

Avaya Enterprise Linux Install and Upgrade Procedures

(Issue 3)

Introduction

This document contains updated Experience Portal 6.0 documentation related to installing and upgrading Avaya Enterprise Linux. When installing or upgrading Avaya Enterprise Linux, you should follow the procedures in this document rather than the procedures contained in the documentation library that shipped with Experience Portal 6.0.

If you are doing a fresh install of Avaya Enterprise Linux, see the topic [Installing and configuring Avaya Enterprise Linux](#).

If you are upgrading Avaya Enterprise Linux, see the topic [Upgrading Avaya Enterprise Linux](#).

Installing and configuring Avaya Enterprise Linux

Before you begin

Install the Avaya-provided hardware at the customer site.

If you are installing Avaya Enterprise Linux using the console, make sure that you have a keyboard and monitor connected directly to the server machine.

If you are using a cross-over Ethernet connection from a laptop, make sure that you have configured the laptop properly as described in [Preparing to connect to Avaya Enterprise Linux via a cross-over Ethernet cable](#).

Based on how this server is going to be used, have the appropriate worksheet below completed ready to help answer the questions asked during the installation:

- Primary EPM server installation worksheet
- Auxiliary EPM server installation worksheet
- MPP server installation worksheet
- Single server configuration worksheet



Note:

These worksheets can be found in the topic *Installation Worksheets* in the documents *Implementing Avaya Aura Experience Portal on multiple servers* and *Implementing Avaya Aura Experience Portal on a single server*.

Procedure

1. Power on the server.
2. Boot the server from the Avaya Enterprise Linux DVD.
3. Initiate the install.

- A) If you are installing via the console:

When the server boots you will see the Avaya Enterprise Linux installer Welcome screen. Type `1` and press *Enter* at the **boot** prompt to select the **Fresh Install** option. The installer displays the Warning screen.



Important:

You must enter your selection on the Welcome screen within 60 seconds. If you do not, the installer assumes that there is no console attached and starts looking for an Ethernet cross-over connection on interface eth1.

- B) If you are upgrading via a cross-over Ethernet connection to eth1:

On your laptop, open a Command Prompt window and enter the command `ping -t 192.11.13.6` to determine when the server has booted. Once the server starts responding to ping, type *Ctrl-C* to stop the ping command.

Then, use a telnet client such as PuTTY to open a telnet connection to IP address 192.11.13.6. The installer displays the Warning screen.



Important:

You must initiate your telnet session within 5 minutes of the server responding to ping. If you do not, the installer ejects the DVD and reboots the server.



Note:

If you wish to use the Windows command telnet as your telnet client, the proper way to connect to an Experience Portal server is as follows:

- a. Open a Command Prompt window.
- b. Enter the command *telnet*.
- c. At the **Microsoft Telnet>** prompt, enter the command *set term vt100*.
- d. At the **Microsoft Telnet>** prompt, enter the command *open 192.11.13.6*.

4. On the Warning screen, type *yes* and press *Enter* to continue with the installation. The Installer displays the Network related information screen.



Note:

Under rare circumstances, instead of displaying the Warning screen the Avaya Enterprise Linux installer displays the error **No Disks found! /dev/sda missing!** If that happens, type *n* and press *Enter* at the **Eject CD/DVD before rebooting** prompt. This is an intermittent issue that will likely not reoccur when you reboot.

5. On the Network related information screen, enter the following details:
 - **hostname or FQDN:** Type the hostname of the server.
 - **ip address (eth0):** Type a static IP address for the server.
 - **subnetmask:** Type the subnet mask for the server.
 - **gateway:** Type the IP address of the default gateway.
 - **DNS domain:** Type the domain name where this server resides.
 - **DNS server 1:** Type the IP address of the first DNS server.
 - **DNS server 2:** Type the IP address of the second DNS server.
 - **DNS server 3:** Type the IP address of the third DNS server.
6. Press *Enter*.
The installer displays the network related information that you have specified.
7. Type *yes* and press *Enter* to confirm the network related information.
The installer displays the Time Zone selection screen.
8. Type the number of desired region and press *Enter*.
The installer displays a list of time zones in the selected region.
9. Type the number of the desired time zone and press *Enter*.
The installer displays the time zone that you have specified.
10. Type *c* and press *Enter* to confirm the time zone.
The installer displays the Date and Time screen.
11. Specify the date details:
 - **day of month**
 - **month**
 - **year**

12. Specify the time details:
- **hours**



Note:

Type the hour in 24 hour format.

- **minutes**

13. Press *Enter*.
The installer displays the date and time that you have specified.
14. Type *yes* and press *Enter* to confirm the date and time information.
The installer displays *the NTP* configuration screen.
15. Enter the following NTP details:
- **NTP server 1:** Type the IP address of the first NTP server.
 - **NTP server 2:** Type the IP address of the second NTP server.
 - **NTP server 3:** Type the IP address of the third NTP server.



Note:

The Experience Portal installer automatically configures NTP on all servers other than the primary EPM to synchronize with the primary EPM. Therefore, it is safe for you to leave all NTP server addresses blank.

16. Press *Enter*.
The installer displays the NTP information that you have specified.
17. Type *yes* and press *Enter* to confirm the NTP information.
The installer erases any existing data on the server hard disk and installs Avaya Enterprise Linux. When the installer is finished, it ejects the DVD and reboots the server.



Important:

Once the server reboots, you can no longer access that server via telnet. Instead, you must use an SSH client. Note that PuTTY can function as an SSH client as well as a telnet client.

18. Remove the Avaya Enterprise Linux DVD from the drive.
19. When the server comes back online, log in to Linux on the Experience Portal server.



Note:

The Enterprise Linux Installer creates the following accounts:

User name	Group	Purpose
root	root	Avaya Services root access
craft	susers	Avaya Services non-root access
cust	susers	Customer non-root access

 **Note:**
This account is disabled until you set the password for it later in this procedure.

root	root	<p>Customer root access</p> <p> Note: This account is disabled until you set the password for it later in this procedure.</p>
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The root login is disabled after installing Avaya Enterprise Linux. If you need the password for the sroot or craft account, contact Avaya Services.

You cannot log in directly as a root user except via the console. Instead, you must log in as a non-root user and switch to a root account using the su command.

- A) If you are installing via the console:

Log in to the local Linux console as sroot.

- B) If you are installing via a cross-over Ethernet connection to eth1:

If you are installing a Dell PowerEdge1950 server (also known as Avaya S8510), then move the cross-over cable from the second Ethernet port on the daughter-card to the second Ethernet port on the motherboard (port **Gb 2**).

Use a secure shell (SSH) client such as PuTTY to open an SSH connection to IP address *192.11.13.6*.

Log in to Linux as craft and then change to the user sroot by entering the *su - sroot* command.

20. For security reasons, change the passwords for the two Linux customer-related accounts created during the installation.



Note:

If this procedure is performed by an Avaya Services representative, you should either have the customer enter the new passwords, or enter default passwords and inform the customer what passwords you used and that they need to change those passwords as soon as possible.

- a. Enter the *passwd root* command.
- b. Type the password and press *Enter*.
- c. Confirm the password at the prompt.
- d. Enter the *passwd cust* command.
- e. Type the password and press *Enter*.
- f. Confirm the password at the prompt.

Next steps

Return to *Implementing Avaya Aura Experience Portal on multiple servers* or *Implementing Avaya Aura Experience Portal on a single server* for instructions on installing Experience Portal.

Upgrading Avaya Enterprise Linux

If this installation uses Avaya-provided hardware for the Avaya Aura® Experience Portal servers, you need to upgrade Avaya Enterprise Linux to version RH6.0.32-AV17EP6 or later.

Before you begin

If you are upgrading Avaya Enterprise Linux using the console, make sure that you have a keyboard and monitor connected directly to the server machine.

If you are upgrading Avaya Enterprise Linux using a regular network connection, make sure that you have a secure shell (SSH) client such as PuTTY.



Note:

Most of the upgrade procedure can be performed remotely. However, someone with physical access to the server is required to insert the Avaya Enterprise Linux DVD in to the server at the beginning of the upgrade procedure.

If you are using a cross-over Ethernet connection from a laptop, make sure that you have configured the laptop properly as described in [Preparing to connect to Avaya Enterprise Linux via a cross-over Ethernet cable](#).

Procedure

1. Log in to Linux on the Voice Portal 5.x server.
 - A) If you are upgrading via the console:

If you are an Avaya Services representative, log in to the local Linux console as `sroot`.

Otherwise, log in to the local Linux console as `root`.
 - B) If you are upgrading via a regular network connection to `eth0`:

If you are an Avaya Services representative, log in to Linux as `craft` and then change to the user `sroot` by entering the `su - sroot` command.

Otherwise, log in to Linux as a non-root user and then change to the user `root` by entering the `su -` command.
 - C) If you are upgrading via a cross-over Ethernet connection to `eth1`:

Use a secure shell (SSH) client such as PuTTY to open an SSH connection to IP address `192.11.13.6`.

If you are an Avaya Services representative, log in to Linux as `craft` and then change to the user `sroot` by entering the `su - sroot` command.

Otherwise, log in to Linux as a non-root user and then change to the user `root` by entering the `su -` command.
2. Insert the Avaya Enterprise Linux DVD (version RH6.0.32-AV17EP6 or later) into the server's DVD drive.

3. Mount the drive by entering the *mount /mnt/cdrom* command.

If the mount command shown above does not work, see the topic *Cannot mount DVD on Avaya Linux* in *ReleaseNotes.htm*.

4. Enter the *bash /mnt/cdrom/Avaya/vpupgrade.sh* command to run the Preupgrade utility. This utility prepares the system for the upgrade.
5. Type *y* and press *Enter* to confirm that you want to run the utility. The utility asks whether autoupgrade should be enabled.
6. Specify whether autoupgrade should be enabled.

- A) If you are upgrading via the console:

Type *n* and press *Enter* to disable autoupgrade.

- B) If you are upgrading via a regular network connection to eth0:

Type *y* and press *Enter* to enable autoupgrade.

- C) If you are upgrading via a cross-over Ethernet connection to eth1:

If you are upgrading a Dell PowerEdge 1950 server (also known as Avaya S8510), then type *y* and press *Enter* to enable autoupgrade.

Otherwise, type *n* and press *Enter* to disable autoupgrade.

7. Wait until the script has finished processing. When the script has finished processing, it prompts you to press *Enter* and then reboot the server.
8. Press *Enter* to complete the Preupgrade utility.
9. Enter the *reboot* command to reboot the server.



Important:

Leave the Avaya Enterprise Linux DVD in the server so that the server boots from the DVD.

10. After reboot, proceed with the upgrade.

- A) If you are upgrading via the console:

When the server boots you will see the Avaya Enterprise Linux installer Welcome screen. Type *2* and press *Enter* at the **boot** prompt to select the **Upgrade** option. The installer displays the Warning screen.



Important:

You must enter your selection on the Welcome screen within 60 seconds. If you do not, the installer assumes that there is no console attached and starts looking for an Ethernet cross-over connection on interface eth1.

**Note:**

Under rare circumstances, instead of displaying the Warning screen the Avaya Enterprise Linux installer displays the error **No Disks found! /dev/sda missing!** If that happens, type *n* and press *Enter* at the **Eject CD/DVD before rebooting** prompt. This is an intermittent issue that will likely not reoccur when you reboot.

B) If you are upgrading via a regular network connection to eth0:

Skip to step 12. Since you enabled autoupgrade, the upgrade will complete with no input required.

C) If you are upgrading via a cross-over Ethernet connection to eth1:

If you are upgrading a Dell PowerEdge 1950 server (also known as Avaya S8510), then skip to step 12. Since you enabled autoupgrade, the upgrade will complete with no input required.

Otherwise, on your laptop open a Command Prompt window and enter the command `ping -t 192.11.13.6` to determine when the server has booted. Once the server starts responding to ping, type *Ctrl-C* to stop the ping command.

Then, use a telnet client such as PuTTY to open a telnet connection to IP address `192.11.13.6`. The installer displays the Install/Upgrade screen.

**Important:**

You must initiate your telnet session within 5 minutes of the server responding to ping. If you do not, the installer ejects the DVD and reboots the server.

**Note:**

If you wish to use the Windows command telnet as your telnet client, the proper way to connect to an Experience Portal server is as follows:

- a. Open a Command Prompt window.
- b. Enter the command `telnet`.
- c. At the **Microsoft Telnet>** prompt, enter the command `set term vt100`.
- d. At the **Microsoft Telnet>** prompt, enter the command `open 192.11.13.6`.

**Note:**

Under rare circumstances, instead of displaying the Install/Upgrade screen the Avaya Enterprise Linux installer displays the error **No Disks found! /dev/sda missing!** If that happens, type *n* and press *Enter* at the **Eject CD/DVD before rebooting** prompt. This is an intermittent issue that will likely not reoccur when you reboot.

Type *u* and press *Enter* at the **Specify your choice** prompt to select the **Upgrade** option. The installer displays the Warning screen.

11. On the Warning screen, type *yes* and press *Enter* to continue with the upgrade.
12. Wait until the installer has finished processing.
When the installer is finished, it ejects the DVD and reboots the server.
13. Remove the Avaya Enterprise Linux DVD from the drive.

14. When the server comes back online, log in to Linux on the Experience Portal server.



Note:

The root login is disabled after upgrading Avaya Enterprise Linux. If you need the password for the sroot or craft account, contact Avaya Services.

A) If you are upgrading via the console:

Log in to the local Linux console as sroot.

B) If you are upgrading via a regular network connection to eth0:

Log in to Linux as a non-root user and then change to the user sroot by entering the *su - sroot* command.

C) If you are upgrading via a cross-over Ethernet connection to eth1:

Use a secure shell (SSH) client such as PuTTY to open an SSH connection to IP address *192.11.13.6*.

Log in to Linux as a non-root user and then change to the user sroot by entering the *su - sroot* command.

15. For security reasons, change the passwords for the two Linux customer-related accounts created during the installation.



Note:

If this procedure is performed by an Avaya Services representative, you should either have the customer enter the new passwords, or enter default passwords and inform the customer what passwords you used and that they need to change those passwords as soon as possible.

- a. Enter the *passwd root* command.
- b. Type the password and press *Enter*.
- c. Confirm the password at the prompt.
- d. Enter the *passwd cust* command.
- e. Type the password and press *Enter*.
- f. Confirm the password at the prompt.

16. If this server is an MPP and you previously moved the MPP logs to a new directory or partition using the *mppMoveLogs.sh* script, add that mount point to the */etc/fstab* file as described in the *Moving the MPP logs to a different location* topic in the *Administering Avaya Aura® Experience Portal* guide.

17. If this is a MPP or single server, execute this command to delete all call records:

```
rm -rf $AVAYA_MPP_HOME/logs/records/*
```

Next steps

Return to the *Upgrading from Voice Portal 5.0 or 5.1 to Avaya Aura Experience Portal 6.0* and continue with the procedure for instructions on upgrading Voice Portal to Experience Portal.

Preparing to connect to Avaya Enterprise Linux via a cross-over Ethernet cable

Normally, if you have physical access to an Experience Portal server you access that server via the system console, which is a locally attached keyboard and monitor.

However, if you are installing Avaya Enterprise Linux on a server or you are accessing a server that already has Avaya Enterprise Linux installed on it, you can also access the server via a cross-over Ethernet cable connected from the server to another computer, typically a laptop running Microsoft Windows.

Before you begin

Ensure that you have the equipment required for a cross-over Ethernet connection:

- A computer that has both a telnet client and a secure shell (SSH) client installed



Note:

PuTTY is a popular free program for Windows that can act as both a telnet client and an SSH client.

- A cross-over Ethernet cable

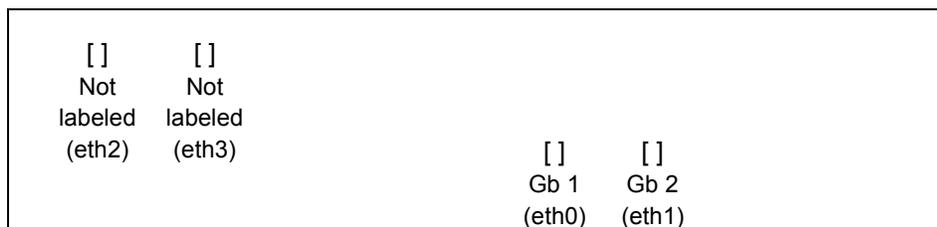
Procedure

1. Connect a cross-over Ethernet cable from your laptop to the second Ethernet port (eth1) on the Experience Portal server that you wish to connect to.



Important:

If you are connecting to a Dell PowerEdge1950 server (also known as Avaya S8510), it has two Ethernet ports on the motherboard plus two Ethernet ports on a daughter-card. Looking at the back of the server, the ports are arranged as follows:



If you are connecting to a server that will be booted from the Avaya Enterprise Linux DVD for a fresh install, then connect the cross-over Ethernet cable to the second Ethernet port on the daughter-card. This port is not labeled on the server. In the diagram above, the correct port is labeled **eth3**.

If you are connecting to a server that is booted from the hard disk, such as before an upgrade of Avaya Enterprise Linux, then connect the cross-over Ethernet cable to the second Ethernet port on the motherboard. This port is labeled **Gb 2** on the server. In the diagram above, the correct port is labeled **eth1**.

2. Configure the network settings on your laptop as follows:

IP address=192.11.13.5

Subnet mask=255.255.255.252

Default gateway=192.11.13.4