

IBM Security Guardium Cloud Deployment for Amazon AWS

Guardium Technical Note

Updated June 28, 2023

©IBM Corporation 2017, 2023

IBM Security Guardium Cloud Deployment Guide for Amazon AWS

Introduction

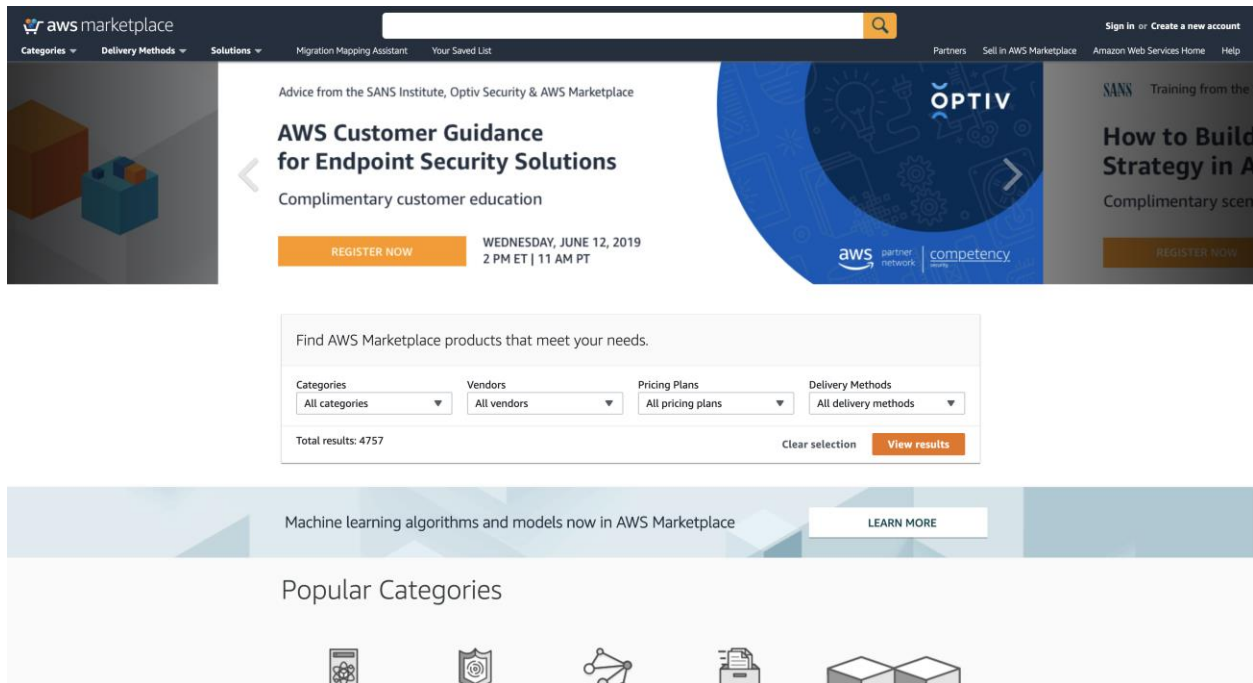
Guardium instances can be deployed on AWS in one of two ways. You can deploy either from the marketplace or from Guardium specific Amazon Machine Images (AMIs).

Note: Guardium supports Amazon EC2 M5 Instances for new deployments of Guardium v11.2 and later. EC2 M5 instances are not supported when you upgrade from a version of Guardium before v11.2.

Method 1: Deploying from the Marketplace

1. Navigate to the AWS Marketplace:

<https://aws.amazon.com/marketplace>



2. Search for Guardium.

The screenshot shows the AWS Marketplace search results for 'Guardium'. The search bar at the top contains 'Guardium'. Below the search bar, there are navigation links for 'Categories', 'Delivery Methods', 'Solutions', 'Migration Mapping Assistant', and 'Your Saved List'. The search results are displayed in a grid format. On the left, there are filters for 'Categories', 'Vendors', 'Operating System', 'Software Pricing Plans', 'Delivery Method', 'Architecture', and 'Region'. The main content area shows two results for 'Guardium (2 results)'. The first result is 'IBM Security Guardium Multi-Cloud Data Protection - Collector' and the second is 'IBM Security Guardium Multi-Cloud Data Protection - Aggregator or CM'. Both results include the IBM logo, a star rating, and a brief description of the product.

3. Click on the IBM Security Guardium Collector or the IBM Security Guardium Aggregator offering.

4. Click Continue to Subscribe to subscribe to the offering.

The screenshot shows the product page for 'IBM Security Guardium Multi-Cloud Data Protection - Collector'. The page features the IBM logo, the product name, and a 'Continue to Subscribe' button. Below the product name, there is a 'Save to List' button and a pricing box showing a 'Typical Total Price' of '\$0.400/hr'. The pricing box also includes a note: 'Total pricing per instance for services hosted on m4.2xlarge in US East (N. Virginia). View Details'. The product description states: 'Safeguard critical, sensitive, or regulated data wherever it resides'. The product is available on Linux/Unix and has a rating of 0 stars.

5. You are prompted to log into your AWS account if not logged in already


6. Review the terms and conditions.

7. Click Continue to Configuration.

The screenshot shows the subscription page for 'IBM Security Guardium Multi-Cloud Data Protection - Collector'. The page features the IBM logo, the product name, and a 'Continue to Configuration' button. Below the product name, there is a 'Subscribe' button and a 'Product Detail' link. The main heading is 'Subscribe to this software'. Below this, there is a message: 'You're subscribed to this software. Please see the terms and pricing details below or click the button above to configure your software.' The page also includes a 'Terms and Conditions' section and an 'IBM Offer' section. The offer section states: 'You have subscribed to this software and agree that your use of this software is subject to the pricing terms and the seller's End User License Agreement (EULA). Your use of AWS services is subject to the AWS Customer Agreement.' Below the offer section, there is a table with the following data:

| Product | Effective Date | Expiration Date | Action |
|---|----------------|-----------------|--------------|
| IBM Security Guardium Multi-Cloud Data Protection - Collector | 12/6/2018 | N/A | Show Details |

8. Review the fulfillment option and then click Continue to Launch.

**IBM Security Guardium Multi-Cloud Data Protection - Collector**Continue to Launch

[< Product Detail](#) [Subscribe](#) [Configure](#)

Configure this software

Choose a fulfillment option below to select how you wish to deploy the software, then enter the information required to configure the deployment.

Fulfillment Option

64-bit (x86) Amazon Machine Image (AMI)

Software Version

Guardium v10.6 Collector (Jan 10)

Region

US East (N. Virginia) **Ami Id:** ami-06c0e9f33d4f5b15b

Pricing information

This is an estimate of typical software and infrastructure costs based on your configuration. Your actual charges for each statement period may differ from this estimate.

Software Pricing


| | |
|---|--------|
| IBM Security Guardium Multi-Cloud Data Protection - Collector | \$0/hr |
|---|--------|

BYOL
running on m4.2xlarge

Infrastructure Pricing

| | |
|-------------------|----------------|
| EC2: | 1 * m4.2xlarge |
| Monthly Estimate: | \$288.00/month |

9. Click Usage Instructions to review the instructions.

**IBM Security Guardium Multi-Cloud Data Protection - Collector**

[< Product Detail](#) [Subscribe](#) [Configure](#) [Launch](#)

Launch this software

Review your configuration and choose how you wish to launch the software.

Configuration Details

| | |
|--------------------|--|
| Fulfillment Option | 64-bit (x86) Amazon Machine Image (AMI) IBM Security Guardium Multi-Cloud Data Protection - Collector <i>running on m4.2xlarge</i> |
| Software Version | Guardium v10.6 Collector |
| Region | US East (N. Virginia) |

[Usage Instructions](#)

10. Choose to launch the software from the Website or EC2.

Note: You can also opt to copy the Guardium offering to your AWS Service Catalog to manage your organization's cloud resources

11. Choose an EC2 Instance Type

Note: Guardium recommends that you configure instances as described in [IBM Guardium System Requirements and Supported Platforms..](#)

12. Configure VPC settings.

13. Configure Subnet settings.

Note: By default, a public IP address is associated with the instance on deployment. To prevent this, modify the subnet settings in EC2 in order to disable auto-assign IP settings

14. Configure your security group settings

Note: Specify ports 22 and 8443 on launch in order to access SSH and the Guardium UI. Additional ports can be specified depending on user needs. For port requirements, see [Guardium Port Requirements](#).

15. Configure Key Pair settings.

Note: Access to Guardium instances is limited to using a EC2 key pair. Password- based authentication and related commands are not supported, including the following commands:

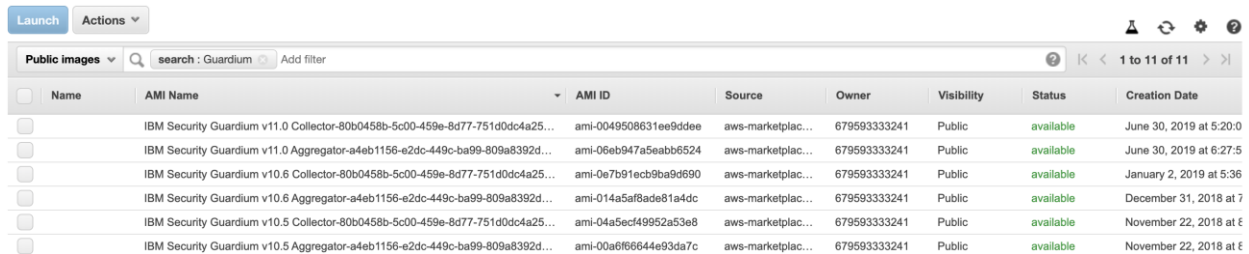
- > store password expiration cli
- > show password expiration cli

16. Click Launch to launch your Guardium instance.

Method 2: Deploying from an Amazon Machine Image (AMI)

The official Guardium AMIs are listed publicly and are accessible to all other AWS accounts. To access the images, go to the AMIs page and search for "Guardium".

1. Log in to the AWS EC2 console page at <https://console.aws.amazon.com/ec2/>
2. Under Images click AMIs.
3. Next to the search bar select Public Images, then search for "Guardium."



The screenshot shows the AWS Management Console interface for the Amazon Machine Images (AMI) page. The search bar contains the text "Guardium". Below the search bar, a table lists several public AMIs for IBM Security Guardium. The table has columns for Name, AMI Name, AMI ID, Source, Owner, Visibility, Status, and Creation Date. The first five rows are visible, showing various Guardium v11.0 and v10.5 Collector and Aggregator AMIs.

| Name | AMI Name | AMI ID | Source | Owner | Visibility | Status | Creation Date |
|------|--|-----------------------|-------------------|--------------|------------|-----------|-------------------------|
| | IBM Security Guardium v11.0 Collector-80b0458b-5c00-459e-8d77-751d0dc4a25... | ami-0049508631ee9ddee | aws-marketplac... | 679593333241 | Public | available | June 30, 2019 at 5:20:0 |
| | IBM Security Guardium v11.0 Aggregator-a4eb1156-e2dc-449c-ba99-809a8392d... | ami-06eb947a5eabb6524 | aws-marketplac... | 679593333241 | Public | available | June 30, 2019 at 6:27:5 |
| | IBM Security Guardium v10.6 Collector-80b0458b-5c00-459e-8d77-751d0dc4a25... | ami-0e7b91ecb9ba9d690 | aws-marketplac... | 679593333241 | Public | available | January 2, 2019 at 5:36 |
| | IBM Security Guardium v10.6 Aggregator-a4eb1156-e2dc-449c-ba99-809a8392d... | ami-014a5af8ade81a4dc | aws-marketplac... | 679593333241 | Public | available | December 31, 2018 at 7 |
| | IBM Security Guardium v10.5 Collector-80b0458b-5c00-459e-8d77-751d0dc4a25... | ami-04a5ecf49952a53e8 | aws-marketplac... | 679593333241 | Public | available | November 22, 2018 at 8 |
| | IBM Security Guardium v10.5 Aggregator-a4eb1156-e2dc-449c-ba99-809a8392d... | ami-00a6f66644e93da7c | aws-marketplac... | 679593333241 | Public | available | November 22, 2018 at 8 |

4. Select from either the Collector or Aggregator Guardium AMIs.
5. Click Launch to start the Instance creation wizard.

Create the Guardium Instance

1. On the Choose an Instance Type page select the instance size General Purpose m4.2xlarge (Guardium recommends a minimum of 4 vCPUs and 24GB RAM). Click Next to configure the instance details.
2. Next to network select a VPC.
3. Next to subnet select a subnet from the list.
4. Under Network Interfaces enter an IP address in primary IP address.

| Network interfaces ⓘ | | | |
|----------------------|------------------------|----------------------|--|
| Device | Network Interface | Subnet | Primary IP |
| eth0 | New network interface▼ | <input type="text"/> | <input type="text" value="172.31.64.100"/> |

5. Click Next to go to the Storage Configuration page.
6. Review the configuration for Storage, then click Next.
7. Add a tag name for the instance, then click Next to configure the Security Group.

Configure the Security Groups

1. In the Security Configuration Page click on Assign a Security Group.
2. Next to Security Group Name enter a name for the Security Group.
3. Next to Description write a short description for the Security Group.
4. Guardium uses port 8443 to connect to the web UI and port 22 to connect to the CLI. Create these 2 rules:
 - a. Type: SSH, Protocol: TCP, Port Range: 22, Source: Custom
 - b. Type: Custom TCP, Protocol: TCP, Port Range: 8443, Source: Custom
 Note: Guardium recommends that security group rules allow access from known IP addresses only.

| Type ⓘ | Protocol ⓘ | Port Range ⓘ | Source ⓘ |
|-------------------|------------|--------------|-------------------------------------|
| SSH ▼ | TCP | 22 | Custom ▼ CIDR, IP or Security Group |
| Custom TCP Rule ▼ | TCP | 8443 | Custom ▼ CIDR, IP or Security Group |

Security Group rules can also be configured for the following on an as needed basis:

- For GIM: “tcp:8444-8446; tcp:8081”
- For FAM: “tcp:16022-16023”
- For Unix STAP: “tcp:16016-16018”
- For Windows STAP: “tcp:9500-9501”
- For Quick Search: “tcp:8983; tcp:9983”
- For MySQL: “tcp:3306”

For a complete list of ports that are used in IBM Security Guardium, see [Guardium port requirements](#).

5. Click Review and Launch.
6. Review the configuration settings then click Launch.
7. Select the Secret Key pair from the drop-down list , then click Launch Instances.

Configuration and Settings

Once the Guardium instance is deployed, the steps below outline how to connect to the instance and how to configure the network settings.

Connect to the instance

1. Connect to the Guardium GUI: In a browser, go the URL: https://<instance-ip>:8443. The default password for admin, accessmgr, and Guardium UI users is the instance-id.
2. Connect to the CLI. From a terminal, connect via ssh to the command line interface using the private key corresponding to the public key selected when launching the instance:

```
>ssh -i /path/to/private-key cli@<ip-of-gmachine>
```

Set up the Network

1. From the EC2 > Instances page, find the values for the private IP, subnet mask, internal gateway IP and Internal FQDN of the instance, then run the following CLI network commands to configure the appliance. Answer “yes” to the question “Is it a newly cloned appliance?”..
 - a. Setup the primary (eth0) IP

```
>store net interface ip <instance-ip>
```

- b. Setup the Netmask
`>store net interface mask <netmask>`
 - c. Set the GID for this instance
`>store product gid <n>`
 - d. Setup the Gateway
`>store network route defaultroute <default-router-ip>`
 - e. Set the DNS resolver
`>store network resolver 1 <resolver-ip>`
 - f. Setup the system hostname
`>store system hostname <instance-hostname>`
If the appliance is cloned, be sure to answer yes ('y') when prompted.
 - g. Setup the system domain
`>store system domain <instance-domain>`
2. Restart the network for all changes to take effect restart network:
`>restart network`

Working with Guardium support

If you need to contact Guardium support, the support team might need to access your system for debugging purposes. You can grant temporary access to the support team by running the following CLI command:

```
cli> support reset-password cloudsupport
```

To see the current passkey for cloudsupport, run the following CLI command:

```
cli> show passkey cloudsupport
```

When requested, copy and paste the passkey that is returned in the output and send it to Guardium Support.

For more information about the CLI commands, see [Support CLI commands](#).

IBM Security Guardium Licensed Materials - Property of IBM. © Copyright IBM Corp. 2017, 2019. US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

IBM, the IBM logo, and ibm.com® are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at "Copyright and trademark information" (www.ibm.com/legal/copytrade.shtml)