



# Installation, Backup, and Restore Issues

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This chapter covers solutions for the following most common issues related to a Cisco CallManager installation, backup, or restore.

- [Quick Upgrade, Backup, and Restore Tips](#)
- [Installation Issues](#)
- [Upgrade Issues](#)
- [Backup and Restore Issues](#)

If the following procedures do not solve your problem, contact TAC for a more detailed investigation.

For the latest information to the *Cisco IP Telephony Operating System, SQL Server, Security Updates*, refer to the following URL:

[http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_callmg/osbios.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/osbios.htm)

For the *Cisco CallManager Compatibility Matrix*, refer to the following URL:

[http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_callmg/ccmcomp.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/ccmcomp.htm)

# Quick Upgrade, Backup, and Restore Tips

Use the following quick tips to help avoid issues when performing upgrades, backups, and restores to your system:

- [Restore Location When You Have Two Different Versions of Cisco CallManager](#)
- [BAT for Faster Transfer of Data](#)
- [Upgrade, Backup, and Restore](#)
- [Back Up the Publisher](#)
- [Third-Party Backup Utilities](#)

## Restore Location When You Have Two Different Versions of Cisco CallManager



**Tip**

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Do a system restore on the same Cisco CallManager version. Changes from release to release cause problems if you try to restore from a different version.

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## BAT for Faster Transfer of Data



**Tip**

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Build a clean system; then, use the Bulk Administration Tool (BAT) to import your phones and users.

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## Upgrade, Backup, and Restore



**Tip**

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Perform your upgrade, run the Cisco IP telephony Applications Backup Utility, rebuild the new system from scratch, and restore the backup tape.

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## Back Up the Publisher

**Tip**

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Back up only the publisher server in a Cisco CallManager cluster. All other servers (subscribers) copy over the information on installation.

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## Third-Party Backup Utilities

For the Unity backup, you need a third-party application.

**Note**

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Cisco does not support third-party utilities for backing up the Cisco CallManager database. Doing so voids your TAC support.

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**Tip**

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Use the included Cisco IP telephony Applications Backup Utility to back up the Cisco CallManager database to a separate machine. Then, use that separate machine to run your third-party backup software.

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## Installation Issues

For detailed documentation on installation and troubleshooting installs, refer to the *Installation Guide for Cisco CallManager* at the following URL:

[http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_callmg/](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/)

and click **Installation Instructions** to find the document with the release number for your system software version.

Also refer to the *Release Notes for Cisco CallManager* for any installation issues for your current software version.

This document covers the following installation issues:

- [Unable to Change the Server Name for Cisco CallManager](#)

- [Boot Failure Recovery](#)
- [One Publisher, Two Subscribers: All Three Databases Have Different Information After an Install on One Subscriber](#)

## Unable to Change the Server Name for Cisco CallManager

### Symptom

You attempt to change the name of the Cisco CallManager server and the service fails. Other services also fail, such as CTI Manager, Extended Functions, and Voice Media Streaming.

### Probable Cause

Cisco does not support changing the name of a Cisco CallManager server.

### Corrective Action

Change the IP address instead of changing the name of a Cisco CallManager server. See [Chapter 4, “Cisco CallManager System Issues”](#) to change the IP address.

## Boot Failure Recovery

The following URL provides detailed Boot Failure recovery procedures:

[http://www.cisco.com/en/US/tech/tk331/tk336/tk542/tsd\\_technology\\_support\\_sub-protocol\\_home.html](http://www.cisco.com/en/US/tech/tk331/tk336/tk542/tsd_technology_support_sub-protocol_home.html)

# One Publisher, Two Subscribers: All Three Databases Have Different Information After an Install on One Subscriber

## Symptom

**Error Message** looking for ccmxxxx databases in  
(local).master.dbo.sysdatabases table

## Probable Cause

The subscriber build failed.

## Corrective Action

### Procedure

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- Step 1** Ensure that the NetBIOS name resolution is working between all servers.
- Step 2** Ensure (by editing) that the hosts and LMHOSTS are filled in on the publisher and subscriber servers, so each one can resolve the other's host name and NetBIOS name.
- Hosts is used for DNS resolution. LMHOSTS uses NetBIOS for name resolution. Also, SQL uses NetBIOS for name resolution.
- Step 3** From the web, upgrade the Cisco CallManager for the software version on your publisher.
- The software will download the SQL database to the subscriber(s).
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# Upgrade Issues

This section covers the following issues for Cisco CallManager upgrades:

- [Subscriber Upgrade Fails: Unable to Find Updated Database](#)
- [Blank Enterprise Parameters Page After Upgrade](#)
- [Related Information](#)

## Subscriber Upgrade Fails: Unable to Find Updated Database

### Symptom

During the upgrade of a publisher and a number of subscribers in Cisco CallManager 3.x, there are several instances whereby no error messages appear. However, when rebooting the servers in the cluster, neither phones or devices register with the correct subscribers.

Often, failover between Cisco CallManager nodes in a cluster also fail. In addition, checking the Application Event Viewer will show many instances of the Cisco CallManager service stopping and starting repetitively.

### Probable Cause

Access the SQL Enterprise Manager and open both publisher and subscriber databases. Check the latest Cisco CallManager database version (CCM030X) on the publisher and for each subscriber. If, when viewing the publisher and subscriber(s) databases within the SQL Enterprise Manager, you notice that the subscriber(s) do not have the most current database, you are probably experiencing a naming resolution problem within your network.

Another way to verify this problem is to refer to the newest Database Upgrade log found at **C:\Program Files\Common Files\Cisco\Logs**. Scroll down and look for the following:

```
4-28-2002 10:54:00 _DBPullSubscription: CALLMAN01 CCM0302 sa
***** CALLMAN02
```

```
CCM0302 sa ***** C:\Program Files\Cisco\Bin\ 0
```

```
4-28-2002 11:11:32 Pulling subscription from CALLMAN01 to
subscribe to the CCM0302 Database.
```

```
Return Code = 8 DB_SCRIPT_ERROR
```

The output shows that, while the subscriber was able to contact the publisher and determine the correct database version, there were problems that prevented it from being copied or replicated.

## Corrective Action

The Microsoft SQL Server uses NetBIOS name resolution for some types of remote-procedure call (RPC) tasks. Because of this, the publisher and all subscribers should use the LMHOSTS file for NetBIOS name resolution. All servers in the cluster should also use HOSTS files for proper name resolution between the servers.

Windows 2000 includes sample HOSTS and LMHOSTS files (HOSTS.SAM and LMHOSTS.SAM) in the directory **C:\winnt\system32\drivers\etc**. Use the following process to modify the sample files for your custom installation.

### Procedure

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- Step 1** Open the file **C:\winnt\system32\drivers\etc\hosts.sam** from the Cisco CallManager publisher using a text editor such as Notepad.
  - Step 2** Read the comment lines that start with the # symbol. Then delete all lines from the file. Windows must parse every line in the file for every attempt at name resolution.

**Step 3** Enter the IP address of the publisher, a space, and the hostname of the publisher. The hostname can be found by using the **ipconfig /all** command.

Repeat until the file contains one line for each server in the cluster. The following is a sample hosts file:

```
127.0.0.1          localhost
172.18.110.90     ICSCM1
172.18.110.94     ICSCM2
```

**Step 4** Save the file as **C:\winnt\system32\drivers\etc\hosts** without any extension.




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**Note** Notepad appends a .txt extension by default. Therefore, use Windows Explorer or a command prompt to remove the .txt extension.

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**Note** Windows Explorer hides file extensions by default. Therefore, make sure you are viewing file extensions or just use the **rename** command.

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**Step 5** Use a text editor such as Notepad and open the file **C:\winnt\system32\drivers\etc\lmhosts.sam**.

**Step 6** Read and then delete all of the comment lines. Add one line for each server but append the text **#PRE** after the name of the server. The following is a sample lmhosts file:

```
172.18.110.90     ICSCM1     #PRE
172.18.110.94     ICSCM2     #PRE
```

**Step 7** Save the file as **C:\winnt\system32\drivers\etc\lmhosts** without any extension.




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**Note** Notepad appends a .txt extension by default. Therefore, use Windows Explorer or a command prompt to remove the .txt extension.

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**Note** Windows Explorer hides file extensions by default. Therefore, make sure you are viewing file extensions or, use the **rename** command.

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- Step 8** Open a command prompt and enter the **nbtstat -R** command to load the contents of the LMHOSTS file into the NetBIOS name cache. Use the **nbtstat -c** command to verify that the LMHOSTS file was successfully parsed and loaded. If no information is listed, please see Microsoft Knowledge Base article Q180099 .



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**Note** The NetBIOS Remote Cache will only contain name-to-address resolution for remote nodes.

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- Step 9** Select **Start > Run** and type **services.msc**.
- Step 10** Click **OK**.
- Step 11** Click **DNS Client Service**, right-click on the service name, and click **Restart**.
- Step 12** Repeat steps 1-11 for each Cisco CallManager server in the cluster.
- Step 13** Re-run the Cisco CallManager upgrade on the subscribers.
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## Verification

If successful, the subscribers have the current Cisco CallManager database and are pulling the subscription successfully from the publisher.

## Blank Enterprise Parameters Page After Upgrade

### Symptom

No field or variable information displays on the Enterprise Parameters page. All other pages display correctly.

### Probable Cause

Refer to CSCdv65210—Issues occur where an upgrade was not moving all the information to the database.

## Corrective Action

Reinitialize the pages by running

**C:\Program Files\Cisco\bin\Xmltemp\installxml.vbs**

## Verification

The Enterprise Parameters page displays correctly.

## Related Information

For detailed information on upgrading your Cisco CallManager, refer to *Upgrading Cisco CallManager* and locate your release number at the following URL:

[http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_callmg/](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/)

Click **Installation Instructions** to find the document for your specific software release.

The following URL provides information that is located on the TAC site:

[http://www.cisco.com/en/US/products/hw/routers/tsd\\_products\\_support\\_category\\_home.html](http://www.cisco.com/en/US/products/hw/routers/tsd_products_support_category_home.html)

# Backup and Restore Issues

This section covers the following issues for backups:

- [Backup to Local Tape Drive Is Not Working and Terminates with Error Code 1165](#)
- [When Installing Cisco CallManager, No Prompt Displays for a Backup Destination](#)
- [Sti Backup Utility in Cisco CallManager Stuck on “Cancelling Backup”](#)
- [After a Restore, Database Is Corrupt](#)

The Cisco IP telephony Applications Backup Utility automatically backs up the following items:

- Cisco CallManager database on SQL Server 2000, including the Call Detail Records (CDR) database
- Administrative Reporting Tool (ART) database
- DC Directory, LDAP directory
- Distribution .ini, which contains the publisher and subscriber configuration information
- Database.dat, if present
- HKLM\Software\Cisco Systems, Inc.
- Cisco Customer Response Applications (CRA)

For detailed information on backing up the Cisco CallManager, refer to the *Backing Up and Restoring Cisco CallManager* and locate your release number at the following URL:

[http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_callmg/](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/)

Click **Installation Instructions** to find the document for your specific software release.

## Backup to Local Tape Drive Is Not Working and Terminates with Error Code 1165

### Symptom

**Error Message** 1165 The device has indicated that cleaning is required before further operations are attempted.  
ERROR\_DEVICE\_REQUIRED\_CLEANING

### Probable Cause

Issues exist with the tape drive or the tape.

## Corrective Action

Refer to your hardware documentation for details on cleaning the tape drive, or try using a different, clean tape.

## Verification

Backup successfully completes with no errors.

# When Installing Cisco CallManager, No Prompt Displays for a Backup Destination

## Symptom

You cannot locate the backup folder or the Cisco IP telephony Applications Backup Utility.

## Probable Cause

If you are installing Cisco CallManager for the first time, you may have clicked **Cancel** on the backup display. If so, the backup destination was not created.

## Corrective Action

Two ways exist for you to install the backup utility into the correct folder:

- Copy the “backup” folder from any other blade, which has installed the Cisco IP telephony Applications Backup Utility, and run the `_stBackSetup.exe` file.
- Run `setup.exe` from the “Backup” folder off of the root directory of the Cisco CallManager CD.

# Sti Backup Utility in Cisco CallManager Stuck on “Cancelling Backup”

## Symptom

When running the Sti BackupUtility, the following message displays:

```
"Cancelling backup process. Please wait.."
```

The message does not disappear when you attempt to cancel the backup process after noticing that the backup never executed (via the status monitor).



### Note

Rebooting the server will not solve the problem.

## Corrective Action

### Procedure

- Step 1** Note the value of the Config registry key in the Registry Editor window.
- Step 2** From the Windows Start button, choose **Run** and enter **regedit**.
- Step 3** From the Registry Editor, choose **HKEY\_LOCAL\_MACHINE > SOFTWARE > Cisco Systems > Backup > Config**.
- Step 4** Manually change the value of the Config registry key to **0**.
- Step 5** Manually stop the StiView.exe process in the Cisco CallManager by pressing **Ctrl-Alt-Del** and choosing **Task Manager**.  
The Windows Task Manager displays,
- Step 6** Click the Processes tab, choose **stiView.exe**, and click the **End Process** button.

### Alternate Solution

From your system directory, select **C: > WINNT > SYSTEM32** and run the **StiBack.exe** file.

# After a Restore, Database Is Corrupt

## Symptom

A backup and restore appear to successfully complete on the publisher and subscriber servers. One database is missing information. Each database shows different versions of the software.

## Probable Cause

A backup was made of one version, and the restore was to a newer software version.

## Corrective Action

You must do a system restore on the same Cisco CallManager version. Changes from release to release would cause problems if you tried to restore from a different version.

Use the following procedures to restore databases.

**Note**

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Always perform these procedures from the publisher server. Make sure Cisco NT services and IIS Admin service are stopped.

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## Backup the SQL Database

### Procedure

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- Step 1** Choose **Start-Programs > Microsoft SQL Server 2000** for Cisco CallManager version 4.0.
- Step 2** Click **Enterprise Manager**.
- Step 3** Double-click **Microsoft SQL Servers**.
- Step 4** Double-click **SQL Server Group**.
- Step 5** Double-click the machine name (the DNS name of the machine).

- Step 6** Double-click **Databases**.
  - Step 7** Click the highest level database beginning with **CCM**.
  - Step 8** Choose **Tools > Backup Database**.
  - Step 9** Choose **Database — complete** and **Overwrite existing media**.
  - Step 10** Click **Add**.
  - Step 11** Enter the type in a file name in the default path.
  - Step 12** Click **OK**.
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## Restore the SQL Database for the Purpose of Viewing the information

### Procedure

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- Step 1** Ensure you have backed up your database (see the “[Backup the SQL Database](#)” procedure).

### Unpublish your current database

- Step 2** Ensure that all Cisco NT services and the IIS Admin service are stopped.
- Step 3** Choose **Start > Programs > Microsoft SQL Server 2000**.
- Step 4** Click **Enterprise Manager**.
- Step 5** Choose **Microsoft SQL Servers > SQL Server Group**.
- Step 6** Click on your *server name*.
- Step 7** Right-click **Server Name > Replication**.
- Step 8** Choose **Configure Publishing > Subscribers > Distribution**.
- Step 9** Click the **Publication Database** tab in the pop-up window.
- Step 10** Uncheck the name of your currently published database.
- Step 11** Click **OK**.

### Restore the Customer Database

- Step 12** Ensure that all Cisco NT services and the IIS Admin service are stopped.
- Step 13** Place the customer backup file in **C:MSSQL2000\BACKUP**.

- Step 14** Choose **Start > Programs > Microsoft SQL Server 2000**.
- Step 15** Click **Enterprise Manager**.
- Step 16** Choose **Microsoft SQL Servers > SQL Server Group**.
- Step 17** Double-click **Databases**.
- Step 18** Click the highest numbered database beginning with **CCM**.
- Step 19** Click **Restore Database**.

**If you backed up a database and want to restore that database**

- Step 20** Choose **first backup to restore**.
  - Step 21** Choose **Database — complete**.
  - Step 22** Click **OK**.
  - Step 23** If you restore a different database to this machine
  - Step 24** Choose **Restore — from device**.
  - Step 25** Click **Select Devices**.
  - Step 26** Click **Add** and enter the filename from which you are restoring.
  - Step 27** Choose **Database — complete**.
  - Step 28** Click **OK**.
  - Step 29** The following message displays:  
**Restore of database CCMxxxxx completed successfully.**
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Now you can view the contents of the database by clicking on it in the main window and looking at its tables, users, and other information.

When you are ready to restore your former database, republish it by choosing **Server Name > Replication** and right-click **Configure Publishing > Subscribers > Distribution** and checking your original database.

## Restore a Customer Database to Work With Cisco CallManager on Your Machine

### Procedure

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**Step 1** Repeat the previous procedures for unpublishing your database and restoring the Customer Database.

**Step 2** From the Enterprise Manager, delete the following three default users: CiscoCCMUser, CiscoCCMCDR, and CiscoCCMReader by choosing **Tools > SQL Server Query Analyzer**.

You can also access the Query Analyzer from **Start > Programs > Microsoft SQL Server > Query Analyzer**.

**Step 3** Choose your database from the pull-down menu in the upper right corner of the screen.



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**Note** Choosing the correct database name is important. Otherwise, you risk deleting users from the wrong database.

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**Step 4** Enter **Sp\_dropuser CiscoCCMUser** and click **Go**.

**Step 5** Click the **Play** button.

**Step 6** The following message displays:  
**User CiscoCCMUser successfully removed from database.**

**Step 7** Enter **Sp\_dropuser CiscoCCMCDR** and click **Go**.

**Step 8** Click the **Play** button.

**Step 9** The following message displays:  
**User CiscoCCMCDR successfully removed from database.**

**Step 10** Enter **Sp\_dropuser CiscoCCMReader** and click **Go**.

**Step 11** Click the **Play** button.

**Step 12** The following message displays:  
**User Cisco CCMReader successfully removed from database.**

### Add the three default users for your machine

**Step 13** Right-click **Users** in the main screen under your database name.

**Step 14** Choose **CiscoCCMUser** and check the "db\_owner" box for this user.

- Step 15** Click **OK**.
- Step 16** Choose **CiscoCCMCDR** -and check the "db\_owner" box.
- Step 17** Click **OK**.
- Step 18** Choose **CiscoCCMReader** and check the "db\_datareader" box.
- Step 19** Click **OK**.

### Configuring database tables

#### ProcessConfig table

- Step 20** Choose **Tables > ProcessConfig**.
- Step 21** Right-click **ProcessConfig**.
- Step 22** Choose **open > return all rows**.
- Step 23** Click the **SQL** button and Run the following SQL query:

```
SELECT *
FROM ProcessConfig
where
tkservice = 9

ORDER by paramname
choose the exclamation point to run
```

- Step 24** Make note of the paramValue for GlassHouseNodeID  
ParamValue for the GlassHouseNodeId in this table matches the fkProcessNode string in the Cisco CallManager and pkid string in ProcessNode.




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**Note** The first set of digits are the least significant.

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- Step 25** Change the Server names in all the DBConnection records to match the machine name of your publisher machine.
- Step 26** Change the database names in the DBConnection records to match the current database name.

#### ProcessNode table

- Step 27** Choose **Tables > ProcessNode**.
- Step 28** Right-click on **ProcessNode** and choose **open > return all rows**.

**Step 29** Change the 'name' column for the publisher (pkid=glassHouseNodeID you previously noted) to be the *ip address* or *machine name* of your machine.

#### **CallManager table**

**Step 30** Choose **Tables > CallManager**.

**Step 31** Right-click on **CallManager** and choose **open > return all rows**.

**Step 32** Change the 'processNodeName' column for the CallManager record where fkprocessnode=glassHouseNodeID is correct machine name or the IP address you changed in the ProcessNode table.

#### **Check the registry settings**

**Step 33** Open the registry to HKEY\_LOCAL\_MACHINE > SOFTWARE.

**Step 34** Click **Cisco Systems, Inc.**

**Step 35** Click **DBL**.

**Step 36** Note the value of the DBConnection0 key.  
In the value, ensure the value of SERVER is the DNS name of the publisher and that the database version name is correct.

#### **Publish the database**

**Step 37** Return to the main tree in Enterprise Manager.

**Step 38** Click on the *server name*.

**Step 39** Choose **New > Publication**.

**Step 40** Click **Next**.

**Step 41** Choose your *database name*.

**Step 42** Click **Next**.

**Step 43** Choose **Transactional**.

**Step 44** Click **Next**.

**Step 45** Click **Next**.

**Step 46** Choose **publish all tables**.

**Step 47** Click **Next**.

**Step 48** Click **Next**.

**Step 49** Click **Next**.

**Step 50** Click **Finish**.

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## Related Information

The following few Microsoft utilities will help you find out what OS patches apply to your Cisco CallManager.

- Hfnctk.exe—Displays programs and service pack that are installed on the box and whether newer patches are available.
- Serverinfo.exe—Displays basic information and statistics on the system.
- Qfecheck.exe—Displays which HotFixes are installed. This utility does not work for SQL and Internet Explorer HotFixes. Qfecheck also spikes the processor during the time it runs. Cisco recommends that you run this utility only in a maintenance window.

To view the HotFixes that apply to Internet Explorer, perform the following steps.

### Procedure

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**Step 1** Open your Internet Explorer and click **Help > About Internet Explorer**.

**Step 2** View the Update Versions line.

This line will list the Knowledge Base number for each installed HotFix.

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