IBM Security Guardium Cloud Deployment for Amazon AWS

Guardium Technical Note

Updated June 28, 2023

IBM Security Guardium Cloud Deployment Guide for Amazon AWS

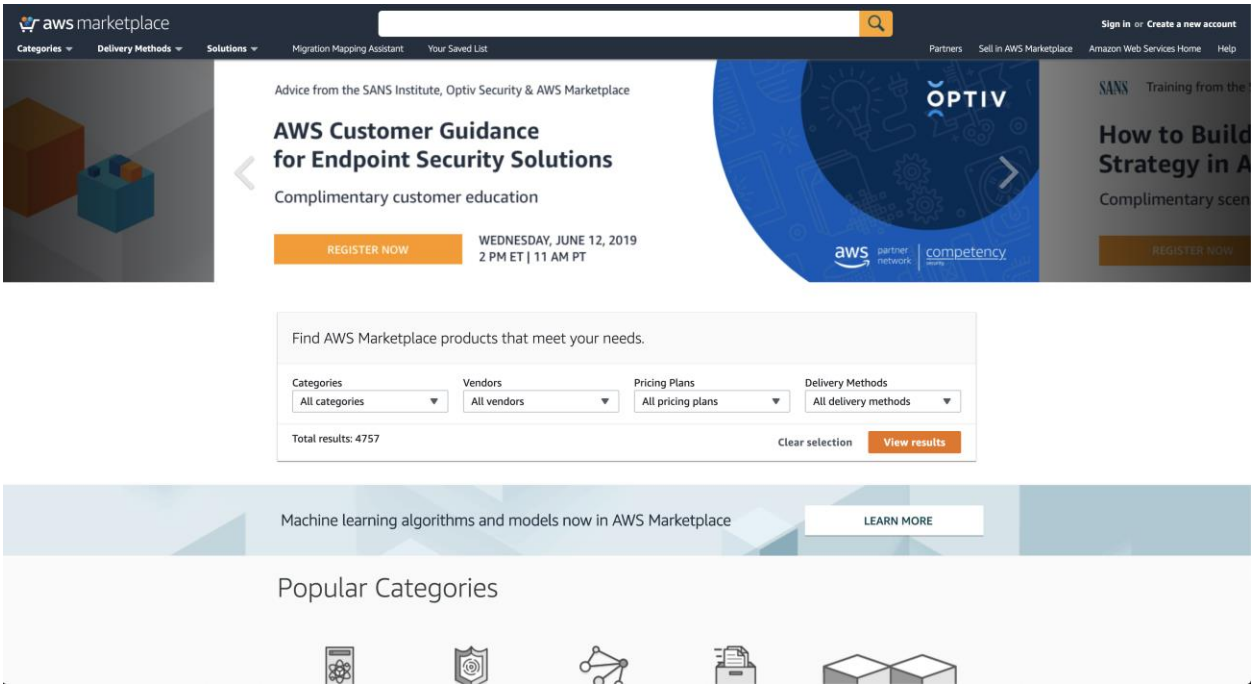
Introduction

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).

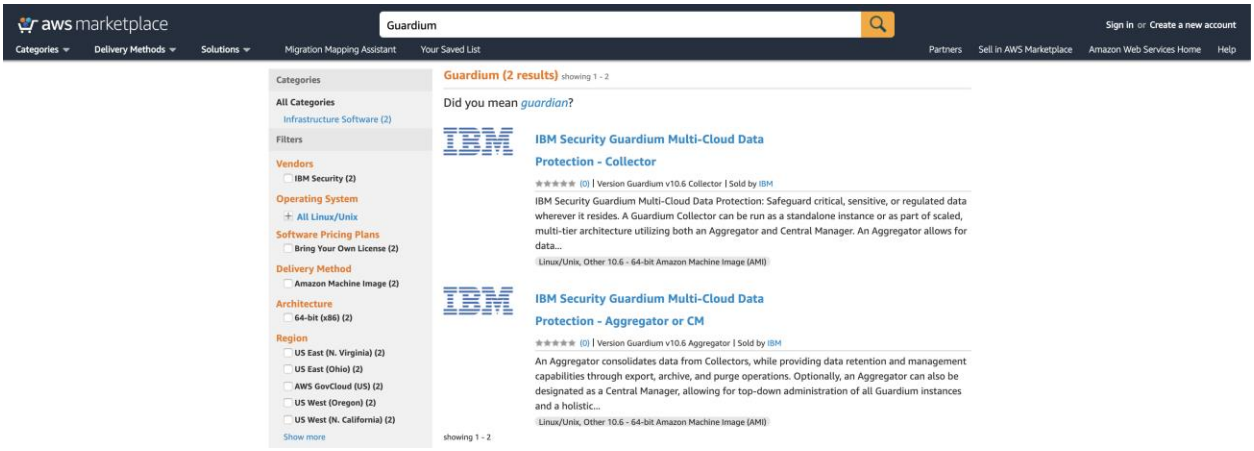
Note: Guardium supports Amazon EC2 M5 Instances for new deployments of Guardium v11.2 and later. EC2 M5 instances are not supported when you upgrade from a version of Guardium before v11.2.

Method 1: Deploying from the Marketplace

1. Navigate to the AWS Marketplace:
   https://aws.amazon.com/marketplace

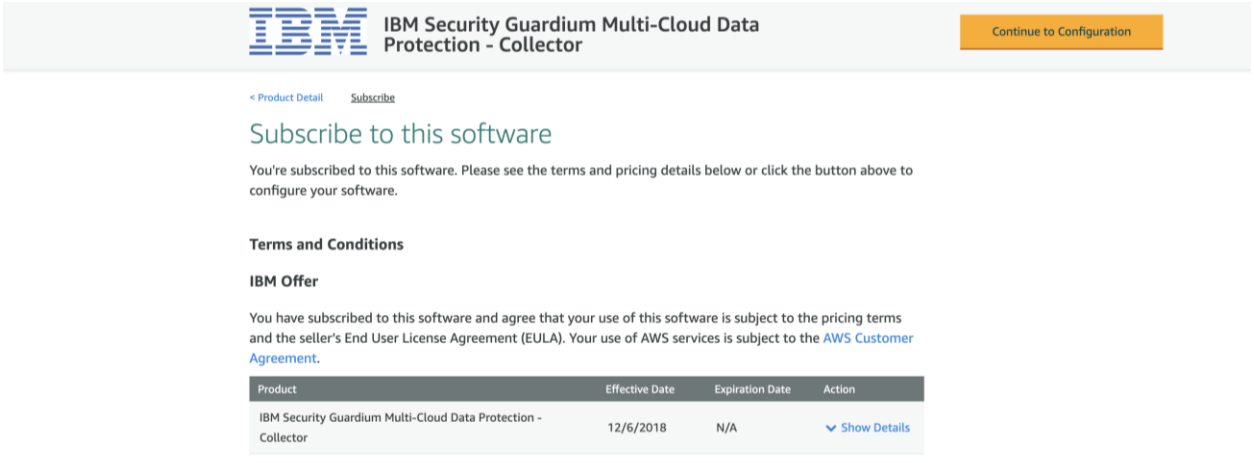


2. Search for Guardium.

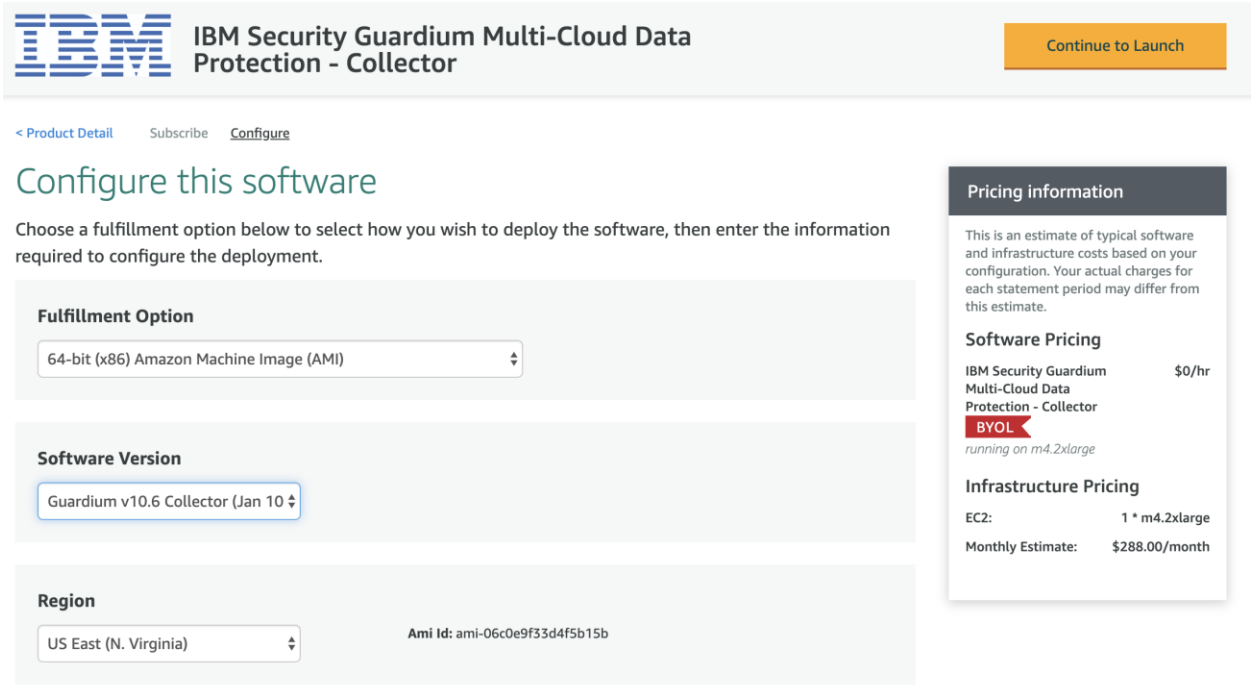


3. Click on the IBM Security Guardium Collector or the IBM Security Guardium Aggregator offering.
4. Click Continue to Subscribe to subscribe to the offering.

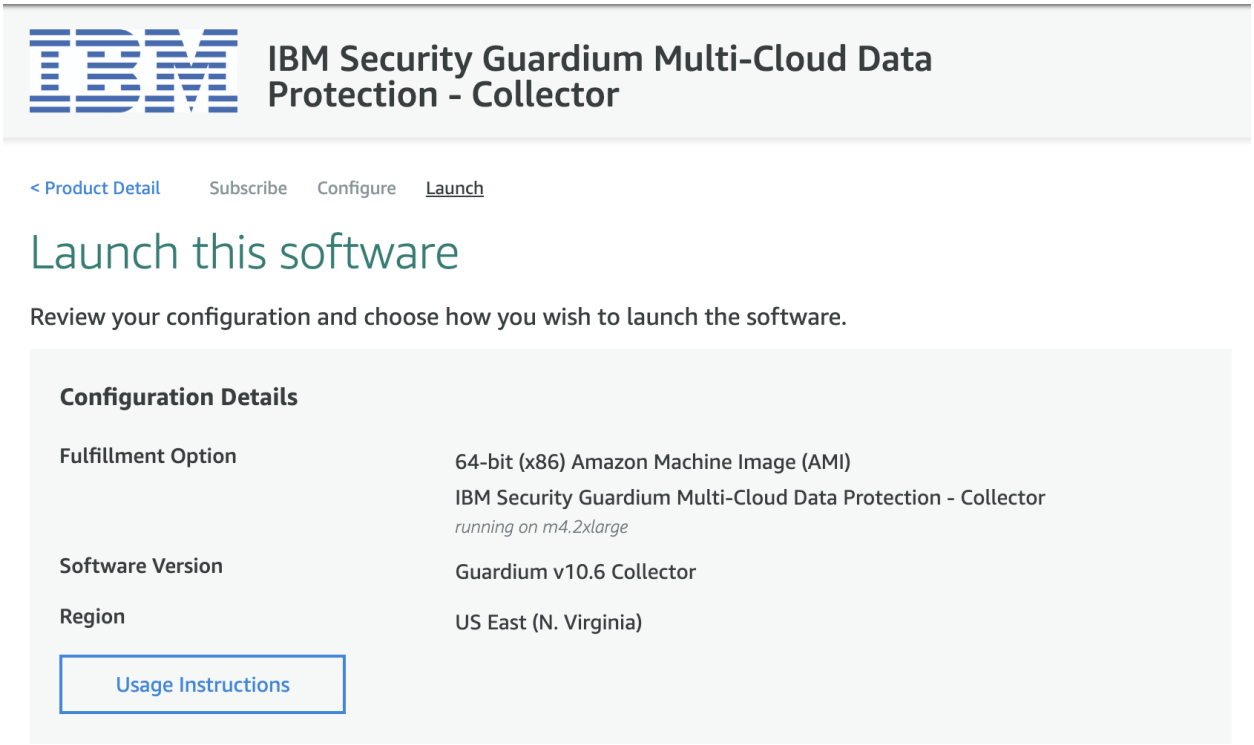
5. You are prompted to log into your AWS account if not logged in already
6. Review the terms and conditions.
7. Click Continue to Configuration.



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



9. Click Usage Instructions to review the 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:

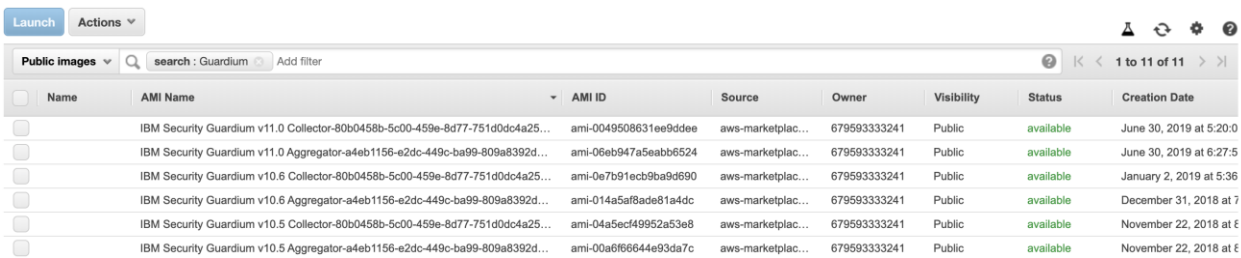
    > store password expiration cli
    > show password expiration cli

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."



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.

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.

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.