



# Release Notes for Cisco Unified Operations Manager 1.1

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These release notes are for use with Cisco Unified Operations Manager (Operations Manager).

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# New Features

Operations Manager 1.1 adds the following:

- Support for Cisco Unified CallManager 5.0 and 4.2.
- Support for Cisco Unified MeetingPlace Express 1.1.1.
- Support for Cisco Unity Connection 2.2.
- Support (including synthetic tests) for SIP phones.
- Enhancements to Notifications Services workflow.

## Product Documentation



### Note

The originally published printed and electronic documentation is included with your product. Any changes after original publication are reflected on Cisco.com, where you will find the most up-to-date documentation.

[Table 1](#) describes the product documentation that is available.

**Table 1**      **Product Documentation**

| Document Title  | Available Formats  |
|---|--|
| <i>Supported Devices Table for Cisco Unified Operations Manager 1.1</i> | On Cisco.com at the following URL:<br><a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_unified_operations_manager/1.1/device_support/table/OMdvsp11.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_unified_operations_manager/1.1/device_support/table/OMdvsp11.html</a>  |
| <i>Release Notes for Cisco Unified Operations Manager 1.1</i>           | <ul style="list-style-type: none"> <li>• Printed document that was included with the product.</li> <li>• PDF on the product CD-ROM.</li> <li>• On Cisco.com at the following URL:<br/><a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_unified_operations_manager/1.1/release/notes/CUOM11RN.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_unified_operations_manager/1.1/release/notes/CUOM11RN.html</a></li> </ul> |

**Table 1**      **Product Documentation (continued)**

| Document Title  | Available Formats  |
|---|--|
| <i>Quick Start Guide for Cisco Unified Operations Manager 1.1</i>                         | <ul style="list-style-type: none"> <li>Printed document that was included with the product.</li> <li>PDF on the product CD-ROM.</li> <li>On Cisco.com at the following URL:<br/><a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_unified_operations_manager/1.1/quick/guide/CUOM1_1_Q.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_unified_operations_manager/1.1/quick/guide/CUOM1_1_Q.html</a></li> </ul> |
| <i>Installation Guide for Cisco Unified Operations Manager (Includes Service Monitor)</i> | <ul style="list-style-type: none"> <li>PDF on the product CD-ROM.</li> <li>On Cisco.com at the following URL:<br/><a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_unified_operations_manager/1.1/installation/guide/instalgd.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_unified_operations_manager/1.1/installation/guide/instalgd.html</a></li> </ul>   |
| <i>User Guide for Cisco Unified Operations Manager</i>                                    | <ul style="list-style-type: none"> <li>PDF on the product CD-ROM.</li> <li>On Cisco.com at the following URL:<br/><a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_unified_operations_manager/1.1/user/guide/userguid.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_unified_operations_manager/1.1/user/guide/userguid.html</a></li> </ul>   |
| Context-sensitive online help   | <ul style="list-style-type: none"> <li>Select an option from the navigation tree, then click <b>Help</b>.</li> <li>Click the Help button in the page.</li> </ul>   |

## Related Documentation



### Note

We sometimes update the printed and electronic documentation after original publication. Therefore, you should also review the documentation on Cisco.com for any updates.

[Table 2](#) describes the additional documentation that is available.

**Table 2**      **Related Documentation**

| Document Title  | Available Formats   |
|---|---|
| <i>Release Notes for Cisco Unified Service Monitor 1.1</i>                                      | <ul style="list-style-type: none"> <li>• PDF on the product CD-ROM</li> <li>• On Cisco.com at the following URL:<br/><a href="http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_ip_communications_service_monitor/1.1/release/notes/SrvMonRN.html">http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_ip_communications_service_monitor/1.1/release/notes/SrvMonRN.html</a></li> </ul> |
| <i>User Guide for Cisco Unified Service Monitor</i>   | <ul style="list-style-type: none"> <li>• PDF on the product CD-ROM.</li> <li>• On Cisco.com at the following URL:<br/><a href="http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_ip_communications_service_monitor/1.1/user/guide/usrguide.html">http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_ip_communications_service_monitor/1.1/user/guide/usrguide.html</a></li> </ul>      |
| <i>Release Notes for CiscoWorks Common Services 3.0.3 (Includes CiscoView 6.1.2) on Windows</i> | On Cisco.com at the following URL:<br><a href="http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_common_services_software/3.0.3/release/windows/notes/CWCS_RNW_303.html">http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_common_services_software/3.0.3/release/windows/notes/CWCS_RNW_303.html</a>   |
| <i>Installation and Setup Guide for Common Services (Includes CiscoView) on Windows</i>         | On cisco.com at the following URL:<br><a href="http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_common_services_software/3.0.3/installation/windows/guide/ig_win.html">http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_common_services_software/3.0.3/installation/windows/guide/ig_win.html</a>   |
| <i>User Guide for CiscoWorks Common Services</i>  | On Cisco.com at the following URL:<br><a href="http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_common_services_software/3.0.3/user/guide/usrguide.html">http://www.cisco.com/en/US/docs/net_mgmt/cisoworks_common_services_software/3.0.3/user/guide/usrguide.html</a>   |

## Useful Information

[Table 3](#) documents problems you may encounter.

**Table 3**      **Circumstances that Can Affect Data**

| Description   | Circumstances  |
|---|--|
| <p>No DSP records for Voice Interface Cards (VICs) that are supported by the following network modules:</p> <ul style="list-style-type: none"> <li>• NM-1V</li> <li>• NM-2V</li> <li>• NM-HDA</li> </ul> <p>Affected record type: 109</p>   | <p>CISCO-DSP-MGMT-MIB is not supported on the listed network modules. This bug applies to all devices that support them.</p> <p>Bug ID: CSCeb62542</p>       |
| <p>Number of CAS ports is incorrect and CAS channel status is missing for all supported network devices that run Cisco IOS except for Cisco Universal Gateways. GSU always reports the number of CAS ports as follows:</p> <ul style="list-style-type: none"> <li>• 24 ports for each T1</li> <li>• 31 ports for each E1</li> </ul> <p>For example, if a device has two T1 ports, Operations Manager reports the total number of T1 CAS ports as 48, no matter how many CAS ports are configured on the device.</p> <p>Affected record types: 102, 112, 113</p> | <p>Except for Cisco Universal Gateways, the network devices that run Cisco IOS do not support CISCO-POP-MGMT-MIB.</p> <p>Bug IDs: CSCdm87395, CSCdx04678</p> |

## Known Problems

[Table 4](#) describes problems known to exist in this release.



### Note

To obtain more information about known problems, access the Cisco Software Bug Toolkit at <http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl>. (You will be prompted to log into Cisco.com.)

**Table 4**      *Known Problems in Operations Manager*

| Bug ID     | Summary  | Explanation  |
|------------|--|--|
| CSCsb60614 | Cluster name changes are not reflected in Operations Manager.                                | <p>If you change the name of a cluster in Cisco CallManager after the devices have been added to Operations Manager, the name change does not occur in Operations Manager. This is the case even after performing inventory collection.</p> <p>Workaround:</p> <p>Delete the devices in the cluster from Operations Manager and then re-add the devices.</p> |
| CSCsb63311 | In the Service Quality Alerts display, filtering does not work when using multiple criteria. | <p>Using multiple filtering options at one time to customize the Service Quality Alerts display does not work correctly.</p> <p>Workaround:</p> <p>Filter the Service Quality Alerts display based on a single criterion.</p>  |

**Table 4**      **Known Problems in Operations Manager (continued)**

| Bug ID     | Summary   | Explanation   |
|------------|---|---|
| CSCsb66977 | Voice application software (for example, Cisco Conference Connection, Cisco CallManager, or Cisco Emergency Responder) goes to the Unsupported state. | <p>On some servers that have voice application software installed, rebooting causes the server to go to the Unsupported state in Operations Manager.</p> <p>The problem occurs on servers that have the Windows operating system version upgraded to 2000.2.7sr3 or 2000.4.1.</p> <p>The problem is caused by incompatibility between the CDP driver installed by the voice application and Microsoft Security hotfix MS05-019. For more information regarding the hotfix, see the Microsoft website for more details.</p> <p>Workaround:</p> <p>Upgrade the CDP driver on the voice application server.</p> <ol style="list-style-type: none"> <li>1. Uninstall the CDP driver from the voice application server. Run the following command: <pre>C:\Program Files\Cisco\Bin&gt; cdpinstaller -v -u CISCO_CDP</pre> </li> <li>2. Log on to any Cisco CallManager 4.1 server and copy the following files to the voice application server. <ul style="list-style-type: none"> <li>• CDP.SYS (C:\Program Files\Cisco\Bin)</li> <li>• CDPintf.dll (C:\WINNT\system32)</li> <li>• CDPInstaller.exe</li> <li>• CDP.inf</li> </ul> </li> <li>3. Install the new CDP driver by running the following command: <pre>C:\program files\Cisco\Bin&gt; cdpinstaller -v -l "C:\Program Files\Cisco\Bin\cdp.inf" -c p -i CISCO_CDP</pre> </li> </ol> |

**Table 4**      **Known Problems in Operations Manager (continued)**

| Bug ID     | Summary  | Explanation  |
|------------|--|--|
| CSCsb73004 | An error occurs when you launch a trending graph for a device when the time of the graph is configured for more than 48 minutes in the past. | <p>The error states that there is not any data available for the last 48 minutes. This error occurs due to an incorrect system uptime in the device.</p> <p>This error occurs in specific Cisco IOS versions. Refer to the Cisco IOS IP SLA bugs, CSCin66315 and CSCeb46870.</p> <p>Workaround:</p> <p>Upgrade the Cisco IOS version, or reboot the source device. For details, see CSCin66315 and CSCeb46870.</p>   |
| CSCsb83202 | OperationallyDown events for voice ports are being cleared automatically, even though the port is still down in the router.                  | <p>The operationallyDown event for voice ports in routers are being cleared even though the port continues to be down.</p> <p>Operations Manager only sends an operationallyDown alarm if the operating status (the OperStatus for this router) is in one of the following states:</p> <ul style="list-style-type: none"> <li>• Down (2).</li> <li>• Testing (3) (If not suppressing testing-related alarms).</li> </ul> <p>If, during a polling cycle, the <i>ifOperStatus</i> is Down (2), the alarm is generated. If, during the next polling cycle, the <i>ifOperStatus</i> is Dormant (5), the operationallyDown alarm is cleared because it is not Down (2) or Testing (3).</p> <p>Related bug: CSCsb87389.</p> <p>Workaround: None.</p> |

**Table 4**      **Known Problems in Operations Manager (continued)**

| Bug ID     | Summary   | Explanation   |
|------------|---|---|
| CSCsc07502 | Some screens in Operations Manager are not sized correctly when opened. | <p>Several popup screens open with the status bar covering the bottom of the screen. Some popups are not resizable, and the buttons located at the bottom right are covered by the status bar.</p> <p>This occurs only with Windows XP Service Pack 2 using Microsoft Internet Explorer, and with certain security settings configured. The security settings are applied when the Operations Manager server is put in a security zone where the sizing of popups opened by scripts is disabled.</p> <p>Workaround:</p> <p>For detailed instructions, access this bug through Cisco Software Bug Toolkit at <a href="http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl">http://www.cisco.com/cgi-bin/Support/Bugtool/home.pl</a>. (You will be prompted to log into Cisco.com.)</p> <p>To fix the problem, the Allow script-initiated windows without size or position constraints option should be enabled for the security zone that the Operations Manager server is in.</p> <p>Do one of the following:</p> <ul style="list-style-type: none"> <li>• Enable the setting, Allow script-initiated windows without size or position constraints, for the security zone that the Operations Manager server is in.</li> <li>• Add the IPCOM server site to the local intranet or trusted security zone.</li> </ul> <p><b>Note</b> In many cases, using the server name instead of the IP address in the browser will fix the problem. But the Operations Manager server must be in the same domain as the client, and DNS must be configured correctly. Alternatively, you can add the IP address to the Local Intranet or Trusted security zone.</p> |

**Table 4**      **Known Problems in Operations Manager (continued)**

| Bug ID     | Summary   | Explanation   |
|------------|---|---|
| CSCsc10167 | On the Alert Details page, once a tool is launched, you cannot relaunch it.   | <p>In the Alert Details page, once you select a tool from the Launch Tools menu you cannot launch the selected tool again until you choose another tool.</p> <p>Workaround:</p> <p>After launching a tool, to launch the same tool again, you must either select a different tool or select the Launch Tools option in the menu.</p> <p>After doing either of these actions, you can relaunch your original choice.</p>   |
| CSCsc12967 | Exchange services are displayed as stopped when Cisco Unity is configured for failover.   | <p>When Cisco Unity is configured for failover mode, Operations Manager shows Microsoft Exchange Services as being stopped.</p> <p>Workaround: None.</p>  |
| CSCsc30250 | <p>The Service Level View sometimes displays the following message:</p> <pre>A script in this movie is causing Macromedia Flash Player 8 to run slowly. If it continues to run, your computer may become unresponsive. Do you want to abort the script?</pre> | <p>This message appears when there is an update to the Service Level View and that update contains a large amount of content (100 KBs or more). Also, it may appear if the client system is under a load due to other processes using as little as 40 KB of CPU memory. The message is created by the Flash plug-in and the only way to avoid it is to partition the data to the client and send it in chunks of 100 KB or less.</p> <p>Workaround:</p> <p>Click <b>No</b> every time you see the message. Do not click <b>Yes</b>. If you do click <b>Yes</b>, close the Service Level View, and reopen it.</p> <p>Also, check for any processes running on the client system that are using large amounts of CPU.</p> <p>If you can disable nonessential processes on your system, reducing the overall system CPU usage, the message seldom appears.</p> |

**Table 4**      **Known Problems in Operations Manager (continued)**

| Bug ID     | Summary  | Explanation   |
|------------|--|---|
| CSCsc44538 | <p>The DFMServer and VHMServer processes are not registering with the broker.</p> <p>Devices that are added to Operations Manager when it is in this condition exhibit the following behavior:</p> <ul style="list-style-type: none"> <li>• ALL devices become stuck in the Inventory Collection in Progress state.</li> <li>• All devices move to the unreachable state.</li> </ul> | <p>After installing Operations Manager and rebooting the server, either the DFMServer, or the VHMServer, or both processes do not start. There is no sm_server.exe instance (or there are only two sm_server.exe instances) in the Windows task manager.</p> <p>Workaround:</p> <p>Perform the following:</p> <ol style="list-style-type: none"> <li>1. Run <code>net stop crmdmgttd.</code></li> <li>2. Wait 15 minutes.</li> <li>3. Run <code>net start crmdmgttd.</code></li> </ol> <p>After the CPU cools down, check the Windows task manager. There should be four instances of sm_server.exe.</p> <p>The output of the <b>brcontrol</b> command should show both DFM and VHM.</p> <p>For example:</p> <pre>C:\Program Files\CSCOPx\objects\smarts\bin&gt;brcontrol  Broker is located at: IPCOM-daily:9002 Started: Jan 06 10:21:09 2006 Domain           Host Name           Port Proc ID State  Last Chg Time -----  - -----  - DFM           IPCOM-daily.cisco.com   2163 14120 RUNNING Jan 06 16:18:03 2006 VHM           IPCOM-daily.cisco.com   2206 8856 RUNNING Jan 06 16:18:04 2006</pre> |
| CSCsc61752 | <p>In the Service Level View, when Cisco IP Contact Center (IPCC) is part of a user-defined view, it only appears in the tree view (view pane).</p>  | <p>User-defined views in the Service Level View do not show Cisco IP Contact Centers in the map display pane. They only appear in the view pane.</p> <p>Workaround: None.</p>   |

**Table 4**      **Known Problems in Operations Manager (continued)**

| Bug ID     | Summary  | Explanation   |
|------------|--|---|
| CSCsc87486 | In the Personalized report, not all the graphs are shown for the node-to-node test violations. | <p>In the Personalized report for node-to-node tests, 24-Hour History shows the graph for only the following metrics:</p> <ul style="list-style-type: none"> <li>• Source-to-Destination Packet Jitter.</li> <li>• Destination-to-Source Packet Jitter.</li> <li>• Average Latency.</li> </ul> <p>No other graphs are displayed.</p> <p>Workaround: None.</p> |
| CSCsc91915 | When creating node-to-node tests, errors are displayed when the test limit is exceeded.        | <p>When creating more node-to-node tests than allowed (the limit is 250), the following errors are displayed:</p> <ul style="list-style-type: none"> <li>• Exceeding the test limit.</li> <li>• No selected studies. Please check field(s) for invalid entries.</li> </ul> <p>Workaround: None.</p> <p>You can ignore the error messages.</p>                 |

**Table 4**      **Known Problems in Operations Manager (continued)**

| Bug ID     | Summary  | Explanation  |
|------------|--|--|
| CSCsd21804 | Learning appears in the Device Type column of the Alerts and Events display. | <p>On the Alerts and Events display and the Alert Details page, you may see <i>Learning</i> in the Device Type column. Learning indicates that Operations Manager was discovering the device when the alert occurred. The following events can trigger an alert during discovery:</p> <ul style="list-style-type: none"> <li>• Duplicate IP (might be generated for any type of device)</li> <li>• Events for media servers only: <ul style="list-style-type: none"> <li>– FanDown</li> <li>– FanDegraded</li> <li>– TemperatureSensorDown</li> <li>– TemperatureSensorDegraded</li> </ul> </li> </ul> <p>Workaround:</p> <ul style="list-style-type: none"> <li>• Simply wait; the actual device type is reflected in the Device Type column when new events occur.</li> <li>• Look up the current state of a device from the Detailed Device View, which always displays the current state.</li> </ul> |

**Table 4**      *Known Problems in Operations Manager (continued)*

| Bug ID     | Summary  | Explanation   |
|------------|--|---|
| CSCsc26996 | Next Discovery, in the Device Management: Summary page, displays the incorrect time. | <p>The problem is due to a registry setting in Windows that appears for certain time zones for which Daylight Saving Time changes are applicable. If the check box for Daylight Saving Time is not checked, problems occur when converting valid date strings to a Date object. This registry key remains even if the time zone of the machine is switched to another time zone for which Daylight Saving Time is not applicable.</p> <p>Following is the registry information:</p> <p>HKEY_LOCAL_MACHINE\CurrentControlSet\Control\TimeZoneInformation</p> <p>DisableAutoDaylightTimeSet REG_DWORD<br/>0x00000001(1)</p> <p>Workaround:</p> <p>If the system is in a time zone that has Daylight Saving Time, check the Automatically adjust for Daylight Saving Time changes check box.</p> <p>If the system is in a time zone for which Daylight Saving Time is not applicable, but the registry key is present and set to 1, do the following:</p> <ol style="list-style-type: none"> <li>1. Change to a time zone for which Daylight Saving Time is applicable.</li> <li>2. Check the Automatically adjust for Daylight Saving Time changes check box, and click <b>Apply</b>.</li> </ol> <p>This will cause the registry key to disappear. Now switch the machine to its present time zone.</p> |
| CSCsd22730 | Automatic discovery does not discover Cisco Unity Express devices.                   | <p>During automatic discovery, using either ping sweep or CDP, Cisco Unity Express devices are discovered. These devices go into the Unreachable state.</p> <p>Workaround:</p> <p>Manually add Cisco Unity Express devices into Operations Manager.</p>   |

**Table 4**      **Known Problems in Operations Manager (continued)**

| Bug ID                   | Summary   | Explanation   |
|--------------------------|---|---|
| CSCsd38707<br>CSCsd45913 | During discovery, ping sweep does not consider domain names or syslocation.                     | <p>During discovery, if you have devices configured in multiple domains and try to use the domain name filter, the filter will not work.</p> <p>Devices should be configured with a hostname and domain name.</p> <p>Workaround:</p> <p>There is no workaround for the domain name filters. You can discover devices using the IP address filter.</p>   |
| CSCsd58055               | The Devices report may show a device's capability as UnknownMDFType.                            | <p>The Devices report displays a device's capability as UnknownMDFType when the device is not supported by Operations Manager.</p> <p>Workaround: None.</p>   |
| CSCsd65399               | After upgrading, IP Communications Operations Manager 1.0 still appears under Start > Programs. | <p>After upgrading from Operations Manager 1.0, IP Communications Operations Manager 1.0 still appears in the following locations:</p> <ul style="list-style-type: none"> <li>• On the Windows desktop when you select Start &gt; Programs. Two entries appear, one for IP Communications Operations Manager 1.0 and one for Cisco Unified Operations Manager 1.1. Both options launch Operations Manager 1.1.</li> <li>• On the CiscoWorks home page. If you select CiscoWorks in the top-right corner of the Operations Manager home page, the CiscoWorks home page opens. You will see two options, one for IP Communications Operations Manager and one for Cisco Unified Operations Manager. Both options launch Operations Manager 1.1.</li> </ul> <p>Workaround: None.</p> |

**Table 4**      **Known Problems in Operations Manager (continued)**

| Bug ID     | Summary   | Explanation   |
|------------|---|---|
| CSCsd69455 | The right-click menu in the Service Level View does not display some of the options for Cisco CallManagers. | <p>When you right-click on a Cisco CallManager in the Service Level View, not all the menu items are available in the list. Also, in the Detailed Device View for a Cisco CallManager’s device capabilities, MediaServer and Host are not displayed.</p> <p>Workaround:<br/>Rediscover the Cisco CallManager.</p>   |
| CSCsd71626 | The Service Level View does not display a Cisco CallManager cloud that was previously displayed.            | <p>During initial discovery or when the Operations Manager server boots up, if the Cisco CallManager Service is down on all members of the cluster, this cluster will not show up in the Service Level View.</p> <p>Workaround:<br/>Rediscover the device once the Cisco CallManager is reachable and the Cisco CallManager Service is running on the Cisco CallManagers.</p>   |
| CSCsd78140 | Wrong IP SLA results are displayed for the Phone Status Test Results report.                                | <p>When you run a Phone Status Test and schedule it to run once, the resulting report displays wrong information in the IP SLA column.</p> <p>This is an intermittent problem, and can be caused by heavy loads on the router and network. There can be a delay in the router between the time the test is configured and when the data is collected. If the information is collected before the test starts to run, the returned information will not be correct.</p> <p>Workaround:<br/>Schedule the test using the <i>every</i> option rather than the <i>once</i> option.</p> |

**Table 4**      **Known Problems in Operations Manager (continued)**

| Bug ID     | Summary  | Explanation  |
|------------|--|--|
| CSCsd80619 | SRST cloud disappears when the cluster is updated due to changes in the cluster.           | <p>In the Service Level View, SRST clouds (to indicate that the cluster has SRST connections) disappear from the first-level map-display pane. This occurs when the cluster is updated due to changes in the cluster.</p> <p>If you drill down, the SRST connections are displayed correctly.</p> <p>Workaround:</p> <p>Refresh the Service Level View window.</p>   |
| CSCsd80651 | During physical discovery, Cisco CallManager's HTTP credentials are not getting picked up. | <p>Cisco CallManagers are going into the Partially Monitored state because their HTTP credentials are not getting picked up during physical discovery. This occurs even if the HTTP credentials are entered on the Default Credentials page.</p> <p>This impacts Cisco CallManager release 5.0 only.</p> <p>Workaround:</p> <p>Edit the credentials of the Cisco CallManager in the Device Credentials Repository (DCR). This will trigger a rediscovery and the Cisco CallManager will go to the Monitored state.</p>     |
| CSCsd80704 | Sometimes automatic discovery does not stop.   | <p>Automatic discovery does not progress if any Cisco CallManager 5.0 devices are used as seed devices. Also, the discovery process does not terminate on its own.</p> <p>Further, if other devices are used as seed devices and Cisco CallManager 5.0 devices are encountered during automatic discovery, the discovery process does not stop.</p> <p>Workaround:</p> <p>Cancel automatic discovery. Click the Cancel button that appears on the Device Management: Summary page next to Device Selection: Automatic.</p> |

**Table 4**      *Known Problems in Operations Manager (continued)*

| Bug ID     | Summary  | Explanation   |
|------------|--|---|
| CSCsd80731 | Discovery Credentials should have a provision to enter the Windows Management Instrumentation (WMI) credentials. | <p>The Discovery Credentials page does not contain a field where the WMI credentials can be entered.</p> <p>The following devices go into the Partially Monitored device state if the WMI credentials are not provided:</p> <ul style="list-style-type: none"> <li>• Cisco IP Contact Center</li> <li>• Cisco Unity</li> <li>• Cisco Unity Connection</li> <li>• Cisco Personal Assistant</li> </ul> <p>Workaround:</p> <p>Enter the Windows credentials in the Primary Credentials field in the DCR.</p> |

**Table 4**      *Known Problems in Operations Manager (continued)*

| Bug ID     | Summary                              | Explanation   |
|------------|--------------------------------------|---|
| CSCsd81030 | Error in attaching to the DfmBroker. | <p>After installing Operations Manager, rebooting, and importing devices for discovery, all devices go to the unreachable state. An error occurs when trying to attach to the DFMBroker.</p> <p>To verify this, do the following:</p> <ol style="list-style-type: none"> <li>1. Open a command prompt and go to:<br/>&lt;NMSROOT&gt;\objects\smarts\bin.</li> </ol> <p><b>Note</b> NMSROOT is the directory where Operations Manager is installed on your system. If you selected the default directory during installation, it is C:\Program Files\CSCOpX.</p> <ol style="list-style-type: none"> <li>2. Run <code>brcontrol</code>. You will see the following message:<br/><br/>Error attaching to broker:<br/>IPCOM-PERF4GBL:9002</li> </ol> <p>Workaround:</p> <p>Do the following:</p> <ol style="list-style-type: none"> <li>1. Open a command prompt.</li> <li>2. Run <code>net stop crmdmgtd</code>.</li> <li>3. Wait 15 minutes.</li> <li>4. Run <code>net start crmdmgtd</code>.</li> </ol> <p>After the CPU cools down, check the Windows task manager. There should be four instances of <code>sm_server.exe</code> and two instances of <code>brstart.exe</code>.</p> |

**Table 4**      *Known Problems in Operations Manager (continued)*

| Bug ID     | Summary  | Explanation   |
|------------|--|---|
| CSCsd84401 | Device discovery can take a long time to complete. | <p>The default SNMP timeout used to validate device credentials is 3 seconds with 2 retries. This can cause discovery time to increase under the following conditions:</p> <ul style="list-style-type: none"> <li>• There are many SNMP unreachable devices in the network.</li> <li>• Multiple credentials have been supplied. This means that discovery will have to try one or more credentials on each device until it finds the correct credentials for the device.</li> </ul> <p>Workaround:</p> <p>Lower the SNMP timeout and retries. Do the following:</p> <ol style="list-style-type: none"> <li>1. Enter the credentials on the Default Credentials page.</li> <li>2. Open the IPCDiscovery-config.xml file from &lt;NMSROOT&gt;\conf\discovery.</li> </ol> <p><b>Note</b> NMSROOT is the directory where Operations Manager is installed on your system. If you selected the default directory during installation, it is C:\Program Files\CSCOpX.</p> <ol style="list-style-type: none"> <li>3. Locate the Credentials section. In this section, for each credential that you entered, you will find a section similar to the following: <pre>&lt;SnmpCredential IPAddress="*.*.*.*"&gt; &lt;SNMPv2 Snmpretry="2" Snmptimeout="3000" Usertag="SNMPv2 Credentials in first line" ROCommunity="/qiJe7XyxpU=" RWCommunity="Byh+1ukjK3I="/&gt; &lt;/SnmpCredential&gt;</pre> <p>Snmptimeout="3000" indicates that the timeout is 3000 milliseconds or 3 seconds.</p> </li> </ol> |

**Table 4**      *Known Problems in Operations Manager (continued)*

| Bug ID                    | Summary  | Explanation   |
|---------------------------|--|---|
| CSCsd84401<br>(continued) | Device discovery can take a long time to complete. | <p><b>4.</b> You can lower this value to 1000 milliseconds or 1 second. You can choose a value based on the SNMP responsiveness of your network.</p> <p><b>5.</b> Save the changes that you made to the file.</p> <p><b>6.</b> Start discovery.</p> <p><b>Note</b> If you make any further modifications to the credential list from the Default Credentials page, you will need to verify the SNMP timeout values in the configuration file. They may have been overwritten.</p> |

## Resolved Problems

[Table 5](#) describes problems that were fixed in this release.

**Table 5**      *Problems Resolved in Operations Manager 1.1*

| Bug ID     | Summary  | Explanation  |
|------------|--|--|
| CSCsb71077 | CPU usage approaches 100% when the following processes do not stop: <ul style="list-style-type: none"> <li>• sm_server</li> <li>• sm_authority</li> <li>• brstart</li> </ul> | This problem would occur occasionally after CiscoWorks Daemon Manager had been stopped and restarted. This no longer occurs.                 |
| CSCsb75405 | The TopoServer.log file grows to 100 MB in size and the file is not getting updated.   | The TopoServer.log file would increase in size to more than 100 MB, and could completely fill the disk space. This problem no longer occurs. |

**Table 5** *Problems Resolved in Operations Manager 1.1 (continued)*

| <b>Bug ID</b>                          | <b>Summary</b>  | <b>Explanation</b>  |
|--|---|---|
| CSCsb98782                             | SRST information is not getting updated for phones connected to Cisco CallManager Express.  | When creating SRST tests using IP phones connected to a Cisco CallManager Express, the phones did not display SRST information in the SRST IP Phones report. These IP phones now display SRST information.  |
| CSCsc26862<br>CSCsc39249<br>CSCsb49192 | IP phones registered to a Cisco CallManager Express appear as unregistered in the IP phone reports. Also, the audit function does not work correctly. | IP phones registered to a Cisco CallManager Express would appear as unregistered in the IP phone reports, even though the phones were actually registered.<br><br>Also, the audit (registered, unregistered, and add) entries would be incorrect.<br><br>These problems no longer occur.  |
| CSCsc58959                             | User-defined views are not automatically refreshed when updates occur to the group through group administration.                                      | User-defined views were not getting refreshed automatically after being updated in group administration pages. Now updates are automatically updated in the Service Level View.   |
| CSCsc88312                             | In the Service Quality Alerts display, after manually clearing an event, the default sort on the time does not work correctly.                        | After you manually cleared an event in the Service Quality Alerts display, the old time stamp was displayed for the alert and the alert was shown as the last updated alert. This problem no longer occurs.   |
| CSCsc88731                             | You cannot launch performance graphing for multicapable devices, if one of the capabilities is not being polled or encounters an error.               | This problem occurred when a multicapable device had polling enabled, but one of the capabilities did not have polling enabled (or Operations Manager was not monitoring the Cisco CallManager to which the MGCP gateway was registered).<br><br>When a performance graph was launched for this device, an error message would appear and the performance graph did not open. Performance graphs, for these types of devices, now open correctly. |
| CSCsc89454                             | Cleared alerts appear in the Service Quality Alerts display.  | This problem occurred for alerts that had multiple events. This would happen during heavy loads on the Operations Manager server. This problem no longer occurs.  |

**Table 5** *Problems Resolved in Operations Manager 1.1 (continued)*

| <b>Bug ID</b> | <b>Summary</b>  | <b>Explanation</b>   |
|---------------|---|--|
| CSCsc89552    | You cannot launch performance graphing for all the metrics for multicapable devices.  | If you launched performance graphing for a single multicapable device for which all capabilities were being polled, only the common metrics were displayed in the graph. Now all metrics are displayed.  |
| CSCsc93833    | Devices configured with SNMPv3 are not fully supported in Operations Manager.   | SNMPv3 devices were not supported for certain Operations Manager features. SNMPv3 is now supported for all features.   |
| CSCsc97495    | When there are continual bursts of events for an extended period of time, alerts and events are not updated in the Alerts and Events display, or in the Service Quality Alerts display. | When there were continual large bursts of events over an extended period of time, the EPMServer memory grew, causing a memory exception. This resulted in alerts and events not getting updated in the Alerts and Events display, or in the Service Quality Alerts display. This problem no longer occurs. |
| CSCsc95761    | SRST tests cannot be created from the IP Phone report.  | In the Service Level View, when you selected the Associated SRST Phones option from the right-click menu first, the IP Phone report for the SRST tests would be empty, and the SRST tests could not be created. This problem no longer occurs.   |
| CSCsc95940    | You cannot view associated SRST phones from the Service Level View.   | In the Service Level View, when you selected the Associated SRST Phones option from the right-click menu for an SRST router, the associated SRST phones list was empty. This list is now populated.  |
| CSCsc97130    | The Find IP Phone page copies previous information when a new selection is made.  | The Find IP Phone page would copy information for a previously canceled browse operation. The cancel operation did not clear the previous information completely. This problem no longer occurs.   |

**Table 5** *Problems Resolved in Operations Manager 1.1 (continued)*

| <b>Bug ID</b> | <b>Summary</b>  | <b>Explanation</b>  |
|---------------|---|---|
| CSCsc98112    | An error occurs when selecting a user-defined group for a view in the Alerts and Events, Service Quality Alerts or IP Phones Status displays. | When a user-defined group was created with single quotes (') in its name and activated as a view, the dashboards (Alerts and Events, Service Quality Alerts, and IP Phones Status displays) displayed an error message when the view was selected. Single quotes can now be used.   |
| CSCsd11587    | Connectivity details does not appear correctly under certain conditions.  | The Connectivity Detail View for a device displayed incorrect details if any of the devices in the immediate neighborhood of the device (within five hops) was known to Operations Manager, but was not either monitored or partially monitored by Operations Manager. This problem no longer occurs.   |
| CSCsd11986    | End-to-end call synthetic tests for 6-minute to 9-minute intervals are not supported.   | For end-to-end call synthetic tests, Operations Manager only supported test intervals of 1, 2, 3, 4, or 5 minutes, and multiples of 5 minutes. If you chose 6, 7, 8, or 9 minutes as the test interval, the test would still only run every 5 minutes. Now you can also schedule tests for 6-minute to 9-minute intervals.                        |
| CSCsd21739    | Duplicate names in synthetic tests are not checked during import.   | You could not use duplicate synthetic test names during seed file import. Having two tests with the same name could result in flapping of the test results and alerts in the Alerts and Events display. Also, one of the tests would not appear in the Detailed Device View. You can now use duplicate test names without causing these problems. |

# Upgrading IP Communications Operations Manager 1.0 to Cisco Unified Operations Manager 1.1

Supported upgrade paths:

- Upgrade from a licensed copy of IP Communications Operations Manager 1.0 to a licensed copy of Cisco Unified Operations Manager 1.1.
- Upgrade from a licensed copy of IP Communications Operations Manager 1.0 to an evaluation copy of Cisco Unified Operations Manager 1.1

**Note**

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You cannot upgrade from an evaluation copy of IP Communications Operations Manager 1.0 to an evaluation copy of Cisco Unified Operations Manager 1.1.

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**Note**

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Synthetic test settings are not migrated from IP Communications Operations Manager 1.0 to Cisco Unified Operations Manager 1.1. After upgrade, you will have to recreate any synthetic tests that you previously created in Operations Manager 1.0.

---

**Before You Begin**

- Make sure your system meets the system requirements. For system requirements, see *Installation Guide for Cisco Unified Operations Manager (Includes Service Monitor)*.
- Close all open or active programs. Do not run other programs during the upgrade process.

**Step 1**

---

As the local administrator, log in to the machine on which you will be upgrading the Operations Manager software, and insert the Cisco Unified Operations Manager CD-ROM into the CD-ROM drive. The Cisco Unified Operations Manager 1.1 and Service Monitor 1.1 Setup Program window opens.




---

**Note** If the CD-ROM is already in the CD-ROM drive and you stopped the installation process to close programs or if Autostart is disabled, click **Setup.exe** to restart the process.

---

**Step 2** Click **Install**. The Welcome window appears.

**Step 3** Click **Next**. The Software License Agreement window appears.

**Step 4** Click **Accept**. The Licensing Information window appears.

**Step 5** Select a radio button:

- If you know the location of the license file for Operations Manager, select the first radio button and browse to the location of the license file. Click **Next**.
- If you do not have a license for Operations Manager, select the Evaluation Only radio button, and click **Next**.




---

**Note** For instructions on obtaining a license file, see [Licensing Process, page 30](#).

---

The Setup Type window appears.

**Step 6** Select **Typical** or **Custom**.

**Step 7** Click **Next**. The Backup Data window appears.

**Step 8** Enter or browse to the location where you want the backup of your previous version of Operations Manager stored.

**Step 9** The System Requirements window displays the results of the requirements check and advises whether the upgrade can continue; click **Next**.

**Step 10** If you chose Custom installation, you will be asked to enter the following:

- casuser password
- Username and password for data transport protocol authentication
- Location where the Service Monitor call metrics data will be stored
- Location where the Service Monitor probe image and configuration files will be stored

This step is not required for Typical installation. Click **Next**.

**Step 11** An information dialog box appears, confirming upgrade; click **OK**.

The Summary window appears, displaying the current settings.

**Step 12** Click **Next**. The installation proceeds.

**Step 13** Remove the Cisco Unified Operations Manager CD-ROM from the drive.




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**Note** Store the CD-ROM in a secure, climate-controlled area for safekeeping.

---

**Step 14** Click **Finish** to reboot the machine.

**Step 15** Wait 30 minutes after the system reboots before starting Operations Manager. This gives all Operations Manager processes time to initialize.

**Step 16** To verify that the Operations Manager Server process is running, log in to the CiscoWorks home page as the administrator and select **Common Services > Server > Admin > Processes**.

**Step 17** To make sure all existing devices go to the monitored state, Operations Manager must perform rediscovery. Do the following:

- a. In Operations Manager, select **Device > Device Management > View/Rediscover/Delete**.
- b. In the device selector, select the All Devices check box.
- c. Click **Rediscover**.




---

**Note** During upgrade, the Voice Utilization polling settings are carried over from IP Communications Operations Manager 1.0 to Cisco Unified Operations Manager 1.1. If you encounter problems when launching performance graphs, do the following:

1. From a command prompt run the following command:

- `pdshow InventoryCollector`

This verifies that the Inventory Collector server is running.

2. If the server is not running, run the following command:

- `pdexec InventoryCollector`

3. In Operations Manager Polling and Thresholds, change any priority settings.
  4. Click **Apply Changes**.
-

- Step 18** Recreate any synthetic tests that you previously created in Operations Manager 1.0.



**Note** Synthetic test settings are not migrated from IP Communications Operations Manager 1.0 to Cisco Unified Operations Manager 1.1. After upgrade, you will have to recreate your synthetic tests.

If any errors occur during installation, check the installation log in the root directory on the drive. (For example, the CiscoWorks Common Services installation might create C:\Ciscoworks\_setup001.log, the Operations Manager installation might create C:\Ciscoworks\_setup002.log, and so forth.) The Cisco Technical Assistance Center (TAC) might ask you to send them the installation log.

## Licensing Overview

Operations Manager features software-based product registration and license key technologies. Licensing ensures that you possess a licensed copy of Operations Manager 1.1.



**Note** Licensing uses node-locking technology. The license file can only be used with the MAC address that you supply.

To determine whether Operations Manager is licensed, see [Verifying Operations Manager License Status, page 28](#). If you do not have a license or you want to upgrade your license, see [Licensing Scenarios, page 29](#).

## Verifying Operations Manager License Status

- Step 1** Select the CiscoWorks link in the upper right-hand corner of the Operations Manager home page. The CiscoWorks home page window opens.
- Step 2** Select **Common Services > Server > Admin > Licensing**. The Licensing Information page appears, displaying the information in the following table.

| Column          | Description   |
|-----------------|---|
| Name            | Abbreviated product name—For Operations Manager, this is OM.  |
| Version         | Product version— <i>A.b.c</i> , where <i>A</i> is the major version number, <i>b</i> is the minor version number, and <i>c</i> is the service pack number. For example, OM 1.1.0 indicates version 1.1 without service packs.             |
| Size            | Limit—Number of IP phones that Operations Manager supports.   |
| Status          | One of the following: <ul style="list-style-type: none"> <li>• Purchased—You have a registered, licensed product.</li> <li>• Evaluation—This license will expire on the expiration date; Operations Manager will stop running.</li> </ul> |
| Expiration Date | Date on which Operations Manager stops running—Applies to evaluation licenses. The evaluation period lasts for 30 days.   |

## Licensing Scenarios

[Table 6](#) describes what to do in different scenarios if you do not have a licensed, registered copy of Operations Manager or if you want to increase device support.

**Table 6**      *How to Obtain and Register a License*

| Scenario                             | What to do   |
|--------------------------------------|--|
| Installing with a purchased license. | <ol style="list-style-type: none"> <li>1. Before installing obtain a license file. See <a href="#">Licensing Process, page 30</a>.</li> </ol> <p><b>Note</b> You can install Operations Manager without the license file. You can upgrade your license after installation. See <a href="#">Registering a License File with Operations Manager, page 31</a>.</p> <ol style="list-style-type: none"> <li>2. During installation, select License File Location, and provide the location of your license file.</li> </ol> |

**Table 6**      *How to Obtain and Register a License*

| Scenario   | What to do   |
|--|--|
| Installing with an evaluation license.<br><br><b>Note</b> The evaluation license is limited to monitoring 300 devices and 1000 phones. | During installation, select Evaluation Only. Evaluation versions are active for 30 days, before you are required to purchase a license.<br><br>If you want to upgrade to a purchased license after installation, obtain a PAK and license file for the installed version of Operations Manager. For information on the licensing process, see <a href="#">Licensing Process, page 30</a> . |
| Getting a license for additional devices. Either upgrading from an evaluation license, or increasing the number of supported devices.  | See <a href="#">Licensing Process, page 30</a> .<br><br><b>Note</b> When upgrading your license either from an evaluation version or from lower device limits to higher limits, you must restart the daemon manager. If the daemon manager is not restarted, the new device limits will not take effect and the system status reports will not show the correct information.               |
| Moving Operations Manager to another server.   | Call the Cisco TAC for assistance.   |

## Licensing Process

This process applies to new installations and license upgrades.

1. Obtain a Product Authorization Key (PAK)—The PAK is used to register Operations Manager, and any additional device support that you might purchase for Operations Manager, on Cisco.com, and it contains resource limitations. See [Obtaining a PAK, page 31](#).
2. Obtain a license file—A license file is sent to you after you register the PAK on Cisco.com. See [Obtaining a License File, page 31](#).
3. Copy the license file to the server where Operations Manager is to be installed. If Operations Manager is already installed and you are upgrading your license file, you must register the license file with Operations Manager. See [Registering a License File with Operations Manager, page 31](#).

## Obtaining a PAK

The PAK is located on the software claim certificate that is shipped with the Operations Manager product CD.

## Obtaining a License File

- 
- Step 1** Register the PAK and the MAC address of the system where Operations Manager is installed with Cisco.com at <http://www.cisco.com/go/license>. You will be asked to log in. You must be a registered user of Cisco.com to log in.




---

**Note** The MAC address is required because licensing uses node-locking technology. The license file can only be used with the MAC address that you supply.

---

The license file will be e-mailed to you.

After you obtain a license file, register the license with the Operations Manager server.

---

## Registering a License File with Operations Manager

- 
- Step 1** Copy the license file to the Operations Manager server, into a directory with read permission for the username casuser or the user group casuser.
- Step 2** Install the license:
- a. From the Operations Manager home page, click **CiscoWorks** in the upper right-hand corner of the window. The CiscoWorks home page opens. Under Common Services, select **Server > Admin > Licensing**. (For more information, see Common Services online help.)

The Licensing Information page appears.

- b. Click **Update**. A file browser dialog box appears.
- c. Enter the path to the new license file in the License field, or click **Browse** to locate the license file you copied to the server.

d. Click **OK**.

The system verifies whether the license file is valid, and updates the license. The updated licensing information appears on the Licensing Information page. If you purchased more than one license, repeat [Step 2](#) to install each additional license.

If you encounter errors, repeat the steps to license your product.

**Step 3** Stop and start the daemon manager from a command prompt by issuing the following commands:

```
net stop crmdmgmt
net start crmdmgmt
```

---

## Licensing Reminders

Operations Manager provides reminders in the following circumstances:

- [Evaluation Version: Before Expiry, page 32](#)
- [Purchased Version: No License File, page 33](#)
- [Purchased Version: Device Limit Exceeded, page 33](#)

### Evaluation Version: Before Expiry

If you have installed the evaluation version of Operations Manager, you must obtain the license file from Cisco.com if you want to continue to use the product after the 30-day evaluation period. For details, see [Licensing Process, page 30](#).

Before expiry of the evaluation license, you will see the following prompt:

```
This software is provided for evaluation purposes only and will expire in XX days. If this is not an evaluation copy, please click this link for information about obtaining a valid purchase license. Click here for current licensing information. Otherwise, please contact your Cisco representative for purchasing information.
```

This message is displayed as an alert after you log in and try to access Operations Manager. If you fail to upgrade your evaluation license, all Operations Manager processes will run, but access to Operations Manager functionality will be prohibited.

## Purchased Version: No License File

If you have installed a purchased version of Operations Manager, you must register Operations Manager using the PAK number. For details, see [Licensing Process, page 30](#). If you fail to register Operations Manager, you will see the following prompt:

```
The license file is invalid. Please click this link for information
about obtaining a valid purchase license. Click here for current
licensing information. Otherwise, please contact your Cisco
representative for purchasing information.
```

Operations Manager 1.1 is fully functional. However, you will continue to receive the alert until you register your license.

## Purchased Version: Device Limit Exceeded

If you have a restricted license, Operations Manager notifies you when your device inventory approaches the device limit. After the device limit has been reached, Operations Manager displays the following messages:

- Exceeded device limit:

```
You have exceeded the device limit for Cisco Unified Operations
Manager. Devices will not be managed.
```

- Exceeded phone limit:

```
You have exceeded the phone limit for Cisco Unified Operations
Manager. Please click here for current licensing information.
Please contact your Cisco representative to determine if
additional licenses can be purchased for this server.
```

Operations Manager 1.1 remains functional, but will shortly stop adding devices and phones to managed inventory.

# Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. Cisco also provides several ways to obtain technical assistance and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

## Cisco.com

You can access the most current Cisco documentation at this URL:

<http://www.cisco.com/techsupport>

You can access the Cisco website at this URL:

<http://www.cisco.com>

You can access international Cisco websites at this URL:

[http://www.cisco.com/public/countries\\_languages.shtml](http://www.cisco.com/public/countries_languages.shtml)

## Product Documentation DVD

The Product Documentation DVD is a comprehensive library of technical product documentation on a portable medium. The DVD enables you to access multiple versions of installation, configuration, and command guides for Cisco hardware and software products. With the DVD, you have access to the same HTML documentation that is found on the Cisco website without being connected to the Internet. Certain products also have .PDF versions of the documentation available.

The Product Documentation DVD is available as a single unit or as a subscription. Registered Cisco.com users (Cisco direct customers) can order a Product Documentation DVD (product number DOC-DOCDVD= or DOC-DOCDVD=SUB) from Cisco Marketplace at this URL:

<http://www.cisco.com/go/marketplace/>

## Ordering Documentation

Registered Cisco.com users may order Cisco documentation at the Product Documentation Store in the Cisco Marketplace at this URL:

<http://www.cisco.com/go/marketplace/>

Nonregistered Cisco.com users can order technical documentation from 8:00 a.m. to 5:00 p.m. (0800 to 1700) PDT by calling 1 866 463-3487 in the United States and Canada, or elsewhere by calling 011 408 519-5055. You can also order

documentation by e-mail at [tech-doc-store-mkpl@external.cisco.com](mailto:tech-doc-store-mkpl@external.cisco.com) or by fax at 1 408 519-5001 in the United States and Canada, or elsewhere at 011 408 519-5001.

## Documentation Feedback

You can rate and provide feedback about Cisco technical documents by completing the online feedback form that appears with the technical documents on Cisco.com.

You can submit comments about Cisco documentation by using the response card (if present) behind the front cover of your document or by writing to the following address:

Cisco Systems  
Attn: Customer Document Ordering  
170 West Tasman Drive  
San Jose, CA 95134-9883

We appreciate your comments.

## Cisco Product Security Overview

Cisco provides a free online Security Vulnerability Policy portal at this URL:  
[http://www.cisco.com/en/US/products/products\\_security\\_vulnerability\\_policy.html](http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html)

From this site, you will find information about how to:

- Report security vulnerabilities in Cisco products.
- Obtain assistance with security incidents that involve Cisco products.
- Register to receive security information from Cisco.

A current list of security advisories, security notices, and security responses for Cisco products is available at this URL:

<http://www.cisco.com/go/psirt>

To see security advisories, security notices, and security responses as they are updated in real time, you can subscribe to the Product Security Incident Response Team Really Simple Syndication (PSIRT RSS) feed. Information about how to subscribe to the PSIRT RSS feed is found at this URL:

[http://www.cisco.com/en/US/products/products\\_psirt\\_rss\\_feed.html](http://www.cisco.com/en/US/products/products_psirt_rss_feed.html)

## Reporting Security Problems in Cisco Products

Cisco is committed to delivering secure products. We test our products internally before we release them, and we strive to correct all vulnerabilities quickly. If you think that you have identified a vulnerability in a Cisco product, contact PSIRT:

- For Emergencies only — [security-alert@cisco.com](mailto:security-alert@cisco.com)

An emergency is either a condition in which a system is under active attack or a condition for which a severe and urgent security vulnerability should be reported. All other conditions are considered nonemergencies.

- For Nonemergencies — [psirt@cisco.com](mailto:psirt@cisco.com)

In an emergency, you can also reach PSIRT by telephone:

- 1 877 228-7302
- 1 408 525-6532



We encourage you to use Pretty Good Privacy (PGP) or a compatible product (for example, GnuPG) to encrypt any sensitive information that you send to Cisco. PSIRT can work with information that has been encrypted with PGP versions 2.x through 9.x.

Never use a revoked or an expired encryption key. The correct public key to use in your correspondence with PSIRT is the one linked in the Contact Summary section of the Security Vulnerability Policy page at this URL:

[http://www.cisco.com/en/US/products/products\\_security\\_vulnerability\\_policy.html](http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html)

The link on this page has the current PGP key ID in use.

If you do not have or use PGP, contact PSIRT at the aforementioned e-mail addresses or phone numbers before sending any sensitive material to find other means of encrypting the data.

---

## Obtaining Technical Assistance

Cisco Technical Support provides 24-hour-a-day award-winning technical assistance. The Cisco Technical Support & Documentation website on Cisco.com features extensive online support resources. In addition, if you have a valid Cisco service contract, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not have a valid Cisco service contract, contact your reseller.

## Cisco Technical Support & Documentation Website

The Cisco Technical Support & Documentation website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day, at this URL:

<http://www.cisco.com/techsupport>

Access to all tools on the Cisco Technical Support & Documentation website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

<http://tools.cisco.com/RPF/register/register.do>



### Note

Use the Cisco Product Identification (CPI) tool to locate your product serial number before submitting a web or phone request for service. You can access the CPI tool from the Cisco Technical Support & Documentation website by clicking the **Tools & Resources** link under Documentation & Tools. Choose **Cisco Product Identification Tool** from the Alphabetical Index drop-down list, or click the **Cisco Product Identification Tool** link under Alerts & RMAs. The CPI tool offers three search options: by product ID or model name; by tree view; or for certain products, by copying and pasting **show** command output. Search results

show an illustration of your product with the serial number label location highlighted. Locate the serial number label on your product and record the information before placing a service call.

---

## Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool provides recommended solutions. If your issue is not resolved using the recommended resources, your service request is assigned to a Cisco engineer. The TAC Service Request Tool is located at this URL:

<http://www.cisco.com/techsupport/servicerequest>

For S1 or S2 service requests, or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553-2447

For a complete list of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/techsupport/contacts>

## Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—An existing network is down, or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Severity 2 (S2)—Operation of an existing network is severely degraded, or significant aspects of your business operations are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Severity 3 (S3)—Operational performance of the network is impaired, while most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

## Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- The *Cisco Product Quick Reference Guide* is a handy, compact reference tool that includes brief product overviews, key features, sample part numbers, and abbreviated technical specifications for many Cisco products that are sold through channel partners. It is updated twice a year and includes the latest Cisco offerings. To order and find out more about the Cisco Product Quick Reference Guide, go to this URL:

<http://www.cisco.com/go/guide>

- Cisco Marketplace provides a variety of Cisco books, reference guides, documentation, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:

<http://www.cisco.com/go/marketplace/>

- *Cisco Press* publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:

<http://www.ciscopress.com>

- *Packet* magazine is the Cisco Systems technical user magazine for maximizing Internet and networking investments. Each quarter, Packet delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and

troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources. You can access Packet magazine at this URL:

<http://www.cisco.com/packet>

- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:

<http://www.cisco.com/ipj>

- Networking products offered by Cisco Systems, as well as customer support services, can be obtained at this URL:

<http://www.cisco.com/en/US/products/index.html>

This document is to be used in conjunction with the documents listed in the “[Product Documentation](#)” section.



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