



Release Notes for *Cisco Remote Silent Monitoring Release 1.0(2)*

March 19, 2009

Contents

- [Introduction, page 2](#)
- [System Requirements, page 2](#)
- [Related Documentation, page 3](#)
- [New and Changed Information, page 3](#)
- [Documentation Updates, page 4](#)
- [Limitations and Restrictions, page 5](#)
- [Installation Notes, page 8](#)
- [Caveats, page 8](#)
- [Troubleshooting, page 10](#)
- [Obtaining Documentation, Obtaining Support, and Security Guidelines, page 10](#)
- [Field Alerts and Field Notices, page 11](#)



Introduction

This document discusses the features and caveats for Cisco Remote Silent Monitoring (RSM) Release 1.0(2). 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 1.0(2) supports the following software releases:

- Cisco Unified Communications Manager (Unified CM) version 6.1(x) and 7.0(x)
- Cisco Unified Contact Center Enterprise (Unified CCE), version 7.2(x) and 7.5(x)
- Cisco IP IVR, version 5.0(x) and 7.0(x)
- Cisco Unified Customer Voice Portal (CVP) versions 4.1(x) and 7.0(x)
- Microsoft Windows2003 Server R2 or SP2

About Release 1.0(2)

Cisco Remote Silent Monitoring Release 1.0(2) is a Maintenance Release (MR) for the inaugural RSM 1.0(1) release, delivered in an automated installer. The MR installer does not support a full installation of RSM. It includes only those specific files and configurations that need to be updated or created for the MR. The MR installer is available from www.cisco.com.

**Caution**

During MR installation, the VLEngine and PhoneSim services are stopped then re-started once installation is complete. Thus, all monitoring sessions in progress will be terminated, and no new sessions can be initiated until MR installation is complete.

During installation, the MR installer will check the product version registry key to ensure that the base RSM installation is present on the server, and will then update the key to reflect the MR version. The 1.0(2) MR installer creates a backup directory for all 1.0(1) files, at `C:\CiscoRSM\Backup_<prior version>`, to facilitate rollback to 1.0(1) files and configurations. The MR 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/docs/voice_ip_comm/cust_contact/contact_center/icm_enterprise/icm_enterprise_7_5/user/guide/icm75bom.pdf

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 1.0(2).

Extension Mobility

RSM 1.0(2) 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) increases 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.

Documentation Updates

In addition to the features described above, the *Cisco Remote Silent Monitoring Installation and Administration Guide Release 1.0(2)* has been modified as follows:

- **Chapter 7, Troubleshooting**—The “PhoneSim Log File Error Messages” and “Fatal Error Messages” topics have been enhanced with detailed resolution information.
- **Appendix B, Registry Keys**—The following registry keys have been updated, added or deleted, as per new clustering functionality.

Updated registry keys:

- ClusterN_VLEngine_CTIOS1_HostName
- ClusterN_VLEngine_CTIOS2_HostName
- ClusterN_VLEngine_CTIOS2_Port

New registry keys:

- ClusterN_VLEngine_CTIOS21_HostName
- ClusterN_VLEngine_CTIOS21_Port
- ClusterN_VLEngine_CTIOS22_HostName
- ClusterN_VLEngine_CTIOS22_Port
- ClusterN_VLEngine_CTIOS31_HostName
- ClusterN_VLEngine_CTIOS31_Port
- ClusterN_VLEngine_CTIOS32_HostName
- ClusterN_VLEngine_CTIOS32_Port
- ClusterN_VLEngine_CTIOS41_HostName
- ClusterN_VLEngine_CTIOS41_Port
- ClusterN_VLEngine_CTIOS42_HostName
- ClusterN_VLEngine_CTIOS42_Port

Deleted registry keys:

- ClusterN_VLEngine_CM1_AXL_Port
- ClusterN_VLEngine_CM1_AXL_UserName
- ClusterN_VLEngine_CM1_AXL_Password

- ClusterN_VLEngine_CM2_AXL_Port
- ClusterN_VLEngine_CM2_AXL_UserName
- ClusterN_VLEngine_CM2_AXL_Password

Limitations and Restrictions

The following notes describe the known limitations of Cisco Remote Silent Monitoring Release 1.0(2) 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.

Outbound Option Support

Currently, RSM does not support the Cisco Outbound Option.

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, specifically:

- 7921
- 7941/42/45
- 7961/62/65
- 7970
- IP Communicator 7.0(1) and higher (note that Personal Communicator is not supported by Unified CCE)

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

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. However, if you enable the on-hold beep in Unified CM, which keeps the RTP stream alive while the agent put the caller on hold, RSM will keep the monitoring session alive during the hold period. See open caveat CSCsw94179 in Table 1 below.

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 Administration Guide*, accessible from

<http://www.cisco.com/>

Installation Notes

See the *Cisco Remote Silent Monitoring Installation and Administration Guide Release 1.0(2)* 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 in advance of installation, 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 Admin Workstation (AW) 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 1.0(2)

Identifier	Severity	Component	Headline
CSCso20058	Minor	VLEngine	RSM session abruptly ends when a call has been put on hold, after supervisor selects * or 1
CSCsw94179	Moderate	VLEngine	Monitored call ends when agent is on hold for more than 10 to 15 seconds when MOH service is disabled in Communications Manager
CSCsy18364	Moderate	VLEngine	Pressing 2 or 4, then selecting newest calls, erroneously results in listing calls that have been on hold and resumed as newest calls.
CSCsw94077	Moderate	VLEngine	Pressing 5, then selecting list of talking agents or by skill group ID, results in erroneous listing of calls that were put on hold before RSM session started
CSCsw94093	Moderate	VLEngine	Pressing 2 or 4, then pressing 2 for random calls results in erroneous listing of calls on hold
CSCsy18327	Minor	MR Installer	While applying MR on main RSM build or performing a MR rollback, all RSM related files and folder must be closed (PDFs, log files, etc.)

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 1.0(2)

Table 3 lists the caveats that were resolved in Release 1.0(2).

Table 2 Resolved in Release 1.0(2)

Identifier	Severity	Component	Headline
CSCsw94114	Critical	VLEngine	In option 4, select 2 for random call. While monitoring an agent, the agent transfers that call to different agent. At this point, the Supervisor monitoring call will end. After ending the monitoring call it has to connect to next random call. But it is not connecting, it is hanging.
CSCsw94056	Major	VLEngine	In the option 5 list of talking agents, once total list is played, the “You will now return to main menu” voice prompt will erroneously play twice.
CSCso85487	Minor	Documentation	The RSM Install and Admin Guide should not list system requirements.
CSCsx15392	Minor	Documentation	RSM documentation states wrong Audio Encoding.
CSCsw91302	Minor	VLEngine	RSM support of monitoring agents using Extension Mobility.

Troubleshooting

See the *Cisco Remote Silent Monitoring Installation and Administration Guide 1.0(2)* 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>

Documentation Feedback

You can provide comments about this document by sending email to the following address:

ccbu_docfeedback@cisco.com

We appreciate your comments.

CCDE, CCENT, Cisco Eos, Cisco HealthPresence, the Cisco logo, Cisco Lumin, Cisco Nexus, Cisco StadiumVision, Cisco TelePresence, Cisco WebEx, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn and Cisco Store are service marks; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MeetingPlace Chime Sound, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0812R)

© 2009 Cisco Systems, Inc. All rights reserved.

