



# Release Notes for Cisco CTI OS, Release 7.5(10)

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# Introduction

These Release Notes explain new features, changes, and caveats for Cisco CTI OS, Maintenance Release 7.5(10).

Cisco CTI OS software is a component of the *Cisco Unified Contact Center Enterprise (Unified CCE)* and *Unified CCE, Hosted Deployment Model* deployments. See Product Naming, below.

This document pertains to Cisco CTI OS only. Release Notes for Cisco Contact Center Enterprise & Hosted, Cisco Agent Desktop, Cisco E-Mail Manager Option, Cisco Web Collaboration Option and Cisco Unified Intelligence Suite (CUIS) are available separately on cisco.com.

MR 7.5(10) is a safe harbor release. 7.5(10) is software-maintenance supported till the date specified (End of SW Maintenance Releases Date) in the End of Sale/End of Life Announcement for 7.5. For more information about the announcement click

[http://www.cisco.com/en/US/products/sw/custcosw/ps1844/prod\\_eol\\_notices\\_list.html](http://www.cisco.com/en/US/products/sw/custcosw/ps1844/prod_eol_notices_list.html)

## Product Naming

The Cisco CTI OS product name has not changed. However, to simplify the user experience, there is now one comprehensive product name for the enterprise software that was formerly branded as 'ICM Enterprise' and 'IPCC Enterprise'. That name is *Cisco Unified Contact Center Enterprise (Unified CCE)*. The hosted editions of the former 'ICM' and 'IPCC' enterprise products are now named *Unified CCE, Hosted Deployment Model*.

Note also that Cisco Unified Call Manager has been renamed *Cisco Unified Communications Manager*.

This naming unification does not include or imply functionality changes or license entitlement changes for previously purchased software licenses.

These new names do not yet appear consistently throughout the user interface or the documentation.

## About Maintenance Releases and Release Notes

**Maintenance Releases** are made available as part of the CTI OS software maintenance strategy and deliver code updates that resolve issues in CTI OS software.

Cisco CTI OS Release 7.5(10) is the eighth maintenance release built on CTI OS Release 7.5(1).

Maintenance releases must be installed over the *base release* of the product version, and they are cumulative. That is, they include code updates present in earlier minor releases, maintenance releases, and engineering specials (ESs) for their respective version. This means that:

- Before you install CTI OS MR 7.5(10), you must have installed the *base release* CTI OS Release 7.5(1). You might have installed other CTI OS 7.5(x) MRs over the base release.
- CTI OS Maintenance Release 7.5(10) incorporates the following:
  - CTI OS MR 7.5(2)
  - CTI OS MR 7.5(3)
  - CTI OS MR 7.5(4)
  - CTI OS MR 7.5(5)
  - CTI OS MR 7.5(6) \*\*\*
  - CTI OS MR 7.5(8)

- CTI OS MR 7.5(9)




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**Note** \*\*\* There is no CTI OS MR 7.5(7).

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- CTI OS 7.5(x) is available on CD and as a downloadable installer from [cisco.com](http://cisco.com). See [Maintenance Release Installation, page 7](#).




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**Note** Maintenance releases for Cisco Unified CCE and Cisco CTI OS are co-released. Cisco Unified CCE and Cisco CTI OS are typically upgraded together. For 7.5.10, PG and CTIOS must be on the same version.

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## About Release Notes

As a best practice, read the previous CTI OS 7.5(x) Release Notes prior to installing Maintenance Release 7.5(10).

- Release Notes for the CTI OS 7.5(1) base release are posted [on this page in cisco.com](#). Login is required.
- MR Release Notes for MRs 7.5(2) through 7.5(9) are available for viewing and download on the Support Download page.

To locate other CTI OS 7.5(x) MR Release Notes, follow steps 1 through 5 in [Maintenance Release Installation, page 7](#). Select each 7.5(x) folder to see the Release Notes for that MR.

## System Requirements




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**Note** For hardware and third-party software specifications for this release, see the [Hardware and System Software Specifications \(Bill of Materials\) for Cisco Unified ICM/Contact Center Enterprise & Hosted](#). Your system must meet these requirements before you can run the 7.5(10) installers for Unified CCE/ICM or CTI OS.

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## Related Documentation

Documentation for Cisco CTI Object Server (CTI OS) is accessible from Cisco.com at: [http://www.cisco.com/en/US/products/sw/custcosw/ps14/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/custcosw/ps14/tsd_products_support_series_home.html)

- The documentation for Cisco Unified Contact Center Products, is available at [this page](#) on cisco.com.
  - Click **Voice and Unified Communications > Customer Collaboration**.
  - Click **Cisco Unified Contact Center Products** or **Cisco Unified Voice Self-Service Products**.
  - Then click on the product/option you are interested in.
- Additional related documentation:
  - [CTIOS System Manager Guide](#) (CTI OS Installation)
  - [Serviceability Best Practices Guide](#)

- [Cisco Unified Communications Manager](#) (Unified CM)
- [Cisco Unified Customer Voice Portal](#) (Unified CVP)
- [Cisco Unified E-Mail Interaction Manager](#) (Unified EIM)
- [Cisco Unified IP IVR](#) (Unified IP IVR)
- [Cisco Unified Web Interaction Manager](#) (Unified WIM)
- [Cisco Agent Desktop](#) (Unified CAD)
- [Cisco Doc Wiki troubleshooting tips](#).
- [Technical Support documentation and tools](#)
- [Product Bulletins](#)(login required)
- For information on the Cisco software support methodology, see the *Software Release and Support Methodology* (login required)

## Installation Notes

This section contains the following information:

[Silent Installation](#), page 4

[Installation Order for CTI OS Components](#), page 4

[Installation Checklist for All Components](#), page 5

[Maintenance Release Installation](#), page 7

[Uninstalling this Maintenance Release](#), page 8

## Silent Installation

Cisco Systems does not support any third party tools for performing silent installation to deploy the components present in the MR.

The release installer package cannot be used or replaced by any silent installation tool.

## Timing for Installing a CTI OS Maintenance Release

Installing a CTI OS release requires temporarily stopping all CTI OS services and CTI OS Client applications. To limit impact to a live CTI OS system, schedule and install CTI OS releases during a maintenance period *when your CTI OS system is out of production*.

## Installation Order for CTI OS Components

CTI OS releases must be installed first on the server platform (Side A and Side B) and then on the client components. This avoids a temporary situation of mismatched components.

The deployment sequence is as follows:

[CTI OS Server Deployment](#), page 5

[CTI OS Desktops Deployment](#), page 5

[CTI OS Driver for Siebel 7.x Deployment, page 6](#)

[CTI OS Data Store Deployment, page 6](#)

[CTI OS SDK Deployment, page 7](#)

## Installation Checklist for All Components

Prior to installing the CTI OS components:

- Schedule a maintenance period for installation. Because CTI OS release installation requires bringing down a CTI OS system, schedule release installation for a maintenance period when your CTI OS system is out of production.
- Determine which CTI OS components require release installation.

## CTI OS Server Deployment

### Before the installation:

- Inventory CTI OS nodes targeted for release installation.
- Install the release on CTI OS nodes.
- Install the release on each Peripheral Gateway in your system where CTI OS is co-located.

If you are installing this release on multiple CTI OS systems, you must install CTI OS releases on each host one at a time.

### How to Deploy CTI OS Server:

- 
- Step 1** Logout all the agents from both servers (side A and side B).
  - Step 2** Stop all CTI OS and Cisco Security Agent (CSA) services on each peer (side A and side B).
  - Step 3** Install the release on side A.
  - Step 4** Restart the CTI OS services on side A. Ensure the newly patched system is running with no errors and comes back online.
  - Step 5** Once you have confirmed that side A is working correctly, install the release on side B.
  - Step 6** Restart the CTI OS services on side B. Ensure the newly patched system is running with no errors and comes back online.
  - Step 7** Restart CSA on both sides.
  - Step 8** Repeat this procedure on the other CTI OS systems.
  - Step 9** Test and troubleshoot the installation.
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## CTI OS Desktops Deployment

### Before the installation:

- Inventory CTI OS desktops targeted for release installation.
- Install the release on CTI OS desktops.

- Install the release on each Agent/IPCC Supervisor desktop system where a CTI OS desktop is loaded.

**Caution**

Component update must be performed only using the installer package provided with the release. You cannot simply copy files from one client system to another as a way of avoiding running the installer package at each system.

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### How to Install the CTI OS Desktop Release

- Step 1** Logout all the agents and close the client at each host desktop.
  - Step 2** Install the release on the host desktop.
  - Step 3** Restart the CTI OS Desktop. Ensure the newly patched CTI OS Phone is running with no errors by logging in a call center agent and perform call and agent state control.
  - Step 4** Repeat this procedure for the other host desktop.
  - Step 5** Test and troubleshoot the installation.
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## CTI OS Driver for Siebel 7.x Deployment

### Before the installation:

- Inventory the call centers in the Siebel configuration database targeted for release installation.
- Take an inventory of all call centers defined in the Siebel configuration database that use this CTI OS Driver release.
- Install the release on the Siebel Communications Server host.
- Install the CTI OS Driver release on each Siebel Communications Server where the CTI OS Driver is loaded.

Installing this release on multiple Siebel Communications servers can be done simultaneously.

### How to Install the CTI OS Driver for Siebel 7.x Deployment

- Step 1** Logout all the agents using a Siebel CTI client and close the browser, or Siebel application, at each host desktop.
- Step 2** Install the release on the Siebel Communications server.
- Step 3** Restart the Siebel client. Ensure the newly patched CTI OS Driver for Siebel is running with no errors by logging in a call center agent and performing call and agent state control.
- Step 4** Repeat this procedure for the other host desktops.
- Step 5** After installation, test your CTI OS Driver to ensure that it is working properly.

## CTI OS Data Store Deployment

### Before the installation:

- Inventory the CTI OS Data Stores in a Siebel Environment targeted for release installation.

- Take an inventory of all CTI OS Data Stores used by the CTI OS Driver for Siebel 7.x that use this release.
- Install the release on the CTI OS Data Store Server host.
- Install the CTI OS Data Store release on each host where the CTI OS Data Store is loaded.

### How to Deploy CTI OS Data Store

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- Step 1** Stop all CTI OS and Cisco Security Agent (CSA) services on each host.
- Step 2** Install the release.
- Step 3** Restart the CTI OS Data Store service. Ensure the newly patched system is running with no errors and comes back on-line.
- Step 4** Restart CSA.
- Step 5** Repeat this procedure for the other CTI OS systems.
- Step 6** After installation, test your CTI OS Driver and CTI OS Data Store together to ensure that they are working properly.
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## CTI OS SDK Deployment

### Before the installation:

- Inventory developer's workstations targeted for release installation.
- Install the release on each developer's workstation where CTI OS SDK is loaded.

### How to Deploy CTI OS SDK

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- Step 1** Close all programming environments and any client applications using any of the components in the CTI OS SDK.
- Step 2** Install the release on a developer workstation.
- Step 3** Restart the programming environment or application. Ensure the newly patched CTI OS SDK works appropriately by building one of the examples included in the SDK and logging in a call center agent and performing call and agent state control.
- Step 4** Repeat this procedure for the other developer workstations.
- Step 5** Test and troubleshoot the installation.
- 

## Maintenance Release Installation



### Note

These steps explain how to download the CTI OS MR 7.5(10) software. The Unified CCE/ICM and CTI OS MRs are separate installers and must be installed individually.

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Before you install this MR:

- Plan and schedule the maintenance period.

- Review all applicable documentation.

**To access and download the installation file:**

- 
- Step 1** Point your browser to <http://www.cisco.com>.
- Step 2** Click **Support**. Then click **Download Software**.
- Step 3** In the *Make a selection to continue* panel, click **Voice and Unified Communications**. Then select **Customer Collaboration** in the far right panel.
- Step 4** Select **Cisco Unified Contact Center Products**. Select the link for **Cisco Computer Telephony Integration Option**.
- Step 5** Navigate to the appropriate folder. (For this MR download, open the CTIOS Version 7 folder. Then open the 7.5 folder.)
- Step 6** Navigate to 7.5(10).
- Step 7** Select the CTIOS7.5.10.exe and click **Add To Cart**.
- Step 8** Click the Download Cart link at the top right of the page.
- Step 9** From the Download Cart page, select **Proceed with Download**.
- Step 10** Click **Agree** to accept the download rules.
- Step 11** Enter feedback if you care to and click **Send**. Feedback is not mandatory.
- Step 12** Select a download option.
- Step 13** Select **Save** at the File Download dialog box and navigate to a location on your local drive.

## Uninstalling this Maintenance Release

You can uninstall MR 7.5(10) from **Windows Control Panel > Add or Remove Programs**.

If you uninstall 7.5(10), your system reverts to the version before the 7.5.(10) installation. For example, if:

- You previously installed Release 7.5(1) and also the MRs 7.5(2) and 7.5(4).
- You install 7.5.(10).
- You uninstall 7.5(10).

Then your system will be at 7.5(4).

## New and Changed Information

[CTI OS Server to CTI Server Reconnect Implementation, page 8](#)

[CTI Server Driver Refactoring, page 9](#)

[Dropping Skill Group Statistics, page 9](#)

[Log Enhancement and EMS Log File Compression., page 9](#)

## CTI OS Server to CTI Server Reconnect Implementation

This release implements new behavior for reconnecting CTI OS Server to the CG (CTI SVR), as follows:



If the connection cannot be re-established within  $X$  number of retries, where  $X = 60 / \text{RetryIntervalSec}$  (as defined in the CT IOS registry), then CTI OS will restart.

If the connection is re-established, then CTI OS Server checks whether or not the configuration has changed while the connection to the CG was not active.

- If the configuration has not changed, then CTI OS goes Active without restarting.
- If the configuration has changed, then CTI OS Server restarts with the changed configuration.

If the CG connection fails before CTI OS Server completely loads the configuration; CTI OS server restarts and continues loading the changes.

## CTI Server Driver Refactoring

CTI Server driver has been re-factored to improve the speed of reading the messages from CTI Server.

## Dropping Skill Group Statistics

The [Cisco Unified Contact Center Enterprise 7.5 Solution Reference Network Design \(SRND\)](#) lists recommended limits for agents, teams, supervisors, and skill groups.

Configuring your system in excess of those limits can affect CTI OS performance, particularly over a slow and/or bandwidth-limited WAN connection, as it causes CTI OS to receive too many skill group statistics updates and creates a queue of messages from CTI Server.

An enhancement in this release allows you to add a registry key such that the system drops skill group updates to a client when that client is not reading data fast enough. This setting prevents a system slowdown and avoids the possibility of depleting CTI OS resources.

To enable this feature, add the following registry key:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Cisco Systems, Inc.\Ctios\CTIOS_<ICM
Instance>\CTIOS<number>\Server\SkillGroup\
```

Value Name: PendingSendLimit

Value Type: REG\_DWORD

Value Setting: 0x19 (NOTE: this is 25 in hex)

The value setting indicates how many outstanding messages can be sent on a client connection before skill group statistics will be dropped.

If the SkillGroup PendingSendLimit is not configured in the registry or if it is set to 0 (zero), no skill group statistics dropping will occur.

## Log Enhancement and EMS Log File Compression.

The CTI OS Server default trace mask has changed from 0x03 to 0x00060A0F.

The EMS Log File compression has been enabled for the CTI OS server, thereby increasing the log retention for these components.

**New Default value for EMSAllLogFilesMax:** For components that support EMS file compression, EMSAllLogFilesMax is set to 2GB if the installation drive has a minimum 25GB free disk space. The new value is set when the patch is installed or when the PG and/or CTIOS Sever Setup is run on the supported components. The new default value of this registry key allows log files up to 2GB size (after compression) on the system.

**EMS File Compression Control:** A new registry key, EMSZipCompressionEnabled, located in ..\EMS\CurrentVersion\Library\Processes\

**Note**

Additional Registries EMSZipFormat and EMSZipExtension are added under ..\EMS\CurrentVersion\Library\Processes\

**Dumplog:** Dumplog is updated to handle the compressed EMS files. Dumplog looks for the “gzip.exe” file in <Install Drive>\icm\bin to unzip compressed EMS files before dumping logs.

You must unzip the EMS files before using the dumplog if you want to dump logs from the compressed EMS files (with “.gz extension) out of a Peripheral Gateway/CTI Server.

For more details on using the dumplog, see the [Serviceability Best Practices Guide for Cisco Unified Contact Center Enterprise](#). This guide is listed under **Cisco Unified Contact Center Enterprise 8.0(1)**

**Note**

As ICM and CTIOS 7.5(10) is built on EMS compression library, the PG/CG/CTI OS has to be on the same version from 7.5(10) onwards.

## Important Notes

### Localization

CTI OS 7.5(10) comes with Language Pack 7.5(10), which is available on cisco.com in the same location as the MR installation executable file. See [Maintenance Release Installation, page 7](#).

Apply LanguagePack 7.5(10) only if you want to change Webview, Script Editor, or a select set of configuration tools to a different language *after* you have applied MR7.5(10). English-speaking customers do not need to run LanguagePack.

The language pack is installed into <install drive>:\icm\bin.

If you have installed LanguagePack 7.5(1) with base Release 7.5(1), you do not need to run 7.5(10) LanguagePack — the 7.5(10)Installer automatically updates the localized files on your system.

Please see the Cisco Unified ICM/Contact Center Product and System Localization Matrix available at: [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/cust\\_contact/contact\\_center/icm\\_enterprise/localization\\_matrix/guide/G11nMap.xls](http://www.cisco.com/en/US/docs/voice_ip_comm/cust_contact/contact_center/icm_enterprise/localization_matrix/guide/G11nMap.xls) for:

- A detailed list of language localizations implemented for different portions of this release.
- Notes regarding product-specific limitations in supporting international character data.

## Resolved Caveats in this Release

This section contains a list of all Severity defects that have been resolved in Cisco CTI OS Maintenance Release 7.5(10). Defects are listed by identifier and then by component. You can open the defect directly in Bug Toolkit by clicking the link in the Identifier column.

**Table 1** *Resolved Caveats for Cisco CTI OS, Release 7.5(10)*

Identifier	Component	Severity	Headline
<a href="#">CSCtg55020</a>	ctios-server	2	CTIOS appears to have a memory leak during bulk login/logout
<a href="#">CSCth33739</a>	ctios-server	2	Call not getting cleared from Agent desktop after completing transfer
<a href="#">CSCti65358</a>	silent-monitor	2	CTIOS silent monitoring slows login when enabled
<a href="#">CSCtj16286</a>	siebel-driver	2	Siebel Driver do not transfer Screen Context in CV10
<a href="#">CSCtj42423</a>	siebel-driver	2	Siebel Ctidriver Crashing on SCOMM Servers
<a href="#">CSCtk66073</a>	client-libs	2	7.5(10) agent desktops crash when incoming call is routed to them
<a href="#">CSCsh30367</a>	siebel-driver	3	Driver Crashing Due to Invalid Parameters From Siebel
<a href="#">CSCsu83458</a>	dotnetcil	3	.NET doesn't send hostname in IdentifyClientRequest
<a href="#">CSCsw79868</a>	ctios-server	3	Aspect CTIOS Blind transfers (#9 CCT) not successful
<a href="#">CSCte69133</a>	ctios-server	3	Call doesn't disappear from 2nd Agent's Desktop after Blind Transfer.
<a href="#">CSCth32141</a>	cti-toolkit-superv	3	CTIOS Supervisor Desktop Crashes when processing endcall event
<a href="#">CSCth95292</a>	silent-monitor	3	session is triggered by a Supervisor the monitored voice traffic reaches
<a href="#">CSCti48363</a>	ctios-server	3	Skill groups missing from Statistics Grid
<a href="#">CSCtk07541</a>	siebel-driver	3	Unable to release outbound reservation call from Siebel Desktop
<a href="#">CSCtc94798</a>	ctios-server	3	Agent desktop grayed out when changing the agent state
<a href="#">CSCtf27585</a>	ctios-server	3	Agent cannot change state from wrap-up
<a href="#">CSCth21172</a>	ctios-server	3	Trans/Conf buttons getting grayed out on dialing num with spl char

Table 1 Resolved Caveats for Cisco CTI OS, Release 7.5(10)

Identifier	Component	Severity	Headline
<a href="#">CSCth28590</a>	cti-toolkit-agent	3	CTIOS Agent desktop crashes after silent monitoring session failed
<a href="#">CSCth45490</a>	silent-monitor	3	Silent monitoring service reloads.
<a href="#">CSCth85435</a>	setup	3	Installer Incorrectly installs Security icon even if Sec is not chosen
<a href="#">CSCti03121</a>	ctios-server	3	Agent desktop grays out during wrapup after NBT/NCT Call with PIMLET PG.
<a href="#">CSCti41115</a>	ctios-server	3	CTIOS Server : FAILED to set socket TOS value.
<a href="#">CSCtj01753</a>	dotnetcil	3	Agent statistics button grayed out during consult conference scenario
<a href="#">CSCtj53208</a>	ctios-server	3	G3: Unable to complete Conference/Transfer after CTIOS failover.
<a href="#">CSCtj59351</a>	dotnetcil	3	Logout reason code is not displayed in dotnet desktop
<a href="#">CSCtj61089</a>	ctios-server	3	Agent status changes to "online" from "monitoredonline" in CTIOS failovr
<a href="#">CSCtj71123</a>	cti-toolkit-superv	3	CTIOS Supervisor Desktop "Team Real-Time Status" screen flickers
<a href="#">CSCtk08258</a>	ctios-server	3	CTIOS desktop grays out when the agent is on held while completing conf.
<a href="#">CSCtk67372</a>	ctios-server	3	Incorrect skill group assignment after reskilling in supv/agent desktop.
<a href="#">CSCtf20117</a>	ctios-server	4	Call disappears from desktop when source non monitored agent logs in
<a href="#">CSCti12923</a>	ctios-server	4	CTIOS Notready Reasoncode Cu reason code to be given precedence.
<a href="#">CSCti65048</a>	ctios-server	4	"Time in state" field not updating in Real time status of supervisorDesk
<a href="#">CSCtj64964</a>	cpcil	4	Multiple warning messages observed when agent is moved not ready by pim
<a href="#">CSCtj79471</a>	ctios-server	4	MA login through siebel when Param.AgentWorkMode set to invalid format

**Table 1** Resolved Caveats for Cisco CTI OS, Release 7.5(10)

Identifier	Component	Severity	Headline
<a href="#">CSCtj87227</a>	cti-toolkit-agent	4	Incorrect display of Skill Group Stats when launched for the first time
<a href="#">CSCtj21031</a>	ctios-server	4	Supervisor real-time status showing incorrect skill group assignment.
<a href="#">CSCtk16700</a>	ctios-server	4	Heartbeats always sent

## Open Caveats in this Release

This section contains a list of all Severity 1, 2, and customer-found Severity 3 defects that are currently pending in Cisco CTI OS Maintenance Release 7.5(10). You can open the defect directly in Bug Toolkit by clicking the link in the Identifier column.



**Note** Because defect status continually changes, be aware that the following table reflects a snapshot of the defects that were open at the time this report was compiled. For an updated view of open defects, access Bug Toolkit and follow the instructions as described in [Using Bug Toolkit](#).

**Table 2** Open caveats for Cisco CTI OS, Release 7.5(10)

Identifier	Component	Severity	Headline
<a href="#">CSCtk15844</a>	client-libs	2	CTIOS Filter mode with agentstate causes COM Cil Memory Leak

## Using Bug Toolkit

**To access the Bug Toolkit**, you need the following items:

- An Internet connection
- A Web browser
- A Cisco.com user ID and password

**To use the Bug Toolkit**, follow these steps:

- Step 1** Point your browser to <http://tools.cisco.com/Support/BugToolKit/action.do?hdnAction=searchBugs>
- Step 2** Log in with your Cisco.com user name and password.
- Step 3** To look for information about a specific problem, enter the bug ID number in the “Search for Bug ID” field then, click **Go**.

Alternatively, under “Select Product Category”, choose **Voice and Unified Communications**; or, under “Select Products” choose **Cisco Unified Intelligent Contact Management Enterprise** and then choose the “Software Version” you are interested in.

For information about how to search for bugs, create saved searches, create bug groups, and so on, click **Help** in the Bug Toolkit window.

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## Troubleshooting

For Cisco Unified Contact Center software troubleshooting tips, go to [Cisco Documentation Wiki](#), then click the product/option you are interested in.

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