



Tech Tips: **Silver Peak Unity Orchestrator** **AMI Deployments**

Revision A, February 2020

Support

For product and technical support, contact Silver Peak Systems at either of the following:

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We're dedicated to continually improving the usability of our products and documentation.

- If you have suggestions or feedback for our documentation, send an e-mail to techpubs@silver-peak.com.
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About

This guide provides information about deploying an instance of Silver Peak Orchestrator from an Amazon Machine Image (AMI), as well as instructions about upgrades and migrations that are specific to the AMI instance. Go to any of the following topics for specific details.

- [Deploy Orchestrator from an Amazon Machine Image \(AMI\)](#)
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Deploy Orchestrator from an Amazon Machine Image (AMI)

Complete the following steps to deploy Orchestrator in AWS from an Amazon Machine Image (AMI).

1. Locate the **Silver Peak Unity Orchestrator - BYOL** image in the Amazon Marketplace.
2. Refer to the [Orchestrator Host Specification](#) document to guide your selections, then instantiate Orchestrator using the provided AMI.
3. SSH into Orchestrator using the key as **ec2-user**.
4. On the SSH, enter the following steps to reset the admin user password:
 - a. `$ sudo su - gms`
 - b. `$ cd /home/gms/gms`
 - c. `$./resetpasswd change`
 - d. You should be able to login to Orchestrator as an admin user at this point.

NOTE Before proceeding, you should update Orchestrator's public IP address or domain name. The IP or domain name is used by all appliances to communicate with Orchestrator and for building links for password reset, report emails, etc.

To change this value, log in to the Orchestrator UI and open the **Orchestrator Reachability** dialog (Administration > General Settings > Setup > Orchestrator Reachability).

General SSH Operations

This section provides information about SSH operations you will use frequently when working with an Orchestrator launched from an AMI.

Starting and Stopping Orchestrator

You must use `sudo` when starting and stopping the Orchestrator service.

Start Orchestrator

1. SSH into Orchestrator as `ec2-user`
2. Enter: `sudo service gms start`

Stop Orchestrator

1. SSH into Orchestrator as `ec2-user`
2. Enter: `sudo service gms stop`

Switching Users

Some commands must be executed with different user privileges.

Switch to root

1. SSH into Orchestrator as **ec2-user**
2. Enter `$ sudo su -`

Switch to admin

1. SSH into Orchestrator as **ec2-user**
2. Enter `$ sudo su - gms`

Modify the Orchestrator Restore Script

NOTE This step is only required if you are running Orchestrator versions 8.8.6 and earlier. A fix is planned in the Orchestrator 8.9.0 release.

Some commands in the restore script (restore.sh) do not include their full path. When using the Orchestrator AMI, you will need to modify the restore script to ensure that all contained commands will execute successfully.

To modify the restore script, SSH to Orchestrator as **ec2-user** and do the following:

1. Switch to the `gms` user:
2. `sudo su - gms`
3. Modify the restore script (`/home/gms/gms/setup/restore.sh`) as follows:
 - a. Locate all instances of the following commands: **gmsadmin, gmsdb, dbserver**
 - b. In each instance, ensure that the command includes the full `/home/gms/gms` path.
For example, toward the beginning of the script, under **# Stop gms:**
gmsadmin stop should be changed to **/home/gms/gms/gmsadmin stop**
4. Save the restore script when finished.

Upgrade Orchestrator

1. Upload the Orchestrator build file to Orchestrator. Place it under `/tmp`.
2. SSH into Orchestrator as `ec2-user`.

From here, you have two ways to install and upgrade Orchestrator, depending on your use case.

If you have an HTTP URL to the Orchestrator installation file, complete the following step.

1. In the shell console, enter `sudo /home/gms/gms/setup/install_orchestrator.sh <HTTP_URL_of_the_Orchestrator_installation_file>`

If you don't have an HTTP server, upload the Orchestrator installation file to Orchestrator by using SCP.

1. From your local PC console, enter `scp <Orchestrator Installation file> admin@<orchestrator_ip_address>:/home/gms`
2. From the Orchestrator SSH shell console, enter `sudo /home/gms/gms/setup/install_orchestrator.sh <full_path_to_Orchestrator_Installation_file>`

NOTE The upgrade process can take several hours to complete.

Migrate from an On-Prem Orchestrator

1. Take a backup of the on prem orchestrator.
2. Shut down the on prem Orchestrator.
3. Launch an Orchestrator using Orchestrator AMI. Upgrade (if required) the Orchestrator to the same exact version as the on prem orchestrator.
4. Restore the backup.
5. Copy the Orchestrator backup file from your back up server to the Orchestrator in AWS and put it in the `/home/gms` directory as `gms.zip`.
6. SSH into Orchestrator as `ec2-user` and do the following:
 - a. Change ownership of `gms.zip` and the `/home/gms/gms` directory to `gms.gms`:

```
chown -R gms.gms gms.zip  
chown -R gms.gms /home/gms/gms
```
 - b. Stop the Orchestrator service: `sudo service gms stop`
 - c. Switch to the `gms` user: `su - gms`
 - d. Run the restore script:

```
/home/gms/gms/setup/restore.sh 2>&1 | tee /tmp/restorelog
```
 - e. Start the Orchestrator service: `sudo service gms start`

Migrate from Orchestrator as a Service

Complete the following steps to successfully deploy your instance of Orchestrator from the Cloud to your on prem environment.

1. Deploy a new Orchestrator with the same version as your Cloud Orchestrator.
2. In the cloud based Orchestrator UI, select **Orchestrator Blueprint Export** (Orchestrator > Orchestrator Server > Tools > Orchestrator Blueprint Export). The **Orchestrator Blueprint Export** window opens.
3. Select **Migration**.
4. Select **Export**. Migration begins in the background.

NOTE It should take a few seconds. Do not close the browser during this time.

5. Complete the prompt to save the file on your local desktop.
6. Log in as admin to the Orchestrator in AWS.
7. Enter the Portal Account name and key.
8. Approve the target Orchestrator from the source (Cloud), Orchestrator, or ask Silver Peak Support to approve. Please see the Support page for contact information.
9. Contact Silver Peak Support to shutdown the Cloud Orchestrator.
10. Transfer the file you downloaded in Step #5 to your new Orchestrator in the directory `/home/gms`.

Complete the following CLI commands to restore an on prem Orchestrator from a cloud Orchestrator blueprint file.

1. Transfer `sp_blueprint.sql` to the new orchestrator in directory `/home/gms`.
2. SSH into new Orchestrator and stop the Orchestrator service, but keep database running.
 - a. Stop the Orchestrator service
 - b. Enter: `$ sudo service gms stop`
 - c. Switch to the admin user and start the database.
 1. `$ sudo su - gms`
 2. `$ cd /home/gms/gms`
 3. `$ dbserver start`

3. Run the blueprint import script: `$./setup/golden-orch-import.sh /home/gms/sp_blueprint.sql`
4. Start the Orchestrator service: `$ sudo service gms start`
5. Contact Silver Peak Support and request to delete the Cloud Orchestrator.