



Prerequisites

This chapter describes the factors that you should consider before installing Campus Manager 4.0 (Campus) on a Solaris system.

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Product Overview

Campus Manager, a member of the CiscoWorks family of products, is a suite of web-based network management tools that enable administrators to obtain various types of graphical views of their network topology and end-user information. Campus Manager is based on a client/server architecture that connects multiple web-based clients to a server on the network.

The CiscoWorks Server supplies tools and services to the Campus Manager applications, including the Asynchronous Networks Interface (ANI) Server.

The ANI Server discovers information about network devices and saves it in the ANI database for Campus applications, to access. For more information, see *User Guide for Campus Manager*, *User Guide for CiscoWorks Common Services 3.0*, online help for the CiscoWorks Common Services and online help for the ANI Server.

The Campus Manager applications are:

- Path Analysis—View the actual path that packets take between end nodes/ devices on your network.
- User Tracking—Locate and display data about users, IP Phones and hosts in your network.
- Topology Services—Discover, view, and monitor the physical and logical services on your network. View detailed network information about all devices, links, and ports in your network.
- VLAN Port Assignment—View port information, create trunk, configure VLANs on a trunk, and move ports between VLANs on your network.
- Discrepancy Reports—Discover and view physical and logical discrepancies in your network.

Campus Upgrade Paths

You can upgrade to Campus Manager 4.0 from both Campus Manager 3.2 and Campus Manager 3.3.

Campus Manager 4.0 requires CiscoWorks Common Services 3.0, which is the foundation for the CiscoWorks family of products.

When you install CiscoWorks Common Services 3.0, the previous version of Campus Manager database is preserved. When you install Campus Manager 4.0, certain data from the previous database is converted to Campus Manager 4.0 format. This data includes:

- Seed devices.
- SNMP community strings.
- Discovery schedule.
- User Tracking manually entered data fields.
- User Tracking queries and layouts.
- Path preferences.
- Job schedule.
- Topology groups.

You must upgrade to CiscoWorks Common Services 3.0 before installing or upgrading to Campus 4.0.

**Note**

Topology groups and job schedules were not part of Campus Manager 3.2.


Server Requirements

The minimum system requirements for CiscoWorks Common Services 3.0 and Campus Manager 4.0 are shown in [Table 1-1](#).

Table 1-1 **Server System Requirements Summary**

Requirement Type	Minimum Requirement ¹
System hardware	<ul style="list-style-type: none"> • Sun UltraSPARC IIIi • 17-inch color monitor • CD-ROM drive
Memory (RAM)	512 MB
Available drive space ²	<ul style="list-style-type: none"> • 2 GB on the partition on which you install the product. The default is /opt. • Swap space equal to double the amount of memory (RAM). For example, if your system has 512 MB of RAM, you need 1024 MB of swap space.
/tmp directory	Must be on a swap partition.
System software	Solaris 2.8 or 2.9. ³ Campus supports US-English and Japanese versions of Solaris Operating Systems. It does not support any other language version. Set the default locale to US-English for US-English version and Japanese for Japanese version.

Table 1-1 Server System Requirements Summary (continued)

Requirement Type	Minimum Requirement ¹
Additional software	Netscape 7.0, if you are using the CiscoWorks Home page on the server system.
	 Caution For Solaris, use Netscape downloaded only from the Sun site.

1. If other applications are installed, or the number of devices on your network exceeds 500, the requirements might be greater.
2. For information about verifying disk space, see the [“Checking Required Disk Space”](#) section on page 1-5.
3. Patch 106292-05 must not be installed.

Checking Required Disk Space

To verify the amount of available disk space in each of the specified partitions and directories, enter:

```
# df -k directory
```

where *directory* is the partition or directory for which you want to check the available disk space.

Solaris Patches

Table 1-2 lists the required and recommended patches for Solaris 2.8 and 2.9.

Table 1-2 Required and recommended patches for Solaris 2.8 and 2.9

Operating System	Required		Recommended	
	Server	Client	Server	Client
Solaris 2.8	111327-05	111626-03	110951-01	110951-05
	110945-08	108652-81	110662-02	110662-12
	110934-16	108921-21	110615-01	110615-11
	110898-09	108940-62	110286-02	108964-06
	109326-14			
	108827-40			
	108528-29			
Solaris 2.9	114224-01	112771-14	113326-01	112808-06
	113580-01	112661-06	112998-03	
	112839-04	113244-05	113713-14	
	112233-12		112964-07	
	114006-01		113575-05	
			112970-07	

Use the `showrev -p` command to verify that these patches have been applied.

Maximum Recommended Load

The maximum recommended load on servers configured with the minimum server requirements shown in Table 1-1 is 500 Cisco devices and one client at a time.

If other network management applications are installed on your server, additional resources might be required.

Server Recommendations

If your network has more than 500 Cisco devices, the following minimum requirements are recommended:

- Sun Sparc Ultra 10 processor
- 1 GB of memory (RAM)
- 2 GB of swap space

To select or configure a server system that best meets your needs, consider the number of managed devices.

[Table 1-3](#) shows the recommendations for a server running Common Services and Campus Manager. These recommendations produce optimal response time when running user reports.


Client Requirements

The minimum client system requirements for CiscoWorks Common Services 3.0 and Campus Manager 4.0 are shown in [Table 1-3](#). The maximum recommended load on clients configured with the minimum requirements shown in [Table 1-3](#) is 2000 Cisco devices.

**Note**

Before you can access Campus from a client system, you must configure the system properly. For information about configuring clients, see *Installation and Setup Guide for CiscoWorks Common Services 3.0 (Includes CiscoView) on Solaris*.

Table 1-3 *Client System Requirements Summary*

Requirement Type	Minimum Requirement
System Software and Hardware	<ul style="list-style-type: none"> • Client system: <ul style="list-style-type: none"> – IBM system with at least a 300 MHz Pentium processor running Windows (Professional and Server), or Windows XP SP1. – Solaris SPARC station Solaris 2.8 or 2.9. – Color monitor with video card set to 24 bits color depth.
Memory (RAM)	512 MB
Browser	<p>One of the following browsers:</p> <ul style="list-style-type: none"> • On Windows 2000 and Windows XP clients: <ul style="list-style-type: none"> – Microsoft Internet Explorer 6.0 (version 6.0.2600.0000) or Internet Explorer 6.0 with Service Pack 1 (version 6.0.2800.1106), – Java Virtual Machine (JVM) 5.0.0.3802 and above, and Java plug-in version 1.4.2_04¹. <p>To verify the JVM: From Internet Explorer, select View > Java Console. From Netscape Navigator, Tools > Server > Java Console. From Mozilla, Help > About Plug-ins</p> <ul style="list-style-type: none"> – Netscape 7.1. – Mozilla 1.7. • On Solaris clients use Netscape 7.0 for Solaris 2.8 and 2.9. <p> Caution For Solaris, use Netscape downloaded from the Sun site only.</p>

1. You can install Java Plug-in version 1.4.2_06. See section [Using Sun Java Plug-in 1.4.2_06, page 1-9](#) for more details.

Using Sun Java Plug-in 1.4.2_06

A vulnerability in the Java Plug-in 1.4.2_04 may allow an untrusted applet to escalate privileges, through JavaScript calling into Java code, including reading and writing files with the privileges of the user running the applet. For more details, refer Sun Alert ID: 57591. This is fixed in Java plugin 1.4.2_06.

CiscoWorks neither exploits nor is impacted by this vulnerability. If you choose to use Sun Java Plug-in 1.4.2_06 instead of the one provided in Campus Manager (1.4.2_04), you can choose the plug-in manually.

To modify your CiscoWorks installation to use Sun Java Plug-in 1.4.2_06:

Step 1 On Campus Manager server, locate the Java Plug-in properties file `%NMSROOT%/lib/classpath/javaplugin.properties` and change the following entries in the `javaplugin.properties` file:

```
WIN_IE_VERSION=clsid:CAFEEFAC-0014-0002-0006-ABCDEFEDCBA
WIN_NS_VERSION=application/x-java-applet;jpi-version=1.4.2_06
SOL_VERSION=application/x-java-applet;jpi-version=1.4.2_06
```

Step 2 Save the modified `javaplugin.properties` file.

Step 3 Update each Windows client as follows:

- a. Download Java Plug-in 1.4.2_06 for Windows from the Sun site.
- b. Install the Java Plug-in on the client.
- c. Close any running browser instances and start them again.

Step 4 Update each Solaris client as follows:

- a. Download Java Plug-in 1.4.2_06 for Solaris from the Sun site.
- b. Install the Java Plug-in on the client.
- c. Locate the `jpi.profile` and `jpi.cshrc` files on the client, and change the `MOZ_PLUGIN_PATH`, to reflect the path to Java Plug-in 1.4.2_06.

For example, if you have installed 1.4.2_04 in `/opt/jre14204`, and you have installed 1.4.2_06 in `/opt/jre14206`:

Change

```
MOZ_PLUGIN_PATH=/opt/jre14204/j2re1.4.2_04/plugin/sparc/ns610
```

To

```
MOZ_PLUGIN_PATH=/opt/jre14206/j2re1.4.2_06/plugin/sparc/ns610
```

Step 5 Update each Solaris client using Netscape 7.0 or Mozilla as follows:

- a. Modify the links to point to the links for Java Plug-in 1.4.2_06:

Change

```
NS7_HOME/plugins/libjavaplugin_oji.so
```

To

```
JPI1.4.2_06_HOME/plugin/sparc/ns610/libjavaplugin_oji.so
```

- b. Source `/jpi.cshrc` or `/jpi.profile`.
 - c. Close any running browser instances and start them again.
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Supported Devices

For information about supported devices, access the Supported Devices table at the following location:

http://www.cisco.com/en/US/docs/net_mgmt/ciscoverks_campus_manager/4.0/device_support/table/cm40sdt.html