



# Installation Requirements

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## Installation Overview

This chapter describes the system recommendations and requirements for Cisco Prime Provisioning. Prime Provisioning is a web-based application you install on a server, along with a web server and other supporting packages. You access Prime Provisioning using a web browser.

The recommendation is to thoroughly review this list before even planning your installation, to be sure you have all the hardware and software you must successfully install.

This chapter includes the following sections:

- [Prime Provisioning Server Hardware, page 1-1](#)
- [Prime Provisioning Client, page 1-3](#)
- [IOS XR Device Setup, page 1-4](#)
- [Supported Cisco Network Devices and Software Versions, page 1-4](#)

## Prime Provisioning Server Hardware

You must have a DVD drive to install the Prime Provisioning 6.8 product.

For information on NSA's configuration guidance for operating systems, see

[http://www.nsa.gov/ia/mitigation\\_guidance/security\\_configuration\\_guides/operating\\_systems.shtml](http://www.nsa.gov/ia/mitigation_guidance/security_configuration_guides/operating_systems.shtml)

To access the platform hardening guide for RHELv5, click

<http://www.redhat.com/promo/summit/2008/downloads/pdf/hardening-rhel5.pdf>

To access the Red Hat Enterprise Linux 6 Security Guide, click

[https://www.uvm.edu/~fcs/Doc/RedHat/Red\\_Hat\\_Enterprise\\_Linux-6-Security\\_Guide-en-US.pdf](https://www.uvm.edu/~fcs/Doc/RedHat/Red_Hat_Enterprise_Linux-6-Security_Guide-en-US.pdf)

To access the Red Hat Enterprise Linux 6 Security Guide, latest version, click

[https://access.redhat.com/site/documentation/en-US/Red\\_Hat\\_Enterprise\\_Linux/6/pdf/Security\\_Guide/Red\\_Hat\\_Enterprise\\_Linux-6-Security\\_Guide-en-US.pdf](https://access.redhat.com/site/documentation/en-US/Red_Hat_Enterprise_Linux/6/pdf/Security_Guide/Red_Hat_Enterprise_Linux-6-Security_Guide-en-US.pdf)

For the Linux server, the minimum recommendations are as shown in [Table 1-1](#).

**Table 1-1** Minimum Linux Server Recommendations for Prime Provisioning Applications

Class	Applications	Minimum Linux Server	RAM	Swap Space	Disk Space
Entry	L2VPN and L3 MPLS with a total of up to 1500 service endpoints Note: Not recommended for API use.	C200 with 1 CPU (recommending X5550) Standard RAID card (0 and 1)	8 GB (see note below)	8 GB	73 GB hard drive (see note below)
Mid-range	L2VPN and L3 MPLS with a total of up to 10,000 service endpoints	C200 with 2 CPUs (recommending 2 x X5550 for cost perspective) Standard RAID card (0 and 1)	16 GB	16 GB	73 GB hard drive (see note below)
High End	L2VPN and L3 MPLS with a total of more than 10,000 service endpoints	C210 with 2 CPUs (recommending 2 x X5670) PCI RAID card (0, 1, 5, 6...)	24 GB	32 GB	146 GB hard drive 4 disk drives (RAID5) for virtual machines.

**Notes:**

The recommended servers in this table are examples for typical installations. Relative performance can be impacted by many factors. Please contact your Cisco account representative if you need assistance in selecting the correct server.

The default Oracle and Sybase database layouts are sufficient for Prime Provisioning. Further optimization is your preference.

The two disk drives are required (one for OS/Prime Provisioning and one for swap space). If disk mirroring for better availability is required, then four disk drives is two mirrored pairs.

The minimum memory resources required for a mid-level VmWare image running Prime Provisioning are 4 GB RAM and 8 GB swap space. To determine whether all of the CPU core resources are needed for running Prime Provisioning, it is recommended that you perform benchmark testing of your server under typical load.

In addition to Linux platforms, Prime Provisioning supports UCS/VMware platforms. Specific platforms supported include:

- Red Hat Enterprise Linux, version 6.7.

**Note**

You need to install a list of Linux RPMs for a successful Prime Provisioning GUI mode installation. For more information on the list or RPMs, refer to [Prerequisites](#) of Prime Provisioning GUI installation.

- VMware virtualization, including running the embedded database.
- Linux UCS B-series blade servers.
- Linux UCS C-series servers.

## Prime Provisioning Client

The following is needed for the Prime Provisioning client:

- A web browser is needed for the client machine on which to run Prime Provisioning. For list of supported browsers, see the [Web Browser Support](#) section.
- The screen resolutions that are recommended are 1024x768 pixels and 1280x1024 pixels. To view the fonts and colors correctly, the system display must be set to use a color quality of (at least) 32-bits.

**Note**

Adobe Flash player (version 10.3.183.7) and its plug-in must be installed to support the web browser and to enable the main bar and charts in the Prime Provisioning GUI.

**Note**

In Internet Explorer, we recommend disabling the script debugging feature. To do this, navigate to **Tools > Internet Options** and click the **Advanced** tab. Check the check box **Disable script debugging** and click **OK**.

**Note**

When using Mozilla Firefox and launching Prime Provisioning in a second window, you might lose the latest changes made using the the first Prime Provisioning window. To avoid this, launch the second Prime Provisioning session using a tab or a hyperlink from within the first Prime Provisioning session.

- Java Runtime Environment (JRE) and Java Web Start must be installed on the client machine to run the Inventory Manager. The supported Java version is Java 8.

**Note**

Prime Provisioning supports JRE version 7 (update 21) through to JRE version 7 (update 45) without issue. If using JRE version 7 (update 51) or later, the JRE security level must be reduced from 'High' to 'Medium' in order to launch the TE Topology Tool.

**Note**

When using more than one Prime Provisioning login, ensure each login is using a different HTTP session. To do so, run each session in a separate browser launched from the command line or by clicking on the browser icon on the desktop or **Start** menu. Do not run parallel Prime Provisioning logins in tabs within the same browser window or in browser windows launched from existing browser windows.

For operations that last longer than the amount of time predefined by the browser, you may get a warning message that says

“Warning: Unresponsive script. A script on this page may be busy, or may have stopped....”

Examples of tasks during which this warning message occurs are:

- editing a customer device with many interfaces,
- editing user details when there are many users.

Workaround- Increase the browser timeout value.

- For Mozilla Firefox, see [http://kb.mozillazine.org/Unresponsive\\_Script\\_Error](http://kb.mozillazine.org/Unresponsive_Script_Error)
- For Internet Explorer 8, see <http://support.microsoft.com/kb/175500#LetMeFixItMyselfAlways>

## Web Browser Support

- Prime Provisioning GUI is supported by the following browsers:
  - Firefox browser version ESR 24 and 31.
  - Firefox browser version 30, 31 and 37.
  - Internet Explorer 9, 10, and 11.
- The recommended screen resolutions for both browser windows are:
  - 1024 x 768 pixels
  - 1280 x 1024

To view fonts and colors correctly, the system display must be set to use a color quality of at least 32-bits.

- Prime Provisioning supports JRE version 7 (update 21) through to JRE version 7 (update 45) without issue. If using JRE version 7 (update 51) or later, the JRE security level must be reduced from ‘High’ to ‘Medium’ in order to launch the TE Topology Tool.
- The zoom functionality only works properly in the Prime Provisioning GUI if the Firefox browser menu option **View > Zoom > Zoom Text Only** is unchecked.
- Adobe Flash player (version 10.3.183.7) and its plug-in have to be installed to support the web browser and allow viewing of the main bar and charts in the GUI.
- If the Service Request Chart (pie chart) displays both very large and very small numbers, the pie section representing very small numbers is also very small and consequently difficult to access.  
**Workaround:** Try selecting individual subsections (broken, working, or to be deployed).
- For some operations that last a long time, the browser may issue a message like “Warning: Unresponsive script. A script on the page may be busy....” Two examples of this are when editing a customer device with many interfaces, and when editing user details, if there are many users.  
**Workaround:** Increase the browser timeout value.

## IOS XR Device Setup

The following are the minimum patches for IOS XR, PIEs:

- **mini.pie** - Always required
- **mpls.pie** - Always required for Prime Provisioning
- **mcast.pie** - Required for Prime Provisioning layer 3 multicast functionality
- **k9sec.pie** - Required only if using Secure Shell (SSH)

## Supported Cisco Network Devices and Software Versions

The following hardware and software are recommended and required as specified:

- Cisco Prime Provisioning can configure a managed CPE in the case of Layer 3 VPN services. It supports any device running IOS or IOS-XE version 12.1 or newer.
- The Network-facing Provider Edge (NPE) and User-facing Provider Edge (UPE) can be any of the PE devices.

The devices and related software supported are listed in the [Supported Devices Table for Prime Provisioning](#).