



Release Notes for Cisco Unified Contact Center Enterprise Release 9.0(1)

April 3, 2014

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Introduction to Cisco Unified Contact Center Enterprise Release 9.0(1)

These release notes describe new features and changes for Release 9.0(1) of Unified Contact Center Enterprise (Unified CCE) software.

Change History

This table lists changes made to this guide and gives the dates those changes were made.

Change	Date
Added new section Support for Windows Server and Required Microsoft Hotfix for AD 2012.	April 3, 2014

System Requirements

Note For hardware and third-party software specifications for this release, see the [Hardware & System Software Specification \(Bill of Materials\) for Cisco Unified ICM/Contact Center Enterprise & Hosted](#).

Supported Browser

Release 9.0(1) supports Microsoft Internet Explorer 9.

Support for Active Directory Windows Server 2012

Release 9.0(1) supports Active Directory on Windows Server 2012 R2 (64-bit). For details about Active Directory support, see Staging Guide for Unified Contact Center Enterprise at <http://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-installation-guides-list.html>.

Required Microsoft Hotfix for AD 2012

If you have computers that run Windows Server 2008 R2 in a domain environment and you use a domain user account to log on to a Windows Server 2012-based domain controller, you cannot map the following security identifiers (SIDS):

- S-1-18-1 Authentication authority asserted identity
- S-1-18-2 Service asserted identity

Some applications such as the User Migration Tool use these SIDs and may fail.

To resolve this issue, install the hotfix on the Windows Server 2008 R2-based computers in the domain. See <http://support.microsoft.com/kb/2830145/en-us>.

Microsoft Windows 7 Support

Release 9.0(1) supports running all *client* applications on Microsoft Windows 7. Administration Client Setup requires local administrator privileges to function properly on Microsoft Windows 7.

Note The CallRouter, Logger, Administration & Data Server, and other server components are *not* supported on Microsoft Windows 7.

Microsoft Windows Server 2008 R2

Release 9.0(1) supports Microsoft Windows Server 2008 R2 with SP1, both Standard and Enterprise Editions. Unified CCE 32-bit applications run using Microsoft WoW64 compatibility mode on the 64-bit Microsoft Windows Server 2008 R2 operating system. For more information, see [Microsoft Windows Server 2008 R2 SP1](#) in the Important Notes section.

Unified ICM/CCE 9.0(1) Install Error

If you install Unified ICM/Contact Center Enterprise 9.0(1) on a Microsoft Windows Server 2008 R2 with no service pack installed, the following (incorrect) error message appears:

[SEVERE] - This version of Cisco Unified ICM/Contact Center for Enterprise & Hosted requires Windows Server 2008 R2 Enterprise or Standard service pack 2 or later.

Instead, the error message should state:

[SEVERE] - This version of Cisco Unified ICM/Contact Center for Enterprise & Hosted requires Windows Server 2008 R2 Enterprise or Standard service pack 1.

Microsoft SQL Server 2008

Release 9.0(1) supports Microsoft SQL Server 2008 R2 64-bit. Microsoft SQL Server 2005 32-bit is not supported in Unified CCE Release 9.0(1).

Customers who plan to upgrade from Windows Server 2003 must complete a technology refresh for the operating system. This includes the migration to Microsoft SQL Server 2008 R2.

For customers on Windows Server 2008 R2 with Unified CCE Release 8.5(2) or later, there is an upgrade procedure to migrate from Microsoft SQL Server 2005 to Microsoft SQL Server 2008 R2 without completing a technology refresh.

For more information, see the [Upgrade Guide for Cisco Unified ICM/Contact Center Enterprise & Hosted](#).

Mixed Mode Authentication

Mixed Mode Authentication (SQL Server Authentication and Windows Authentication) is supported in SQL Server 2008 R2. Mixed Mode Authentication is enforced when you apply SQL Server 2008 Hardening during Unified CCE 9.0(1) installation.

Virtual Machine Open Virtual Archive Templates

For Release 9.0(1), a new OVA template is available (UCCE_9.0_Win2008_vmv8_v1.0.ova) that provides appropriate resource allocation for Unified CCE Release 9.0(1) components running on ESXi 5.0 (VMWareESXi 5.0 is the only supported hypervisor for Unified Contact Center Enterprise release 9.x).

The Release 9.0(1) OVA adds CPU reservation for most virtual machines (this is new since Release 8.5(2)); doing so enables VMware hypervisor behavior that is beneficial for real-time applications.

For detailed information about the OVA templates (including relevant ESXi information), see the [Cisco Virtualization DocWiki](#).

Product Documentation

See these sources for Unified CCE product documentation:

- [Latest version of these release notes](#)
- [Unified CCE documentation index](#) on Cisco.com
- For troubleshooting tips, go to the [Cisco DocWiki](#)
- [Cisco Unified CCE Product and System Localization Matrix](#)

Documentation for these products can be found at the [Unified CCE documentation index](#):

- Cisco Agent Desktop (CAD)
- Cisco CTI Object Server (CTI OS)
- Cisco Unified Contact Center Management Portal (Unified CCMP)

New and Changed Information

The following sections describe new features and changes that are pertinent to this release.

Precision Routing

Precision Routing enhances and can replace traditional call routing. Traditional routing takes into account all of the skills to which an agent belongs and defines the hierarchy of skills to map business needs. However, traditional routing is restricted by its one-dimensional nature. Precision Routing provides multidimensional routing with simple configuration, scripting, and reporting. Agents are represented through multiple attributes with proficiencies so that the capabilities of each agent are accurately exposed, bringing more value to the business. You can use a combination of attributes to create multidimensional precision queues. Using Unified CCE scripting, you can dynamically map the precision queues to direct a call to the agent that best matches the precise needs of the caller.

Note Precision Routing is only supported by inbound Unified CCE agents.

Precision Routing Configuration

Precision Routing is configured using Unified CCE Web Administration. For more information about the web user interface, see http://docwiki.cisco.com/wiki/Precision_Routing.

Apache Tomcat Version

Unified CCE 9.0(1) installs Apache Tomcat 7.0 during the installation.

Cisco Unified IP Phone 6945 Support for Agent Greeting and Whisper Announcement

Support for Cisco Unified IP Phone 6945 for Agent Greeting and Whisper Announcement was added in Unified CCE 9.0(1).

Cisco Unified Contact Center Management Portal

The following section describes new and changed information for Cisco Unified Contact Center Management Portal (Unified CCMP).

Note If the prerequisite checks for Unified CCMP succeed and the Install button is disabled, then the deployment tool did not validate that Service Pack 1 for Windows Server 2008 R2 was installed. Before you install Unified CCMP 9.0(1), you must install Service Pack 1 for Windows 2008 R2.

Integrated Configuration Environment Tool

For Release 9.0(1), the Integrated Configuration Environment (ICE) tool replaces the Unified CCMP Configuration Manager tool. Use the ICE tool for Unified CCMP cluster configuration and replication setup and monitoring for dual-sided deployments.

For more information about the ICE tool, see the [Administration Manual for Cisco Unified Contact Center Management Portal Release 9.0\(1\)](#).

Bulk Item Upload Changes

Unified CCMP Release 9.0(1) supports the bulk upload of Unified CCMP users in the same way that other resources such as folders and Unified CCE agents can be bulk uploaded with Unified CCMP Release 8.5(x). Bulk upload functionality is accessible from the System Manager tool within Unified CCMP.

In Unified CCMP Release 9.0(1) Bulk Upload file size is restricted to 1000 rows. In previous releases there was no limit on Bulk Upload file size.

In Unified CCMP Release 8.5(x) and earlier, you cannot specify a default skill group when bulk uploading agents using the System Manager tool. In Unified CCMP Release 9.0(1), anew, optional, column was added to the agent bulk upload template to allow a default skill group to be specified using its Enterprise Name.

The default skill group field in the agent bulk upload template is an optional field. If the field is not present or is left blank, the agent's default skill group defaults to the peripheral default skill group.

For more information about bulk upload functionality, see the [User Manual for Cisco Unified Contact Center Management Portal Release 9.0\(1\)](#) and online help.

Prioritization of Re-skilling Operations

You can configure Unified CCMP 9.0(1) to process re-skilling requests ahead of other provisioning request types such as agent creation. To access this setting, which is enabled by default, use the ICE Tool.

Activity Monitor

In Release 9.0(1), the Activity Monitor Tool replaces Unified CCMP Audit Reports. You can use the Activity Monitor to view the outcome of historical provisioning activity as well as the status of current operations.

For more information about Activity Monitor functionality, see the [User Manual for Cisco Unified Contact Center Management Portal Release 9.0\(1\)](#).

Folder Tree Changes

Beginning with Release 9.0(1), the Unified CCMP folder tree interface supports drag and drop functionality to move folders and has a context menu that you can use to create, edit, and delete folders.

The sort order for folders has changed. System folders are displayed first, in alphabetical order, followed by tenant folders.

Users with large numbers of folders can use a paged folder view for improved performance.

For more information about the changes to folder tree functionality, see the [User Manual for Cisco Unified Contact Center Management Portal Release 9.0\(1\)](#).

SQL Server 2008 R2 64-Bit Support

For Unified CCMP 9.0(1), Microsoft SQL Server 2008 R2 64-bit is supported. Microsoft SQL Server 2005 32-bit is not supported in Unified CCMP 9.0(1).

Browser Support

Unified CCMP 9.0(1) supports Microsoft Internet Explorer versions 7, 8 and 9.

Congestion Control

In Unified CCE Release 9.0(1), a new Congestion Control feature is available to protect against overloading the Central Controller during high call volume. When you enable Congestion Control, new calls that exceed the calls per second (CPS) capacity of the contact center are rejected and treated by the routing clients at call-entry point. This avoids overload on the call router and ensures as designed call-processing throughput.

The measured CPS at the router is the trigger to identify congestion in the system. For a given deployment, the supported capacity is set when the deployment type is selected. The router measures the incoming new call requests from all the routing clients and computes a moving weighted average over the sample duration. The congestion control algorithm uses three congestion levels and rejects and treats the incoming calls as per the reduction percentage for that level. The change in congestion level is communicated to the

NIC, and PG routing clients. The routing clients start rejecting and treating calls based on reduction percentage. The routing clients can treat the calls based on the defined (configured) treatment mode.

For more information, see the [Cisco Unified Contact Center Enterprise Solution Reference Network Design \(SRND\)](#).

Database Schema Changes in Release 9.0(1)

There are several database changes in Unified CCE Release 9.0(1) in support of Precision Routing and Congestion Control. Changes include new tables, modified tables, and deleted tables. The Enhanced Data Migration Tool (EDMT) was updated to apply the new schema transformations and perform data migration.

Note Beginning with Unified CCE Release 9.0(1), the Database Partitioning feature is obsolete.

New Tables

The following new tables were added to the Unified CCE Database Schema for Release 9.0(1):

- Agent_Precision_Q_Real_Time
- Attribute
- Bulk_Job
- Congestion_Control
- Precision_Q_Real_Time
- Precision_Q_Step_Real_Time
- Precision_Queue
- Precision_Queue_Step
- Precision_Queue_Term
- Router_Queue_Interval
- System_Capacity_Real_Time

For descriptions of the new tables and their fields, see the [Database Schema Guide for Cisco Unified Contact Center Enterprise Release 9.0](#).

Changed Tables

The following tables were changed in the Unified CCE Database Schema for Release 9.0(1):

- ICR_Globals
- Agent_Desk_Settings
- Agent_Real_Time
- Agent_Skill_Group_Interval
- Agent_Skill_Group_Real_Time
- Call_Type_SG_Interval
- Peripheral

- Routing_Client
- Routing_Client_Five_Minute
- Skill_Group
- Skill_Group_Interval
- Termination_Call_Detail

Deleted Tables

The following tables were deleted from the Unified CCE Database Schema for Release 9.0(1):

- ICR_Spaceused
- Assignment_Queue
- Assignment_Queue_Attribute
- Assignment_Queue_Member
- Galaxy_Agent_Call_Count
- Galaxy_Agent_IGroup
- Galaxy_Agent_Performance
- Galaxy_Alarm
- Galaxy_DNIS
- Galaxy_Gate
- Galaxy_Gate_Delayed_Call
- Galaxy_Overflow
- Galaxy_PBX
- Galaxy_Single_Trunk
- Galaxy_Transaction_Code
- Galaxy_Trunk_Call_Count
- Galaxy_Trunk_IGroup

EMSMON Changes

Beginning in Unified CCE Release 8.5(2) with support for Windows Server 2008 R2, the traditional Unified CCE process command windows are no longer available. Instead, users can use the EMSMON utility and the Diagnostic Portico.

For more information about EMSMON and the Diagnostic Portico, see the [Serviceability Best Practices Guide for Cisco Unified ICM/Contact Center Enterprise & Hosted](#).

JRE Version

Unified CCE Release 9.0(1) supports and installs JRE Platform 1.6, Product 1.6.0_30 during the installation.

CTI OS9.0(1) Java CIL supports JRE Platform 1.6, Product 1.6.0_30.

1-2-2 Call Model in Reverse Conference

If you are an API developer, 1-2-2 Call Model in Reverse Conference changes the way partners use the CTI Server protocol.

A standard conference is when a customer calls agent 1 (primary call), agent 1 consults agent 2 (secondary call), and then agent 1 completes the conference.

A reverse conference occurs when agent 1 retrieves the first call before completing the conference. The CTI OS desktop does not allow this operation, but the desk phone, the CTI API, and other desktops do support the reverse conference. In these cases, the secondary call persists.

The conference event that reports reverse conference as 2-1-2 in the conference event, where the final call is retrieved from the connection list. With this change in Release 9.0(1), the reverse conference is reported as 1-2-2, and receives a connection cleared event for 1 while the conference is in progress.

If a partner application that is integrated with the CTI Server assumes that the primary call always persists, and if after the merge, a call cleared event for the primary call is received, then a reverse conference can result in the call disappearing from the custom client desktop. To determine the final Call ID for the Unified CCE CTI Server protocol, use the connection list in the conferenced event.

Testing Reverse Conference (for non-API developers)

If you are not an API developer, to test the impact on third-party applications, run this call flow with three phones and two agents:

1. From an unmonitored phone, call Agent 1.
2. Agent 1 calls Agent 2.
3. Agent 1 places the active call on hold
4. Agent 1 completes the conference.
5. Confirm whether call appearance is present for Agent 1 and Agent 2.

If you cannot complete this call flow from your desktop application, you can run it from a hard phone.

Non-Voice Agent PG Support is Deprecated

In Release 9.0, PG configuration through PG Setup and PG Explorer continues to support a non-voice option. On a non-voice agent PG, non-voice media routing domain applications can manage agents on the system without associating a Cisco Unified Communications Manager (UCM) instance to those agents. (An MR PG is installed to route non-voice tasks to these agents; however, the agents do not receive voice calls.)

In a future release of Unified Contact Center Enterprise, the non-voice PG configuration option will be removed. The current release thus positions the feature as deprecated.

Standard multi-media agent support with both MR and agent PG (UCM) components, as is deployed with the EIM/WIM option, is unaffected by this change.

PIM and NIC Support with Windows Server 2008 R2

Peripheral Interface Module (PIM) support in Windows Server 2008 R2 is provided for the following Peripheral Gateways:

- Agent Routing Services

- Avaya (Definity)
- Avaya Aura CC (Symposium)
- CUCM
- MediaRouting
- NonVoiceAgent
- UCC Enterprise Gateway
- UCC Express Gateway
- UCCE System
- VRU

The following PGs are available as part of PG Setup; however, the third-party vendor has not completed support on Windows Server 2008 R2.

- Aspect Call Center
- Aspect Spectrum (Rockwell)

The following PGs are no longer supported in 9.0(1):

- DMS100
- Expert Advisor

Note The PG names in Configuration are up to date; however, the names in the ACD Supplements may not be up to date.

The following network interface controllers (NICs) are fully supported unless otherwise indicated:

- AT&T*
- CRSP
- CWC*
- GKTMP – deprecated
- ICRP – deprecated
- INCRP
- MCI**
- Nortel
- NTL
- Sprint – This NIC is undergoing testing and is not yet fully supported.
- SS7InNic*
- Stentor**
- TIM*
- Unisource*

* These NICs are connected to the IXC switching domain through their respective Sigtran or SS7 Gateways (NGW). The SS7 Gateways (for example, ATGate, ITUGate, and INAPGate) require SS7 interface hardware cards. Due to a device driver dependency, those cards are not supported in Windows Server 2008 R2. For deployment options, see the [Hardware & System Software Specification \(Bill of Materials\) for Cisco Unified ICM/Contact Center Enterprise & Hosted](#).

**These NICs appear in the user interface but are not supported.

Progger Deployment

Beginning with Unified CCE Release 9.0(1), Progger deployment types are deprecated. For configurations with less than 1000 agents, Packaged Contact Center Enterprise is the suggested deployment type. For more information about Packaged Contact Center Enterprise, see the Packaged Contact Center Enterprise Administration Guide Release 9.0(1).

North American Local Exchange NPA NXX Database Update

For those that use Outbound Option, the region prefix has been updated for accuracy.

Obsolete Configurations

Beginning with Unified CCE Release 9.0(1), the following configuration types are obsolete:

- Multi-NAM
- 4K Multi-CTI OS
- Multi-Instance CTI OS
- Multi-Instance SIP Dialer

QoS Implementation and Support

In Unified CCE Release 9.0(1), the Microsoft Packet Scheduler (for Router/Router, PG/Router, and PG/PG connections) is no longer available. The ability to enable Packet Scheduler on the PG Setup was also removed.

For Microsoft Windows Server 2008, the Microsoft facility for DSCP packet markings (the IP_TOS socket option) was removed. Subsequently, for Microsoft Windows Server 2008, packet markings are now made with locally created QoS Policy entries. Note that the functional result for Microsoft Windows Server 2003 and 2008 installations is the same.

Note Due to the removal of the IP_TOS socket option from Microsoft Windows Server 2008, applications that include the Silent Monitor Server and the CTI OS server can no longer set ToS markings for outgoing packets.

The CTI Client Interface Library (or CIL) also implemented QoS support with the IP_TOS socket option; this functionality is supported under Windows XP, but not under Windows Vista or Windows 7. Therefore, any CIL-based CTI Client on Microsoft Vista or Windows 7 cannot rely on the TOS (Type of Service) parameters in the connection libraries to properly mark packets. A policy-based QoS arrangement (similar to that taken on Unified CCE services) is not in the CIL because that approach relies on administrator or elevated privilege, and Cisco cannot guarantee that client installation programs, or the client applications themselves, will have the required privileges to add, delete, or modify a QoS Policy. Due to the large number of CTI Clients in any installation, Cisco supports an Active Directory administered QoS Group Policy. An Active Directory administered QoS Group Policy will drive consistency across the client installations. If a locally created QoS Policy is deemed necessary, use the IGroupPolicyInterface to programmatically manage policies.

Virtualization: UCS Network Configuration and QoS

In a UCS network configuration, you must enable QoS for both the private network connections (between Side A and B) and the public network connections (between the Router and the PG) in Unified CCE setup. For more information, see the [Cisco Unified Contact Center Enterprise Solution Reference Network Design \(SRND\)](#).

Scripting: Call Type node

This node was enhanced to use a formula expression to dynamically match the configured call type name or ID.

Siebel Driver for Avaya Aura CC (Symposium)

Beginning with Unified CCE Release 9.0(1), the Siebel driver for Avaya Aura CC (Symposium) is deprecated.

SingleSkillGroupAbandon Registry Key

The SingleSkillGroupAbandon router registry key (found on the router under: HKLM\Software\Cisco System, Inc.\ICM(instance)\Router(side)\CurrentVersion\Configuration\Queuing), first introduced in Release 7.x, is deprecated in Release 9.0(1) and is to be removed in a later 9.x release. When this key is removed, the behavior of the system will be the same as setting the key value to 1.

Sub-Skill Groups Not Supported in Unified CCE 9.0(1)

As of Release 9.0(1), sub-skill groups are not supported in Unified CCE 9.0(1). Support for sub-skill groups continues, however, for Unified ICM 9.0(1) – and thus for the following TDM peripheral gateways: Avaya (Definity), Avaya Aura CC (Symposium), and Aspect Spectrum (Rockwell).

You cannot upgrade to Unified CCE 9.0(1) until all Unified CCE sub-skill groups are removed from the older system. Any attempt to upgrade to Unified CCE 9.0(1) while Unified CCE sub-skill groups are present will fail.

To confirm that no Unified CCE sub-skill groups are on the system, before beginning an upgrade, run the Sub-Skill Group Evaluator (SSGE) utility. The SSGE utility is part of the Enhanced Database Migration Tool (EDMT) for Unified CCE 9.0(1). For information about how to obtain EDMT and run the SSGE utility, see the upgrade guide.

If Unified CCE sub-skill groups are found, the Sub-Skill Group Evaluator generates a report that includes a list of affected sub-skill groups, base skill groups, enterprise skill groups, agent memberships, and associated scripts.

The impact of removing residual Unified CCE sub-skills varies based on the customer configuration. If you deployed no sub-skills for Unified CCE, no effort is required. If you deployed sub-skills, you must change corresponding script and agent associations – if associations exist, you cannot remove the sub-skills. To remove sub-skills, you may need to complete one or more of the following tasks:

- Modify call routing and scripts.
- Modify Enterprise skill groups.
- Modify agent memberships of base skill groups.
- Move agents to new skill groups

Some reports and reporting data may no longer be available.

Support Tools

Beginning with Unified CCE 8.5(1), Support Tools are no longer available. The following serviceability tools replace Support Tools:

- **RTMT Analysis Manager** (with diagnostic capabilities only). Analyze Call Path is not supported.
- **Unified SystemCLI**

Sybase Integrity Check Tool

Beginning with Unified CCE Release 9.0(1), the Sybase Integrity Check Tool is deprecated.

Video Contact Center

Video Remote Expert is a feature that is available with Unified CCE, Release 9.0(1). Video Remote Expert is a video kiosk that can connect customers to a remote expert agent with the press of a single button. The customer and the agent are then connected with a high-quality video feed and can share documents back and forth as well as perform financial transactions.

For more information, see the Video Remote Expert chapter in the [Cisco Unified Contact Center Enterprise Solution Reference Network Design \(SRND\)](#).

Important Notes

The following section provides information on limitations and other considerations related to Unified CCE Release 9.0(1).

Agent Targeting Rules versus Device Target Configuration

Device Targets are deprecated in Unified CCE Release 9.0(1). Customers who use Device Targets can continue to do so for Unified CCE.

Based on configured agent targeting rules, if an agent attempts to log into an extension to which the router cannot target a call, the peripheral gateway rejects the login request and returns an error that identifies why the login request failed.

For call routing in UCM Agent PG, configure the extension range in the Agent Targeting Rules in Unified CCE.

Note If an agent extension in the Agent Targeting Rule is modified or deleted while the agent is logged in, the agent can continue to log in with that extension until the active PIM restarts. After the active PIM restarts, the agent can no longer log in with that extension.

Note The above described behavior will be modified in a future product update. Upon modification of an agent extension, the agent will no longer be able to log in regardless of whether the active PIM restarts.

Cisco IP Communicator

Cisco IP Communicator (CIPC) is not supported for Mobile Agents.

Consult or Single-Step Transfer

You cannot complete a consult or single-step transfer from an agent that is logged into the CTI OS agent desktop on the Tandberg E20, EX60 and EX90 phones. You must disable Agent Greeting on the CTI OS desktop for these phones.

CCAgent Process Memory Leak

Cisco testing of Unified CCE with the Windows Server 2008 R2 operating system identified a memory leak in the ccagent communications process. The problem appears under certain PG connect retry scenarios and can, over time, accumulate sufficient process memory as to erode performance and – in a worst-case scenario – cause communication between the central controller and PG to fail.

The root cause is an internal Windows Server handle leak. Microsoft has released a hotfix to address the issue, referenced from Knowledge Base case 2627484. Unified CCE customers should obtain and install the fix on their Windows Server 2008 R2 SP1 systems. To view details, go to <http://support.microsoft.com/kb/2627484>.

Imported Configuration Data

For duplexed Loggers, if you use the ICMDBA tool to manually import configuration data on one side of the Logger, you must manually synchronize the configuration data on the partner Logger side before you start the partner Logger services. You must also use the Initialize Local Database tool to reinitialize the configuration data on all of the connected Administration Workstations.

Ring No Answer Timeout

For Unified CCE deployments with Unified CVP, configuring Ring No Answer (RNA) timeout in Unified CVP is the supported option. This removes the requirement to manually align the relevant Unified CVP and Unified CCE timer configuration. (If you configure Ring No Answer timeout on Unified CVP, you need not configure RNA timeout in Unified CCE.)

To configure RNA timeout in Unified CVP, see the “Patterns for RNA timeout on outbound SIP calls” section in the Unified CVP OAMP console.

For Unified CCE deployments that are not based on Unified CVP, you must configure RNA timeout in Unified CCE (using the Agent Desk Settings List Tool on the Unified CCE Administration Workstation).

After a Unified CVP requery due to the RNA condition, after the call is revoked, the agent is transitioned to the Not Ready state.

Uninstall of Unified CCE with Add/Remove Programs not Supported

If you use Add/Remove Programs to uninstall Unified CCE, it can leave the system in an undefined state and, in some cases, hinder subsequent reinstallation of the same or different Unified CCE version. To

successfully uninstall Unified CCE, follow the upgrade procedure in the [Upgrade Guide for Cisco Unified ICM/Contact Center Enterprise & Hosted Release 9.0\(1\)](#).

Microsoft Windows Server 2003

In Unified CCE Release 9.0(1), Microsoft Windows Server 2003 is no longer supported.

Microsoft Windows Server 2008 R2 SP1

Migration to Microsoft Windows Server 2008 R2

Microsoft does not provide an upgrade path from 32-bit Windows Server 2003 to 64-bit Windows Server 2008 R2. Therefore, a common-ground upgrade for Unified CCE and CTI OS systems is not supported. Details on a “Technology Refresh” on Windows Server 2008 R2 SP1 are available in the [Upgrade Guide for Cisco ICM/Unified Contact Center Enterprise, Release 9.0\(1\)](#). You can run a technology refresh upgrade to Release 9.0(1) for new hardware (or on existing 64-bit hardware, if you were previously running 32-bit Windows Server 2003 and Windows Server 2008 R2 is being newly installed) from Release 8.0(x), 8.5(1), 8.5(2), or 8.5(3).

Details on a “Fresh Install” on Windows Server 2008 R2 SP1 are available in the [Installation Guide for Cisco Unified ICM /Unified Contact Center Enterprise, Release 9.0\(1\)](#).

Microsoft Windows Server 2008 R2 SP1 Security Considerations

Microsoft Windows Server 2008 R2 User Account Control

Microsoft User Account Control (UAC) enhances security by limiting applications to standard user privileges until an administrator authorizes a privilege increase or elevation. UAC is turned on by default in Windows Server 2008 R2 SP1.

A user account may have administrator privileges assigned to it, but applications that the user runs do not inherit those privileges, unless those privileges are approved beforehand or the user explicitly authorizes the privileges. Unified CCE Tools requiring Setup privileges run with elevated privileges. If a user who is not an administrator attempts to run these tools, the user will be prompted for administrative credentials.

For more information about UAC, see the User Account Control Step-by-Step Guide:
[http://technet.microsoft.com/en-us/library/cc709691\(WS.10\).aspx](http://technet.microsoft.com/en-us/library/cc709691(WS.10).aspx)

Microsoft Network Access Protection Considerations

Network Access Protection (NAP) is a Microsoft platform and a feature for Windows Server 2008 R2 SP1. For more information about the impact of NAP on Unified CCE, see the [Security Best Practices Guide for Cisco Unified ICM/Contact Center Enterprise & Hosted](#).

Contact Center Networking

The following networking features are not disabled by default in Microsoft Windows Server 2008 R2 and are not supported:

- Receive Side Scaling (RSS)
- TCP Chimney Offload

For more information, see the following DocWiki posting: [Contact Center Networking: Offload, Receive Side Scaling and Chimney](#).

Microsoft SQL Server 2005

In Unified CCE Release 9.0(1), Microsoft SQL Server 2005 is no longer supported.

Viewing the Status of Unified ICM/CCE Processes

For Release 9.0(1), Unified CCE process windows do not appear in the taskbar. This is due to security constraints in Windows Server 2008 R2 and means that the user can no longer use the taskbar to view process status information, for example, whether a process is active.

To address this issue, the user can view process status information in the Diagnostic Framework Portico, or use the updated EMSMON application to provide additional information that previously appeared in the title bar of process window. See the [Serviceability Best Practices Guide for Cisco ICM/Unified Contact Center Enterprise](#) for more details on using the Diagnostic Framework Portico. EMSMON changes are described in this document in the section *EMSMON Changes*.

Websetup and Diagnostic Framework Portico tools fail to launch

During an upgrade from Unified CCE 8.x(x) to Unified CCE 9.0(1) on a Rogger server the Websetup and Diagnostic Framework portico tools fail to launch.

To launch the Websetup and the Diagnostic Framework Portico tools:

1. Stop the Tomcat service.
2. Remove the following registry key: HKEY_LOCAL_MACHINE\SOFTWARE\Cisco Systems, Inc.\ICM\ActiveInstance
3. Restart the Tomcat service.

Open Caveats

This section contains a list of all Severity 1–2, and all customer found defects that are currently pending in Unified CCE Release 9.0(1). Defects are listed by identifier and then by component.

Identifier	Component	Severity	Headline
CSCua31234	netgwy	2	INAP Gateway drops IDP message with Called Number after Calling Number
CSCua44856	documentation	3	CTIOS Dev Guide should say dumpargs does not work with call vars
CSCtx17238	router	3	Call/ECCRussianVariables used by DBWorker is garbled in CAD/CTI Desktop
CSCtx54940	documentation	3	ICM/UCCE 8.X and Higher Systems Missing Key Help Files

Identifier	Component	Severity	Headline
CSCtz91654	documentation	3	Compatibility matrix for NAM and CICM releases
CSCua44869	documentation	3	trace mask for callvariable logging needs to be documented
CSCua25108	outbound	3	Blank CallingDeviceID in any Inbound call to CTISvr drops Dialer calls
CSCua29106	web.setup	3	Websetup for Logger doesnt define public medium address
CSCua36577	outbound	3	baDialerminidump when attempting a call back
CSCua36583	pg.opc	3	CAD outbound call the DNIS changes to X1 & last DNIS changes to -1
CSCua40900	ctios.server	3	EnablementMask incorrect when caller hangs up before NR agent answers
CSCua40936	ctios.server	3	Wrong CTIOS enablement mask when Silent Monitor ends after the call
CSCua41675	documentation	3	Database Schema Handbook updates to clarify why null values
CSCua43144	pg.opc	3	PG OPC does not generate agent outbound option completed tasks data
CSCth57786	db.logger	4	Incorrect retention period seen in ICMDBA-Space used summary
CSCua18776	ctios.client	4	CTIOS 8.5(3) Sample CTIOS Agent & Sup Desktops doesnt match exe

Resolved Caveats

This section contains a list of all Severity 1–2, and all customerfound defects that were resolved Unified CCE Release 9.0(1). Defects are listed by identifier and then by component.

Identifier	Severity	Component	Headline
CSCtz03031	2	router	Unexpected router restart when an object is deleted
CSCtf33321	2	pg.opc	Additional CD 34 and 13 with incorrect PCT seen during NBT load.
CSCtx30865	2	outbound	Campaign Manager crashes
CSCtr46454	2	aw	ICMDBA Estimator application broken in 8.x
CSCtx52458	2	pg.opc	Skill groups have stale TalkingOther value.
CSCts10730	2	icmccinstaller	Upgrade of AW Server from ICM 7.5 on Win2K3

Identifier	Severity	Component	Headline
			to ICM 8.5 on Win2k8 Fails
CSCtx98842	2	pg.opc	OPC asserts on network transfer
CSCty05388	2	db.logger	Purge fails with SQL Server User Error 241
CSCty09668	2	outbound	SIP Dialer restarts when the 183 message does not have MIME content.
CSCty40034	2	router	UserToUser field is not populated in Route_Call_Detail
CSCtu07032	2	router	RTS process asserts due to Heap Corruption (varying ScriptRealTime size)
CSCty75818	2	pg.opc	OPC is not resetting the AS_RT_DURATION_TASK_LEVEL to the current time
CSCty77092	2	pg.cucm.jtapi	PIM not queingRTP events breaking silent monitoring in CAD.
CSCtu29054	2	pg.definity	ECSPIM getting restarted because PIM running into deadlock condition
CSCtu39531	2	pg.cucm	Calls pulled by CUCM RONA then reroute to ICM are dropped intermittently
CSCtu40014	2	serviceability.snmp	unable to poll windows snmp events on windows 2008 x64
CSCtz87247	2	pg.opc	HLGR process assertion caused by Symposium PIM agent state discrepancy
CSCtz93867	2	pg.opc	LoggedOnTime field reporting mismatch in Parent and Child
CSCtx22088	2	outbound	Dialer Reservation port getting stuck
CSCty74516	2	db.icmdba	DBEstimator link is broken
CSCtz41976	2	router	Router unexpected restart after skill group is deleted
CSCtz58857	2	db.logger	Default bucket interval (ID 1) is allowed to be deleted
CSCua26428	2	mds	Call Failures during Router Side A recovery post failover
CSCtx30029	2	pg.cucm	Conference fail to disconnect properly from Agent desk if UM dev involved
CSCtx54781	2	pg.opc	Op asserts on doing failover during state transfer message exchange
CSCty94663	2	pg.opc	Stale calls are seen in opc upon 12k agent load

Identifier	Severity	Component	Headline
CSCtz68203	2	pg.vru	VRU PIM asserts during mixed call load
CSCtx81165	2	pg.cucm	Login with Long Instrument String Causes All Agents to Log Out
CSCtz64535	2	pg.opc	OPC rolled back the reporting interval when handling config update
CSCtz70827	2	cg.ctiserver	CTI server crashes under 2000 agents longevity load
CSCua28943	2	ctios.server	Agent Logout --> CTIOS server CPU spike, pim crashes, unknown agent state
CSCtz69516	2	pg.cucm	EA PIM Crash during whisper announcement load
CSCty58383	3	ctios.client	CTIOS Supervisor losing visibility for SKillGroup that was member of.
CSCtz91703	3	documentation	CTI failover 60 sec interval needs to be documented in the SRND
CSCtr73354	3	pg.opc	Reverse conference call is not counted as Handled in SkillGroup table
CSCts55747	3	outbound	SCCP dialer dials second phone number after abandon to IVR
CSCts63991	3	outbound	Campaign Manager Crash
CSCty22273	3	pg.opc	Incorrect Skill Group Utilization
CSCtz97548	3	documentation	Unified System CLI - Quick-Start Guide needed
CSCtt38209	3	pg.acmi	NBT and local Warm Transfers (at child) do not work simultaneously
CSCtt40496	3	pg.cucm	Missing agent state events for newly added skills to CTIOS
CSCtt44200	3	pg.definity	EMSDisplayToScreen for ECSPIM is set to 1 in ICM installation
CSCtt98905	3	pg.cucm	Agent goes to wrap up for internal calls even with "Not Allowed" setting
CSCtu00339	3	pg.cucm	Connection Cleared is not sent by JGW when External party hangs up
CSCty25465	3	pg.acmi	Agent stuck in NotReady in Skill Group on Parent
CSCtu23947	3	ctios.client	TimeNotReadyToday incorrect in .NET Combo Sample
CSCty29543	3	documentation	SIP Dialer Guide needs tested & supported PSTN interfaces

Identifier	Severity	Component	Headline
CSCtu33458	3	pg	RONA fails for Transferred calls that were Outbound Dialer originated
CSCtu42507	3	pg.opc	CallsHdlTdy not incremented in CTIOS Agent Statistics for Target Requery
CSCtu73809	3	pg.cucm.jtapi	CAUSE_CTICCMSIP486BUSYHERE is not recognized by JTAPI Gateway (JGW)
CSCtw64029	3	aw.tools	Only A Single Session (1) Allowed to Launch AW Tools on CAW
CSCtw78448	3	pg.opc	Incorrect task state makes Application cannot Resume/End the Media Task.
CSCtw85578	3	pg.cucm	ICM disconnects a call for TEMPORARYFAILURE
CSCtw88666	3	aw.tools	Re-Skilling Tool gives SQL Error when adding/removing skills with IE 8
CSCtx15506	3	pg.cucm	Incorrect Wrapup time
CSCtx19208	3	scripteditor	Script editor asserts while reloading icm configuration
CSCtx21921	3	aw.tools	Error Failed to update database when creating the Agent Id
CSCty30838	3	documentation	LicenseAdmin.exe for CAD requires Netbios setting NIC to be enabled.
CSCtz00154	3	pg.opc	Agent_Skill_Group_Interval not written when agent is reskilled
CSCtx66369	3	cg.ctiserver	CTISvr doesn't failover on Public NW disconnect if CAD in same server
CSCty13639	3	tools	dumplog tool fails to dump log
CSCtz53126	3	documentation	ATT SigtranGW Web Setup - Point Code format should be discussed in help
CSCtz54362	3	pg.cucm.jtapi	uncaught exception in ThreadAddCallObserverTimeout in JGW
CSCty46433	3	documentation	Misleading information on Troubleshooting VOIP Monitoring document
CSCty47032	3	ctios.client	CTI Toolkit Combo Desktop.net showing unknown text
CSCty16732	3	pg.vru	VRU PIM QoS Policy is incomplete on Windows 2008
CSCtz78448	3	serviceability.snmp	UCCE/ICM Greater than 7.5(9) and CVP 8.X Wrong SNMP Memory Calculation

Identifier	Severity	Component	Headline
CSCtz79232	3	documentation	SE Real-Time Display help should be updated
CSCty89124	4	aw.tools	Person List & Person Bulk Edit password fields do not update as expected
CSCtn99267	4	aw-bulk.config	Cmd line Bulkload utility has inconsistent columns vs bulk tools in 8.X
CSCtt00465	4	install	SpectrumPIM install pop-up error: PG with TCP/IP Conn need X.25 Card
CSCtt32155	4	pg	VRU PIM will not function when configured with port 5122
CSCtz68862	4	documentation	AvailAfterIncomingAvailAfterOutgoing still available in the icm schema
CSCty58120	4	ctios.client	C# combo desktop w VS 2010 in debug mode has Handle error
CSCty58322	4	pg.opc	OO reservation Agent_Skill_Group_Real_Time.AgentState should be TALKING
CSCty42951	4	pg.opc	IVR Ports Performance Historical report
CSCtx54955	4	documentation	Running \icm\CTIOS_bin\setup.exe overwrites connection profile
CSCtu21554	5	router	Change to reason code list produces error on Call Router.
CSCtg87607	5	reporting.webview	"Log On DateTime" uses 2 lines when agtskg20 is used with thresholds
CSCtu27131	5	db.icmdba	ICMDBA not showing correct 'KB' units for large Data size

Bug Search Tool

If you have an account with Cisco.com, you can use the Bug Search tool to find caveats of any severity for any release. Access the Bug Search tool at <https://www.cisco.com/cisco/psn/bssprt/bss>. Enter the bug identifier in the search box and press return or click **Search**.

Troubleshooting

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

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