Release Notes for the Cisco TelePresence Exchange System Release 1.2

Revised September 24, 2013

These release notes describe the new features and caveats of the Cisco TelePresence Exchange System Release 1.2. For lists of open and resolved caveats that are pertinent to this release, see the "Caveats" section on page 16.

Contents

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

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.

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.

Product Documentation

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

- *Installation and Upgrade Guide for the Cisco TelePresence Exchange System Release 1.2*, at http://www.cisco.com/en/US/products/ps11276/prod_installation_guides_list.html
- *Administration Guide for the Cisco TelePresence Exchange System Release 1.2*, at http://www.cisco.com/en/US/products/ps11276/products_installation_and_configuration_guides_list.html
- *API User Guide for the Cisco TelePresence Exchange System Release 1.2*, at http://www.cisco.com/en/US/products/ps11276/products_programming_reference_guides_list.html

To access the documentation suite for previous releases of the Cisco TelePresence Exchange System, go to the following URL: http://www.cisco.com/go/ctx-docs.

Installation and Upgrade Notes

- Installing Cisco TelePresence Exchange System Release 1.2 for the First Time, page 3
- Upgrading to Cisco TelePresence Exchange System Release 1.2, page 3

Installing Cisco TelePresence Exchange System Release 1.2 for the First Time

For information related to installing the 1.2 version of the Cisco TelePresence Exchange System, see the "Preparing for Installation" chapter of the *Installation and Upgrade Guide for the Cisco TelePresence Exchange System Release 1.2*, at http://www.cisco.com/en/US/products/ps11276/prod_installation_guides_list.html

Upgrading to Cisco TelePresence Exchange System Release 1.2

There are two ways to upgrade from Release 1.1 to Release 1.2. You can either upgrade the software on the MCS server hardware, or migrate from the MCS servers to virtual machines on UCS server hardware while you do the upgrade.

For instructions on how to upgrade the software on the MCS servers, see the "Upgrading the Software on MCS Servers" chapter of the *Installation and Upgrade Guide for the Cisco TelePresence Exchange System Release 1.2*. For instructions on upgrading while migrating to virtual machines, see the "Migrating from MCS Servers to Virtual Machines" chapter of the guide. The guide is available at http://www.cisco.com/en/US/products/ps11276/prod_installation_guides_list.html

Important Notes

The following sections highlight items that might affect full operation of the Cisco TelePresence Exchange System:

Changes to Licensing in Release 1.2

The Cisco TelePresence Exchange System Release 1.2 uses a new port-based licensing model. In this model, you install a base license which provides 48 1080p HD ports. When you provision a media bridge resource on the system, the maximum capacity that you configure for the resource (in segments) determines how many licensing ports it consumes, as follows:

Media Bridge Resource Type	Mode	Segments of Capacity:License Ports
Cisco TelePresence Multipoint Switch (CTMS)	1080p	3 : 1
Cisco TelePresence Server MSE 8710 (TPS)	1080p	1 : 1
	720p	2 : 1
Cisco TelePresence MCU MSE 8510	HD (720p)	2 : 1

Note The system supports only HD (720p) mode for MCU MSE 8510. FullHD, HD+ and SD modes are not supported.

For example, for a CTMS bridge that is configured in the system with Max Capacity set to 24 segments, eight license ports (24 / 3) are consumed. For either a TPS in 720p mode or a an MCU MSE 8510 in HD mode with Max Capacity set to 24 segments, 12 license ports (24 / 2) are consumed.

The system checks the HD port license capacity when you configure media bridge resources, which means that you cannot configure additional media bridge capacity if no unused port licenses are available. When your needs exceed the 48 base license ports, you can purchase and install additional HD license ports.

There are two types of base license available for the Cisco TelePresence Exchange System:

- Base CTX HD Ports—Applicable to the full-feature configuration of Cisco TelePresence Exchange System. There is no limit to the amount of additional port licenses you can purchase and add beyond the 48 base ports provided by this license.
- Base CTX Starter HD Ports—Applicable to the starter package configuration of Cisco TelePresence Exchange System. With this base license, your system is limited to a maximum of 250 port licenses (including the 48 base ports provided by the license). If you reach the 250 port limit, you must purchase a CTX Starter Upgrade license and additional port licenses to continue adding ports.

The Cisco TelePresence Exchange System comes with a preinstalled 60-day evaluation license that includes 48 ports. After 60 days, you must install a permanent base license to continue to use the Meet-Me and direct-dial services, and a permanent Active Meeting Management feature license if you wish to continue to use the active meeting management feature. Permanent licenses are perpetual, meaning that they do not expire and do not need to be renewed.

For more information on licensing, including the options available for each type of base license and system changes that can affect the validity of your licenses, see the “Managing Licenses” chapter of the *Administration Guide for the Cisco TelePresence Exchange System Release 1.2* at http://www.cisco.com/en/US/products/ps11276/products_installation_and_configuration_guides_list.html.

Enabling Cisco TelePresence Endpoints Running TC Release 5.x to Join Meetings Hosted on the Cisco TelePresence Multipoint Switch

Cisco TelePresence endpoints running TC release 5.x require a configuration change on Cisco TelePresence Multipoint Switch version 1.8 in order to join meetings hosted on the switch. For new installations, the *Administration Guide for the Cisco TelePresence Exchange System Release 1.1* includes the procedure to make the configuration change when you configure the Cisco TelePresence Multipoint Switch to work with the Cisco TelePresence Exchange System.

If you have already configured a Cisco TelePresence Multipoint Switch to work with the Cisco TelePresence Exchange System, do the following additional procedure to enable Cisco TelePresence TC5.x endpoints to join meetings hosted on the Cisco TelePresence Multipoint Switch:

Procedure

Step 1 In CTMS Administration, from the left navigation pane, choose **Manage > Default Meeting Settings**.

The Default Settings window displays.

Step 2 For Supported Endpoint Types, select **Cisco TelePresence TC 5.0 (and later) and CTS 1.8 (and later) endpoints**.

Step 3 To save the modified setting, click **Apply**.

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 additional configuration to enable the API and hosted mode for OBTP functionality 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.

Note During initial configuration of the Cisco TelePresence Manager, ensure that you select the scheduling API option. If you proceed with configuration of the Cisco TelePresence Manager without selecting this option, you must perform a reinstall to correct this issue.

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).

Limitations and Restrictions

The following sections detail limitations and restrictions related to the use of and interoperability with the Cisco TelePresence Exchange System:

Additional Header Editor Required to Allow Polycom Endpoints to Use IVR

Added September 24, 2013

In Release 1.2, Polycom endpoints are unable to use the IVR to join Cisco TelePresence Exchange System meetings unless you add an outbound SIP header editor on the Cisco Session Border Controller and apply the header editor to the adjacencies for the Cisco Application Control Engine and the two Cisco TelePresence Exchange System call engine servers. (Polycom endpoints are able to join meetings when bypassing the IVR by using a single dial string with the service number and conference ID, for example 18005551212**12345678.)

For procedures and examples to configure the outbound header editor and apply it to the adjacencies, see the "Documentation Updates" section on page 17.

Administration Console Access During Database Failover

In the event of a database failure, the administration console may take up to two minutes to respond after database failover.

Do Not Change the Hostname or IP Address of Cisco TelePresence Exchange System Servers

Do not change the hostname or IP address on any of the Cisco TelePresence Exchange System servers . Once the hostname and IP address are set and the Cisco TelePresence Exchange System software installed, changing the hostname or IP address is not supported.

Do Not Disconnect the Network Adapter on Virtual Machines

Do not disconnect the network adapter on any of the Cisco TelePresence Exchange System virtual machines. If you do so, you must restart the virtual machine once it is reconnected.

Grouped Endpoints in Active Meeting Management Limitation

If grouped endpoints join a meeting, each screen will be listed in Active Meeting Management. However, you will not be able to modify any of the properties for the grouped endpoints and only the status of the main endpoint will be accurate.

Meeting Scheduling Race Condition Limitation

If you attempt to schedule two meetings at the same time for the same time slot and they both require immediate allocation, you will receive an error message, and must try again. This will only happen for two Rendezvous guaranteed meetings or two Meet-Me guaranteed meetings scheduled within 5 minutes of the start time.

Presentation Viewing Limitation on Cisco Unified IP Phone 9971/9951

Participants who use a Cisco Unified IP Phone 9971, or Cisco Unified IP Phone 9951 to attend a Meet-Me meeting hosted on a Cisco TelePresence MCU MSE 8510 bridge are sometimes unable to view presentations shared by remote endpoints.

When scheduling a Meet-Me meeting, you can work around this issue by selecting a Custom Screen Layout option other than the default (single-screen) layout.

If you are seeing this issue when the meeting is active, you can use Active Meeting Management to modify the Custom Screen Layout to use any layout other than the single screen layout.

Solution Caveats and Endpoint Limitations

Note the following open caveats and endpoint limitations that may affect the operation or functionality of the Cisco TelePresence Exchange System solution:

Table 1 Solution Caveats

Product	Identifier	Headline	Fixed In Version
ACE	CSCuc76778	ACE is using the connection maps instead of the SIP Call-ID for session	
CTMS	CSCts32388	Concurrency issue causes back-to-back participant add API requests to fail	1.9.3
CTMS	CSCub65748	CTMS does not support TLS with non-CUCM devices	Closed
CTMS	CSCub83310	Jabber IPAD join the CTMS meeting with one way video	
CTMS	CSCuc53330	CTMS is using invalid TCP connection to send the 200 OK response	
CTMS	CSCuc60884	Video quality is bad due to bandwidth negotiated for EX90 is too low	
CTMS	CSCue06577	EX90 can hear audio from CTS 3000 even if they are muted	
CTS-Manager	CSCuc61406	After multiple calls, system becomes unreponsive and crashes	1.9.3, 1.10.0, 6.0.0
CTS-Manager	CSCue26190	CFD:meetings lost after upgrade from 1.7.5 to 1.9 with Scheduling API	
VCS	CSCtt08222	Secure calls downgrade to non-secure under secure setup (reference desig	
VCS	CSCud18847	VCS teardown the call due to receiving 491 message	

Table 2 Endpoint Limitations

Product	Identifier	Headline
MXP 1700	CSCud07829	Endpoint does not escalate from non-secure to secure call

New Features in Cisco TelePresence Exchange System Release 1.2

This section includes information about new features in Cisco TelePresence Exchange System Release 1.2 only. For information about features that were introduced in other Cisco TelePresence Exchange System releases, see the applicable release notes at http://www.cisco.com/en/US/products/ps11276/prod_release_notes_list.html.

See the following sections:

Additional Media Bridge Resource Support

The Cisco TelePresence Exchange System supports the following additional media bridge resources:

- Cisco TelePresence Server 7010—To operate with the Cisco TelePresence Exchange System, the Cisco TS 7010 requires the same configuration as the Cisco TelePresence Server MSE 8710.
- Cisco TelePresence MCU 4500 and 5300 Series—To operate with the Cisco TelePresence Exchange System, the MCU 4500 and 5300 Series requires the same configuration as the Cisco TelePresence MCU MSE 8510.

Administration Console Enhancements

This release contains the following general administration console enhancements:

Active Meeting Diagnostic Enhancement

The Participants View in the Active Meeting Diagnostics area is enhanced to use the term host next to any participant to indicate that this participant is the organizer of this meeting. When the host leaves the meeting, the host participant is displayed in the Previous Participant list.

Call Detail Records Enhancement

The Call Routing > CDRs page is enhanced to allow you to do the following functions when viewing CDRs:

- Filter the listing by each category heading other than the call duration category heading.
- Customize each CDR field that you want to display on the CDRs window by clicking **Choose Fields**.

When you export the CDR file, information for each CDR field is consistent with each CDR parameter that is available through the CDR Application Programming Interface (API).

Capacity Padding Settings for Guaranteed Meeting Reservations

To ensure that media bridge resources are allocated appropriately for guaranteed Meet-Me or Rendezvous meetings, the Cisco TelePresence Exchange System uses a meeting reservation algorithm that is based on a maximum threshold capacity value. The maximum threshold capacity calculation uses the following two new configurable parameters:

- Capacity Padding Threshold—Percentage of the maximum attend-time limit. Default is 67%.
- Capacity Padding Limit—Number (in segments) that is subtracted from the maximum attend-time limit. Default is 16 segments.

For more information about the capacity padding settings, see the "Configuring System Settings" chapter of the *Administration Guide for the Cisco TelePresence Exchange System Release 1.2* at http://www.cisco.com/en/US/products/ps11276/products_installation_and_configuration_guides_list.html.

Date and Time Format Settings

The Date/Time Format drop-down list is added to the Global Configuration settings page to allow you to control how the date and time are displayed on the page in the administration console (for example, on the Active Meetings, Alarms, Audit Trails, CDRs, Database Backups, Events View of Meeting Diagnostics, License Files, Log Capture, Meetings, or Status list pages) by choosing the available date (M D, Y or D M Y) and time (12 hour or 24 hour) format option.

Number of Rows to Display Per List Page

The Number of Rows to Display Per List Page field is added to the Global Configuration settings page to allow you to control the number of rows that display on the administration console list pages (for example, on the Active Meetings, Alarms, Audit Trail, CDRs, Dial Patterns, Endpoints, License Port Usage, Resource Pool Allocations, Status, Time Zones, or Meetings list pages) by changing the value of this field. The new value takes effect for all users of the administration console.

Number of Screens Field for Rendezvous Meetings

The Number of Endpoints field is replaced with the Number of Screens field. The Number of Screens field allows you to specify the number of screens to reserve for a Rendezvous meeting. The Cisco TelePresence Exchange System uses the number of screens value to determine the required media resource bridge capacity for the meeting.

Purge Meeting Data After This Many Days

By default, the Cisco TelePresence Exchange System retains past meeting details, conference events, and call detail records (CDRs) for 30 days from the recorded end time of the meeting. The Purge Meeting Data After This Many Days field is added to the Global Configuration settings page to allow you to configure the meeting data retention period for any length between 1 and 60 days. The system automatically purges past meeting records, conference events, and CDRs that exceed the retention period. In addition, if the total number of conference events or CDRs retained by the system reaches 100,000, the system retains only the most recent 100,000 records and automatically purges the rest. Past meeting details include those for scheduled meetings that have ended, Rendezvous meeting instances that have ended, and Rendezvous meetings that have been cancelled.

Viewing Meetings Enhancement

The Meetings page is enhanced to allow you to view scheduled meetings that have already occurred or meetings that are scheduled for a future date on the Cisco TelePresence Exchange System by using the interactive calendar to choose the start date and end date for your search. You can also view only Rendezvous meetings by checking the Show Rendezvous check box.

Advanced Resource Management Enhancements

This release contains the following advanced resource management enhancements:

Best-Effort Resource Allocation and De-Allocation Optimizations

You can configure the minimum number of screens that the Cisco TelePresence Exchange System will use to determine a minimum bridge capacity (this value is a fraction of the total meeting capacity that was calculated when the meeting was scheduled) to allocate when the first participant joins a best-effort Meet-Me or Rendezvous meeting. After the minimum amount of bridge capacity is allocated to meeting participants, more resources will be dynamically allocated as needed until the total meeting capacity is reached. As each participant leaves the meeting, their associated resources will be dynamically de-allocated until the meeting capacity reaches the specified minimum bridge capacity for the meeting. The system de-allocates the remaining resources when all the participants leave the meeting or when the meeting reaches its configured end time.

If the capacity to be allocated to an endpoint that is attempting to join the meeting exceeds the available capacity on the media bridge resource (as may sometimes be the case for best-effort meetings) or exceeds the available reserved capacity for the meeting, the system will not allow the endpoint to join.

You can configure the best-effort minimum number of screens meeting attribute at the meeting level, organization level, or service provider level.

Idle Meeting Cleanup for Guaranteed Meet-Me Meetings

For a guaranteed Meet-Me meeting that is empty (no participants are consuming bridge resources for the meeting), you can configure the number of minutes that the system will wait before automatically ending or cancelling the meeting so that the bridge resources associated with the meeting can be made available for use by other guaranteed meetings.

If no participants join a guaranteed Meet-Me meeting at the scheduled meeting start time, the idle meeting cleanup timer begins at the meeting start time. In this case, if the timer expires before the scheduled meeting end time, the system will end the meeting when the timer expires and record the event on the meeting diagnostics page. Participants can no longer join the meeting and the bridge resources associated with the meeting are made available for use by other guaranteed meetings.

If participants join a guaranteed Meet-Me meeting and the scheduled meeting end time has not been reached, the idle meeting cleanup timer begins when all participants have left the meeting. In this case, participants can rejoin the meeting before the timer ends. If all participants leave the meeting again and the scheduled meeting end time still has not been reached, the idle meeting cleanup timer will restart at zero. If the timer expires before the scheduled meeting end time and the meeting is still empty, the

system will cancel the meeting and record the event on the meeting diagnostics page. Participants can no longer join the meeting and the bridge resources associated with the meeting are made available for use by other guaranteed meetings.

You can configure the idle meeting cleanup timer at the meeting level, organization level, or service provider level.

Media Resource Bridge Capacity Allocation Optimizations

The Cisco TelePresence Exchange System uses different sources to determine the most accurate amount of capacity consumed by an endpoint during a Meet-Me or Rendezvous meeting. Table 3 describes how the system determines the number of segments allocated to an endpoint depending on the type of media resource bridge that is hosting the meeting.

Table 3 Endpoint Capacity Allocated for Meet-Me and Rendezvous Meetings at Attend Time

Endpoint Type	Bridge Type	Method for Determining Number of Screens (n)	Number of Segments Allocated
Provisioned	CTMS	The system first determines n from the number of screens value provided in the SIP header of the endpoint, if present. Otherwise, n equals the number of screens value provided in the media profile of the endpoint. After the endpoint joins the meeting, the system redetermines n from the number of screens value provided by a CTMS media bridge API call.[1]	n + 1
	MSE 8710	The system determines n from the number of screens information provided in the SIP header of the endpoint, if present. Otherwise, the system determines n from the media profile of the endpoint.[2]	n
	MSE 8510	The system always sets n equal to 1.	1
Unprovisioned or remote	CTMS	The system first determines n from the number of screens value provided in the SIP header of the endpoint, if present. Otherwise, n equals the MeetMe Default Screens parameter defined in the System > Global Configuration window. After the endpoint joins the meeting, the system redetermines n from the number of screens value provided by a CTMS media bridge API call.[1]	n + 1
	MSE 8710	The system determines n from the number of screens information provided in the SIP header of the endpoint, if present. Otherwise, n equals 1.	n
	MSE 8510	The system always sets n equal to 1.	1

1. The system will generate an alarm if the number of screens information provided by the CTMS bridge API call is greater or less than the value specified in the SIP header or media profile of the endpoint. In the case where the value provided by the bridge call is greater, the endpoint may successfully join the meeting but then immediately be dropped from the meeting because of insufficient meeting capacity. If the endpoint is dropped from the meeting as a result of this condition, the system will generate an alarm as well as call detail record (CDR) information.

2. If the number of screens information provided in the SIP header is different than the number of screens specified in the media profile of the provisioned endpoint, the system generates an alarm.

Redundancy Enhancements

Release 1.2 includes redundancy enhancements that simplify the process of handling a facility failure or other outage that affects a set of three servers of different role types. (In other words, one administration server, one call engine server, and one database server are offline due to the outage.)

When you enable the failover monitor, the system can automatically adjust to failure of one set of administration, call engine, and database servers. In order for the automatic adjustment to take place, all of the following conditions must be met:

- The system must be cabled and networked according to specifications for Release 1.2 as outlined in the "Network Design and Routing Configuration for Redundancy" appendix of the *Installation and Upgrade Guide for the Cisco TelePresence Exchange System Release 1.2* at http://www.cisco.com/en/US/products/ps11276/prod_installation_guides_list.html.
- The failover monitor must be enabled in the administration console.
- The other set of administration, call engine, and database servers (that is not part of the failure) must all be online.
- The database server that is online must be able to ping the default gateway and the other servers that are online.

After the failure occurs, the system takes approximately 30 seconds to resume service, during which time new calls may fail and calls in progress may experience an interruption in service due to the loss of signalling information.

If the outage involves a failure that lasts more than 20 seconds, you must take manual steps to restore the system before resolving the issue in order to assure service continuity. If the network failure lasts more than 20 seconds but is resolved before you begin the manual restore process, you must follow a manual process to recover the system. (If the failure lasts less than 20 seconds, the failover monitor will not have initiated failover mode, and you should not need to take any action.)

For instructions on how to cable and network the system to take advantage of the redundancy enhancements, see the appropriate installation or upgrade chapters of the *Installation and Upgrade Guide for the Cisco TelePresence Exchange System Release 1.2* depending on how you are implementing Release 1.2:

- Preparing to Install (for new installations of Release 1.2)
- Upgrading the Software on MCS Servers (for upgrades from Release 1.1 on MCS servers)
- Migrating from MCS to UCS Servers (for upgrades involving a migration to virtual machines)

To enable the failover monitor, see the "Changing Global Configuration Settings" section in the "Configuring System Settings" chapter of the *Administration Guide for the Cisco TelePresence Exchange System Release 1.2* at http://www.cisco.com/en/US/products/ps11276/products_installation_and_configuration_guides_list.html.

For instructions on how to recover full system operation during or after the outage, see the "Recovering from a Three-Server Failure" section in the "Server Failure Recovery" chapter of the *Administration Guide for the Cisco TelePresence Exchange System Release 1.2*.

Virtualization

You can install Cisco TelePresence Exchange System Release 1.2 on virtual machines or migrate from physical servers to virtual machines.

Requirements for Virtualization

Virtualization has the following requirements:

- Two physical Cisco Unified Computing System (UCS) B-series blade servers that meet the specifications in the "Tested Reference Configuration for Virtualization" section on page 13 and that are supported for use in a virtualized environment.
  - You install the three Cisco TelePresence Exchange System server components—administration server, call engine server, and database server—on each UCS server. Having each of the components on each UCS server eliminates the possibility of having a single point of failure for the system.
  - The UCS servers must be dedicated to the Cisco TelePresence Exchange System (no other virtual machines are installed on the servers) to ensure that the virtual machines have sufficient resources available to them.
- VMware ESXi Version 5.0 installed on the UCS servers on which the Cisco TelePresence Exchange System virtual machines will run. For instructions, see the Cisco UCS B-Series Blade Servers VMware Installation Guide, at http://www.cisco.com/en/US/docs/unified_computing/ucs/sw/b/os/vmware/install/bseries-vmware-install.html.

For additional guidelines on deploying the Cisco TelePresence Exchange System on virtual machines, see the "Preparing for Installation" chapter of the *Installation and Upgrade Guide for the Cisco TelePresence Exchange System Release 1.2*, at http://www.cisco.com/en/US/products/ps11276/prod_installation_guides_list.html.

Tested Reference Configuration for Virtualization

The Cisco TelePresence Exchange System uses a "Tested Reference Configuration" model to describe supported configurations of compute, storage and network hardware for virtualization. The Tested Reference Configuration supported in Release 1.2 is described in Table 4.

Table 4 Tested Reference Configurations for Cisco TelePresence Exchange System Release 1.2

Base Server Model and Generation	CPU	RAM	Storage	Adapters	VMware Environment
UCS B200 M3 D	Dual E5-2690 (2.9 GHz, 16 physical cores total)	64 GB (8x8GB)	• DAS (RAID1) for VMware • FC SAN for Cisco TelePresence Exchange System applications – 200 - 300 IOPs – 300 GB Fastcache – 4Gbps minimum FC interface speed	Cisco UCS M81KR	• vCenter 5.0.0 Update 1a (build 755629) • ESXi 5.0.0 (build 768111)

Virtual Machine Specifications

Each Cisco TelePresence Exchange System virtual machine is configured to the following specifications:

Hard Disk	400 GB, thick provisioned[1], lazy zeroed
RAM	8 GB
CPU	1 CPU, 5 cores
Network	1 network adapter

1. We highly recommend that you use thick provisioning. Use thin provisioning only if you have effective storage monitoring in place and can ensure that the Cisco TelePresence Exchange System servers do not exceed the available storage capacity.

Other Changes and Improvements

This section includes information about changed functionality and improvements in Cisco TelePresence Exchange System Release 1.2.

See the following sections:

- Command Reference Changes, page 15
- Improvements to the General Functionality of Inherited Meeting Attributes, page 15
- Improvements to Modifying Inherited Meeting Attributes for Active Meetings, page 15
- Removal of Large Meeting Resource Pools, page 15

Command Reference Changes

Table 5 lists the new commands for Release 1.2. For detailed information about the commands, see the "Command Reference" appendix of the *Administration Guide for the Cisco TelePresence Exchange System Release 1.2*, at http://www.cisco.com/en/US/products/ps11276/products_installation_and_configuration_guides_list.html.

Table 5 New Commands for Release 1.2

Command	Description
utils service snmp start	Used to start the snmp daemon.
utils service snmp status	Used to check whether the snmp daemon is running.
utils service snmp stop	Used to stop the snmp daemon.

The following commands are deprecated:

- **utils snmp get**
- **utils snmp walk**

Improvements to the General Functionality of Inherited Meeting Attributes

If you want a Meet-Me or Rendezvous meeting to inherit its attributes from the service provider, you must enable the inheritance option at both the meeting and organization level. However, if no organization is specified for the meeting, then you must enable inheritance at the meeting level only.

Prior to 1.2, specifying an organization for the meeting scheduler and selecting the inheritance option at the organization level was required if you wanted a meeting to inherit its attributes from the service provider.

Improvements to Modifying Inherited Meeting Attributes for Active Meetings

The inherited meeting attributes for meeting extension and drop participants on meeting host exit can be modified while a meeting is active. Specifically, if meeting extension was not enabled or was set to be inherited before the meeting was active, you can enable meeting extension at the meeting level and extend the meeting while the meeting is active. Also, if the drop participants on host exit attribute was set to true or set to be inherited before the meeting was active, you can change this setting to false while the meeting is active.

Prior to 1.2, if meeting extension was not enabled or was set to be inherited before the meeting was active, you could not extend the meeting while the meeting was active. Also, if the drop participants on host exit attribute was set to true or set to be inherited before the meeting was active, you could not change this setting to false while the meeting is active. For these situations, the fields on the Modify an Active Meeting page were view only.

Removal of Large Meeting Resource Pools

The concept of reserving specific resources for large meetings is not supported in Release 1.2.

For information on the enhancements to the meeting reservation algorithm for guaranteed Meet-Me and Rendezvous meetings, see the "Capacity Padding Settings for Guaranteed Meeting Reservations" section on page 9.

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. Topics in this section include:

Open Caveats

Table 6 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 6 Open Caveats in Cisco TelePresence Exchange System Release 1.2

Identifier	Component	Severity	Headline
CSCud36625	installer	Moderate	ISO installation on MCS servers might halt, but rarely
CSCud62844	call_control	Moderate	CTX Allows Endpoint to Join Meeting if Host Disconnects too Quickly

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 16.

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 1.2.

- Administration Guide for the Cisco TelePresence Exchange System: Outbound SIP Header Editor for Polycom Endpoints and IVR, page 17

Administration Guide for the Cisco TelePresence Exchange System: Outbound SIP Header Editor for Polycom Endpoints and IVR

Added September 24, 2013

The "Configuring Editors" and "Creating Adjacencies" sections of the "Configuring Cisco Session Border Controllers" chapter omit the outbound SIP header editor configuration that is required in order for Polycom endpoints to join meetings on the Cisco TelePresence Exchange System by using the IVR.

Use the following procedures and examples (in addition to the configuration in the guide) to add the SIP header editor and configure it on the adjacencies for the Cisco Application Control Engine and the two Cisco TelePresence Exchange System call engine servers.

Procedure

	Command	Purpose
Step 1	`Router(config-sbc-sbe)# sip header-editor editor-name`	Configures a header editor. Specify the name of the header editor.
Step 2	`Router(config-sbc-sbe-mep-hdr)# store-rule [entry entry-number]`	Creates a store-rule context to extract variables from the headers. Specify the filtered entry number. By default, the value is 1.
Step 3	`Router(config-sbc-sbe-mep-hdrele-act)# condition [comparison-type | boolean-operator | operator | comparison-value]`	Specifies one or more conditions for the action to be effective. Specify the *comparison-type* as the header-name *name* header-value that is used as the content of a different header. Specify the *operator* as [not] regex-match that is used for regular expression matching (BRE). Specify the *store-as* that is used to store rules only.

	Command	Purpose
Step 4	`Router(config-sbc-sbe-mep-hdrele-act)# exit`	Exits the SIP header editor header action configuration mode.
Step 5	`Router(config-sbc-sbe-mep-hdr)# header` *header-name* `[entry` *entry-number*`]`	Adds a header to a SIP message editor. Specify the name of the header to be added to the header editor. Valid names are 1 to 32 characters in length (inclusive) and case-sensitive. Specify the filtered entry number. The range is from 1 to 99.
Step 6	`Router(config-sbc-sbe-mep-hdrele)# action {add-first-header| add-header | replace-name | replace-value} {value` *word*`}`	Configures an action to be taken on a header editor. You must add the first occurrence of a header (no action occurs if a header already exists). Then, specify the string that is used in conjunction with the action. The string is up to 256 characters.
Step 7	`Router(config-sbc-sbe-sip-hdrele-act)# condition [`*comparison-type* `|` *boolean-operator* `|` *operator* `|` *comparison-value*`]`	Specifies one or more conditions for the action to be effective. Specify the *comparison-type* as the variable that is used to match on variable content. Specify the *boolean-operator* as *is-defined* that is used to test if a variable is defined. Specify the *operator* as [not] eq that is defined as equals or not equal. Then, specify a character string or numeric value to compare.

The following example shows how to define the outbound SIP header editor for Polycom endpoints:

```
Router(config)# sbc mmsbc
Router(config-sbc)# sbe
Router(config-sbc-sbe)# sip header-editor HE_POLYCOM
Router(config-sbc-sbe-mep-hdr)# store-rule entry 1
Router(config-sbc-sbe-mep-hdr-ele-act)# condition header-name Contact header-value
regex-match "\(.*\);+sip.instance=[^;]*\(.*\)" store-as c1 c2
Router(config-sbc-sbe-mep-hdrele-act)# exit
Router(config-sbc-sbe-mep-hdr-ele-act)# header contact entry 1
Router(config-sbc-sbe-mep-hdr-ele)# action replace-value value "${c1}${c2}"
Router(config-sbc-sbe-sip-hdr-ele-act)# condition variable c1 is-defined eq true
```

Procedure

	Command	Purpose
Step 1	`Router(config-sbc-sbe)# adjacency {sip | h323}` *adjacency-name*	Enters configuration mode for the specified SIP or H.323 adjacency. For the Cisco TelePresence Exchange System configuration, enter **sip** as the type of adjacency.
Step 2	`Router(config-sbc-sbe-adj-sip)# no attach`	Detaches the adjacency. You can only modify adjacencies when the adjacency is detached. The adjacency stays in the going down state until all calls have ended or when the ping enable feature is running. During this state, existing calls are not torn down and new calls are not accepted. An adjacency cannot be attached until the adjacency is in detached state.

	Command	Purpose
Step 3	**header-editor** {**inbound** | **outbound**} {*editor-name* | **default**}	Sets a specified header editor for inbound and outbound signaling on the SBE SIP adjacency. • **inbound**—Sets the inbound SIP header editor. • **outbound**—Sets the outbound SIP header editor. • *editor-name*—Name of the header editor to be set for inbound or outbound signaling on the adjacency. • **default**—Sets the header editor to the default settings.
Step 4	Router(config-sbc-sbe-adj-sip)# **attach**	Attaches the adjacency to the SBC instance. The adjacency is now available for SIP call processing.

The following example shows how to add the outbound header editor to the Cisco Application Control Engine and Cisco TelePresence Exchange System call engine adjacencies:

```
Router(config)# sbc mmsbc
Router(config-sbc)# sbe
Router(config-sbc-sbe)# adjacency sip TEST-ACE
Router(config-sbc-sbe-adj-sip)# no attach
Router(config-sbc-sbe-adj-sip)# header-editor outbound HE_POLYCOM
Router(config-sbc-sbe-adj-sip)# attach
Router(config-sbc-sbe-adj-sip)# adjacency sip TEST_CTX_ENGINE1
Router(config-sbc-sbe-adj-sip)# no attach
Router(config-sbc-sbe-adj-sip)# header-editor outbound HE_POLYCOM
Router(config-sbc-sbe-adj-sip)# attach
Router(config-sbc-sbe-adj-sip)# adjacency sip TEST_CTX_ENGINE2
Router(config-sbc-sbe-adj-sip)# no attach
Router(config-sbc-sbe-adj-sip)# header-editor outbound HE_POLYCOM
Router(config-sbc-sbe-adj-sip)# attach
```

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 "Product Documentation" section on page 2.

Release Notes for the Cisco TelePresence Exchange System Release 1.2