameter-group

Description

Creates a DB parameter group.

A DB parameter group is initially created with the default parameters for the database engine used by the DB instance. To provide custom values for any of the parameters, you must modify the group after creating it using rds-modify-db-parameter-group (p. 135). Once you've created a DB parameter group, you need to associate it with your DB instance using rds-modify-db-instance (p. 122). When you associate a new DB parameter group with a running DB instance, you need to reboot the DB instance for the new DB parameter group and associated settings to take effect.

Important
After you create a DB parameter group, you should wait at least 5 minutes before creating your first DB instance that uses that DB parameter group as the default parameter group. This allows Amazon RDS to fully complete the create action before the parameter group is used as the default for a new DB instance. This is especially important for parameters that are critical when creating the default database for a DB instance, such as the character set for the default database defined by the `character_set_database` parameter. You can use the Parameter Groups option of the Amazon RDS console or the rds-describe-db-parameters (p. 85) command to verify that your DB parameter group has been created or modified.

Syntax

```
rds-create-db-parameter-group DBParameterGroupName

-d (--description) value

-f (--db-parameter-group-family) value

[General Options]
```

Options

Name	Description	Required
DBParameterGroupName	The name for the DB parameter group. Type: String Default: None Constraints: Is non-preserving and case-insensitive. Must contain visible characters only. Must be 1 to 63 alphanumeric characters or hyphens. Must not be "Default". Example: `--db-parameter-group-name mydbparametergroup`	Yes

Name	Description	Required

`-d value`
 	
`--description value`
	The description for the DB parameter group.
	
	Type: String
	
	Default: None
	
	Constraints: Must not exceed 255 characters.
	
	Example: `-d "This is my parameter group"`
		Yes

`-f value`
 	
`--db-parameter-group-family value`
	The DB parameter group family. A DB parameter group can be associated with one and only one DB parameter group family, and can be applied only to a DB instance running a database engine compatible with that DB parameter group family.
	
	Type: String
	
	Default: None
	
	Example: `-f MySQL5.1`
		Yes

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Group Name—**The user-supplied DB parameter group name
- **Parameter Group Family—**Parameter group family to which this group applies.
- **Description—**The description of the DB parameter group

Examples

Create a DB parameter group

This example creates a new DB parameter group.

```
PROMPT> rds-create-db-parameter-group mydbparametergroup -f mysql5.1 -d "My
first DB parameter group"

DBPARAMETERGROUP  Group Name           Parameter Group Family  Description
DBPARAMETERGROUP  mydbparametergroup   mysql5.1                My first DB
parameter group
```

Related Operations

- rds-delete-db-parameter-group (p. 70)
- rds-modify-db-instance (p. 122)
- rds-modify-db-parameter-group (p. 135)
- rds-describe-db-parameter-groups (p. 83)

rds-create-db-security-group

Description

Creates a new DB security group.

Syntax

```
rds-create-db-security-group DBSecurityGroupName

-d (--db-security-group-description) value

-v (--ec2-vpc-id)value

[General Options]
```

Options

Name	Description	Required
DBSecurityGroupName	The name for the DB security group. This value is store as a lowercase string. Type: String Default: None Constraints: Must contain visible characters only; cannot contain spaces. Must contain no more than 255 alphanumeric characters or hyphens. Must not begin with a number, and cannot be named "*default*." Example: `--db-security-group-name mysecuritygroup`	Yes
`-d` *value* `--db-security-group-description` *value*	The description for the database security group. Type: String Default: None Constraints: Must not exceed 255 characters. Example: `-d "This is my DB Security group"`	Yes
`-v` *value* `--ec2-vpc-id` *value*	The identifier of an Amazon Virtual Private Cloud (VPC). This should only be specified when creating a DB security group for a VPC. Type: String Default: None Constraints: Must be the identifier of an existing VPC.	Yes

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Name—**DB security group name
- **Description—**DB security group description
- **VpcId—**Identifier of the VPC to which this DB security group belongs
- **EC2 Group Name—**EC2 security group name
- **EC2 Owner ID—**EC2 security group owner
- **Status—**Status of authorization. Valid values: `authorizing` | `authorized` | `revoking`
- **IP Range—**CIDR range for the security group

Examples

Create a Database Security Group

This example creates a new database security group.

```
PROMPT> rds-create-db-security-group --db-security-group-name mygroup --db-se
curity-group-description "My Security Group"
```

Related Operations

- rds-delete-db-security-group (p. 71)
- rds-authorize-db-security-group-ingress (p. 22)
- rds-describe-db-security-groups (p. 87)

rds-create-db-snapshot

Description

Creates a recoverable DB snapshot of all data associated with a DB instance.

Note
This operation is not supported for read replica DB instances.

Syntax

```
rds-create-db-snapshot DBInstanceIdentifier

-s (--db-snapshot-identifier) value

[General Options]
```

Options

Name	Description	Required
DBInstanceIdentifier	DB instance identifier. This is the unique key that identifies a DB instance. This parameter is stored as a lowercase string. This parameter can also be set using **--db-instance-identifier value** Type: String Default: None Constraints: Must contain 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens. Example: `--db-instance-identifier mydbinstance`	Yes
`-s` *value* `--db-snapshot-identifier` *value*	The identifier for the DB snapshot. Type: String Default: None Constraints: Cannot be null, empty, or blank. Cannot be a word reserved by the database engine. Must contain 1 to 255 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens. Example: `-s my-snapshot-id`	Yes

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **DBSnapshotId—**Name of the DB snapshot
- **Snapshot Created—**The time (in 24 hour UTC) when the DB snapshot was taken
- **DBInstanceId—**User-supplied database identifier; this is the unique key that identifies a DB instance
- **Instance Created—**The date and time when the DB instance was created
- **Engine—**The name and version of the database engine used
- **Storage—**The size of the DB snapshot's allocated storage (GB)
- **Status—**Status of the DB snapshot. Valid values: `creating` | `available` | `deleting`
- **AZ—**The original Availability Zone of the database from which the DB snapshot was taken. This column appears only in the *`--show-long`* view
- **Iops—**The provisioned IOPS allocated, expressed as I/O operations per second
- **Storage—**The size of the DB snapshot's allocated storage (GB)
- **Port—**The original port of the database from which the DB snapshot was taken. This column appears only with the *`--show-long-view`* command option

Examples

Create a Database Snapshot

This example creates a new DB snapshot.

```
PROMPT> rds-create-db-snapshot -i mydbinstance -s mytestsnapshot
```

Related Operations

- rds-delete-db-snapshot (p. 72)
- rds-describe-db-snapshots (p. 89)
- rds-restore-db-instance-from-db-snapshot (p. 158)

rds-create-db-subnet-group

Description

Creates a new DB subnet group.

Syntax

```
rds-create-db-subnet-group DBSubnetGroupName

-d (--db-subnet-group-description) value,

-s (--db-subnet-list) value, [value, ...]

[General Options]
```

Options

Name	Description	Required
DBSubnetGroupName	The name for the DB subnet group. This value is stored as a lowercase string. This parameter can also be set using **--db-subnet-group-name `value`** Type: String Default: None Constraints: Must contain visible characters only. Must contain no more than 255 alphanumeric characters or hyphens. Must not be *default*. Example: `--db-subnet-group-name mysubnetgroup`	Yes
`-d` *value* `--db-subnet-group-description` *value*	The description for the database subnet group. Type: String Default: None Constraints: Must not exceed 255 characters. Example: `-d "This is my DB Subnet group"`	Yes

Name	Description	Required

`-s value, value, ...`
 	
`--db-subnet-list value, value, ...`
	A list of one or more subnets to add to this DB subnet group. DB subnet groups must contain at least one subnet in at least two AZs in the region.
	
	Type: String
	
	Default: None
	
	Constraints: Must be existing subnets.
	
	Example: `-s subnet1, subnet2`
		Yes

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Name—**DB subnet group name
- **Description—**DB subnet group description
- **Status—**The status of the DB subnet group.
- **Subnet Identifier—** Subnet Group identifier
- **Subnet Availability Zone—** The Subnet Availability Zone
- **Status—**The status of the subnet

Examples

Create a Database Security Group

This example creates a new database security group.

```
PROMPT> rds-create-db-subnet-group --db-subnet-group-name mygroup --db-subnet-
group-description "My Subnet Group" --db-subnet-list subnet1, subnet2, subnet3
```

Related Operations

- rds-delete-db-subnet-group (p. 74)
- rds-modify-db-subnet-group (p. 138)
- rds-describe-db-subnet-groups (p. 95)

rds-create-event-subscription

Description

Creates an Amazon RDS event notification subscription. This action requires a topic ARN created by either the RDS console, the Amazon SNS console, or the Amazon SNS API. To obtain an ARN with Amazon SNS, you must create a topic in Amazon SNS and subscribe to the topic. The ARN is displayed in the Amazon SNS console.

You can specify the type of source (SourceType) you want to be notified of, provide a list of Amazon RDS sources (SourceIds) that triggers the events, and provide a list of event categories (EventCategories) for events you want to be notified of. For example, you can specify SourceType = db-instance, SourceIds = mydbinstance1, mydbinstance2 and EventCategories = Availability, Backup.

If you specify both the SourceType and SourceIds, such as SourceType = db-instance and SourceIdentifier = myDBInstance1, you will be notified of all the db-instance events for the specified source. If you specify a SourceType but do not specify a SourceIdentifier, you will receive notice of the events for that source type for all your RDS sources. If you do not specify either the SourceType nor the SourceIdentifier, you will be notified of events generated from all Amazon RDS sources belonging to your customer account.

Syntax

```
rds-create-event-subscription SubscriptionName

-t (--SnsTopicArn) value

[--EventCategories value ]

[--SourceIds value ]

[-s (--SourceType) value ]

[--Enabled value ]

[General Options]
```

Options

Name	Description	Required
`--SubscriptionName` *value*	The name of the subscription. Type: String Constraints: The name must be less than 255 characters. Example: `--SubscriptionName mysubscription1`	Yes
`-t` `--SnsTopicArn` *value*	The Amazon Resource Name (ARN) of the Amazon SNS topic created for event notification. The ARN is created by Amazon SNS when you create a topic and subscribe to it.	Yes

Name	Description	Required
`--EventCategories` *value*	A list of event categories for a SourceType that you want to subscribe to.You can see a list of the categories for a given SourceType in the Events topic in the Amazon Relational Database Service User Guide. Type: String list	No
`--SourceIds` *value*	A list of identifiers of the event sources for which events will be returned. If not specified, then all sources are included in the response. An identifier must begin with a letter and must contain only ASCII letters, digits, and hyphens; it cannot end with a hyphen or contain two consecutive hyphens. Type: String list Constraints: If *SourceIds* are supplied, *SourceType* must also be provided. If the source type is a DB instance, then a DBInstanceIdentifier must be supplied. If the source type is a DB security group, a DBSecurityGroupName must be supplied. If the source type is a DB parameter group, a DBParameterGroupName must be supplied. If the source type is a DB snapshot, a DBSnapshotIdentifier must be supplied.	No
`-s` `--SourceType` *value*	The type of source that will be generating the events. For example, if you want to be notified of events generated by a DB instance, you would set this parameter to db-instance. if this value is not specified, all events are returned. Valid values: db-instance | db-parameter-group | db-security-group | db-snapshot Type: String	No
`--Enabled` *value*	A Boolean value; set to *true* to activate the subscription. You can set this value to *false* if you want to create the subscription but not active it. Type: Boolean	No

Output

The command returns a table with the following information:

Note
Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **CustSubscriptionId—**the Id of the event subscription
- **CustomerAwsId—**the AWS customer account associated with the Amazon RDS event notification subscription
- **Enabled—**a Boolean value indicating if the subscription is enabled. True indicates the subscription is enabled
- **EventCategoriesList—**a list of event categories for the Amazon RDS event notification subscription
- **SnsTopicArn—**the Amazon SNS topic's ARN for the Amazon RDS event notification subscription
- **SourceIdsList—**a list of source Ids for the Amazon RDS event notification subscription
- **SourceType—**the source type for the Amazon RDS event notification subscription
- **Status—**the status of the Amazon RDS event notification subscription. Can be one of the following: creating | modifying | deleting | active | no-permission | topic-not-exist

  The status "no-permission" indicates that Amazon RDS no longer has permission to post to the Amazon SNS topic. The status "topic-not-exist" indicates that the topic was deleted after the subscription was created.
- **SubscriptionCreationTime—**the time the RDS event notification subscription was created

Examples

Creating an event subscription

This example creates a subscription called MySubscription1 that receives event notifications whenever a Failover category event occurs for the DB instance named MyDBInstance1. value of

```
PROMPT> rds-create-event-subscription MySubscription1
    -t  arn:aws:sns:us-west-2:803981917763:MyTopic --SourceIds MyDBInstance1 -
-SourceType db-instance --EventCategories Failover
```

Creating an event subscription with multiple source Ids and event categories

This example creates a subscription called MySubscription2 that receives event notifications from the Failure and Configuration Change event categories for a DB instance and a DB security group.

```
PROMPT> rds-create-event-subscription MySubscription2
    -t  arn:aws:sns:us-west-2:803981917763:MyTopic --SourceIds MyDBInstance1,
MySecurityGroup1 --SourceType db-instance, db-security-group
    --EventCategories Failure, Configuration Change
```

Related Operations

- rds-add-source-identifier-to-subscription (p. 19)
- rds-remove-source-identifier-from-subscription (p. 153)
- rds-modify-event-subscription (p. 140)
- rds-describe-event-subscriptions (p. 105)

rds-create-option-group

Description

Creates an option group.

Syntax

```
rds-create-option-group name

--engine-name value

--major-engine-version value

--description "value"
[General Options]
```

Options

Name	Description	Required
`name`	Name of the option group to be created.	Yes

`--engine-name`
 	
`-e`
	The name of the DB engine that the option applies to, for example, `oracle-ee`.	Yes

`--major-engine-version`
 	
`-v`
	The major version of the DB engine.	Yes

`--description`
 	
`-d`
	A brief description of the option group for display purposes.	Yes

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Group name—**The name of the option group.
- **Engine—**The name of the DB engine that the option group is associated with.
- **Major engine version—**The major version ID of the DB engine.
- **Description—**The description of the option group.

Example

This example creates an option group named TestOptionGroup, which is associated with the Oracle Enterprise Edition DB engine.

```
PROMPT> rds-create-option-group TestOptionGroup --engine-name oracle-ee --major-
engine-version 11.2 --description "Oracle Database Manager Database Control"

OPTIONGROUP testoptiongroup oracle-ee 11.2 Oracle Database Manager Database
Control
```

rds-delete-db-instance

Description

Deletes a DB instance. Once started, the process cannot be stopped, and the DB instance will no longer be accessible. When you delete a DB instance, all automated backups for that instance are deleted and cannot be recovered. Manual DB snapshots of the DB instance to be deleted are not deleted.

Syntax

```
rds-delete-db-instance DBInstanceIdentifier
[-f (--force) ]
[--final-db-snapshot-identifier value ]
[--skip-final-snapshot ]
[General Options]
```

Options

Name	Description	Required
DBInstanceIdentifier	DB instance identifier.	Yes
`-f` *value* `--force`	Forces no confirmation prompt for the delete operation.	No
`--final-db-snapshot-identifier` *value*	Name for the final DB snapshot. This option is not permitted if the *`--skip-final-snapshot`* option is specified, and must be provided if *`--skip-final-snapshot`* is not specified. Cannot be specified when deleting a read replica. Constraints: Must contain 1 to 255 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens.	No
`--skip-final-snapshot`	Specifies that no final DB snapshot should be made of the DB instance before it is deleted. Must be set to true when deleting a read replica.This parameter must not be specified if the *`--final-db-snapshot`* parameter is provided.	No

Output

The command returns the following information:

Note
Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the

Endpoint Address value because that value is null until the DB instance has finished being created or restored.

- **DBInstanceId—**User-supplied database identifier; this is the unique key that identifies a DB instance
- **Created—**When the instance was created, in UTC
- **Class—**The compute and memory capacity of the Amazon RDS instance
- **Engine—**Name of the database engine to be used for this DB instance
- **Storage—**Initially allocated storage size specified in GBs
- **Master Username—**The master username for the instance
- **Status—**Status of the DB snapshot. Valid values: `creating` | `available` | `deleting`
- **Endpoint Address—**Address of the DB instance
- **Port—**The original port of the database from which the DB snapshot was taken. This column appears only with the *`--show-long-view`* command option
- **AZ—**The original Availability Zone of the database. This column appears only in the *`--show-long`* view
- **PendingClass—**The class to which the instance will be scaled during the next maintenance window, or to which it is currently being scaled if the *`--apply-immediately`* option was specified.
- **PendingCredentials—**The (hidden) master user password that will be applied to the DB instance
- **PendingStorage—**The storage size to which the instance will be scaled during the next maintenance window, or to which it is currently being scaled if the *`--apply-immediately`* option was specified
- **Version—**The version number of the database engine.
- **Auto Minor Version Upgrade—**Indicates that minor version upgrades will be applied to the DB instance during the maintenance window. This column appears only in the *`--show-long`* view.
- **DB Name—**Name of the initial database created when the instance was created or the Oracle System ID (SID) of the created DB instance (for the Oracle engine). This column appears only in the *`--show-long`* view
- **Maintenance Window—**The period during which patching and instance modifications will be performed. This column appears only in the *`--show-long`* view
- **Name—**security group name
- **Status—**Status of authorization. Valid values: `authorizing` | `authorized` | `revoking`
- **Group Name—**Name of DB parameter group applied to
- **Apply Status—**Status of applying the parameter group. Valid values: `in-sync` | `pending-reboot` | `applying`

Examples

Delete a Database Instance with No Final DB snapshot

This example deletes a DB instance, forcing data deletion so no final DB snapshot is created.

```
PROMPT>
rds-delete-db-instance databaseInstance1 --skip-final-snapshot

Once you begin deleting this database, it will no longer be able to accept
connections.
Are you sure you want to delete this database? [Ny]y
```

Delete a Database Instance, Allowing a Final DB snapshot

This example deletes a database, but specifies a final DB snapshot.

```
PROMPT> rds-delete-db-instance databaseInstance1 --final-db-snapshot-identifier
 myfinalsnapshot

Once you begin deleting this database, it will no longer be able to accept
connections.
Are you sure you want to delete this database? [Ny]y
```

Output Example with Column Headers

This example shows command output with column headers.

```
DBINSTANCE  DBInstanceId  Created                  Class   Engine    Storage
Master Username  Status           Endpoint Address
 Port  AZ           PendingClass    PendingCredentials
DBINSTANCE  simcoprod01   2009-05-15 22:13:39.559  db.m1.large  MySQL5.1  10GB
     master           available        mydbinstance.kldusfasddog.us-east-
1.rds.am...us-east-1c
      SECGROUP  Name     Status
      SECGROUP  Default  authorized
      PARAMGRP  Group Name    Apply Status
      PARAMGRP  mydbconfig    in-sync
```

Related Operations

- rds-create-db-instance (p. 28)
- rds-describe-db-instances (p. 78)
- rds-delete-db-instance (p. 67)

rds-delete-db-parameter-group

Description

Deletes a DB parameter group. The specified DB parameter group cannot be associated with any DB instances.

Syntax

```
rds-delete-db-parameter-group DBParameterGroupName

[General Options]
```

Options

Name	Description	Required
DBParameterGroupName	DB parameter group identifier. This value can also be passed using the `--db-parameter-group-name` named parameter. Constraints: Must contain 1 to 255 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens.	Yes

Examples

Delete a DB parameter group

This example deletes a DB parameter group.

```
PROMPT> rds-delete-db-parameter-group mydbparametergroup1
```

Related Operations

- rds-create-db-parameter-group (p. 52)
- rds-describe-db-parameter-groups (p. 83)
- rds-modify-db-parameter-group (p. 135)

rds-delete-db-security-group

Description

Deletes a database security group. The specified security group cannot be in use by any DB instances.

Syntax

```
rds-delete-db-security-group DBSecurityGroupName

[General Options]
```

Options

Name	Description	Required
DBSecurityGroupName	The DB security group identifier. This value can also be passed using the `--db-security-group-name` named parameter.	Yes

Examples

Delete a DB Security Group

This example deletes a database security group.

```
PROMPT>
rds-delete-db-security-group mysecuritygroup

    Once you begin deleting this security group, it will no longer be available

    for setting access permissions on your DB instances.
    Are you sure you want to delete this security group [Ny]
```

Related Operations

- rds-create-db-security-group (p. 55)
- rds-describe-db-security-groups (p. 87)

rds-delete-db-snapshot

Description

Deletes a DB snapshot. If the snapshot is being copied, the copy operation is terminated.

Syntax

```
rds-delete-db-snapshot DBSnapshotIdentifier

[General Options]
```

Options

Name	Description	Required
DBSnapshotIdentifier	DB snapshot identifier. This value can also be passed using the `--db-snapshot-identifier` named parameter. Constraints: Must contain 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens.	Yes

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **DBSnapshotId—**Name of the DB snapshot
- **Snapshot Created—**The time (UTC) when the DB snapshot was taken
- **DBInstanceId—**User-supplied database identifier; this is the unique key that identifies a DB instance
- **Instance Created—**The date and time when the DB instance was created
- **Engine—**The name and version of the database used
- **Storage—**The size of the DB snapshot's allocated storage (GB)
- **Status—**Status of the DB snapshot. Valid values: `creating` | `available`
- **Master Username—**The login name of the database's master user
- **AZ—**The original Availability Zone of the database from which the DB snapshot was taken. This column appears only in the *`--show-long`* view.
- **Port—**The original port of the database from which the DB snapshot was taken. This column appears only in the *`--show-long`* view.

Examples

Delete a Database Snapshot

This example deletes a DB snapshot.

```
PROMPT> rds-delete-db-snapshot mysnapshot

Once you begin deleting this snapshot, it will no longer be available for db
instance restoration.
Are you sure you want to delete this snapshot [Ny]
```

Output Example

This example shows detailed output with column headers.

```
DBSNAPSHOT  DBSnapshotId    Snapshot Created         DBInstanceId     Instance
 Created         Engine    Storage  Status   Master Username
DBSNAPSHOT  mysnapshot      2009-09-03 19:08:13.710  mydbinstance     2009-08-
2721:56:55.034   MySQL5.1  10GB     deleted  sa
```

Related Operations

- rds-create-db-snapshot (p. 57)
- rds-describe-db-snapshots (p. 89)

rds-delete-db-subnet-group

Description

Deletes a db subnet group. The specified subnet group cannot be in use.

Syntax

```
rds-delete-db-subnet-group DBSubnetGroupName

[General Options]
```

Options

Name	Description	Required
DBSubnetGroupName	Database subnet group identifier. This value can also be passed using the `--db-security-group-name` named parameter. Constraints: Must contain 1 to 255 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens.	Yes

Examples

Delete a DB Security Group

This example deletes a database security group.

```
                    PROMPT>
                        rds-delete-db-security-group mysecuritygroup

                           Once you begin deleting this security group, it
will no longer be available
                          for setting access permissions on your DB instances.

                           Are you sure you want to delete this security group
 [Ny]
```

Related Operations

- rds-create-db-subnet-group (p. 59)
- rds-modify-db-subnet-group (p. 138)
- rds-describe-db-subnet-groups (p. 95)

rds-delete-event-subscription

Description

Deletes an Amazon RDS event notification subscription. Note that if you want to temporarily turn off a subscription instead of deleting it, you can use the **rds-modify-event-subscription** command and set the *Enabled* parameter to `false`.

Syntax

```
rds-delete-event-subscription SubscriptionName

[General Options]
```

Options

Name	Description	Required
`--SubscriptionName` *value*	The name of the subscription. Type: String Constraints: The name must be less than 255 characters.	Yes

Output

The command returns a table with the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **CustSubscriptionId—**the Id of the event subscription
- **CustomerAwsId—**the AWS customer account associated with the Amazon RDS event notification subscription
- **Enabled—**a Boolean value indicating if the subscription is enabled. True indicates the subscription is enabled
- **EventCategoriesList—**a list of event categories for the Amazon RDS event notification subscription
- **SnsTopicArn—**the Amazon SNS topic's ARN for the Amazon RDS event notification subscription
- **SourceIdsList—**a list of source Ids for the RDS event notification subscription
- **SourceType—**the source type for the Amazon RDS event notification subscription
- **Status—**the status of the Amazon RDS event notification subscription. Can be one of the following: creating | modifying | deleting | active | no-permission | topic-not-exist

  The status "no-permission" indicates that RDS no longer has permission to post to the Amazon SNS topic. The status "topic-not-exist" indicates that the topic was deleted after the subscription was created.
- **SubscriptionCreationTime—**the time the Amazon RDS event notification subscription was created

Examples

Deleting an event subscription

This example deletes a subscription called MySubscription1.

```
PROMPT> rds-delete-event-subscription MySubscription1
```

Related Operations

- rds-add-source-identifier-to-subscription (p. 19)
- rds-remove-source-identifier-from-subscription (p. 153)
- rds-modify-event-subscription (p. 140)
- rds-describe-event-subscriptions (p. 105)

rds-delete-option-group

Description

Deletes an option group. You can delete an option group only if it is not associated with any DB instance.

Syntax

```
rds-delete-option-group name

[--force]
[General Options]
```

Options

Name	Description	Required
`name`	Name of the option group to be deleted.	Yes

`--force`
 	
`-f`
	If specified, forces the deletion to proceed without a confirmation prompt.	No

Example

This example deletes an option group named TestOptionGroup.

```
PROMPT> rds-delete-option-group TestOptionGroup

Once you delete this option group, it will no longer be available for use.
Are you sure you want to delete this option group [Ny]
```

rds-describe-db-instances

Description

Returns information about all DB instances for an account if no DB instance identifier is displayed, or displays information about a specific DB instance.

Note
This command returns only active DB instances in the current default region. To see DB instances created in another region, you can change the region using the *--region* parameter or pass in the URL of the regional endpoint using the *--url* parameter.

Syntax

```
rds-describe-db-instances [DBInstanceIdentifier ]

[--max-records value ]

[General Options]
```

Options

Name	Description	Required
DBInstanceIdentifier	DB instance identifier. This is the unique key that identifies an DB instance. Stored as a lowercase string. Type: String Default: None Constraints: Must contain from 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens. Example: `myinstance`	No
`--max-records`	The maximum number of records to include in the response. If more records exist than the specified `MaxRecords` value, a pagination token called a marker is included in the response so that the remaining results can be retrieved. Default: 100 Constraints: minimum 20, maximum 100	No

Output

The command returns the following information:

Note
Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command

output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **DBInstanceId—**User-supplied database identifier; this is the unique key that identifies a DB instance
- **Created—**When the instance was created, in UTC
- **Class—**The compute and memory capacity of the DB instance
- **Engine—**Name of the database engine used for this DB instance
- **Storage—**Initially allocated storage size specified in GBs
- **Master Username—**The master username for the instance
- **Status—**The current status of the instance. Valid values: `available` | `backing-up` | `creating` | `deleted` | `deleting` | `failed` | `incompatible-restore` | `incompatible-parameters` | `modifying` | `rebooting` | `resetting-master-credentials` | `storage-full`
- **Endpoint Address—**Address of the DB instance
- **Port—**Port used to connect to the DB instance
- **AZ—**The instance's Availability Zone
- **SecondaryAZ—**When the DB instance has multi-AZ support, this value is the secondary AZ.
- **Backup Retention—**The number of days that automated backups are retained before deletion
- **PendingClass—**The class to which the instance will be scaled during the next maintenance window, or to which it is currently being scaled if the *`--apply-immediately`* option was specified.
- **PendingCredentials—**The (hidden) master user password that will be applied to the DB instance.
- **PendingVersion—** The pending database engine version number. This column appears only in the *`--show-long`* view.
- **DB Name—**Name of the initial database created when the instance was created or the Oracle System ID (SID) of the created DB instance (for the Oracle engine). This column appears only in the *`--show-long`* view
- **Maintenance Window—**The period during which patching and instance modifications will be performed. This column appears only in the *`--show-long`* view.
- **Backup Window—**The daily period during which automated backups are created. This column appears only in the *`--show-long`* view.
- **Version—**The version number of the database engine.
- **Iops—**The provisioned storage IOPS, expressed as I/O operations per second.
- **Auto Minor Version Upgrade—**Indicates that minor version upgrades will be applied to the DB instance during the maintenance window. This column appears only in the *`--show-long`* view.
- **Name—**DB security group name.
- **Status—**Status of authorization. Valid values: `authorizing` | `authorized` | `revoking`
- **Group Name—**Name of DB parameter group applied to.
- **Apply Status—**Status of applying the DB parameter group. Valid values: `in-sync` | `pending-reboot` | `applying`
- **Multi-AZ—**Indicates if this is a Multi-AZ DB instance.
- **EngineVersion—**Database engine version number.
- **Replication State—**The status of the read replica replication.
- **Change Date—**The date of the last replication state change for the read replica.

Examples

Get a Description of All Database Instances

This example returns a description of all DB instances for the account.

```
PROMPT> rds-describe-db-instances


DBINSTANCE  mydbinstance        2010-08-04T23:27:36.420Z  db.m1.small  mysql
50
sa      available  mydbinstance.ab7c2d4uz396.us-east-1.rds.amazonaws.com

3306  us-east-1a  3  n  5.1.49
    SECGROUP  default  active
    PARAMGRP  default.mysql5.1  in-sync
DBINSTANCE  simcoprod01         2010-08-06T07:51:10.154Z  db.m1.large  mysql
10
master  available  simcoprod01.cu7u2t4uz396.us-east-1.rds.amazonaws.com

3306  us-east-1a  1  n  5.1.49
    SECGROUP  default  active
    PARAMGRP  default.mysql5.1  in-sync
```

Get a Description of a Specific Database Instance, Showing Headers

This example returns a full description of a specific DB instance and shows table headers

```
PROMPT> rds-describe-db-instances simcoprod01 --show-long --headers


DBINSTANCE,DBInstanceId,Created,Class,Engine,Storage,Master Username,Status,
Endpoint Address,Port,AZ,Backup Retention,PendingBackupRetention,PendingClass,
PendingCredentials,PendingStorage,PendingMulti-AZ,PendingVersion,DB Name,
Maintenance Window,Backup Window,Latest Restorable Time,Multi-AZ,Version,
Auto Minor Version Upgrade
DBINSTANCE,simcoprod01,2010-07-16T00:06:59.107Z,db.m1.large,mysql,60,master,avai
lable,simcoprod01.cu7u2z4zz123.us-east-1.rds.amazonaws.com,3306,us-east
-1d,1,(nil),(nil),(nil),(nil),(nil),(nil),sun:05:00-sun:09:00,23:00-01:00,
2010-08-05T00:00:00Z,n,5.1.47,n
SECGROUP,Name,Status
SECGROUP,default,active
PARAMGRP,Group Name,Apply Status
PARAMGRP,default.mysql5.1,in-sync
```

Related Operations

- rds-create-db-instance (p. 28)
- rds-delete-db-instance (p. 67)
- rds-modify-db-instance (p. 122)

rds-describe-db-log-files

Description

Displays a list of log files available for an DB instance; the list can be filtered by the optional parameters. The **DescribeDBLogFiles** API action ignores the `MaxRecords` parameter when listing Oracle log files and returns up to 1000 records.

Syntax

```
rds-describe-db-log-files DBInstanceIdentifier

[--filename-contains value ]

[--file-last-written value ]

[--file-size value ]

[General Options]
```

Options

Name	Description	Required
DBInstanceIdentifier	Customer-supplied DB instance identifier; this is the name you assigned to the DB instance when you created it and is the unique key that identifies a DB instance. Type: String	Yes
--filename-contains	Filters the available log files for log file names that contain the specified string. Type: String	No
--file-last-written	Filters the available log files for files written since the specified date. Type: Date	No
--file-size	Filters the available log files for files larger than the specified size (in bytes). Type: Integer	No
--marker	The pagination marker provided in the previous request. If this parameter is specified the response includes only records beyond the marker, up to MaxRecords.	No

Name	Description	Required
`--max-records`	The maximum number of records to include in the response. If more records exist than the specified `MaxRecords` value, a pagination token called a marker is included in the response so that the remaining results can be retrieved. This parameter is ignored when run against Oracle log files. Up to 1000 records are returned for Oracle log files. Default: 100 Constraints: minimum 20, maximum 100	No

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **FileName—**The log file name available.
- **LastWritten—**The date and time that the log file was last written.
- **Size—**The size of the log file (in bytes).

Examples

Get a List of All Log Files for a DB instance

This example returns a list of all log files for a DB instance named mysql-prod-db1.

```
PROMPT> rds-describe-db-log-files mysql-prod-db1
```

Related Operations

- rds-watch-db-logfile (p. 175)

rds-describe-db-parameter-groups

Description

Returns information about all DB parameter groups for an account if no database parameter group name is supplied, or displays information about a specific named DB parameter group.

Syntax

```
rds-describe-db-parameter-groups [DBParameterGroupName ]

[--max-records value ]

[General Options]
```

Options

Name	Description	Required
DBParameterGroupName	DB parameter group name. This value can also be supplied using the `--db-parameter-group-name` parameter. Type: String Default: None	No

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Group Name—**User-supplied DB parameter group name.
- **Parameter Group Family—**Parameter group family to which this group applies.
- **Description—**Description of the DB parameter group.

Examples

Get a Description of All DB parameter groups

This example returns a description of all DB parameter groups for the account, with column headers.

```
PROMPT> rds-describe-db-parameter-groups
```

```
    DBPARAMETERGROUP  Group Name          Parameter Group Family
Description
    DBPARAMETERGROUP  default.MySQL5.1    MySQL5.1
The default database configuration for MySQL5.1
```

Related Operations

- rds-create-db-parameter-group (p. 52)
- rds-delete-db-parameter-group (p. 70)
- rds-modify-db-parameter-group (p. 135)

rds-describe-db-parameters

Description

Returns information about parameters that are part of a parameter group. You can optionally request only parameters from a specific source.

Syntax

```
rds-describe-db-parameters DBParameterGroupName

[--max-records value ]

[--source value ]

[General Options]
```

Options

Name	Description	Required
DBParameterGroupName	DB parameter group name. This value can also be supplied using the `--db-parameter-group-name` parameter. Type: String Default: None	Yes
`--source` *value*	Specifies which parameter types to return. Type: String Default: None Valid values: `user` | `system` | `engine-default`	No

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Parameter Name—**The name of the parameter.
- **Parameter Value—**The current value of the parameter.
- **Description—**A short description of the parameter.
- **Source—**Whether this parameter was set by the database engine, Amazon RDS (system), or the user. Valid values: `user` | `system` | `engine-default`
- **Data Type—**The data type of the parameter..

- **Apply Type—**The type of parameter: Can be either `static` or `dynamic`.
- **Is Modifiable—**Indicates whether a given parameter is modifiable or not.
- **Allowed Values—**The allowed values for this parameter. This column appears only in the *`--show-long`* view.
- **Minimum Version—**The earliest engine version to which the parameter can apply.

Examples

Retrieve the Parameters for a Specified DB parameter group

This example retrieves the parameters for the named parameter group, showing column headers on the output.

```
PROMPT> rds-describe-db-parameters mydbparamgrp --headers

CONFIGPARAMETERS  Parameter Name      Parameter Value     Description
                      Source          Apply Type      Is Modifiable
CONFIGPARAMETERS  max_allowed_packet  2M                  The largest possible
 packet that can ...  user            dynamic         true
CONFIGPARAMETERS  log-error           /rdsdblog/error/m...specify where mysqld
 writes the error...  engine-default  static          false
```

Related Operations

- rds-create-db-parameter-group (p. 52)
- rds-describe-db-parameter-groups (p. 83)
- rds-delete-db-parameter-group (p. 70)

rds-describe-db-security-groups

Description

Returns information about all database security groups for an account if no database security group name is supplied, or displays information about a specific named database security group.

Syntax

```
rds-describe-db-security-groups [DBSecurityGroupName ]

[--max-records value ]

[General Options]
```

Options

Name	Description	Required
DBSecurityGroupName	Database security group name. This value can also be supplied using the `--db-security-group-name` parameter. Type: String Default: None	No

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Name—**Security group name
- **Description—**Description of the database security group
- **Amazon EC2 Group Name—**EC2 security group name
- **Amazon EC2 Owner Id—**EC2 security group owner
- **Status—**Status of security group authorization. Valid values: `adding` | `active` | `removing`
- **IP Range—**the CIDR IP range allowed access to the security group
- **Status—**Status of authorization for the IP Range. Valid values: `authorizing` | `authorized` | `revoking`

Examples

Get a Description of All Security Groups

This example returns a description of all database security groups for the account, with column headers.

```
PROMPT> rds-describe-db-security-groups -H


SECGROUP  Name     Description
SECGROUP  Default  Default
    EC2-SECGROUP  EC2 Group Name  EC2 Owner Id  Status
    EC2-SECGROUP  mytestgroup     210987654321  authorized
    IP-RANGE  IP Range         Status
    IP-RANGE  12.23.34.45/30   authorized
    IP-RANGE  1.2.3.4/32       authorized
```

Related Operations

- rds-create-db-security-group (p. 55)
- rds-delete-db-security-group (p. 71)
- rds-authorize-db-security-group-ingress (p. 22)
- rds-revoke-db-security-group-ingress (p. 172)

rds-describe-db-snapshots

Description

Returns information about the DB snapshots for this account. If you pass in a DBInstanceIdentifier, it will return information only about DB snapshots taken for that instance. If you pass in a DBSnapshotIdentifier, it will return information only about the specified DB snapshot. If you omit both DBInstanceIdentifier and DBSnapshotIdentifier, it will return all snapshot information for all instances, up to --max-records. Passing both DBInstanceIdentifier and DBSnapshotIdentifier will result in an error.

Syntax

```
rds-describe-db-snapshots

[-i (--db-instance-identifier)value]

[-s (--db-snapshot-identifier) value]

[-t (--snapshot-type) value]

[General Options]
```

Options

Name	Description	Required
`--db-instance-identifier` *value* `--i` *value*	The unique identifier for the DB instance. Type: String Default: None Constraints: Must contain 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens. Example: `--db-instance-identifier mydbinstance`	No
`--db-snapshot-identifier` *value* `--s` *value*	The unique identifier for the DB snapshot. Stored as a lowercase string. Type: String Default: None Constraints: Must contain from 1 to 255 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens. Example: `--db-snapshot-identifier m1233123-123`	No

Name	Description	Required
`--snapshot-type` *value* `--t` *value*	The type of DB snapshot. Valid values include "manual" and "automated." If no value is provided, all snapshot types will be returned. Type: String Default: None Example: `--snapshot-type manual`	No

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **DBSnapshotId—**Name of the DB snapshot
- **Snapshot Created—**The time (UTC) when the DB snapshot was taken
- **DBInstanceId—**User-supplied database identifier; this is the unique key that identifies a DB instance
- **Instance Created—**The date and time when the DB instance was created
- **Engine—**The name of the database engine used
- **Storage—**The size of the DB snapshot's allocated storage (GB)
- **Iops—**The provisioned storage IOPS, expressed as I/O operations per second.
- **Status—**Status of the DB snapshot. Valid values: `creating` | `available` | `deleting`
- **Master Username—**The login name of the database's master user
- **AZ—**The original Availability Zone of the database from which the DB snapshot was taken. This column appears only in the *`--show-long`* view
- **Port—**The original port of the database from which the DB snapshot was taken. This column appears only in the *`--show-long`* view
- **EngineVersion—**Database engine version number.

Examples

Get a Description of All Database Snapshots

This example returns a description of all DB snapshots for the account, with column headers.

```
PROMPT> rds-describe-db-snapshots -H


DBSNAPSHOT  DBSnapshotId  Snapshot Created          DBInstanceId  Instance
Created          Engine  Storage  Status     Master Username  Version
DBSNAPSHOT  mysnapshot1                            mydbinstance  2010-08-
```

```
04T23:27:36.420Z  mysql   50       creating   sa              5.1.49
DBSNAPSHOT  mysnapshot2   2010-08-05T00:15:51.815Z  simcoprod01   2010-07-
16T00:06:59.107Z  mysql   60       available  master          5.1.47
```

Related Operations

- rds-create-db-snapshot (p. 57)
- rds-delete-db-snapshot (p. 72)
- rds-restore-db-instance-from-db-snapshot (p. 158)

rds-describe-db-engine-versions

Description

Returns information about available database engine versions.

Syntax

```
rds-describe-db-engine-versions  [-d (--default-only) ]
[-e (--engine) value ]
[-f (--db-parameter-group-family) value ]
[-v (--engine-version) value ]
[-cs (--list-supported-character-sets) value ]
[General Options]
```

Options

Name	Description	Required
`-f` `--db-parameter-group-family` *value*	DB parameter group family filter value. Type: String Default: None Example: `-f mysql5.1`	No
`-d` `--default-only`	Indicates that only the default version of the specified engine or engine and major version combination is returned. Type: Switch flag Example: `--default-only`	No
`-e` `--engine` *value*	Database engine filter value. Type: String Example: `-e mysql`	No
`-v` `--engine-version` *value*	The version number of the database engine. Type: String Example: `-v 5.1.42`	No
`-cs` `--list-supported-character-sets`	Generates a list of supported Oracle character sets.	No

Output

The command returns a table with the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Engine—**name of the database engine.
- **EngineVersion—**database engine version number.
- **Parameter Group Family—**the version's parameter group family.
- **EngineVersion—**database engine version number.
- **Engine Description—**full name of the database engine.
- **Engine Version Description—**full version information of the database engine.
- **Default Character Set—**the default character set for the database engine.

Examples

Describing Engine Versions

This example returns descriptions for all available versions of all available database engines.

```
PROMPT> rds-describe-db-engine-versions


VERSION  Engine     Version      Parameter Group Family  Engine Description
    Engine Version Description    Default Character Set
VERSION  mysql      5.1.42       mysql5.1                MySQL
    Version 5.1.42
VERSION  mysql      5.1.45       mysql5.1                MySQL
    Version 5.1.45
VERSION  mysql      5.1.47       mysql5.1                MySQL
    Version 5.1.47
VERSION  oracle-ee  11.2.0.2.v3  oracle-ee-11.2         Oracle Database Server
EE  Oracle EE 11.2.0.2.v3         AL32UTF8
```

Describing Engine Versions for a Specific Engine

This example describes all available versions of the MySQL database engine.

```
PROMPT> rds-describe-db-engine-versions --engine mysql --show-long --header


VERSION  Engine     Version  Parameter Group Family
VERSION  mysql      5.1.42   mysql5.1
```

```
VERSION  mysql      5.1.45   mysql5.1
VERSION  mysql      5.1.47   mysql5.1
VERSION  mysql      5.1.48   mysql5.1
VERSION  mysql      5.1.49   mysql5.1
VERSION  mysql      5.1.50   mysql5.1
VERSION  mysql      5.5.8    mysql5.5
```

Related Operations

- rds-modify-db-instance (p. 122)
- rds-create-db-parameter-group (p. 52)

rds-describe-db-subnet-groups

Description

Returns information about all DB subnet groups for an account if no DB subnet group name is supplied, or displays information about a specific named DB Subnet group.

Syntax

```
rds-describe-db-subnet-groups [DBSubnetGroupName ]

[--max-records value ]

[General Options]
```

Options

Name	Description	Required
DBSubnetGroupName	Database Subnet Group name. This value can also be supplied using the `--db-subnet-group-name` parameter. Type: String Default: None	No

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Name—**The name of the DB subnet group that was modified.
- **Description—**The description of the DB subnet group that was modified.
- **Status—**The status of the DB subnet group that was modified.
- **Subnet Identifier—**The identifier of a contained subnet.
- **Subnet Availability Zone—**The Availability Zone of the contained subnet.
- **Status—**The status of the contained subnet.

Examples

Get a Description of All Security Groups

This example returns a description of all database security groups for the account, with column headers.

```
PROMPT> rds-describe-db-subnet-groups -H


SUBNETGROUP  Name     Description    Status
SUBNETGROUP  mygroup  my group desc  Active
      SUBNET  Subnet Identifier  Subnet Availability Zone  Status
      SUBNET  mytestgroup        us-east-1c                Active
```

Related Operations

- rds-create-db-subnet-group (p. 59)
- rds-modify-db-subnet-group (p. 138)
- rds-delete-db-subnet-group (p. 74)

rds-describe-engine-default-parameters

Description

Returns a description of the default parameters used for the DB parameter group family.

Syntax

```
rds-describe-engine-default-parameters ParameterGroupFamily

[--max-records ] value

[General Options]
```

Options

Name	Description	Required
ParameterGroupFamily	Contains the name of the DB parameter group family for which to list defaults. This value can also be set using the *--db-parameter-group-family* named parameter. Type: String Default: None	Yes

Output

The command returns a table containing the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Parameter Name—**The name of the parameter.
- **Parameter Value—**Value of the parameter.
- **Description—**A short description of the parameter.
- **Source—**Indicates the source of the parameter. *System* indicates the parameter source is the Amazon RDS service; *EngineDefault* indicates the parameter source is the database engine; *User* indicates the parameter source is the user.
- **Apply Type—**Indicates the type of parameter. Valid values: `static` | `dynamic`
- **Is Modifiable—**Indicates whether a given parameter can be modified.
- **Minimum Version—**The earliest engine version to which the parameter can apply.

Examples

Display Parameter Values for the Default DBParameterGroup

This example shows how to display the default DBParameterGroup parameter values for a specific DB parameter group family and return the results displaying table headers.

```
PROMPT> rds-describe-engine-default-parameters MySQL5.1 --headers
```

Related Operations

- rds-describe-db-parameters (p. 85)
- rds-modify-db-parameter-group (p. 135)
- rds-reset-db-parameter-group (p. 156)

rds-describe-events

Description

Returns information about events related to your DB instances, DB security groups or DB parameter groups.

Syntax

```
rds-describe-events [--duration value ]

[--start-time value ]

[--end-time value ]

[--source-identifier value ]

[--source-type value ]

[--EventCategories value ]

[--max-records value ]

[General Options]
```

Options

Name	Description	Required
`--duration` *value*	The number of minutes for which to retrieve events. Type: Integer Default: 60 Example: Retrieve the last 90 minutes worth of events: `--duration 90`	No
`--start-time` *value*	The beginning of the time interval to retrieve events, specified in ISO8601 format. For more information about ISO 8601, go to the ISO8601 format Wikipedia page. Type: Date Default: none Example: `--start-time 2009-03-31T10:00:00`	No

Name	Description	Required
`--end-time` *value*	The end of the time interval to retrieve events, specified in ISO8601 format. For more information about ISO 8601, go to the ISO8601 format Wikipedia page. Type: Date Default: none Example: `--start-time 2009-03-31T12:00:00`	No
`--EventCategories` *value*	A list of event categories that trigger notifications for a event notification subscription. Type: String list	No
`--source-type` *value*	Specifies the event source for which to retrieve events. Type: String Valid values: `db-instance`, `db-security-group`, `db-parameter-group`, `db-snapshot` Example: `--source-type db-instance`	No
`--source-identifier` *value*	Used with the `--source-type` parameter to restrict returned events to a specific named source. Type: String Default: 60 Example: `--source-type db-instance --source-identifier mydbinstance`	No

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Source Type—**Type of event source
- **Date—**Database event date/time, in UTC
- **Source Id—**Identifier of the event source
- **Category—**Indicates the event category.
- **Message—**Event description

Examples

Describe All Events

This example returns all events with column headers.

```
PROMPT> rds-describe-events --headers

    Source Type         Date                 Source Id       Message
    db-instance         2009-03-27 00:28:44  test002         Database instance
 test002 deleted
    db-instance         2009-03-27 00:30:08  test003         Database instance
 test003 deleted
    db-instance         2009-03-27 00:37:59  test001         Database instance
 test001 created
    db-instance         2009-03-27 00:39:05  test0010        Database instance
 test0010 created
    db-security-group   2009-03-27 00:39:12  Default         Finished applying
 changes to security group
   db-security-group   2009-03-27 00:40:22  Default        The security group
 mysourcegroup owned by XXXXXX does not exist; revoking authorization
    db-security-group   2009-03-27 00:44:44  Default         Finished applying
 changes to security group
    db-instance         2009-03-27 01:07:53  test0010        Database instance
 test0010 deleted
    db-instance         2009-03-27 01:09:09  test02          Database instance
 test02 deleted
    db-instance         2009-03-27 01:09:22  test004         Database instance
 test004 deleted
    db-instance         2009-03-27 01:09:58  test001         Database instance
 test001 deleted
    db-parameter-group  2009-03-27 00:39:12  myconfig        DBParameterGroup
updated with parameter max_binlog_size to 4096 with apply method Immediate
    db-snapshot         2009-03-27 01:09:58  snapshotid      Deleted user
snapshot: snapshotid
```

Describe Events for a Specified Instance

This example returns only events for a specific DB instance.

```
PROMPT> rds-describe-events --source-type db-instance --source-identifier test001


Source Type         Date                 Source Id       Message

db-instance         2009-03-27 00:37:59  test001         Database instance
test001 created
db-instance         2009-03-27 01:09:58  test001         Database instance
test001 deleted
```

Describe Events for a Specified Time Interval

This example returns only events for a specific time interval.

```
PROMPT> rds-describe-events --start-time 2009-03-20T00:00:00-08:00 --end-time
2009-03-20T23:59:59-08:00
```

Related Operations

- rds-describe-db-instances (p. 78)
- rds-describe-db-snapshots (p. 89)
- rds-describe-db-parameter-groups (p. 83)
- rds-describe-db-security-groups (p. 87)

rds-describe-event-categories

Description

Displays a list of categories for all event source types, or, if specified, for a specified source type. You can see a list of the categories for a given SourceType in the Events topic in the Amazon Relational Database Service User Guide.

Syntax

```
rds-describe-event-categories

-s (--SourceType) value

[General Options]
```

Options

Name	Description	Required
`-s` `--SourceType` *value*	The type of source that will be generating the events. For example, if you want to be notified of events generated by a DB instance, you would set this parameter to db-instance. if this value is not specified, all events are returned. Valid values: db-instance | db-parameter-group | db-security-group | db-snapshot Type: String	No

Output

The command returns a list of event categories and their associated source type.

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **EventCategories—**the event categories for the specified source type
- **SourceType—**the source type that the returned categories belong to

Examples

Describing the event categories available for RDS event notification subscriptions

This example lists the event categories available for a DB instance source type.

```
PROMPT> rds-describe-event-categories --SourceType db-instance
```

Related Operations

- rds-add-source-identifier-to-subscription (p. 19)
- rds-create-event-subscription (p. 61)
- rds-modify-event-subscription (p. 140)
- rds-describe-event-subscriptions (p. 105)

rds-describe-event-subscriptions

Description

Lists all the subscription descriptions for a customer account. The description for a subscription includes SubscriptionName, SNSTopicARN, CustomerID, SourceType, SourceID, CreationTime, and Status.

If you specify a SubscriptionName, lists the description for that subscription.

Syntax

```
rds-describe-event-subscriptions SubscriptionName

[--marker value ]

[--max-records value ]

[General Options]
```

Options

Name	Description	Required
`--SubscriptionName` *value*	The name of the subscription. Type: String Constraints: The name must be less than 255 characters. Example: `--SubscriptionName mysubscription1`	No
`--marker`	The pagination marker provided in the previous request. If this parameter is specified the response includes only records beyond the marker, up to MaxRecords.	No
`--max-records`	The maximum number of records to include in the response. If more records exist than the specified `MaxRecords` value, a pagination token called a marker is included in the response so that the remaining results can be retrieved. Default: 100 Constraints: minimum 20, maximum 100	No

Output

The command returns a list of event subscriptions, each with the following information:

Note
Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command

output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **CustSubscriptionId—**the Id of the event subscription
- **CustomerAwsId—**the AWS customer account associated with the Amazon RDS event notification subscription
- **Enabled—**a Boolean value indicating if the subscription is enabled. **True** indicates the subscription is enabled
- **EventCategoriesList—**a list of event categories for the Amazon RDS event notification subscription
- **SnsTopicArn—**the Amazon SNS topic's ARN for the Amazon RDS event notification subscription
- **SourceIdsList—**a list of source Ids for the Amazon RDS event notification subscription
- **SourceType—**the source type for the Amazon RDS event notification subscription
- **Status—**the status of the Amazon RDS event notification subscription. Can be one of the following: creating | modifying | deleting | active | no-permission | topic-not-exist

  The status "no-permission" indicates that Amazon RDS no longer has permission to post to the Amazon SNS topic. The status "topic-not-exist" indicates that the topic was deleted after the subscription was created.
- **SubscriptionCreationTime—**the time the Amazon RDS event notification subscription was created
- **Marker—**an optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by **MaxRecords**.

Examples

Describing all event subscriptions

This example lists all subscriptions for the current AWS account.

```
PROMPT> rds-describe-event-subscriptions
```

Related Operations

- rds-add-source-identifier-to-subscription (p. 19)
- rds-remove-source-identifier-from-subscription (p. 153)
- rds-modify-event-subscription (p. 140)
- rds-create-event-subscription (p. 61)

rds-describe-option-group-options

Description

Provides a list of options that can be added to option groups that are associated with the specified DB engine.

Syntax

```
rds-describe-option-group-options

--engine-name value

[--major-engine-version value]

[--marker value]

[--max-records value]
[General Options]
```

Options

Name	Description	Required

`--engine-name`
 	
`-e`
	Name of the DB engine.	Yes

`--major-engine-version`
 	
`-v`
	A filter that limits option groups described to those associated with the specified major version of the DB engine. Default is all versions.	No

`--marker`	The pagination marker provided in the previous request. If this parameter is specified the response includes only records beyond the marker, up to MaxRecords.	No
`--max-records`	The maximum number of records to include in the response. If more records exist than the specified `MaxRecords` value, a pagination token called a marker is included in the response so that the remaining results can be retrieved. Default: 100 Constraints: minimum 20, maximum 100	No

Output

The command returns the following information for each available option:

Note
Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the

Endpoint Address value because that value is null until the DB instance has finished being created or restored.

- **Option—**The name of the option.
- **Engine—**The name of the DB engine that the option requires.
- **Minimum required engine version—**The minimum major version ID of the DB engine that the option requires.
- **Port required—**If y, the option requires a port.
- **Default port—**The default port that is used by the option.
- **Description—**A description of the option.
- **Name—**The name of the associated option group.
- **Status—**The status of the option group membership. For example, the status could be in-sync, applying, pending, or pending-maintenance.

Example

This example describes options that require Oracle Enterprise Edition:

```
PROMPT> rds-describe-option-group-options --engine-name oracle-ee

OPTION  Option Name Engine      Minimum Required Engine Version Port Required
  Default Port    Description
OPTION  OEM         oracle-ee   11.2.0.2v3                      y
  1158            Oracle Enterprise Manager
```

This example describes options that require Oracle Enterprise Edition 11.2:

```
PROMPT> rds-describe-option-group-options --engine-name oracle-ee  --major-en
gine-version 11.2

OPTION  Option Name Engine      Minimum Required Engine Version Port Required
  Default Port    Description
OPTION  OEM         oracle-ee   11.2.0.2v3                      y
  1158            Oracle Enterprise Manager
```

rds-describe-option-groups

Description

Provides information about a specific option group or about all option groups that are described with the command. By default, all option groups are described.

Syntax

```
rds-describe-option-groups

[--option-group-name value]

[--engine-name value]

[--major-engine-version value]
[General Options]
```

Options

Name	Description	Required

`--option-group-name`
 	
`-g`
	Name of the option group to be described. Default is all option groups.	No

`--engine-name`
 	
`-e`
	A filter that limits option groups described to those associated with the specified DB engine. Default is all DB engines.	No

`--major-engine-version`
 	
`-v`
	A filter that limits option groups described to those associated with the specified major version of the DB engine. Default is all major versions.	No

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Group name—**The name of the option group.
- **Engine—**The name of the DB engine that the option group is associated with.
- **Major engine version—**The major version ID of the DB engine.
- **Description—**The description of the option group.
- **VPC Specific—**Indicates if both VPC and non-VPC instances can join this option group.
- **VPC—**Indicates if only instances in this VPC can join this option group.
- **Name—**The name of the option.
- **Port—**The port used by this option, if applicable.

- **Description—**The description of the option.
- **Name—**The security group name.
- **Status—**The status of authorization.

Example

This example describes all option groups that are associated with Oracle Enterprise Edition version 11.2:

```
PROMPT> rds-describe-option-groups --engine-name oracle-ee --major-engine-version
 11.2

OPTIONGROUP default:oracle-ee-11-2  oracle-ee    11.2   Default option group
for oracle-ee 11.2
OPTIONGROUP testoptiongroup         oracle-ee    11.2   Oracle Database Manager
 Database Control
```

rds-describe-orderable-db-instance-options

Description

Returns information about available orderable DB instance options.

Syntax

```
rds-describe-orderable-db-instance-options  -e (--engine)
[-c (--db-instance-class) value ]
[-lm (--license-model) value ]
[-v (--engine-version) value ]
[--vpc ] value
[General Options]
```

Options

Name	Description	Required
`-e` *value* `--engine` *value*	The name of the engine to retrieve DB instance options for. Type: String Default: None Example: `-e mysql`	Yes
`-c` `--db-instance-class` *value*	The DB instance class filter value. Specify this parameter to show only the available offerings that match the specified DB instance class. Type: String Default: None Example: `-c db.m1.xlarge`	No
`-lm` `--license-model` *value*	The license model filter value. Specify this parameter to show only the available offerings that match the specified license model. Type: String Default: None Example: `--license-model bring-your-own-license`	No

Name	Description	Required
`-v` `--engine-version` *value*	The engine version filter value. Specify this parameter to show only the available offerings matching the specified engine version. Type: String Default: None Example: `-v 5.1.50`	No
`--vpc` *value*	The VPC filter value. Specify this parameter to filter by VPC or non-VPC orderable database instance options.	No

Output

The command returns a table with the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Engine—**the database engine name.
- **Version—**the database engine version.
- **Class—**the DB instance class.
- **License—**the license model.
- **Multi-AZ—**indicates if the configuration is Multi-AZ capable.
- **ReadReplica—**indicates if the configuration is read replica capable.
- **Name—**the name of the availability zone.
- **Vpc—**indicates if the configuration has VPC offered.

Examples

Describing All Orderable DB instance Options

This example returns descriptions of all orderable database instance options.

```
PROMPT> rds-describe-orderable-db-instance-options
```

Describing Orderable DB instance Options for MySQL

This example returns descriptions of all orderable database instance options for the MySQL database engine.

```
PROMPT> rds-describe-orderable-db-instance-options  --engine mysql
```

Related Operations

- rds-create-db-instance (p. 28)

rds-describe-reserved-db-instances

Description

Returns information about reserved DB instances for this account, or about a specified reserved DB instance.

Syntax

```
rds-describe-reserved-db-instances  ReservedDBInstanceID

[-c (--db-instance-class) value ]

[-d (--duration) value ]

[-m (--multi-az) value ]

[-p (--product-description) value ]

[-o (--reserved-db-instances-offering-id) value ]

[--max-records ] value

[General Options]
```

Options

Name	Description	Required
`ReservedDBInstance` `--reserved-db-instance-id` *`value`*	Reserved DB instance identifier. Provide this parameter to return only information about a specific reserved DB instance. You can also set this value using the *`--reserved-db-instance-id`* parameter. Type: String Default: None Example: `--reserved-db-instance-id myreserveddbinstance`	No
`-c` `--db-instance-class` *`value`*	DB instance class filter value. Specify this parameter to show only reservations matching the specified DB instances class. Type: String Default: None Example: `-c db.m1.xlarge`	No

Name	Description	Required
`-d` `--duration` *value*	Duration filter value, specified in years. Specify this parameter to show only reservations for this duration. Type: String Default: None Example: `-d 3y`	No
`-m` `--multi-az` *value*	Multi-AZ filter value. Specify this parameter to show only reservations matching the specified multi-AZ parameter. Type: Boolean Default: None Example: `-m true`	No
`-p` `--product-description` *value*	Product description filter value. Specify this parameter to show only reservations matching the specified product description. Type: String Default: None Example: `-p mysql`	No
`-o` `--reserved-db-instances-offering-id` *value*	Offering identifier filter value. Specify this parameter to show only reservations matching the specified offering identifier. Type: String Default: None Example: `--reserved-db-instances-offering-id SampleReservationID`	No

Output

The command returns a table with the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **ReservationId—**the unique identifier for the reservation.
- **OfferingID—**the offering identifier (only appears when the *`--show-long`* parameter is specified).
- **Class—**the DB instance class for the reservation.

- **Multi-AZ—**indicates if the reservation applies to Multi-AZ deployments.
- **Start Time—**the time the reservation started
- **Duration—**the duration of the reservation in years
- **Fixed Price—**the fixed price charged for each DB instance in this reservation (only appears when the *--show-long* parameter is specified).
- **Usage Price—**the hourly price to run each reserved DB instance (only appears when the *--show-long* parameter is specified).
- **Count—**the number of database instances reserved.
- **Status—**the status of the reservation.
- **Description—**the database engine used by the reservation.

Examples

Describing Reserved Instances

This example returns descriptions of all of your database instance reservations

```
PROMPT> rds-describe-reserved-db-instances
```

Describing a Specific Reserved Instance

This example returns information about a specific reserved DB instance.

```
PROMPT> rds-describe-reserved-db-instances reservation1 --show-long --header
```

Related Operations

- rds-describe-reserved-db-instances-offerings (p. 117)
- rds-purchase-reserved-db-instances-offering (p. 146)

rds-describe-reserved-db-instances-offerings

Description

Returns information about available reserved DB instance offerings.

Syntax

```
rds-describe-reserved-db-instances-offerings ReservedDBInstancesOfferingId
[--reserved-db-instances-offering-id value ]

[-c (--db-instance-class) value ]

[-d (--duration) value ]

[-m (--multi-az) value ]

[-p (--product-description) value ]

[--max-records ] value

[General Options]
```

Options

Name	Description	Required
`ReservedDBInstancesOfferingId` *value*	Offering identifier filter value. Specify this parameter to show only the available offering that matches the specified Reserved DB instances Offering. This value can also be supplied using the *`--reserved-db-instances-offering-id`* parameter. Type: String Default: None Example: `--reserved-db-instances-offering-id 438012d3-4052-4cc7-b2e3-8d3372e0e706`	No
`-c` `--db-instance-class` *value*	DB instance class filter value. Specify this parameter to show only the available offerings matching specified DB instances class. Type: String Default: None Example: `-c db.m1.xlarge`	No

Name	Description	Required
`-d` `--duration` *value*	Duration filter value, specified in years. Specify this parameter to show only the available offerings for this duration. Type: String Default: None Example: `-d 3`	No
`-m` `--multi-az` *value*	Multi-AZ filter value. Specify this parameter to show only available offerings matching the specified Multi-AZ parameter. Type: Boolean Default: None Example: `-m true`	No
`-p` `--product-description` *value*	Product description filter value. Specify this parameter to show only available offerings matching the specified product description. Type: Boolean Default: None Example: `-p mysql`	No

Output

The command returns a table with the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **OfferingId—**the unique identifier for the offering.
- **Class—**the DB instance class for the offering.
- **Multi-AZ—**indicates if the offering applies to Multi-AZ deployments.
- **Duration—**the length of the duration in years
- **Fixed Price—**the fixed price charged to reserve each DB instance.
- **Usage Price—**the hourly price to run each reserved DB instance.
- **Description—**the database engine used by the offering.

Examples

Describing Reserved Instances Offerings

This example returns descriptions of all reserved database instance offerings.

```
PROMPT> rds-describe-reserved-db-instances-offerings
```

Describing a Specific Reserved Instance Offering

This example returns information about a specific reserved DB instance offering.

```
PROMPT> rds-describe-reserved-db-instances-offerings offering-id --headers
```

Describing Only Multi-AZ Reserved Instance Offerings

This example returns information about Multi-AZ reserved DB instance offerings.

```
PROMPT> rds-describe-reserved-db-instances-offerings --multi-az true
```

Related Operations

- rds-describe-reserved-db-instances (p. 114)
- rds-purchase-reserved-db-instances-offering (p. 146)

rds-download-db-logfile

Description

Downloads the specified log file.

Syntax

```
rds-download-db-logfile DBInstanceIdentifier

--log-file-name value

[General Options]
```

Options

Name	Description	Required
DBInstanceIdentifier	Customer-supplied DB instance identifier; this is the name you assigned to the DB instance when you created it and is the unique key that identifies a DB instance. Type: String	Yes
--log-file-name	The name of the log file to be downloaded. Type: String	Yes

Output

The command downloads the specified log file.

Examples

Downloads a Log File

This example downloads a log file named error-running.log.20 for a DB instance called MySQLDB223.

```
PROMPT> rds-download-db-logfile MySQLDB223 --log-file-name error-running.log.20
```

Related Operations

- rds-describe-db-log-files (p. 81)

rds-list-tags-for-resource

Description

Lists all tags associated with an Amazon RDS resource. The Amazon RDS resource is identified by its Amazon Resource Name (ARN) To learn how to construct the ARN that references a resource, see Constructing an RDS Amazon Resource Name (ARN).

Syntax

```
rds-list-tags-for-resource resourcename [General Options]
```

Options

Name	Description	Required
`resourcename`	The Amazon Resource Name (ARN) of the Amazon RDS resource that has the tags you want to list. To learn how to construct the ARN that references the resource to be tagged, see Constructing an RDS Amazon Resource Name (ARN).	Yes

Output

This command returns a table that contains the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **key—**The name (key) of the tag.
- **value—**The value of the tag.

Example

This example lists the tags of a DB instance.

```
PROMPT> rds-list-tags-for-resource arn:aws:rds:us-east-1:0123456789:db:my-db-
instance

TAG project trinity
TAG cost-center 5092
```

rds-modify-db-instance

Description

Changes the settings of an existing DB instance.

Syntax

```
rds-modify-db-instance DBInstanceIdentifier
[--allow-major-version-upgrade value ]
[-au (--auto-minor-version-upgrade) value ]
[-v (--engine-version) value ]
[-s (--allocated-storage) value ]
[--apply-immediately ]
[-r (--backup-retention-period) value ]
[-c (--db-instance-class) value ]
[-g (--db-parameter-group-name) value ]
[-a (--db-security-groups)value[,value...] ]
[-sg (--vpc-security-group-ids)value[,value...] ]
[-n (--new-db-instance-identifier) value ]
[--iops value ]
[-og (--option-group) value ]
[-p (--master-user-password) value ]
[-m (--multi-az) value]
[-w (--preferred-maintenance-window) value ]
[-b (--preferred-backup-window) value ]
[General Options]
```

Options

Name	Description	Required
DBInstanceIdentifier	DB instance identifier. This is the unique key that identifies an DB instance. Stored as a lowercase string. Type: String Default: None Constraints: Must contain 1 to 63 (1 to 15 for SQL Server) alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens. Example: myinstance	Yes
`--allow-major-version-upgrade` *value*	Indicates that major version upgrades are allowed. Changing this parameter does not result in an outage and the change is asynchronously applied as soon as possible. Type: Boolean Constraints: This parameter must be set to `true` when specifying a value for the *`--engine-version`* parameter that is a different major version than the DB instance's current version.	Conditional
`-au` *value* `--auto-minor-version-upgrade` *value*	Indicates that minor version upgrades will be applied automatically to the DB instance during the maintenance window. Changing this parameter does not result in an outage except in the following case and the change is asynchronously applied as soon as possible. An outage will result if this parameter is set to `true` during the maintenance window, and a newer minor version is available, and RDS has enabled auto patching for that engine version. Type: Boolean Example: `--au true`	No

Name	Description	Required
`-n` *value* `--new-db-instance-identifier` *value*	Provides the new name for the DB instance when renaming an existing instance. Type: String Constraints: Must contain 1 to 63 (1 to 15 for SQL Server) alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens. Cannot be the name of an existing DB instance. Example: `rds-modify-db-instance DBInstanceIdentifier -n NewDBInstanceIdentifier`	No
`-v` *value* `--engine-version` *value*	Version number of the database engine to use. Changing this parameter results in an outage and the change is applied during the next maintenance window unless the `ApplyImmediately` parameter is set to `true` for this request. **Note** For major version upgrades, if a non-default DBParameterGroup is currently in use, a new DBParameterGroup in the DBParameterGroupFamily for the new engine version must be specified. The new DBParameterGroup can be the default for that DBParameterGroupFamily. Type: String Example: `--engine-version 5.1.42`	No
`--apply-immediately`	Determines when a change is applied. If set to `True`, the change will be applied immediately if possible. See each parameter to determine when a change is applied. Type: Boolean Default: `False` Valid values: `True` | `False`	No

Name	Description	Required
`-r` *value* `--backup-retention-period` *value*	The number of days for which automated backups are retained. Setting this parameter to a positive number enables backups. Setting this options to 0 disables automatic backups. Changing this parameter can result in an outage if you change from 0 to a non-zero value or from a non-zero value to 0. These changes are applied during the next maintenance window unless the `ApplyImmediately` parameter is set to `true` for this request. If you change the parameter from one non-zero value to another non-zero value, the change is asynchronously applied as soon as possible. Type: Integer Default: 1 Constraints: • Must be a value from 0 to 35. • Can be specified for a DB instance that is a read replica only if the source is running MySQL 5.6. • Cannot be set to 0 if the DB instance is a source to read replicas.	No

Name	Description	Required
`-c` *value* `--db-instance-class` *value*	Contains the compute and memory capacity of the DB instance. Different instance classes are available for different database engines. For information about valid values for a particular engine, use the rds-describe-orderable-db-instance-options (p. 111) command. Changing this parameter results in an outage and the change is applied during the next maintenance window, unless the `ApplyImmediately` parameter is specified as `true` for this request. Type: String Default: None Valid values: `db.t1.micro` | `db.m1.small` | `db.m1.medium` | `db.m1.large` | `db.m1.xlarge` | `db.m2.xlarge` | `db.m2.2xlarge` | `db.m2.4xlarge` | `db.m3.medium` | `db.m3.large` | `db.m3.xlarge` | `db.m3.2xlarge` Example: `--db-instance-class db.m1.xlarge` **Note** Amazon RDS does not support db.t1.micro instances in a virtual private cloud (VPC).	No
`--g` *value* `--db-parameter-group-name` *value*	Name of the DB parameter group to associate with this DB instance. Changing this parameter does not result in an outage and the change is applied during the next maintenance window unless the `ApplyImmediately` parameter is set to `true` for this request. Type: String Example: `--db-parameter-group-name MyDBParameterGroup`	No
`-a` *value [,value...]* `--db-security-groups` *value [,value...]*	A list of one or more DB security groups to associate with this DB instance. Changing this parameter does not result in an outage and the change is asynchronously applied as soon as possible. Type: String[] Example: `--db-security-groups mysecuritygroup1, mysecuritygroup2`	No

Name	Description	Required
`-sg` *value* `--vpc-security-group-ids` *value [,value...]*	A list of the IDs of one or more VPC security groups to associate with this DB instance. Type: String[] Example: `--vpc-security-group-ids sg-e763f78e, sg-e0690405`	No
`-p` *value* `--master-user-password` *value*	Password for the master database user. Changing this parameter does not result in an outage and the change is asynchronously applied as soon as possible. Type: String **MySQL** Constraints: Must contain from 8 to 41 alphanumeric characters. Type: String **Oracle** Constraints: Must contain from 8 to 30 alphanumeric characters. Type: String **SQL Server** Constraints: Must contain from 8 to 128 alphanumeric characters. Example: `--master-user-password mysecretpassword01`	No

Name	Description	Required
--iops value	Specifies the new amount of provisioned IOPS for the DB instance, expressed in I/O operations per second. Changing this parameter does not result in an outage and the change is applied during the next maintenance window unless the `ApplyImmediately` parameter is set to `true` for this request. This option can only be specified if the database instance was created with iops specified. The iops and allocated-storage options cannot both be specified in the same request. To set or remove the iops option, or to change the iops-to-storage ratio, create a new database instance and then restore a database instance from a snapshot or to a point-in-time restore. Constraints: Must be an integer greater than 1000. **SQL Server** You cannot change the provisioned IOPS for a SQL Server DB instance. If you choose to migrate your DB instance from using standard storage to using Provisioned IOPS, or from using Provisioned IOPS to using standard storage, the process can take time. The duration of the migration depends on several factors such as database load, storage size, storage type (standard or Provisioned IOPS), amount of IOPS provisioned (if any), and the number of prior scale storage operations. Typical migration times are under 24 hours, but the process can take up to several days in some cases. During the migration, the DB instance will be available for use, but may experience performance degradation. While the migration takes place, nightly backups for the instance will be suspended. No other Amazon RDS operations can take place for the instance, including modifying the instance, rebooting the instance, deleting the instance, creating a read replica for the instance, and creating a DB snapshot of the instance.	No

Name	Description	Required
`-m` *value* `--multi-az` *value*	Specifies if this is a Multi-AZ deployment. Changing this parameter does not result in an outage and the change is applied during the next maintenance window unless the `ApplyImmediately` parameter is set to `true` for this request. **Note** At this time, multi-AZ deployments are not supported for the Microsoft SQL Server database engine. Type: Boolean Default: `false` Valid values: `true` | `false` Constraints: Cannot be specified if the DB instance is a read replica.	No
`-og` *value* `--option-group` *value*	Specifies the option group to be applied. Changing this parameter does not result in an outage except in the following case and the change is applied during the next maintenance window unless the `ApplyImmediately` parameter is set to `true` for this request. If the parameter change results in an option group that enables OEM, this change can cause a brief (sub-second) period during which new connections are rejected but existing connections are not interrupted. Note that persistent options, such as the TDE_SQLServer option for Microsoft SQL Server, cannot be removed from an option group while DB instances are associated with the option group. Permanent options, such as the TDE option for Oracle Advanced Security TDE, can never be removed from an option group, and that option group cannot be removed from a DB instance once it is associated with a DB instance. Type: String	No

Name	Description	Required
`-s` *value* `--allocated-storage` *value*	Amount of storage to be allocated for the DB instance, in gigabytes. Changing this parameter does not result in an outage and the change is applied during the next maintenance window unless the `ApplyImmediately` parameter is set to `true` for this request. Type: Integer Example: `--allocated-storage 20` **MySQL** and **PostgreSQL** Must be an integer from 5 to 3072. **Oracle** Must be an integer from 10 to 3072. **SQL Server** You cannot change the allocated storage for a SQL Server DB instance. If you choose to migrate your DB instance from using standard storage to using Provisioned IOPS, or from using Provisioned IOPS to using standard storage, the process can take time. The duration of the migration depends on several factors such as database load, storage size, storage type (standard or Provisioned IOPS), amount of IOPS provisioned (if any), and the number of prior scale storage operations. Typical migration times are under 24 hours, but the process can take up to several days in some cases. During the migration, the DB instance will be available for use, but may experience performance degradation. While the migration takes place, nightly backups for the instance will be suspended. No other Amazon RDS operations can take place for the instance, including modifying the instance, rebooting the instance, deleting the instance, creating a read replica for the instance, and creating a DB snapshot of the instance.	No

Name	Description	Required

`-w value`
 	
`--preferred-maintenance-window value`
	Preferred maintenance window for the DB instance.
	
	Changing this parameter does not result in an outage, except in the following situation, and the change is asynchronously applied as soon as possible. If there are pending actions that cause a reboot, and the maintenance window is changed to include the current time, then changing this parameter will cause a reboot of the DB instance. If moving this window to the current time, there must be at least 30 minutes between the current time and end of the window to ensure pending changes are applied.
	
	Type: String
	
	Constraints: Must be in the format ddd:hh24:mi-ddd:hh24:mi. Times should be 24-hour Universal Time Coordinated (UTC). Must be at least 30 minutes. See example below.
	
	Example: `rds-modify-db-instance myinstance --preferred-maintenance-window Tue:04:00-Tue:04:30`
		No

`--preferred-backup-window value`
 	
`-b value`
	The daily time range during which automated backups are created if backups are enabled (using the *`--backup-retention-period`*). Changing this parameter does not result in an outage and the change is asynchronously applied as soon as possible.
	
	Type: String
	
	Constraints: Must be in the format hh24:mi-hh24:mi. Must be at least 30 minutes. Times should be 24-hour Universal Time Coordinated (UTC). Must not conflict with the *`--preferred-maintenance-window`*.
		No

Output

The command returns a table that contains the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **DBInstanceId—**User-supplied database identifier; this is the unique key that identifies a DB instance
- **Created—**When the instance was created, in UTC
- **Class—**The compute and memory capacity of the DB instance

- **Engine—**Name of the database engine to be used for this DB instance
- **Storage—**Initially allocated storage size specified in GBs
- **Master Username—**The master username for the instance
- **Status—**The current status of the instance. Valid values: `available` | `backing-up` | `creating` | `deleted` | `deleting` | `failed` | `modifying` | `rebooting` | `resetting-master-credentials`
- **Endpoint Address—**Address of the DB instance
- **Port—**Port used to connect to the DB instance
- **AZ—**The instance's Availability Zone
- **IOPS—**The provisioned storage allocated, expressed as I/O operations per second
- **Backup Retention—**The number of days that automated backups are retained before deletion
- **PendingClass—**The class to which the instance will be scaled during the next maintenance window, or to which it is currently being scaled if the *`--apply-immediately`* option was specified
- **PendingCredentials—**The (hidden) master user password that will be applied to the DB instance
- **PendingVersion—**The pending database engine version number. This column appears only in the *`--show-long`* view.
- **DB Name—**Name of the initial database created when the instance was created or the Oracle System ID (SID) of the created DB instance (for the Oracle engine). For SQL Server, will always be null. This column appears only in the *`--show-long`* view.
- **Maintenance Window—**The period during which patching and instance modifications will be performed. This column appears only in the *`--show-long`* view.
- **Backup Window—**The daily period during which automated backups are created. This column appears only in the *`--show-long`* view.
- **Version—**The version number of the database engine
- **Auto Minor Version Upgrade—**Indicates that minor version upgrades will be applied to the DB instance during the maintenance window. This column appears only in the *`--show-long`* view.
- **License—**The license model used for this DB instance
- **Name—**DB security group name
- **Status—**Status of authorization. Valid values: `authorizing` | `authorized` | `revoking`
- **Publicly Accessible—**Indicates the accessibility option of the instance. A value of true specifies an Internet-facing instance with a publicly resolvable DNS name, which resolves to a public IP address. A value of false specifies an internal instance with a DNS name that resolves to a private IP address.
- **Group Name—**Name of DB parameter group applied to
- **Apply Status—**Status of applying the DB parameter group. Valid values: `in-sync` | `pending-reboot` | `applying`
- **Multi-AZ—**Indicates if this is a Multi-AZ DB instance
- **EngineVersion—**Database engine version number
- **read replica Source Identifier—**The identifier of the source DB instance for which this DB instance acts as a read replica
- **Name—**Subnet group name
- **Description—**Subnet group description
- **VpcId—**Identifier of the VPC associated with the subnet group
- **VPC security group Ids—**Identifier of the VPC security groups associated with the instance
- **Subnet identifier—**Subnet group identifier
- **Subnet Availability Zone—**Availability Zone of the subnet

Examples

Associate a Security Group with a Database Instance

This example shows how to associate a DB security group with the specified DB instance.

```
PROMPT> rds-modify-db-instance mydbinstance --db-security-groups mycoworkers
```

Immediately Upgrade the Instance Class of a Database Instance

This example shows how to immediately change the instance class of a DB instance to *db.m1.xlarge*, with the change to take place immediately.

```
PROMPT> rds-modify-db-instance mydbinstance -c db.m1.xlarge --apply-immediately
```

Modify the Maintenance Window for a Database Instance

This shows how to change the weekly preferred maintenance window for the DB instance to be the minimum four hour window starting Sundays at 11:15 PM, and ending Mondays at 3:15 AM.

```
PROMPT> rds-modify-db-instance mydbinstance -w Sun:23:15-Mon:03:15
```

Change the Master Password for the Database Instance

This example shows how to change the master password for a DB instance.

```
PROMPT> rds-modify-db-instance mydbinstance -p a1b2c3d4
```

Change the Allocated Storage for a Database Instance

This example shows how to change the allocated storage for a DB instance to 20 GB.

```
PROMPT> rds-modify-db-instance mydbinstance -s 20
```

Related Operations

- rds-create-db-instance (p. 28)
- rds-delete-db-instance (p. 67)
- rds-describe-db-instances (p. 78)

rds-modify-db-parameter-group

Description

Updates the parameters in a parameter group. You can update up to 20 values per call.

Note
Amazon RDS does not support passing multiple comma-delimited parameter values for a single parameter.

Important
After you modify a DB parameter group, you should wait at least 5 minutes before creating your first DB instance that uses that DB parameter group as the default parameter group. This allows Amazon RDS to fully complete the modify action before the parameter group is used as the default for a new DB instance. This is especially important for parameters that are critical when creating the default database for a DB instance, such as the character set for the default database defined by the `character_set_database` parameter. You can use the Parameter Groups option of the Amazon RDS console or the rds-describe-db-parameters (p. 85) command to verify that your DB parameter group has been created or modified.

Syntax

```
rds-modify-db-parameter-group DBParameterGroupName

-p (--parameters) "name=value, value=value, method=value"[,

"name=value, value=value, method=value"][,

...]

[General Options]
```

Options

Name	Description	Required
DBParameterGroupName	DB parameter group identifier. Stored as a lowercase string. This value can also be passed using the `--db-parameter-group-name` named parameter. Constraints: Must contain from 1 to 255 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens.	Yes

Name	Description	Required

`-p`
 	
`--parameters "name=value, value=value, method=value"`
	A string containing a series of parameter names, values, and the update method for the parameter update. The first --parameters argument is required; subsequent arguments are optional. A maximum of 20 parameters may be updated in a single call to the `rds-modify-parameter-group` command.
	
	To obtain a list of the parameters that make up a parameter group, with their values, use the rds-describe-db-parameters (p. 85) command. Only parameters that are marked as modifiable can be changed.
	
	Valid values (method): `immediate` | `pending-reboot`.
	
	If `immediate`, the change takes effect immediately. If `pending-reboot`, the change takes effect the next time that the DB instance is rebooted.
	
	The *`immediate`* method can be used only for dynamic parameters; the *`pending-reboot`* method can be used with MySQL and Oracle DB instances for either dynamic or static parameters. For Microsoft SQL Server DB instances, the *`pending-reboot`* parameter can be used only for static parameters.
		Yes

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Group Name—**The name of the parameter group that was modified.

Examples

Modify Parameters in a Parameter Group

This example shows how to modify a group of parameters in a parameter group.

```
PROMPT> rds-modify-db-parameter-group mydbparametergroup --parameters
"name=max_user_connections, value=24, method=pending-reboot" "name=max_al
lowed_packet, value=1024, method=immediate"
```

Related Operations

- rds-create-db-parameter-group (p. 52)
- rds-delete-db-parameter-group (p. 70)
- rds-describe-db-parameter-groups (p. 83)

rds-modify-db-subnet-group

Description

Updates an existing DB subnet group.

Syntax

```
rds-modify-db-subnet-group DBSubnetGroupName

-d (--db-subnet-group-description) value

-s (--db-subnet-list) "value" [,value,...]]

[General Options]
```

Options

Name	Description	Required
DBSubnetGroupName	DB subnet group identifier. This value can also be passed using the `--db-subnet-group-name` parameter. Constraints: Must contain from 1 to 255 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens.	Yes
`-d` `--db-subnet-group-description` *value*	The description of the DB subnet group Constraints: Cannot contain more than 255 characters.	No
`-s` `--db-subnet-group-list` *value[,value, value...]*	A comma-delimited list of subnets to include in this DB subnet group. Constraints: Cannot contain more than 255 characters.	No

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Name—**The name of the DB subnet group that was modified.
- **Description—**The description of the DB subnet group that was modified.

- **Status—**The status of the DB subnet group that was modified.
- **Subnet Identifier—**The identifier of a contained subnet.
- **Subnet Availability Zone—**The Availability Zone of the contained subnet.
- **Status—**The status of the contained subnet.

Examples

Modify Parameters in a Parameter Group

This example shows how to modify a DB subnet group.

```
PROMPT> rds-modify-db-subnet-group --db-subnet-group-name mygroup --db-subnet-
group-description "My Subnet Group" --db-subnet-list subnet1,subnet2,subnet3


SUBNETGROUP  Name     Description    Staus
SUBNETGROUP  mygroup  my group desc  Active
      SUBNET  Subnet Identifier  Subnet Availability Zone  Status
      SUBNET  mytestgroup        us-east-1c                Active
```

Related Operations

- rds-create-db-subnet-group (p. 59)
- rds-delete-db-subnet-group (p. 74)
- rds-describe-db-subnet-groups (p. 95)

rds-modify-event-subscription

Description

Modifies an existing RDS event notification subscription. Note that you cannot modify the source identifiers using this call; to change source identifiers for a subscription, use the **AddSourceIdentifier** and **RemoveSourceIdentifier** calls.

You can see a list of the event categories and source types in the Events topic in the Amazon Relational Database Service User Guide or by using the **DescribeEventCategories** action.

Syntax

```
rds-modify-event-subscription SubscriptionName

-t (--SnsTopicArn) value

[--EventCategories) value ]

[-s (--SourceType) value ]

[--Enabled value ]

[General Options]
```

Options

Name	Description	Required
`--SubscriptionName` *value*	The name of the subscription to be modified. Type: String Constraints: The name must be less than 255 characters. Example: `--SubscriptionName mysubscription1`	Yes
`-t` `--SnsTopicArn` *value*	The Amazon Resource Name (ARN) of the Amazon SNS topic created for event notification. The ARN is created by Amazon SNS when you create a topic and subscribe to it.	No
`--EventCategories` *value*	A list of event categories for a SourceType that you want to subscribe to.You can see a list of the categories for a given SourceType in the Events topic in the Amazon Relational Database Service User Guide. Type: String list	No

Name	Description	Required
`-s` `--SourceType` *value*	The type of source that will be generating the events. For example, if you want to be notified of events generated by a DB instance, you would set this parameter to db-instance. if this value is not specified, all events are returned. Valid values: db-instance | db-parameter-group | db-security-group | db-snapshot Type: String	No
`--Enabled` *value*	A Boolean value; set to *true* to activate the subscription. You can set this value to *false* if you want to create the subscription but not active it. Type: Boolean	No

Output

The command returns a table with the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **CustSubscriptionId—**the Id of the event subscription
- **CustomerAwsId—**the AWS customer account associated with the Amazon RDS event notification subscription
- **Enabled—**a Boolean value indicating if the subscription is enabled. True indicates the subscription is enabled
- **EventCategoriesList—**a list of event categories for the RDS event notification subscription
- **SnsTopicArn—**the Amazon SNS topic's ARN for the Amazon RDS event notification subscription
- **SourceIdsList—**a list of source Ids for the Amazon RDS event notification subscription
- **SourceType—**the source type for the Amazon RDS event notification subscription
- **Status—**the status of the Amazon RDS event notification subscription. Can be one of the following: creating | modifying | deleting | active | no-permission | topic-not-exist

  The status "no-permission" indicates that RDS no longer has permission to post to the Amazon SNS topic. The status "topic-not-exist" indicates that the topic was deleted after the subscription was created.
- **SubscriptionCreationTime—**the time the Amazon RDS event notification subscription was created

Examples

Modifying an event subscription

This example modifies an existing subscription called MySubscription1 to include several event categories.

```
PROMPT> rds-modify-event-subscription MySubscription1 --EventCategories Creation,
 Deletion, Failure, Failover
```

Modifying an event subscription with multiple event categories

This example modifies a subscription called MySubscription2.

```
PROMPT> rds-modify-event-subscription MyProductionSubscription --SourceType
MyDBInstance1, MyDBInstance2,
MyDBSecGrp1, MyParmGrp --SourceType db-instance, db-parameter-group, db-security-
group --EventCategories Failover, Failure, Configuration Change
```

Related Operations

- rds-add-source-identifier-to-subscription (p. 19)
- rds-remove-source-identifier-from-subscription (p. 153)
- rds-create-event-subscription (p. 61)
- rds-describe-event-subscriptions (p. 105)

rds-promote-read-replica

Description

Creates a new DB instance from a read replica.

Syntax

```
rds-promote-read-replica DBInstanceIdentifier
[-r (--backup-retention-period) value ]
[-b (--preferred-backup-window) value ]
[General Options]
```

Options

Name	Description	Required
`DBInstanceIdentifier`	The database instance identifier of the read replica to be promoted. The identifier consists of 1 to 63 alphanumeric characters or hyphens, is case insensitive, and is not case preserving.	Yes
`--backup-retention-period` `-r`	The number of days automated backups are retained. Setting this parameter to a positive number enables backups. Setting this parameter to 0 disables backups. Type: Integer Default: 1 Constraints: Must be a value from 0 to 35.	No
`--preferred-backup-window` `-b`	Weekly time range (in UTC) during which system maintenance can occur. Type: String Default: A 30-minute window selected at random from an 8-hour block of time per region, occurring on a random day of the week.	No

Output

The command returns the following information:

Note
Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **DBInstanceId—**User-supplied database identifier; this is the unique key that identifies a DB instance
- **Created—**When the instance was created, in UTC
- **Class—**The compute and memory capacity of the DB instance
- **Engine—**Name of the database engine used for this DB instance
- **Storage—**Initially allocated storage size specified in GBs
- **Master Username—**The master username for the instance
- **Status—**The current status of the instance. Valid values: `available` | `backing-up` | `creating` | `deleted` | `deleting` | `failed` | `incompatible-restore` | `incompatible-parameters` | `modifying` | `rebooting` | `resetting-master-credentials` | `storage-full`
- **Endpoint Address—**Address of the DB instance
- **Port—**Port used to connect to the DB instance
- **AZ—**The instance's Availability Zone
- **SecondaryAZ—**When the DB instance has multi-AZ support, this value is the secondary AZ.
- **Backup Retention—**The number of days that automated backups are retained before deletion
- **PendingClass—**The class to which the instance will be scaled during the next maintenance window, or to which it is currently being scaled if the *`--apply-immediately`* option was specified.
- **PendingCredentials—**The (hidden) master user password that will be applied to the DB instance.
- **PendingVersion—** The pending database engine version number. This column appears only in the *`--show-long`* view.
- **DB Name—**Name of the initial database created when the instance was created or the Oracle System ID (SID) of the created DB instance (for the Oracle engine). This column appears only in the *`--show-long`* view
- **Maintenance Window—**The period during which patching and instance modifications will be performed. This column appears only in the *`--show-long`* view.
- **Backup Window—**The daily period during which automated backups are created. This column appears only in the *`--show-long`* view.
- **Version—**The version number of the database engine.
- **Iops—**The provisioned storage IOPS, expressed as I/O operations per second.
- **Auto Minor Version Upgrade—**Indicates that minor version upgrades will be applied to the DB instance during the maintenance window. This column appears only in the *`--show-long`* view.
- **Name—**DB security group name.
- **Status—**Status of authorization. Valid values: `authorizing` | `authorized` | `revoking`
- **Group Name—**Name of DB parameter group applied to.
- **Apply Status—**Status of applying the DB parameter group. Valid values: `in-sync` | `pending-reboot` | `applying`
- **Multi-AZ—**Indicates if this is a Multi-AZ DB instance.
- **EngineVersion—**Database engine version number.
- **Replication State—**The status of the read replica replication.
- **Change Date—**The date of the last replication state change for the read replica.

Example

This example shows how to promote a read replica to be a DB instance.

```
PROMPT> rds-promote-read-replica mydbinstance
```

This example shows how to promote read replica instance and set backup retention to 1 day with the preferred backup window for the db to be 1 hour starting daily at 9:15 PM and ending at 10:15 AM

```
PROMPT> rds-promote-read-replica mydbinstance -r 1 -b 21:15-22:15
```

rds-purchase-reserved-db-instances-offering

Description

Purchases a reserved DB instance offering.

Syntax

```
rds-purchase-reserved-db-instance-offering  ReservedDBInstancesOfferingId
[-c (--instance-count) value ]
[-i (--reserved-db-instance-id) value ]
[General Options]
```

Options

Name	Description	Required
`ReservedDBInstancesOfferingId`	The ID of the Reserved DB instance offering to purchase. You can also set this value using the *`--reserved-db-instances-offering-id`* parameter. Type: String Default: None Example: `--reserved-db-instances-offering-id myreserveddbinstance`	Yes
`-c` `--instance-count` *`value`*	The number of DB instances to reserve. Type: Integer Default: 1 Example: `-c 3`	No
`-i` `--reserved-db-instance-id` *`value`*	Optional unique identifier for the purchased reservation. If this parameter is not specified, an identifier is automatically generated for the reservation. Type: String Default: None Example: `-i myreservationID`	No

Output

The command returns a table with the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **ReservationId—**the unique identifier for the reservation.
- **OfferingID—**the offering identifier (only appears when the *--show-long* parameter is specified).
- **Class—**the DB instance class for the reservation.
- **Multi-AZ—**indicates if the reservation applies to Multi-AZ deployments.
- **Start Time—**the time the reservation started
- **Duration—**the length of the duration in years.
- **Fixed Price—**the fixed price charged for each DB instance in this reservation (only appears when the *--show-long* parameter is specified).
- **Usage Price—**the hourly price to run each reserved DB instance (only appears when the *--show-long* parameter is specified).
- **Count—**the number of database instances reserved.
- **State—**the payment status of the reservation.
- **Description—**the database engine used by the reservation.

Examples

Reserve a Database Instance

This example reserves a single database instance from offering 438012d3-4052-4cc7-b2e3-8d3372e0e706.

```
PROMPT> rds-purchase-reserved-db-instances-offering 438012d3-4052-4cc7-b2e3-
8d3372e0e706 -i myreservationID
```

Reserve Multiple Database Instances

This example reserves five database instances from offering 438012d3-4052-4cc7-b2e3-8d3372e0e706.

```
PROMPT> rds-purchase-reserved-db-instances-offering 438012d3-4052-4cc7-b2e3-
8d3372e0e706 -i myreservationID -c 5
```

Related Operations

- rds-describe-reserved-db-instances (p. 114)

- rds-describe-reserved-db-instances-offerings (p. 117)

rds-reboot-db-instance

Description

Reboots a DB instance. Once started, the process cannot be stopped, and the DB instance is unavailable until the reboot is completed.

Syntax

```
rds-reboot-db-instance DBInstanceIdentifier

[-f (--force-failover) value ][General Options]
```

Options

Name	Description	Required
DBInstanceIdentifier	DB instance identifier. Constraints: Must contain 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens.	Yes
`-f` *value* `--force-failover` *value*	When `true`, specifies that the reboot will be conducted through a Multi-AZ failover. You cannot specify `true` if the DB instance is not configured for Multi-AZ. Type: Boolean Default: `false` Example: `--force-failover true`	No

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **DBInstanceId—**User-supplied database identifier; this is the unique key that identifies a DB instance
- **Created—**When the instance was created, in UTC
- **Class—**The compute and memory capacity of the DB instance
- **Engine—**Name of the database engine to be used for this DB instance
- **Storage—**Initially allocated storage size specified in GBs
- **Master Username—**The master username for the instance
- **Status—**The current status of the instance. Valid values: `available` | `backing-up` | `creating` | `deleted` | `deleting` | `failed` | `modifying` | `rebooting` | `resetting-master-credentials`

- **Endpoint Address—**Address of the DB instance
- **Port—**Port used to connect to the DB instance
- **AZ—**The instance's Availability Zone
- **Backup Retention—**The number of days that automated backups are retained before deletion
- **PendingClass—**The class to which the instance will be scaled during the next maintenance window, or to which it is currently being scaled if the *--apply-immediately* option was specified.
- **PendingCredentials—**The (hidden) master user password that will be applied to the DB instance.
- **PendingVersion—** The pending database engine version number. This column appears only in the *--show-long* view.
- **DB Name—**Name of the initial database created when the instance was created or the Oracle System ID (SID) of the created DB instance (for the Oracle engine). This column appears only in the *--show-long* view
- **Maintenance Window—**The period during which patching and instance modifications will be performed. This column appears only in the *--show-long* view.
- **Backup Window—**The daily period during which automated backups are created. This column appears only in the *--show-long* view.
- **Version—**The version number of the database engine.
- **Auto Minor Version Upgrade—**Indicates that minor version upgrades will be applied to the DB instance during the maintenance window. This column appears only in the *--show-long* view.
- **Name—**DB security group name.
- **Status—**Status of authorization. Valid values: `authorizing` | `authorized` | `revoking`
- **Group Name—**Name of DB parameter group applied to.
- **Apply Status—**Status of applying the DB parameter group. Valid values: `in-sync` | `pending-reboot` | `applying`
- **Multi-AZ—**Indicates if this is a Multi-AZ DB instance.
- **EngineVersion—**Database engine version number.

Examples

Reboot a Database Instance

This example reboots a DB instance.

```
PROMPT> rds-reboot-db-instance databaseInstance1
```

Related Operations

- rds-delete-db-instance (p. 67)
- rds-describe-db-instances (p. 78)

rds-remove-option-from-option-group

Description

Removes one or more specified options from an option group.

Syntax

```
rds-remove-option-from-option-group optionGroupName

--options value[,value 2][,...]

[--apply-immediately]
"
```

Options

Name	Description	Required
`optionGroupName`	Name of the option group that the specified option or options will be removed from.	Yes

`--options`
 	
`-o`
	A comma-separated list of options that will be removed.	Yes

`--apply-immediately`	If supplied, the options will be immediately disabled for all associated DB instances; otherwise, the options will be disabled for each DB instance at its next maintenance window.	No

Output

The command returns the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Group name—**The name of the option group that options will be removed from.
- **Engine—**The DB engine that the option group is associated with
- **Major engine version—**The major version of the DB engine.
- **Description—**The description of the option group.
- **VPC Specific—**Indicates if both VPC and non-VPC instances can join this option group.
- **VPC—**Indicates if only instances in this VPC can join this option group.
- **Name—**The name of the option.
- **Port—**The port used by this option, if applicable.
- **Description—**The description of the option.
- **Name—**The security group name.

- **Status—**The status of authorization.

The following example removes the Oracle Enterprise Manager Database Control option from an option group named TestOptionGroup. For DB instances that use TestOptionGroup, the option will be removed at the next maintenance window for each instance:

```
PROMPT> rds-remove-option-from-option-group TestOptionGroup --options OEM
OPTIONGROUP testoptiongroup oracle-ee 11.2 Oracle Enterprise Manager Database
Control
```

rds-remove-source-identifier-from-subscription

Description

Removes a source identifier from an existing Amazon RDS event notification subscription.

Syntax

```
rds-remove-source-identifier-from-subscription SubscriptionName

--SourceIdentifier value

[General Options]
```

Options

Name	Description	Required
`--SubscriptionName` *value*	The name of the subscription. Type: String Constraints: The name must be less than 255 characters. Example: `--SubscriptionName mysubscription1`	Yes
`--SourceIdentifier` *value*	The source identifier to be removed from the subscription. An identifier must begin with a letter and must contain only ASCII letters, digits, and hyphens; it cannot end with a hyphen or contain two consecutive hyphens. Type: String Constraints: If the source type is a DB instance, then a DBInstanceIdentifier must be supplied. If the source type is a DB security group, a DBSecurityGroupName must be supplied. If the source type is a DB parameter group, a DBParameterGroupName must be supplied. If the source type is a DB snapshot, a DBSnapshotIdentifier must be supplied.	Yes

Output

The command returns a table with the following information:

Note
Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **CustSubscriptionId—**the Id of the event subscription
- **CustomerAwsId—**the AWS customer account associated with the Amazon RDS event notification subscription
- **Enabled—**a Boolean value indicating if the subscription is enabled. True indicates the subscription is enabled
- **EventCategoriesList—**a list of event categories for the Amazon RDS event notification subscription
- **SnsTopicArn—**the Amazon SNS topic's ARN for the Amazon RDS event notification subscription
- **SourceIdsList—**a list of source Ids for the RDS event notification subscription
- **SourceType—**the source type for the Amazon RDS event notification subscription
- **Status—**the status of the RDS event notification subscription. Can be one of the following: creating | modifying | deleting | active | no-permission | topic-not-exist

  The status "no-permission" indicates that RDS no longer has permission to post to the Amazon SNS topic. The status "topic-not-exist" indicates that the topic was deleted after the subscription was created.
- **SubscriptionCreationTime—**the time the RDS event notification subscription was created

Examples

Removing a source identifier from an event subscription

This example removes the DB instance named MyDBInstance1 from the MySubscription1 subscription.

```
PROMPT> rds-remove-source-identifier-from-subscription MySubscription1 --
SourceIdentifier MyDBInstance1
```

Related Operations

- rds-add-source-identifier-to-subscription (p. 19)
- rds-create-event-subscription (p. 61)
- rds-modify-event-subscription (p. 140)
- rds-describe-event-subscriptions (p. 105)

rds-remove-tags-from-resource

Description

Removes a tag for each key specified from an Amazon RDS resource. The Amazon RDS resource is identified by its Amazon Resource Name (ARN). To learn how to construct the ARN that references the resource, see Constructing an RDS Amazon Resource Name (ARN)

Syntax

```
rds-remove-tags-for-resource resourcename  -k (--keys) value[,value2...]
[General Options]
```

Options

Name	Description	Required
`resourcename`	The Amazon Resource Name (ARN) of the Amazon RDS resource that has the tag to be removed. To learn how to construct the ARN that references the resource, see Constructing an RDS Amazon Resource Name (ARN).	Yes

`--keys`
 	
`-k`
	The keys of the tags to be deleted.	Yes

Output

This command does not return any output.

Example

This example deletes tags on a DB instance that have the keys "project" and "cost-center." No output is returned.

```
PROMPT>  rds-remove-tags-from-resource arn:aws:rds:us-east-1:0123456789:db:my-
db-instance -k project,cost-center
```

rds-reset-db-parameter-group

Description

Resets individual parameters or all parameters in a parameter group to engine defaults.

Syntax

```
rds-reset-db-parameter-group DBParameterGroupName

[-p (--parameters) "name=value, method=value" ...]]

[--reset-all-parameters ] [General Options]
```

Options

Name	Description	Required
DBParameterGroupName	DB parameter group identifier. This value can also be passed using the `--db-parameter-group-name` named parameter. Constraints: Must contain from 1 to 255 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens.	Yes
`-p` `--parameters` *"name=value, method=value"*	A string containing a series of parameter names, values, and apply methods. A maximum of 20 parameters may be reset in a single call to the **rds-reset-db-parameter-group** command. Valid values (for apply method): `immediate` | `pending-reboot` Constraints: Cannot be specified if **--reset-all-parameters** is specified.	Conditional
`--reset-all-parameters`	Specifies that all parameters in the group should be reset to their defaults. Constraints: Cannot be specified if **--parameters** string is specified.	Conditional

Output

The command returns the following information:

Note
Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the

Endpoint Address value because that value is null until the DB instance has finished being created or restored.

- **Group Name—**the name of the parameter group that was modified.

Examples

Reset Parameters in a Parameter Group

This example shows how to reset some parameters in a parameter group.

```
PROMPT> rds-reset-db-parameter-group mydbparametergroup
  --parameters "name=max_user_connections, method=pending-reboot"
"name=max_allowed_packet, method=immediate"
```

Reset Parameters in a Parameter Group

This example shows how to reset all parameters in a parameter group.

```
PROMPT> rds-reset-db-parameter-group mydbparamgrp --reset-all-parameters
```

Related Operations

- rds-create-db-parameter-group (p. 52)
- rds-delete-db-parameter-group (p. 70)
- rds-describe-db-parameter-groups (p. 83)

rds-restore-db-instance-from-db-snapshot

Description

Creates a new DB instance from a DB snapshot of an existing DB instance, effectively replicating the existing instance at the time the DB snapshot was taken. Some characteristics of the new DB instance can be modified using optional parameters; if these are omitted, the new restored DB instance defaults to the characteristics of the DB instance from which the snapshot was taken.

Note
This operation is not supported for read replica DB instances.

Syntax

```
rds-restore-db-instance-from-db-snapshot DBInstanceIdentifier

-s (--db-snapshot-identifier) value

[-e (--engine) value ]

[-lm (--license model) value ]

[-z (--availability-zone) value ]

[-c (--db-instance-class) value ]

[--iops value ]

[-pub (--publicly-accessible) value]

[-m (--multi-az) value ]

[-og (--option-group) value ]

[-sn (--db-subnet-group-name) value ]

[-n (--db-name) value ]

[-p (--port) value ]

[-au (--auto-minor-version-upgrade) value ]

[General Options]
```

Options

Name	Description	Required
DBInstanceIdentifier	DB instance identifier. This is the unique key that identifies a DB instance. Stored as a lowercase string. Type: String Default: None Constraints: Must contain 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens. Example: myinstance	Yes
`-z` *value* `--availability-zone` *value*	The Amazon EC2 Availability Zone that the DB instance will be created in. Type: String Default: A random, system-chosen Availability Zone. Example: `-z us-east-1c`	No
`-s` *value* `--db-snapshot-identifier` *value*	The identifier for an existing DB snapshot. Type: String Default: None Constraints: Cannot be null, empty, or blank. Must contain from 1 to 255 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens. Example: `-s my-snapshot-id`	Yes
`-e` *value* `--engine` *value*	Name of the database engine to use for the new DB instance. Type: String Default: Same as the source DB instance. Valid values: `MySQL` | `oracle-se1` | `oracle-se` | `oracle-ee`	Yes

Name	Description	Required
`-c` *value* `--db-instance-class` *value*	Contains the compute and memory capacity of the DB instance. Different instance classes are available for different database engines. For information about valid values for a particular engine, use the rds-describe-orderable-db-instance-options (p. 111) command. Type: String Default: None Valid values: `db.t1.micro` | `db.m1.small` | `db.m1.medium` | `db.m1.large` | `db.m1.xlarge` | `db.m2.2xlarge` | `db.m2.4xlarge` | `db.m3.medium` | `db.m3.large` | `db.m3.xlarge` | `db.m3.2xlarge` Example: `--db-instance-class db.m1.xlarge`	No
`-lm` `--license-model` *value*	License model for the new DB instance. Type: String Default: Same as the source DB instance. Valid values: `license-included` | `bring-your-own-license` | `general-public-license` Example: `--license-model bring-your-own-license`	No
`-sn` *value* `--db-subnet-group` *value*	The name of the DB subnet group to restore into. Specifying a DB subnet group will restore to a DB instance in the named VPC. **Note** You can restore a DB instance from a VPC to a DB instance in another VPC, or from a non-VPC DB instance into a DB instance in a VPC. You cannot restore from a VPC to a DB instance that is not in a VPC. Type: String Default: none Constraints: Must be the name of an existing DB subnet group. Example: `--db-subnet-group-name mydbsubnetgroup`	No

Name	Description	Required
--iops value	Specifies the amount of provisioned IOPS for the DB instance, expressed in I/O operations per second. If this parameter is not specified, the IOPS value will be taken from the backup. If this parameter is set to 0, the new instance will be converted to a non-PIOPS instance, which will take additional time, though your DB instance will be available for connections before the conversion starts. Constraints: Must be an integer greater than 1000. **SQL Server** You cannot change the provisioned IOPS for a SQL Server DB instance.	No
-pub *value* --publicly-accessible *value*	Specifies the accessibility options for the DB instance. A value of true specifies an Internet-facing instance with a publicly resolvable DNS name, which resolves to a public IP address. A value of false specifies an internal instance with a DNS name that resolves to a private IP address.	
-m *value* --multi-az *value*	Specifies if the new DB instance is a Multi-AZ deployment. Type: Boolean Default: `false` Valid values: `true` | `false` Constraints: The *--availability-zone* parameter cannot be set if the *--multi-az* parameter is set to `true`.	No
-og *value* --option-group *value*	Specifies the name of the option group that should be associated with this instance. Permanent options, such as the TDE option for Oracle Advanced Security TDE, can never be removed from an option group, and that option group cannot be removed from a DB instance once it is associated with a DB instance. Type: String	No

Name	Description	Required
`-n` *value* `--db-name` *value*	The meaning of this parameter differs according to the database engine you use. **MySQL** Name of a database to create when the DB instance is created. If this parameter is not specified, no database is created in the instance. Constraints: • Cannot be empty. • Must contain 1 to 64 alphanumeric characters. • Cannot be a word reserved by the specified database engine. Type: String Example: `--db-name MyDatabase` **Oracle** The Oracle System ID (SID) of the created DB instance. Constraints: • Cannot be longer than 8 characters. Type: String Example: `--db-name MYORACLE`	No
`-p` *value* `--port` *value*	Port number that the DB instance uses for connections. Type: Integer Default: The value used in the DB snapshot Example: `--port 1234`	No
`-au` *value* `--auto-minor-version-upgrade` *value*	Indicates that minor version upgrades will be applied automatically to the DB instance during the maintenance window. Type: Boolean Example: `--au true`	No

Output

The command returns a table that contains the following information:

Note
Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **DBInstanceID—**the user-supplied database identifier
- **Created—**the data and time the instance was created, in UTC
- **Class—**The compute and memory capacity of the DB instance
- **Engine—**Name of the database engine to be used for this DB instance
- **Storage—**Initially allocated storage size specified in GBs
- **Iops—**The provisioned storage IOPS, expressed as I/O operations per second.
- **Master Username—**The master username for the DB instance
- **Status—**The current status of the instance. Valid values: `available` | `backing-up` | `creating` | `deleted` | `deleting` | `failed` | `modifying` | `rebooting` | `resetting-master-credentials`
- **SecondaryAvailabilityZone—**If present, specifies the name of the secondary Availability Zone for a DB instance with multi-AZ support.
- **Endpoint Address—**Address of the DB instance
- **Port—**Port used to connect to the DB instance
- **AZ—**The instance's Availability Zone
- **PendingClass—**The class to which the instance will be scaled during the next maintenance window, or to which it is currently being scaled if the *`--apply-immediately`* option was specified
- **PendingCredentials—**The (hidden) master user password that will be applied to the DB instance
- **PendingStorage—**The storage size to which the instance will be scaled during the next maintenance window, or to which it is currently being scaled if the *`--apply-immediately`* option was specified
- **DB Name—**Name of the initial database created when the instance was created or the Oracle System ID (SID) of the created DB instance (for the Oracle engine). This column appears only in the *`--show-long`* view
- **Maintenance Window—**The window during which patching and instance modifications will be performed. This column appears only in the *`--show-long`* view
- **Name—**security group name
- **Status—**Status of authorization. Valid values: `authorizing` | `authorized` | `revoking`
- **Name—**DB subnet group name
- **Description—**DB subnet group description
- **Group Name—**Name of DB parameter group applied to
- **Apply Status—**Status of applying the parameter group. Valid values: `in-sync` | `pending-reboot` | `applying`
- **Multi-AZ—**Indicates if this is a Multi-AZ DB instance.
- **EngineVersion—**Database engine version number.

Examples

Restore a Database from a Snapshot with Minimal Parameters

This example restores a database from a DB snapshot with the minimal set of parameters.

```
PROMPT> rds-restore-db-instance-from-db-snapshot mynewrestoreddatabase -s myex
istingsnapshot
```

Restore a Database from a Snapshot, Specifying a New Availability Zone

This example restores a database from a DB snapshot with a new Availability Zone.

```
PROMPT> rds-restore-db-instance-from-db-snapshot mynewrestoreddatabase -s myex
istingsnapshot -c db.m1.large -p 3501 -z us-east-1a
```

Related Operations

- rds-delete-db-snapshot (p. 72)
- rds-describe-db-snapshots (p. 89)

rds-restore-db-instance-to-point-in-time

Description

Restores a DB instance to a specified point in time, creating a new DB instance.

Some characteristics of the new DB instance can be modified using optional parameters; if these are omitted, the new DB instance defaults to the characteristics of the DB instance from which the DB snapshot was created.

Note
This operation is not supported for read replica DB instances.

Syntax

```
rds-restore-db-instance-to-point-in-time TargetDBInstanceIdentifier

-s (--source-db-instance-identifier) value

[-l (--use-latest-restorable-time) ]

[-e (--engine) value ]

[-lm (--license model) value ]

[-r (--restore-time) value ]

[-z (--availability-zone) value ]

[-c (--db-instance-class) value ]

[-p (--port) value ]

[--iops value ]

[-og (--option-group) value]

[-pub (--publicly-accessible) value]

[-m (--multi-az) value]

[-au (--auto-minor-version-upgrade) value ]

[-sn (--db-subnet-group-name) value ]

[General Options]
```

Options

Name	Description	Required
TargetDBInstanceIdentifier	DB instance identifier. This is the unique key that identifies a DB instance. Type: String Default: None Constraints: Must contain 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens. Example: mydbinstance	Yes
`-s` *value* `--source-db-instance-identifier` *value*	User-supplied identifier of the DB instance from which to restore. This instance must be available and must have automated backups enabled. Type: String	Yes

`-l`
 	
`--use-latest-restorable-time`
	Specifies that the DB instance is restored from the latest backup time.
	
	Type: Boolean
	
	Default: `False`
	
	Constraints: Cannot be specified if `RestoreTime` parameter is provided.
		Conditional

`-lm` `--license-model` *value*	License model for the new DB instance. Type: String Default: Same as the source DB instance. Valid values: `license-included` | `bring-your-own-license` | `general-public-license` Example: `--license-model bring-your-own`	No

Name	Description	Required
`-r` *value* `--restore-time` *value*	The date and time from to restore from. Type: Date Default: none Valid Values: Value must be a UTC time Constraints: • Time specified must be after the creation of the oldest system snapshot available for *SourceDBInstanceIdentifier*. • Cannot be after the latest restorable time for the DB instance. • Cannot be specified if `UseLatestRestorableTime` parameter is `true`. Example: `2009-09-07T23:45:00Z`	Conditional
`-z` *value* `--availability-zone` *value*	The Amazon EC2 Availability Zone that the DB instance will be created in. Type: String Default: The Availability Zone of the source DB instance. Example: `-z us-east-1c`	No
`-c` *value* `--db-instance-class` *value*	Contains the compute and memory capacity of the DB instance. Type: String Default: The instance class of the source DB instance. Different instance classes are available for different database engines. For information about valid values for a particular engine, use the rds-describe-orderable-db-instance-options (p. 111) command. Valid values: `db.t1.micro` | `db.m1.small` | `db.m1.medium` | `db.m1.large` | `db.m1.xlarge` | `db.m2.2xlarge` | `db.m2.4xlarge` | `db.m3.medium` | `db.m3.large` | `db.m3.xlarge` | `db.m3.2xlarge` Example: `--db-instance-class db.m1.xlarge`	No

Name	Description	Required
`-e` *value* `--engine` *value*	Name of the database engine to use for the new DB instance. Type: String Default: Same as the source DB instance. Valid values: `MySQL` | `oracle-se1` | `oracle-se` | `oracle-ee`	Yes
`-p` *value* `--port` *value*	Port number that the DB instance uses for connections. Type: Integer Default: The port of the source DB instance. Example: `--port 1234`	No
`--iops` *value*	Specifies the amount of provisioned IOPS for the DB instance, expressed in I/O operations per second. If this parameter is not specified, the IOPS value will be taken from the original instance. If this parameter is set to 0, the new instance will not have provisioned IOPS. Constraints: Must be an integer greater than 1000. **SQL Server** You cannot change the provisioned IOPS for a SQL Server DB instance.	No
`-pub` *value* `--publicly-accessible` *value*	Specifies the accessibility options for the DB instance. A value of true specifies an Internet-facing instance with a publicly resolvable DNS name, which resolves to a public IP address. A value of false specifies an internal instance with a DNS name that resolves to a private IP address.	
`-m` *value* `--multi-az` *value*	Specifies if the new DB instance is a Multi-AZ deployment. Type: Boolean Default: `false` Valid values: `true` | `false` Constraints: The *`--availability-zone`* parameter cannot be set if the *`--multi-az`* parameter is set to `true`.	No

Name	Description	Required
`-og` *value* `--option-group` *value*	Specifies the name of the option group that should be associated with the restored instance. Permanent options, such as the TDE option for Oracle Advanced Security TDE,can never be removed from an option group, and that option group cannot be removed from a DB instance once it is associated with a DB instance. Type: String	No
`-au` *value* `--auto-minor-version-upgrade` *value*	Indicates that minor version upgrades will be applied automatically to the DB instance during the maintenance window. Type: Boolean Example: `--au true`	No
`-sn` *value* `--db-subnet-group` *value*	The name of the DB subnet group to restore into. Specifying a DB subnet group will restore to a DB instance in the named VPC. **Note** You can restore a DB instance from a VPC to a DB instance in another VPC, or from a non-VPC DB instance into a DB instance in a VPC. You cannot restore from a VPC to a DB instance that is not in a VPC. Type: String Default: none Constraints: Must be the name of an existing DB subnet group. Example: `--db-subnet-group-name mydbsubnetgroup`	No

Output

The command returns a table that contains the following information:

Note
Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **DBInstanceID—**the user-supplied database identifier
- **Created—**the data and time the instance was created, in UTC
- **Class—**The compute and memory capacity of the instance
- **Engine—**Name of the database engine to be used for this DB instance

- **Storage—**Initially allocated storage size specified in GBs
- **Iops—**The provisioned storage IOPS, expressed as I/O operations per second.
- **Master Username—**The master username for the instance
- **Status—**The current status of the instance. Valid values: `available` | `backing-up` | `creating` | `deleted` | `deleting` | `failed` | `modifying` | `rebooting` | `resetting-master-credentials`
- **SecondaryAvailabilityZone—**If present, specifies the name of the secondary Availability Zone for a DB instance with multi-AZ support.
- **Endpoint Address—**Address of the DB instance.
- **Port—**Port used to connect to the DB instance.
- **AZ—**The instance's Availability Zone.
- **Backup Retention—**The number of days that automated backups are retained before deletion.
- **PendingBackupRetention—**The backup retention period which will be applied at the next maintenance window, or which is currently being applied if the *`--apply-immediately`* option was specified.
- **PendingClass—**The class to which the instance will be scaled during the next maintenance window, or to which it is currently being scaled if the *`--apply-immediately`* option was specified.
- **PendingCredentials—**The (hidden) master user password that will be applied to the DB instance.
- **PendingStorage—**The storage size to which the instance will be scaled during the next maintenance window, or to which it is currently being scaled if the *`--apply-immediately`* option was specified.
- **DB Name—**Name of the initial database created when the instance was created. This column appears only in the *`--show-long`* view.
- **Maintenance Window—**The window during which patching and instance modifications will be performed. This column appears only in the *`--show-long`* view.
- **Backup Window—**The period during which daily automated backups are created. This column appears only in the *`--show-long`* view.
- **Name—**security group name.
- **Status—**Status of authorization. Valid values: `authorizing` | `authorized` | `revoking`
- **Name—**DB subnet group name.
- **Description—**DB subnet group description.
- **Group Name—**Name of DB parameter group applied to.
- **Apply Status—**Status of applying the parameter group. It can be either `in-sync` or `pending-reboot`.
- **Multi-AZ—**Indicates if this is a Multi-AZ DB instance.
- **EngineVersion—**Database engine version number.

Examples

Restore a Database to a Specified Time with Minimal Parameters

This example restores a database to a specified time with the minimal set of parameters.

```
PROMPT> rds-restore-db-instance-to-point-in-time restored-db -s original-db -r
 2009-07-31T13:00:00Z
```

Restore a Database to a Specified Time, Specifying a New Availability Zone

This example restores a database to a specified time with a new Availability Zone.

```
PROMPT> rds-restore-db-instance-to-point-in-time restored-db -s original-db -r
 2009-07-31T13:00:00Z -z us-east-1b
```

Related Operations

- rds-create-db-instance (p. 28)
- rds-describe-db-instances (p. 78)

rds-revoke-db-security-group-ingress

Description

Revokes ingress to a DB security group for previously authorized IP ranges or Amazon EC2 security groups.

Syntax

```
rds-revoke-db-security-group-ingress DBSecurityGroupName
[-s (--ec2-security-group-id) ] value
[-g (--ec2-security-group-name) ] value
[-i (--cidr-ip) value ]
[-o (--ec2-security-group-owner-id) value ]
[General Options]
```

Options

Name	Description	Required
`DBSecurityGroupName` `--db-security-group-name` *value*	The name of the DB security group. This can also be passed as a named parameter using `--db-security-group-name` *value* Type: String Default: None Example: `--db-security-group-name mydbsecuritygroup`	Yes
`-s` `--ec2-security-group-id` *value*	Identifier of the Amazon EC2 security group to authorize. Type: String Default: None Constraints: This parameter must be specified if the DB security group is for a VPC. Example: `-g myec2securitygroup`	No
`-g` `--ec2-security-group-name` *value*	The name of the Amazon EC2 security group. Type: String Default: None Example: `-g myec2securitygroup`	No

Name	Description	Required
`-i` `--cidr-ip-value` *value*	The IP range to allow access. Type: String Constraints: Must be a valid Classless Inter-Domain Routing (CIDR) range, in the format ddd.ddd.ddd.ddd/dd. For more information, see CIDR Notation. Default: None Example: `-i 192.168.100.100/0`	No
`-o` `--ec2-security-group-owner-id` *value*	AWS Account Number for the owner of the EC2 security group. Note that this is the account number, not the AWS Access ID. Type: String Default: None Example: `-o 3454903478548345`	No

Output

The command returns a table with the following information:

> **Note**
> Output values list the possible values returned by CLI commands. Not all values are returned for every call to a command. If a value is null or empty, it will not be included in the command output. For example, CLI commands to create or restore a DB instance will not return the **Endpoint Address** value because that value is null until the DB instance has finished being created or restored.

- **Name—**the security group name
- **Description—**the security group description
- **EC2 Group Name—**the name of the Amazon EC2 security group
- **EC2 Group Id—**Identifier of the Amazon EC2 security group
- **EC2 Owner ID—**the owner of the Amazon EC2 security group
- **IP Range—**the CIDR range for the authorized Amazon RDS DB security group
- **Status—**the status of the authorization

Examples

Authorizing Access to an Amazon EC2 Security Group

This example revokes authorization for an IP range

```
PROMPT> rds-revoke-db-security-group-ingress Default --cidr-ip 192.168.100.100/0
```

Authorizing Access to a CIDR range

This example revokes authorization for an Amazon EC2 security group.

```
PROMPT> rds-revoke-db-security-group-ingress Default --ec2-security-group-name
 secgrp --owner-id 666666666666
```

Related Operations

- rds-authorize-db-security-group-ingress (p. 22)
- rds-describe-db-security-groups (p. 87)
- rds-create-db-security-group (p. 55)
- rds-delete-db-security-group (p. 71)

rds-watch-db-logfile

Description

Monitors a database log file and constantly polls to retrieve the most recent log file contents.

Syntax

```
rds-watch-db-logfile DBInstanceIdentifier

--log-file-name value

[General Options]
```

Options

Name	Description	Required
DBInstanceIdentifier	Customer-supplied DB instance identifier; this is the name you assigned to the DB instance when you created it and is the unique key that identifies a DB instance. Type: String	Yes
--log-file-name	The name of the log file to be downloaded. Type: String	Yes

Output

The command the last line written to the specified log file.

Examples

Watches a Log File

This example monitors a log file named error-running.log.20 for the DB instance named mysql-db1.

```
PROMPT> rds-watch-db-logfile mysql-db1 --log-file-name error-running.log.20
```

Related Operations

- rds-download-db-logfile (p. 120)

rds-version

Description

Returns the current version of the Amazon RDS Command Line Interface.

Syntax

```
rds-version
```

Options

None.

Output

This command returns a string containing the version of the Amazon RDS Command Line Interface.

Examples

Example Request

This example returns the version of the Amazon RDS Command Line Interface.

```
PROMPT>rds-version

Relational Database Service CLI version 1.2.000 (API 2010-06-28)
```

Related Operations

- List of Command Line Operations by Function (p. 12)

Document History

The following table describes the important changes to the documentation since the last release of the *Amazon Relational Database Service Command Line Reference*.

- **API version:** 2013-09-09
- **Latest documentation update:** April 3, 2014

Change	Description	Date Changed
New feature	Updated to support Oracle GoldenGate.	April 3, 2014
New feature	Updated to support the M3 DB instance classes.	February 20, 2014
New feature	Updated to support the Oracle Timezone option.	January 13, 2014
New feature	Updated to support Oracle 11.2.0.3.v1.	December 16, 2013
New feature	Updated to support replication between Amazon RDS MySQL DB instances in different regions.	November 26, 2013
New feature	Updated to support the PostgreSQL DB engine.	November 14, 2013
New feature	Updated to support SQL Server transparent data encryption (TDE).	November 7, 2013
New API and new feature	Updated to support cross region DB snapshot copy; new API version, 2013-09-09	October 31, 2013
New feature	Updated to support replication of replicas.	September 24, 2013
New feature	Updated to support fine-grained permissions and tagging for all Amazon RDS resources.	July 8, 2013
New API and new feature	Updated to support read replica status; new API version, 2013-05-15	May 23, 2013
New features	Updated to support Oracle Advanced Security features for native network encryption and transparent data encryption.	April 18, 2013
New features	Updated to support major version upgrades for SQL Server and additional functionality for Provisioned IOPS.	March 13, 2013

Change	Description	Date Changed
New feature	Updated to support VPC By Default for Amazon RDS.	March 11, 2013
New API and new feature	Updated to support database log access; new API version, 2013-02-12	March 4, 2013
New feature	Updated to support Amazon RDS event notification subscriptions.	February 4, 2013
New API and new feature	Updated to support DB instance renaming and the migration of DB security group members in a VPC to a VPC security group.	January 14, 2013
New feature	Updated to support m1.medium and m1.xlarge DB Instance classes.	November 6, 2012
New feature	Updated to support Read Replica promotion.	October 11, 2012
New API and features	Updated to support Provisioned IOPS. API version 2012-09-17.	September 20, 2012
New features	Updated to support resource tagging.	August 8, 2012
New features	Updated to support option groups. First option group supported is Oracle Enterprise Manager Database Control.	May 29, 2012
New features	Updated for Microsoft SQL Server support.	May 8, 2012
New features	Updated for support for forced failover, Multi-AZ deployment for Oracle DB Instances, and nondefault character sets for Oracle DB Instances	May 2, 2012
New feature	Updated for Amazon Virtual Private Cloud (VPC) Support.	March 16, 2012
Updated content	Updated for new Reserved Instance types.	December 19, 2011
New feature	Adds support for new Reserved DB Instance types.	December 29, 2011
New feature	Added support for the Oracle database engine.	May 23, 2011
New feature	Added support for MySQL 5.5.	January 11, 2011
New feature	Added support for Read Replicas.	October 4, 2010
New feature	Added support for DB Engine Version Management.	August 16, 2010
New feature	Added support for Reserved DB Instances.	August 16, 2010
New feature	Added command line arguments for new Multi-AZ deployment feature.	May 17, 2010
Added content	Added new --region common parameter.	April 13, 2010
New Service	This is the first release of *Amazon Relational Database Service Command Line Reference*. Future updates and changes will be noted here.	October 26, 2009