TLS 1.2 Configuration Overview Guide

First Published: April 20, 2018
Last Updated: June 4, 2018

Overview

For security or compliance reasons, administrators can choose to lock down the TLS version of many Cisco Collaboration products to 1.2, and therefore disable TLS 1.0 and TLS 1.1. For an overview, considerations, and implications of enabling TLS 1.2 and disabling TLS 1.0 or 1.1, see the *TLS 1.2 for On-Premises Cisco Collaboration Deployments* available at https://www.cisco.com/c/en/us/support/unified-communications/unified-communications-system/products-configuration-examples-list.html.

This document provides an overview on how to enable TLS 1.2 and disable TLS 1.0 and 1.1 for Cisco Collaboration products. It also provides references to the relevant product documentation.

Configuration

The following table outlines how to configure your Cisco Collaboration products for TLS 1.2.

Prerequisite: Before configuring your products for TLS 1.2, verify that your product versions can enable TLS 1.2 and disable TLS 1.0 and 1.1. For a list of product versions with this capability, see the *TLS 1.2 Compatibility Matrix for Cisco Collaboration Products*: https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/uc_system/unified/communications/system/Compatibility/TLS/TLS1-2-Compatibility-Matrix.html.

Note: You can configure TLS 1.2 and disable TLS 1.0 and 1.1 for the following products in any order.

Table 1. Configure Collaboration Products for TLS 1.2

Product	How to Configure TLS 1.2	References to Product Documentation
Call Control		
Cisco Unified Communications Manager and IM and Presence Service	Use CLI Command: set tls min-version <1.0 | 1.1 | 1.2>	*TLS Setup* chapter in the *Security Guide for Cisco Unified Communications Manager, Release 11.5(1)SU3* or later, available at https://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-maintenance-guides-list.html.
Cisco Unified Survivable Remote Site Telephony	Use CLI Command: sip-ua transport tcp tls [v1.0 | v1.1 | v1.2]	*Cisco Unified SCCP and SIP SRST System Administrator Guide*, available at https://www.cisco.com/c/en/us/support/unified-communications/unified-survivable-remote-site-telephony/products-installation-and-configuration-guides-list.html.

Conferencing		
Cisco Meeting Server	Use CLI Command: tls <sip | ldap | webadmin> min-tls-version <1.0 | 1.1 | 1.2>	*Cisco Meeting Server MMP Command Line Reference, Release 2.3* or later, available at https://www.cisco.com/c/en/us/support/conferencing/meeting-server/products-programming-reference-guides-list.html.
Cisco Meeting Management	No command necessary. TLS 1.1 and 1.0 are disabled.	*Cisco Meeting Management 1.0.1 Release Notes*: https://www.cisco.com/c/dam/en/us/td/docs/conferencing/Cisco-Meeting-Management/Release-Notes/Cisco-Meeting-Management-Release-Notes-1-0-1.pdf.
Cisco TelePresence Management Suite	Edit Windows Registry.	Refer to Microsoft documentation. For example, https://docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-server-2012-R2-and-2012/dn786418(v=ws.11).
Cisco TelePresence Management Suite Extension for Microsoft Exchange	Edit Windows Registry.	Refer to Microsoft documentation. For example, https://docs.microsoft.com/en-us/previous-versions/windows/it-pro/windows-server-2012-R2-and-2012/dn786418(v=ws.11).
Cisco TelePresence Conductor	TLS 1.0/1.1 is disabled by default with XC4.3.2.	*Cisco TelePresence Conductor XC4.3.2, Release Notes*, available at https://www.cisco.com/c/dam/en/us/td/docs/telepresence/infrastructure/conductor/release_note/TelePresence-Conductor-Release-Notes-XC4-3-2.pdf. *Cisco TelePresence Conductor Administrator Guide*, XC4.3.2 or later, available at https://www.cisco.com/c/en/us/support/conferencing/telepresence-conductor/products-maintenance-guides-list.html.
Enterprise Edge		
Cisco Expressway Series	You can configure the cipher suite and minimum supported TLS version for each service on the Maintenance > Security > Ciphers page of the product's web UI.	*Cisco Expressway Administrator Guide (X8.10)* or later, available at https://www.cisco.com/c/en/us/support/unified-communications/expressway-series/products-maintenance-guides-list.html.
Cisco Unified Border Element (CUBE)	Use CLI Command: sip-ua transport tcp tls [v1.0 | v1.1 | v1.2]	*Cisco Unified Border Element Configuration Guide*, available at https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-sip-tls.html.

SIP PSTN Gateway	Use CLI Command: sip-ua transport tcp tls [v1.0 | v1.1 | v1.2]	*Cisco Unified Border Element Configuration Guide*, available at https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-sip-tls.html.
Server Applications		
Cisco Emergency Responder	For pre 12.0(1)SU1, install cop file. For 12.0(1)SU1+, use CLI command: set tls min-version <1.0 | 1.1 | 1.2>	*Cisco Emergency Responder Version 12.0(1)SU(1) Release Notes* or later, available at https://www.cisco.com/c/en/us/support/unified-communications/emergency-responder/products-release-notes-list.html.
Voicemail and Messaging		
Cisco Unity Connection	Use CLI Command: set tls min-version <1.0 | 1.1 | 1.2>	*IP Communications Required by Cisco Unity Connection* chapter in the *Security Guide for Cisco Unity Connection Release 12.x* or later, available at https://www.cisco.com/c/en/us/support/unified-communications/unity-connection/products-user-guide-list.html.
Endpoints		
Cisco IP Phone 7800 and 8800 Series	From Cisco Unified CM, set "Disable TLS 1.0 and TLS 1.1 for Web Access" to enabled or disabled.	*TLS Setup* chapter of Security Guide for *Cisco Unified Communications Manager, Release 11.5(1)SU3* or later, available at https://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-maintenance-guides-list.html. *Cisco IP Phone Administration* chapter in *Cisco IP Phone 7800 Series Administration Guide for Cisco Unified Communications Manager*, available at https://www.cisco.com/c/en/us/support/collaboration-endpoints/unified-ip-phone-7800-series/products-maintenance-guides-list.html. *Cisco IP Phone Administration* chapter in *Cisco IP Phone 8800 Series Administration Guide for Cisco Unified Communications Manager*, available at https://www.cisco.com/c/en/us/support/collaboration-endpoints/unified-ip-phone-8800-series/products-maintenance-guides-list.html.
Cisco TelePresence SX/MX/DX Series running the CE software	TLS 1.0 is always disabled starting from CE8.1.0. To disable TLS 1.1, in the endpoint web interface, go to Setup > Configuration > NetworkServices > ServerMinimumTLSVersion.	*Cisco TelePresence SX, MX, and DX Series, Collaboration Endpoint Software 8 Release Notes*: https://www.conferenceroomav.com/pdf/ce-software-release-notes-ce8%20collaboration%20software.pdf.

Cisco Webex Room Kit & Plus	TLS 1.0 is always disabled. To disable TLS 1.1, in the endpoint web interface, go to Setup > Configuration > NetworkServices > ServerMinimumTLSVersion.	https://www.cisco.com/c/en/us/support/collaboration-endpoints/spark-room-kit/model.html https://www.cisco.com/c/en/us/support/collaboration-endpoints/spark-room-kit-plus/model.html
Cisco TelePresence C/SX/EX/MX/Profile Series running the TC software	TLS 1.0 is always disabled on the HTTPS web interface. TLS 1.1 and TLS 1.2 are always allowed.	*Cisco TelePresence System C/SX/EX/MX/Profile Series Software release notes TC 7*: https://www.cisco.com/c/dam/en/us/td/docs/telepresence/endpoint/software/tc7/release_notes/tc-software-release-notes-tc7.pdf.
Cisco TelePresence IX5000	TLS 1.0 and 1.1 are disabled by default since IX 8.2.2.	*Release Notes for Cisco TelePresence System Software Release IX 8*, available at https://www.cisco.com/c/en/us/td/docs/telepresence/ix_sw/8_x/release/notes/ix_release_notes.html.
Cisco Jabber	Not applicable. There is no TLS server interface.	https://www.cisco.com/c/en/us/products/unified-communications/jabber/index.html
Service Management		
Cisco Prime Collaboration (Provisioning)	TLS 1.0 and 1.1 are disabled on the TLS server interface (HTTPS).	https://www.cisco.com/c/en/us/support/cloud-systems-management/prime-collaboration/tsd-products-support-series-home.html
Cisco Prime Collaboration (Deployment)	Use CLI Command: set tls min-version <1.0 | 1.1 | 1.2>	*Minimum TLS Version Control* chapter in the *Cisco Prime Collaboration Deployment Administration Guide, Release 12.0(1)* or later, available at https://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-maintenance-guides-list.html.
Cisco Prime License Manager	Use CLI Command: set tls min-version <1.0 | 1.1 | 1.2>	*Cisco Prime License Manager User Guide, Release 11.5(1)SU2*, available at https://www.cisco.com/c/en/us/support/cloud-systems-management/prime-license-manager/products-user-guide-list.html.
Communication Gateways		
STC App and Cisco VG Series Gateways	Use CLI Command: stcapp security tls-version v1.2	*Configuring Voice Functionality* chapter in *Cisco 4000 Series ISRs Software Configuration Guide, Cisco IOS XE Fuji 16.7.x* or later, available at https://www.cisco.com/c/en/us/support/routers/4000-series-integrated-services-routers-isr/products-installation-and-configuration-guides-list.html.
Other		

IOS MTP/CFB	Use CLI Command: dspfarm profile <n> conference security tls-version <v1.0 | v1.1 | v1.2>	*Cisco 4000 Series ISRs Software Configuration Guide*, available at https://www.cisco.com/c/en/us/td/docs/routers/access/4400/software/configuration/xe-16-7/isr4400swcfg-xe-16-7-book/configuring_voice_functionality.html.

Documentation Changes

Table 2. Documentation Changes

Date	Change
June 4, 2018	Added Cisco IP Phone 7800 and 8800 Series to table. Updated product names from Cisco Spark to Cisco Webex.

Obtaining Documentation and Submitting a Service Request

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.

OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

All printed copies and duplicate soft copies are considered un-Controlled copies and the original on-line version should be referred to for latest version.

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco website at www.cisco.com/go/offices.