Silver Peak

Unity Orchestrator: Getting Started Guide

201525-001 Rev C
August 2019
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Date: August 2019

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About this guide

This guide describes how to install or upgrade Silver Peak® Unity Orchestrator™. This guide also explains the differences between Orchestrator versions 8.5.x and 8.6.x. Depending on your Orchestrator version, the steps required to install or upgrade Orchestrator are different.
About Silver Peak Unity Orchestrator

Silver Peak Unity Orchestrator manages all Silver Peak appliances in the WAN. From Orchestrator, you can provision, deploy, configure, monitor, and troubleshoot your Silver Peak SD-WAN regardless of the make, model, or deployment type. Orchestrator manages physical, virtual, and cloud-based EdgeConnect appliances from a single console.

Orchestrator is a virtual appliance and, therefore, requires a suitable host to run on. It must identify an appropriate host machine with adequate resources to host Orchestrator. Typical deployment locations for Orchestrator are in a Network Operations Center (NOC) or a data center, but any location with efficient access to the WAN devices are suitable.

For more information on Orchestrator requirements, refer to the Orchestrator Host System Requirements on Silver Peak’s user documentation site.

For licensing, the Orchestrator IP address must be able to reach the Silver Peak Cloud Portal by using the Internet. Allocate an appropriate IP address for the Orchestrator appliance and allow it access through any security components in the environment to the “silver-peak.com” domain. (Orchestrator requires port 443 access.)

What happens if a license expires?

If the license for an EdgeConnect appliance expires, you have a 30-day grace period to renew the license. In the meantime, you can continue using the appliance.
Before you begin

Before you set up Orchestrator and deploy EdgeConnect appliances, make sure you get the following information from your Silver Peak representative.

- An account name.
- An account key.
- A valid license for Orchestrator and all EdgeConnect appliances.

As long as your Silver Peak account representative submits a valid request, Silver Peak sends you an email with the required information.
Download the Orchestrator Virtual Appliance Package

Install Orchestrator for the first time from an email sent by Silver Peak.

1. From the email you received from Silver Peak, select the link to install Orchestrator. The Silver Peak website displays.
2. Sign in and click **Download Software**. Save the software to your local machine.
3. Select **Download Software**.
4. Select the Unity Orchestrator file for your appropriate hypervisor.
5. Select **Initial Installation Packages**.
6. Select **Orchestrator (GMS)**.
7. Select **GA** (General Availability).
8. Select the recommended release number to download your OVA file.
9. Save the OVA file in a location where you can import it into your hypervisor environment.

Silver Peak supports the following hypervisors:

- VMware
- Microsoft Hyper-V
- Citrix XenServer
- KVM

Once the OVA file for Unity Orchestrator has been downloaded, it is ready to be deployed using the hypervisor.

Alternatively, you can download the Orchestrator .ova file from the Silver Peak support portal.

2. Enter your Silver Peak user name and password.
3. Repeat the steps from the previous scenario.
Deploying the Orchestrator Virtual Appliance

After downloading the Orchestrator virtual appliance, you can deploy the Unity Orchestrator appliance using the hypervisor of your choice. The Quick Start Guides in the documentation section of the Silver Peak website can help with this process. For example, see Silver Peak Unity Orchestrator Quick Start for VMware to learn how to deploy Orchestrator on a VMware hypervisor.
Which version of Orchestrator am I using?

The steps that you follow to set up or upgrade Orchestrator differ depending on your Orchestrator version.

- To set up Orchestrator 8.5.x or earlier, completing the Getting Started Wizard is the only requirement.
- To upgrade Orchestrator 8.5.x to a newer version, complete the upgrade process in the UI.
- To set up Orchestrator 8.6.x or later, complete the Getting Started Wizard and configure certain features in the CLI.
- To upgrade Orchestrator 8.6.x to a newer version, complete the upgrade process in the CLI.

From the following table, select the scenario that best fits your organization’s needs.

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Setting up Orchestrator 8.5.x or earlier for the first time

The first time you sign into Orchestrator, the Getting Started Wizard opens automatically. Complete the following steps to navigate through the wizard.

Set up the hostname, DHCP, and password.

1. In your web browser, enter the IP address of your Orchestrator in the URL field.
2. Enter your user name and password.
3. Select Login.
4. In the Hostname field, enter a descriptive text for the Orchestrator host name.
5. (Optional) You can change your password by filling out the Change Admin Password fields.
6. For Management Interface, select DHCP or Static.
7. Select Next.

Set up licensing and registration.

1. For Account Name and Account Key, enter your account name and key that you obtained from Silver Peak. To view your account name and key, sign into the Silver Peak support portal.

   You need the account name and account key to use EdgeConnect.
2. In the License field, enter your account license.
   You need the license to use Orchestrator.
3. Select Next.

Set up the time and date.

1. For Date/Time, from the list, select your time zone.
2. Select Manual or NTP Time Synchronization.
   - Manual matches the appliance time to the client system time of the template. Follow the UI instructions to enter the date and time.
An NTP server is the recommended option and enables the Appliance Manager to choose servers in the listed order, from the top down. Data is synchronized across Orchestrator and the appliances.

3. In the **Server 1** field, enter the server IP address. It's not mandatory to include an address for Server 2.

4. Select **Next**.

Change the email settings.

1. For **Enable SSL**, select the check box if you want to enable Secure Socket Layer for your email transmissions.
2. For **Enable Authentication**, select the check box to enable SMTP authentication.
3. In the **SMTP Server** field, enter the address of the SMTP server that you want to use for Orchestrator email notifications.
4. In the **SMTP User** field, set up an email account by entering an email address.
5. In the **SMTP Password** field, enter a new password for the email account.
6. In the **Email Sender** field, enter the same email address that you entered in step 4.
7. In the **Server Port** field, enter the email server port number.
8. In the **Send a Test Email to** field, enter the same email address that you entered in step 4.
9. Select **Test** to display a message, "Test email sent", if Orchestrator successfully sent an email to the email address.
10. Select **Next**.

Add the EdgeConnect appliances.

1. From the **Group** list, select the group that the appliance belongs to.
2. In the **IP or DNS name** field, enter the IP address or DNS name of the appliance.
3. From the **Network Role** list, select a topology type, such as **Mesh**.
4. In the **Admin Username** field, enter your appliance user name.
5. In the **Admin Password** field, enter your appliance password.
6. From the **Protocol** list, select a network protocol for the appliance, such as **HTTPS**.
7. Select the right arrow, >, to add the appliance to the **Appliance List**.
8. Select **Next**.
Configure the Orchestrator backup settings.

1. For the backup **Destination**, fill in the fields.
2. For **Schedule**, select **Add** to add a backup schedule.
   The Schedule screen opens.
3. Complete the UI fields and check boxes and select **OK**.
4. Select **Apply**.

The Wizard Configuration Summary message opens, displaying a summary of your configuration settings. After you close the dialogue screen, Orchestrator restarts. Sign back in to begin using Orchestrator.
Upgrading Orchestrator 8.5.x or earlier to a newer version

If your current Orchestrator is version 8.5.x or earlier, complete the following steps to upgrade Orchestrator to a newer version.

Download the GIP file of the Orchestrator version that you want to upgrade to.

1. In your browser URL, enter https://www.silver-peak.com/support/customer-login.
2. Sign in with your user credentials.
3. Select Download Software.
4. Select Software Upgrades.
5. Select Orchestrator (GMS).
6. Expand GA and select a recommended release number to download your GIP file.
7. Save the GIP file in a location where you can import it into Orchestrator.

Upgrade Orchestrator.

1. In the Orchestrator main screen, select Orchestrator > Upgrade Orchestrator.
   
   **NOTE** Make sure you back up Orchestrator first.

2. Select Select Software Upgrade File.
3. From your local drive, select the GIP file that you previously saved.
4. Select Open.
5. Select Start Upgrade Now.

The upgrade process can take 30 minutes or more. Keep the current Orchestrator screen open to view the upgrade process. When the upgrade is complete, Orchestrator restarts.
Setting up Orchestrator 8.6.x or later for the first time

This scenario describes how to set up a new Orchestrator deployment that's version 8.6.x or later. The setup process follows the steps in the Getting Started Wizard, outlined in Setting up Orchestrator 8.5.x or earlier for the first time. Unlike Orchestrator 8.5.x, however, the setup process for Orchestrator 8.6.x requires you to configure some features in the command line interface (CLI) and not in the Getting Started Wizard.

Configure these mandatory CLI settings

Complete the following steps to change the admin password and the root password.

1. Install the Orchestrator 8.6.x virtual appliance package.
2. Sign in to Orchestrator using the hypervisor console or by creating an SSH shell.
   The default admin user name is admin.
   The default admin password is admin.
3. Orchestrator prompts you to change the admin password and the root password. Follow the CLI screen prompts to change the passwords.

Optionally configure these Linux host settings

Change the virtual machine IP address to a static IP address if DHCP is not an option.

1. SSH as the admin.
2. Enter su - root.
3. Enter cd /etc/sysconfig/network-scripts.
4. Use a text editor to edit the following interface configuration file: ifcfg-mgmt0.
   a. Change BOOTPROTO=dhcp to BOOTPROTO=none.
   b. Change IPADDR= to IPADDR=<ip address>.
   c. Change NETMASK= to NETMASK=<net mask>.
   d. Change GATEWAY= to GATEWAY=<ip address>.
5. Execute the following command: service network restart.

Change the Orchestrator hostname by completing the following steps.
1. SSH as the admin.
2. Enter `su - root`.
3. Enter `cd /etc`.
4. Use a text editor to edit the contents of the `/etc/hostname` file.
5. Use a text editor to edit the contents of the `/etc/hosts` file.

Change the primary and secondary DNS servers used in a static IP address.

1. SSH as the admin.
2. Enter `su - root`.
3. Enter `cd /etc`.
4. Use a text editor to edit the contents of `/etc/resolv.conf`.

Manually set the time zone, date, and time that's used by Orchestrator.

1. SSH as the admin.
2. Enter `su - root`.
3. Enter `timedatectl set-timezone <timezone name>`.

Set up the NTP servers to synchronize the date and time across Orchestrator and EdgeConnect appliances.

1. SSH as the admin.
2. Enter `su - root`.
3. Use a text editor to edit the contents of `/etc/ntp.conf`.
4. At the bottom of the text, enter `server <server ip or name>` as many times as required.
5. If your system is using chrony, edit the contents of the `/etc/chrony.conf` file instead.
6. Enter `timedatectl set-ntp true`.
Upgrading Orchestrator 8.6.x to a newer version

If you are already using Orchestrator 8.6.0 or later and want to upgrade to a newer version, complete the following requirements.

**WARNING** An upgrade that fails can cause Orchestrator to be in a corrupt state. Back up Orchestrator before you start the upgrade process.

1. Create an SSH shell to Orchestrator.
2. SSH as the administrator, admin.
3. Enter `su -root`.
4. Enter `cd /home/gms`.

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 `/home/gms/gms/setup/install_orchestrator <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 `/home/gms/gms/setup/install_orchestrator <full_path_to_Orchestrator_Installation_file>`

**NOTE** The upgrade process can take several hours to complete.
Related Documentation

- **Release Notes** provide information on new software features, system bugs, and software compatibility.

- All user documentation is available at [https://www.silver-peak.com](https://www.silver-peak.com).