

# Upgrading ESM Appliance Models E7100 and E7200 to OEL 5.5, ESM 5.0 SP1, and Oracle 11g

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## Document Purpose

This upgrade document describes the procedures for upgrading ESM Appliance models E7100 and E7200 to Oracle Enterprise Linux (OEL) 5.5, ESM 5.0 SP1, and Oracle 11g. Each model has different upgrade paths.

The purpose of the upgrade is to provide customers the ability to use Oracle 11g on ESM models E7100 and E7200. In order to use Oracle 11g, the operating system must be OEL 5.5 and ESM must be 5.0 SP1. This document will provide the proper sequence of steps to take the ESM to the required operating system and software versions.

## What to Know Before You Upgrade

- The OEL upgrade tool in this release is designed for the ESM Appliance models E7100 and E7200.



The OEL upgrade tool checks the appliance model and requires the appliance to be either E7100 or E7200. If you apply the OEL upgrade on unsupported models, the upgrade tool will display an error message and then quit.

- To upgrade the OEL operating system, your ESM version must be at least v5.0 GA. If you have an older ESM version, you need to upgrade to v5.0 GA before you can upgrade your operating system.
- If you have previously performed system modifications on the appliance, the upgrade may not save the modifications. You must therefore make a backup of these modifications prior to upgrading, and restore them after the upgrade.
- After the appliance is upgraded, don't perform a system restore because you will revert the appliance to its factory default operating system, OEL v4.
- To perform ESM upgrades, you will be referred to the applicable upgrade guides. Keep in mind that those guides address various platforms and some of the information may not apply to the ESM Appliance. This guide will highlight the appliance-specific items for you.

## Upgrade Paths

The supported upgrade paths are described in the following table. Locate the configuration that applies to your appliance, then refer to the corresponding upgrade steps.



Do not reverse the documented sequence to avoid unexpected results.

**Table 1** ESM Appliance Upgrade Paths

If you have this configuration:	Perform the upgrade in this sequence:
<ul style="list-style-type: none"> <li>• OEL 4</li> <li>• ESM 4.0 SP1</li> <li>• Oracle 10.2.0.2</li> </ul>	<ol style="list-style-type: none"> <li>1 <a href="#">"Upgrading ESM 4.0 SP1 to 4.0 SP3" on page 3</a> (This includes upgrading Oracle 10.2.0.2 to 10.2.0.4.)</li> <li>2 <a href="#">"Upgrading ESM 4.0 SP3 to 4.5 SP2" on page 4</a></li> <li>3 <a href="#">"Upgrading ESM 4.5 SPx to 5.0" on page 5</a></li> </ol> <p><b>Note:</b> Between <a href="#">Step 1</a> and <a href="#">Step 3</a>, allow 24 hours for the ArcSight Database's Partition Archiver to complete an entire day's pass. This only applies to upgrades within ESM 4.X. Once you are at ESM v5.0 (after completing <a href="#">Step 3</a>), you may continue upgrading within the same day.</p> <ol style="list-style-type: none"> <li>4 <a href="#">"Upgrading the Operating System to OEL 5.5" on page 9</a></li> <li>5 <a href="#">"Upgrading ESM 5.0 to 5.0 SP1" on page 12</a></li> <li>6 <a href="#">"Upgrading to Oracle 11g" on page 13</a></li> </ol>

**Table 1 ESM Appliance Upgrade Paths (Continued)**

If you have this configuration:	Perform the upgrade in this sequence:
<ul style="list-style-type: none"> <li>OEL 4</li> <li>ESM 4.5 SP2 or SP3</li> <li>Oracle 10.2.0.4</li> </ul>	<ol style="list-style-type: none"> <li>1 <a href="#">"Upgrading ESM 4.5 SPx to 5.0" on page 5</a></li> <li>2 <a href="#">"Upgrading the Operating System to OEL 5.5" on page 9</a></li> <li>3 <a href="#">"Upgrading ESM 5.0 to 5.0 SP1" on page 12</a></li> <li>4 <a href="#">"Upgrading to Oracle 11g" on page 13</a></li> </ol>
<ul style="list-style-type: none"> <li>OEL 4</li> <li>ESM 5.0 GA</li> <li>Oracle 10.2.0.4</li> </ul>	<ol style="list-style-type: none"> <li>1 <a href="#">"Upgrading the Operating System to OEL 5.5" on page 9</a></li> <li>2 <a href="#">"Upgrading ESM 5.0 to 5.0 SP1" on page 12</a></li> <li>3 <a href="#">"Upgrading to Oracle 11g" on page 13</a></li> </ol>
<ul style="list-style-type: none"> <li>OEL 4</li> <li>ESM 5.0 SP1</li> <li>Oracle 10.2.0.4</li> </ul>	<ol style="list-style-type: none"> <li>1 <a href="#">"Upgrading the Operating System to OEL 5.5" on page 9</a></li> <li>2 <a href="#">"Upgrading to Oracle 11g" on page 13</a></li> </ol>

## Upgrading ESM 4.0 SP1 to 4.0 SP3

If your ESM Appliance is at ESM 4.0 SP1, use the information in this section to upgrade to ESM 4.0 SP3. The upgrade will include features provided in 4.0 SP2. This upgrade step also requires that Oracle 10.2.0.2 be upgraded to 10.2.0.4. If you are already at ESM 4.0 SP3, skip this section and go to ["Upgrading ESM 4.0 SP3 to 4.5 SP2" on page 4](#).



Note

### Important:

You will be referred to the appropriate documents for detailed instructions that include downloading the installation files. Keep in mind that the appliance is on the Linux 64-bit platform, therefore, you will download the bin file that has the `Linux64` suffix. Using ArcSight Manager as an example, you will download `ArcSight-4.0.3.5684.0-Manager-Linux64.bin`.

### Related documentation:

[Upgrading ArcSight ESM v4.0 SP1 to v4.0 SP3](#)

[ArcSight ESM v4.0 SP3 Release Notes](#)

### To upgrade from ESM 4.0 SP1 to 4.0 SP3

- 1 From the [Protect 724 Community](#), download and read the document, [Upgrading ArcSight ESM 4.0 SP1 to 4.0 SP3](#), to familiarize yourself with the entire upgrading process, then proceed with the upgrade according to the instructions.

In the topic, *Downloading installation files, scripts, and other documents*, you are given a list of files to download. Download only the following files that apply to your platform:

- ◆ For SmartConnectors: Refer to the upgrade guide for more information.
- ◆ For ArcSight Database: `ArcSight-4.0.3.5684.0-DB-Linux.bin`
- ◆ For ArcSight Manager: `ArcSight-4.0.3.5684.0-Manager-Linux64.bin`
- ◆ For ArcSight Web: `ArcSight-4.0.3.5684.0-Web-Linux.bin`

- ◆ For ArcSight Console: `ArcSight-4.0.3.5684.0-Console-<Platform>.bin`



ArcSight Console is a fresh installation, not an upgrade. Install the Console on a separate system and not on the ESM Appliance. The Console is supported on different platforms, therefore, download the file that applies to your platform: Linux, MacOSX, Solaris, or Windows.

- ◆ For the Oracle 10.2.0.4 upgrade files:  
`10201_database_linux_x86_64.cpio.gz`  
`p6810189_10204_Linux-x86-64.zip`
- 2 Follow the instructions in [Upgrading ArcSight ESM v4.0 SP1 to v4.0 SP3](#) to complete the following upgrades:
    - ◆ SmartConnectors upgrade starting on page 4
    - ◆ ArcSight Database upgrade, including upgrading Oracle 10.2.0.2 to 10.2.0.4, starting on page 5
    - ◆ ArcSight Manager upgrade starting on page 11
    - ◆ ArcSight Console upgrade starting on page 21
    - ◆ ArcSight Web upgrade starting on page 22

While following the document to run commands on executable files, substitute **5684** for **XXXX**. For example, to run the Manager installation executable, you will enter

```
./ArcSight-4.0.3.5684.0-Manager-Linux.bin
```
  - 3 Verify the state of your existing content according to the instructions starting on page 22.
  - 4 Refer to the ArcSight ESM v4.0 SP3 Release Notes if you want more information about this release.
  - 5 Wait for a day, then proceed to [“Upgrading ESM 4.0 SP3 to 4.5 SP2”](#) on page 4.

## Upgrading ESM 4.0 SP3 to 4.5 SP2

If your appliance is at ESM 4.0 SP3, use the information in this section to upgrade directly to 4.5 SP2. The upgrade will include all the features provided in ESM 4.5 GA and 4.5 SP1. If you are already at ESM 4.5 SP2, skip this section and go to [“Upgrading ESM 4.5 SPx to 5.0”](#) on page 5.



### Important:

You will be referred to the appropriate documents for detailed instructions that include downloading the installation files. Keep in mind that the appliance is on the Linux 64-bit platform, therefore, you will download the `bin` file that has the `Linux64` suffix. Using ArcSight Manager as an example, you will download `ArcSight-4.5.2.6076.0-Manager-Linux64.bin`.

### Related documentation:

- [Upgrading ArcSight ESM 4.0 SP3 to 4.5 SP2](#)
- [ArcSight ESM v4.5 SP2 Release Notes](#)

**To upgrade from ESM 4.0 SP3 to 4.5 SP2**

- 1 From the [Protect 724 Community](#), download and read the document, Upgrading ArcSight ESM 4.0 SP3 to 4.5 SP2, to familiarize yourself with the entire upgrading process, then proceed with the upgrade according to the instructions.

In the topic, *Downloading installation files, scripts, and other documents*, you are given a list of files to download. Download only the following files that apply to your platform:

- ◆ For SmartConnectors: Refer to the upgrade guide for more information.
- ◆ For ArcSight Database: `ArcSight-4.5.2.6076.0-DB-Linux.bin`
- ◆ For ArcSight Manager: `ArcSight-4.5.2.6076.0-Manager-Linux64.bin`
- ◆ For ArcSight Web: `ArcSight-4.5.2.6076.0-Web-Linux.bin`
- ◆ For ArcSight Console: `ArcSight-4.5.2.6076.0-Console-<Platform>.bin`



ArcSight Console is a fresh installation, not an upgrade. Install the Console on a separate system and not on the ESM Appliance. The Console is supported on different platforms, therefore, download the file that applies to your platform: Linux, MacOSX, Solaris, or Windows.

- 2 Follow the instructions in Upgrading ArcSight ESM 4.0 SP3 to 4.5 SP2 to complete the following upgrades:
  - ◆ ArcSight Database upgrade, Chapter 2, starting on page 9  
This section includes upgrading Oracle 10.2.0.2 to 10.2.0.4. Follow the upgrade instructions if your Oracle instance is at 10.2.0.2.
  - ◆ ArcSight Manager upgrade, Chapter 3, starting on page 21
  - ◆ ArcSight Console upgrade, Chapter 4, starting on page 35
  - ◆ ArcSight Web upgrade, Chapter 5, starting on page 39
  - ◆ SmartConnectors upgrade, Chapter 6, starting on page 43  
While following the document to run commands on executable files, substitute **6076** for **XXXX**. For example, to run the Manager installation executable, you will enter  
**`./ArcSight-4.5.2.6076.0-Manager-Linux.bin`**
- 3 Verify the state of your existing content according to the instructions in Chapter 7, starting on page 45.
- 4 Refer to the ArcSight ESM v4.0 SP3 Release Notes if you want more information about this release.
- 5 Wait for a day, then proceed to [“Upgrading ESM 4.5 SPx to 5.0” on page 5](#).

**Upgrading ESM 4.5 SPx to 5.0**

If your ESM Appliance is at ESM 4.5 SPx, use the information in this section to upgrade to ESM v5.0 GA. If you are at ESM 5.0 GA, skip this section and go to [Upgrading the Operating System to OEL 5.5](#).

You will use one of the following upgrade paths:

- If your ESM version is 4.5 SP1 or SP2, you will upgrade directly to ESM 5.0 GA.

- If your ESM version is 4.5 SP3, you will first upgrade to ESM 5.0 GA then apply Patch 1.

After completing the applicable the ESM upgrade, you can then upgrade the OS.



**Important:**

You will be referred to the appropriate upgrade guides for detailed instructions that include downloading the installation files. Keep in mind that the appliance is on the Linux 64-bit platform, therefore, you will download the `bin` file that has the `Linux64` suffix. Using ArcSight Manager as an example, you will download `ArcSight-5.0.0.6450.0-Manager-Linux64.bin`.

## Upgrading from ESM 4.5 SP1 or SP2 to 5.0 GA

**Related documentation:**

Upgrading ArcSight ESM v4.5 SP1 or v4.5 SP2 to v5.0 GA

ArcSight ESM v5.0 GA Release Notes

**To upgrade from ESM 4.5 SP1 or SP2 to 5.0 GA:**

- 1 From the [Protect 724 Community](#), download and read the document, Upgrading ArcSight ESM v4.5 SP1 or v4.5 SP2 to v5.0 GA, to familiarize yourself with the entire upgrade process, then proceed with the upgrade according to the instructions.

In the topic, *Downloading Installation Files, Scripts, Files, and Other Documents* on page 2, you are given a list of files to download. Download only the following files that apply to your platform:

- ◆ For SmartConnector: refer to the document.
- ◆ For ArcSight Database: `ArcSight-5.0.0.6450.0-DB-Linux.bin`
- ◆ For ArcSight Manager: `ArcSight-5.0.0.6450.0-Manager-Linux64.bin`
- ◆ For ArcSight Web: `ArcSight-5.0.0.6450.0-Web-Linux.bin`
- ◆ For ArcSight Console: `ArcSight-5.0.0.6450.0-Console-<platform>.bin`



ArcSight Console is a fresh installation, not an upgrade. Install the Console on a separate system and not on the ESM Appliance. The Console is supported on different platforms, therefore, download the file that applies to your platform: Linux, MacOSX, Solaris, or Windows.

- 2 Follow the instructions in Upgrading ArcSight ESM v4.5 SP1 or v4.5 SP2 to v5.0 GA to complete the following upgrades:

- ◆ ArcSight Database upgrade, Chapter 2, starting on page 9
- ◆ ArcSight Manager upgrade, Chapter 3, starting on page 15
- ◆ ArcSight Console upgrade, Chapter 4, starting on page 31
- ◆ ArcSight Web upgrade, Chapter 5, starting on page 35
- ◆ SmartConnectors upgrade, Chapter 6, starting on page 39

While following the document to run commands on executable files, substitute **6450** for **XXXX**. For example, to run the database installation executable, you will enter

`./ArcSight-5.0.0.6450.0-DB-Linux.bin`

- 3 Verify the state of your existing content according to the instructions in Chapter 7, starting on page 41.
- 4 Refer to the ArcSight ESM v5.0 GA Release Notes if you want more information about this release.
- 5 Proceed to [“Upgrading the Operating System to OEL 5.5” on page 9](#) to upgrade your OS.

## Upgrading from ESM 4.5 SP3 to 5.0 GA Patch 1

You will upgrade in two stages: upgrade to ESM v5.0 GA then apply Patch 1.

### Related documentation

Upgrading ArcSight ESM v4.5 SP3 to v5.0 Patch 1

Patch Release Notes, ArcSight ESM v5.0 Patch 1 (Build 5.0.0.6521.1)

ArcSight ESM v5.0 GA Release Notes

### To upgrade from ESM 4.5 SP3 to 5.0 GA:

- 1 From the [Protect 724 Community](#), download and read the document, Upgrading ArcSight ESM v4.5 SP3 to v5.0 Patch 1, to familiarize yourself with the entire upgrade process.

In the topic, *Downloading Installation Files, Scripts, Files, and Other Documents* on page 6, you are given a list of files to download. Download only the following files that apply to the Linux 64-bit platform:

- ◆ For SmartConnectors: refer to the document.
- ◆ For ArcSight Database: `ArcSight-5.0.0.6450.0-DB-Linux.bin`
- ◆ For ArcSight Manager: `ArcSight-5.0.0.6450.0-Manager-Linux64.bin`
- ◆ For ArcSight Web: `ArcSight-5.0.0.6450.0-Web-Linux.bin`
- ◆ For ArcSight Console: `ArcSight-5.0.0.6450.0-Console-<platform>.bin`



ArcSight Console is a fresh installation, not an upgrade. Install the Console on a separate system and not on the ESM Appliance. The Console is supported on different platforms, therefore, download the file that applies to your platform: Linux, MacOSX, Solaris, or Windows.

- 2 Follow the instructions in Upgrading ArcSight ESM v4.5 SP3 to v5.0 Patch 1 to complete the following upgrades:
  - ◆ ArcSight Database upgrade, Chapter 2, starting on page 9
  - ◆ ArcSight Manager upgrade, Chapter 3, starting on page 15
  - ◆ ArcSight Console upgrade, Chapter 4, starting on page 33
  - ◆ ArcSight Web upgrade, Chapter 5, starting on page 37
  - ◆ SmartConnectors upgrade, Chapter 6, starting on page 41

While following the document to run commands on executable files, substitute **6450** for **XXXX**. For example, to run the database installation executable, you will enter

```
./ArcSight-5.0.0.6450.0-DB-Linux.bin
```

- 3 Verify the state of your existing content according to the instructions in Chapter 7, starting on page 43.
- 4 Refer to the ArcSight ESM v5.0 GA Release Notes if you want more information about this release.

After completing the upgrade from ESM v4.5 SP3 to v5.0 GA, you are ready to apply Patch 1 (“To apply Patch 1” on page 8).

### To apply Patch 1

- 1 From the [Protect 724 Community](#), download the following files for the Linux platform:

- ◆ For ArcSight Database: Patch-5.0.0.6521.1-DB-Linux.bin
- ◆ For ArcSight Manager: Patch-5.0.0.6521.1-Manager-Linux.bin
- ◆ For ArcSight Web: Patch-5.0.0.6521.1-Web-Linux.bin
- ◆ For ArcSight Console: ArcSight-5.0.0.6521.0-Console-*<platform>*.bin



On the MacOS platform, download Patch-5.0.0.6521.1-Console-MacOSX.zip. ArcSight Console is a fresh installation, not an upgrade. Install the Console on a separate system and not on the ESM Appliance. The Console is supported on different platforms, therefore, download the file that applies to your platform: Linux, MacOSX, Solaris, or Windows.

- ◆ For JRE Updater: JREUpdater\_1.6.0\_20-ESM\_5.0.0.0-6521-DB-Linux.bin
- 2 Read the document, Patch Release Notes, ArcSight ESM v5.0 Patch 1 (Build 5.0.0.6521.1), to familiarize yourself with the entire patch application process, then proceed according to the instructions.

In the topic, *Oracle Critical Patch (CPU) Certification* on page 6, you are given a list of files to download. Download only the following files that apply to the Linux 64-bit platform:

- ◆ For Oracle CPU October 2010 Certification: p9952272\_10204\_Linux-x86-64.zip
- ◆ For OPatch: p6880880\_102000\_Linux-x86-64.zip

- 3 Follow the instructions to apply the Oracle CPU starting on page 7.
- 4 Follow the instructions to install Patch 1 for ESM 5.0 starting on page 9.

While following the document to run commands on executable files, substitute **6521** for **XXXX**. For example, to run the patch executable, you will enter

**Patch-5.0.0.6521.1-DB-Linux.bin**

- 5 Proceed to [Upgrading the Operating System to OEL 5.5](#) to upgrade your OS.



## Upgrading the Operating System to OEL 5.5

If your ESM version is 4.5, upgrade to 5.0 GA first as described in [“Upgrading ESM 4.5 SPx to 5.0” on page 5](#). Then come back to this topic.



The OEL upgrade tool checks the appliance model and requires the appliance to be either E7100 or E7200. If you apply the OEL upgrade on unsupported models, the upgrade tool will display an error message and then quit.

An upgrade package is provided to upgrade OEL (Oracle Enterprise Linux) 4 to 5.5 on the ESM Appliance. The package is an updater script that you run three times. The first time you run the script, the swap space, `/dev/sda5`, is repurposed to serve as a second root partition. A basic operating system without the X Windows-based graphical interface is placed in this partition. The second time you run the script, the actual migration of the original partition takes place. At this stage, you will manually reboot the appliance and eventually will be presented with the X Windows-based login window. The third time you run the script, the original swap partition (`/dev/sda5`) will be restored.

Note that after the first reboot, the system boots into a second partition that contains a subset of the original system. This partition is temporary; it facilitates the final upgrade step and contains only a basic directory structure. The `/home/arcsight` directory will not be visible, for example. This is expected and does not indicate data loss. By logging in as **root**, you are placed in the `/root` directory, which includes the necessary update script for completing the second stage of the process. Do not abandon this process or start over at any stage.

- 1 Verify the appliance model. Log in as **root** and run the following query:

```
query_platform model
```

If the model is returned as E7100 or E7200, continue with the procedure.



If the model is not E7100 or E7200, do not proceed with the upgrade. The upgrade is not supported on other appliance models.

- 2 Use **ssh** and run the following commands to download the required files. Make sure to download the files in the `/root` directory:

```
wget https://updates.arcsight.com/depot/OEL5.5updater-1.1 --no-check-certificate
```

```
wget https://updates.arcsight.com/depot/OEL5.5updater-1.1.md5 --no-check-certificate
```

- 3 Verify the MD5 checksum with the value that is in the `OEL5.5updater-1.1` file. The value should be:

```
79b405b029023d34f50af5dd500a6abb
```

- 4 As **root**, make the package executable with this command:

```
chmod u+x OEL5.5updater-1.1
```

- 5 Run the updater script:

```
./OEL5.5updater-1.1
```

The following system messages are displayed:

```
HP/ArcSight System Upgrade Script Version 1.1 Copyright (C)2011
This script will install a minimal OEL 5.5 OS on top of the existing system.
Please note that this is a three-stage script that requires two manual
reboots in order to complete. Please consult the documentation for further
information.
Proceed [y/N]?
```

**6** Enter **Y** to proceed.

The following system messages are displayed:

```
Validating payload.
Expanding payload.
Creating upgrade filesystem.
Preparing secondary partition.
Creating environment.
Installing packages.
Preparing... ##### [100%]
  1:setup ##### [ 1%]
  2:filesystem ##### [ 1%]
  3:basesystem ##### [ 2%]
  .
  .
  .
183:hwdata ##### [ 99%]
184:kernel ##### [ 99%]
185:pciutils ##### [100%]
Finalizing basic configuration.
Please reboot to upgrade the second stage.
```

At this point, the previous swap partition now includes a file system with a minimal OEL 5.5 installation, and the bootloader is modified to automatically boot to that partition. Some files such as the network settings and password files are retained.

**7** Reboot the appliance by entering:

**reboot**

**8** Log in as **root** and run the updater script a second time:

**./OEL5.updater-1.1**

The following system messages are displayed:

```
Migrating OS to primary partition
Backing up previous files.
Creating environment.
Installing packages.
Preparing... ##### [100%]
  1:setup ##### [ 0%]
  2:filesystem ##### [ 0%]
  3:basesystem ##### [ 1%]
  .
  .
  .
528:xorg-x11-drv-vmware ##### [100%]
```

```
529:system-config-display##### [100%]
530:firstboot ##### [100%]
Finalizing basic configuration.
Please reboot to finalize the upgrade.
```

All the files in `{bin,etc,lib,lib64,sbin,selinux,usr,var}` are moved into `/previous`, while some basic network settings and other files are retained. The `/opt` and `/tmp` directories remain untouched because they do not affect the upgrade. The bootloader is now changed to allow booting this final operating system.

- 9 Reboot the appliance by entering:

**reboot**

At this stage, the appliance automatically reboots once to perform an SELinux relabel event. It then completes booting into the new system and provides you a login prompt.

- 10 Log in as **root** and verify that the OS is working correctly.
- 11 Run the updater script a third time to restore the original swap partition:

**./e7200OEL5.5updater**

The following system messages are displayed:

```
Restoring swap partition.
Upgrade process complete.
```

The ESM Appliance is now functioning as an OEL 5.5-based appliance. You may need to restore or reinstall any custom files that were not part of the basic upgrade. You also have the option to keep or delete the `/previous` directory after you have verified that the operating system is working properly. You may also delete the `/osupgrade` directory and the original upgrade script since these were only required during the OS installation.

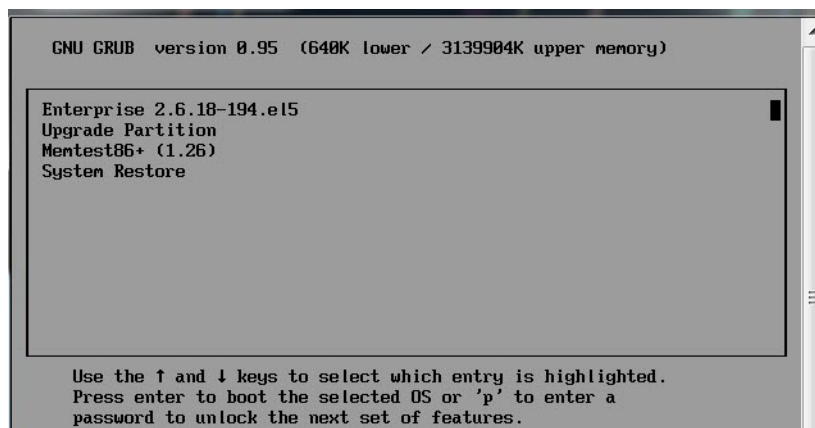
After a successful upgrade of your OS to OEL 5.5, you are ready to upgrade ESM to 5.0 SP1 (["Upgrading ESM 5.0 to 5.0 SP1" on page 12](#)). If you are already at ESM 5.0 SP1, you can upgrade directly to Oracle 11g (["Upgrading to Oracle 11g" on page 13](#)).

For availability of upgrades after OEL 5.5, contact your HP customer support representative for ArcSight products.

## If the OEL Upgrade Fails

If the operating system upgrade is interrupted or fails for any reason, perform the following steps to recover from the failure.

- 1 Reset or power-cycle the appliance.
  - During startup, you are prompted to press any key to enter the menu.
- 2 Press any key to activate the GRUB bootloader menu.



- 3 From the menu, select the original Enterprise boot target.
- 4 Run the OS updater script once ([Step 5](#) through [Step 6 on page 10](#)) to restore the original swap space and revert the appliance to its pre-upgrade state.
- 5 Clear the OS staging directory to avoid any possible upgrade file contamination:
 

```
rm -rf /osupgrade
```

This removes the entire /osupgrade directory containing the expanded packages.
- 6 Repeat the process to update the OS from [Step 5 on page 9](#) through [Step 11 on page 11](#). Note that you will be running the updater script three times during the process.

## Upgrading ESM 5.0 to 5.0 SP1

This upgrade is applicable to ESM 5.0 GA or 5.0 Patch 1.



To have the option to fall back to the previous version, take a full cold backup of your database installation.

### Related documentation:

- Upgrading ArcSight ESM v5.0 to v5.0 SP1
- ArcSight ESM v5.0 SP1 Release Notes

### To upgrade to ESM 5.0 SP1:

- 1 From the [Protect 724 Community](#), download and read the document, Upgrading ArcSight ESM v5.0 to v5.0 SP1, to familiarize yourself with the entire upgrade process.
- 2 The topic, *Downloading Installation Files, Scripts, and Other Documents* on page 2, gives you a list of files to download. Download only the following files that apply to the Linux 64-bit platform:
  - ◆ For SmartConnector: refer to the document.
  - ◆ For ArcSight Database: ArcSight-5.0.1.6572.0-DB-Linux.bin
  - ◆ For ArcSight Manager: ArcSight-5.0.1.6572.0-Manager-Linux64.bin
  - ◆ For ArcSight Web: ArcSight-5.0.1.6572.0-Web-Linux.bin

- ◆ For ArcSight Console: `ArcSight-5.0.1.6572.0-Console-<platform>.bin`



ArcSight Console is a fresh installation, not an upgrade. Install the Console on a separate system and not on the ESM Appliance. The Console is supported on different platforms, therefore, download the file that applies to your platform: Linux, MacOSX, Solaris, or Windows.

- 3 Follow the instructions in Upgrading ArcSight ESM v5.0 to v5.0 SP1 to complete the following upgrades:

- ◆ ArcSight Database upgrade starting on page 9
- ◆ ArcSight Manager upgrade starting on page 17
- ◆ ArcSight Console upgrade starting on page 33
- ◆ ArcSight Web upgrade starting on page 37
- ◆ SmartConnectors upgrade starting on page 43

While following the document to run commands on executable files, substitute **6572** for **XXXX**.

For example, to run the database installation executable, you will enter

```
./ArcSight-5.0.1.6572.0-DB-Linux.bin
```

- 4 Refer to the ArcSight ESM v5.0 SP1 Release Notes for more information about this release.

You are now ready to upgrade the Oracle database from 10g to 11g.

## Upgrading to Oracle 11g

If you are at ESM 5.0 SP1 with Oracle 10g and you want to upgrade to Oracle 11g, follow the steps in this section.

### Related documentation:

Upgrading ArcSight ESM v5.0 to v5.0 SP1



On page 45 of Upgrading ArcSight ESM v5.0 to v5.0 SP1, you are instructed to download required Oracle packages. Skip the instructions because this OEL 5.5 upgrade has installed those Oracle packages for you.

[Step 3](#) shows how to verify that the Oracle packages are installed.

- 1 From the [Protect 724 Community](#), download the following Oracle 11g database files and place them into a temporary directory without extracting the files. Make sure that the path does not have any spaces in any of the folder names.

```
p10098816_112020_Linux-x86-64_1of7.zip
p10098816_112020_Linux-x86-64_2of7.zip
```

- 2 Read the document, Upgrading ArcSight ESM v5.0 to v5.0 SP1, Chapter 8, *Upgrading Oracle Database to 11g*, to familiarize yourself with the entire process.
- 3 Verify that the appliance has all the required Oracle packages that came with the OEL 5.5 upgrade by using this command:

```
rpm -qa
```

You should see this list of packages:

```
binutils-2.17.50.0.6-14.el5.x86_64.rpm
compat-libstdc++-33-3.2.3-61.x86_64.rpm
gcc-4.1.2-48.el5.x86_64.rpm
glibc-2.5-49.i386.rpm
glibc-2.5-49.x86_64.rpm
glibc-common-2.5-49.x86_64.rpm
libaio-0.3.106-5.i386.rpm
libaio-0.3.106-5.x86_64.rpm
libaio-devel-0.3.106-5.i386.rpm
libaio-devel-0.3.106-5.x86_64.rpm
libstdc++-4.1.2-48.el5.i386.rpm
libstdc++-4.1.2-48.el5.x86_64.rpm
libstdc++-devel-4.1.2-48.el5.i386.rpm
libstdc++-devel-4.1.2-48.el5.x86_64.rpm
make-3.81-3.el5.x86_64.rpm
sysstat-7.0.2-3.el5.x86_64.rpm
unixODBC-2.2.11-7.1.i386.rpm
unixODBC-2.2.11-7.1.x86_64.rpm
unixODBC-devel-2.2.11-7.1.i386.rpm
unixODBC-devel-2.2.11-7.1.x86_64.rpm
```

If you want to verify a specific package, use this command:

**rpm -q *package\_name***

Replace *package\_name* with the actual name of the package, for example, **make**. Specifying the version number is not required. In this example, you should see

```
make-3.81-3.el5
```

- 4 Proceed with the Oracle upgrade as instructed in Chapter 8. The chapter will take you through two upgrade phases:
  - a Upgrading Oracle 10g software to 11g
  - b Upgrading your Oracle 10g instance to 11g

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