Welcome

Topics

- **Who Should Read This Guide**
- **Reader Feedback**
- **How This Guide Is Organized**
- **Amazon EC2 Resources**

This is the *Amazon Elastic Compute Cloud* Command Line Tools Reference Guide. It provides the syntax, a description, options, and usage examples for each command line tool. This section describes who should read this guide, how the guide is organized, and other resources related to Amazon Elastic Compute Cloud.

The Amazon Elastic Compute Cloud is occasionally referred to within this guide as simply "Amazon EC2"; all copyrights and legal protections still apply.
Who Should Read This Guide

This guide is intended for users that administer Amazon EC2 instances using the command line tools.

Required Knowledge and Skills

Use of this guide assumes you are familiar with the following:

- Basic understanding of web services (go to W3 Schools Web Services Tutorial)
- Experience using Amazon EC2 obtained by working through the Amazon Elastic Compute Cloud Getting Started Guide,
- A basic understanding of the command line AMI and API tools (which were installed when working through the Amazon Elastic Compute Cloud Getting Started Guide).

Note
For high level concepts and examples of how to use major Amazon EC2 features, go to the Amazon Elastic Compute Cloud User Guide.
Reader Feedback

The online version of this guide provides a link at the top of each page that enables you to enter feedback about this guide. We strive to make our guides as complete, error free, and easy to read as possible. You can help by giving us feedback. Thank you in advance!
How This Guide Is Organized

This guide is organized into several major sections described in the following table.

<table>
<thead>
<tr>
<th>Information</th>
<th>Relevant Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive reference to the tools for creating Amazon EC2 AMIs.</td>
<td>AMI Tools Reference</td>
</tr>
<tr>
<td>Comprehensive reference to the Amazon EC2 command line tools.</td>
<td>API Command Line Tools Reference</td>
</tr>
<tr>
<td>Amazon EC2 terms.</td>
<td>Glossary</td>
</tr>
<tr>
<td>Typographic and symbol conventions.</td>
<td>Document Conventions</td>
</tr>
</tbody>
</table>
# Amazon EC2 Resources

The following table lists related resources that you'll find useful as you work with this service.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amazon Elastic Compute Cloud Getting Started Guide</td>
<td>The Getting Started Guide provides a quick tutorial of the service based on a simple use case. Examples and instructions are included.</td>
</tr>
<tr>
<td>Amazon Elastic Compute Cloud User Guide</td>
<td>The Console and Command Line User Guide provides conceptual information about Amazon EC2 and describes how to use Amazon EC2 features using the AWS Management Console and command line tools.</td>
</tr>
<tr>
<td>Amazon Elastic Compute Cloud Developer Guide</td>
<td>The Developer Guide provides conceptual information about Amazon EC2 and describes how to use Amazon EC2 features using the SOAP and Query APIs.</td>
</tr>
<tr>
<td>Amazon Elastic Compute Cloud API Reference</td>
<td>The API Reference contains a comprehensive description of all SOAP and Query APIs. Additionally, it contains a list of all SOAP data types.</td>
</tr>
<tr>
<td>Amazon EC2 Technical FAQ</td>
<td>The FAQ covers the top questions developers have asked about this product.</td>
</tr>
<tr>
<td>Amazon EC2 Release Notes</td>
<td>The Release Notes give a high-level overview of the current release. They specifically note any new features, corrections, and known issues.</td>
</tr>
<tr>
<td>AWS Developer Resource Center</td>
<td>A central starting point to find documentation, code samples, release notes, and other information to help you build innovative applications with AWS.</td>
</tr>
<tr>
<td>AWS Management Console</td>
<td>The console allows you to perform most of the functions of Amazon EC2 and other AWS products without programming.</td>
</tr>
<tr>
<td>Discussion Forums</td>
<td>A community-based forum for developers to discuss technical questions related to Amazon Web Services.</td>
</tr>
<tr>
<td>AWS Support Center</td>
<td>The home page for AWS Technical Support, including access to our Developer Forums, Technical FAQs, Service Status page, and AWS Premium Support (if you are subscribed to this program).</td>
</tr>
<tr>
<td>AWS Premium Support Information</td>
<td>The primary web page for information about AWS Premium Support, a one-on-one, fast-response support channel to help you build and run applications on AWS Infrastructure Services.</td>
</tr>
<tr>
<td>Amazon EC2 Product Information</td>
<td>The primary web page for information about Amazon EC2.</td>
</tr>
<tr>
<td>Form for questions related to your AWS</td>
<td>This form is only for account questions. For technical questions, use the Discussion Forums.</td>
</tr>
<tr>
<td>account:</td>
<td>Contact Us</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Conditions of Use</strong></td>
<td>Detailed information about the copyright and trademark usage at Amazon.com and other topics.</td>
</tr>
</tbody>
</table>
What's New

This What's New is associated with the 2009-07-15 release of Amazon EC2. This guide was last updated on September 03, 2009.

The following table describes the important changes since the last release of the Amazon EC2 documentation set.

<table>
<thead>
<tr>
<th>Change</th>
<th>Description</th>
<th>Release Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amazon Virtual Private Cloud</td>
<td>Amazon EC2 now supports Amazon Virtual Private Cloud, a service that lets you create isolated resources within the AWS cloud, and then connect those resources directly to your own data center using industry-standard encrypted IPsec VPN connections. For more information about the service, go to Amazon Virtual Private Cloud Product Page.</td>
<td>26 August 2009</td>
</tr>
</tbody>
</table>
Getting the Command Line Tools

To use the commands described in this guide, you must install both the AMI tools and the API tools. The AMI tools create, bundle, and migrate AMIs between regions. The API tools mirror the Amazon EC2 SOAP and Query APIs and enable you to perform all other functions.

The command line tools are available as a ZIP file in the Amazon EC2 Resource Center. These tools are written in Java and include shell scripts for both Windows 2000/XP and Linux/UNIX/Mac OSX. The ZIP file is self-contained; no installation is required. You just download it and unzip it.

For information on setting up and using the tools, go to the Amazon Elastic Compute Cloud Getting Started Guide.

**Note**

If you need to create and modify Amazon EC2 AMIs, download the AMI tools from the public Amazon S3 downloads bucket. For instructions on how to create AMIs, go to the Amazon Elastic Compute Cloud User Guide.
AMI Tools Reference

Topics

- Common Options for AMI Tools
- ec2-bundle-image
- ec2-bundle-vol
- ec2-delete-bundle
- ec2-download-bundle
- ec2-migrate-bundle
- ec2-migrate-manifest
- ec2-unbundle
- ec2-upload-bundle
Common Options for AMI Tools

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

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--help, -h</td>
<td>Display the help message.</td>
</tr>
<tr>
<td>--version</td>
<td>Displays the version and copyright notice.</td>
</tr>
<tr>
<td>--manual</td>
<td>Displays the manual entry.</td>
</tr>
<tr>
<td>--batch</td>
<td>Runs in batch mode, suppressing user interaction and confirmation.</td>
</tr>
<tr>
<td>--debug</td>
<td>Prints internal debugging information. This is useful to assist us when troubleshooting problems.</td>
</tr>
</tbody>
</table>
ec2-bundle-image
Description

Create a bundled AMI from an operating system image created in a loopback file. For more information, go to the

Amazon Elastic Compute Cloud Getting Started Guide or Amazon Elastic Compute Cloud User Guide.

Note

Scripts that require a copy of the public key from the launch key pair must obtain the key from the instance's metadata (not the key file in the instance store) for instances bundled with the 2007-08-29 AMI tools and later. AMIs bundled before this release will continue to work normally.
Syntax

```
ec2-bundle-image -k private_key -c cert -u user_id -i image_path -r {i386 | x86_64} [-d destination] [-p ami_prefix] [--ec2cert cert_path] [--kernel kernel-id] [--ramdisk ramdisk_id] [--block-device-mapping block_device_mapping]
```
## Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>-k, --privatekey</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>private_key</code></td>
<td>The path to the user's PEM-encoded RSA key file.</td>
<td>Yes</td>
</tr>
<tr>
<td>Example: <code>-k pk-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>-c, --cert</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>cert</code></td>
<td>The user's PEM encoded RSA public key certificate file.</td>
<td>Yes</td>
</tr>
<tr>
<td>Example: <code>-c cert-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>-u, --user</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>user_id</code></td>
<td>The user's AWS account number without dashes. Do not use the Access Key ID.</td>
<td>Yes</td>
</tr>
<tr>
<td>Example: <code>-u AIDADH4IGTRXXKCD</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>-i, --image</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>image_path</code></td>
<td>The path to the image to bundle.</td>
<td>Yes</td>
</tr>
<tr>
<td>Example: <code>-i /var/spool/my-image/version-2/debian.img</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>-d, --destination</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>destination</code></td>
<td>The directory in which to create the bundle.</td>
<td>No</td>
</tr>
<tr>
<td>Default: The current directory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example: <code>-d /var/run/my-bundle</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>-p, --prefix</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>ami_prefix</code></td>
<td>The filename prefix for bundled AMI files.</td>
<td>No</td>
</tr>
<tr>
<td>Default: image</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example: <code>-p my-image-is-special</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>--ec2cert</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>cert_path</code></td>
<td>The path to the Amazon EC2 X.509 public key certificate.</td>
<td>No</td>
</tr>
<tr>
<td>Default: <code>/etc/ec2/amitools/cert-ec2.pem (varies, depending on tools)</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example: <code>--ec2cert /etc/ec2/amitutil/cert-ec2.pem</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>--kernel</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>kernel_id</code></td>
<td>The ID of the kernel to select.</td>
<td>No</td>
</tr>
<tr>
<td>Default: <code>2.6.16-xenU</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example: <code>--kernel aki-ba3adfd3</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>--ramdisk</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>ramdisk_id</code></td>
<td>The ID of the RAM disk to select.</td>
<td>No</td>
</tr>
<tr>
<td>Some kernels require additional drivers at launch. Check the kernel requirements for information on whether you need to specify a RAM disk. To find kernel requirements, go to the <strong>Resource Center</strong> and search for the kernel ID.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Default block-device-mapping scheme with which to launch the AMI. This defines how block devices are exposed to an instance of this AMI if the instance type supports the specified device.

The scheme is a comma-separated list of key=value pairs, where each key is a virtual name and each value is the desired device name. Virtual names include:

- **ami**—The root file system device, as seen by the instance
- **root**—The root file system device, as seen by the kernel
- **swap**—The swap device, as seen by the instance
- **ephemeralN**—The Nth ephemeral store

Example:
```
--block-device-mapping
ami=sda1,root=/dev/sda1,ephemeral0=sda2,swap=sda3
```

Example:
```
--block-device-mapping
ami=0,root=/dev/dsk/c0d0s0,ephemeral0=1
```
Output

Status messages describing the stages and status of the bundling process.
Example

This example creates a bundled AMI from an operating system image that was created in a loopback file.

```
s ec2-bundle-image  -k pk-HKZYKTAIG2ECMXIBH3XV4ZBZQ55CL0.pem -c cert-HK Splitting bundled/fred.gz.crypt... Created fred.part.00 Created fred.part.01 Created fred.part.02 Created fred.part.03 Created fred.part.04 Created fred.part.05 Created fred.part.06 Created fred.part.07 Created fred.part.08 Created fred.part.09 Created fred.part.10 Created fred.part.11 Created fred.part.12 Created fred.part.13 Created fred.part.14 Generating digests for each part... Digests generated. Creating bundle manifest... Bundle Image complete.
```
Related Topics

- ec2-bundle-vol
- ec2-unbundle
- ec2-upload-bundle
- ec2-download-bundle
- ec2-delete-bundle
ec2-bundle-vol
Description

Creates a bundled AMI by compressing, encrypting and signing a snapshot of the local machine's root file system.

Note

Scripts that require a copy of the public key from the launch key pair must obtain the key from the instance's metadata (not the key file in the instance store) for instances bundled with the 2007-08-29 AMI tools and later. AMIs bundled before this release will continue to work normally.

On a running instance, Amazon EC2 attempts to inherit product codes, kernel settings, RAM disk settings, and block device mappings with which the instance launched.
Syntax

```
```
# Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>-k, --privatekey</td>
<td>The path to the user's PEM-encoded RSA key file.</td>
<td>Yes</td>
</tr>
<tr>
<td>private_key</td>
<td>Example: <code>-k pk-HKZYKTAIG2ECMXIBH3HXV4ZBQ55CL0.pem</code></td>
<td></td>
</tr>
<tr>
<td>-c, --cert cert</td>
<td>The user's PEM encoded RSA public key certificate file.</td>
<td>Yes</td>
</tr>
<tr>
<td>cert</td>
<td>Example: <code>-c cert-HKZYKTAIG2ECMXIBH3HXV4ZBQ55CL0.pem</code></td>
<td></td>
</tr>
<tr>
<td>-u, --user user_id</td>
<td>The user's AWS account number without dashes. Do not use the Access Key ID.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Example: <code>-u AIDADH4IGTRXXKCD</code></td>
<td></td>
</tr>
<tr>
<td>-s, --size size</td>
<td>The size, in MB (1024 * 1024 bytes), of the image file to create. The maximum size is 10240 MB.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Default: 10240</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>-s 2048</code></td>
<td></td>
</tr>
<tr>
<td>-d, --destination</td>
<td>The directory in which to create the bundle.</td>
<td>No</td>
</tr>
<tr>
<td>destination</td>
<td>Default: /tmp</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>-d /var/run/my-bundle</code></td>
<td></td>
</tr>
<tr>
<td>-e, --exclude</td>
<td>A list of absolute directory paths and files to exclude from the bundle operation. This overrides the --all parameter.</td>
<td>No</td>
</tr>
<tr>
<td>directory_1,</td>
<td>Example: <code>-e /tmp,/home/secret-data</code></td>
<td></td>
</tr>
<tr>
<td>directory_2,...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-p, --prefix ami_prefix</td>
<td>The filename prefix for bundled AMI files.</td>
<td>No</td>
</tr>
<tr>
<td>ami_prefix</td>
<td>Default: image</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>-p my-image-is-special</code></td>
<td></td>
</tr>
<tr>
<td>-v, --volume volume</td>
<td>The absolute path to the mounted volume from which to create the bundle.</td>
<td>No</td>
</tr>
<tr>
<td>volume</td>
<td>Default: The root directory (/)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>-v /mnt/my-customized-ami</code></td>
<td></td>
</tr>
<tr>
<td>-a, --all</td>
<td>Bundle all directories, including those on remotely</td>
<td>No</td>
</tr>
</tbody>
</table>
mounted filesystems.
Example: -a

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Default</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>--ec2cert cert_path</td>
<td>The path to the Amazon EC2 X.509 public key certificate.</td>
<td>/etc/ec2/amiutil/cert-ec2.pem (varies, depending on tools)</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Example: --ec2cert /etc/ec2/amiutil/cert-ec2.pem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--fstab fstab_path</td>
<td>The path to the fstab to bundle into the image. If this is not specified, Amazon EC2 bundles /etc/fstab.</td>
<td>/etc/fstab</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Example: --fstab /etc/fstab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--generate-fstab</td>
<td>Causes Amazon EC2 to bundle the volume using an Amazon EC2-provided fstab.</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Example: --generate-fstab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--kernel kernel_id</td>
<td>The ID of the kernel to select.</td>
<td>aki-ba3adfd3</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Example: --kernel aki-ba3adfd3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--ramdisk ramdisk_id</td>
<td>The ID of the RAM disk to select. Some kernels require additional drivers at launch. Check the kernel requirements for information on whether you need to specify a RAM disk. To find the kernel requirements, go to the Resource Center and search for the kernel ID.</td>
<td>ari-badbad00</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Example: --ramdisk ari-badbad00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--block-device-mapping</td>
<td>Default block-device-mapping scheme with which to launch the AMI. This defines how block devices are exposed to an instance of this AMI if the instance type supports the specified device.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mappings</td>
<td>The scheme is a comma-separated list of key=value pairs, where each key is a virtual name and each value is the desired device name. Virtual names include:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- **ami**—The root file system device, as seen by the instance
- **root**—The root file system device, as seen by the kernel
- **swap**—The swap device, as seen by the instance
- **ephemeralN**—The Nth ephemeral store

Example: `--block-device-mapping
ami=sda1, root=/dev/sda1, ephemeral0=sda2, swap=sda3`

Example: `--block-device-mapping
ami=0, root=/dev/dsk/c0d0s0, ephemeral0=1

No
Output

Status messages describing the stages and status of the bundling.
Example

This example creates a bundled AMI by compressing, encrypting and signing a snapshot of the local machine's root file system.

```
$ ec2-bundle-vol -d /mnt -k HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem -c cert HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem -u AIDADH4IGTRXXKCD -r x86_64

Copying / into the image file /mnt/image.img...
Excluding:
  sys
  dev/shm
  proc
  dev/pts
  proc/sys/fs/binfmt_misc
  dev
  media
  mnt
  proc
  sys
  tmp/image.img
  mnt/img-mnt
1+0 records in
1+0 records out
mke2fs 1.38 (30-Jun-2005)
warning: 256 blocks unused.

Splitting /mnt/image.gz.crypt...
Created image.part.00
Created image.part.01
Created image.part.02
Created image.part.03
...
Created image.part.22
Created image.part.23
Generating digests for each part...
Digests generated.
Creating bundle manifest...
Bundle Volume complete.
```
Related Topics

- ec2-bundle-image
- ec2-unbundle
- ec2-upload-bundle
- ec2-download-bundle
- ec2-delete-bundle
ec2-delete-bundle
Description

Deletes the specified bundle from Amazon S3 storage.
Syntax

```
ec2-delete-bundle -b s3_bucket -a access_key_id -s secret_key [-m manifest_path] [-p ami_prefix] [--url url] [--retry] [-y] [-clear]
```
# Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>-b, --bucket</code></td>
<td>The name of the Amazon S3 bucket containing the bundled AMI, followed by an optional '/'-delimited path prefix</td>
<td>Yes</td>
</tr>
<tr>
<td><code>s3_bucket</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>--prefix</code></td>
<td>The bundled AMI filename prefix.</td>
<td>Conditional</td>
</tr>
<tr>
<td><code>ami_prefix</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>-a, --access-key</code></td>
<td>The AWS access key ID.</td>
<td>Yes</td>
</tr>
<tr>
<td><code>access_key_id</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>-s, --secret-key</code></td>
<td>The AWS secret access key.</td>
<td>Yes</td>
</tr>
<tr>
<td><code>secret_key</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>-m, --manifest</code></td>
<td>The path to the unencrypted manifest file.</td>
<td>Conditional</td>
</tr>
<tr>
<td><code>manifest_path</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>--url</code></td>
<td>The Amazon S3 service URL.</td>
<td>No</td>
</tr>
<tr>
<td><code>url</code></td>
<td>Default: <a href="https://s3.amazonaws.com">https://s3.amazonaws.com</a></td>
<td></td>
</tr>
<tr>
<td><code>--retry</code></td>
<td>Automatically retries on all Amazon S3 errors, up to five times per operation.</td>
<td>No</td>
</tr>
<tr>
<td><code>--yes</code></td>
<td>Automatically assumes the answer to all prompts is 'yes'.</td>
<td>No</td>
</tr>
<tr>
<td><code>--clear</code></td>
<td>Deletes the specified bundle from the Amazon S3 bucket and deletes the bucket, if empty.</td>
<td>No</td>
</tr>
</tbody>
</table>

Example: `-b ec2-cracker-ami-bucket
- a
- s
eW91dHViZS5jb20vd2F0Y2g/dj1SU3NKMT1zeTNKSQ==
- m/var/spool/my-first-bundle/Manifest
- s eos-
- s https://s3.amazonaws.ie
- s
- s
- s
- s
Output

Amazon EC2 displays status messages indicating the stages and status of the delete process.
Example

This example deletes a bundle from Amazon S3.

```bash
$ ec2-delete-bundle -b my-s3-bucket -a AKIADQKE4SARGYLE -s eW91dHViZS5jb
Deleting files:
my-s3-bucket/fred.manifest.xml
my-s3-bucket/fred.part.00
my-s3-bucket/fred.part.01
my-s3-bucket/fred.part.02
my-s3-bucket/fred.part.03
my-s3-bucket/fred.part.04
my-s3-bucket/fred.part.05
my-s3-bucket/fred.part.06
Continue? [y/n]
Y
Deleted my-s3-bucket/fred.manifest.xml
Deleted my-s3-bucket/fred.part.00
Deleted my-s3-bucket/fred.part.01
Deleted my-s3-bucket/fred.part.02
Deleted my-s3-bucket/fred.part.03
Deleted my-s3-bucket/fred.part.04
Deleted my-s3-bucket/fred.part.05
Deleted my-s3-bucket/fred.part.06
ec2-delete-bundle complete.
```
Related Topics

- ec2-bundle-image
- ec2-bundle-vol
- ec2-unbundle
- ec2-upload-bundle
- ec2-download-bundle
ec2-download-bundle
Description

Download the specified bundles from S3 storage.
Syntax

```
ec2-download-bundle -b s3_bucket [-m manifest] -a access_key_id -s secret_key -k private_key [-p ami_prefix] [-d directory] [--url url]
```
## Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>-b, --bucket</code></td>
<td><code>s3_bucket</code> The name of the Amazon S3 bucket where the bundle is located,</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>followed by an optional ‘/’-delimited path prefix.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>-b</code> <code>ec2-cracked</code></td>
<td></td>
</tr>
<tr>
<td><code>-m, --manifest</code></td>
<td><code>manifest</code> The manifest path and filename.</td>
<td>No</td>
</tr>
<tr>
<td><code>-a, --access-key</code></td>
<td><code>access_key_id</code> Your AWS access key ID.</td>
<td>Yes</td>
</tr>
<tr>
<td><code>-s, --secret-key</code></td>
<td><code>secret_key</code> Your AWS secret access key.</td>
<td>Yes</td>
</tr>
<tr>
<td><code>-k, --privatekey</code></td>
<td><code>private_key</code> The private key used to decrypt the manifest.</td>
<td>Yes</td>
</tr>
<tr>
<td><code>-p, --prefix</code></td>
<td><code>ami_prefix</code> The filename prefix for the bundled AMI files.</td>
<td>No</td>
</tr>
<tr>
<td><code>-d, --directory</code></td>
<td><code>directory</code> The directory where the downloaded bundle is saved. The directory</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>should exist.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: The current working directory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>-d</code> <code>/tmp/my-downloaded-bundle</code></td>
<td></td>
</tr>
<tr>
<td><code>--retry</code></td>
<td>Automatically retries on all Amazon S3 errors, up to five times per</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>operation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>--retry</code></td>
<td></td>
</tr>
<tr>
<td><code>--url url</code></td>
<td>The S3 service URL.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Default: <code>https://s3.amazonaws.com</code></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>--url</code> <code>https://s3.amazonaws.ie</code></td>
<td></td>
</tr>
</tbody>
</table>
Output

Status messages indicating the various stages of the download process are displayed.
Example

This example creates the *bundled* directory and downloads the bundle from the *my-s3-bucket* Amazon S3 bucket.

```
$ mkdir bundled
$ ec2-download-bundle -b my-s3-bucket -m fred.manifest.xml -a AKIADQKE4S

downloading manifest https://s3.amazonaws.com/my-s3-bucket/image.manifest.xml to bundled/image.manifest.xml

Downloaded image.manifest.xml from https://s3.amazonaws.com/my-s3-bucket.

downloading part https://s3.amazonaws.com/my-s3-bucket/image.part.00 to bundled/image.part.00

Downloaded image.part.00 from https://s3.amazonaws.com/my-s3-bucket.

downloading part https://s3.amazonaws.com/my-s3-bucket/image.part.01 to bundled/image.part.01

Downloaded image.part.01 from https://s3.amazonaws.com/my-s3-bucket.

downloading part https://s3.amazonaws.com/my-s3-bucket/image.part.02 to bundled/image.part.02

Downloaded image.part.02 from https://s3.amazonaws.com/my-s3-bucket.

downloading part https://s3.amazonaws.com/my-s3-bucket/image.part.03 to bundled/image.part.03

Downloaded image.part.03 from https://s3.amazonaws.com/my-s3-bucket.

downloading part https://s3.amazonaws.com/my-s3-bucket/image.part.04 to bundled/image.part.04

Downloaded image.part.04 from https://s3.amazonaws.com/my-s3-bucket.

downloading part https://s3.amazonaws.com/my-s3-bucket/image.part.05 to bundled/image.part.05

Downloaded image.part.05 from https://s3.amazonaws.com/my-s3-bucket.

downloading part https://s3.amazonaws.com/my-s3-bucket/image.part.06 to bundled/image.part.06

Downloaded image.part.06 from https://s3.amazonaws.com/my-s3-bucket.

Download Bundle complete.
```

Note

This example uses the Linux and UNIX *mkdir* command.
Related Topics

- ec2-bundle-image
- ec2-bundle-vol
- ec2-unbundle
- ec2-upload-bundle
- ec2-delete-bundle
ec2-migrate-bundle
Description

Copy a bundled AMI from one region to another. For information on regions, go to the

Amazon Elastic Compute Cloud User Guide.

Note

After copying a bundled AMI to a new region, make sure to register it as a new AMI.

During migration, Amazon EC2 replaces the kernel and RAM disk in the manifest file with a kernel and RAM disk designed for the destination region. Unless the --no-mapping parameter is given, ec2-migrate-bundle might use the Amazon EC2 DescribeRegions and DescribeImages operations to perform automated mappings.
**Syntax**

```
ec2-migrate-bundle -k private_key -c cert -a access_key_id -s secret_key -
-bucket source_s3_bucket --destination-bucket destination_s3_bucket --
manifest manifest_path --location {US | EU} --ec2cert ec2_cert_path [--
kernel kernel-id] [--ramdisk ramdisk_id] {--no-mapping} --region
mapping_region_name
```
## Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>-k, --privatekey private_key</code></td>
<td>The path to the user's PEM-encoded RSA key file.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Example: <code>-k pk-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem</code></td>
<td></td>
</tr>
<tr>
<td><code>-c, --cert cert</code></td>
<td>The user's PEM encoded RSA public key certificate file.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Example: <code>-c cert-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem</code></td>
<td></td>
</tr>
<tr>
<td><code>-a, --access-key access_key_id</code></td>
<td>The AWS access key ID.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Example: <code>-a AKIADQKE4SARGYLE</code></td>
<td></td>
</tr>
<tr>
<td><code>-s, --secret-key secret_key</code></td>
<td>The AWS secret access key.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Example: <code>-s eW91dHViZS5jb20vd2F0Y2g/dj1SU3NKMTlzeTNKSQ==</code></td>
<td></td>
</tr>
<tr>
<td><code>--bucket source_s3_bucket</code></td>
<td>The source Amazon S3 bucket where the AMI is located, followed by an optional '/'-delimited path prefix.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>--bucket my-us-bucket</code></td>
<td></td>
</tr>
<tr>
<td><code>--destination-bucket destination_s3_bucket</code></td>
<td>The destination Amazon S3 bucket, followed by an optional '/'-delimited path prefix. If the destination bucket does not exist, it is created.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>--destination-bucket my-eu-bucket</code></td>
<td></td>
</tr>
<tr>
<td><code>--manifest manifest</code></td>
<td>The location of the Amazon S3 source manifest.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>--manifest my-ami.manifest.xml</code></td>
<td></td>
</tr>
<tr>
<td>`--location {US</td>
<td>EU}`</td>
<td>The location of the destination Amazon S3 bucket.</td>
</tr>
<tr>
<td></td>
<td>If the bucket exists and the location is specified, the tool exits with an error. If the specified location does not match the actual location. If the bucket exists and no location is specified, the tool uses the bucket's location. If the bucket does not exist and the location is specified, the tool creates the bucket in the specified location. If the bucket does not exist and location is not specified, the tool creates the bucket without a location</td>
<td></td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
<td>Default</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td><strong>--acl acl</strong></td>
<td>The access control list policy of the bundled image.</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Valid Values: `public-read</td>
<td>aws-exec-read`</td>
</tr>
<tr>
<td></td>
<td>Default: <code>aws-exec-read</code></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <strong>--acl public-read</strong></td>
<td></td>
</tr>
<tr>
<td><strong>--retry</strong></td>
<td>Automatically retries on all Amazon S3 errors, up to five times per operation.</td>
<td>None</td>
</tr>
<tr>
<td><strong>--kernel kernel_id</strong></td>
<td>The ID of the kernel to select.</td>
<td>None</td>
</tr>
<tr>
<td><strong>--ramdisk ramdisk_id</strong></td>
<td>The ID of the RAM disk to select.</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Some kernels require additional drivers at launch. Check the kernel requirements for information on whether you need to specify a RAM disk. To find kernel requirements, go to the <a href="#">Resource Center</a> and search for the kernel ID.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <strong>--ramdisk ari-badbad00</strong></td>
<td></td>
</tr>
<tr>
<td><strong>--no-mapping</strong></td>
<td>Disables automatic mapping of kernels and RAM disks.</td>
<td>None</td>
</tr>
<tr>
<td><strong>--region</strong></td>
<td>Region to look up in the mapping file. If no region is specified, Amazon EC2 attempts to determine the region from the location of the Amazon S3 bucket.</td>
<td>None</td>
</tr>
</tbody>
</table>
Output

Status messages describing the stages and status of the bundling process.
Example

This example copies the AMI specified in the `my-ami.manifest.xml` manifest from the US to the EU.

```bash
$ ec2-migrate-bundle --cert cert-THUMBPRINT.pem --privatekey pk-THUMBPRINT.pem --access-key AKIADQKE4SARGYLE --secret-key eW91dHViZS5jb2 ... KMTlzeTNKSQ== --bucket my-us-bucket --destination-bucket my-eu-bucket --manifest my-ami.manifest.xml --location EU

Downloading manifest my-ami.manifest.xml from my-us-bucket to /tmp/ami-migration-my-ami.manifest.xml

Copying 'my-ami.part.00'...
Copying 'my-ami.part.01'...
Copying 'my-ami.part.02'...
Copying 'my-ami.part.03'...
Copying 'my-ami.part.04'...
Copying 'my-ami.part.05'...
Copying 'my-ami.part.06'...
Copying 'my-ami.part.07'...
Copying 'my-ami.part.08'...
Copying 'my-ami.part.09'...
Copying 'my-ami.part.10'...

Your new bundle is in S3 at the following location:
my-eu-bucket/my-ami.manifest.xml
```
Related Topics

- ec2-register
- ec2-run-instances
ec2-migrate-manifest
**Description**

Modify a bundled AMI to work in a new region. For information on regions, go to the

[Amazon Elastic Compute Cloud User Guide](#).

You must use this command if you are bundling in one region for use in another or if you copy a bundled AMI out of band (without using `ec2-migrate-bundle`) and want to use it in a different region.

**Note**

This command replaces the kernel and RAM disk in the manifest file with a kernel and RAM disk designed for the destination region.
Syntax

`ec2-migrate-manifest -k private_key -c cert -a access_key_id -s secret_key --manifest manifest_path --ec2cert ec2_cert_path [--kernel kernel-id] [--ramdisk ramdisk_id] {--no-mapping} --region mapping_region_name`
## Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>-k, --privatekey</td>
<td>The path to the user's PEM-encoded RSA key file.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Example: <code>-k pk-HKZYKTAIG2ECMXYIHB3HXV4ZBQ55CL0.pem</code></td>
<td></td>
</tr>
<tr>
<td>-c, --cert</td>
<td>The user's PEM encoded RSA public key certificate file.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Example: <code>-c cert-HKZYKTAIG2ECMXYIHB3HXV4ZBQ55CL0.pem</code></td>
<td></td>
</tr>
<tr>
<td>-a, --access-key</td>
<td>The AWS access key ID.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Example: <code>-a AKIADQKE4SARGYLE</code></td>
<td></td>
</tr>
<tr>
<td>-s, --secret-key</td>
<td>The AWS secret access key.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Example: <code>-s eW91dHiZ5Sjb2vd2F0Y2g/dj1SU3NKMT1zeTNKSQ==</code></td>
<td></td>
</tr>
<tr>
<td>--manifest</td>
<td>The location of the Amazon S3 source manifest.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>--manifest my-ami.manifest.xml</code></td>
<td></td>
</tr>
<tr>
<td>--kernel</td>
<td>The ID of the kernel to select.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Example: <code>--kernel aki-ba3adfd3</code></td>
<td></td>
</tr>
<tr>
<td>--ramdisk</td>
<td>The ID of the RAM disk to select.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Some kernels require additional drivers at launch. Check the kernel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>requirements for information on whether you need to specify a RAM disk.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To find kernel requirements, go to the <a href="https://aws.amazon.com/">Resource Center</a> and search for the kernel ID.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>--ramdisk ari-badbad00</code></td>
<td></td>
</tr>
<tr>
<td>--mapping-file</td>
<td>Overrides the file containing kernel and RAM disk region mappings.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Example: <code>--mapping-file eu-mappings</code></td>
<td></td>
</tr>
<tr>
<td>--mapping-url</td>
<td>Overrides the file containing kernel and RAM disk region mappings from the</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>specified hostname portion of a URL.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>--mapping-url mysite.com/eu-mappings</code></td>
<td></td>
</tr>
<tr>
<td>--no-mapping</td>
<td>Disables automatic mapping of kernels and RAM disks.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Example: <code>--mapping-file mysite.com/eu-mappings</code></td>
<td></td>
</tr>
<tr>
<td>--region</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Region to look up in the mapping file. If no region is specified, the tool attempts to determine the region from the location of the Amazon S3 bucket.

Example: `--region eu-west-1`
Output

Status messages describing the stages and status of the bundling process.
Example

This example copies the AMI specified in the `my-ami.manifest.xml` manifest from the US to the EU.

```
$ ec2-migrate-manifest --manifest my-ami.manifest.xml --cert cert-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CLO.pem --privatekey pk-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CLO.pem --region eu-west-1

Backing up manifest...
Successfully migrated my-ami.manifest.xml It is now suitable for use in eu-west-1.
```
Related Topics

- ec2-register
- ec2-run-instances
ec2-unbundle
Description

Recreates the AMI from the bundled AMI parts.
Syntax

e2-unbundle -m manifest -k private_key [-d destination_directory] [-s source_directory]
# Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>-m, --manifest manifest</code></td>
<td>The path to the unencrypted AMI manifest file.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Example: <code>-m /var/spool/my-first-bundle/Manifest</code></td>
<td></td>
</tr>
<tr>
<td><code>-k, --privatekey private_key</code></td>
<td>The path to your PEM-encoded RSA key file.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Example: <code>-k $HOME/pk-234242DEADCAFE.pem</code></td>
<td></td>
</tr>
<tr>
<td><code>-d, --destination destination_directory</code></td>
<td>The directory in which to unbundle the AMI. The destination directory must exist.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Default: The current directory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>-d /tmp/my-image</code></td>
<td></td>
</tr>
<tr>
<td><code>-s, --source source_directory</code></td>
<td>The directory containing the bundled AMI parts.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Default: The current directory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>-s /tmp/my-bundled-image</code></td>
<td></td>
</tr>
</tbody>
</table>
### Example

This Linux and UNIX example unbundles the AMI specified in the `fred.manifest.xml` file.

```bash
$ mkdir unbundled
$ ec2-unbundle -m fred.manifest.xml -s bundled -d unbundled
Unbundle complete.
$ ls -l unbundled
total 1025008
  -rw-r----- 1 root root 1048578048 Aug 25 23:46 fred.img
```
Output

Status messages indicating the various stages of the unbundling process are displayed.
Related Topics

- ec2-bundle-image
- ec2-bundle-vol
- ec2-upload-bundle
- ec2-download-bundle
- ec2-delete-bundle
ec2-upload-bundle
Description

Upload a bundled AMI to Amazon S3 storage.
Syntax

```
```
# Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>-b, --bucket s3_bucket</code></td>
<td>The name of the Amazon S3 bucket in which to store the bundle, followed by an optional '/'-delimited path prefix. If the bucket doesn't exist it will be created (if the bucket name is available). Example: <code>-b ec2-cracker-ami</code></td>
<td>Yes</td>
</tr>
<tr>
<td><code>-m, --manifest manifest</code></td>
<td>The path to the manifest file. The manifest file is created during the bundling process and can be found in the directory containing the bundle. Example: <code>-m /var/spool/my-first-bundle/Manifest</code></td>
<td>Yes</td>
</tr>
<tr>
<td><code>-a, --access-key access_key_id</code></td>
<td>Your AWS access key ID. Example: <code>-a AKIADQKE4SARGYLE</code></td>
<td>Yes</td>
</tr>
<tr>
<td><code>-s, --secret-key secret_key</code></td>
<td>Your AWS secret access key. Example: <code>-s eW91dHViZS5jb20vvd2F0Y2g/dj1SU3NKMTlzeTNKSQ==</code></td>
<td>Yes</td>
</tr>
<tr>
<td><code>--acl acl</code></td>
<td>The access control list policy of the bundled image. Valid Values: public-read</td>
<td>No</td>
</tr>
<tr>
<td><code>aws-exec-read</code></td>
<td>Default: <code>aws-exec-read</code></td>
<td></td>
</tr>
<tr>
<td><code>--ec2cert certificate</code></td>
<td>The path to the Amazon EC2 X.509 public key certificate. Default: <code>/etc/ec2/amitools/cert-ec2.pem</code> (varies, depending on tools) Example: <code>--ec2cert /etc/ec2/amitool/cert-ec2.pem</code></td>
<td>No</td>
</tr>
<tr>
<td><code>-d, --directory directory</code></td>
<td>The directory containing the bundled AMI parts. Default: The directory containing the manifest file (see the <code>-m</code> option). Example: <code>-d /var/run/my-bundle</code></td>
<td>No</td>
</tr>
<tr>
<td><code>--part part</code></td>
<td>Starts uploading the specified part and all subsequent parts. Example: <code>--part</code></td>
<td>No</td>
</tr>
<tr>
<td>`--location {US</td>
<td>EU}`</td>
<td>The location of the destination Amazon S3 bucket. If the bucket exists and the location is specified, the tool exits with an error. If the specified location does not match the actual location. If the bucket exists and no location is specified, the tool uses the bucket's</td>
</tr>
</tbody>
</table>
location. If the bucket does not exist and the location is specified, the tool creates the bucket in the specified location. If the bucket does not exist and location is not specified, the tool creates the bucket without a location constraint (in the US).

Default: None
Example: `--location EU`

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Default</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>--url url</code></td>
<td>The S3 service URL.</td>
<td><code>https://s3.amazonaws.com</code></td>
<td><code>--url https://s3.amazonaws.ie</code></td>
</tr>
<tr>
<td><code>--retry</code></td>
<td>Automatically retries on all Amazon S3 errors, up to five times per operation.</td>
<td>No</td>
<td><code>--retry</code></td>
</tr>
<tr>
<td><code>--skipmanifest</code></td>
<td>Does not upload the manifest.</td>
<td>No</td>
<td><code>--skipmanifest</code></td>
</tr>
</tbody>
</table>
Output

Amazon EC2 displays status messages that indicate the stages and status of the upload process.
Example

This example uploads the bundle specified by the bundled/fred.manifest.xml manifest.

```
$ ec2-upload-bundle -b my-s3-bucket -m bundled/fred.manifest.xml -a AKIA
Creating bucket...
Uploading bundled image parts to the S3 bucket my-s3-bucket ...
Uploaded fred.part.00
Uploaded fred.part.01
Uploaded fred.part.02
Uploaded fred.part.03
Uploaded fred.part.04
Uploaded fred.part.05
Uploaded fred.part.06
Uploaded fred.part.07
Uploaded fred.part.08
Uploaded fred.part.09
Uploaded fred.part.10
Uploaded fred.part.11
Uploaded fred.part.12
Uploaded fred.part.13
Uploaded fred.part.14
Uploading manifest ...
Uploaded manifest.
Bundle upload completed.
```
Related Topics

- ec2-bundle-image
- ec2-bundle-vol
- ec2-unbundle
- ec2-download-bundle
- ec2-delete-bundle
API Command Line Tools Reference

Topics

- Common Options for API Tools
- List of Command Line Operations by Function
- ec2-add-group
- ec2-add-keypair
- ec2-allocate-address
- ec2-associate-address
- ec2-attach-volume
- ec2-authorize
- ec2-bundle-instance
- ec2-cancel-bundle-task
- ec2-confirm-product-instance
- ec2-create-snapshot
- ec2-create-volume
- ec2-delete-group
- ec2-delete-keypair
- ec2-delete-snapshot
- ec2-delete-volume
- ec2-deregister
- ec2-describe-addresses
- ec2-describe-availability-zones
- ec2-describe-bundle-tasks
- ec2-describe-group
- ec2-describe-image-attribute
- ec2-describe-images
- ec2-describe-instances
- ec2-describe-keypairs
- ec2-describe-regions
- ec2-describe-reserved-instances
- ec2-describe-reserved-instances-offerings
- ec2-describe-snapshots
- ec2-describe-volumes
- ec2-detach-volume
- ec2-disassociate-address
- ec2-fingerprint-key
• ec2-get-console-output
• ec2-get-password
• ec2-get-password-data
• ec2-migrate-bundle
• ec2-migrate-image
• ec2-modify-image-attribute
• ec2-monitor-instances
• ec2-purchase-reserved-instance-offering
• ec2-reboot-instances
• ec2-register
• ec2-release-address
• ec2-reset-image-attribute
• ec2-revoke
• ec2-run-instances
• ec2-terminate-instances
• ec2-unmonitor-instances
**Common Options for API Tools**

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

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--region region</td>
<td>Overrides the region specified in the EC2_URL environment variable. Default: The EC2_URL environment variable, or us-east-1 if the environment variable is not set. Example: --region eu-west-1</td>
</tr>
<tr>
<td>-U URL</td>
<td>URL is the uniform resource locator of the Amazon EC2 web service entry point. Default: The EC2_URL environment variable, or <a href="https://ec2.amazonaws.com">https://ec2.amazonaws.com</a> if the environment variable is not set. Example: -U <a href="https://ec2.amazonaws.com">https://ec2.amazonaws.com</a></td>
</tr>
<tr>
<td>-K EC2-PRIVATE-KEY</td>
<td>The private key to use when constructing requests to Amazon EC2. Default: The value of the EC2_PRIVATE_KEY environment variable. Example: -K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem</td>
</tr>
<tr>
<td>-C EC2-CERT</td>
<td>The X.509 certificate to use when constructing requests to Amazon EC2. Default: The value of the EC2_CERT environment variable. Example: -C cert-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem</td>
</tr>
<tr>
<td>-v</td>
<td>Displays verbose output by showing the SOAP request and response on the command line. This is particularly useful if you are building tools to talk directly to our SOAP API.</td>
</tr>
<tr>
<td>--show-empty-fields</td>
<td>Shows empty columns as (nil).</td>
</tr>
<tr>
<td>--debug</td>
<td>Prints internal debugging information. This is useful to assist us when troubleshooting problems.</td>
</tr>
<tr>
<td>-?</td>
<td>Displays help.</td>
</tr>
<tr>
<td>-</td>
<td>If - is specified as an argument to one of the parameters, a list of arguments are read from standard input. This is useful for piping the output of one command into the input of another. Example: ec2-describe-instances</td>
</tr>
</tbody>
</table>
List of Command Line Operations by Function

Amazon DevPay

- ec2-confirm-product-instance

AMIs

- ec2-deregister
- ec2-describe-image-attribute
- ec2-describe-images
- ec2-migrate-bundle
- ec2-migrate-image
- ec2-modify-image-attribute

Availability Zones and Regions

- ec2-describe-availability-zones
- ec2-describe-regions

Elastic Block Store

- ec2-attach-volume
- ec2-create-snapshot
- ec2-create-volume
- ec2-delete-snapshot
- ec2-delete-volume
- ec2-describe-snapshots
- ec2-describe-volumes
- ec2-detach-volume

Elastic IP Addresses

- ec2-allocate-address
- ec2-associate-address
- ec2-describe-addresses
- ec2-disassociate-address
- ec2-release-address

General

- ec2-get-console-output

Images

- ec2-register
- ec2-reset-image-attribute

Instances

- ec2-describe-instances
- ec2-reboot-instances
- ec2-run-instances
- ec2-terminate-instances

Key Pairs
• ec2-add-keypair
• ec2-delete-keypair
• ec2-describe-keypairs
• ec2-fingerprint-key

Monitoring
• ec2-monitor-instances
• ec2-unmonitor-instances

Reserved Instances
• ec2-describe-reserved-instances
• ec2-describe-reserved-instances-offerings
• ec2-purchase-reserved-instance-offering

Security Groups
• ec2-add-group
• ec2-authorize
• ec2-delete-group
• ec2-describe-group
• ec2-revoke

Windows
• ec2-bundle-instance
• ec2-cancel-bundle-task
• ec2-describe-bundle-tasks
- `ec2-get-password`
- `ec2-get-password-data`
ec2-add-group
Description

Creates a new security group. Group names must be unique per account.

Every instance is launched in a security group. If no security group is specified during launch, the instances are launched in the default security group. Instances within the same security group have unrestricted network access to each other. Instances will reject network access attempts from other instances in a different security group. As the owner of instances you can grant or revoke specific permissions using the AuthorizeSecurityGroupIngress and RevokeSecurityGroupIngress operations.
Syntax

```bash
ec2-add-group group -d description
```
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>group</td>
<td>Name of the security group.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Constraints: Accepts alphanumeric characters, spaces, dashes, and underscores.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: websrv</td>
<td></td>
</tr>
</tbody>
</table>

- **-d "description**

  Description of the group. This is informational only. If the description contains spaces, you must enclose it in single quotes ('') or URL-encode it.

  Type: String

  Default: None

  Constraints: Accepts alphanumeric characters, spaces, dashes, and underscores.

  Example: -d 'Web servers'
Output

The command returns a table that contains the following information:

- GROUP identifier
- Group name
- Group description

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example creates the `websrv` security group.

```
PROMPT> ec2-add-group websrv -d 'Web Servers'
GROUP websrv Web Servers
```
Related Operations

- ec2-run-instances
- ec2-describe-group
- ec2-authorize
- ec2-revoke
- ec2-delete-group
ec2-add-keypair
Description

Creates a new 2048-bit RSA key pair with the specified name. The public key is stored by Amazon EC2 and the private key is displayed on the console. The private key is returned as an unencrypted PEM encoded PKCS#8 private key. If a key with the specified name already exists, Amazon EC2 returns an error.
Syntax

dc2-add-keypair key
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>key</td>
<td>A unique name for the key pair.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Constraints: Accepts alphanumeric characters, spaces, dashes, and underscores.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: mysecretkey</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- KEYPAIR identifier
- Key pair name
- Private key fingerprint
- Private key. This value is displayed on a new line

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example creates a key pair named gsg-keypair.

PROMPT> ec2-add-keypair gsg-keypair
KEYPAIR gsg-keypair

-----BEGIN RSA PRIVATE KEY-----
MIIEoQIBAAKCAQBuFg5ujHrtm1jnutSu08Xe56LjTHM88v/xkaa39EstM3/aFxThgElQuiLChp
HungXQZg9TVc8rc1bw0kJid320H5eqjMgMHyvwEwqaoHwASUM114o3o/IX+0f2ucPkoCovUr+jx7Ig
5AU52EqfanIn3ZQ8IF7Edp5a3q4dhj6luKTOhvBicLSE+g4zSF95wIyywZfEw/UF3LpGZyq/
3b1JICj2TBhkLBC2757R7N8vpQwp47B6YV3tGB3mTRP5hnbuzzq3itkLhjU39S2sJCX0tJmx
i8BygRs3MhKbj81+ePQxG1kGBf6R4y6g6sEcmXn17MRQVX0DNHZbAgMBAECAgEGAA1tisiUsIwD15
91CxIRkYgu9yfL1xenfIS0mDFM/skmumTqioH07RtrOor1HDRK7wMCy/YY5KxcXno7mvU61PM
ZNUJs7rw9gZTRtf7LyiaJ58kOcyajw8Ts4e4LPbaHwS1d6Kr8h64o6WqW4Rs66ICmri1KQI73
wcfgtSeciu4TzF9E01Hjn+2eR1srjBdeor17KiUNc/pAG2316-mdDOFEQRcCsz1Cj+4/mciUSA
SWs4dMbrpb9FNSIcf9dcLxVM7/6KxgJNzfZcX3waUw77Jg8xqz2d0vlH0ux51ZC+UvSKUWi4dyfc1
tE8C3psbbU9FGy5vLCA1b4qKQueDQ10246xRikswF32YtBMMvToLgCuW9h9H109mKAc2m8Cm1
jeUE5ipzR7tedC9l2qi1MUNtvgnw2auSCzbUeYMURPtdqyQ7p6AJUjup9EPemcSV0KvXYLlPto
xW9MCodtv61PKCN7g0qiZXPrKafBwADPl6p8UAIvSaX5X5jwKBgQCKKpH12E3h1uRkhhlyjvWC
1DCk6JBRsMvPLbc9vSdKwpS5a1QfmdR5PJaV2qvZS5CyNpMAY1/EDNTY5OSIU+6KfmQbyhsm
rdLNLd+4TcnT7Cc2/ah010h1v/CVBcrHtL1BfgDQc7+sAc8vmKkesnF7cCEKdyF/DrxyQdKQ
bc6iZzNaapayz1+JcTVlwEid6j9qNxBc+Z2wmi1+T0Fv/P/hwKx/ype0Xnlucw0Ih/yTGBVAC
DQbs7Lcy1HqxiKyNvXNwGxw0+oiChjxVekSdsT1fFkn4vSCVU9BxDbQHjdiNDj6L6zoar92UN7
vByVchj3F7LyUH4YmVpHAOGAbZ2X7XvoeEO+uz58/BGK0IHGvHyBDiXzKhdJr15HTYjxK70gTz
mgk+8z4p4LniVlgDM80vft3Z2PEWuvI87twCzFH+CswLQADZKMsSasOZ/h1Fw4dMgCMcY+Q1zd4
JZKjtSu317vyxx6RzdSedXEMTNTZWN4qLx3kR5ahucIgQ9A9+Zrvm1F0seQPbLkn7EeqXiiBat
P8TTwW/6bdP12ezxzn7Kdrcf1lYpP1hLMpOA/w/x2ALIF91UB+v50hyoIoDAsL9gij1houRe
2ERKkdzwzL9Sw6Vtdhr/5G994CK72fy5WhyErbDJuiHaK3MB49JJu6cSerVSB4g==
-----END RSA PRIVATE KEY-----
Related Operations

- `ec2-run-instances`
- `ec2-describe-keypairs`
- `ec2-delete-keypair`
ec2-allocate-address
Description

Acquires an elastic IP address for use with your account.
Syntax

c2-allocate-address
Options

This command does not have any options.
Output

The command returns a table that contains the following information:

- Output type identifier ("ADDRESS")
- Elastic IP address for use with your account

Amazon EC2 displays errors on stderr.
Examples

Example Request

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

```plaintext
PROMPT> ec2-allocate-address
ADDRESS 67.202.55.255
```
Related Operations

- ec2-describe-addresses
- ec2-release-address
- ec2-associate-address
- ec2-disassociate-address
ec2-associate-address
Description

 Associates an elastic IP address with an instance. If the IP address is currently assigned to another instance, the IP address is assigned to the new instance. This is an idempotent operation. If you enter it more than once, Amazon EC2 does not return an error.
Syntax

e2-associate-address -i instance_id ip_address
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>ip_address</td>
<td>IP address that you are assigning to the instance.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: 67.202.55.255</td>
<td></td>
</tr>
<tr>
<td>instance_id</td>
<td>The instance to associate with the IP address.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: i-43a4412a</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- Output type identifier ("ADDRESS")
- Elastic IP address that you are assigning to the instance
- Instance to which the IP address is assigned

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example associates an IP address with an instance.

```
PROMPT> ec2-associate-address -i i-43a4412a 67.202.55.255
ADDRESS 67.202.55.255   i-43a4412a
```
Related Operations

- `ec2-allocate-address`
- `ec2-describe-addresses`
- `ec2-release-address`
- `ec2-disassociate-address`
ec2-attach-volume
Description

Attaches an Amazon EBS volume to a running instance and exposes it as the specified device.

Note

Windows instances currently support devices xvda through xvdp. Devices xvda and xvdb are reserved by the operating system, xvdc is assigned to drive C:\, and, depending on the instance type, devices xvdd through xvde might be reserved by the instance stores. Any device that is not reserved can be attached to an Amazon EBS volume. For a list of devices that are reserved by the instance stores, go to the Amazon Elastic Compute Cloud Developer Guide.
Syntax

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
</table>
| `volume_id` | The ID of the Amazon EBS volume. The volume and instance must be within the same Availability Zone and the instance must be running.  
Type: String  
Default: None  
Example: `vol-4d826724` | Yes      |
| `--instance instance_id` | The ID of the instance to which the volume attaches. The volume and instance must be within the same Availability Zone and the instance must be running.  
Type: String  
Default: None  
Example: `i-6058a509` | Yes      |
| `--device device` | Specifies how the device is exposed to the instance (e.g., `/dev/sdh`).  
Type: String  
Default: None  
Example: `/dev/sdf` (Linux and UNIX) or `xvdf` (Windows) | Yes      |
Output

The command returns a table that contains the following information:

- ATTACHMENT identifier
- ID of the volume
- ID of the instance
- The device as it is exposed to the instance
- Attachment state (e.g., attaching, attached, detached, detaching, error)
- Time stamp when attachment initiated

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example attaches volume vol-4d826724 to instance i-6058a509 and exposes it as /dev/sdh. For information on standard storage locations, go to the Amazon Elastic Compute Cloud Developer Guide.

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

- ec2-create-volume
- ec2-delete-volume
- ec2-describe-volumes
- ec2-detach-volume
ec2-authorize
Description

Adds permissions to a security group.

Permissions are specified by the IP protocol (TCP, UDP or ICMP), the source of the request (by IP range or an Amazon EC2 user-group pair), the source and destination port ranges (for TCP and UDP), and the ICMP codes and types (for ICMP). When authorizing ICMP, -1 can be used as a wildcard in the type and code fields.

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

When authorizing a user/group pair permission, GroupName, SourceSecurityGroupName and SourceSecurityGroupOwnerId must be specified. When authorizing a CIDR IP permission, GroupName, IpProtocol, FromPort, ToPort and CidrIp must be specified. Mixing these two types of parameters is not allowed.
Syntax

```
ec2-authorize group [-P protocol] (-p port_range | -t icmp_type_code) [-u source_group_user ...] [-o source_group ...] [-s source_subnet ...]
```
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>group</td>
<td>Name of the group to modify. The name must be valid and belong to the account</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: websrv</td>
<td></td>
</tr>
<tr>
<td>-P &quot;protocol&quot;</td>
<td>IP protocol.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Valid Values: tcp</td>
<td>udp</td>
</tr>
<tr>
<td></td>
<td>Example: udp</td>
<td></td>
</tr>
<tr>
<td>-u &quot;source_group_user&quot;</td>
<td>AWS User ID of an account.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: 495219933132</td>
<td></td>
</tr>
<tr>
<td>-o &quot;source_group&quot;</td>
<td>Name of the security group.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: headoffice</td>
<td></td>
</tr>
<tr>
<td>-s &quot;source_subnet&quot;</td>
<td>CIDR range.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Constraints: Valid CIDR IP address range.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: 205.192.8.45/24</td>
<td></td>
</tr>
<tr>
<td>-t &quot;icmp_type_code&quot;</td>
<td>For the ICMP protocol, the ICMP type and code must be specified.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>This must be specified in the format type:code where both are</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Integers. Type, code, or both can be specified as -1, which is a wildcard.

**Type:** String

**Default:** None

**Valid Values:** tcp | udp | icmp

**Example:** 2:5

| `-p "port_range` | For the TCP or UDP protocols, this specifies the range of ports to allow.  
| Type: String  
| Default: None  
| Constraints: A single integer or a range (min-max).  
| Example: 80-84 | Yes |
Output

The command returns a table that contains the following information:

- Output type identifier ("GROUP", "PERMISSION")
- Group name. Currently, this will report an empty string
- Type of rule. Currently, only ALLOW rules are supported
- Protocol to allow
- Start of port range
- End of port range
- FROM
- Source

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example grants TCP port 80 access from the 205.192.0.0/16 address range to the websrv security group.

```
PROMPT> ec2-authorize websrv -P tcp -p 80 -s 205.192.0.0/16
GROUP websrv "" PERMISSION websrv ALLOWS tcp 80 80 FROM CIDR 205.192.0.0/16
```
Related Operations

- ec2-add-group
- ec2-describe-group
- ec2-revoke
- ec2-delete-group
ec2-bundle-instance
Description

Bundles the Windows instance. This procedure is not applicable for Linux and UNIX instances. For more information, go to the

Amazon Elastic Compute Cloud Developer Guide or Amazon Elastic Compute Cloud Getting Started Guide.

Note

During bundling, only the root store (C:) is bundled. Data on other instance stores is not preserved.
Syntax

`ec2-bundle-instance instance -b bucket -p prefix -o access-key-id { -c policy | -w secret-access-key } [options]`
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>instance</td>
<td>The ID of the instance to bundle.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: i-5e73d509</td>
<td></td>
</tr>
<tr>
<td>-b &quot;bucket&quot;</td>
<td>The bucket in which to store the AMI. You can specify a bucket that you</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>already own or a new bucket that Amazon EC2 creates on your behalf. If you</td>
<td></td>
</tr>
<tr>
<td></td>
<td>specify a bucket that belongs to someone else, Amazon EC2 returns an error.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: mybucket</td>
<td></td>
</tr>
<tr>
<td>-p &quot;prefix&quot;</td>
<td>Specifies the beginning of the file name of the AMI.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: winami</td>
<td></td>
</tr>
<tr>
<td>-a &quot;access-key-id&quot;</td>
<td>The Access Key ID of the owner of the Amazon S3 bucket.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: 157SZTMZQT516NAZ7CR2</td>
<td></td>
</tr>
<tr>
<td>-c &quot;policy&quot;</td>
<td>An Amazon S3 upload policy that gives Amazon EC2 permission to upload</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>items into Amazon S3 on the user's behalf. For more information on bundling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>in Windows, go to the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: upload-policy</td>
<td></td>
</tr>
<tr>
<td>-v &quot;secret-access-key&quot;</td>
<td>The bucket in which to store the AMI. You can specify a bucket that you</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>already own or a new bucket that Amazon EC2 creates on your behalf. If you</td>
<td></td>
</tr>
<tr>
<td></td>
<td>specify a bucket that belongs to someone else, Amazon EC2 returns an error.</td>
<td></td>
</tr>
<tr>
<td>Type:</td>
<td>String</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Default:</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Example:</td>
<td><code>eW91dHViZS5jb20vd2F0Y2g/dj1SU3NKMTlzeTNKSQ==</code></td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- BUNDLE identifier
- ID of the bundle
- ID of the instance
- Bucket name
- Bundle prefix
- Bundle status
- Bundle start time

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example bundles the i-e468cd8d instance.

| PROMPT > | ec2-bundle-instance | i-12345 -b mybucket -p winami -o AIDADH4IG7 | BUNDLE bun-c1a540a8 i-12345 mybucket winami pending 2008-09-15T17:20+0000 2008-06 |
Related Operations

- `ec2-cancel-bundle-task`
- `ec2-describe-bundle-tasks`
ec2-cancel-bundle-task
Description

Cancels an Amazon EC2 bundling operation. For more information on bundling instances, go to the

Amazon Elastic Compute Cloud Developer Guide or Amazon Elastic Compute Cloud Getting Started Guide.
Syntax

dc2-cancel-bundle-task bundle
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>bundle</td>
<td>The ID of the bundle task to cancel.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: bun-cla432a3</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- BUNDLE identifier
- ID of the bundle
- ID of the instance
- Bucket name
- Cancel status
- Bundle start time
- Error message, if any

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example cancels the bun-cla322b9 bundle task.

PROMPT> ec2-cancel-bundle-task bun-cla322b9
BUNDLE  bun-cla322b9  i-2674d22r  mybucket  winami  canceling  2008-09-15T17:15:20+0000
Related Operations

- `ec2-bundle-instance`
- `ec2-describe-bundle-tasks`
ec2-confirm-product-instance
Description

Verifies whether a Amazon DevPay product code is associated with an instance. This can only be executed by the owner of the AMI and is useful when an AMI owner wants to verify whether a user's instance is eligible for support.
Syntax

e2-confirm-product-instance product_code -i instance_id
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>product_code</td>
<td>The product code to confirm.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: 774F4FF8</td>
<td></td>
</tr>
<tr>
<td>instance_id</td>
<td>The instance to confirm.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: i-10a64379</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

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

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example describes the confirms the product code is associated with the instance.

```
PROMPT> ec2-confirm-product-instance 774F4FF8 -i i-10a64379
774F4FF8i-10a64379 true
```
Related Operations

- `ec2-describe-instances`
- `ec2-run-instances`
ec2-create-snapshot
Description

Creates a snapshot of an Amazon EBS volume and stores it in Amazon S3. You can use snapshots for backups, to make identical copies of instance devices, and to save data before shutting down an instance. For more information about Amazon EBS, go to the

Amazon Elastic Compute Cloud Developer Guide.

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

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

```bash
# umount -d /dev/sdh
```

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

dc2-create-snapshot volume_id
Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>volume_id</td>
<td>The ID of the Amazon EBS volume to take a snapshot of.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: vol-4d826724</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- SNAPSHOT identifier
- ID of the snapshot
- ID of the volume
- Snapshot state (e.g., pending, completed, error)
- Time stamp when snapshot initiated

Amazon EC2 displays errors on stderr.
Examples

Example Request

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

```
PROMPT> ec2-create-snapshot vol-4d826724 --instance i-6058a509 --device
SNAPSHOT snap-78a54011 vol-4d826724 pending 2008-05-07T12:51:50+0000
```
Related Operations

- ec2-delete-snapshot
- ec2-describe-snapshots
ec2-create-volume
Description

Creates a new Amazon EBS volume to which any Amazon EC2 instance can attach within the same Availability Zone. For more information about Amazon EBS, go to the

Amazon Elastic Compute Cloud Developer Guide.

Note
You must specify an Availability Zone when creating a volume. The volume and the instance to which it attaches must be in the same Availability Zone.
Syntax

```
ec2-create-volume [--size size | --snapshot snapshot] --availability-zone zone
```
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>--size &quot;size&quot;</td>
<td>The size of the volume, in GiBs. Required if you are not creating a volume from a snapshot.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Valid Values: 1 - 1024</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: 800</td>
<td></td>
</tr>
<tr>
<td>--snapshot &quot;snapshot&quot;</td>
<td>The snapshot from which to create the new volume.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: snap-78a54011</td>
<td></td>
</tr>
<tr>
<td>--availability-zone &quot;zone&quot;</td>
<td>The Availability Zone in which to create the new volume.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: us-east-1a</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- VOLUME identifier
- ID of the volume
- Size of the volume, in GiBs
- Snapshot from which the volume was created, if applicable
- Availability Zone in which the volume was created
- Volume state (e.g., creating, available, in use, deleting, error)
- Time stamp when volume creation was initiated

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example creates a new 800 GiB volume in Availability Zone us-east-1a.

```
PROMPT> ec2-create-volume --size 800 --availability-zone us-east-1a
VOLUME vol-4d826724 800 us-east-1a creating 2008-05-07T11:51:50+0000
```
Related Operations

- `ec2-delete-volume`
- `ec2-describe-volumes`
- `ec2-attach-volume`
- `ec2-detach-volume`
- `ec2-describe-availability-zones`
ec2-delete-group
Description

Deletes a security group that you own.

**Note**

If you attempt to delete a security group that contains instances, a fault is returned.

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

`ec2-delete-group group`
Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
</table>
| group | Name of the security group to delete.  
| Type: String  
| Default: None  
| Example: websrv | | Yes |
Output

The command returns a table that contains the following information:

- GROUP identifier
- Name of the deleted security group

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example deletes the `websrv` security group.

```
PROMPT> ec2-delete-group websrv
GROUP websrv
```
Related Operations

- `ec2-add-group`
- `ec2-describe-group`
- `ec2-authorize`
- `ec2-revoke`
ec2-delete-keypair
Description

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

```
ec2-delete-keypair key_pair
```
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>key_pair</td>
<td>Name of the key pair to delete.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: primary_keypair</td>
<td></td>
</tr>
</tbody>
</table>

Yes
Output

The command returns a table that contains the following information:

- KEYPAIR identifier
- Name of the deleted key pair
- Private key fingerprint

Amazon EC2 displays errors on stderr.
**Examples**

**Example Request**

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

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

- ec2-add-keypair
- ec2-describe-keypairs
ec2-delete-snapshot
Description

Deletes a snapshot of an Amazon EBS volume that you own. For more information, go to the

Amazon Elastic Compute Cloud Developer Guide.
Syntax

`ec2-delete-snapshot snapshot_id`
# Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>snapshot_id</td>
<td>The ID of the Amazon EBS snapshot to delete.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: snap-78a54011</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- SNAPSHOT identifier
- ID of the snapshot

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example deletes snapshot snap-78a54011.

PROMPT> ec2-delete-snapshot snap-78a54011
SNAPSHOT  snap-78a54011
Related Operations

- `ec2-create-snapshot`
- `ec2-describe-snapshots`
ec2-delete-volume
Description

Deletes an Amazon EBS volume that you own. For more information about Amazon EBS, go to the Amazon Elastic Compute Cloud Developer Guide.

Note
The volume remains in the deleting state for several minutes after you enter this command.
Syntax

dc2-delete-volume volume_id
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>volume_id</td>
<td>The ID of the volume to delete. The volume remains in the &quot;deleting&quot; state for several minutes after entering this command.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: vol-4282672b</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- VOLUME identifier
- ID of the volume you deleted

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example deletes volume vol-4282672b.

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

- ec2-create-volume
- ec2-describe-volumes
- ec2-attach-volume
- ec2-detach-volume
ec2-deregister
Description

Deregisters the specified AMI. Once deregistered, the AMI cannot be used to launch new instances.

Note

This command does not delete the AMI from Amazon S3.
Syntax

`ec2-deregister ami_id`
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
</table>
| ami_id| Unique ID of the AMI which was assigned during registration. To register an AMI, use "RegisterImage". To view the AMI IDs of AMIs that belong to your account, use "DescribeImages". Type: String  
Default: None  
Example: ami-4fa54026 | Yes      |
Output

The command returns a table that contains the following information:

- IMAGE identifier
- The ID of the AMI that was deregistered

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example deregisters the ami-4fa54026 AMI.

| PROMPT> ec2-deregister ami-4fa54026 |
| IMAGE ami-4fa54026 |
Related Operations

- `ec2-register`
- `ec2-describe-images`
Description

Lists elastic IP addresses assigned to your account or provides information about a specific address.
Syntax

`ec2-describe-addresses [public_ip ...]`
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>public_ip</td>
<td>Elastic IP address to describe.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: 67.202.55.255</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- Output type identifier ("ADDRESS")
- Elastic IP address assigned to your account
- Instance ID to which the IP address is assigned

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example describes elastic IP addresses assigned to the account. Amazon EC2 returns 67.202.55.255 which is assigned to instance i-f15ebb98 and 67.202.55.233 which is not assigned to an instance.

PROMPT> ec2-describe-addresses
ADDRESS 67.202.55.255  i-f15ebb98
ADDRESS 67.202.55.233
Related Operations

- ec2-allocate-address
- ec2-release-address
ec2-describe-availability-zones
Description

Displays Availability Zones that are currently available to the account and their states.

Note
Availability Zones are not the same across accounts. The Availability Zone us-east-1a for account A is not necessarily the same as us-east-1a for account B. Zone assignments are mapped independently for each account.
Syntax

ec2-describe-availability-zones [zone_name...]
Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>zone-name</td>
<td>Availability Zone name.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: us-east-1a</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- AVAILABILITYZONE identifier
- Availability Zone name
- State

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example displays information about Availability Zones that are available to the account.

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

- ec2-run-instances
- ec2-describe-regions
ec2-describe-bundle-tasks
Description

Describes current bundling tasks. For more information on bundling instances, go to the

Amazon Elastic Compute Cloud Developer Guide or Amazon Elastic Compute Cloud Getting Started Guide.
Syntax

d2-describe-bundle-tasks [bundle...]
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>bundle</td>
<td>The ID of the bundle task to describe.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: If no ID is specified, all bundle tasks are described.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: bun-cla432a3</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- BUNDLE identifier
- ID of the bundle
- ID of the instance
- Bucket name
- Bundle status
- Bundle start time
- Error message, if any

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example describes the status of the bun-57a5403e bundle task.

```bash
PROMPT> ec2-describe-bundle-tasks bun-c1a540a8
BUNDLE  bun-c1a540a8  i-2674d22r  mybucket  winami  pending  2008-09-15T17:15:20+0000  200
```
Related Operations

- ec2-bundle-instance
- ec2-cancel-bundle-task
ec2-describe-group
Description

Returns information about security groups that you own.
Syntax

ec2-describe-group [group ...]
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>group</td>
<td>Name of the security group.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: Describes all groups within the account.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: websrv</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- Output type identifier ("GROUP", "PERMISSION")
- User ID of security group owner
- Security group name
- Description of the security group
- Firewall rule

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example returns information about two security groups that are configured for the account.

```
PROMPT> ec2-describe-group
GROUP AIDADH4IGTRXXKCD WebServers Web Servers
GROUP AIDADH4IGTRXXKCD RangedPortsBySource Group A
```
Related Operations

- ec2-add-group
- ec2-authorize
- ec2-revoke
- ec2-delete-group
ec2-describe-image-attribute
**Description**

Returns information about an attribute of an AMI. Only one attribute can be specified per call.
Syntax

ec2-describe-image-attribute *ami_id* {--l|--p|--B|--kernel|--ramdisk}
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ami_id</code></td>
<td>The ID of the AMI for which an attribute will be described.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: ami-4fa54026</td>
<td></td>
</tr>
<tr>
<td>`-l&quot; &quot;--launch-permission&quot;&quot;</td>
<td>Describes the launch permissions of the AMI.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: -l</td>
<td></td>
</tr>
<tr>
<td>`-p&quot; &quot;--product-code&quot;&quot;</td>
<td>Describes the product code associated with the AMI.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: -p</td>
<td></td>
</tr>
<tr>
<td>`--kernel&quot;&quot;</td>
<td>Describes the ID of the kernel associated with the AMI.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>--kernel</code></td>
<td></td>
</tr>
<tr>
<td>`--ramdisk&quot;&quot;</td>
<td>Describes the ID of the RAM disk associated with the AMI.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>--ramdisk</code></td>
<td></td>
</tr>
<tr>
<td>`-B&quot; &quot;--block-device-mapping&quot;&quot;</td>
<td>Describes the mapping that defines native device names to use when exposing virtual devices.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td>--platform</td>
<td>Describes the operating system platform.</td>
<td>Type: String</td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- Attribute type identifier
- ID of the AMI
- Attribute value type or attribute list item value type
- Attribute or attribute list item value

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example lists the launch permissions for the ami-61a54008 AMI.

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

Example Request

This example lists the product code for the ami-2bb65342 AMI.

```shell
PROMPT> ec2-describe-image-attribute ami-2bb65342 -p
productCodes ami-2bb65342 productCode 774F4FF8
```
Related Operations

- ec2-describe-images
- ec2-modify-image-attribute
- ec2-reset-image-attribute
ec2-describe-images
Description

Returns information about AMIs, AKIs, and ARIs. This includes image type, product codes, architecture, and kernel and RAM disk IDs. Images available to you include public images, private images that you own, and private images owned by other users for which you have explicit launch permissions.

Launch permissions fall into three categories:

<table>
<thead>
<tr>
<th>Launch Permission</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>public</td>
<td>The owner of the AMI granted launch permissions for the AMI to the all group. All users have launch permissions for these AMIs.</td>
</tr>
<tr>
<td>explicit</td>
<td>The owner of the AMI granted launch permissions to a specific user.</td>
</tr>
<tr>
<td>implicit</td>
<td>A user has implicit launch permissions for all AMIs he or she owns.</td>
</tr>
</tbody>
</table>

The list of AMIs returned can be modified by specifying AMI IDs, AMI owners, or users with launch permissions. If no options are specified, Amazon EC2 returns all AMIs for which the user has launch permissions.

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

If you specify one or more AMI owners, only AMIs from the specified owners and for which you have access are returned. The results can include the account IDs of the specified owners, amazon for AMIs owned by Amazon or self for AMIs that you own.

If you specify a list of executable users, only users that have launch permissions for the AMIs are returned. You can specify account IDs (if you own the AMI(s)), self for AMIs for which you own or have explicit permissions, or all for public AMIs.

Note
Deregistered images are included in the returned results for an unspecified interval after deregistration.
Syntax

c2-describe-images [ami_id ...] [-a] [-o owner ...] [-x user_id]
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>-x &quot;user_id&quot;</td>
<td>Returns AMIs for which the specified user has explicit launch permissions. The user ID can be a user's account ID, &quot;self&quot; to return AMIs for which the sender of the request has explicit launch permissions, or &quot;all&quot; to return AMIs with public launch permissions.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: -x self</td>
<td></td>
</tr>
<tr>
<td>ami_id</td>
<td>AMI IDs to describe.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: Returns all AMIs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: ami-78a54011</td>
<td></td>
</tr>
<tr>
<td>-a</td>
<td>Describes all AMIs.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: -a</td>
<td></td>
</tr>
<tr>
<td>-o &quot;owner&quot;</td>
<td>Returns AMIs owned by the specified owner. Multiple owners can be specified. The IDs &quot;amazon&quot;, &quot;self&quot;, and &quot;explicit&quot; can be used to include AMIs owned by Amazon, AMIs owned by the user, and AMIs for which the user has explicit launch permissions, respectively.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: -o 157SZTMZQT516NAZ7CR2</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- IMAGE identifier
- Image identifier
- Manifest location
- User identifier of the user that registered the image
- Image status
- Image visibility (public or private)
- Product codes, if any, that are attached to the instance
- Image architecture (i386 or x86_64)
- Image type (machine, kernel, or ramdisk)
- ID of the kernel associated with the image (machine images only)
- ID of the RAM disk associated with the image (machine images only)

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example describes the ami-be3adfd7 AMI.

PROMPT> ec2-describe-images ami-be3adfd7
IMAGE ami-78a54011 powerdns/image.manifest.xml AIDADH4IGTRXXKCD available private 774F4FF8
Related Operations

- ec2-describe-instances
- ec2-describe-image-attribute
ec2-describe-instances
**Description**

Returns information about instances that you own.

If you specify one or more instance IDs, Amazon EC2 returns information for those instances. If you do not specify instance IDs, Amazon EC2 returns information for all relevant instances. If you specify an invalid instance ID, a fault is returned. If you specify an instance that you do not own, it will not be included in the returned results.

Recently terminated instances might appear in the returned results. This interval is usually less than one hour.
Syntax

e2-describe-instances [instance_id|availability_zone ...]
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>instance_id</td>
<td>Instance IDs to describe.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: Returns all instances.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: r-15a4417c</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- Output type identifier ("RESERVATION", "INSTANCE")
- Instance ID for each running instance
- AMI ID of the image on which the instance is based
- Public DNS name associated with the instance. This is only present for instances in the running state
- Private DNS name associated with the instance. This is only present for instances in the running state
- Instance state
- Key name. If a key was associated with the instance at launch, its name will appear
- AMI launch index
- Product codes attached to the instance
- Instance type. The type of the instance
- Instance launch time. The time the instance launched
- Availability Zone. The Availability Zone in which the instance is located
- Monitoring state

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example describes the current state of the instances owned by this user.

```plaintext
PROMPT> ec2-describe-instances
RESERVATION r-15a4417c AIDADH4IGTRXXKCD INSTANCE i-3ea74257 ami-6ba54002 ec2-72-44-33-4.compute-1.amazonaws.com 10- ... running 1 m1.small 2007-07-11T16:40:44+0000 aki-ba3adfd3 ari-badbad00 us-east-1a monitoring-enabled
RESERVATION r-1c65b675 262355691199 default INSTANCE i-e5b3108c ...
```
Related Operations

- ec2-run-instances
- ec2-terminate-instances
ec2-describe-keypairs
Description

Returns information about key pairs available to you. If you specify key pairs, information about those key pairs is returned. Otherwise, information for all registered key pairs is returned.
Syntax

```bash
ec2-describe-keypairs [key_id ...]
```
Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>key_id</td>
<td>Key pair to describe.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: Describes all key pairs available to the account.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: gsg-keypair</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- KEYPAIR identifier
- Key pair identifier
- Private key fingerprint

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example describes the state of the gsg-keypair key.

PROMPT> `ec2-describe-keypairs gsg-keypair`
Related Operations

- `ec2-describe-availability-zones`
- `ec2-run-instances`
ec2-describe-regions
Description

Describes regions that are currently available to the account.
Syntax

e2-describe-regions [region...]
# Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
</table>
| **region** | Name of a region.  
Type: String  
Default: Describes all regions available to the account.  
Example: eu-west-1 | No       |
Output

The command returns a table that contains the following information:

- REGION identifier
- Region name
- Service endpoint to which you make requests

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example displays regions that are available to the account.

PROMPT> ec2-describe-regions
REGION  us-east-1  us-east-1.ec2.amazonaws.com
REGION  eu-west-1  eu-west-1.ec2.amazonaws.com
Related Operations

- ec2-describe-availability-zones
- ec2-run-instances
ec2-describe-reserved-instances
Description

Describes Reserved Instances that you purchased. For more information about Reserved Instances, go to the

Amazon Elastic Compute Cloud Developer Guide.
Syntax

ec2-describe-reserved-instances [reservation_id ...]
Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>reservation_id</td>
<td>IDs of the Reserved Instance to describe.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: 4b2293b4-5813-4cc8-9ce3-1957fc1dcfc8</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- RESERVEDINSTANCES identifier
- ID of the Reserved Instance
- The instance type
- The Availability Zone in which the Reserved Instance can be used
- The duration of the Reserved Instance
- The usage price of the Reserved Instance, per hour
- The purchase price of the Reserved Instance
- The number of Reserved Instance purchased
- The Reserved Instance description
- The state of the Reserved Instance purchase (pending-payment, active, payment-failed)

Amazon EC2 displays errors on stderr.
# Examples

## Example Request

This example describes Reserved Instances owned by the account.

```bash
PROMPT> ec2-describe-reserved-instances
RESERVEDINSTANCE 1ba8e2e3-2538-4a35-b749-1f4442d50744 us-east-1a m1.small 1y 0.00 0.00 19
af9f760e-c1c1-449b-8128-1342d3a6927d us-east-1a m1.xlarge 1y 0.00 0.00 3 2009-01-20T00:00:00
```
Related Operations

- ec2-purchase-reserved-instance-offering
- ec2-describe-reserved-instances-offerings
ec2-describe-reserved-instances-offerings
Description

Describles Reserved Instance offerings that are available for purchase. With Amazon EC2 Reserved Instances, you purchase the right to launch Amazon EC2 instances for a period of time (without getting insufficient capacity errors) and pay a lower usage rate for the actual time used. For more information about Reserved Instances, go to the

Amazon Elastic Compute Cloud Developer Guide.
Syntax

`ec2-describe-reserved-instances-offerings [offering_id ...] [--type instance_type ...] [--availability-zone zone ...] [--description description ...]`
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>--type &quot;instance_type</code></td>
<td>The instance type on which the Reserved Instance can be used.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: m1.small</td>
<td></td>
</tr>
<tr>
<td><code>--availability-zone &quot;zone</code></td>
<td>The Availability Zone in which the Reserved Instance can be used.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: us-east-1a</td>
<td></td>
</tr>
<tr>
<td><code>--description &quot;description</code></td>
<td>The Reserved Instance description.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: m1.small offering in us-east-1a</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- OFFERING identifier
- ID of the offer
- The instance type
- The Availability Zone in which the Reserved Instance can be used
- The duration of the Reserved Instance
- The purchase price of the Reserved Instance
- The usage price of the Reserved Instance, per hour
- The Reserved Instance description

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example describes available Reserved Instance offerings.

```
PROMPT> ec2-describe-reserved-instances-offerings
OFFERING 4b2293b4-5813-4cc8-9ce3-1957fc1dcfc8 m1.small us-east-1a 1y 0.00 0.00 Linux/UNIX
```
Related Operations

- `ec2-purchase-reserved-instance-offering`
- `ec2-describe-reserved-instances`
ec2-describe-snapshots
Description

Describes the status of Amazon EBS snapshots. If no snapshots are specified, Amazon EBS returns information about all snapshots owned by the account. For more information about Amazon EBS, go to the

Amazon Elastic Compute Cloud Developer Guide.
Syntax

ec2-describe-snapshots [snapshot_id ...]
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>snapshot_id</td>
<td>The ID of the Amazon EBS snapshot.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: Describes all snapshots that you own.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: snap-78a54011</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- SNAPSHOT identifier
- ID of the snapshot
- ID of the volume
- Snapshot state (e.g., pending, completed, error)
- Time stamp when snapshot initiated
- Percentage of completion

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example describes snapshot snap-78a54011.

```bash
PROMPT> ec2-describe-snapshots snap-78a54011
SNAPSHOT snap-78a54011 vol-4d826724 pending 2008-02-15T09:53:58+0000 60%
```
Related Operations

- [ec2-create-snapshot](#)
- [ec2-delete-snapshot](#)
ec2-describe-volumes
**Description**

Describes the specified Amazon EBS volumes that you own. If you do not specify one or more volume IDs, Amazon EBS describes all volumes that you own. For more information about Amazon EBS, go to the

Syntax

dc2-describe-volumes [volume_id ...]
# Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>volume_id</code></td>
<td>The ID of the volume to list.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: Describes all volumes that you own.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <code>vol-4282672b</code></td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- VOLUME identifier
- ID of the volume
- Size of the volume, in GiBs
- Snapshot from which the volume was created, if applicable
- Availability Zone in which the volume launched
- Volume state (e.g., creating, available, in-use, deleting, error)
- Time stamp when volume creation initiated

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example describes all volumes associated with your account.

```
PROMPT> ec2-describe-volumes
VOLUME vol-4d826724 800 us-east-1a in-use 2008-02-14T00:00:00+0000
ATTACHMENT vol-4d826724 i-6058a509 /dev/sdh attached 2008-02-14T00:17+0000
VOLUME vol-50957039 13 us-east-1a available 2008-02-09T00:00:00+0000
VOLUME vol-6682670f 1 us-east-1a in-use 2008-02-11T12:00:00+0000
ATTACHMENT vol-6682670f i-69a54000 /dev/sdh attached 2008-02-11T13:56:00+0000
```
Related Operations

- ec2-create-snapshot
- ec2-delete-snapshot
ec2-detach-volume
**Description**

Detaches an Amazon EBS volume from an instance. For more information about Amazon EBS, go to the Amazon Elastic Compute Cloud Developer Guide.

**Important**

Make sure to unmount any file systems on the device within your operating system before detaching the volume. Failure to unmount file systems, or otherwise properly release the device from use, can result in lost data and will corrupt the file system.
Syntax

```
ec2-detach-volume volume_id [--instance instance_id [--device device]] [--force]
```
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>volume_id</td>
<td>The ID of the volume.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: vol-4282672b</td>
<td></td>
</tr>
<tr>
<td>--instance</td>
<td>The ID of the instance.</td>
<td>No</td>
</tr>
<tr>
<td>--device</td>
<td>The device name.</td>
<td>No</td>
</tr>
<tr>
<td>--force</td>
<td>Forces detachment if the previous detachment attempt did not occur cleanly</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>(logging into an instance, unmounting the volume, and detaching normally).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This option can lead to data loss or a corrupted file system. Use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>this option only as a last resort to detach a volume from a failed instance.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The instance will not have an opportunity to flush file system caches nor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>file system meta data.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If you use this option, you must perform file system check and repair</td>
<td></td>
</tr>
<tr>
<td></td>
<td>procedures.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type: Boolean</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: None</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- ATTACHMENT identifier
- ID of the volume
- ID of the instance
- Device as which the volume is exposed within the instance
- Attachment state (e.g., detaching)
- Time stamp when detaching was initiated

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example detaches volume vol-4d826724.

PROMPT> ec2_detach_volume vol-4d826724
ATTACHMENT vol-4d826724 i-6058a509 /dev/sdh detaching 2008-02-14T00:00:17+0000
Related Operations

- ec2-create-volume
- ec2-delete-volume
- ec2-describe-volumes
- ec2-attach-volume
ec2-disassociate-address
**Description**

Disassociates the specified elastic IP address from the instance to which it is assigned. This is an idempotent operation. If you enter it more than once, Amazon EC2 does not return an error.
Syntax

ec2-disassociate-address ip_address
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>ip_address</td>
<td>IP address that you are disassociating from the instance.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: 67.202.55.255</td>
<td></td>
</tr>
</tbody>
</table>
**Output**

The command returns a table that contains the following information:

- Output type identifier ("ADDRESS")
- Elastic IP address you are disassociating from the instance

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example disassociates the 67.202.55.255 IP address from the instance to which it is assigned.

```
PROMPT> ec2-disassociate-address 67.202.55.255
ADDRESS 67.202.55.255
```
Related Operations

- ec2-allocate-address
- ec2-describe-addresses
- ec2-release-address
- ec2-associate-address
ec2-fingerprint-key
Description

Retrieves console output for the specified instance.

Instance console output is buffered and posted shortly after instance boot, reboot, and termination. Amazon EC2 preserves the most recent 64 KB output which will be available for at least one hour after the most recent post.
Syntax

ec2-fingerprint-key keyfile
Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>keyfile</td>
<td>The path to a file containing an unencrypted PEM-encoded PKCS#8 private key. Type: String Default: None Example: mykey.pem</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- A key fingerprint. This is formatted as a hash digest with each octet separated by a colon

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example computes and displays the fingerprint for the mykey.pem private key.

```
PROMPT> ec2-fingerprint-key mykey.pem
```
Related Operations

- ec2-describe-keypairs
ec2-get-console-output
Description

Retrieves console output for the specified instance.

Instance console output is buffered and posted shortly after instance boot, reboot, and termination. Amazon EC2 preserves the most recent 64 KB output which will be available for at least one hour after the most recent post.
Syntax

c2-get-console-output instance_id [-r]
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>instance_id</code></td>
<td>ID of the instance for which you want console output.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: i-10a64379</td>
<td></td>
</tr>
<tr>
<td><code>-r</code></td>
<td>Raw output. Do not escape the output to facilitate reading.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: -r</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- A timestamp indicating the time of the last update
- The instance console output. By default the ^ESC character is escaped and duplicate new-lines are removed to facilitate reading

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example retrieves the console output for the i-10a64379 Linux and UNIX instance.

```
PROMPT> ec2-get-console-output i-10a64379
2007-01-03 12:00:00
Linux version 2.6.16-xenU (builder@patchbat.amazonsa) (gcc version 4.0.1 20050727 (Red Hat)
BIOS-provided physical RAM map:
Xen: 0000000000000000 - 000000006a400000 (usable)
980MB HIGHMEM available.
727MB LOWMEM available.
NX (Execute Disable) protection: active
IRQ lockup detection disabled
Built 1 zonelists
Kernel command line: root=/dev/sda1 ro 4
Enabling fast FPU save and restore... done.

ec2: -----BEGIN SSH HOST KEY FINGERPRINTS-----
ec2: 2048 fc:8d:0c:eb:0e:a6:4a:61:50:00:c4:d2:51:78:66 /etc/ssh/ssh_host_rsa_key.pub
ec2: -----END SSH HOST KEY FINGERPRINTS-----

Fedora release 8 (Werewolf)
Kernel 2.6.21.7-2.fc8xen on an i686
```
Related Operations

- ec2-run-instances
Description

Retrieves and decrypts the administrator password for the instances running Windows.

You must specify the key pair used to launch the instance.

Note

The Windows password is only generated the first time an AMI is launched. It is not generated for rebundled AMIs or after the password is changed on an instance.

The password is encrypted using the key pair that you provided.

There is no SOAP or Query version of the `ec2-get-password` command.
Syntax

`ec2-get-password instanceId -k windows_keypair`
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>instance_id</em></td>
<td>An instance ID returned from a previous call to</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: i-9b76d0f3</td>
<td></td>
</tr>
<tr>
<td><em>windows_keypair</em></td>
<td>The file that contains the private key used to launch the instance.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: MyWindowsKeypair</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- The Windows administrator password

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example returns the administrator password for the i-2574e22a instance.

```
PROMPT> ec2-get-password i-2574e22a -k windows-keypair
g96A40B9w
```
Related Operations

- \texttt{ec2-run-instances}
- \texttt{ec2-describe-instances}
ec2-get-password-data
Description

Retrieves the encrypted administrator password for the instances running Windows.

Note

The Windows password is only generated the first time an AMI is launched. It is not generated for rebundled AMIs or after the password is changed on an instance.

The password is encrypted using the key pair that you provided.
Syntax

e2-get-password-data instance_id [-r]
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
</table>
| instance_id | The ID of the instance for which to get the password.  
Type: String  
Default: None  
Example: i-10a64379 | Yes      |
Output

The command returns a table that contains the following information:

- The password data.

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example returns the encrypted version of the administrator password for the i-2574e22a instance.

```
PROMPT> ec2-get-password-data i-2574e22a
TGludXggdmVyc2lvb1AyLjYuMTYteGVuVSAoYnVpbGR1ckBwYXRjaGJhdC5hbWF6b25zYSkgKGdj
```
Related Operations

- ec2-run-instances
ec2-migrate-bundle
Description

Copy a bundled AMI from one region to another. For information on regions, see ???.

**Note**

After copying a bundled AMI to a new region, make sure to register it as a new AMI.

During migration, Amazon EC2 replaces the kernel and RAM disk in the manifest file with a kernel and RAM disk designed for the destination region. Unless the --no-mapping parameter is given, `ec2-migrate-bundle` might use the Amazon EC2 DescribeRegions and DescribeImages operations to perform automated mappings.

This tool is being deprecated and replaced by `ec2-migrate-image`. 
Syntax

```
ec2-migrate-bundle -K private_key -k private_key -c cert -a access_key_id -s secret_key --bucket source_s3_bucket --destination-bucket destination_s3_bucket --manifest manifest_path --location {US | EU} --
```

```
ec2cert ec2_cert_path [--kernel kernel-id] [--ramdisk ramdisk_id] {--no-mapping} --region mapping_region_name
```
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>-K, --private-key</td>
<td>The path your PEM-encoded RSA key file.</td>
<td>No</td>
</tr>
<tr>
<td>&quot;private_key&quot;</td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: Uses EC2_PRIVATE_KEY environment variable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: None</td>
<td></td>
</tr>
<tr>
<td>-c, --cert &quot;cert&quot;</td>
<td>The user's PEM encoded RSA public key certificate file.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: Uses EC2_CERT environment variable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: cert-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CLO.pem</td>
<td></td>
</tr>
<tr>
<td>-U, --url &quot;url&quot;</td>
<td>Specifies the URL to use as the web service URL.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: <a href="https://ec2.amazonaws.com">https://ec2.amazonaws.com</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: <a href="https://ec2.amazonaws.com">https://ec2.amazonaws.com</a></td>
<td></td>
</tr>
<tr>
<td>-o, --owner-akid</td>
<td>Access key ID of the bucket owner.</td>
<td>Yes</td>
</tr>
<tr>
<td>&quot;access_key_id&quot;</td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: 157SZTMZQT516NAZ7CR2</td>
<td></td>
</tr>
<tr>
<td>-w, --owner-sak</td>
<td>Secret access key of the bucket owner.</td>
<td>Yes</td>
</tr>
<tr>
<td>&quot;secret_access_key&quot;</td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: eW91dHVizS5jb20vd2F0Y2g/dj1SU3NKMTIzeTNKSQ==</td>
<td></td>
</tr>
<tr>
<td>--bucket &quot;source_s3_bucket&quot;</td>
<td>The source Amazon S3 bucket where the AMI is located, followed by an optional '/'-delimited path prefix.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>--destination-bucket</td>
<td>The destination Amazon S3 bucket, followed by an optional '/'-delimited path prefix. If the destination bucket does not exist, it is created.</td>
<td>None</td>
</tr>
<tr>
<td>destination_s3_bucket</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--manifest manifest</td>
<td>The location of the Amazon S3 source manifest.</td>
<td>None</td>
</tr>
<tr>
<td>--location {US</td>
<td>EU}</td>
<td>The location of the destination Amazon S3 bucket.</td>
</tr>
<tr>
<td>--acl &quot;acl&quot;</td>
<td>The access control list policy of the bundled image.</td>
<td>None</td>
</tr>
<tr>
<td>--kernel&quot;&quot;</td>
<td>The ID of the kernel to select.</td>
<td>None</td>
</tr>
<tr>
<td>--ramdisk&quot;&quot;</td>
<td>The ID of the RAM disk to select. Some kernels require additional drivers at launch. Check the kernel requirements for information on whether you need to specify a RAM disk. To find kernel requirements, go to the</td>
<td>None</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
<td>Example</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>--no-mapping</strong></td>
<td>Disables automatic mapping of kernels and RAM disks.</td>
<td>No</td>
</tr>
<tr>
<td>Type: String</td>
<td>Default: Mapping is enabled.</td>
<td></td>
</tr>
<tr>
<td>Example: my-ami.manifest.xml</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>--region region</strong></td>
<td>Region to look up in the mapping file.</td>
<td>No</td>
</tr>
<tr>
<td>Type: String</td>
<td>Default: Amazon EC2 attempts to determine the region from the location of the Amazon S3 bucket.</td>
<td></td>
</tr>
<tr>
<td>Example: eu-west-1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- Status messages describing the stages and status of the migration

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example copies the AMI specified in the `my-ami.manifest.xml` manifest from the US to the EU.

PROMPT> `ec2-migrate-bundle --cert cert-THUMBPRINT.pem --privatekey pk-THUMBPRINT.pem --access-key AKIADQKE4SARGYLE --secret-key eW91dHViZS5jb20vZmFsc2UsY29tLmNvbTA== --bucket my-us-bucket --destination-bucket my-eu-bucket --manifest my-ami.manifest.xml --location EU`

Copying 'my-ami.part.00'...
Copying 'my-ami.part.01'...
Copying 'my-ami.part.02'...
Copying 'my-ami.part.03'...
Copying 'my-ami.part.04'...
Copying 'my-ami.part.05'...
Copying 'my-ami.part.06'...
Copying 'my-ami.part.07'...
Copying 'my-ami.part.08'...
Copying 'my-ami.part.09'...
Copying 'my-ami.part.10'...
Your new bundle is in S3 at the following location:
my-eu-bucket/my-ami.manifest.xml
Related Operations

- ec2-register
- ec2-run-instances
- ec2-migrate-image
ec2-migrate-image
Description

Copies a bundled AMI from one region to another. For information on regions, see

???.

This tool replaces ec2-migrate-bundle.
Syntax

```
ec2-migrate-image -K private_key -C cert -U url -o access_key_id -w secret_access_key --bucket source_s3_bucket --destination-bucket destination_s3_bucket --manifest manifest_path --location {US | EU} --ec2cert ec2_cert_path [--kernel kernel-id] [--ramdisk ramdisk_id] {--no-mapping} --region mapping_region_name
```
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
</table>
| -K, --private-key "private_key" | The path to your PEM-encoded RSA key file.  
  Type: String  
  Default: Uses EC2_PRIVATE_KEY environment variable  
  Example: None | No |
| -C, --cert "cert" | The user's PEM encoded RSA public key certificate file.  
  Type: String  
  Default: Uses EC2_CERT environment variable  
  Example: cert-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CLO.pem | No |
| -U, --url "url" | Specifies the URL to use as the web service URL.  
  Type: String  
  Default: https://ec2.amazonaws.com  
  Example: https://ec2.amazonaws.com | No |
| -o, --owner-akid "access_key_id" | Access key ID of the bucket owner.  
  Type: String  
  Default: None  
  Example: 157SZTMZQT516NAZ7CR2 | Yes |
| -w, --owner-sak "secret_access_key" | Secret access key of the bucket owner.  
  Type: String  
  Default: None  
  Example: eW91dHViziZS5jb20vd2F0Y2g/dj1SU3NKMTlzeTNKSQ== | Yes |
| --bucket source_s3_bucket | The source Amazon S3 bucket where the AMI is located, followed by an optional '/'-delimited path prefix.  
  Type: String | Yes |
<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
<th>Default</th>
<th>Example</th>
<th>Type</th>
<th>Valid Values</th>
<th>Example</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>--destination-bucket</code></td>
<td>The destination Amazon S3 bucket, followed by an optional '/'-delimited path prefix. If the destination bucket does not exist, it is created.</td>
<td>None</td>
<td>my-us-bucket</td>
<td>String</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td><code>destination_s3_bucket</code></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>--manifest</code></td>
<td>The location of the Amazon S3 source manifest.</td>
<td>None</td>
<td>my-ami.manifest.xml</td>
<td>String</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td><code>manifest</code></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>`--location US</td>
<td>EU&quot;`</td>
<td>The location of the destination Amazon S3 bucket.</td>
<td>US</td>
<td>EU</td>
<td>String</td>
<td>US</td>
<td>EU</td>
</tr>
<tr>
<td><code>--acl &quot;acl&quot;</code></td>
<td>The access control list policy of the bundled image.</td>
<td>None</td>
<td>public-read</td>
<td>aws-exec-read</td>
<td>String</td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>--kernel&quot;</code></td>
<td>The ID of the kernel to select.</td>
<td>None</td>
<td>aki-ba3adfd3</td>
<td>String</td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td><code>--ramdisk&quot;</code></td>
<td>The ID of the RAM disk to select. Some kernels require additional drivers at launch. Check the kernel requirements for information on whether you need to specify a RAM disk. To find kernel requirements, go to the</td>
<td>None</td>
<td></td>
<td>String</td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type: String</td>
<td>Default: None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example: ari-badbad00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>--no-mapping</strong></td>
<td>Disables automatic mapping of kernels and RAM disks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type: String</td>
<td>Default: Mapping is enabled.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example: my-ami.manifest.xml</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>--region region</strong></td>
<td>Region to look up in the mapping file.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type: String</td>
<td>Default: Amazon EC2 attempts to determine the region from the location of the Amazon S3 bucket.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Example: eu-west-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- Status messages describing the stages and status of the migration

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example copies the AMI specified in the my-ami.manifest.xml manifest from the US to the EU.

```
PROMPT> ec2-migrate-image --cert cert-THUMBPRINT.pem --privatekey pk-THUM... KMTlzeTNKSQ== --bucket my-us-bucket --destination-bucket my-eu-bucket --manifest my-ami.manifest.xml --location EU

Copying 'my-ami.part.00'...
Copying 'my-ami.part.01'...
Copying 'my-ami.part.02'...
Copying 'my-ami.part.03'...
Copying 'my-ami.part.04'...
Copying 'my-ami.part.05'...
Copying 'my-ami.part.06'...
Copying 'my-ami.part.07'...
Copying 'my-ami.part.08'...
Copying 'my-ami.part.09'...
Copying 'my-ami.part.10'...
Your new bundle is in S3 at the following location:
my-eu-bucket/my-ami.manifest.xml
```
Related Operations

- `ec2-register`
- `ec2-run-instances`
ec2-modify-image-attribute
Description

Modifies an attribute of an AMI.
Syntax

`ec2-modify-image-attribute ami_id { -l (-a entity | -r entity) | --product-code code }`
### Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>ami_id</td>
<td>The AMI ID.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: ami-2bb65342</td>
<td></td>
</tr>
</tbody>
</table>

Yes
Output

The command returns a table that contains the following information:

- Attribute type identifier
- ID of the AMI on which attributes are being modified
- Action performed on the attribute
- Attribute or attribute list item value type
- Attribute or attribute list item value

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example makes this a public AMI and grants specific permissions to a user.

```
PROMPT> ec2-modify-image-attribute ami-2bb65342 -l -a AIDADH4IGTRXXKCD
launchPermission ami-2bb65342 ADD userId AIDADH4IGTRXXKCD
```

Example Request

The following example adds the 774F4FF8 product code to the ami-2bb65342 AMI:

```
PROMPT> ec2-modify-image-attribute ami-2bb65342 -p 774F4FF8
productCodes ami-2bb65342 productCode 774F4FF8
```
Related Operations

- `ec2-reset-image-attribute`
- `ec2-describe-image-attribute`
ec2-monitor-instances
Description

Enables monitoring for a running instance. For more information, refer to the Amazon CloudWatch Developer Guide.
Syntax

```
ec2-monitor-instances instance_id [instance_id...]
```
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
</table>
| *instance_id* | Instance ID.  
Type: String  
Default: None  
Example: i-43a4412a | Yes      |
Output

The command returns a table that contains the following information:

- Instance ID
- Monitoring state

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example enables monitoring for i-43a4412a and i-23a3397d.

PROMPT> ec2-monitor-instances i-43a4412a i-23a3397d
i-43a4412a monitoring-pending
i-23a3397d monitoring-pending
Related Operations

- ec2-unmonitor-instances
- ec2-run-instances
ec2-purchase-reserved-instance-offering
Description

Purchases a Reserved Instance for use with your account. With Amazon EC2 Reserved Instances, you purchase the right to launch Amazon EC2 instances for a period of time (without getting insufficient capacity errors) and pay a lower usage rate for the actual time used. For more information about Reserved Instances, go to the

Amazon Elastic Compute Cloud Developer Guide.
Syntax

```
ec2-purchase-reserved-instance-offering --offering offering --instance-count count
```
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>offering</td>
<td>The offering ID of the Reserved Instance to purchase.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: 4b2293b4-5813-4cc8-9ce3-1957fc1dcfc8</td>
<td></td>
</tr>
<tr>
<td>count</td>
<td>The number of Reserved Instances to purchase.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: Integer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: 5</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- RESERVEDINSTANCES identifier
- The ID(s) of the purchased Reserved Instances

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example purchases Reserved Instances.

```
PROMPT> ec2-purchase-reserved-instance-offering --offering offering-1234
RESERVEDINSTANCES b847fa93-0c31-405b-b745-b6bf00032333 b847fa93-0c31-405b-b745-b6bf00032334 b847fa93-0c31-405b-b745-b6bf00032335
```
Related Operations

- `ec2-describe-reserved-instances-offerings`
- `ec2-describe-reserved-instances`
ec2-reboot-instances
Description

Requests a reboot of one or more instances. This operation is asynchronous; it only queues a request to reboot the specified instance(s). The operation will succeed if the instances are valid and belong to you. Requests to reboot terminated instances are ignored.

Note

If a Linux/UNIX instance does not cleanly shut down within four minutes, Amazon EC2 will perform a hard reboot.
Syntax

**ec2-reboot-instances** `instance_id` `[instance_id ...]`
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>instance_id</td>
<td>One or more instance IDs. Type: String Default: None Example: i-3ea74257</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- This command displays no output on success

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example reboots an instance.

```
PROMPT> ec2-reboot-instances &InstanceId.1=i-3ea74257
```
Related Operations

- ec2-run-instances
ec2-register
Description

Registers an AMI with Amazon EC2. Images must be registered before they can be launched. To launch instances, use the `RunInstances` operation.

Each AMI is associated with an unique ID which is provided by the Amazon EC2 service through the `RegisterImage` operation. During registration, Amazon EC2 retrieves the specified image manifest from Amazon S3 and verifies that the image is owned by the user registering the image.

The image manifest is retrieved once and stored within the Amazon EC2. Any modifications to an image in Amazon S3 invalidates this registration. If you make changes to an image, deregister the previous image and register the new image. To deregister an image, use the `DeregisterImage` operation.
Syntax

`ec2-register manifest`
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
</table>
| manifest | Full path to your AMI manifest in Amazon S3 storage.  
Type: String  
Default: None  
Example: mybucket/image.manifest.xml | Yes |
Output

The command returns a table that contains the following information:

- IMAGE identifier
- Unique ID of the newly registered machine image

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example registers the AMI specified in the `image.manifest.xml` manifest file.

```
PROMPT> ec2-register mybucket/image.manifest.xml
IMAGE ami-78a54011
```
Related Operations

- ec2-describe-images
- ec2-deregister
ec2-release-address
Description

Releases an elastic IP address associated with your account.

If you run this operation on an elastic IP address that is already released, the address might be assigned to another account which will cause Amazon EC2 to return an error.

**Note**
Releasing an IP address automatically disassociates it from any instance with which it is associated. To disassociate an IP address without releasing it, use the DisassociateAddress operation.

**Important**
After releasing an elastic IP address, it is released to the IP address pool and might no longer be available to your account. Make sure to update your DNS records and any servers or devices that communicate with the address.
Syntax

`ec2-release-address ip_address`
**Options**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>ip_address</td>
<td>The IP address that you are releasing from your account. Type: String Default: None Example: 67.202.55.255</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- Output type identifier ("ADDRESS")
- Elastic IP address that you are releasing

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example releases an elastic IP address associated with the account.

```
PROMPT> ec2-release-address 67.202.55.255
ADDRESS 67.202.55.255
```
Related Operations

- ec2-allocate-address
- ec2-describe-addresses
- ec2-associate-address
- ec2-disassociate-address
Description

Resets an attribute of an AMI to its default value.

Note

The productCodes attribute cannot be reset.
Syntax

ec2-reset-image-attribute ami_id -l
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>ami_id</td>
<td>ID of the AMI on which the attribute will be reset.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: r-15a4417c</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- Attribute type identifier
- ID of the AMI on which the attribute is being reset
- Action identifier ("RESET")

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example resets the launchPermission attribute.

```
PROMPT> ec2-reset-image-attribute ami-6ba54002 -l
launchPermission ami-6ba54002 RESET
```
Related Operations

- ec2-modify-image-attribute
- ec2-describe-image-attribute
ec2-revoke
Description

Revokes permissions from a security group. The permissions used to revoke must be specified using the same values used to grant the permissions.

Permissions are specified by IP protocol (TCP, UDP, or ICMP), the source of the request (by IP range or an Amazon EC2 user-group pair), the source and destination port ranges (for TCP and UDP), and the ICMP codes and types (for ICMP).

Permission changes are quickly propagated to instances within the security group. However, depending on the number of instances in the group, a small delay is might occur.
Syntax

```
ec2-revoke group [-P protocol] (-p port_range | -t icmp_type_code) [-u source_group_user ...] [-o source_group ...] [-s source_subnet ...]
```
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>group</td>
<td>Name of the group to modify.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: websrv</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- Output type identifier ("GROUP", "PERMISSION")
- Group name. Currently, this will report an empty string
- Type of rule. Currently, only ALLOW rules are supported
- Protocol to allow
- Start of port range
- End of port range
- FROM
- Source

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example revokes TCP port 80 access from the 205.192.0.0/16 address range for the websrv security group.

```
PROMPT> ec2-revoke websrv -P tcp -p 80 -s 205.192.0.0/16
GROUP websrv "" PERMISSION websrv ALLOWS tcp 80 80 FROM CIDR 205.192.0.0/16
```
Related Operations

- ec2-add-group
- ec2-describe-group
- ec2-authorize
- ec2-delete-group
ec2-run-instances
Description

Launches a specified number of instances of an AMI for which you have permissions.

If Amazon EC2 cannot launch the minimum number AMIs you request, no instances will be launched. If there is insufficient capacity to launch the maximum number of AMIs you request, Amazon EC2 launches the minimum number specified for each AMI and allocate the remaining available instances using round robin.

In the following example, Libby generates a request to launch two images (database and web_server):

1. Libby runs the RunInstances operation to launch database instances (min. 10, max. 15) and web_server instances (min. 30, max. 40).

   Because there are currently 30 instances available and Libby needs a minimum of 40, no instances are launched.

2. Libby adjusts the number of instances she needs and runs the RunInstances operation to launch database instances (min. 5, max. 10) and web_server instances (min. 20, max. 40).

   Amazon EC2 launches the minimum number of instances for each AMI (5 database, 20 web_server).

   The remaining 5 instances are allocated using round robin.

3. Libby adjusts the number of instances she needs and runs the RunInstances operation again to launch database instances (min. 5, max. 10) and web_server instances (min. 20, max. 40).

   ![Note]
   Every instance is launched in a security group (created using the CreateSecurityGroup operation).

You can provide an optional key pair ID for each image in the launch request.
(created using the `CreateKeyPair` operation). All instances that are created from images that use this key pair will have access to the associated public key at boot. You can use this key to provide secure access to an instance of an image on a per-instance basis. Amazon EC2 public images use this feature to provide secure access without passwords.

⚠️ **Important**

Launching public images without a key pair ID will leave them inaccessible.

The public key material is made available to the instance at boot time by placing it in the `openssh_id.pub` file on a logical device that is exposed to the instance as `/dev/sda2` (the instance store). The format of this file is suitable for use as an entry within `~/.ssh/authorized_keys` (the OpenSSH format). This can be done at boot (e.g., as part of `rc.local`) allowing for secure access without passwords.

Optional user data can be provided in the launch request. All instances that collectively comprise the launch request have access to this data. For more information, go the

Amazon Elastic Compute Cloud Developer Guide.

⚠️ **Note**

If any of the AMIs have a product code attached for which the user has not subscribed, the `RunInstances` call will fail.

⚠️ **Important**

We strongly recommend using the 2.6.18 Xen stock kernel with the c1.medium and c1.xlarge instances. Although the default Amazon EC2 kernels will work, the new kernels provide greater stability and performance for these instance types. For more information about kernels, go the Amazon Elastic Compute Cloud Developer Guide.
Syntax

```
ec2-run-instances ami_id [-n instance_count] [-g group [-g group ...]] [-k keyname] [-d user_data | -f user_data_file] [ --addressing addressing_type] [--type instance_type] [ --availability-zone zone] [ --kernel kernel_id] [ --ramdisk ramdisk_id] [ --block-device-mapping block_device_mapping]
```
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ami_id</code></td>
<td>Unique ID of a machine image, returned by a call to</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: r-15a4417c</td>
<td></td>
</tr>
<tr>
<td><code>-k &quot;keyname</code></td>
<td>The name of the key pair.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: MyKeyPair</td>
<td></td>
</tr>
<tr>
<td><code>group</code></td>
<td>Name of the security group.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: websrv</td>
<td></td>
</tr>
<tr>
<td><code>-f &quot;user-data-file</code></td>
<td>Specifies additional information to make available to the instance(s).</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: MyDataFile.txt</td>
<td></td>
</tr>
<tr>
<td><code>-d &quot;user_data</code></td>
<td>The user data.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: my user data</td>
<td></td>
</tr>
<tr>
<td><code>--type &quot;instance_type&quot;</code></td>
<td>Specifies the instance type.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: m1.small</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Valid Values: m1.small</td>
<td>m1.large</td>
</tr>
<tr>
<td>Option</td>
<td>Description</td>
<td>Example</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td><code>--availability-zone &quot;zone</code></td>
<td>Specifies the placement constraints (Availability Zones) for launching the instances.</td>
<td>Example: m1.large</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: Amazon EC2 selects an Availability Zone.</td>
<td>Example: us-east-1b</td>
</tr>
<tr>
<td><code>kernel</code></td>
<td>The ID of the kernel with which to launch the instance.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td>Example: aki-ba3adfd3</td>
</tr>
<tr>
<td><code>ramdisk</code></td>
<td>The ID of the RAM disk with which to launch the instance. Some kernels require additional drivers at launch. Check the kernel requirements for information on whether you need to specify a RAM disk. To find kernel requirements, go to the Resource Center and search for the kernel ID.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td>Example: ari-badbad00</td>
</tr>
<tr>
<td><code>--block-device-mapping &quot;mapping&quot;</code></td>
<td>The virtual name.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td>Example:</td>
</tr>
<tr>
<td><code>--block-device-mapping &quot;mapping&quot;</code></td>
<td>The device name (e.g., /dev/sdh).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td>Example: /dev/sdh</td>
</tr>
<tr>
<td><code>--monitoring</code></td>
<td>Enables monitoring for the instance.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type: Boolean</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: Disabled</td>
<td>Example: --monitoring</td>
</tr>
</tbody>
</table>
| **-subnet** | Specifies the subnet ID within which to launch the instance(s) for Amazon Virtual Private Cloud.  
| **Type:** String  
| **Default:** None  
| **Example:** MyPrivateSubnet | No |

| **-n instance_count** | The number of instances to launch. If Amazon EC2 cannot launch the specified number of instances, no instances will launch. If this is specified as a range (min-max), Amazon EC2 will try to launch the maximum number, but no fewer than the minimum number.  
| **Type:** String  
| **Default:** None  
| **Constraints:** Between 1 and the maximum number allowed for your account (default: 20).  
| **Example:** 5-10 | Yes |
Output

The command returns a table that contains the following information:

- Output type identifier ("INSTANCE")
- Instance ID which uniquely identifies each running instance
- AMI ID of the image on which the instance(s) are based
- DNS name associated with the instance (only present for instances in the running state)
- Instance state. This is usually pending, which indicates that the instance(s) are preparing to launch
- Key name. If a key was associated with the instance at launch its name is displayed
- AMI launch index
- Instance type. Specifies the instance type (CPU and memory configuration)
- Instance launch time. Specifies when the instance launched
- Availability Zone. Specifies the zone in which the instance launched

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example launches three instances of the ami-60a54009 AMI.

```
PROMPT> ec2-run-instances ami-60a54009 -n 3 --availability-zone us-east-
```

<table>
<thead>
<tr>
<th>RESERVATION</th>
<th>r-237fed4a</th>
<th>853279305796</th>
<th>default</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTANCE</td>
<td>i-d9add0b0</td>
<td>ami-60a54009</td>
<td>pending 0 m1.small 2009-05-14T12:38:24+0000 us-east</td>
</tr>
<tr>
<td>INSTANCE</td>
<td>i-dbadd0b2</td>
<td>ami-60a54009</td>
<td>pending 1 m1.small 2009-05-14T12:38:24+0000 us-east</td>
</tr>
<tr>
<td>INSTANCE</td>
<td>i-ddadd0b4</td>
<td>ami-60a54009</td>
<td>pending 2 m1.small 2009-05-14T12:38:24+0000 us-east</td>
</tr>
</tbody>
</table>
Related Operations

- `ec2-describe-instances`
- `ec2-terminate-instances`
- `ec2-authorize`
- `ec2-revoke`
- `ec2-describe-group`
- `ec2-add-group`
- `ec2-add-keypair`
ec2-terminate-instances
**Description**

Shuts down one or more instances. This operation is idempotent; if you terminate an instance more than once, each call will succeed.

Terminated instances will remain visible after termination (approximately one hour).
Syntax

`ec2-terminate-instances instance_id [instance_id ...]`
Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>instance_id</td>
<td>Instance ID to terminate.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Type: String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Example: i-3ea74257</td>
<td></td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- INSTANCE identifier
- The instance ID of the instance being terminated
- The state of the instance prior to being terminated
- The new state of the instance

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example terminates the i-3ea74257 instance.

PROMPT> ec2-terminate-instances i-3ea74257
INSTANCE i-3ea74257 running shutting-down
Related Operations

- ec2-describe-instances
ec2-unmonitor-instances
**Description**

Disables monitoring for a running instance. For more information, refer to the *Amazon CloudWatch Developer Guide*.
Syntax

```
ec2-unmonitor-instances instance_id [instance_id...]
```
## Options

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>instance_id</code></td>
<td>Instance ID. Type: String Default: None Example: i-43a4412a</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Output

The command returns a table that contains the following information:

- Instance ID
- Monitoring state

Amazon EC2 displays errors on stderr.
Examples

Example Request

This example disables monitoring for i-43a4412a and i-23a3397d.

PROMPT> ec2-unmonitor-instances i-43a4412a i-23a3397d
  i-43a4412a monitoring-disabling
  i-23a3397d monitoring-disabling
Related Operations

- ec2-monitor-instances
- ec2-run-instances
Glossary
Amazon machine image (AMI)

An Amazon Machine Image (AMI) is an encrypted machine image stored in Amazon S3. It contains all the information necessary to boot instances of your software.

Amazon EBS

A type of storage that enables you to create volumes that can be mounted as devices by Amazon EC2 instances. Amazon EBS volumes behave like raw unformatted external block devices. They have user supplied device names and provide a block device interface. You can load a file system on top of Amazon EBS volumes, or use them just as you would use a block device.

Availability Zone

A distinct location within a region that is engineered to be insulated from failures in other Availability Zones and provides inexpensive, low latency network connectivity to other Availability Zones in the same region.

compute unit

An Amazon-generated measure that enables you to evaluate the CPU capacity of different Amazon EC2 instance types.

EBS

See Amazon EBS.

Elastic Block Store

See Amazon EBS.

elastic IP address

A static public IP address designed for dynamic cloud computing. Elastic IP addresses are associated with your account, not specific instances. Any elastic IP addresses that you associate with your account remain associated with your account until you explicitly release them. Unlike traditional static
IP addresses, however, elastic IP addresses allow you to mask instance or Availability Zone failures by rapidly remapping your public IP addresses to any instance in your account.

ephemeral store

See instance store.

explicit launch permission

Launch permission granted to a specific user.

group

See security group.

instance store

Every instance includes a fixed amount of storage space on which you can store data. This is not designed to be a permanent storage solution. If you need a permanent storage system, use Amazon EBS.

instance type

A specification that defines the memory, CPU, storage capacity, and hourly cost for an instance. Some instance types are designed for standard applications while others are designed for CPU-intensive applications.

gibibyte (GiB)

a contraction of giga binary byte, a gibibyte is $2^{30}$ bytes or 1,073,741,824 bytes. A gigabyte is $10^9$ or 1,000,000,000 bytes. So yes, Amazon has bigger bytes.

image

See Amazon machine image.

instance

Once an AMI has been launched, the resulting running system is referred to
as an instance. All instances based on the same AMI start out identical and any information on them is lost when the instances are terminated or fail.

instance store

The disk storage associated with an instance. In the event an instance fails or is terminated (not simply rebooted), all content on the instance store is deleted.

group

Also known as a security group, groups define firewall rules that can be shared among a group of instances that have similar security requirements. The group is specified at instance launch.

launch permission

AMI attribute allowing users to launch an AMI

Linux

Amazon EC2 instances are available for many operating platforms, including Linux, Solaris, Windows, and others.

paid AMI

An AMI that you sell to other Amazon EC2 users. For more information, refer to the Amazon DevPay Developer Guide.

private IP address

All Amazon EC2 instances are assigned two IP addresses at launch: a private address (RFC 1918) and a public address that are directly mapped to each other through Network Address Translation (NAT).

public AMI

An AMI that all users have launch permissions for.

public data sets
Sets of large public data sets that can be seamlessly integrated into AWS cloud-based applications. Amazon stores the data sets at no charge to the community and, like all AWS services, users pay only for the compute and storage they use for their own applications. These data sets currently include data from the Human Genome Project, the U.S. Census, Wikipedia, and other sources.

**public IP address**

All Amazon EC2 instances are assigned two IP addresses at launch: a private address (RFC 1918) and a public address that are directly mapped to each other through Network Address Translation (NAT).

**region**

A geographical area in which you can launch instances (e.g., US, EU).

**reservation**

A collection of instances started as part of the same launch request.

**Reserved Instance**

An additional Amazon EC2 pricing option. With Reserved Instances, you can make a low one-time payment for each instance to reserve and receive a significant discount on the hourly usage charge for that instance.

**security group**

A security group is a named collection of access rules. These access rules specify which ingress (i.e., incoming) network traffic should be delivered to your instance. All other ingress traffic will be discarded.

**shared AMI**

AMIs that developers build and make available for other AWS developers to use.

**Solaris**
Amazon EC2 instances are available for many operating platforms, including Linux, Solaris, Windows, and others.

snapshot

Amazon EBS provides the ability to create snapshots or backups of your Amazon EBS volumes and store them in Amazon S3. You can use these snapshots as the starting point for new Amazon EBS volumes and to protect your data for long term durability.

supported AMIs

These AMIs are similar to paid AMIs, except that you charge for software or a service that customers use with their own AMIs.

tebibyte (TiB)

a contraction of tera binary byte, a tebibyte is \(2^{40}\) bytes or 1,099,511,627,776 bytes. A terabyte is \(10^{12}\) or 1,000,000,000,000 bytes. So yes, Amazon has bigger bytes.

UNIX

Amazon EC2 instances are available for many operating platforms, including Linux, Solaris, Windows, and others.

Windows

Amazon EC2 instances are available for many operating platforms, including Linux, Solaris, Windows, and others.
Document Conventions

This section lists the common typographical and symbol use conventions for AWS technical publications.
**Typographical Conventions**

This section describes common typographical use conventions.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description/Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call-outs</td>
<td>A call-out is a number in the body text to give you a visual reference. The reference point is further discussion elsewhere. You can use this resource regularly.</td>
</tr>
<tr>
<td>Code in text</td>
<td>Inline code samples (including XML) and commands are identified with a special font. You can use the command <code>java -version</code>.</td>
</tr>
<tr>
<td>Code blocks</td>
<td>Blocks of sample code are set apart from the body and marked accordingly.</td>
</tr>
<tr>
<td></td>
<td>```</td>
</tr>
<tr>
<td></td>
<td># ls -l /var/www/html/index.html</td>
</tr>
<tr>
<td></td>
<td># date</td>
</tr>
<tr>
<td></td>
<td>Wed Jun 21 09:33:42 EDT 2006</td>
</tr>
<tr>
<td></td>
<td>```</td>
</tr>
<tr>
<td>Emphasis</td>
<td>Unusual or important words and phrases are marked with a special font.</td>
</tr>
<tr>
<td></td>
<td>You <em>must</em> sign up for an account before you can use the service.</td>
</tr>
<tr>
<td>Internal cross references</td>
<td>References to a section in the same document are marked.</td>
</tr>
<tr>
<td></td>
<td>See <a href="#">Document Conventions</a></td>
</tr>
<tr>
<td>Logical values, constants, and regular expressions, abstracta</td>
<td>A special font is used for expressions that are important to identify, but are not code. If the value is <code>null</code>, the returned response will be <code>false</code>.</td>
</tr>
<tr>
<td>Product and feature names</td>
<td>Named AWS products and features are identified on first use.</td>
</tr>
<tr>
<td></td>
<td>Create an <em>Amazon Machine Image</em> (AMI).</td>
</tr>
<tr>
<td>Operations</td>
<td>In-text references to operations.</td>
</tr>
<tr>
<td></td>
<td>Use the <code>GetHITResponse</code> operation.</td>
</tr>
<tr>
<td>Parameters</td>
<td>In-text references to parameters.</td>
</tr>
<tr>
<td></td>
<td>The operation accepts the parameter <code>AccountID</code>.</td>
</tr>
</tbody>
</table>
| **Response elements** | In-text references to responses.  
A container for one CollectionParent and one or more CollectionItems. |
|-----------------------|---------------------------------------------------------------|
| **Technical publication references** | References to other AWS publications. If the reference is hyperlinked, it is also underscored.  
For detailed conceptual information, see the *Amazon Mechanical Turk Developer Guide*. |
| **User entered values** | A special font marks text that the user types.  
At the password prompt, type **MyPassword**. |
| **User interface controls and labels** | Denotes named items on the UI for easy identification.  
On the File menu, click Properties. |
| **Variables** | When you see this style, you must change the value of the content when you copy the text to a command line.  
% ec2-register `<your-s3-bucket>/image.manifest`  
See also [Symbol Conventions](#). |
Symbol Conventions

This section describes the common use of symbols.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Symbol</th>
<th>Description/Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutually exclusive parameters</td>
<td>(Parentheses</td>
<td>and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>% data = hdfread (start</td>
</tr>
<tr>
<td>Optional parameters</td>
<td>[square brackets]</td>
<td>Within a code description, square brackets denote completely optional commands or parameters.</td>
</tr>
<tr>
<td>XML variable text</td>
<td></td>
<td>% sed [-n, -quiet]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use square brackets in XML examples to differentiate them from tags.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;CustomerId&gt;[ID]&lt;/CustomerId&gt;</td>
</tr>
<tr>
<td>Variables</td>
<td>&lt;arrow brackets&gt;</td>
<td>Within a code sample, arrow brackets denote a variable that must be replaced with a valid value.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>% ec2-register &lt;your-s3-bucket&gt;/image.manifest</td>
</tr>
</tbody>
</table>
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