



Release Notes for *Cisco Support Tools 1.0(1)*

May 2004

Introduction

These release notes contain late breaking information about the Cisco Support Tools (also known as Cisco IPCC Support Tools), version 1.0(1). Please review this document before installing and using Support Tools. For all other information, including installation and configuration instructions, see the *Support Tools 1.0(1) User Guide*. Descriptions and links to the complete Support Tools documentation set are provided in the *getstart.htm* file at the top level of the Support Tools CD.

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Supported Platforms

This section provides platform support information for Support Tools 1.0(1), including:

- [ICM Platform Compatibility](#)
- [Support Tools Installation Platforms](#)
- [Support Tools Dashboard Browser Support](#)

ICM Platform Compatibility

Support Tools 1.0(1) is designed for use with ICM release 5.0 (Enterprise, Hosted, and IPCC) and ICM/IP Contact Center Enterprise Edition, Release 6.0(0). For questions regarding the use of Support Tools with other ICM versions, contact your Cisco representative.

Support Tools Installation Platforms

Support Tools Server Platform

It is recommended that you install the Support Tools Server on a standalone server (that is, one on which no ICM products are installed), or on an existing ICM Admin Workstation (AW) in your ICM network. This prevents or lessens any performance impact on your ICM system as well as ensures ample space for the Support Tools repository without conflicting with any ICM AW needs.



Caution

Due to possible performance issues, **DO NOT** install the Support Tools Server on a CallRouter, a Logger, or a PG.

The Support Tools Server runs on the following platform:

Server Type	OS	Web Server/Servlet Engine	Java
Windows	Windows 2000, SP3/4 or greater	Apache Tomcat 4.0.6 (included in Support Tools Server installer)	Java Runtime Environment 1.4.2 (included in Support Tools Server installer)



Note

See <http://www.cisco.com/univercd/cc/td/doc/product/icm/index.htm> for the ICM/IP Contact Center Enterprise Edition, Release 6.0(0) BOM.

Support Tools Node Platform

The Support Tools Node can be installed on any ICM nodes listed below that you want to manage through Support Tools. All ICM 5.0 or ICM/IP Contact Center Enterprise Edition, Release 6.0(0) nodes run on the Windows 2000 Server SP3 or SP4 (respectively) platform:

- Cisco CallManager (CCM)
- Cisco Collaboration Server (CCS)
- Cisco E-Mail Manager (CEM)
- Cisco Media Blender (CMB)
- CTI Object Server (CTIOS)
- ICM Admin Workstations (AWs)
- ICM Call Router
- ICM Peripheral Gateways (PGs)
- ICM Logger

Support Tools Dashboard Browser Support

The Support Tools Dashboard is designed to work with Microsoft Internet Explorer 5.5 SP2 or greater. Other browser platforms are not supported.

New Features

Cisco Support Tools 1.0(1) is a suite of over fifty utilities that allow you to manage and troubleshoot the ICM nodes which process call load, routing, and reporting. Through Support Tools, you can troubleshoot configuration and performance problems on these systems from a single machine in your network--the Support Tools Server.

Access to utilities in the Support Tools suite is through a browser-based interface--the Support Tools Dashboard--installed on the Support Tools Server. Levels of security control both access to the Dashboard and the ability to use specific tools once logged in. In low bandwidth conditions (for example, via dialup access) or when Web browsing is otherwise impractical, most Support Tools utilities can also be accessed and run via command line.

Key Features

The Support Tools suite includes the full set of standard diagnostic tools delivered with earlier ICM versions. It also provides key new functionality including:

- The ability to interrogate individual Support Tools nodes for their hardware/OS, Cisco component, and third party product information.
- The ability to view, start, and stop services running on Support Tools nodes.
- The ability to view and terminate processes running on Support Tools nodes.
- The ability to compare and synchronize registry settings from different Support Tools nodes.
- The ability to pull logs from most Cisco nodes including ICM call routers, loggers, PGs, AWs, CTIOS, CCS, CEM, CMB, and CallManager.
- Ability to perform enhanced time-synchronized merged logs across servers.

Limitations and Restrictions

This section describes significant functioning-as-designed limitations of this product, including limitations imposed by third-party products.

Log Collector imposes a maximum number of systems per log group and logs per system

By default, the Log Collector allows a maximum of:

- 10 systems per log group
- 10 logs per system per request

These defaults are determined by registry settings whose value data was determined to ensure optimal performance. It is advised that you do not modify these settings without first consulting your Cisco support representative.

Log Collection can affect performance on CallManagers under heavy load

Log collection can negatively impact call completion rate for Call Managers running under heavy load. In environments where Call Managers may be running greater than (approximately) 15,000 busy hour call attempts (BHCA), log collection should be avoided during peak load periods.

Some Cisco Web utility functionality may affect performance when run from a command line on a node

Typically, Cisco Web utilities are executed and run on the Support Tools Server. However, when initiating these utilities from a command-line, users can specify that they execute and run on a particular Support Tools node.

Because registry comparisons and merged logs collections tend to be resource-intensive, it is suggested that these actions not be executed from a node due to possible performance impact to that system.

Browsers configured to use Web proxy for local addresses prevent local login to Dashboard on Support Tools Server

Attempting to access the Support Tools Dashboard via a local login on the Support Tools Server fails if the Web browser in use is configured to use a proxy for local addresses. The browser returns an error stating that the proxy is unable to find the requested page.

To avoid this limitation, ensure that the browser on the Support Tools Server does not use a proxy for local addresses. In Internet Explorer 6.0, for example, this setting is located at: Tools > Internet Options > Connections > LAN Settings > Bypass proxy for local addresses.

Unix utilities support US-ASCII characters only

The set of Unix-style utilities delivered with Support Tools (for example, `chmod`, `diff`, `grep`) support US-ASCII characters only. If desired, users can replace the US-ASCII versions of these tools with localized versions. Unix utilities are installed on the Support Tools Server at `<support_tools_root>\Unix Tools`.

Using command redirection to save output on Latin-1 systems may result in files that display incorrect characters in Windows text editors

When using Cisco Web utilities from a command-line on Latin-1 systems, saving output via command redirection may result in files that display incorrect characters when viewed in Windows-based text editors such as Notepad.

This occurs because the OEM character set (used to render text in a command window) is typically different than the ANSI character set (used to render text in Windows text editors) on Latin-1 systems. Thus, while output may display correctly when initially viewed in a DOS window, files saved via command redirection may display incorrect characters when later viewed in a Windows text editor.

To avoid this limitation, on Latin-1 systems, avoid using command redirection (demonstrated below) to save output to a file:

```
>registry /list > my_file.txt
```

Support Tools Uninstaller does not remove the Cisco CCBU Support Tools HTTP Server service

The Support Tools Server uninstaller does not remove the Tomcat Web Server service (listed in the Windows Services Panel as “Cisco CCBU Support Tools HTTP Server”).

This occurs because the Support Tools Server uninstall program does not automatically uninstall Tomcat. If desired, after uninstalling the Support Tools Server, Tomcat can be manually uninstalled as described below:

1. Ensure that the Cisco CCBU Support Tools HTTP Server is stopped.
2. From a command-line, navigate to the Tomcat bin directory located at:
`<support_tools_root_directory>\jakarta-tomcat-4.0.6\bin`.
3. Enter `tomcat -uninstall Apache-Catalina`.

Installation and Uninstallation Caveats

Support Tools 1.0(1) uses the Patch Manager Utility to install fixes that may be required for the Support Tools components. Due to the nature of the Support Tools setup program the following guidelines must be followed if you need to re-run the Support Tools setup program.

The only reason to re-run setup is if you need to change one of the following settings:

- The location of the Support Tools Installation
- The location of the Support Tools Repository
- The Support Tools Administrative Group
- The designated user name, domain or login password of the designated user that is used to run the TomCat Web server
- TCP/IP Port (should never be changed after initial setup)



Note You must make the change on all systems where Support Tools are installed.

- Web Server Port or SSL Port
- Network Time Protocol Server Name or Address and the sample frequency



Note You must make the change on all systems where Support Tools are installed.



Caution

Never re-run the setup program for Support Tools. Always use the Patch Manager utility to install Service Releases (SR) or Engineering Specials (ES) for Support Tools.

Guidelines for running Support Tools Setup

You may re-run setup on a system with **no Support Tools patches installed**.

Step 1 Re-run the Support Tools setup program and follow the instructions.



Note Only necessary if you need to modify a setting established when you first installed Support Tools. These settings are listed (the bulleted items) in the previous section.

You must follow the following steps to re-run setup on a system with **Support Tools patches installed**:

Step 1 Backout all of the installed patches using the Patch Manager uninstallation utility.

- Step 2 Run setup and make the configuration changes.
 - Step 3 Re-install all patches using the Patch Manager utility.
-

Guidelines for uninstalling Support Tools

To properly uninstall Support Tools if **no patches** have been **applied** to the Support Tools:

- Step 1 Select **Start > Settings > Control Panel > Add/Remove Programs**.
 - Step 2 Select **Support Tools**.
-

To properly uninstall Support Tools if **patches** have been **applied** to the Support Tools:

- Step 1 Backout all of the installed patches using the Patch Manager uninstallation utility.
 - Step 2 Select **Start > Settings > Control Panel > Add/Remove Programs**.
 - Step 3 Select **Support Tools**.
-

The steps outlined above are necessary in order to keep the revision history information accurate and all program files at the correct version.

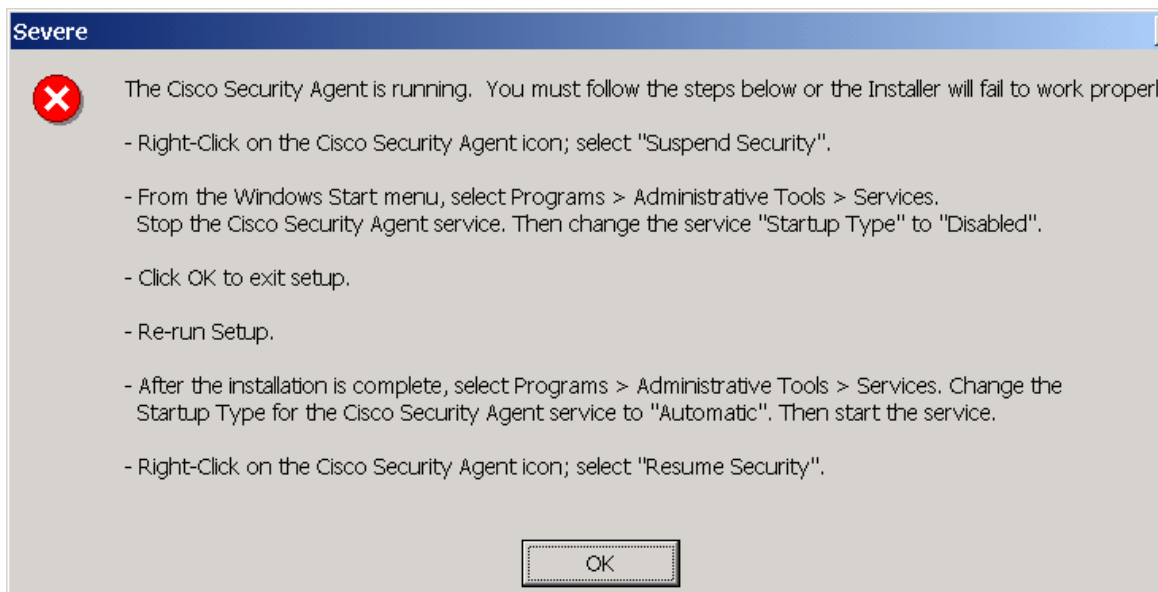
Important Notes

Setup should check for WMI service started/automatic

If you choose to disable WMI, the System Interrogate tools do not return OS, hardware, Web Server, or SQL Server information for the interrogation report. Enabling the WMI service using one of the service control options restores full functionality to the System Interrogation tool.

CSA Agent Warning Message

If CSA is running when you attempt to run setup, you get the following warning message:



Follow the steps in the dialog to resolve this issue.

Unresolved Caveats

This section describes significant defects recorded against this product. The information in the section is current as of the time this document was published.



Tip

If you have a cisco.com account, you can use the Bug Toolkit to reference and monitor all caveats recorded against this product, including those recorded subsequent to the publication of this document. To access the Bug Toolkit, log on to http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. For information on how to create a cisco.com account, see the [“Obtaining Technical Assistance” section on page 14](#).

Install and Configuration Issues

The Users Guide Configure SSL section information is not accurate

Symptom: The user reads the User Guide and follows the directions for configuring the SSL Login and is not able to get the SSL login to work.

Conditions: The section in the User Guide titled "How to Configure the Dashboard Login for SSL" does not correctly state how to modify the config files to enable this feature. Step 4 incorrectly states which text to add to the web.xml file.

Workaround: Replace steps 1 through 7 in *To Configure the Dashboard Login for SSL* with the following sections:

1. Ensure that an appropriate server certificate is installed on your Support Tools Server machine, and that Tomcat has been configured for SSL.

Instructions on how to configure Tomcat for SSL are available at:
<http://jakarta.apache.org/tomcat/tomcat-4.0-doc/ssl-howto.html>



Note The instructions state that you need to download the JSSE 1.0.2 software. This software does not need to be downloaded as it comes packaged with the support tools software.

2. In a text editor, open the *web.xml* file located at: `<support_tools_root>\UIServer\uiroot\WEB-INF\`
3. Locate the following closing tag: `</web-app>`.
4. Remove the comment around the text that starts with the XML element `<security-constraint>` and ends with `</security-constraint>`.
5. Save the file.
6. Restart Tomcat.
7. If a firewall stands between your Support Tools Server and the Support Tools nodes and/or remote users, remember to enable the appropriate SSL port on the firewall. For more information, see *How to Enable Ports for Support Tools*.



Note After configuring the Login page for SSL, users can continue to specify HTTP in the URL path to the Dashboard Login page. Entering HTTPS is not necessary. Similarly, users can continue to specify the HTTP port number in the URL. Entering the SSL port number is not necessary. User will be automatically redirected to the correct port. Therefore, the URL to the Support Tools login page using SSL is identical to that used for non-SSL: `http://<hostname>:8188`.

Defect Number: CSCsa18652

SupTools upgrade overwrites user security hardening for Tomcat

Symptom: After a SupportTools server is upgraded or re-installed, one of both of these symptoms is observed: (1) If the server had been configured for Dashboard Login via SSL, the login no longer uses SSL. (1) If the server had been configured with IP address restrictions, the access is no longer restricted.

Condition: Occurs when a Support Tools server configured with SSL login and/or IP address restrictions is upgraded or re-installed.

Workaround: After upgrade or re-installation, reconfigure SSL login as specified in Support Tools User Guide and/or IP address restrictions as specified at
<http://jakarta.apache.org/tomcat/tomcat-4.0-doc/config/valve.html>

Defect Number: CSCma28134

After install AppServer over NodeAgent, latter service not removed

Symptom: User installs AppServer on top of existing NodeAgent without first un-installing the NodeAgent. The NodeAgent service is not removed by AppServer installation. User may see the following three support tool services co-existing in service manager box: Cisco CCBU Support Tools AppServer; Cisco CCBU Support Tools NodeAgent; Cisco CCBU Support Tools HTTP Server.

Condition: AppServer installed over NodeAgent.

Workaround: Delete the NodeAgent service from registry CurrentControlSet to rectify the error (or, preferably, un-install AppServer as a first step).

Defect Number: CSCma26406

If a file named cisco already exists on drive install will fail

Symptom: Error 'file by this name already exists' received when installing Node or AppServer.

Condition: The directory entered or used to install tools conflicts with a pre-existing file. For example, if the install path is c:\Cisco\ccbu\supportTools and there already is a file called 'Cisco' in the c:\ directory, Windows will not permit the directory to be created. This is true for any conflict between a file and a directory, regardless of the name. This is a standard Windows error.

Workaround: Rename the file on disk or choose a different install path.

Defect Number: CSCma26375

Install of Network Time Protocol Server allows a bad machine name

Symptom: During installation, the Network Time Protocol Server allows entry of a bad machine name, for example, one that does not exist. Installation continues without a check to ensure a proper connection can be made.

Condition: SNTP server may be down, may not exist, or the name may be incorrect.

Workaround: Re-run install with the correct SNTP server name.

Defect Number: CSCma26364

AppServer or Node cannot be started after initial install

Symptom: Support Tools Server or Node fails to start following the initial product installation.

Condition: There are two conditions where the Support Tools server or node component may fail to start following an installation. The cases are differentiated by whether the install was a) a first install to a clean system, or b) to a system which already had a previous (or same) version of Support Tools installed. In the first case, Support Tools fails to start due to a problem with the order of internal component registration. In the second case, Support Tools fails to start/stop services if the Service Control Panel is open during the installation.

Workaround: Either manually start the service, or--in the latter case -- simply close the Service Control Panel and repeat the installation procedure.

Defect Number: CSCma26295

Dashboard and Utilities Issues

LogCollector: Nodes required to use local time to log their content

Symptom: Unable to retrieve correct logs from Node; logging is performed in UTC time.

Condition: If NodeAgent uses UTC(GMT) time for logging, LogCollector cannot retrieve correct log content for a specific range. Set the configuration to log in localtime (see product documentation).

Workaround: NodeAgent product node component (for example, Cisco Media Blender) needs to be configured to use Local time for login.

Defect Number: CSCma26511

Node and AppServer must use same code page to compare registry

Symptom: When performing a registry comparison using the Compare Registry utility, data returned from nodes may contain? and/or other inappropriate characters.

Condition: Occurs when a registry comparison is performed from an AppServer that uses a character encoding method different than at least one of the nodes being compared.

Workaround: When performing registry comparisons, ensure that the AppServer and the systems being compared use the same character encoding (code page).

Defect Number: CSCma26477

Text version of Reg, RegCompare has no indication of cust instances

Symptom: When a registry or registry comparison file is downloaded as plain text, there is no indication as to the selected customer instance. When a registry or registry compare file is fetched, only one ICM instance is fetched at a time. Although the other instances are shown blank, they can be viewed by simply selecting them. Saved text files list all instances but contains data only for the selected instance. This is consistent with the visual UI.

Condition: Occurs in Registry and Registry Comparison files saved as plain text.

Workaround: Use a file naming convention to clearly identify which instance is saved.

Defect Number: CSCma26334

Registry Expanded Sz, Multi Sz types incorrectly handled by tool

Symptom: A registry value of type REG_EXPAND_SZ is displayed as type REG_SZ. A registry value of type REG_MULTI_SZ is displayed as type REG_BINARY.

Condition: Registry values that are of types REG_EXPAND_SZ or REG_MULTI_SZ are not handled correctly by the Support Tools Registry and Registry Compare Tools. When these values are displayed through the Support Tools, they are displayed with the wrong types. A registry value of type REG_EXPAND_SZ is displayed as type REG_SZ. A registry value of type REG_MULTI_SZ is displayed as type REG_BINARY.

Workaround: None known. Users should be aware that REG_EXPAND_SZ or REG_MULTI_SZ are not supported for registry manipulation with the RegCompare tool. NOTE: Users should never use the RegCompare tool to synchronize registry values consisting of types REG_EXPAND_SZ or REG_MULTI_SZ. Doing so against these types--while normally not present in the registry subtree that Support Tools is used to access--will override and inadvertently modify the corresponding values if a synchronization operation is applied.

Defect Number: CSCma26327

LogCollector: very large log files may be incompatible w/ text editor

Symptom: Downloading a broad time range (for example, full day) of log files can result in very large files retrieved to the collection. Because the Support Tools log collection feature concatenates logs from a given node, the operation can result in extremely large files. Some text editors are unable to read files of very large size (for example, hundreds of MB).

Condition: Log collection request issued to node across very large time span, for example, great than several hours.

Workaround: Reduce the time span specified for the collection.

Defect Number: CSCma26123

Internationalization/Localization Issues

Must use US-English characters for log group & collection names

Symptom: Entering non-US English values for a 'Log Group Name' or for a 'Collection Name' results in the following message displayed as a popup window: "The name may only consist of letters, numbers, underscores and spaces." The user is required to press the 'OK' button to continue, at which point they need to remove the invalid characters in order to complete the operation. If the invalid characters are not removed the user cannot save the new log group or execute the log collection request.

Condition: This error only occurs while the user is creating or renaming a 'Log Group' or when a user is creating or renaming a log 'Collection Name'.

Workaround: The user must remove all non-US English characters from the 'Log Group' or 'Collection Name'. Once the invalid characters are removed the user may save the 'Log Group'. If the user was attempting to create or rename a 'Log Collection' request; once the invalid characters are removed the operation (create or rename) shall function properly.

Defect Number: CSCma26443

Other Issues

Disk full condition: various tools need to return disk full error

Symptom: Various support tool occasionally time out due to a disk full condition.

Condition: Disk may be full, or nearly full, in either the node or AppServer.

Workaround: Support Tools requires disk space to operate. This space is used to create XML responses, log errors, and store files in the repository.

Defect Number: CSCma26493

Caveats Resolved in this Release

Install and Configuration Issues

Setup does not check for valid privileged group existence

Defect Number: CSCma26739

NTPSampleIntervalMinutes not correctly updated w/ AppServer Install

Defect Number: CSCma26473

Failed JDK installation not properly detected

Defect Number: CSCma26193

Dashboard and Utilities Issues

Combination of multi node component access fails to create log group

Defect Number: CSCma26765

Processinfo.xml error can cause loss of process list tool function

Defect Number: CSCma26655

Clicking download button twice in Dashboard causes download failure

Defect Number: CSCma26509

LogCollector incorrectly displays node log availability

Defect Number: CSCma26401

Action buttons should not be available when viewing RegComp file

Defect Number: CSCma26312

Internationalization/Localization Issues

CmdLine syslist /check option has cosmetic bug on foreign language

Defect Number: CSCma26475

Garbled filename w/ IE downloading filename with I18n character(s)

Defect Number: CSCma26445

Obtaining Technical Assistance

The following resources are available to Support Tools users:

Online Resources

Additional Support Tools information is available online at:

Additional Support Tools information is available online at:

- Latest Support Tools user documentation: www.cisco.com
- Technical tips: www.cisco.com/warp/customer/640/
- Known issues and workarounds: www.cisco.com/cgi-bin/Support/Bugtool/home.pl (listed under Cisco ICM Enterprise Edition)

**Note**

Note: Some resources on the Cisco Web site require you to have an account. Register for an account at: www.cisco.com/register/

Cisco Technical Assistance Center

You can get technical assistance with Support Tools by contacting Cisco's Technical Assistance Center (TAC).

Contacting TAC

To open a request for technical assistance with Support Tools, contact TAC at:

Online: www.cisco.com/tac/

Email: tac@cisco.com (please include "Support Tools" in the Subject line)

Telephone: In North America: 1.800.553.2447

Outside North America: 1.408.526.7209

Providing Information to TAC

To assist you in troubleshooting a problem, the Cisco TAC may ask you to provide the following. You can expedite matters by having it available when you contact them:

1. Your Support Tools version and build number
2. The name of the utility you are having an issue with
3. Details of the behavior you are encountering