Release Notes for the Cisco TelePresence Exchange System Release 1.0(2)

Revised June 22, 2012

These release notes describe the new features and caveats of the Cisco TelePresence Exchange System release 1.0(2).

For a list of open caveats that are pertinent to this release, see the "Caveats" section on page 5.

Contents

Introduction

The Cisco TelePresence Exchange System is an integrated video service-creation platform that enables service providers and strategic partners to offer secure cloud-based managed and hosted Cisco TelePresence and business video services. The Cisco TelePresence Exchange System is a software environment that provides the following benefits:

- Simplifies end-to-end subscriber service provisioning
- Optimizes intelligent call routing for endpoints and network bandwidth
- Manages the call processing and allocation of media resources for conferencing

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- Consolidates a centralized control point for management, billing, and administration
- Presents an open application programming interface (API) for application integration such as scheduling and directory services

Based on proven technology and powered by a fully redundant and horizontally scalable architecture, it delivers an open, scalable, and robust multi-tenant solution that can grow in scale and functions based on service needs. As a result, it accelerates time to market by simplifying the process of new services production and promotes service innovation through APIs that support service customizing.

For more details on the Cisco TelePresence Exchange System and its supported features and functionality, see the Product Overview chapter of the *Installation and Administration Guide for Cisco TelePresence Exchange System Release 1.0*, at http://www.cisco.com/go/ctx-docs.

System Requirements

For information on the required hardware and minimum software releases that the Cisco TelePresence Exchange System solution requires, see the *System Requirements and Compatibility Matrix for the Cisco TelePresence Exchange System*, at http://www.cisco.com/en/US/docs/telepresence/tx/exchange_system/compatibility/matrix/ctxmatrix.html.

Related Documentation

For more information about the Cisco TelePresence Exchange System, refer to the following documentation:

- *Installation and Administration Guide for Cisco TelePresence Exchange System Release 1.0*, at http://www.cisco.com/en/US/docs/telepresence/tx/exchange_system/1_0/install_admin/book/b_install_admin.html
- *API User Guide for the Cisco TelePresence Exchange System Release 1.0*, at http://www.cisco.com/en/US/docs/telepresence/tx/exchange_system/1_0/api_guide/api_guide_101.html

To access the documentation suite for the Cisco TelePresence Exchange System, go to the following URL:

http://www.cisco.com/go/ctx-docs

For more information about the Cisco TelePresence Exchange System solution, refer to the following documentation:

- *Cisco TelePresence Manager 1.7 Administration and Installation Guide*, at http://www.cisco.com/en/US/docs/telepresence/cts_manager/1_7/admin/ctm1_7adminguide.html
- *Cisco TelePresence Multipoint Switch Release 1.7 Administration Guide*, at http://www.cisco.com/en/US/docs/telepresence/multipoint_switch/1_7/administration/guide/CTMS_Release1_7.html
- Cisco TelePresence MSE 8000 Series documentation, at http://www.cisco.com/en/US/products/ps11340/tsd_products_support_series_home.html
- Cisco Catalyst 4900 Series Switches documentation, at http://www.cisco.com/en/US/products/ps6021/tsd_products_support_series_home.html
- Cisco ASR 1000 Series Aggregation Services Router documentation, at http://www.cisco.com/en/US/products/ps9343/tsd_products_support_series_home.html

- *Cisco Application Control Engine (ACE) Quick Start Guide*, *Cisco ACE Server Load Balancing Configuration Guide,* and *Cisco ACE 4700 Series Appliance Administration Guide*, at http://www.cisco.com/en/US/products/ps7027/tsd_products_support_series_home.html
- *Cisco Unified Communications Manager Security Guide, Release 7.1(2)*, at http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/prod_maintenance_guides_list.html

Important Notes

Information in this section highlights items that might affect full operation of the Cisco TelePresence Exchange System, and includes the following topics:

High Availability of Database Servers Requires Peer Access to Integrated Management Modules

In order for the high availability (HA) implementation to work properly for the database servers, each database server must be able to reach the integrated management module (IMM) of the peer database server.

If the IMM of the primary database server becomes unavailable, and the primary database server fails for any reason, the secondary database server cannot take over the primary role. In this situation, all calls to or from the system fail, and meetings cannot be scheduled or modified. To recover from this situation, see the "Recovering from a Failed Primary Database Server" section in the *Installation & Administration Guide for the Cisco TelePresence Exchange System Release 1.0* at http://www.cisco.com/en/US/docs/telepresence/tx/exchange_system/1_0/install_admin/hardware_failure_recovery.html#wp1123528.

To avoid this situation, take the following actions:

- Make sure that both power cords are securely attached to each database server. Cisco recommends that you do one or both of the following:
  - Connect each power cord to an independent power supply, so that each database server has dual power sources.
  - Use an uninterruptible power supply (UPS) to prevent power loss to each database server.
- Ensure reliable network connectivity between the database servers by connecting the cables as specified in the "Cabling Requirements for the Database Servers" section in the *Installation & Administration Guide for the Cisco TelePresence Exchange System Release 1.0* at http://www.cisco.com/en/US/docs/telepresence/tx/exchange_system/1_0/install_admin/prepare_to_install.html#wp1066971.

Licensing

The Cisco TelePresence Exchange System requires the installation of a license to enable Meet-Me and direct dial services. The system checks the license before scheduling a meeting or initiating a Meet-Me or direct dial call. The system blocks these operations if a valid license is not detected.

The Cisco TelePresence Exchange System comes preinstalled with a 30-day evaluation license. After 30 days, you must install a permanent license to continue to use the Meet-Me and direct dial services. The permanent license is perpetual, meaning that it does not expire and does not need to be renewed.

The license is locked to the call engine servers. If you replace a call engine server, you need to request a new license file for the replacement server.

Special Considerations for Interoperability with the Cisco TelePresence Manager

To ensure proper interoperability between the Cisco TelePresence Manager and the Cisco TelePresence Exchange System, a Cisco support engineer must perform an additional configuration to enable the API on the Cisco TelePresence Manager during system installation. To arrange for this support, contact your local Cisco system engineer or file a support case at Cisco.com.

Be aware that if the necessary configuration is not done, the Cisco TelePresence Exchange System might fail to authenticate with the Cisco TelePresence Manager or might report the following API exception value and cause code: ERC_CTSMAN_COMMUNICATION_FAILURE (exception value), CTSMAN_INTERCOMPANY_NOT_CONFIGURED (cause code).

Enabling Interop Endpoints to Dial In to Scheduled Meetings

The Cisco TelePresence Exchange System currently requires that all provisioned interop endpoints be dial-out only, meaning that the system calls the interop endpoints at the scheduled meeting time, and that the interop endpoints cannot dial in to the meeting.

You can, however, add single-screen interop endpoints that will dial *in* to a scheduled meeting, as long as the incoming calls to the Cisco TelePresence Exchange System use SIP, and you add each interop endpoint to the meeting by using one of the following methods:

- Add the interop endpoint to the meeting as an *unprovisioned* endpoint. This option enables you to associate the endpoint with an organization, which reserves the required ports from the network bandwidth capacity of the organization, and which enables you to bill the organization accordingly. This option also reserves the required segments from the media bridge resource capacity of the telepresence exchange. To use this option, use one of the following methods while creating or modifying a meeting:
  - From the administration console, click **Add Unprovisioned Endpoint** and identify the organization of the interop endpoint. Also, for the **Additional Bridge Capabilities**, select **Single-screen Interop Endpoints**.
  - From the scheduling API, add an **apiUnprovisionedEndpoint** entry to the **unprovisionedEndpointList**. Also, specify **SUPPORT_SINGLESCREEN_INTEROP** for the **bridgeCapabilityList**.

- Instead of adding the endpoint to the meeting, you can reserve an additional media bridge resource for the interop endpoint to join the meeting. To use this option, use one of the following methods while creating or modifying a meeting:
  - From the administration console, add 1 segment to the **Additional Capacity** field for each interop endpoint that will dial in to the meeting.
  - From the scheduling API, have the value for the **additionalCapacity** parameter include 1 segment for each interop endpoint that will dial in to the meeting.

Caveats

This section addresses the open caveats in this release and provides information on how to use the Bug Toolkit to find further details on those caveats, and includes the following topics:

Open Caveats

Table 1 describes the open caveats in this release of the Cisco TelePresence Exchange System. (Caveats are listed in order by severity, then by component, then by caveat number.)

Table 1 Open Caveats in Cisco TelePresence Exchange System Release 1.0(2)

Identifier	Component	Severity	Headline
CSCto03761	admin_ui	3	CTX Admin — Non-SUPER user can Edit Cluster Nodes.
CSCto03765	admin_ui	3	“Internal Error” while accessing meeting information from Meetings Diagnostics.
CSCto03770	admin_ui	3	OutOfMemoryError: GC overhead limit exceeded while exporting CDRs.
CSCto03772	admin_ui	3	CTX API — “ne” (not equal to) not recognized for booleans in query string.
CSCto03774	admin_ui	3	CTX API — isEndpointFree method always returns true.
CSCto03775	admin_ui	3	CTX API — getMeetings: startTime and endTime queries fail.
CSCto03776	admin_ui	3	CTX API — getRegions: serviceProvider.name in query string is not found.
CSCto32304	admin_ui	3	Required capacity for some H323 guest endpoints is reported as 3.
CSCto69702	admin_ui	3	Entering a string for filters that expect an integer results in Error.
CSCto69703	admin_ui	3	CTX Admin — Meetings Page Start Time Filter does not work properly.
CSCto69705	admin_ui	3	Edit of Standing Meeting fails when capacity is modified.
CSCto69706	admin_ui	3	Canceling a Backup as soon as it has been triggered can lead to Error.
CSCto88759	admin_ui	3	Diagnostics Page does not show CDR after meeting ends or participant leaves.
CSCto88760	admin_ui	3	CTX Admin — Error seen when filtering on Diagnostics page.

Table 1 Open Caveats in Cisco TelePresence Exchange System Release 1.0(2) (continued)

Identifier	Component	Severity	Headline
CSCto88762	admin_ui	3	Errors when putting a reserved TPS in maintenance before meeting starts.
CSCto03762	call_control	3	Meeting Diagnostic page does not show leave_time for some participants.
CSCto03763	call_control	3	Concurrent access by netop and endpoint leave results in call failures.
CSCto05163	call_control	3	CTX should not re-initiate new meeting after an outage.
CSCto06653	call_control	3	JVM core dump after loss of local vlan network connectivity.
CSCto12424	call_control	3	Intermittent Problem connecting to serving SBC.
CSCto15401	call_control	3	Call dropped when ethernet unplugged from active engine for 8510 meeting.
CSCto26253	call_control	3	CTMS resources down after engine node reboot and restore.
CSCto88763	call_control	3	Three minute delay in resource reallocation when TPS resource fails.
CSCto88766	call_control	3	Endpoint did not drop when meeting ends after back-to-back engine failure.
CSCto89376	call_control	3	Disconnect reason description not visible in diagnostic tool.
CSCto34771	installer	3	Race condition in post install script leads to wrong cliCommands.xml.
CSCto32362	platform_os	3	CTX Subagent fails to reinit when adminserver goes up or down.
CSCto32370	platform_os	3	Calls are dropped if we fail Primary DB by unplugging power cable.
CSCto57434	platform_os	3	Reinstall of database server marks its status to offline in admin/snmp.
CSCto88764	platform_os	3	CDR Duration is NULL for some records.
CSCto89040	platform_os	3	No cts-man alarm is displayed on Admin.

Resolved Caveats

For the latest information on resolved caveats for this release, access Bug Toolkit as described in the "Accessing Bug Toolkit" section on page 6.

Accessing Bug Toolkit

You can use the Bug Toolkit to find information about caveats for this release, including a description of the problems and available workarounds. The Bug Toolkit lists both open and resolved caveats.

To access Bug Toolkit, you need the following items:

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

To use the Bug Toolkit, do the steps in the following procedure.

Procedure

Step 1 To access the Bug Toolkit, go to the following link:

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 and click **Go**.

Step 4 To look for information when you do not know the bug ID number, do the following:

a. From the Select Product Category menu, choose **TelePresence**.

b. From the Select Products menu, choose the desired product.

c. From the Software Version menu, choose the version number.

d. Under Advanced Options, choose either **Use default settings** or **Use custom settings**.

- When you select **Use default settings**, the system searches for severity 1, 2, and 3 bugs, open and fixed bugs, and only those bugs containing bug details.
- When you select **Use custom settings**, you can specify the severity and status parameters or search for keywords within the bug headline and description.

Documentation Updates

This section describes omissions and changes to the published documentation for the Cisco TelePresence Exchange System Release 1.0.

Changes to the *Installation and Administration Guide for the Cisco TelePresence Exchange System Release 1.0*

- Endpoint Capacity, page 11
- Command Reference for set password admin, page 12

Gathering Required Information Before Installation

The "Gathering Required Information Before Installation" section in the "Preparing for Installation" chapter incorrectly states that using the same administrator username and password for all nodes in the server cluster is recommended to simplify management.

In fact, it is *mandatory* that you use the same administrator username and password on all Cisco TelePresence Exchange System servers, because the administration servers also use the administrator credentials over SSH to get the status of all nodes in the server cluster.

Installing the Software

The following sections in the "Installing the Software" chapter contain errors:

- Installing the Database Server Software
- Installing the Call Engine Server Software
- Installing the Administration Server Software

Specifically, the steps for the Administrator Login Configuration screen in the installer fail to state that you *must* use the same administrator username and password for all nodes in the Cisco TelePresence Exchange System server cluster.

Scheduling Meetings

The "Scheduling Meetings" section in the "Configuring Collaboration Services" chapter excludes information on how to add single-screen interop endpoints to a meeting reservation without having the system dial out to the endpoint.

For this information, see Enabling Interop Endpoints to Dial In to Scheduled Meetings, page 4.

Schedule Meeting Fields

The "Schedule Meeting Field Descriptions" table in the "Configuring Collaboration Services" chapter contains incorrect and incomplete information for the "Additional Capacity" field. The correct information is as follows.

Field	Description
Additional Capacity	Number of additional media bridge resource segments to reserve for the meeting. Use this field to reserve media bridge resources for endpoints that you do not add to the meeting reservation but that you expect to join the meeting. To determine how many segments to add for each endpoint, use the following guidelines, depending on which media resource provides the meeting bridge: • Cisco TelePresence Multipoint Switch—Add 4 segments for each three-screen endpoint and 2 segments for each single-screen endpoint. • Cisco TelePresence Server MSE 8710—Add 3 segments for each three-screen endpoint and 1 segment for each single-screen endpoint. **Note** This field is displayed only when scheduling a Meet-Me meeting.

Password Recovery

The "Password Recovery" section fails to state that you must use the same administrator username and password for all nodes in the Cisco TelePresence Exchange System server cluster.

Troubleshooting an Interop Call in Cisco TelePresence Exchange System Release 1.0(2)

This procedure in the "Troubleshooting Calls" chapter incorrectly applies only to interop dial-*in* calls. The updated procedure, which applies to both dial-in and dial-out interop calls, is as follows. For information about supporting interop dial-in calls, see Enabling Interop Endpoints to Dial In to Scheduled Meetings, page 4.

Procedure

Step 1 Log in to the Cisco TelePresence Exchange System.

Step 2 From the navigation pane, choose **Diagnostics > Meetings Diagnostics**.

The Meeting Diagnostics window is displayed.

Step 3 In the search field, enter the Conference ID of the meeting that is experiencing connection problems and click **Search**.

You can find the Conference ID for a meeting by choosing either **Collaboration Services > Meetings** or **Collaboration Services > Standing Meetings**, and then clicking a specific meeting entry from the Subject column to display the Meetings Overview window.

From the Meetings Overview window, you can also go directly to the Meeting Diagnostics windows for that meeting by clicking the **Go to Diagnostics** button (top).

Step 4 In the search results, see when each participant joined and left the meeting, and determine the disconnect reason for each call.

Look for endpoints that were disconnected before the end of the meeting time, or for abnormal disconnect reasons such as rejected or resource shutdown. These issues generally indicate that an endpoint is unable to join a meeting.

Step 5 Log in to the Cisco VCS as the administrator.

Step 6 From the tool bar, choose **Status > Calls > History**.

The Call History window is displayed.

Step 7 In the Status column, look at the status of the interop call that is experiencing problems.

- When the call status shows that the call was rejected, determine if the call was routed to the right destination. If not, identify and fix the routing issue on the Cisco VCS.

  For additional information on the Cisco VCS, see http://www.cisco.com/en/US/products/ps11337/tsd_products_support_series_home.html.

- When the call status indicates normal call clearing, the problem is not with the Cisco VCS.

  To further diagnose the problem, select one of the following options:

  – For guest dialout calls to ISDN endpoints, check the status of the call on the Cisco TelePresence ISDN Gateway MSE 8321 resource.

    For additional information on the Cisco TelePresence ISDN Gateway MSE 8321, see http://www.cisco.com/en/US/products/ps11340/tsd_products_support_series_home.html.

  – For dialout calls placed on enterprise endpoints, check the status of the call on the session border controller (SBC).

  – For URI and IP dialout calls, check the status of the call on the Cisco TelePresence Video Communication Server Expressway.

    For additional information on the Cisco VCS Expressway, see http://www.cisco.com/en/US/products/ps11337/tsd_products_support_series_home.html.

- (For dial-out calls only) When there is no record of the call on the Cisco VCS, check the status of the call on the appropriate Cisco TelePresence MSE 8000 Series resource in the network (Cisco TelePresence Server MSE 8710 or Cisco TelePresence MCU MSE 8510), and use a static meeting to test why a dialout to an endpoint is failing.

  For additional information on the Cisco MSE 8000 Series, see http://www.cisco.com/en/US/products/ps11340/tsd_products_support_series_home.html.

Server Failure Recovery

The following sections in the “Server Failure Recovery” chapter incorrectly state that using the same administrator username and password for all nodes in the server cluster is recommended to simplify management:

- Preparing to Replace a Database Server
- Replacing an Administration or Call Engine Server

In fact, it is *mandatory* that you use the same administrator username and password on all Cisco TelePresence Exchange System servers, because the administration servers also use the administrator credentials over SSH to get the status of all nodes in the server cluster.

Installation Worksheets

The "Worksheet for Cisco TelePresence Exchange System Servers" table in the "Installation Worksheets" appendix fails to reflect that you must use the same administrator username and password on all Cisco TelePresence Exchange System servers. The corrected table is as follows.

Table 2 Worksheet for Cisco TelePresence Exchange System Servers

Node	Hostname	IP Address	Subnet Mask	Default Gateway	Username	Password
Database—shared virtual[1]				—	—	—
Database—primary					—	—
Database—secondary					—	—
Database—primary IMM[2]	—					
Database—secondary IMM	—					
Engine 1					—	—
Engine 1—IMM (optional)	—					
Engine 2					—	—
Engine 2—IMM (optional)	—					
Admin 1					—	—
Admin 1—IMM (optional)	—					
Admin 2					—	—
Admin 2—IMM (optional)	—					
Administrator username and password for accessing the CLI of any node in the server cluster[3]						
Security password to authenticate data requests between the database server and the other servers[4]						

1. The virtual hostname and virtual IP (VIP) address are shared by both the primary and secondary database servers.
2. IMM = integrated management module. The IMM configuration is required to provide active/standby redundancy on the database servers. For the call engine and administration servers, you need to configure the IMM only if you want remote control.
3. You must use the same administrator username and password on all Cisco TelePresence Exchange System servers, because the administration servers also use the administrator credentials over SSH to get the status of all nodes in the server cluster.
4. The security password must be identical for all nodes in the server cluster. After you set the security password on a server, you cannot change it without reinstalling the server.

Endpoint Capacity

This appendix does not contain information for dial-in interop calls. The updated appendix content, which applies to both dial-in and dial-out interop calls, is as follows.

How many media bridge resource segments are actually reserved for each endpoint in a meeting depends on several factors, including which media resource provides the meeting bridge, the type of endpoint, the number of screens, and the type of call (dial-in or dial-out).

Table 3 Endpoint Capacity for Meet-Me Calls

Type of Call	Endpoint Type	Number of Screens	Bridge Type	Number of Segments Reserved
Reserved dial in	TIP-based Cisco TelePresence System	1	Cisco TelePresence Multipoint System	4
		3		4
		Unknown		4
		1	Cisco TelePresence Server MSE 8710	3
		3		3
		Unknown		3
	SIP[1]	Unknown	Cisco TelePresence Server MSE 8710	3
		Unknown	Cisco TelePresence MCU MSE 8510	1
Dial out	H.323	1	Cisco TelePresence Server MSE 8710	1
		3		3
Guest dial out		Unknown		1
Dial out call		1	Cisco TelePresence MCU MSE 8510	1
Guest dial out		Unknown		1
Dial out	ISDN	1	Cisco TelePresence Server MSE 8710	1
Guest dial out		Unknown		1
Dial out		1	Cisco TelePresence MCU MSE 8510	1
Guest dial out		Unknown		1

1. In this table, the SIP endpoint type refers to any single-screen interop endpoint whose dial-in call to the Cisco TelePresence Exchange System uses SIP. For example, a single-screen H.323 interop endpoint may dial in to a Meet-Me meeting if the enterprise Cisco TelePresence Video Communication Server does the H.323-to-SIP conversion.

Please note the following bridge limitations:

- Dial-out calls to TIP-based Cisco TelePresence System endpoints are not supported.
- Guest dial out to three-screen H.323 endpoints is not supported.
- TIP-based Cisco TelePresence System endpoints and three-screen H.323 endpoints are not supported on the Cisco TelePresence MCU MSE 8510.

Command Reference for set password admin

The set password admin command reference fails to state that you must use the same administrator username and password on all Cisco TelePresence Exchange System servers.

Changes to the *API User Guide for the Cisco TelePresence Exchange System Release 1.0*

The “Scheduling API” chapter excludes information on how to add single-screen interop endpoints to a meeting reservation without having the system dial out to the endpoint.

For this information, see Enabling Interop Endpoints to Dial In to Scheduled Meetings, page 4.

Changes to the Online Help for the Administration Console

The online help for the administration console captures an early version of a subset of the *Installation and Administration Guide for the Cisco TelePresence Exchange System*. For the most recent content, see the following documents at http://www.cisco.com/go/ctx-docs:

- *Installation and Administration Guide for the Cisco TelePresence Exchange System*
- *Release Notes for the Cisco TelePresence Exchange System*

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, 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

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This document is to be used in conjunction with the documents listed in the Related Documentation, page 2

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