



Release Notes for *Cisco Remote Silent Monitoring Release 8.0(1)*

March 09, 2010

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Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

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Introduction

This document discusses the features and caveats for Cisco Remote Silent Monitoring (RSM) Release 8.0(1). RSM allows for real-time, phone-based monitoring of agents in Cisco's Unified Contact Center Enterprise (Unified CCE) environment. The RSM platform is installed on a Windows operating system as a single server instance, and a separate call flow script is hosted on an IP IVR or CVP (VRU) platform.

Remote Silent Monitoring Release 8.0(1) supports the following software releases:

- Cisco Unified Communications Manager (Unified CM) version 6.x, 7.x, and 8.x
- Cisco Unified Contact Center Enterprise (Unified CCE), version 7.2(x), 7.5(x), and 8.0(x)
- Cisco IP IVR, version 5.0(x), 7.0(x), and 8.0(x)
- Cisco Unified Customer Voice Portal (CVP) versions 4.1(x) and 7.0(x)
- Microsoft Windows 2003 Server R2 or SP2, or Cisco OEM Windows 2003 OS

About Release 8.0(1)

Cisco Remote Silent Monitoring Release 8.0(1) is a major release, delivered in an installer. The installer supports both a full installation of RSM 8.0(1) as well as support for upgrading all previously released base versions of RSM, as described below. The installer is available from www.cisco.com.

Supported Base Install Versions

This release has been tested to be compatible with the following base releases: Cisco RSM 1.0(1), 1.0(2), 1.0(2) ES1, 1.0(2) ES2, 1.0(2) ES3, and 1.0(2) ES4.

**Caution**

If you are updating from a previous version of RSM, the VLEngine and PhoneSim services are stopped during installation and then re-started once installation is complete. Thus, all monitoring sessions in progress will be terminated, and no new sessions can be initiated until installation is complete.

The release can be uninstalled via Control Panel > Add or Remove Programs.

**Note**

The most up-to-date version of these release notes is available on the Web at http://www.cisco.com/en/US/products/sw/custcosw/ps1844/prod_release_notes_list.html

System Requirements

For Unified CM and Unified CCE specifications required for this release, refer to the *Hardware and System Software Specification (Bill of Materials): Cisco ICM/IPCC Enterprise & Hosted Editions*, which is accessible from

http://www.cisco.com/en/US/products/sw/custcosw/ps1844/prod_technical_reference_list.html

See the *Cisco Remote Silent Monitoring Installation and Administration Guide* for detailed information on RSM hardware requirements, which are based on anticipated monitoring sessions and agent usage.

Anti-Virus Software Requirements

RSM requires the use of one of the following Cisco approved anti-virus software:

- Trend Micro ServerProtect 5.7
- McAfee VirusScan Enterprise 8.7i
- Symantec Endpoint Protection 11.0

Refer to Chapter 2, Cisco Hardware and Software Requirements, of the *Cisco Remote Silent Monitoring Installation and Administration Guide* for BOM information.

Related Documentation

Documentation for Cisco Unified Contact Center Enterprise and Hosted Editions, as well as most related documentation, is accessible from

<http://www.cisco.com>

- Related documentation includes the documentation sets for Cisco CTI Object Server (CTI OS), Cisco Agent Desktop (CAD), Cisco Agent Desktop - Browser Edition (CAD-BE), Cisco Unified Contact Center Management Portal, Cisco E-Mail Manager Option, Cisco Web Collaboration Option (including Cisco Collaboration Server, Cisco Dynamic Content Adapter, Cisco Media Blender), Cisco Unified Customer Voice Portal (CVP), Cisco IP IVR, Cisco Support Tools, and Cisco Unified Communications Manager.
- Technical Support documentation and tools can be accessed from <http://www.cisco.com/en/US/support/index.html>
- The Product Alert tool can be accessed through <http://www.cisco.com/cgi-bin/Support/FieldNoticeTool/field-notice>

New and Changed Information

The following new features have been introduced for Cisco Remote Silent Monitoring Release 8.0(1).

Extension Mobility

RSM 8.0(1) release now supports monitoring agent phones using Communications Manager Extension Mobility feature. Previously, conversations would terminate when an attempt was made to monitor these type of agent phones.

Multi-Cluster Support (Load Balancing and Failover)

RSM 1.0(1) provided the ability to connect to two Communications Managers and CTI Manager servers using JTAPI, AXL, and SIP, and two CTI OS servers for each cluster. RSM 1.0(2) and higher increased this CTI OS server limit to eight CTI OS servers for each cluster (e.g., four pairs of two servers each).

RSM now provides connection redundancy for each Communications Manager cluster, and simulated phone registrations are balanced across the two Communications Managers. The JTAPI startMonitoring request accesses the primary Communications Manager server, and falls back to the secondary server upon failure.

SupervisorID Enhancement

The canMonitorAgentID.jsp API has been modified to allow for non-supervisor permission checks of agentIDs. Refer to the SupervisorID and AGENT_CANT_MONITOR parameters in the “canMonitorAgentID.jsp” topic in Appendix A, API Extensions.

Outbound Option Support

Cisco RSM now supports the Cisco Outbound Option.

Now, when monitoring an Outbound Option call, and choosing option 1 to play call information, RSM will play the proper call type (i.e., Outbound Option) and customer ANI number.

Cisco RSM will automatically filter the Outbound Option reservation calls, so that the supervisors using Cisco RSM with Outbound Option do not unintentionally start monitoring (virtual) reservation calls. All Outbound Dialing modes, namely, Preview, Preview Direct, Progressive, Predictive, and Callbacks are now supported by Cisco RSM.

Since reservation calls are ignored, there are no stale call objects to persist in the system. Additionally, support of this feature has no impact on Inbound monitoring, and no new menu prompts, or changes to existing prompts, have been introduced.

Support is provided for both Cisco Skinny (SCCP) and SIP dialers (SIP dialers option available for UCC 8.0(x) and higher only).

Limitations and Restrictions

The following notes describe the known limitations of Cisco Remote Silent Monitoring Release 8.0(1) in a Cisco environment, as well as information about other important system integration issues.

Monitoring of Simphones via Supervisor Desktop

Currently, you cannot monitor RSM simulated supervisor phones (i.e, simphones) via Cisco Supervisor Desktop (CSD), as the simphones are purposefully added to the Communications Manager platform with their BiB (built-in-bridge) disabled.

Failover Redundancy and Load Balancing with CVP

Currently, RSM does not support load balancing and clustering if CVP is used as a VRU. (Load balancing support is defined as the association of multiple RSM servers so that the incoming request load is distributed among them. Failover redundancy is defined as the association of RSM servers so that if one fails, the others will act in its place.)

Mobile Agent Support

RSM uses the Unified Communications Manager (Unified CM) monitoring mechanism, which currently does not support Cisco Mobile Agent monitoring. Subsequently, RSM does not support monitoring Mobile Agents.

IP IVR HTTP Security

Currently, IP IVR supports only HTTP communication with the RSM server. TLS HTTPS is not supported.

Multiple Clusters and JTAPI Libraries

If a single RSM server is configured to use Unified CM multiple clusters, each cluster's constituent servers must be running the same build of Unified CM. Attaching to multiple clusters running different versions of Unified CM is not supported, as there may be JTAPI library incompatibilities between versions.

Unified CCE Supported IP Phones

Agents must use a third-generation or later Unified CCE supported IP phone with RSM (note that Personal Communicator is not supported by Unified CCE). Phones supported include:

- 7906G, 7911G, 7921G (Aug 08 upd), 7925G, 7931G, 7941G/GE, 7942G, 7945G, 7961G/GE, 7962G, 7965G, 7970G, 7971G-GE, 7975G, 6900, and IP Communicator 7.0(1) and higher. (Note: See "Support for 6900, 8900, 9900 Phones" topic, below, for 6900 information.)

Phones not supported include:

- 7910, 7912, 7940, 7960

All new phones will be supported. For phone support information, refer to the *Cisco Unified Contact Center Enterprise (Unified CCE) Software Compatibility Guide*, accessible from

http://www.cisco.com/en/US/products/sw/custcosw/ps1844/products_device_support_tables_list.html

Support for 6900, 8900 and 9900 Phones

6900, 8900 and 9900 phone models have Join, Join Across Lines (JAL), Direct Transfer, and Direct Transfer Across Lines (DTAL) features, which RSM does not support. 6900 phones allow disabling of these features, and so RSM can support monitoring these phones if these features are disabled; but 8900 and 9900 phones do not allow for disabling of these features, and so RSM does not support monitoring of these phones.

Encrypted Call Monitoring

RSM does not allow for the monitoring of encrypted calls.

Transfers and Alternate Call Monitoring

Transfers and alternate calls require manual intervention to continue monitoring. RSM does not do this automatically. So, when an agent starts a consult call, RSM stops monitoring the customer call, which is now on hold, and starts monitoring the consult call, if desired. When the agent transfers the call to another agent, the RSM monitoring session is terminated.

Agent Monitoring on Hold

An agent can be monitored with RSM only when they are talking on a call. They cannot be monitored while on hold or not on a call. Calls on hold before the supervisor initiates a monitoring session will not be picked up for monitoring. The VLEngine will filter these calls from being monitored by any of the IVR options (e.g., agentid, skill group, newest call, random call or list of talking agents).

However, if the agent puts the caller on hold while being monitored by a supervisor, then the monitoring session is kept alive for the duration of the hold period. If the supervisor exits out of the monitoring session by pressing * or 1 for information or instructions, then they will not be able to resume monitoring. This is due to BiB functionality, where a monitoring call can be established only if the agent is in a talking state.

Monitoring Sessions Per Agent

Unified CM provides for one active monitoring session per agent, as the agent's phone can handle only one active monitoring session and one active recording session at any given time. If a third-party recorder is recording the agent's conversations, the agent can still be monitored by a supervisor using the supervisor desktop or RSM; however, if a RSM-based supervisor and a supervisor desktop-based supervisor both try to monitor the agent simultaneously, the request will fail.

RSM will set up only one monitoring session through Unified CM for a single monitored agent, even if two or more RSM users are requesting to monitor the agent's call at the same time. In this case, RSM forks the stream to cover all RSM users, so that more than two RSM-based supervisors can monitor the same agent. However, if there are multiple RSM servers in the environment that monitor the same agent, they each make a separate monitoring call to that agent.

If the monitoring call limit has been reached for a specific agent, and a dialed-in supervisor then attempts to monitor this same agent, the request will be denied via an audio prompt feedback from the system, stating that the agent cannot be monitored.

Bandwidth

There must be sufficient bandwidth available from the agent IP phone to the RSM server to support the monitoring voice stream, in addition to the regular voice streams for the call. This is important for employees who work remotely, at home, and small branches on limited bandwidth. Regular Call Admission Control (CAC) and bandwidth calculations are applicable for monitoring calls.

Since G.711 is the codec supported for monitoring calls between agent IP phone and RSM server (phonesim), use the Cisco TAC Voice Bandwidth Codec Calculator for additional bandwidth capacity planning, at

http://tools.cisco.com/Support/VBC/jsp/Codec_Calc1.jsp

VLEngine and Email Alerts

Currently, the VLEngine service does not support the sending of email alerts in error situations.

Gateway Memory

1G of gateway memory is recommended for use with RSM, and the gateway can support 40 users.

RSM Requires a Dedicated VXML Gateway

When RSM is used with CVP, the gateway 'IVR prompt streaming for HTTP' needs to be enabled (see Chapter 5 of the *RSM Installation and Administration Guide*). Note that this setting is not recommended for other CVP applications. Therefore RSM requires a dedicated VXML gateway. This gateway must not be used for other CVP applications.

IP IVR Execution Steps

IP IVR can execute up to 25,000 steps per script session. The Max Number of Executed Steps parameter is used to configure this setting, and has a default setting of 1,000 steps.

RSM can reliably monitor up to 10 agents consecutively before the 1,000 steps limit is reached, at which point a system error message is displayed and IP IVR abruptly closes. To enable the monitoring of multiple agents in one session, modify the Max Number of Executed Steps configuration parameter in IP IVR to its upper limit of 25,000. (This value has been successfully tested to monitor at least 40 agents consecutively, with calls up to 600 seconds in duration, and at least one hold event per call.)

For information on modifying the Max Number of Executed Steps parameter, refer to the *Cisco IP IVR/CRS 5.0/7.0/8.0 Administration Guide*, accessible from <http://www.cisco.com/>

Support for Calls Established Before VLEngine Services Start

RSM does not support monitoring calls that have been established before the RSM VLEngine service starts. Only calls that start after the VLEngine starts up can be monitored.

Installation Notes

See the *Cisco Remote Silent Monitoring Installation and Administration Guide Release 8.0(1)* for specific instructions on how to plan, deploy, and integrate RSM into your Cisco environment. This guide also provides important pre-installation tasks that must be considered, including:

- Provisioning the base operating system
- Enabling Unified CM services
- Configuring simulated phones
- Associating simphones with the system pguser
- Adding an RSM application user
- Creating a supervisor login account
- Installing the JTAPI client libraries required to run RSM

**Note**

You will need administration access for both Unified CM and Administration and Data Server (ADS) to perform many of the pre-installation and installation tasks described in the RSM documentation.

Caveats

Using Bug Toolkit

Known problems (bugs) are graded according to severity level. These release notes contain descriptions of the following:

- All severity level 1, 2, and 3 bugs.
- Significant severity level 4 bugs.

You can search for problems by using the Cisco Software Bug Toolkit.

Before You Begin

To access Bug Toolkit, you need the following items:

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

Procedure

-
- Step 1** To access the Bug Toolkit, go to <http://tools.cisco.com/Support/BugToolKit/action.do?hdnAction=searchBugs>.
- Step 2** Log in with your Cisco.com user ID 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**.
-

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

Open Caveats

The caveats in Table 1 describe possible unexpected behavior in the latest Cisco Remote Silent Monitoring release. These caveats may also be open in previous releases. Bugs are listed in order of severity and then in alphanumeric order by bug identifier.



Tip

If you have an account with Cisco.com, you can use the Bug Toolkit to find caveats of any severity for any release. Bug Toolkit may also provide a more current listing than is reflected in this document. To access the Bug Toolkit, log onto http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl

Table 1 *Open Caveats for Cisco Remote Silent Monitoring Release 8.0(1)*

Identifier	Severity	Component	Headline
CSCsy18327	Minor	Installer	All RSM related files and folders must be closed when applying patches
CSCtb44669	Minor	VLEngine	Hardcoded prompt paths in RSM CVP VXML scripts result in wrong prompts

Resolved Caveats

This section lists caveats that are resolved but that may have been open in previous releases.

Bugs are listed in order of severity and then in alphanumeric order by bug identifier. Because defect status continually changes, be aware that this document reflects a snapshot of the defects that were resolved at the time this report was compiled. For an updated view of resolved defects, access the Bug Toolkit (see the “Using Bug Toolkit” section on page 8.)

The following table lists caveats that are resolved in Cisco Remote Silent Monitoring but that may have been open in previous releases:

Release 8.0(1)

Table 2 lists the caveats that were resolved in Release 8.0(1).

Table 2 *Resolved in Release 8.0(1)*

Identifier	Severity	Component	Headline
CSCtd90223	Severe	VLEngine	RSM does not send keepalive message to CTI OS for an established TCP connection
CSCtd90241	Severe	VLEngine	Supervisor cannot authenticate if primary CTI OS is down
CSCsx15392	Severe	Documentation	RSM documentation states wrong Audio Encoding.
CSCsw94056	Moderate	VLEngine	“You will now return to main menu” voice prompt erroneously plays twice
CSCsw94114	Moderate	VLEngine	Agent transfers monitored call, fail to connect to next random call

Table 2 Resolved in Release 8.0(1)

CSCsy18364	Moderate	VLEngine	Playing Newest call from option 2 and 4, plays un-hold-ed as newest
CSCsw94077	Moderate	VLEngine	When agent on hold, the agent is still listed in List of Talking Agents
CSCsw94093	Moderate	VLEngine	When picking random Call, RSM picks calls that are on hold
CSCsw94179	Moderate	VLEngine	Monitoring call gets ended when agent goes on hold more than 10-15 secs
CSCtb44630	Moderate	VLEngine	Inconsistent with the rest of the app where only Sup team is checked
CSCtb42409	Moderate	RSM	Cluster information disappears from the RSM Configuration Manager
CSCtd96359	Moderate	VLEngine	Calls By Skillgroup not displayed properly after re-skill
CSCtf33713	Moderate	PhoneSim	RSM is adding tapping noise to the monitoring session
CSCso85487	Minor	Documentation	The RSM Install and Admin Guide should not list system requirements
CSCsw91302	Minor	VLEngine	RSM support of monitoring agents using Extension Mobility

Troubleshooting

See the *Cisco Remote Silent Monitoring Installation and Administration Guide 8.0(1)* for detailed information on RSM troubleshooting information, including case scenarios and specific fixes, located at

http://www.cisco.com/en/US/products/sw/custcosw/ps1844/prod_installation_guides_list.html

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Field Alerts and Field Notices

Note that Cisco products may be modified or key processes may be determined important. These are announced through use of the Cisco Field Alert and Cisco Field Notice mechanisms. You can register to receive Field Alerts and Field Notices through the Product Alert Tool on Cisco.com. This tool enables you to create a profile to receive announcements by selecting all products of interest.

Log into www.cisco.com; then access the tool at:

<http://tools.cisco.com/Support/PAT/do/ViewMyProfiles.do?local=en>

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