Cisco Unified IP Conference Phone 8831 Release Notes for Firmware Release 10.3(1)SR4b

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Introduction

These release notes support the Cisco Unified IP Conference Phone 8831 running SIP Firmware Release 10.3(1)SR4b.

This release does not support the Cisco Unified IP Conference Phone 8831NR.

The following table lists the support and protocol compatibility for the Cisco IP Phones.

Table 1: Cisco IP Phones, Support, and Firmware Release Compatibility

Cisco IP Phone	Protocol	Support Requirements
Cisco Unified IP Conference Phone 8831	SIP	Cisco Unified Communications Manager 7.1(5) and later
		Cisco Business Edition 3000 8.6(1) and later
		Cisco Business Edition 6000 8.6(5) and later
		Cisco Unified Communications Manager Express 10.0 and later; on IOS, release 15.4(1)T or later
		Cisco Hosted Collaboration Solution 8.6(2) and later

Related Documentation

Use the following sections to obtain related information.

Cisco Unified IP Conference Phone 8831 Documentation

Refer to publications that are specific to your language, phone model, and call control system. Navigate from the following documentation URL:

https://www.cisco.com/c/en/us/support/collaboration-endpoints/unified-ip-phone-8800-series/tsd-products-support-series-home.html

Cisco Unified Communications Manager Documentation

See the *Cisco Unified Communications Manager Documentation Guide* and other publications that are specific to your Cisco Unified Communications Manager release. Navigate from the following documentation URL:

https://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/tsd-products-support-series-home.html

New and Changed Features

The following sections describe the features that are new or have changed in this release.



Note Some features may require the installation of a Cisco Unified Communications Manager Device Package. Failure to install the Device Package before the phone firmware upgrade may render the phones unusable.

Features Available with the Firmware Release

The following sections describe the features available with the Firmware Release.

TLS 1.2 Support

The Cisco Unified IP Conference Phone 8831 supports TLS 1.2.

The ability to use TLS protocol depends on the certificates present on the phone.

- Manufactured Installed Certificate(MIC): The phone MIC is SHA1 based. If MIC is used for secure transaction, the phone uses TLSv1 protocol.
- Locally Significant Certificate(LSC): If Cisco Unified Communications Manager has the ability of generate LSC with SHA256 algorithm and install the same on the phone, the phone uses TLSV1.2 based on LSC for secure transaction.

Transport Layer Security Enhancements

The Cisco Unified IP Conference Phone 8831 now supports Transport Layer Security (TLS) 1.0, 1.1 and 1.2.

TLS 1.0 and TLS 1.1 cannot be disabled from the Cisco Unified Communications Manager (Unified CM) for the Cisco Unified IP Conference Phone 8831.

To use TLS 1.2, you must install a LSC certificate that supports TLS 1.2.

Where to Find More Information

Cisco IP Conference Phone 8831 Administration Guide

Installation

When you install the 10.3(1)SR4b firmware, the steps you follow depend on the firmware version on your phone.

If you have 9.3(3) or 9.3(3)ES9:

You need to install an interim firmware load before you install the 10.3(1)SR4b firmware.

If you have 10.3(1), 10.3(1)SR1, 10.3(1)SR2, 10.3(1)SR3, or 10.3(1)SR4:

You can directly upgrade to 10.3(1)SR4b.

This release does not support the Cisco Unified IP Conference Phone 8831NR.

Installation Requirements

Before you install the firmware release, you must ensure that your Cisco Unified Communications Manager is running the latest device package. After you install a device package on the Cisco Unified Communications Manager servers in the cluster, you need to reboot all the servers.



Note

If your Cisco Unified Communications Manager doesn't have the required device package to support this firmware release, the firmware may not work correctly.

For information on the Cisco Unified Communications Manager Device Packages, see https://www.cisco.com/ c/en/us/td/docs/voice_ip_comm/cucm/compat/matrix/CMDP_BK_CCBDA741_00_ cucm-device-package-compatibility-matrix.html.

Upgrade from 10.3(1) to 10.3(1)SR4b

If your Cisco Unified IP Conference Phone 8831 is running Firmware Release 10.3(1), 10.3(1)SR1, 10.3(1)SR2, 10.3(1)SR3, or 10.3(1)SR4, use this set of upgrade instructions.

The 10.3(1)SR4b release does not support the Cisco Unified IP Conference Phone 8831NR.

Before you begin

Before using Cisco Unified IP Phone Firmware Release 10.3(1)SR4b with Cisco Unified Communications Manager, you must install the latest firmware on all Cisco Unified Communications Manager servers in the cluster.

Procedure

o	
Step 1	Go to the following URL:
	http://www.cisco.com/cisco/software/navigator.html?mdfid=268437892&flowid=5293
Step 2	Choose Cisco Unified IP Phones 8800 Series.
Step 3	Choose Cisco Unified IP Conference Phone 8831.
Step 4	Choose Session Initiation Protocol (SIP) Software.
Step 5	In the Latest Releases folder, choose 10.3(1)SR4b.
Step 6	Select the required region-specific file as described in the following table, click the Download Now or Add to cart button, and follow the prompts.

Region	Region-Specific Firmware
North America	cmterm-8831-sip.10-3-1SR4b-1-NA.cop.sgn
Europe	cmterm-8831-sip.10-3-1SR4b-1-EU.cop.sgn
Latin America	cmterm-8831-sip.10-3-1SR4b-1-LA.cop.sgn
Brazil	cmterm-8831-sip.10-3-1SR4b-1-BR.cop.sgn

Table 2: Wireless Microphone Regions and Firmware Loads

Region	Region-Specific Firmware
Taiwan	cmterm-8831-sip.10-3-1SR4b-1-TW.cop.sgn
Japan	cmterm-8831-sip.10-3-1SR4b-1-JP.cop.sgn

- **Note** If you added the firmware file to the cart, click the **Download Cart** link when you are ready to download the file.
- **Step 7** Click the + next to the firmware filename in the Download Cart section to access additional information about this file. The hyperlink for the readme file is in the Additional Information section, which contains installation instructions for the corresponding firmware:

cmterm-8831-sip.10-3-1SR4b-1-readme.html

- **Step 8** Follow the instructions in the readme file to install the firmware.
- **Step 9** If the Cisco Unified Communications Manager Device Pack to support this release is not available, download the file cmterm-8831-QED-1031-4.k3.cop.sgn and install it on the Cisco Unified Communications Manager.
- **Step 10** Follow the instructions in the readme file to install the firmware.

Upgrade from 9.3(3) to 10.3(1)SR4b

If your Cisco Unified IP Conference Phone 8831 is running Firmware Release 9.3(3) or 9.3(3)SE9, use these upgrade instructions. You must upgrade the phone from 9.3(3) to 10.3(1) and then apply the 10.3(1)SR4b load.

The 10.3(1)SR4b release does not support the Cisco Unified IP Conference Phone 8831NR.

Before you begin

Before using Cisco Unified IP Phone Firmware Release 10.3(1)SR4b with Cisco Unified Communications Manager, you must install the latest firmware on all Cisco Unified Communications Manager servers in the cluster.

Procedure

Step 1	Go to t	he following URL:
	https://	software.cisco.com/download/navigator.html?mdfid=284729655&i=rm
Step 2	Choose Cisco Unified IP Phones 8800 Series.	
Step 3	Choose Cisco Unified IP Conference Phone 8831.	
Step 4	Choose Session Initiation Protocol (SIP) Software.	
Step 5	In the All Releases folder, expand the SIPv.10 folder and choose 10.3(1).	
Step 6		the file cmterm-8831-sip.9-3-3-TO-10-3-1-v2.cop.sgn, click the Download Now or cart button, and follow the prompts.
	Note	If you added the firmware file to the cart, click the Download Cart link when you are ready to download the file.

Step 7 Click the + next to the firmware filename in the Download Cart section to access additional information about this file. The hyperlink for the readme file is in the Additional Information section, which contains installation instructions for the corresponding firmware:

cmterm-8831-sip.9-3-3-TO-10-3-1-v2-readme.html

- **Step 8** Follow the instructions in the readme file to install the firmware.
- **Step 9** Return to the firmware download page.
- **Step 10** In the Latest Releases folder, choose **10.3**(1)**SR4b**.
- **Step 11** Select the required region-specific file as described in the following table, click the **Download Now** or **Add to cart** button, and follow the prompts.

Region	Region-Specific Firmware
North America	cmterm-8831-sip.10-3-1SR4b-1-NA.cop.sgn
Europe	cmterm-8831-sip.10-3-1SR4b-1-EU.cop.sgn
Latin America	cmterm-8831-sip.10-3-1SR4b-1-LA.cop.sgn
Brazil	cmterm-8831-sip.10-3-1SR4b-1-BR.cop.sgn
Taiwan	cmterm-8831-sip.10-3-1SR4b-1-TW.cop.sgn
Japan	cmterm-8831-sip.10-3-1SR4b-1-JP.cop.sgn

Note If you added the firmware file to the cart, click the **Download Cart** link when you are ready to download the file.

- **Step 12** Click the + next to the firmware filename in the Download Cart section to access additional information about this file. The hyperlink for the readme file is in the Additional Information section, which contains installation instructions for the corresponding firmware.
- **Step 13** If the Cisco Unified Communications Manager Device Pack to support this release is not available, download the file cmterm-8831-QED-1031-4.k3.cop.sgn and install it on the Cisco Unified Communications Manager.
- **Step 14** Follow the instructions in the readme file to install the firmware.

Upgrade from 10.3(1) to 10.3(1)SR4b with Zip Files

If a Cisco Unified Communications Manager is not available to load the installer, you can use a .zip file to load the firmware.

If your Cisco Unified IP Conference Phone 8831 is running Firmware Release 10.3(1), 10.3(1)SR1, 10.3(1)SR2, 10.3(1)SR3, or 10.3(1)SR4, use this set of upgrade instructions.

The 10.3(1)SR4b release does not support the Cisco Unified IP Conference Phone 8831NR.

Before you begin

Before using Cisco Unified IP Phone Firmware Release 10.3(1)SR4b with Cisco Unified Communications Manager, you must install the latest firmware on all Cisco Unified Communications Manager servers in the cluster.

Procedure

Step 1	Go to the following URL:		
	http://www.cisco.com/cisco/software/navigator.html?mdfid=268437892&flowid=5293		
Step 2	Choose Cisco Unified IP Phones 8800 Series.		
Step 3	Choose Cisco Unified IP Conference Phone 8831.		
Step 4	Choose Session Initiation Protocol (SIP) Software.		
Step 5	In the Latest Releases folder, choose 10.3(1)SR4b .		
Step 6	Download the zip file for your region.		
Step 7	Unzip the files.		
Step 8	Manually copy the unzipped files to the directory on the TFTP server. See <i>Cisco Unified Communications Operating System Administration Guide</i> for information about how to manually copy the firmware files to the server.		
Step 9	If the Cisco Unified Communications Manager Device Pack to support this release is not available, download the file cmterm-8831-QED-1031-4.k3.cop.sgn and install it on the Cisco Unified Communications Manager.		

Upgrade from 9.3(3) to 10.3(1)SR4b with Zip Files

If a Cisco Unified Communications Manager is not available to load the installer, you can use a .zip file to load the firmware.

If your Cisco Unified IP Conference Phone 8831 is running Firmware Release 9.3(3) or 9.3(3)SE9, use these upgrade instructions. You must upgrade the phone from 9.3(3) to 10.3(1) and then apply the 10.3(1)SR4b load.

The 10.3(1)SR4b release does not support the Cisco Unified IP Conference Phone 8831NR.

Before you begin

Before using Cisco Unified IP Phone Firmware Release 10.3(1)SR4b with Cisco Unified Communications Manager, you must install the latest firmware on all Cisco Unified Communications Manager servers in the cluster.

Procedure

Step 1 Go to the following URL:

https://software.cisco.com/download/navigator.html?mdfid=284729655&i=rm

Step 2 Choose Cisco Unified IP Phones 8800 Series.

Step 3	Choose Cisco Unified IP Conference Phone 8831.	
Step 4	Choose Session Initiation Protocol (SIP) Software.	
Step 5	In the All Releases folder, expand the SIPv.10 folder and choose 10.3(1).	
Step 6	Select the file cmterm-8831-sip.9-3-3-TO-10-3-1-v2.zip, click the Download Now or Add to cart button, and follow the prompts.	
	Note If you added the firmware file to the cart, click the Download Cart link when you are ready to download the file.	
Step 7	Click the + next to the firmware filename in the Download Cart section to access additional information about this file. The hyperlink for the readme file is in the Additional Information section, which contains installation instructions for the corresponding firmware:	
	cmterm-8831-sip.9-3-3-TO-10-3-1-v2-readme.html	
Step 8	Follow the instructions in the readme file to install the firmware.	

- Step 9
 Return to the firmware download page.
- Step 10In the Latest Releases folder, choose 10.3(1)SR4b.
- **Step 11** Select the required region-specific file as described in the following table, click the **Download Now** or **Add to cart** button, and follow the prompts.

Table 4: Wireless Microphone Regions and Firmware Loads

Region	Region-Specific Firmware
North America	cmterm-8831-sip.10-3-1SR4b-1-NA.zip
Europe	cmterm-8831-sip.10-3-1SR4b-1-EU.zip
Latin America	cmterm-8831-sip.10-3-1SR4b-1-LA.zip
Brazil	cmterm-8831-sip.10-3-1SR4b-1-BR.zip
Taiwan	cmterm-8831-sip.10-3-1SR4b-1-TW.zip
Japan	cmterm-8831-sip.10-3-1SR4b-1-JP.zip

- **Note** If you added the firmware file to the cart, click the **Download Cart** link when you are ready to download the file.
- **Step 12** Click the + next to the firmware filename in the Download Cart section to access additional information about this file. The hyperlink for the readme file is in the Additional Information section, which contains installation instructions for the corresponding firmware.
- **Step 13** Unzip the files.
- **Step 14** Manually copy the unzipped files to the directory on the TFTP server. See *Cisco Unified Communications Operating System Administration Guide* for information about how to manually copy the firmware files to the server.
- **Step 15** If the Cisco Unified Communications Manager Device Pack to support this release is not available, download the file cmterm-8831-QED-1031-4.k3.cop.sgn and install it on the Cisco Unified Communications Manager.

Limitations and Restrictions

Firmware Downgrade Limitation

After you install Firmware Release 10.3(1)SR3 on a conference phone, you cannot downgrade the firmware to a previous version.

Phone Behavior During Times of Network Congestion

Anything that degrades network performance can affect phone audio and, in some cases, can cause a call to drop. Sources of network degradation can include, but are not limited to, the following activities:

- Administrative tasks, such as an internal port scan or security scan
- · Attacks that occur on your network, such as a Denial of Service attack

Health-Care Environment Use

This product is not a medical device and uses an unlicensed frequency band that is susceptible to interference from other devices or equipment.

Caveats

View Caveats

You can search for caveats using the Cisco Bug Search.

Known caveats (bugs) are graded according to severity level, and can be either open or resolved.

Before you begin

To view caveats, you need the following items:

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

Procedure

Step 1 Perform one of the following actions:

• To find all caveats for this release, use this URL:

https://bst.cloudapps.cisco.com/bugsearch/ search?kw=customer%20visible%20bug%20for%208831%2010.3(1)SR4b&pf=prdNm&sb=anfr&bt=custV

• To find all open caveats for this release, use this URL:

https://bst.cloudapps.cisco.com/bugsearch/ search?kw=customer%20visible%20bug%20for%208831%2010.3(1)SR4b&pf=prdNm&sb=anfr&sts=open&bt=custV

• To find all resolved caveats for this release, use this URL:

https://bst.cloudapps.cisco.com/bugsearch/ search?kw=customer%20visible%20bug%20for%208831%2010.3(1)SR4b&pf=prdNm&sb=anfr&sts=fd&bt=custV

- **Step 2** When prompted, log in with your Cisco.com user ID and password.
- Step 3To look for information about a specific problem, enter the bug ID number in the Search for field, then pressEnter.

Open Caveats

The following list contains the defects that are open for the 10.3(1)SR4b Firmware Release.

For more information about an individual defect, you can access the online record for the defect by accessing the Bug Search tool and entering the Identifier. You must be a registered Cisco.com user to access this online information.

Because defect status continually changes, the list reflects a snapshot of the defects that were open at the time this report was compiled. For an updated view of open defects, access Bug Toolkit as described in View Caveats, on page 8.

- CSCvg28873 8831 shaky voice with FW 10.3(1)SR3.
- CSCvi71998 The ROC reset on the 8831 phone is caused by the key/salt change after hold/resume
- CSCvk12397 8831 IP Phone should not listen on UDP 5060 with a TCP only transport setting

Resolved Caveats

The following list contains the defects that are resolved for the 10.3(1)SR4 Firmware Release.

For more information about an individual defect, you can access the online record for the defect by accessing the Bug Search tool and entering the Identifier. You must be a registered Cisco.com user to access this online information.

Because defect status continually changes, the list reflects a snapshot of the defects that were resolved at the time this report was compiled. For an updated view of resolved defects, access Bug Toolkit as described in View Caveats, on page 8.

- CSCuz43004 8831 doesn't send firmware download complete to CCM, stuck on upgrading.
- CSCvb03709 8831 Not Using HTTPS With Service Provisioning URL Set To Internal
- CSCvb30150 CP-8831 Unable to set static IP address without LAN cable
- CSCvb48716 Evaluation of odm jdm phones for Openssl September 2016
- CSCvb85696 Evaluation of 3pcc-beignet for CVE-2016-5195 (DIRTY CoW)
- CSCvb86909 8831 doesn't send inband DTMF when controlled over CTI
- CSCvc28555 8831 model phones, ITL deleted when all CallManager certs are updated
- CSCvc75103 EAP-TLS doesn't work for 8831 with FreeRadius server
- CSCvd36281 8831 Phone rejects incoming INVITE containing "Accept-language" in SRST Mode
- CSCvd44135 8831 Daisy Chain Secondary phone stops functioning after reset

- CSCve06892 8831 phones have choppy/robotic audio
- CSCve60798 8831's Choppy/Garbled/Robotic Audio issue due to the abnormal gap in the rtp sequence number -- Add integrated release 10.3(1)ES8
- CSCve84001 8831: EAP-FAST is not working
- CSCvf18723 8831 phone will not register if common phone profile sets 802.1x to enabled and LSC is being pushed
- CSCvf45738 Robotic/clicking noise on 8831 IP phone
- CSCvf75169 CP 8831 firmware downgrade path clarity
- CSCvf95630 8831 IP Phone not taking particular timezone Africa/Dar_es_Salaam
- CSCvg19090 8831 Secure Profile Causing No RTP/Ringtones During Consult Transfer
- CSCvg46001 Dnsmasq October 2017 vulnerabilities
- CSCvh12266 One-way audio during full duplex streaming from 8831.
- CSCvh30703 8831 unable to dial DTMF with payload type 101 when payload type 96 is negotiated
- CSCvh70826 8831 phone DTMF not getting recognized
- CSCvi33539 8831 phone displaying wrong time for Asia/Kolkata time zone
- CSCvi89169 HTTP Security Header Not Detected vulnerability reported by vulnerability scanner
- CSCvi89174 Evaluation of 8831 phone for CVE-2004-0230
- CSCvj42006 8831 cannot install LSC
- CSCvj73508 Cisco IP Phone 8831 Denial of Service Vulnerability

Cisco Unified Communication Manager Public Keys

To improve software integrity protection, new public keys are used to sign cop files for Cisco Unified Communications Manager Release 10.0.1 and later. These cop files have "k3" in their name. To install a k3 cop file on a pre-10.0.1 Cisco Unified Communications Manager, consult the README for the ciscocm.version3-keys.cop.sgn to determine if this additional cop file must first be installed on your specific Cisco Unified Communications Manager version. If these keys are not present and are required, you will see the error "The selected file is not valid" when you try to install the software package.

Unified Communications Manager Endpoints Locale Installer

By default, Cisco IP Phones are set up for the English (United States) locale. To use the Cisco IP Phones in other locales, you must install the locale-specific version of the Unified Communications Manager Endpoints Locale Installer on every Cisco Unified Communications Manager server in the cluster. The Locale Installer installs the latest translated text for the phone user interface and country-specific phone tones on your system so that they are available for the Cisco IP Phones.

To access the Locale Installer required for a release, access https://software.cisco.com/download/ navigator.html?mdfid=286037605&flowid=46245, navigate to your phone model, and select the Unified Communications Manager Endpoints Locale Installer link. For more information, see the documentation for your particular Cisco Unified Communications Manager release.



The latest Locale Installer may not be immediately available; continue to check the website for updates.

Cisco IP Phone Documentation Updates on Cisco Unified Communications Manager

The Cisco Unified Communications Manager Self Care Portal (Release 10.0 and later) and User Options web pages (Release 9.1 and earlier) provide links to the IP Phone user guides in PDF format. These user guides are stored on the Cisco Unified Communications Manager and are up to date when the Cisco Unified Communications Manager release is first made available to customers.

After a Cisco Unified Communications Manager release, subsequent updates to the user guides appear only on the Cisco website. The phone firmware release notes contain the applicable documentation URLs. In the web pages, updated documents display "Updated" beside the document link.

Note

The Cisco Unified Communications Manager Device Packages and the Unified Communications Manager Endpoints Locale Installer do not update the English user guides on the Cisco Unified Communications Manager.

You and your users should check the Cisco website for updated user guides and download the PDF files. You can also make the files available to your users on your company website.

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Tip You may want to bookmark the web pages for the phone models that are deployed in your company and send these URLs to your users.

Cisco IP Phone Firmware Support Policy

For information on the support policy for phones, see https://cisco.com/go/phonefirmwaresupport.

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The following information is for FCC compliance of Class B devices: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the equipment causes interference to radio or television reception, which can be determined by turning the equipment off and on, users are encouraged to try to correct the interference by using one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and receiver.
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- · Consult the dealer or an experienced radio/TV technician for help.

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