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



For high level concepts and examples of how to use major Amazon EC2 features, go to the <u>Amazon Elastic Compute Cloud User Guide</u>.

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!

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Welcome		

How This Guide Is Organized

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

Information	Relevant Sections
Comprehensive reference to the tools for creating Amazon EC2 AMIs.	AMI Tools Reference
Comprehensive reference to the Amazon EC2 command line tools.	API Command Line Tools Reference
Amazon EC2 terms.	Glossary
Typographic and symbol conventions.	Document Conventions

Amazon EC2 Resources

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

Resource	Description
Amazon Elastic Compute Cloud Getting Started Guide	The Getting Started Guide provides a quick tutorial of the service based on a simple use case. Examples and instructions are included.
<u>Amazon Elastic</u> <u>Compute Cloud User</u> <u>Guide</u>	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.
<u>Amazon Elastic</u> <u>Compute Cloud</u> <u>Developer Guide</u>	The Developer Guide provides conceptual information about Amazon EC2 and describes how to use Amazon EC2 features using the SOAP and Query APIs.
<u>Amazon Elastic</u> <u>Compute Cloud API</u> <u>Reference</u>	The API Reference contains a comprehensive description of all SOAP and Query APIs. Additionally, it contains a list of all SOAP data types.
<u>Amazon EC2</u> <u>Technical FAQ</u>	The FAQ covers the top questions developers have asked about this product.
Amazon EC2 Release Notes	The Release Notes give a high-level overview of the current release. They specifically note any new features, corrections, and known issues.
AWS Developer Resource Center	A central starting point to find documentation, code samples, release notes, and other information to help you build innovative applications with AWS.
<u>AWS Management</u> <u>Console</u>	The console allows you to perform most of the functions of Amazon EC2 and other AWS products without programming.
Discussion Forums	A community-based forum for developers to discuss technical questions related to Amazon Web Services.
AWS Support Center	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).
AWS Premium Support Information	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.
Amazon EC2 Product Information	The primary web page for information about Amazon EC2.
Form for questions related to your AWS	This form is <i>only</i> for account questions. For technical questions, use the Discussion Forums.

account: <u>Contact Us</u>	
Conditions of Use	Detailed information about the copyright and trademark usage at Amazon.com and other topics.

What's New

This What's New is associated with the 2009-08-15 release of Amazon EC2. This guide was last updated on October 26, 2009.

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

Change	Description	Release Date
High- Memory Instance Types	Amazon EC2 now supports High-Memory instance types. Instances of this family offer large memory sizes for high throughput applications, including database and memory caching applications.	26 October 2009
Consolidation of Windows AMIs	 Amazon EC2 no longer differentiates between Amazon EC2 running Windows and Amazon EC2 running Windows with Authentication Services. New and existing Windows instances can now run Authentication Services, such as LDAP and Kerberos, at no additional charge. Additionally, any currently running Windows with Authentication Services instances are now charged the same price as Windows instances. Existing Windows AMIs will be removed starting October 15. If you need the current version of a Windows AMI, please rebundle it as described in the Amazon Elastic Compute Cloud Developer Guide. 	1 October 2009
Shared Snapshots	Amazon EC2 now supports shared snapshots, which enables users to launch Amazon EBS volumes from your snapshots. Using shared snapshots, you can grant access to specific users or make your snapshots public.	15 September 2009

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 <u>Amazon EC2 Resource</u> <u>Center</u>. 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 <u>Amazon Elastic</u> <u>Compute Cloud Getting Started Guide</u>.



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

AMI Tools Reference

Topics

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

Common Options for AMI Tools

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

Option	Description
help, - h	Display the help message.
version	Displays the version and copyright notice.
manual	Displays the manual entry.
batch	Runs in batch mode, suppressing user interaction and confirmation.
debug	Prints internal debugging information. This is useful to assist us when troubleshooting problems.

ec2-bundle-image

Description

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

<u>Amazon Elastic Compute Cloud Getting Started Guide</u> or <u>Amazon Elastic</u> <u>Compute Cloud User Guide</u>.



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-devicemappingblock_device_mapping]

Options

Option	Description	Required
-k, privatekey	The path to the user's PEM-encoded RSA key file.	Yes
private_key	Example: -k pk-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem	
-c,cert <i>cert</i>	The user's PEM encoded RSA public key certificate file.	Yes
	Example: -c cert-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem	
-u,user user_id	The user's AWS account number without dashes. Do not use the Access Key ID.	Yes
	Example: -u AIDADH4IGTRXXKCD	
-i,image <i>image_path</i>	The path to the image to bundle.	Yes
	<pre>Example: -i /var/spool/my-image/version-2/debian.img</pre>	
-d, destination	The directory in which to create the bundle.	No
destination	Default: The current directory	
	Example: -d /var/run/my-bundle	
-p, prefix	The filename prefix for bundled AMI files.	No
ami_prefix	Default: image	
	Example: -p my-image-is-special	
ec2cert cert_path	The path to the Amazon EC2 X.509 public key certificate.	No
eer c_pach	Default: /etc/ec2/amitools/cert-ec2.pem (varies, depending on tools)	
	<pre>Example:ec2cert /etc/ec2/amiutil/cert-ec2.pem</pre>	
kernel <i>kernel_id</i>	The ID of the kernel to select.	No
Kerner_ru	Default: 2.6.16-xenU	
	Example:kernel aki-ba3adfd3	
ramdisk ramdisk_id	The ID of the RAM disk to select.	No
. amaisk_10	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 <u>Resource Center</u> and search for the kernel ID.	

	Example:ramdisk ari-badbad00	
block- device- mapping mappings	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.	No
	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.

```
$ ec2-bundle-image -k pk-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.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

- <u>ec2-bundle-vol</u>
- <u>ec2-unbundle</u>
- <u>ec2-upload-bundle</u>
- <u>ec2-download-bundle</u>
- <u>ec2-delete-bundle</u>

ec2-bundle-vol

Description

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



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

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

Syntax

ec2-bundle-vol -k *private_key* -u *user_id* -c *cert* -r {i386 | x86_64} [-s *size*] [-d *destination*] [-e *exclude_directory_1,exclude_directory_1,...*] [-p *ami_prefix*] [-v *volume*] [--ec2cert *cert_path*] [--fstab *fstab_path*] [-generate-fstab] [--kernel *kernel-id*] [--ramdisk *ramdisk_id*] [--block-devicemapping*block_device_mapping*]

Options

Option	Description	Required
-k,privatekey private_key	The path to the user's PEM-encoded RSA key file.	Yes
	Example: -k pk- HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem	
-c,cert cert	The user's PEM encoded RSA public key certificate file.	Yes
	Example: -c cert- HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem	
-u,user <i>user_id</i>	The user's AWS account number without dashes. Do not use the Access Key ID.	Yes
	Example: -u AIDADH4IGTRXXKCD	
-s,size <i>size</i>	The size, in MB (1024 * 1024 bytes), of the image file to create. The maximum size is 10240 MB.	No
	Default: 10240	
	Example: -s 2048	
-d,destination destination	The directory in which to create the bundle.	No
	Default: /tmp	
	Example: -d /var/run/my-bundle	
-e,exclude directory_1,directory_2,	A list of absolute directory paths and files to exclude from the bundle operation. This overrides theall parameter.	No
	Example: -e /tmp,/home/secret-data	
-p,prefix ami_prefix	The filename prefix for bundled AMI files.	No
	Default: image	
	Example: -p my-image-is-special	
-v,volume <i>volume</i>	The absolute path to the mounted volume from which to create the bundle.	No
	Default: The root directory (/)	
	Example: -v /mnt/my-customized-ami	
-a,all	Bundle all directories, including those on remotely	No

	mounted filesystems.	
	Example: -a	
ec2cert cert_path	The path to the Amazon EC2 X.509 public key certificate.	No
	Default: /etc/ec2/amitools/cert-ec2.pem (varies, depending on tools)	
	<pre>Example:ec2cert /etc/ec2/amiutil/cert- ec2.pem</pre>	
fstab fstab_path	The path to the fstab to bundle into the image. If this is not specified, Amazon EC2 bundles /etc/fstab.	No
	Example:fstab /etc/fstab	
generate-fstab	Causes Amazon EC2 to bundle the volume using an Amazon EC2-provided fstab.	No
	Example:generate-fstab	
kernel <i>kernel_id</i>	The ID of the kernel to select.	No
	Example:kernel aki-ba3adfd3	
ramdisk ramdisk_id	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	

<u>Resource Center</u> and search for the kernel ID.

Example: --ramdisk ari-badbad00

No

--block-device-mapping mappings

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

No

Output

Status messages describing the stages and status of the bundling.

Example

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

```
$ ec2-bundle-vol -d /mnt -k pk-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem -c c
  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

- <u>ec2-bundle-image</u>
- <u>ec2-unbundle</u>
- <u>ec2-upload-bundle</u>
- <u>ec2-download-bundle</u>
- <u>ec2-delete-bundle</u>

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 *ur1*] [--retry] [-y] [--clear]

Options

Option	Description	Required
-b,bucket s3_bucket	The name of the Amazon S3 bucket containing the bundled AMI, followed by an optional '/'-delimited path prefix	Yes
	Example:-b ec2-cracker-ami-bucket	
-a,access-key access_key_id	The AWS access key ID.	Yes
	Example: -a AKIADQKE4SARGYLE	
-s,secret-key <i>secret_key</i>	The AWS secret access key.	Yes
	Example: -s eW91dHViZS5jb20vd2F0Y2g/dj1SU3NKMTlzeTNKSQ==	
-m,manifest manifest_path	The path to the unencrypted manifest file.	Conditional
	<pre>Example: -m /var/spool/my-first-bundle/Manifest</pre>	
	Condition: You must specifyprefix ormanifest	
-p,prefix ami_prefix	The bundled AMI filename prefix.	Conditional
	Example: -p eos-	
	Condition: You must specifyprefix ormanifest	
url <i>url</i>	The Amazon S3 service URL.	No
	Default: https://s3.amazonaws.com	
	Example:url https://s3.amazonaws.ie	
retry	Automatically retries on all Amazon S3 errors, up to five times per operation.	No
	Example:retry	
-y,yes	Automatically assumes the answer to all prompts is 'yes'.	No
	Example: -y	
clear	Deletes the specified bundle from the Amazon S3 bucket and deletes the bucket, if empty.	No
	Example:clear	

Output

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

Example

This example deletes a bundle from Amazon S3.

```
$ ec2-delete-bundle -b 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]
У
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

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- <u>ec2-bundle-vol</u>
- <u>ec2-unbundle</u>
- <u>ec2-upload-bundle</u>
- <u>ec2-download-bundle</u>

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 *ur1*]

Options

Option	Description	Required
-b,bucket s3_bucket	The name of the Amazon S3 bucket where the bundle is located, followed by an optional '/'-delimited path prefix.	Yes
	Example:-b ec2-cracked	
-m,manifest manifest	The manifest path and filename.	No
	<pre>Example: -m /var/spool/my-first-bundle/Manifest</pre>	
-a,access-key access_key_id	Your AWS access key ID.	Yes
	Example: - a AKIADQKE4SARGYLE	
-s,secret-key <i>secret_key</i>	Your AWS secret access key.	Yes
	Example: -s eW91dHViZS5jb20vd2F0Y2g/dj1SU3NKMTlzeTNKSQ==	
-k,privatekey private_key	The private key used to decrypt the manifest.	Yes
	Example: -k pk-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem	
-p,prefix ami_prefix	The filename prefix for the bundled AMI files.	No
	Default: image	
	Example: -p my-image	
-d,directory directory	The directory where the downloaded bundle is saved. The directory must exist.	No
	Default: The current working directory	
	Example: -d /tmp/my-downloaded-bundle	
retry	Automatically retries on all Amazon S3 errors, up to five times per operation.	No
	Example:retry	
url url	The S3 service URL.	No
	Default: https://s3.amazonaws.com	
	<pre>Example:url https://s3.amazonaws.ie</pre>	

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/i
downloading part https://s3.amazonaws.com/my-s3-bucket/image.part.00 to bundled/image.part
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
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
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
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
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
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
Downloaded image.part.06 from https://s3.amazonaws.com/my-s3-bucket.
Download Bundle complete.
```



This example uses the Linux and UNIX mkdir command.

Related Topics

ec2-bundle-image

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- <u>ec2-bundle-vol</u>
- <u>ec2-unbundle</u>
- <u>ec2-upload-bundle</u>
- <u>ec2-delete-bundle</u>

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.



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

Option	Description	Required
-k,privatekey private_key	The path to the user's PEM-encoded RSA key file.	Yes
	Example: -k pk-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem	
-c,cert <i>cert</i>	The user's PEM encoded RSA public key certificate file.	Yes
	Example: -c cert-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem	
-a,access-key access_key_id	The AWS access key ID.	Yes
	Example: - a AKIADQKE4SARGYLE	
-s,secret-key <i>secret_key</i>	The AWS secret access key.	Yes
	Example: -s eW91dHViZS5jb20vd2F0Y2g/dj1SU3NKMTlzeTNKSQ==	
bucket source_s3_bucket	The source Amazon S3 bucket where the AMI is located, followed by an optional '/'-delimited path prefix.	Yes
	Default: None	
	Example:bucket my-us-bucket	
destination-bucket destination_s3_bucket	The destination Amazon S3 bucket, followed by an optional '/'- delimited path prefix. If the destination bucket does not exist, it is created.	Yes
	Default: None	
	Example:destination-bucket my-eu-bucket	
manifest manifest	The location of the Amazon S3 source manifest.	Yes
	Default: None	
	<pre>Example:manifest my-ami.manifest.xml</pre>	
location {US EU}	The location of the destination Amazon S3 bucket.	No
	If the bucket exists and the location is specified, the tool exits with an error. if the specified location does not match the actual location. If the bucket exists and no location is specified, the tool uses the bucket's location. If the bucket does not exist and the location is specified, the tool creates the bucket in the specified location. If the bucket does not exist and location is not specified, the tool creates the bucket without a location	

	constraint (in the US).	
	Default: None	
	Example:location EU	
acl acl	The access control list policy of the bundled image.	No
	Valid Values: public-read aws-exec-read	
	Default: aws-exec-read	
	Example:acl public-read	
retry	Automatically retries on all Amazon S3 errors, up to five times per operation.	No
	Example:retry	
kernel <i>kernel_id</i>	The ID of the kernel to select.	No
	Example:kernel aki-ba3adfd3	
ramdisk <i>ramdisk_id</i>	The ID of the RAM disk to select.	No
	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 <u>Resource Center</u> and search for the kernel ID.	
	Example:ramdisk ari-badbad00	
no-mapping	Disables automatic mapping of kernels and RAM disks.	No
	Example:no-mapping	
region	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.	No
	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-bundle --cert cert-THUMBPRINT.pem --privatekey pk-THUMBPRI
Downloading manifest my-ami.manifest.xml from my-us-bucket to /tmp/ami-migration-my-ami.ma
Copying 'my-ami.part.00'...
Copying 'my-ami.part.01'...
Copying 'my-ami.part.02'...
Copying 'my-ami.part.03'...
Copying 'my-ami.part.05'...
Copying 'my-ami.part.06'...
Copying 'my-ami.part.06'...
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

- <u>ec2-register</u>
- <u>ec2-run-instances</u>

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.



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

Option	Description	Require
-k, privatekey	The path to the user's PEM-encoded RSA key file.	Yes
private_key	Example: -k pk-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem	
-c,cert <i>cert</i>	The user's PEM encoded RSA public key certificate file.	Yes
	Example: -c cert-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem	
-a,access- key	The AWS access key ID.	Yes
access_key_id	Example: -a AKIADQKE4SARGYLE	
-s,secret- key	The AWS secret access key.	Yes
secret_key	Example: -s eW91dHViZS5jb20vd2F0Y2g/dj1SU3NKMTlzeTNKSQ==	
manifest manifest	The location of the Amazon S3 source manifest.	Yes
	Default: None	
	Example:manifest my-ami.manifest.xml	
kernel <i>kernel_id</i>	The ID of the kernel to select.	No
	Example:kernel aki-ba3adfd3	
ramdisk ramdisk_id	The ID of the RAM disk to select.	No
	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 <u>Resource Center</u> and search for the kernel ID.	
	Example:ramdisk ari-badbad00	
mapping- file	Overrides the file containing kernel and RAM disk region mappings.	No
mapping_file	Example:mapping-file eu-mappings	
mapping-url <i>url</i>	Overrides the file containing kernel and RAM disk region mappings from the specified hostname portion of a URL.	No
	Example:mapping-url mysite.com/eu-mappings	
no-mapping	Disables automatic mapping of kernels and RAM disks.	No
	Example:mapping-file mysite.com/eu-mappings	
region		

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.	No
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-HKZYKT
Backing up manifest...
Successfully migrated my-ami.manifest.xml It is now suitable for use in eu-west-1.
```

Related Topics

- <u>ec2-register</u>
- <u>ec2-run-instances</u>

ec2-unbundle

Description

Recreates the AMI from the bundled AMI parts.

Syntax

ec2-unbundle -m manifest -k private_key [-d destination_directory] [-s source_directory]

Options

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

Example

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

```
$ mkdir unbundled
$ ec2-unbundle -m fred.manifest.xml -s bundled -d unbundled
cat bundled/fred.part.00 bundled/fred.part.01 bundled/fred.part.02 bundled/fred.part.03 t
Unbundle complete.
$ ls -l unbundled
total 1025008
-rw-r--r-- 1 root root 1048578048 Aug 25 23:46 fred.img
```

Output

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

Related Topics

ec2-bundle-image

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- <u>ec2-bundle-vol</u>
- <u>ec2-upload-bundle</u>
- <u>ec2-download-bundle</u>
- <u>ec2-delete-bundle</u>

ec2-upload-bundle

Description

Upload a bundled AMI to Amazon S3 storage.

Syntax

ec2-upload-bundle -b *s3_bucket* -m *manifest* -a *access_key_id* -s *secret_key* [--acl *ac1*] [--ec2cert *certificate*] [-d *directory*] [--part *part*] [-location {US | EU}] [--url *ur1*] [--retry] [--skipmanifest]

Options

Option	Description	Required
-b,bucket s3_bucket	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).	Yes
	Example:-b ec2-cracker-ami	
-m, manifest manifest	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.	Yes
	<pre>Example: -m /var/spool/my-first-bundle/Manifest</pre>	
-a,access- key	Your AWS access key ID.	Yes
access_key_id	Example: -a AKIADQKE4SARGYLE	
-s,secret- key	Your AWS secret access key.	Yes
secret_key	Example: -s eW91dHViZS5jb20vd2F0Y2g/dj1SU3NKMTlzeTNKSQ==	
acl acl	The access control list policy of the bundled image.	No
	Valid Values: public-read aws-exec-read	
	Default: aws-exec-read	
	Example:acl public-read	
ec2cert <i>certificate</i>	The path to the Amazon EC2 X.509 public key certificate.	No
	Default: /etc/ec2/amitools/cert-ec2.pem (varies, depending on tools)	
	<pre>Example:ec2cert /etc/ec2/amiutil/cert-ec2.pem</pre>	
-d, directory	The directory containing the bundled AMI parts.	No
directory	Default: The directory containing the manifest file (see the -m option).	
	Example:-d /var/run/my-bundle	
part <i>part</i>	Starts uploading the specified part and all subsequent parts.	No
	Example:part	
location {US EU}	The location of the destination Amazon S3 bucket.	No
	If the bucket exists and the location is specified, the tool exits with an error. if the specified location does not match the actual location. If the bucket exists and no location is specified, the tool uses the bucket's	

	location. If the bucket does not exist and the location is specified, the tool creates the bucket in the specified location. If the bucket does not exist and location is not specified, the tool creates the bucket without a location constraint (in the US).Default: NoneExample:location EU	
url <i>url</i>	The S3 service URL.	No
	Default: https://s3.amazonaws.com	
	Example:url https://s3.amazonaws.ie	
retry	Automatically retries on all Amazon S3 errors, up to five times per operation.	No
	Example:retry	
 skipmanifest	Does not upload the manifest.	No
	Example:skipmanifest	

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

•

- <u>ec2-bundle-vol</u>
- <u>ec2-unbundle</u>
- <u>ec2-download-bundle</u>
- <u>ec2-delete-bundle</u>

API Command Line Tools Reference

Topics

- Common Options for API Tools
- List of Command Line Operations by Function
- ec2-add-group
- <u>ec2-add-keypair</u>
- ec2-allocate-address
- <u>ec2-associate-address</u>
- <u>ec2-attach-volume</u>
- <u>ec2-authorize</u>
- <u>ec2-bundle-instance</u>
- <u>ec2-cancel-bundle-task</u>
- <u>ec2-confirm-product-instance</u>
- <u>ec2-create-snapshot</u>
- <u>ec2-create-volume</u>
- <u>ec2-delete-group</u>
- <u>ec2-delete-keypair</u>
- <u>ec2-delete-snapshot</u>
- <u>ec2-delete-volume</u>
- <u>ec2-deregister</u>
- <u>ec2-describe-addresses</u>
- <u>ec2-describe-availability-zones</u>
- ec2-describe-bundle-tasks
- <u>ec2-describe-group</u>
- ec2-describe-image-attribute
- <u>ec2-describe-images</u>
- <u>ec2-describe-instances</u>
- <u>ec2-describe-keypairs</u>
- <u>ec2-describe-regions</u>
- ec2-describe-reserved-instances
- ec2-describe-reserved-instances-offerings
- ec2-describe-snapshot-attribute
- <u>ec2-describe-snapshots</u>
- <u>ec2-describe-volumes</u>
- <u>ec2-detach-volume</u>
- ec2-disassociate-address

- <u>ec2-fingerprint-key</u>
- <u>ec2-get-console-output</u>
- <u>ec2-get-password</u>
- <u>ec2-get-password-data</u>
- <u>ec2-migrate-bundle</u>
- <u>ec2-migrate-image</u>
- <u>ec2-modify-image-attribute</u>
- <u>ec2-modify-snapshot-attribute</u>
- <u>ec2-monitor-instances</u>
- ec2-purchase-reserved-instance-offering
- <u>ec2-reboot-instances</u>
- <u>ec2-register</u>
- <u>ec2-release-address</u>
- <u>ec2-reset-image-attribute</u>
- <u>ec2-reset-snapshot-attribute</u>
- <u>ec2-revoke</u>
- <u>ec2-run-instances</u>
- <u>ec2-terminate-instances</u>
- <u>ec2-unmonitor-instances</u>

Common Options for API Tools

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

Option	Description
region <i>region</i>	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
-U URL	<i>URL</i> is the uniform resource locator of the Amazon EC2 web service entry point.
	Default: The EC2_URL environment variable, or https://ec2.amazonaws.com if the environment variable is not set.
	Example: -U https://ec2.amazonaws.com
-K EC2- PRIVATE-	The private key to use when constructing requests to Amazon EC2.
KEY	Default: The value of the EC2_PRIVATE_KEY environment variable.
	Example: -K pk-HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CL0.pem
-C EC2- CERT	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
- V	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.
show- empty- fields	Shows empty columns as (nil).
debug	Prints internal debugging information. This is useful to assist us when troubleshooting problems.
-?	Displays help.
-	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 grep running cut -f 2 ec2-terminate- instances -i -

List of Command Line Operations by Function

Amazon DevPay

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ec2-confirm-product-instance

AMIs

- <u>ec2-deregister</u>
- <u>ec2-describe-image-attribute</u>
- <u>ec2-describe-images</u>
- <u>ec2-migrate-bundle</u>
- <u>ec2-migrate-image</u>
- <u>ec2-modify-image-attribute</u>

Availability Zones and Regions

- <u>ec2-describe-availability-zones</u>
- <u>ec2-describe-regions</u>

Elastic Block Store

- <u>ec2-attach-volume</u>
- <u>ec2-create-snapshot</u>
- <u>ec2-create-volume</u>
- <u>ec2-delete-snapshot</u>

- <u>ec2-delete-volume</u>
- <u>ec2-describe-snapshot-attribute</u>
- <u>ec2-describe-snapshots</u>
- <u>ec2-describe-volumes</u>
- <u>ec2-detach-volume</u>
- <u>ec2-modify-snapshot-attribute</u>
- <u>ec2-reset-snapshot-attribute</u>

Elastic IP Addresses

- <u>ec2-allocate-address</u>
- <u>ec2-associate-address</u>
- <u>ec2-describe-addresses</u>
- <u>ec2-disassociate-address</u>
- <u>ec2-release-address</u>

General

• <u>ec2-get-console-output</u>

Images

- <u>ec2-register</u>
- <u>ec2-reset-image-attribute</u>

Instances

- <u>ec2-describe-instances</u>
- <u>ec2-reboot-instances</u>

- <u>ec2-run-instances</u>
- <u>ec2-terminate-instances</u>

Key Pairs

- <u>ec2-add-keypair</u>
- <u>ec2-delete-keypair</u>
- <u>ec2-describe-keypairs</u>
- <u>ec2-fingerprint-key</u>

Monitoring

- <u>ec2-monitor-instances</u>
- <u>ec2-unmonitor-instances</u>

Reserved Instances

- <u>ec2-describe-reserved-instances</u>
- <u>ec2-describe-reserved-instances-offerings</u>
- <u>ec2-purchase-reserved-instance-offering</u>

Security Groups

- <u>ec2-add-group</u>
- <u>ec2-authorize</u>
- <u>ec2-delete-group</u>
- <u>ec2-describe-group</u>
- <u>ec2-revoke</u>

Windows

- <u>ec2-bundle-instance</u>
- <u>ec2-cancel-bundle-task</u>
- <u>ec2-describe-bundle-tasks</u>
- <u>ec2-get-password</u>
- <u>ec2-get-password-data</u>

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

ec2-add-group group -d description

Options

Name	Description	Required
group	Name of the security group.	Yes
	Type: String	
	Default: None	
	Constraints: Accepts alphanumeric characters, spaces, dashes, and underscores.	
	Example: websrv	
-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.	Yes
	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

•

- <u>ec2-describe-group</u>
- <u>ec2-authorize</u>
- <u>ec2-revoke</u>
- <u>ec2-delete-group</u>

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

ec2-add-keypair *key*

Options

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

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-keypair1f:51:ae:28:bf:89:e9:d8:1f:25:5d:37:2d:7d:b8:ca:9f:f5:f1:6f----BEGIN F
MIIEoQIBAAKCAQBuLFg5ujHrtm1jnutSuo08Xe56LlT+HM8v/xkaa39EstM3/aFxTHgElQiJLChp
HungXQ29VTc8rc1bW0lkdi230H5eqkMHGhvEwqa0HWASUM114o3o/IX+0f2UcPoKC0VUR+jx71Sg
5AU52EQfanIn3ZQ81FW7Edp5a3q4DhjG1UKT0HVbicL5E+g45zfB95wIyywWZfeW/UUF3LpGZyq/
ebIUlq1qTbHkLbCC2r7RTn8vpQWp47BGVYGtGSBMpTRP5hnbzzuqj3itkiLHjU39S2sJCJ0TrJx5
i8BygR4s3mHKBj8l+ePQxG1kGbF6R4yg6sECmXn17MRQVX0DNHZbAgMBAAECggEAY1tsiUsIwD15
91CXirkYGuVfLyLflXenxfI50mDFms/mumTqloH07tr0oriHDR5K7wMcY/YY5YkcXNo7mvUVD1pM
ZNUJs7rw9gZRTrf7Ly1aJ58k0cyajw8TsC4e4LPbFaHwS1d6K8rXh64o6WgW4SrsB6ICmr1kGQI7
3wcfgt5ecIu4TZf00E9IHjn+2eRlsrjBdeORi7KiUNC/pAG23I6MdD0FEQRcCSigCj+4/mciFUSA
SWS4dMbrpb9FNSIcf9dcLxVM7/6KxgJNfZc9XWzUw77Jg8x92Zd0fVhH0ux5IZC+UvSKWB4dyfcI
tE8C3p9bbU9VGyY5vLCAiIb4qQKBgQDLi024GXrIkswF32YtBBMuVgLGCwU9h9H109mKAc2m8Cm1
jUE51pzRjTedc912qiIMUTwtgnw42auSCzbUeYMURPtDqyQ7p6AjMujp9EPemcSV0K9vXYL0Ptco
xW9MC0dtV6iPkCN7g0qiZXPRKaFbWADp16p8UAIvS/a5XXk5jwKBgQCKkpHi2EISh1uRkhxljvWC
iDCiK6JBRsMvpLbc0v5dKwP5alo1fmdR5PJaV2qvZSj5CYNpMAy1/EDNTY50SIJU+0KFmQbyhsbm
rdLNLDL4+TcnT7c62/aH01ohYaf/VCbRhtLlBfqGoQc7+sAc8vmKkesnF7CqCEKDyF/dhrxYdQKB
gC0iZzzNAapayz1+JcVTwwEid6j9JqNXbBc+Z2YwMi+T0Fv/P/hwkX/ype0XnIUcw0Ih/YtGBVAC
DQbsz7LcY1HqXiHKYNWNvXgww0+oiChjxvEkSdsTTIfnK4VSCvU9BxDbQHjdiNDJbL6oar92UN7V
rBYvChJZF7LvUH4YmVpHAoGAbZ2X7XvoeE0+uZ58/BGK0IGHByHBDiXtzMhdJr15HTYjxK70gTZm
gK+8zp4L9IbvLGDMJ08vft32XPEWuvI8twCzFH+CsWLQADZMZKSsBas0Z/h1FwhdMgCMcY+Q1zd4
JZKjTSu3i7vhvx6RzdSedXEMNTZWN4qlIx3kR5aHcukCgYA9T+Zrvm1F0seQPbLknn7EqhXIjBaT
P8TTvW/6bdPi23ExzxZn7K0drfclYRph1LHMpAONv/x2xALIf91UB+v5ohy1oDoasL0gij1houRe
2ERKKdwz0ZL9SWq6VTdhr/5G994CK72fy5WhyERbDjUIdHaK3M849JJuf8cSrvSb4g==
   --END RSA PRIVATE KEY---
```

Related Operations

ec2-run-instances

•

- <u>ec2-describe-keypairs</u>
- <u>ec2-delete-keypair</u>

ec2-allocate-address

Description

Acquires an elastic IP address for use with your account.

Syntax

ec2-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.

```
PROMPT> ec2-allocate-address
ADDRESS 67.202.55.255
```

Related Operations

ec2-describe-addresses

•

- <u>ec2-release-address</u>
- <u>ec2-associate-address</u>
- <u>ec2-disassociate-address</u>

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

ec2-associate-address -i instance_id ip_address

Options

Name	Description	Required
ip_address	IP address that you are assigning to the instance.	Yes
	Type: String	
	Default: None	
	Example: 67.202.55.255	
instance_id	The instance to associate with the IP address.	Yes
	Type: String	
	Default: None	
	Example: i-43a4412a	

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

•

- <u>ec2-describe-addresses</u>
- <u>ec2-release-address</u>
- <u>ec2-disassociate-address</u>

ec2-attach-volume

Description

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



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

Name	Description	Required
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 <i>device</i>	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 <u>Amazon Elastic Compute Cloud Developer Guide</u>.

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

Related Operations

- <u>ec2-create-volume</u>
- <u>ec2-delete-volume</u>
- <u>ec2-describe-volumes</u>
- <u>ec2-detach-volume</u>

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.

Syntax

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

Options

Name	Description	Required
group	Name of the group to modify. The name must be valid and belong to the account	Yes
	Type: String	
	Default: None	
	Example: websrv	
-P protocol	IP protocol.	Yes
	Type: String	
	Valid Values: tcp udp icmp	
	Default: None	
	Example: udp	
-u source_group_user	AWS User ID of an account. Cannot be used when specifying a CIDR IP address.	Yes
	Type: String	
	Default: None	
	Example: 495219933132	
-o source_group	Name of the security group. Cannot be used when specifying a CIDR IP address.	Yes
	Type: String	
	Default: None	
	Example: headoffice	
-s source_subnet	CIDR range.	Yes
	Type: String	
	Default: None	
	Constraints: Valid CIDR IP address range.	
	Example: 205.192.8.45/24	
-t icmp_type_code		

	 For the ICMP protocol, the ICMP type and code must be specified. This must be specified in the format type:code where both are integers. Type, code, or both can be specified as -1, which is a wildcard. Type: String Valid Values: tcp udp icmp Default: None Example: 2:5 	Yes
-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

•

- <u>ec2-describe-group</u>
- <u>ec2-revoke</u>
- <u>ec2-delete-group</u>

ec2-bundle-instance

Description

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

<u>Amazon Elastic Compute Cloud Developer Guide</u> or <u>Amazon Elastic Compute</u> <u>Cloud Getting Started Guide</u>.



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 -0 access-key-id {-c
policy | -w secret-access-key} [options]

Options

Name	Description	Required
instance	The ID of the instance to bundle.	Yes
	Type: String	
	Default: None	
	Example: i-5e73d509	
-b bucket	The bucket in which to store the AMI. You can specify a bucket that you already own or a new bucket that Amazon EC2 creates on your behalf. If you specify a bucket that belongs to someone else, Amazon EC2 returns an error.	Yes
	Type: String	
	Default: None	
	Example: mybucket	
-p prefix	Specifies the beginning of the file name of the AMI.	Yes
	Type: String	
	Default: None	
	Example: winami	
-0 access-	The Access Key ID of the owner of the Amazon S3 bucket.	Yes
key-id	Type: String	
	Default: None	
	Example: 157SZTMZQT516NAZ7CR2	
-c policy	A Base64-encoded Amazon S3 upload policy that gives Amazon EC2 permission to upload items into Amazon S3 on the user's behalf.	Yes
	Type: String	
	Default: None	
	Example: upload-policy	
-w secret-	Your AWS Secret Access Key.	Yes
access- key	Type: String	

Default: None	
Example: eW91dHViZS5jb20vd2F0Y2g/dj1SU3NKMTlzeTNKSQ==	

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 AIDADH4IG BUNDLE bun-c1a540a8 i-12345 mybucket winami pending 2008-09-15T17:15:20+0000 2008-0

Related Operations

- <u>ec2-cancel-bundle-task</u>
- <u>ec2-describe-bundle-tasks</u>

ec2-cancel-bundle-task

Description

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

<u>Amazon Elastic Compute Cloud Developer Guide</u> or <u>Amazon Elastic Compute</u> <u>Cloud Getting Started Guide</u>.

Syntax

ec2-cancel-bundle-task *bundle*

Options

Name	Description	Required
bundle	The ID of the bundle task to cancel.	Yes
	Type: String	
	Default: None	
	Example: bun-cla432a3	

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 2
```

Related Operations

- <u>ec2-bundle-instance</u>
- <u>ec2-describe-bundle-tasks</u>

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

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

Options

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

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

• <u>ec2-run-instances</u>

•

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.

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

ec2-create-snapshot volume_id [-d description]

Options

Name	Description	Required
volume_id	The ID of the Amazon EBS volume of which to take a snapshot.	Yes
	Type: String	
	Default: None	
	Example: vol-4d826724	
-d,description description	Description of the Amazon EBS snapshot.	No
	Type: String	
	Default: None	
	Constraints: 256 characters.	
	Example: Daily backup.	

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
- ID of the owner
- Size of the volume
- Description

Amazon EC2 displays errors on stderr.

Examples

Example Request

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

PROMPT> ec2-create-snapshot vol-4d826724 --description "Daily Backup" SNAPSHOT snap-c070c5a9 vol-9539dcfc pending 2009-09-16T14:31:29+0000 218213537122 1

Related Operations

- <u>ec2-delete-snapshot</u>
- <u>ec2-describe-snapshots</u>

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.



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

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

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-la
VOLUME vol-4d826724 800 us-east-la creating 2008-05-07T11:51:50+0000

Related Operations

- <u>ec2-delete-volume</u>
- <u>ec2-describe-volumes</u>
- <u>ec2-attach-volume</u>
- <u>ec2-detach-volume</u>
- ec2-describe-availability-zones

ec2-delete-group

Description

Deletes a security group that you own.



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

Name	Description	Required
group	Name of the security group to delete.	Yes
	Type: String	
	Default: None	
	Example: websrv	

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

•

- <u>ec2-describe-group</u>
- <u>ec2-authorize</u>
- <u>ec2-revoke</u>

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

Name	Description	Required
key_pair	Name of the key pair to delete.	Yes
	Type: String	
	Default: None	
	Example: primary_keypair	

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

<u>ec2-add-keypair</u>

•

• <u>ec2-describe-keypairs</u>

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

Name	Description	Required
snapshot_id	The ID of the Amazon EBS snapshot to delete.	Yes
	Type: String	
	Default: None	
	Example: snap-78a54011	

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

- <u>ec2-create-snapshot</u>
- <u>ec2-describe-snapshots</u>

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.



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

Syntax

ec2-delete-volume volume_id

Options

Name	Description	Required
volume_id	The ID of the volume to delete. The volume remains in the	Yes
	Type: String	
	Default: None	
	Example: vol-4282672b	

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

- <u>ec2-create-volume</u>
- <u>ec2-describe-volumes</u>
- <u>ec2-attach-volume</u>
- <u>ec2-detach-volume</u>

ec2-deregister

Description

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



This command does not delete the AMI from Amazon S3.

Syntax

ec2-deregister ami_id

Options

Name	Description	
ami_id	Unique ID of the AMI which was assigned during registration. To register an AMI, use	Yes
	Type: String	
	Default: None	
	Example: ami-4fa54026	

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

<u>ec2-register</u>

•

• <u>ec2-describe-images</u>

ec2-describe-addresses

Description

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

Syntax

ec2-describe-addresses [public_ip ...]

Options

Name	Description	Required
public_ip	Elastic IP address to describe.	No
	Type: String	
	Default: None	
	Example: 67.202.55.255	

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

•

• <u>ec2-release-address</u>

ec2-describe-availability-zones

Description

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



Availability Zones are not the same across accounts. The Availability Zone useast-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

Name	Description	Required
zone-name	Availability Zone name.	No
	Type: String	
	Default: None	
	Example: us-east-1a	

Output

The command returns a table that contains the following information:

- AVAILABILITYZONE identifier
- Availability Zone name
- State

Amazon EC2 displays errors on stderr.

Examples

Г

Example Request

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

<pre>PROMPT> ec2-describe-availability-zones</pre>		
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

•

• <u>ec2-describe-regions</u>

ec2-describe-bundle-tasks

Description

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

<u>Amazon Elastic Compute Cloud Developer Guide</u> or <u>Amazon Elastic Compute</u> <u>Cloud Getting Started Guide</u>.

Syntax

ec2-describe-bundle-tasks [bundle...]

Options

Name	Description	Required
bundle	The ID of the bundle task to describe.	No
	Type: String	
	Default: If no ID is specified, all bundle tasks are described.	
	Example: bun-cla432a3	

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.

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

Related Operations

- <u>ec2-bundle-instance</u>
- <u>ec2-cancel-bundle-task</u>

ec2-describe-group

Description

Returns information about security groups that you own.

Syntax

ec2-describe-group [group ...]

Options

Name	Description	Required
group	Name of the security group.	No
	Type: String	
	Default: Describes all groups within the account.	
	Example: websrv	

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

•

- <u>ec2-authorize</u>
- <u>ec2-revoke</u>
- <u>ec2-delete-group</u>

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}

Options

Name	Description	Required
ami_id	The ID of the AMI for which an attribute will be described.	Yes
	Type: String	
	Default: None	
	Example: ami-4fa54026	
-llaunch- permission	Describes the launch permissions of the AMI.	No
po:00_0	Type: String	
	Default: None	
	Example: -l	
-pproduct-code	Describes the product code associated with the AMI.	No
	Type: String	
	Default: None	
	Example: -p	
kernel	Describes the ID of the kernel associated with the AMI.	No
	Type: String	
	Default: None	
	Example:kernel	
ramdisk	Describes the ID of the RAM disk associated with the AMI.	No
	Type: String	
	Default: None	
	Example:ramdisk	
-Bblock-device- mapping	Describes the mapping that defines native device names to use when exposing virtual devices.	No
	Type: String	
	Default: None	

	Example: -B	
platform	Describes the operating system platform.	No
	Type: String	
	Default: None	
	Example:platform	

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

```
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-2bb65342AMI.

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

Related Operations

ec2-describe-images

•

- <u>ec2-modify-image-attribute</u>
- <u>ec2-reset-image-attribute</u>

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:

Launch Permission	Description
public	The owner of the AMI granted launch permissions for the AMI to the all group. All users have launch permissions for these AMIs.
explicit	The owner of the AMI granted launch permissions to a specific user.
implicit	A user has implicit launch permissions for all AMIs he or she owns.

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.



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

Syntax

ec2-describe-images [ami_id ...] [-a] [-o owner ...] [-x user_id]

Options

Name	Description	Required
-x user_id	Returns AMIs for which the specified user has explicit launch permissions. The user ID can be a user's account ID,	No
	Type: String	
	Default: None	
	Example: -x self	
ami_id	AMI IDs to describe.	No
	Type: String	
	Default: Returns all AMIs.	
	Example: ami-78a54011	
-a	Describes all AMIs.	No
	Type: String	
	Default: None	
	Example: -a	
-0 owner	Returns AMIs owned by the specified owner. Multiple owners can be specified. The IDs	No
	Type: String	
	Default: None	
	Example: -o 157SZTMZQT516NAZ7CR2	

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

•

• <u>ec2-describe-image-attribute</u>

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

ec2-describe-instances [instance_id|availability_zone ...]

Options

Name	Description	Required
instance_id	Instance IDs to describe.	No
	Type: String	
	Default: Returns all instances.	
	Example: r-15a4417c	

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.

PROMPT>ec2-describe-instancesRESERVATIONr-15a4417cAIDADH4IGTRXXKCDINSTANCEi-3ea74257ami-6ba54002ec2-72-44-33-4.ccRESERVATIONr-1c65b675262355691199defaultdefaultINSTANCEi-e5b3108can

Related Operations

ec2-run-instances

•

• <u>ec2-terminate-instances</u>

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

ec2-describe-keypairs [key_id ...]

Options

Name	Description	Required
key_id	Key pair to describe.	No
	Type: String	
	Default: Describes all key pairs available to the account.	
	Example: gsg-keypair	

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
KEYPAIR gsg-keypair1f:51:ae:28:bf:89:e9:d8:1f:25:5d:37:2d:7d:b8:ca:9f:f5:f1:6f

Related Operations

ec2-describe-availability-zones

• <u>ec2-run-instances</u>

•

ec2-describe-regions

Description

Describes regions that are currently available to the account.

Syntax

ec2-describe-regions [region...]

Options

Name	Description	Required
region	Name of a region.	No
	Type: String	
	Default: Describes all regions available to the account.	
	Example: eu-west-1	

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

• <u>ec2-run-instances</u>

•

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

Name	Description	Required
reservation_id	IDs of the Reserved Instance to describe.	No
	Type: String	
	Default: None	
	Example: 4b2293b4-5813-4cc8-9ce3-1957fc1dcfc8	

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.

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:

Related Operations

- <u>ec2-purchase-reserved-instance-offering</u>
- <u>ec2-describe-reserved-instances-offerings</u>

ec2-describe-reserved-instancesofferings

Description

Describes Reserved Instance offerings that are available for purchase. With Amazon EC2 Reserved Instances, you purchase the right to launch Amazon EC2 instances for a period of time (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 ...][-typeinstance_type ...][--availability-zonezone ...][-descriptiondescription ...]

Options

Name	Description	Required
type instance_type	The instance type on which the Reserved Instance can be used.	No
	Type: String	
	Default: None	
	Example: m1.small	
availability-zone <i>zone</i>	The Availability Zone in which the Reserved Instance can be used.	No
	Type: String	
	Default: None	
	Example: us-east-1a	
description description	The Reserved Instance description.	No
	Type: String	
	Default: None	
	Example: m1.small offering in us-east-1a	

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

- <u>ec2-purchase-reserved-instance-offering</u>
- <u>ec2-describe-reserved-instances</u>

ec2-describe-snapshot-attribute

Description

Returns information about an attribute of a snapshot. Only one attribute can be specified per call.

Syntax

ec2-describe-snapshot-attribute *snapshot_id* -c

Options

Name	Description	Required
snapshot_id	The ID of the Amazon EBS snapshot.	No
	Type: String	
	Default: None	
	Example: snap-78a54011	
- C	Describes the create volume permissions of the snapshot.	Yes
	Type: String	
	Default: None	
	Example:	

Output

The command returns a table that contains the following information:

- Attribute type identifier
- ID of the snapshot
- 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 describes permissions for the snap-78a54011 snapshot.

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

Related Operations

ec2-modify-snapshot-attribute

• <u>ec2-describe-snapshots</u>

•

- <u>ec2-reset-snapshot-attribute</u>
- <u>ec2-create-snapshot</u>

ec2-describe-snapshots

Description

Returns information about Amazon EBS snapshots available to the user. Information returned includes volume ID, status, start time, progress, owner ID, volume size, and description. Snapshots available to the user include public snapshots available for any user to launch, private snapshots owned by the user making the request, and private snapshots owned by other users for which the user granted explicit create volume permissions.

The create volume permissions fall into 3 categories:

Permission	Description
public	The owner of the snapshot granted create volume permissions for the snapshot to the all group. All users have create volume permissions for these snapshots.
explicit	The owner of the snapshot granted create volume permissions to a specific user.
implicit	A user has implicit create volume permissions for all snapshots he or she owns.

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

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

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

If you specify a list of restorable users, only users that have create snapshot permissions for the snapshots are returned. You can specify AWS Account IDs (if you own the snapshot(s)), self for snapshots for which you own or have explicit permissions, or all for public snapshots.

Syntax

ec2-describe-snapshots [*snapshot_id* ...] [-a] [-o owner ...] [-r user_id]

Options

Name	Description	Required
snapshot_id	The ID of the Amazon EBS snapshot.	No
	Type: String	
	Default: Describes snapshots for which you have launch permissions.	
	Example: snap-78a54011	
-o owner	Returns snapshots owned by the specified owner. Multiple owners can be specified.	No
	Type: String	
	Valid Values: self amazon AWS Account ID	
	Default: None	
	Example: 218213537122	
-r user_id	Account ID of a user that can create volumes from the snapshot.	No
	Type: String	
	Default: None	
	Example:	

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
- ID of the owner
- Size of the volume
- Description

Amazon EC2 displays errors on stderr.

Examples

Example Request

This example describes snapshot snap-78a54011.

 PROMPT>
 ec2-describe-snapshots
 snap-78a54011

 SNAPSHOT
 snap-7ddb6e14
 vol-9539dcfc
 completed
 2009-09-15T22:06
 15+0000
 100%
 218215

Related Operations

ec2-create-snapshot

•

• <u>ec2-delete-snapshot</u>

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

Amazon Elastic Compute Cloud Developer Guide.

Syntax

ec2-describe-volumes [volume_id ...]

Options

Name	Description	Required
volume_id	The ID of the volume to list.	No
	Type: String	
	Default: Describes all volumes that you own.	
	Example: vol-4282672b	

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 2008-02-14T00:00:17+0000
VoLUME vol-50957039 13 us-east-1a available 2008-02-091T00:00:00+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

- <u>ec2-create-snapshot</u>
- <u>ec2-delete-snapshot</u>

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]

Options

Name	Description	Required
volume_id	The ID of the volume.	Yes
	Type: String	
	Default: None	
	Example: vol-4282672b	
instance instance_id	The ID of the instance.	No
	Type: String	
	Default: None	
	Example: i-6058a509	
device device	The device name.	No
	Type: String	
	Default: None	
	Example: /dev/sdh	
force	Forces detachment if the previous detachment attempt did not occur cleanly (logging into an instance, unmounting the volume, and detaching normally). This option can lead to data loss or a corrupted file system. Use this option only as a last resort to detach a volume from a failed instance. The instance will not have an opportunity to flush file system caches nor file system meta data. If you use this option, you must perform file system check and repair procedures.	No
	Type: Boolean	
	Default: None	
	Example: None	

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

- <u>ec2-create-volume</u>
- <u>ec2-delete-volume</u>
- <u>ec2-describe-volumes</u>
- <u>ec2-attach-volume</u>

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

Name	Description	Required
ip_address	IP address that you are disassociating from the instance.	Yes
	Type: String	
	Default: None	
	Example: 67.202.55.255	

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

•

- <u>ec2-describe-addresses</u>
- <u>ec2-release-address</u>
- <u>ec2-associate-address</u>

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

Name	Description	Required
keyfile	The path to a file containing an unencrypted PEM-encoded PKCS#8 private key.	Yes
	Type: String	
	Default: None	
	Example: mykey.pem	

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
1f:51:ae:28:bf:89:e9:d8:1f:25:5d:37:2d:7d:b8:ca:9f:f5:f1:6f

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

ec2-get-console-output instance_id [-r]

Options

Name	Description	Required
instance_id	ID of the instance for which you want console output.	Yes
	Type: String	
	Default: None	
	Example: i-10a64379	
- r	Raw output. Do not escape the output to facilitate reading.	Yes
	Type: String	
	Default: None	
	Example: -r	

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: 00000000000000 - 00000006a400000 (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 bc:89:29:c6:45:4b:b3:e2:c1:41:81:22:cb:3c:77:54 /etc/ssh/ssh_host_key.pub
ec2: 2048 fc:8d:0c:eb:0e:a6:4a:6a:61:50:00:c4:d2:51:78:66 /etc/ssh/ssh_host_rsa_key.pub
ec2: 1024 b5:cd:88:6a:18:7f:83:9d:1f:3b:80:03:10:17:7b:f5 /etc/ssh/ssh_host_dsa_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

•

ec2-get-password

Description

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

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



Note

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

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

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

Syntax

ec2-get-password instanceId -k windows_keypair

Options

Name	Description	Required
instance_id	An instance ID returned from a previous call to	Yes
	Type: String	
	Default: None	
	Example: i-9b76d0f3	
windows_keypair	The file that contains the private key used to launch the instance.	Yes
	Type: String	
	Default: None	
	Example: MyWindowsKeypair	

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
q96A40B9w
```

Related Operations

ec2-run-instances

•

• <u>ec2-describe-instances</u>

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

ec2-get-password-data instance_id [-r]

Options

Name	Description	Required
instance_id	The ID of the instance for which to get the password.	Yes
	Type: String	
	Default: None	
	Example: i-10a64379	

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
TGludXggdmVyc2lvbiAyLjYuMTYteGVuVSAoYnVpbGRlckBwYXRjaGJhdC5hbWF6b25zYSkgKGdj

Related Operations

ec2-run-instances

•

ec2-migrate-bundle

Description

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

<u>???</u>.



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 EC2DescribeRegions 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] {--nomapping} --region mapping_region_name

Options

Name	Description	Required
-K,private-key private_key	The path your PEM-encoded RSA key file.	No
p:_:ucooj	Type: String	
	Default: Uses EC2_PRIVATE_KEY environment variable	
	Example: None	
-C,cert <i>cert</i>	The user's PEM encoded RSA public key certificate file.	No
	Type: String	
	Default: Uses EC2_CERT environment variable	
	Example: cert- HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CLO.pem	
-U,url <i>url</i>	Specifies the URL to use as the web service URL.	No
	Type: String	
	Default: https://ec2.amazonaws.com	
	Example: https://ec2.amazonaws.com	
-o,owner-akid access_key_id	Access key ID of the bucket owner.	Yes
	Type: String	
	Default: None	
	Example: 157SZTMZQT516NAZ7CR2	
-w,owner-sak secret_access_key	Secret access key of the bucket owner.	Yes
	Type: String	
	Default: None	
	Example: eW91dHViZS5jb20vd2F0Y2g/dj1SU3NKMTlzeTNKSQ==	
bucket source_s3_bucket	The source Amazon S3 bucket where the AMI is located, followed by an optional '/'-delimited path prefix.	Yes
	Type: String	

	Default: None	
	Example: my-us-bucket	
destination-bucket destination_s3_bucket	The destination Amazon S3 bucket, followed by an optional '/'- delimited path prefix. If the destination bucket does not exist, it is created.	Ye
	Type: String	
	Default: None	
	Example: my-eu-bucket	
manifest <i>manifest</i>	The location of the Amazon S3 source manifest.	Yes
	Type: String	
	Default: None	
	Example: my-ami.manifest.xml	
location {US EU}	The location of the destination Amazon S3 bucket.	No
	Type: String	
	Valid Values: US EU	
	Default: US	
	Example: EU	
acl acl	The access control list policy of the bundled image.	Yes
	Type: String	
	Valid Values: public-read aws-exec-read	
	Default: None	
	Example: public-read	
kernel	The ID of the kernel to select.	No
	Type: String	
	Default: None	
	Example: aki-ba3adfd3	
ramdisk	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	No

	Type: String	
	Default: None	
	Example: ari-badbad00	
no-mapping	Disables automatic mapping of kernels and RAM disks.	No
	Type: String	
	Default: Mapping is enabled.	
	Example: my-ami.manifest.xml	
region <i>region</i>	Region to look up in the mapping file.	No
	Type: String	
	Default: Amazon EC2 attempts to determine the region from the location of the Amazon S3 bucket.	
	Example: eu-west-1	

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-TH
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.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

- <u>ec2-register</u>
- <u>ec2-run-instances</u>
- <u>ec2-migrate-image</u>

ec2-migrate-image

Description

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

<u>???</u>.

This tool replaces <u>ec2-migrate-bundle</u>.

Syntax

ec2-migrate-image --private-key private_key --cert cert -U ur1 --owner-akid access_key_id --owner-sak secret_access_key --bucket source_s3_bucket -destination-bucket destination_s3_bucket --manifest manifest_path --acl acl --location {US | EU} --ec2cert ec2_cert_path [--kernel kernel-id] [--ramdisk ramdisk_id] {--no-mapping} --region mapping_region_name

Options

Name	Description	Required
-K,private-key private_key	The path to your PEM-encoded RSA key file.	No
p =	Type: String	
	Default: Uses EC2_PRIVATE_KEY environment variable	
	Example: None	
-C,cert <i>cert</i>	The user's PEM encoded RSA public key certificate file.	No
	Type: String	
	Default: Uses EC2_CERT environment variable	
	Example: cert- HKZYKTAIG2ECMXYIBH3HXV4ZBZQ55CLO.pem	
-U,url <i>url</i>	Specifies the URL to use as the web service URL.	No
	Type: String	
	Default: https://ec2.amazonaws.com	
	Example: https://ec2.amazonaws.com	
-o,owner-akid access_key_id	Access key ID of the bucket owner.	Yes
	Type: String	
	Default: None	
	Example: 157SZTMZQT516NAZ7CR2	
-w,owner-sak secret_access_key	Secret access key of the bucket owner.	Yes
	Type: String	
	Default: None	
	Example: eW91dHViZS5jb20vd2F0Y2g/dj1SU3NKMTlzeTNKSQ==	
bucket source_s3_bucket	The source Amazon S3 bucket where the AMI is located, followed by an optional '/'-delimited path prefix.	Yes
	Type: String	

	Default: None	
	Example: my-us-bucket	
destination-bucket destination_s3_bucket	The destination Amazon S3 bucket, followed by an optional '/'- delimited path prefix. If the destination bucket does not exist, it is created.	Ye
	Type: String	
	Default: None	
	Example: my-eu-bucket	
manifest <i>manifest</i>	The location of the Amazon S3 source manifest.	Yes
	Type: String	
	Default: None	
	Example: my-ami.manifest.xml	
location {US EU}	The location of the destination Amazon S3 bucket.	No
	Type: String	
	Valid Values: US EU	
	Default: US	
	Example: EU	
acl acl	The access control list policy of the bundled image.	Yes
	Type: String	
	Valid Values: public-read aws-exec-read	
	Default: None	
	Example: public-read	
kernel	The ID of the kernel to select.	No
	Type: String	
	Default: None	
	Example: aki-ba3adfd3	
ramdisk	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	No

	Type: String	
	Default: None	
	Example: ari-badbad00	
no-mapping	Disables automatic mapping of kernels and RAM disks.	No
	Type: String	
	Default: Mapping is enabled.	
	Example: my-ami.manifest.xml	
region <i>region</i>	Region to look up in the mapping file.	No
	Type: String	
	Default: Amazon EC2 attempts to determine the region from the location of the Amazon S3 bucket.	
	Example: eu-west-1	

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-THU
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.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

- <u>ec2-register</u>
- <u>ec2-run-instances</u>

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

Name	Description	Required
ami_id	The AMI ID.	Yes
	Type: String	
	Default: None	
	Example: ami-2bb65342	
product-code <i>code</i>	Product code.	No
	Type: String	
	Default: None	
	Example:	
launch- permission	Used with theadd orremove flags to grant or revoke launch permissions.	
	Type: String	
	Default: None	
	Example:launch-permission	
add entity	Adds a launch permission for the specified AWS account or for all users.	
	Type: String	
	Valid Values: AWS account identifier all	
	Default: None	
	Example:launch-permissionadd all	
remove <i>entity</i>	Removes a launch permission for the specified AWS account or for all users.	
	Type: String	
	Valid Values: AWS account identifier all	
	Default: None	
	Example:launch-permissionremove all	

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

•

• <u>ec2-describe-image-attribute</u>

ec2-modify-snapshot-attribute

Description

Adds or remove permission settings for the specified snapshot.

Syntax

ec2-modify-snapshot-attribute snapshot_id -c [--user user_id | --group
group_id]

Options

Name	Description	Required
snapshot_id	The ID of the snapshot.	Yes
	Type: String	
	Default: None	
	Example: snap-78a54011	
add entity	Adds a permission for the specified AWS account or for all users.	
	Type: String	
	Valid Values: AWS account identifier all	
	Default: None	
	Example:launch-permissionadd all	
remove <i>entity</i>	Removes a permission for the specified AWS account or for all users.	
	Type: String	
	Valid Values: AWS account identifier all	
	Default: None	
	Example:launch-permissionremove all	
- C	Modifies the create volume permissions of the snapshot.	Yes
	Type: String	
	Default: None	
	Example:	

Output

The command returns a table that contains the following information:

- createVolumePermission Identifier
- Snapshot ID
- User IDs or 'all'
- Attribute type identifier
- ID of the snapshot 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 the snap-78a54011 snapshot public.

```
PROMPT> ec2-modify-snapshot-attribute snap-7ddb6e14 -c --user 123456789(
createVolumePermission snap-7ddb6e14 ADD userId 123456789012
```

Related Operations

ec2-describe-snapshot-attribute

• <u>ec2-describe-snapshots</u>

•

- <u>ec2-reset-snapshot-attribute</u>
- <u>ec2-create-snapshot</u>

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

Name	Description	Required
instance_id	Instance ID.	Yes
	Type: String	
	Default: None	
	Example: i-43a4412a	

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

• <u>ec2-run-instances</u>

•

ec2-purchase-reserved-instanceoffering

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--instancecount count

Options

Name	Description	Required
offering	The offering ID of the Reserved Instance to purchase.	Yes
	Type: String	
	Default: None	
	Example: 4b2293b4-5813-4cc8-9ce3-1957fc1dcfc8	
count	The number of Reserved Instances to purchase.	No
	Type: Integer	
	Default: 1	
	Example: 5	

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-b6bf0003233

Related Operations

- <u>ec2-describe-reserved-instances-offerings</u>
- <u>ec2-describe-reserved-instances</u>

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.



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 ...]

Options

Name	Description	Required
instance_id	One or more instance IDs.	Yes
	Type: String	
	Default: None	
	Example: i-3ea74257	

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.i-28a64341

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

Name	Description	Required
manifest	Full path to your AMI manifest in Amazon S3 storage.	Yes
	Type: String	
	Default: None	
	Example: mybucket/image.manifest.xml	

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

• <u>ec2-deregister</u>

•

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

Name	Description	Required
ip_address	The IP address that you are releasing from your account.	Yes
	Type: String	
	Default: None	
	Example: 67.202.55.255	

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

•

- <u>ec2-describe-addresses</u>
- <u>ec2-associate-address</u>
- <u>ec2-disassociate-address</u>

ec2-reset-image-attribute

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

Name	Description	Required
ami_id	ID of the AMI on which the attribute will be reset.	Yes
	Type: String	
	Default: None	
	Example: r-15a4417c	

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

•

• <u>ec2-describe-image-attribute</u>

ec2-reset-snapshot-attribute

Description

Resets permission settings for the specified snapshot.

Syntax

ec2-reset-snapshot-attribute snapshot_id

Options

Name	Description	Required
snapshot snapshot	The ID of the snapshot.	No
	Type: String	
	Default: None	
	Example: snap-78a54011	
- C	Resets the create volume permissions of the snapshot.	Yes
	Type: String	
	Default: None	
	Example:	

Output

The command returns a table that contains the following information:

- Snapshot ID
- 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 permissions for snap-78a54011, making it a private snapshot that can only be used by the account that created it.

PROMPT> ec2-reset-snapshot-attribute snap-7ddb6e14 -c
createVolumePermission snap-7ddb6e14 RESET

Related Operations

ec2-modify-snapshot-attribute

- <u>ec2-describe-snapshot-attribute</u>
- <u>ec2-describe-snapshots</u>
- <u>ec2-create-snapshot</u>

•

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

Name	Description	Required
group	Name of the group to modify.	Yes
	Type: String	
	Default: None	
	Example: websrv	

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

•

- <u>ec2-describe-group</u>
- <u>ec2-authorize</u>
- <u>ec2-delete-group</u>

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 High-CPU and High-Memory 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-mappingblock_device_mapping]

Options

Name	Description	Required
ami_id	Unique ID of a machine image, returned by a call to	Yes
	Type: String	
	Default: None	
	Example: r-15a4417c	
-k keyname	The name of the key pair.	No
	Type: String	
	Default: None	
	Example: MyKeyPair	
group	Name of the security group.	No
	Type: String	
	Default: None	
	Example: websrv	
-f user-data- file	Specifies additional information to make available to the instance(s).	No
	Type: String	
	Default: None	
	Example: MyDataFile.txt	
-d user_data	MIME, Base64-encoded user data.	No
	Type: String	
	Default: None	
	Example: my user data	
type instance_type	Specifies the instance type.	No
	Type: String	
	Valid Values:m1.small m1.large m1.xlarge c1.medium c1.xlarge m2.2xlarge m2.4xlarge	

	Example: m1 large	
	Example: m1.large	-
 availability- zone <i>zone</i>	Specifies the placement constraints (Availability Zones) for launching the instances.	No
	Type: String	
	Default: Amazon EC2 selects an Availability Zone.	
	Example: us-east-1b	
kernel	The ID of the kernel with which to launch the instance.	No
	Type: String	
	Default: None	
	Example: aki-ba3adfd3	
ramdisk	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.	No
	Type: String	
	Default: None	
	Example: ari-badbad00	
block- device-mapping	The virtual name.	No
mapping	Type: String	
	Default: None	
	Example:	
block- device-mapping	The device name (e.g., /dev/sdh).	No
mapping	Type: String	
	Default: None	
	Example: /dev/sdh	
monitoring	Enables monitoring for the instance.	No
	Type: Boolean	
	Default: Disabled	

	Example:monitoring	
subnet	Specifies the subnet ID within which to launch the instance(s) for Amazon Virtual Private Cloud.	No
	Type: String	
	Default: None	
	Example: MyPrivateSubnet	
-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.	Yes
	Type: String	
	Default: None	
	Constraints: Between 1 and the maximum number allowed for your account (default: 20).	
	Example: 5-10	

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-RESERVATION r-237fed4a 853279305796 default INSTANCE i-d9add0b0 ami-60a54009 pending 0 m1.small 2009-05-14T12:38:24+0000 us-ea INSTANCE i-dbadd0b2 ami-60a54009 pending 1 m1.small 2009-05-14T12:38:24+0000 us-ea INSTANCE i-ddadd0b4 ami-60a54009 pending 2 m1.small 2009-05-14T12:38:24+0000 us-ea

Related Operations

- <u>ec2-describe-instances</u>
- <u>ec2-terminate-instances</u>
- <u>ec2-authorize</u>
- <u>ec2-revoke</u>
- <u>ec2-describe-group</u>
- <u>ec2-add-group</u>
- <u>ec2-add-keypair</u>

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

Name	Description	Required
instance_id	Instance ID to terminate.	Yes
	Type: String	
	Default: None	
	Example: i-3ea74257	

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

Name	Description	Required
instance_id	Instance ID.	Yes
	Type: String	
	Default: None	
	Example: i-43a4412a	

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

•

• <u>ec2-run-instances</u>

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 <u>Amazon EBS</u>.

Elastic Block Store

See <u>Amazon EBS</u>.

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 2⁴⁰ bytes or 1,099,511,627,776 bytes. A terabyte is 10¹² or 1,000,000,000 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.

Convention	Description/Example		
Call-outs	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.		
Code in text	Inline code samples (including XML) and commands are identified with a special font.		
	You can use the command java -version.		
Code blocks	Blocks of sample code are set apart from the body and marked accordingly.		
	<pre># ls -l /var/www/html/index.html -rw-rw-r 1 root root 1872 Jun 21 09:33 /var/www/html/inde # date Wed Jun 21 09:33:42 EDT 2006</pre>		
Emphasis	Unusual or important words and phrases are marked with a special font.		
	You <i>must</i> sign up for an account before you can use the service.		
Internal	References to a section in the same document are marked.		
cross references	See <u>Document Conventions</u> .		
Logical	A special font is used for expressions that are important to identify, but are not code.		
values, constants, and regular expressions, abstracta	If the value is null, the returned response will be false.		
Product and	Named AWS products and features are identified on first use.		
feature names	Create an Amazon Machine Image (AMI).		
Operations	In-text references to operations.		
	Use the GetHITResponse operation.		
Parameters	In-text references to parameters.		
	The operation accepts the parameter <i>Account ID</i> .		

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	Denotes named items on the UI for easy identification.		
controls and	On the File menu, click Properties.		
labels			
Variables	When you see this style, you must change the value of the content when you copy the text c sample to a command line.		
	% ec2-register < <u>your-s3-bucket</u> >/image.manifest		
	See also <u>Symbol Conventions</u> .		

Symbol Conventions

This section describes the common use of symbols.

Convention	Symbol	Description/Example
Mutually exclusive parameters	(Parentheses and vertical bars)	Within a code description, bar separators denote options from which one must be chosen. % data = hdfread (start stride edge)
Optional parameters XML variable text	[square brackets]	Within a code description, square brackets denote completely optional commands or parameters. % sed [-n, -quiet] Use square brackets in XML examples to differentiate them from tags. <customerid>[ID]</customerid>
Variables	<arrow brackets=""></arrow>	Within a code sample, arrow brackets denote a variable that must be replaced with a valid value. % ec2-register <your-s3-bucket>/image.manifest</your-s3-bucket>

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