Cisco Expressway and Cisco TelePresence Video Communication Server Release Note (X14.0.9)

First Published: 2022-09-14

About the Documentation

This document lists the following topics -

Change History

Table 1: Change History

Date	Change	Reason
September 2022	First publication for X14.0.9	X14.0.9 release
August 2022	Republished X14.2	X14.2 release Replaced Bug ID
August 2022	First publication for X14.2	X14.2 release
July 2022	First publication for X14.0.8	X14.0.8 release
May 2022	First publication for X14.0.7	X14.0.7 release

Date	Change	Reason
March 2022	First publication for X14.0.6	X14.0.6 release
February 2022	First publication for X14.0.5	X14.0.5 release
December 2021	First publication for X14.0.4	X14.0.4 release
August 2021	First publication for X14.0.3.	X14.0.3 release
August 2021	Added a new item on Traffic Server Enforces Certificate Verification in the section "Other Changes in this Release."	X14.0.2 release - Republished
July 2021	First publication for X14.0.2.	X14.0.2 release
June 2021	First publication for X14.0.1.	X14.0.1 release
May 2021	Included a limitation in MRA Limitations section.	X14.0 release - Republished
April 2021	First publication for X14.0.	X14.0 release
December 2020	First publication for X12.7.	X12.7 release
August 2020	Updates for maintenance release.	X12.6.2 release
July 2020	Remove misleading section about issues with software downgrade (which is not supported).	Document correction
July 2020	Updates for maintenance release. Also, clarification on endpoint requirements for OAuth token authorization.	X12.6.1 release
June 2020	First publication for X12.6.	X12.6 release

Supported Platforms

Table 2: Expressway Platforms Supported in this Release

Platform name	Serial Numbers	Scope of software version support
Small VM (OVA)	(Auto-generated)	X8.1 onwards
Medium VM (OVA)	(Auto-generated)	X8.1 onwards
Large VM (OVA)	(Auto-generated)	X8.1 onwards
CE1200 Hardware Revision 2 (pre-installed on UCS C220 M5L)	52E1####	X12.5.5 onwards

Platform name	Serial Numbers	Scope of software version support
CE1200 Hardware Revision 1 (pre-installed on UCS C220 M5L)	52E0####	X8.11.1 onwards
CE1100 (Expressway pre-installed on UCS C220 M4L)	52D#####	Not supported (after X12.5.x) except limited support with X12.6.x versions for maintenance and bug fixing purposes only. Vulnerability/Security support is extended until November 30, 2023.
CE1000 (Expressway pre-installed on UCS C220 M3L)	52B#####	Not supported (after X8.10.x)
CE500 (Expressway pre-installed on UCS C220 M3L)	52C#####	Not supported (after X8.10.x)

Notices Relating to Deploying OVA with VMware 7.0 U2

Note This is a known issue in the current release. Deploying X14.2 OVA shows "Invalid Certificate" on vCenter 7.0 U2 version of VMware, though it shows "Trusted Certificate" in older versions. Refer to Knowledge Article for more information about the issue.

Notices Relating to VCS Product Support

Cisco has announced **end-of-sale** and **end-of-life** dates for the Cisco TelePresence Video Communication Server (VCS) product. Details are available at the following link.

Issues resolved in this software release are available to Cisco Expressway and Cisco TelePresence Video Communication Server users, however, new features added in this release are not supported on the Cisco TelePresence Video Communication Server (VCS) product.

This notice does not affect the Cisco Expressway Series product.

Notices Relating to Hardware Support for CE1200, CE1100, CE1000, and CE500 Appliances

This section applies to **hardware** support services only.

CE1200 Appliance

Important Supply issues with components used in the Expressway CE1200 are delaying orders. In light of the supply issues, we are extending the end of Vulnerability/Security support until November 30, 2023.

Please ignore the warning "**unsupported hardware**" in the User Interface.

CE1100 Appliance - End-of-Life and Advance Notice of hardware service support withdraw

In light of ongoing issues with component shortages that are affecting the timely supply of new Expressway appliances, to support those customers still using Cisco Expressway CE1100 appliances, Cisco has taken the decision to extend the End of Vulnerability/Security Support from November 14, 2021 (as per the original End-of-Life announcement) to November 30, 2023, in line with the last date of support, for those customers with a valid service contract.

Note Although customers may run this release of software on the Expressway CE1100 and benefit from security improvements/vulnerability fixes, many new features require newer, more powerful hardware and as a result, new features/functionality added in this release of the Expressway software are not supported for use on the CE1100 platform.

CE500 and CE1000 Appliances - End-of-Sale Notice

The Cisco Expressway CE500 and CE1000 appliance hardware platforms are no longer supported by Cisco. See the End-of-sale announcement for more details.

Interoperability and Compatibility

Product Compatibility Information

Detailed matrices

Cisco Expressway is standards-based and interoperates with standards-based SIP and H.323 equipment both from Cisco and third parties. For specific device interoperability questions, contact your Cisco representative.

Mobile and Remote Access (MRA)

Information about compatible products for MRA specifically, is provided in version tables for endpoints and infrastructure products in the Mobile and Remote Access Through Cisco Expressway Deployment Guide.

For MRA, to access the latest features and functionality, it's recommended that Expressway is deployed in conjunction with the latest version of UCM. However, Expressway is backwards compatible with earlier UCM releases as well.

Which Expressway Services Can Run Together?

The Cisco Expressway Administrator Guide details which Expressway services can coexist on the same Expressway system or cluster. See the table "*Services That Can be Hosted Together*" in the **Introduction** chapter. For example, if you want to know if MRA can coexist with CMR Cloud (it can) the table will tell you.

Feature Summary for X14.0.9

Table 3: Features by Release Number

Feature / Change	Status
Enabling or Disabling CDB API Access	Supported from X14.2
TLS Verification Mode	Supported from X14.2
Upload files along /tmp/ path	Supported from X14.2
Smart Licensing Phase II	Supported from X14.2
MRA over IPv6	Supported from X14.2
XCP Routing Information	Supported from X14.2
Approved Cryptographic Primitives and Parameters	Supported from X14.2
Enable DOS Protection for TrafficServer	Supported from X14.2
Reduce Email Notifications	Supported from X14.2
Alternate Method of Using xCommand FIPS	Supported from X14.2
RedSky E911 Location Services	Supported from X14.0.4
Service Select Wizard	Supported from X14.0.3
Ban/Unban an IP Address	Supported from X14.0.3
Exempt an IP Address	Supported from X14.0.3
Call Detail Record (CDR) Configuration	Supported from X14.0.3
Multiple Admin Accounts and Groups can have CLI access.	Supported from X14.0.1
Ability to configure SNMP details in the new RAML REST API.	Supported from X14.0.1
Ability to view and acknowledge the alarms using command interface	Supported from X14.0.1
Redirect URI support for SSO/OAuth sign-in	Supported from X14.0
AV1 Support	Supported from X14.0
XCP support for "Jabber Zero Downtime"	Supported from X14.0
Escalation from P2P to Meeting	Supported from X14.0

Feature / Change	Status
Expressway Cluster load balancing not applicable to SIP Federation	Supported from X14.0
MRA SIP Registration Failover for Cisco Jabber	Supported from X14.0
MRA Mobile Application Management clients	Preview
Android Push Notifications for IM&P	Preview (disabled by default from X12.6.2)
Headset Capabilities for Cisco Contact Center	Preview

Withdrawn or Deprecated Features and Software

The Expressway product set is under continuous review and features are sometimes withdrawn from the product or deprecated to indicate that support for them will be withdrawn in a subsequent release. This table lists the features that are currently in deprecated status or have been withdrawn since X12.5.

Table 4: Deprecated and Withdrawn Features

Feature / Software	Status
Hardware Security Module (HSM) Support	Withdrawn from X14.2
Support for Microsoft Internet Explorer browser	Deprecated from X14.0.2
VMware ESXi 6.0 (VM-based deployments)	Deprecated
Cisco Jabber Video for TelePresence (Movi) **Note** Relates to Cisco Jabber Video for TelePresence (works in conjunction with Cisco Expressway for video communication) and not to the Cisco Jabber soft client that works with Unified CM.	Deprecated
FindMe device/location provisioning service - Cisco TelePresence FindMe/Cisco TelePresence Management Suite Provisioning Extension (Cisco TMSPE)	Deprecated
Expressway Starter Pack	Deprecated
Smart Call Home preview feature	Withdrawn X12.6.2
Expressway built-in forward proxy	Withdrawn X12.6.2
Cisco Advanced Media Gateway	Withdrawn X12.6
VMware ESXi 5.x (VM-based deployments)	Withdrawn X12.5

No Support for Ray Baum's Act

Expressway is not an MLTS (Multiline Telephone System). Customers that need to comply with the requirements of Ray Baum's Act should use Cisco Unified Communication Manager in conjunction with Cisco Emergency Responder.

Related Documentation

Table 5: Links to Related Documents and Videos

Support videos	Videos provided by Cisco TAC engineers about certain common Expressway configuration procedures are available on the Expressway/VCS Screencast Video List page (search for "Expressway videos").
Installation - virtual machines	*Cisco Expressway Virtual Machine Installation Guide* on the Expressway Installation Guides page.
Installation - physical appliances	*Cisco Expressway CE1200 Appliance Installation Guide* on the Expressway Installation Guides page.
Basic configuration for single-box systems	*Cisco Expressway Registrar Deployment Guide* on the Expressway Configuration Guides page.
Basic configuration for paired-box systems (firewall traversal)	*Cisco Expressway-E and Expressway-C Basic Configuration Deployment Guide* on the Expressway Configuration Guides page.
Administration and maintenance	*Cisco Expressway Administrator Guide* on the Expressway Maintain and Operate Guides page (includes Serviceability information).
Clustering	*Cisco Expressway Cluster Creation and Maintenance Deployment Guide* on the Expressway Configuration Guides page.
Certificates	*Cisco Expressway Certificate Creation and Use Deployment Guide* on the Expressway Configuration Guides page.
Ports	*Cisco Expressway IP Port Usage Configuration Guide* on the Expressway Configuration Guides page.
Mobile and Remote Access	*Mobile and Remote Access Through Cisco Expressway Deployment Guide* on the Expressway Configuration Guides page.
Cisco Meeting Server	*Cisco Meeting Server with Cisco Expressway Deployment Guide* on the Expressway Configuration Guides page. *Cisco Meeting Server API Reference Guide* on the Cisco Meeting Server Programming Guides page. Other *Cisco Meeting Server Guides* are available on the Cisco Meeting Server Configuration Guides page.

Cisco Webex Hybrid Services	Hybrid services knowledge base
Cisco Hosted Collaboration Solution (HCS)	HCS customer documentation
Microsoft infrastructure	*Cisco Expressway with Microsoft Infrastructure Deployment Guide* on the Expressway Configuration Guides page. *Cisco Jabber and Microsoft Skype for Business Infrastructure Configuration Cheatsheet* on the Expressway Configuration Guides page.
Rest API	*Cisco Expressway REST API Summary Guide* on the Expressway Configuration Guides page (high-level information only as the API is self-documented).
Multiway Conferencing	*Cisco TelePresence Multiway Deployment Guide* on the Expressway Configuration Guides page.

Features and Changes in X14.0.9

We aim to provide new Expressway features as promptly as possible. Sometimes it is not possible to officially support a new feature because it may require updates to other Cisco products which are not yet available.

There are no new functional enhancements or changes for this release.

Preview Features

Some features in this release are provided in "preview" status only, because they have known limitations or incomplete software dependencies. Cisco reserves the right to disable preview features at any time without notice.

Preview features should not be relied on in your production environment. Cisco Technical Support will provide limited assistance (Severity 4) to customers who want to use preview features.

(Preview) Hardware Security Module (HSM) Support - Withdrawn from X14.2 release

The Expressway X12.6 release has added HSM functionality, as a **Preview** feature. (HSM safeguards and manages digital keys for strong authentication and provides crypto-processing for critical functions such as encryption, decryption, and authentication for the use of applications, identities, and databases.)

Although the **Maintenance** > **Security** > **HSM configuration** page is still visible in the Expressway User Interface in this version of Expressway software, this functionality is withdrawn and will be removed from the user interface in the future software releases.

(Preview) Headset Capabilities for Cisco Contact Center – MRA Deployments

This feature applies if you deploy Expressway with Mobile and Remote Access. It is currently provided in Preview status only.

New demonstration software now provides some Cisco Contact Center functions on compatible Cisco headsets. From X12.6, Expressway automatically supports these new headset capabilities as a preview feature, if the

involved endpoint, headset, and Unified CM are running the necessary software versions. The feature is enabled from the Unified CM interface and you do not need to configure anything on Expressway.

More information is available in the white paper Cisco Headset and Finesse Integration for Contact Center.

(Preview) Push Notifications with Mobile Application Management Clients - MRA Deployments

This feature applies if you deploy Expressway with Mobile and Remote Access. It is currently provided in Preview status only.

With this feature, push notification support over Mobile and Remote Access now includes support for Mobile Application Management (MAM) clients like Jabber Intune and Jabber BlackBerry. As a result, the push notification service is available for all devices that are running Jabber Intune and Jabber BlackBerry clients.

(Preview) Push Notifications with Android Devices – MRA Deployments

This feature applies if you deploy Expressway with MRA. In X12.6 it was introduced in Preview status only, due to external product version dependencies.

In X12.6.2, the feature was switched off by default due to a known issue (bug ID CSCvv12541 refers).

In X12.7, bug ID CSCvv12541 was fixed. However, this feature remains in Preview status for now, due to pending software dependencies.

How to enable push notifications for Android devices

This feature is enabled through the Expressway command line interface. Only do this **if all IM and Presence Service nodes that service Android users are also running a supported release**.

The CLI command is: *xConfiguration XCP Config FcmService: On*

Note   IM and Presence services for users who are currently signed in over MRA will be disrupted when this command is used, so those users will need to sign in again.

(Preview) KEM Support for Compatible Phones - MRA Deployments

We have not officially tested and verified support over MRA for the Key Expansion Module (KEM) accessory for Cisco IP Phone 8800 Series devices. However, we have observed under lab conditions that KEMs with multiple DNs work satisfactorily over MRA. These are **not** official tests, but in view of the COVID-19 crisis, this may be useful information for customers who are willing to use an unsupported preview feature.

SIP path headers must be enabled on Expressway, and you need a Unified CM software version that supports path headers (release 11.5(1)SU4 or later is recommended).

REST API Changes

The REST API for Expressway is available to simplify remote configuration. For example, by third party systems such as Cisco Prime Collaboration Provisioning. We add REST API access to configuration, commands, and status information as new features are added, and also selectively retrofit the REST API to some features that were added in earlier versions of Expressway.

The API is self-documented using RAML, and you can access the RAML definitions at `https://<ipaddress>/api/raml`.

Table 6: List of REST API(s)

Configuration APIs	API Introduced In Version
CDB Rest API Access - Enable/Disable CDB REST API Access	X14.2
Service Select Wizard	X14.0.3
Ability to acknowledge active Alarms	X14.0.3
Ban/Unban an IP Address	X14.0.3
Exempt an IP Address	X14.0.3
Call Detail Record (CDR) Configuration	X14.0.3
Status - fail2banbannedaddress	X14.0.2
SNMP Configuration	X14.0.1
Alarms - view and acknowledge	X14.0.1
Dedicated Management Interface (DMI)	X12.7
Diagnostic Logging	X12.6.3
Smart Licensing	X12.6
Clustering	X8.11
Smart Call Home	X8.11
Microsoft Interoperability	X8.11
B2BUA TURN Servers	X8.10
Admin account	X8.10
Firewall rules	X8.10
SIP configuration	X8.10
Domain certificates for Server Name Identification	X8.10
MRA expansion	X8.9
Business to business calling	X8.9
MRA	X8.8

Other Changes in this Release

X14.0.9 release

Jabber Over MRA intermittently plays Ringing Tone instead of Busy, when called Extension is Busy

A new CLI command is added that specifies the maximum delay of a SIP REFER message . It contains DtLineBusyTone during initial call dialog (ensure SIP messages proceeds in a sequence) that the server can handle (in milliseconds).

Expressway processes and sends SIP messages (REFER contain DtLineBusyTone parameter and 183 Session Progress), which causes Jabber Over MRA to intermittently play Ringing Tone instead of Busy Tone (bug ID CSCwc27302 refers).

Recommend adjust delay between 100-200 milliseconds.

The CLI command is: **xConfiguration SIP Advanced BusytoneReferDelay: <0..2000>**

X14.0.7 release

Expressway processes SIP messages in a different order than they are received

A new CLI command is added that specifies the maximum delay of a SIP BIB invite message (ensure SIP message proceeds in order) that the server can handle (in milliseconds).

Recommend adjusting delay between 500-1000 milliseconds.

The CLI command is: **xConfiguration SIP Advanced BibInviteDelay: <1..5000>**

ssh removal from backup and restore

We are removing the client ssh public key and server ssh key pair from the backup and restore.

As ssh keys will not part of backup, after restoring the system ssh may not work without password. So, to login, add both client and server keys manually.

X14.0.2 release

CE Zone Status Change from "Active" to "Address Resolvable"

Prior to X14.0.2, CE zone showed a status of **Active** where the Zone Profile had Monitor Peer status / Neighbor Monitor set to **No** - since the Expressway is not monitoring the peer status for the CE zones, the more accurate status of **Address Resolvable** is indicated.

Auto-created UC zones and associated Unified Communications zone profile are not customizable and Neighbor Monitor set to **No** is by design.

Auto-created CE (tcp/tls/OAuth) Zone destined for the UC node will show status as **Address Resolvable** as per a fix for CSCup29823.

Traffic Server Enforces Certificate Verification

☞

Important   Before upgrading from pre-X14.0.2 release to X14.0.8, make sure the following certificate requirement is met.

Due to improvements in the traffic server service in Expressway, beginning in X14.0.2, the following must be in place for MRA.

Requirement - Upload the Complete Certificate Authority (CA) chain of trust including any Certificate Authority provided intermediate certificates to the *Tomcat*-trust and *CallManager*-trust list of Cisco Unified Communications Manager (UCM), even if the UCM is in **non-secure** mode. And restart the following services on CUCM side:

- TFTP
- Tomcat Service
- CallManager Service
- HA Proxy Service (if using TLS on Tomcat)

Reason - The traffic server service in Expressway sends its certificate whenever a server (UCM) requests it. These requests are for services running on ports other than 8443 (for example, ports 6971, 6972, and so on). This enforces certificate verification even if UCM is in non-secure mode.

For more information, see Mobile and Remote Access Through Expressway Deployment Guide.

Limitations

Some Expressway Features are Preview or Have External Dependencies

We aim to provide new Expressway features as speedily as possible. Sometimes it is not possible to officially support a new feature because it may require updates to other Cisco products which are not yet available, or known issues or limitations affect some deployments of the feature. If customers might still benefit from using the feature, we mark it as "preview" in the release notes. Preview features may be used, **but you should not rely on them in production environments** (see **Preview Features Disclaimer**). Occasionally we may recommend that a feature is not used until further updates are made to Expressway or other products.

Open and Resolved Issues

Follow the links below to read the most recent information about the open and resolved issues in this release.

- All open issues, sorted by date modified (recent first)
- Issues resolved by X14.0.9

Using the Bug Search Tool

The Bug Search Tool contains information about open and resolved issues for this release and previous releases, including descriptions of the problems and available workarounds. The identifiers listed in these release notes will take you directly to a description of each issue.

To look for information about a specific problem mentioned in this document:

1. Using a web browser, go to the Bug Search Tool.

2. Sign in with a cisco.com username and password.

3. Enter the bug identifier in the **Search** field and click **Search**.

To look for information when you do not know the identifier:

1. Type the product name in the **Search** field and click **Search**.

2. From the list of bugs that appears, use the **Filter** drop-down list to filter on either *Keyword*, *Modified Date*, *Severity*, *Status*, or *Technology*.

Use **Advanced Search** on the Bug Search Tool home page to search on a specific software version.

The Bug Search Tool help pages have further information on using the Bug Search Tool.

Obtaining Documentation and Submitting a Service Request

Use the Cisco Notification Service to create customized flexible notification alerts to be sent to you via email or by RSS feed.

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see What's New in Cisco Product Documentation.

To receive new and revised Cisco technical content directly to your desktop, you can subscribe to the What's New in Cisco Product Documentation RSS feed. The RSS feeds are a free service.