Upgrading Avaya Aura™ System Platform

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Contents

Chapter 1: Upgrading System Platform

Platform upgrade

Use the **Platform Upgrade** option to upgrade Avaya Aura™ System Platform software for one or all of the following:

- System Domain (Domain-0)
- Console Domain

Note:
Before proceeding with the System Platform upgrade, check the relevant template documentation to ensure that the template is qualified for the System Platform version to which you want to upgrade.

If System Platform High Availability is enabled and you are upgrading System Domain (Domain-0) and Console Domain, you must stop High Availability before performing the upgrade. Upgrade each server separately before restarting High Availability. See Methods for upgrading High Availability systems on page 13.

The platform upgrade software is distributed as an ISO file (the file type in which System Platform software is distributed for new installations) or platform upgrade files. If you are using the ISO file, you can copy it to a CD or DVD and use the **SP CD/DVD** option to upgrade. Alternately, you can decompress the ISO file and copy the decompressed contents to a USB drive. You can use the **SP USB Disk** option to upgrade.

If you are using the platform upgrade files to install, you can use any of the available options: **Avaya Downloads (PLDS)**, **HTTP**, **SP Server**, **SP CD/DVD**, or **SP USB Disk**.

Note:
On Windows, use WinZip release 12 or higher to decompress the ISO file.

Upgrading System Platform

1. Log in to System Platform Web Console.
2. Click **Server Management** > **Platform Upgrade**.
3. In the **Upgrade Platform From** field, select a location from where to download the template image files for the platform upgrade. The system searches for a template description file that has an .ovf extension. Options are:
   - **Avaya Downloads (PLDS)**
   - **HTTP**
   - **SP Server**
   - **SP CD/DVD**
   - **SP USB Device**
4. If you selected **HTTP** or **SP Server** in the **Upgrade Platform From** field, enter the platform upgrade URL.
5. Click **Search**.
6. Select the required template description file to perform the platform upgrade, and then click **Select**.
   The system displays the version and additional information for the current and the new platform (System Domain (Domain-0) or Console Domain, or both) on the Platform Upgrade Details page.
7. On the Platform Upgrade Details page, click **Upgrade**.

   Important:
   As part of the upgrade process, the System Domain (Domain-0) and Console Domain are rebooted, and as a result, all other virtual machines will be rebooted. During the platform upgrade process, all operations on the System Platform Web Console are blocked and all links (including menu items) are disabled until the system is booted up into the new platform for you to commit or rollback the upgrade.
8. In the dialog box that appears to confirm that the template has been qualified for the platform version you are about to upgrade to and that both System Platform Web Console and Console Domain will reboot on completing the upgrade, click **OK**.
   The system displays all the available template description files for the URL.
9. Click **OK** in the dialog box prompting you to confirm the upgrade.
   At this stage, the upgrade process starts and the system displays the Platform Upgrade workflow status page.

Note:

The System Domain (Domain-0) and Console Domain are rebooted at this stage. So the Platform Upgrade workflow status page does not show any updates until it reboots in the new Console Domain. After the Web Console is up, the system automatically redirects you to the login page. This can take approximately 20 minutes.

10. Log in to the System Platform Web Console.

    At this stage, you can view the time remaining for Auto Rollback of the platform upgrade on the Commit or Rollback platform upgrade page. You can also check the Web Console to make sure that the upgrade process is running alright.

11. On the Commit or Rollback platform upgrade page, do one of the following:

    - Click **Commit** to continue the upgrade process by committing to the newly upgraded platform. See Committing an upgrade on page 11

      Note:

      You are allowed a 4-hour period to log in to the System Platform Web Console. If you do not login during this period, the system will reboot using the previous release of System Platform. If a user logs in to System Platform Web Console within the 4-hour period, it is assumed that System Platform is reachable and the timer is cancelled. However, you still need to verify and commit the upgrade.

    - Click **Rollback** to cancel the upgrade process and go back to the previous version of the software. See Rolling back an upgrade on page 11.

Commit and Rollback

System Platform upgrades should be committed before performing other operations. During an upgrade, after the system boots in the new platform release, the user is required to commit or rollback the upgrade. While the system is waiting for the user to either commit or rollback, Avaya advises not to perform any of the following operations:

- Delete a template
- Install a template
- Upgrade a template
- Reboot the System Platform Web Console

Note:

Rebooting System Platform Web Console before committing will roll back the system back to the previous release.

Note:

System Platform does not prevent you from performing the above operations prior to selecting commit or rollback.

If you perform the above operations, the operations will actually take effect on the system. Thereafter, if rollback is performed, the new changes will be visible in the rolled back system. Committing an upgrade is unaffected by the changes made prior to committing the upgrade. If the template-related operations are performed and you want to recover after committing or rolling back the upgrade, you need to manually rollback the changes through System Platform Web Console. The upgrade rollback operation will not be able to roll the system back. A commit of the upgrade, on the other hand, is unaffected by the changes that you make prior to committing the System Platform upgrade.

Commit

You can execute a commit operation when you are satisfied that the new System Platform software is working without any issues. After executing a commit operation, you cannot go back to the older version of the System Platform software. If you do not log in to System Platform Web Console within 4 hours after the upgrade, the system performs an automatic rollback.

The system performs the following when you commit an upgrade:

- Disables the four hour timer that automatically performs a rollback.
- Performs a clean up operation (such as, removing state files and so on).
- Commits boot loader (grub) to boot up into the new platform from now on.
- Marks the Workflow as complete and indicates that on the Platform Upgrade Status page.

Rollback

You can execute a rollback operation if you find any errors or issues with the new System Platform software and want to go back to the older version of the software. Rollback can reboot the server.

The system performs the following when you roll back an upgrade:

- Disables the four hour timer that automatically performs a rollback.
- Commits boot loader (grub) to boot up into the old platform.
- Performs a clean up operation (such as, removing state files and so on).
- Prepares the system to notify the user of the reason for rollback after rebooting into the old platform.
- Reboots the platform to boot up into the old platform and restores access to System Platform Web Console.

Committing an upgrade

On the Commit or Rollback platform upgrade page, click **Commit** to continue the platform upgrade process.

Rolling back an upgrade

On the Commit or Rollback platform upgrade page, click **Rollback** to cancel the upgrade process and go back to the previous version of the software.

Note:

After a rollback, when you log on to the System Platform Web Console, the system displays the Rollback Acknowledge page that specifies the reason for rollback (either user initiated rollback or deadmans switch) based Auto rollback; or if the upgrade failed and the system rebooted to an older version of System Platform as part of fail-safe fallback mechanism.

Platform Upgrade field descriptions

Name	Description
Upgrade Location	Lets you specify the location from where to download or upload the template image files for the platform upgrade. Options are: • **Avaya Downloads (PLDS)** The files are located in the Avaya Product Licensing and Delivery System (PLDS) Web site. You must enter an Avaya SSO login and password. • **HTTP** The files are located on an HTTP server. You must specify the URL of the platform upgrade if you select this option.

Name	Description
	• **SP Server** The platform upgrade files are located in the `/vsp-template` directory in the System Platform Console Domain. You will need to copy the platform upgrade files in this directory using a file transfer program and change their permissions as follows: `chmod 644 <files-copied>` • **SP CD/DVD** The files are located in a CD or DVD. • **SP USB Device** The files are located in a USB flash drive.

Button descriptions

Button	Description
Search	Searches for a template description file that has an .ovf (Open Virtualization Format) extension at the location that you specify. Opens the Platform Upgrade Details page with the search results. **Note:** Open virtualization format (OVF) is an open standard for packaging and distributing software that runs on virtual machines.
Select	Selects the required template description file.
Upgrade	Upgrades the system with the template description file.
Commit	Commits an upgrade operation and upgrades the System Platform software to the latest version. **Note:** After executing a commit operation, you cannot go back to the older version of the System Platform software. If you do not execute a commit operation within 4 hours after the upgrade, the system performs an automatic rollback.
Rollback	Cancels an upgrade operation, and the system goes back to the previous version of System Platform software.
Acknowledge	Lets you confirm the reason for the rollback operation.

Upgrading System Platform on High Availability Systems

Methods for upgrading High Availability systems

You can upgrade System Platform either on both servers or on the preferred server only.

Upgrading System Platform on both servers

With this method, you must upgrade System Platform on each server. However, the benefit is that you can perform both upgrades from the System Platform Web Console. Therefore, you do not need direct access to the servers.

Upgrading System Platform on the preferred server only

With this method, you upgrade System Platform on the preferred server only. You do not upgrade the standby server. However, you must reinstall the standby server with the same version of System Platform as the preferred server was upgraded to. This task requires direct access to the standby server.

Stop and start of High Availability for platform upgrades

Stopping High Availability for platform upgrades

System Platform does not support platform upgrades while High Availability is running. If you attempt an upgrade while High Availability is running, a warning message is displayed and the system will prevent you from performing the upgrade. To proceed, first stop High Availability.

Starting High Availability after platform upgrades

Once you have finished the platform upgrade procedure on both servers, you can start High Availability from the Failover page.

This procedure synchronizes all required configuration settings from the preferred node to the standby node so that the standby node can assume the role of active node if required.

Stopping High Availability

This procedure restarts the console domain and all template virtual machines.

1. Click **Server Management** > **Failover**.
2. Click **Stop Failover Mode** and confirm the warning that is displayed.

System Platform Web Console redirects to the Reboot page and after a few minutes redirects to the Login page.

3. Log in to the System Platform Web Console.
4. Click **Server Management** > **Failover** and check the status of the High Availability Failover.

Starting High Availability Failover

Prerequisites

High Availability Failover is configured on the system.

This procedure synchronizes all required configuration settings from the preferred node to the standby node so that the standby node can assume the role of active node if required.

This procedure restarts the console domain and all template virtual machines.

1. Click **Server Management** > **Failover**.
2. Click **Start Failover Mode** and confirm the warning that is displayed.
   System Platform Web Console redirects to the Reboot page and after a few minutes redirects to the Login page.
3. Log in to the System Platform Web Console.
4. Click **Server Management** > **Failover** and check the disc synchronization progress.

Upgrading System Platform on both servers

Prerequisites

Stop High Availability.

1. Login to the System Platform Web Console on the standby node.
   The System Platform Web Console of the standby node displays the failover status in the upper right corner.
2. Go to the Platform Upgrade page and proceed with the upgrade procedure of the standby node.
3. Log in to the System Platform Web Console for the preferred node.

The System Platform Web Console of the preferred node displays the failover status in the upper right corner.

4. Go to the Platform Upgrade page and proceed with the upgrade procedure of the preferred node.
5. Once finished, start System Platform High Availability from the Failover page of the preferred node.

Note:

The order of upgrades of the servers is not really important. This is only a suggested order of the upgrades. Platform upgrade must be performed on each server separately. A difference of version between the servers will prevent System Platform High Availability from starting after the upgrade is complete.

Related topics:

Upgrading System Platform on page 8
Stopping High Availability on page 13
Starting High Availability Failover on page 14

Upgrading System Platform on the preferred server only

Prerequisites

Stop High Availability.

1. Log in to the System Platform Web Console on the preferred node.
   The System Platform Web Console displays the failover status in the right upper corner.
2. Click **Server Management** > **Failover**.
3. Click **Remove Failover** and confirm the warning.
4. Go to Platform Upgrade page and proceed with the upgrade procedure of the preferred node.
5. Reinstall the standby node with the same version of System Platform as the preferred node was upgraded to.
6. Once finished, configure and start High Availability from the Failover page of the preferred node.

Note:

Both servers must be running the same version of System Platform. A difference of version between the servers will prevent you from starting System Platform High Availability after the upgrade is complete.

Related topics:

Upgrading System Platform on page 8
Stopping High Availability on page 13
Starting High Availability Failover on page 14

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