

# Cisco Unified IP Phone 6900 Series Release Notes for Firmware Release 9.4(1)SR2

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## Introduction

These release notes support the Cisco Unified IP Phones 6921, 6941, 6945, and 6961 running firmware Release 9.4(1)SR2.

The following table lists the Cisco Unified Communications Manager release and protocol compatibility for the Cisco Unified IP Phones.

Cisco Unified IP Phone	Protocol	Cisco Unified Communications Manager
Cisco Unified IP Phones 6921, 6941, 6945, and 6961	SCCP	Cisco Unified Communications Manager Release 7.1(5) and later
Cisco Unified IP Phones 6921, 6941, 6945, and 6961	SIP	Cisco Unified Communications Manager Release 7.1(5) and later



### Attention

Some features in this release may require a specific version of Cisco Unified Communications Manager. The feature description identifies if the feature requires a different version of Cisco Unified Communications Manager from the version identified in the above table.

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## Related Documentation

Use the following sections to obtain related information.

### Cisco Unified IP Phone 6900 Series Documentation

Refer to publications that are specific to your language, phone model and Cisco Unified Communications Manager release. Navigate from the following documentation URL:

<http://www.cisco.com/c/en/us/support/collaboration-endpoints/unified-ip-phone-6900-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:

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

## Cisco Business Edition 3000 Documentation

See the *Cisco Business Edition 3000 Documentation Guide* and other publications that are specific to your Cisco Business Edition 3000 release. Navigate from the following documentation URL:

<http://www.cisco.com/c/en/us/support/unified-communications/business-edition-3000/tsd-products-support-series-home.html>

## Cisco Business Edition 5000 Documentation

See the *Cisco Business Edition 5000 Documentation Guide* and other publications that are specific to your Cisco Business Edition 5000 release. Navigate from the following URL:

<http://www.cisco.com/c/en/us/support/unified-communications/business-edition-5000/tsd-products-support-series-home.html>

## Cisco Unified Communications Manager Express Documentation

See the publications that are specific to your language, phone model and Cisco Unified Communications Manager Express release. Navigate from the following documentation URL:

<http://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-express/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.



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**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.

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## New and Changed Features

This release contains no new or changed features.

# Installation

## Upgrade Notes

Direct upgrades, using signed load files, are supported from 9.x to Firmware Release 9.4(1)SR2. You can use the following firmware release file for these direct upgrades.



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**Note** Firmware Release 9.4(1)SR2 only applies to the Cisco Unified IP Phone 6921, 6941, 6945, and 6961 (SCCP and SIP).

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- For Cisco Unified IP Phone 6921, 6941, and 6961:
  - cmterm-69xx-SCCP-9-4-1-3SR2.k3.cop.sgn
  - cmterm-69xx-SIP-9-4-1-3SR2.k3.cop.sgn
- For Cisco Unified IP Phone 6945:
  - cmterm-6945-SCCP-9-4-1-3SR2.k3.cop.sgn
  - cmterm-6945-SIP-9-4-1-3SR2.k3.cop.sgn

## Install Firmware Release on Cisco Unified Communications Manager

Before using the Cisco Unified IP Phone Firmware Release 9.4(1)SR2 with Cisco Unified Communications Manager, you must install the latest firmware on all Cisco Unified Communications Manager servers in the cluster.



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**Note** Firmware Release 9.4(1)SR2 only applies to the Cisco Unified IP Phone 6921, 6941, 6945, and 6961.

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**Attention** Before installing the release, ensure that the Cisco Unified Communications Manager Device Package is installed.

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- Step 1** Go to the following URL:  
<http://www.cisco.com/cisco/software/navigator.html?mdfid=282677102&i=rm>
- Step 2** Choose your phone model.
- Step 3** Choose one of the following firmware types:
- **Skiny Client Control Protocol (SCCP) Software**
  - **Session Initiation Protocol (SIP) Software**

**Step 4** In the Latest Releases folder, choose **9.4(1)SR2**.

**Step 5** Select one of the following firmware files, click the **Download** or **Add to cart** button, and follow the prompts: The files for the Cisco Unified IP Phone 6900 Series are:

- For Cisco Unified IP Phone 6921, 6941, and 6961
  - cmterm-69xx-SCCP-9-4-1-3SR2.k3.cop.sgn
  - cmterm-69xx-SIP-9-4-1-3SR2.k3.cop.sgn
- For Cisco Unified IP Phone 6945
  - cmterm-6945-SCCP-9-4-1-3SR2.k3.cop.sgn
  - cmterm-6945-SIP-9-4-1-3SR2.k3.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 6** Click the + next to the firmware file name 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-69xx-SCCP-9-4-1-3SR2-readme.html
- cmterm-69xx-SIP-9-4-1-3SR2-readme.html
- cmterm-6945-SCCP-9-4-1-3SR2-readme.html
- cmterm-6945-SIP-9-4-1-3SR2-readme.html

**Step 7** Follow the instructions in the readme file to install the firmware.

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## Install Firmware Zip Files

If a Cisco Unified Communications Manager is not available to load the installer program, the following .zip files are available to load the firmware.



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**Note** Firmware Release 9.4(1)SR2 only applies to the Cisco Unified IP Phone 6921, 6941, 6945 and 6961.

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- SCCP
  - cmterm-69xx-SCCP-9-4-1-3SR2.zip
  - cmterm-6945-SCCP-9-4-1-3SR2.zip
- SIP
  - cmterm-69xx-SIP-9-4-1-3SR2.zip
  - cmterm-6945-SIP-9-4-1-3SR2.zip

**Attention**

Before installing the release, ensure that the Cisco Unified Communications Manager Device Package is installed.

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- Step 1** Go to the following URL:  
<http://www.cisco.com/cisco/software/navigator.html?mdfid=282677102&i=rm>
- Step 2** Choose your phone model.
- Step 3** Choose one of the following firmware types:
- **Sk Skinny Client Control Protocol (SCCP) Software**
  - **Session Initiation Protocol (SIP) Software**
- Step 4** In the Latest Releases folder, choose **9.4(1)SR2**.
- Step 5** Download the relevant zip files.
- Step 6** Unzip the files.
- Step 7** 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.
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## Limitations and Restrictions

### DTMF During On-Hook Dialing

On-hook dialing can result in users hearing the DTMF from the key press in the handset. The tones are heard if the handset is picked up while the last digit is pressed. If users pick up the handset after pressing the last digit, they will normally not hear any DTMF.

### Voice VLAN and IPv6 Limitation

If the PC attached to the PC port of the phone is using IPv6, we recommend that the PC Voice LAN access be disabled. This ensures that the PC can connect to the Voice VLAN.

### Phone Limitation During SVI Change

Cisco IP Phones use a Switch Virtual Interface (SVI) to manage VLANs. If the SVI changes and the phones require new IP addresses, some phones require a reboot so that the new IP address is used. The following phones must be rebooted in this condition:

- Cisco Unified IP Phone 6901
- Cisco Unified IP Phone 6911
- Cisco Unified IP Phone 6921

- Cisco Unified IP Phone 6941
- Cisco Unified IP Phone 6945
- Cisco Unified IP Phone 6961
- Cisco Unified IP Phone 8941
- Cisco Unified IP Phone 8945
- Cisco Unified IP Phone 8961
- Cisco Unified IP Phone 9951
- Cisco Unified IP Phone 9971

## Phone Behavior During Times of Network Congestion

Anything that degrades network performance can affect Cisco IP Phone voice and video quality, 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

## On-Hook Transfer Limitation in SIP Phones

When the Cisco Unified Communications Manager **Transfer On-Hook Enabled** field is enabled, users might report a problem with direct call transfer in SIP phones. If the user transfers the call and immediately goes on hook before they hear the ring signal, the call may drop instead of being transferred.

The user needs to hear the ring signal so that they can be sure that the call is being routed.

## Caveats

This section describes the resolved and open caveats, and provides information on accessing the Cisco Software Bug Toolkit.

## Access Cisco Bug Search

Known problems (bugs) are graded according to severity level. These release notes contain descriptions of the following:

- All severity level 1 or 2 bugs
- Significant severity level 3 bugs

You can search for problems by using the Cisco Bug Search.

### Before You Begin

To access Cisco Bug Search, you need the following items:

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

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- Step 1** To access the Cisco Bug Search, go to:  
<https://tools.cisco.com/bugsearch>
- 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 field, then press **Enter**.
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## Open Caveats

The following table lists severity 1, 2, and 3 defects that are open for the Cisco Unified IP Phones 6900 Series for Firmware Release 9.4(1)SR2.

For more information about an individual defect, you can access the online record for the defect by clicking the Identifier or going to the URL that is shown. You must be a registered Cisco.com user to access this online information.

Because defect status continually changes, the table 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 [Access Cisco Bug Search](#), on page 6.

Identifier	Headline
<b>Cisco Unified IP Phone 6921, 6941, and 6961</b>	
<a href="#">CSCun78501</a>	HEB:69xx: Wrong alignment in extension mobility interface.

## Resolved Caveats

The following table lists severity 1, 2, and 3 defects that are resolved for the Cisco Unified IP Phones 6900 Series for Firmware Release 9.4(1)SR2.

For more information about an individual defect, you can access the online record for the defect by clicking the Identifier or going to the URL that is shown. You must be a registered Cisco.com user to access this online information.

Because defect status continually changes, the table 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 [Access Cisco Bug Search](#), on page 6.

Identifier	Headline
<b>Cisco Unified IP Phone 6921, 6941, and 6961</b>	

Identifier	Headline
<a href="#">CSCum81805</a>	69xx Complete conference screen is not disappearing in SIP load.
<a href="#">CSCun68622</a>	RT-lite Phone doesn't query 2nd TFTP in case of failure of primary TFTP.
<a href="#">CSCuo34577</a>	6921 phones fails to register after BULK reset of device.
<a href="#">CSCuo70479</a>	No Alerting Name of Hunt pilot on 69xxSCCP Phones after complete transfer.
<a href="#">CSCuo79130</a>	Audio does not always play on 69xx phone.
<a href="#">CSCup15051</a>	69XX intermittently not sending IGMPv2 membership report for multicast.
<a href="#">CSCup22596</a>	Multiple Vulnerabilities in OpenSSL - June 2014.
<a href="#">CSCup51386</a>	RT-lite Phones: All 69XX phones unregister and re register random.
<a href="#">CSCup59745</a>	SIP 69XX phones do not play audio after 488, ICMP port unreachable seen.
<a href="#">CSCup92230</a>	RT_Lite phones invalid garp packet behaviour.
<a href="#">CSCuq03601</a>	6921: Incorrect Miss call history, when same extension on multiple lines.
<a href="#">CSCuq17530</a>	6921 with headsets double talk has bad Audio performance.
<a href="#">CSCuq30042</a>	XML Error [4]: Parse Error 6921 SCCP phone - Directory - name too long.
<a href="#">CSCuq60455</a>	Multiple Vulnerabilities in OpenSSL - August 2014.
<a href="#">CSCuq61271</a>	69xx phones re-using source port after power is remove.
<a href="#">CSCuq69197</a>	Dialing issue with select button from corporate directory - 6945.
<a href="#">CSCuq81230</a>	Phones running SIP firmware unregister during the below call flow.
<a href="#">CSCur12019</a>	Directories not working for 6941s with SBD on GGSG loads w/FIPS enable.
<a href="#">CSCur16878</a>	On-hook should not remove call park toast.
<a href="#">CSCur24122</a>	CLONE - 628731299: after the link speed between the phone and the switch changes (because of the port sync feature), we see that the phone goes to "unavailable" state for a while.
<a href="#">CSCus18664</a>	6921/41/61 Phones not registering to CUCM
<a href="#">CSCus28530</a>	SIP/SCCP doesn't send TLS request on 6921/41/61/45 phone models.
<a href="#">CSCus31298</a>	Oct 2014 OpenSSL Vulnerabilities.
<a href="#">CSCus42734</a>	JANUARY 2015 OpenSSL Vulnerabilities.



Identifier	Headline
<a href="#">CSCus81356</a>	6941 with Built in Bridge - gets one way audio.
<a href="#">CSCur84461</a>	6921- secure profile applied, some of calls ended up with one way voice.
<a href="#">CSCus90634</a>	6921:softkey not correct after failover to SRS.
<a href="#">CSCus91722</a>	6941 one way audio with recording enabled, on callback from IVR.
<a href="#">CSCus91884</a>	69xx phone fails to parse directory url when CUCM has numeric hostname.
<a href="#">CSCut19771</a>	6921:RTLite does not send rtp after failover to SRST.
<a href="#">CSCut24361</a>	Voice delay between 6961 RT-Lite phones with encrypted intercluster call.
<a href="#">CSCut46191</a>	MARCH 2015 OpenSSL Vulnerabilities.
<a href="#">CSCuu21964</a>	Audio issues with 6961 IP Phone after codec change.
<a href="#">CSCuu51912</a>	6961 sending MOS as 0 intermittent.
<a href="#">CSCuu95425</a>	Errors while decoding secure audio streams from the 69xx phones.
<a href="#">CSCuv34656</a>	6961 phone flapping with 9.4.1ES11 when subscriber is unreachable.
<b>Cisco Unified IP Phone 6945</b>	
<a href="#">CSCul26605</a>	CP-6945 stops sending RFC 2833.
<a href="#">CSCul53651</a>	6945 call log may not show external calls.
<a href="#">CSCum37544</a>	Cookie is not updated after a redirect.
<a href="#">CSCun08119</a>	XML Error [4]: Parse Error while accessing customind directory service.
<a href="#">CSCun13192</a>	Intermittent no ringback on outbound calls from 6945 SCCP phone.
<a href="#">CSCun21008</a>	6945 SCCP: Malformed RTP with BiB after hold/resume.
<a href="#">CSCun22302</a>	HOLD Key Not working after pressing TRF and CONF keys.
<a href="#">CSCun95157</a>	802.1x authentication fails due to unexpected empty TLS message.
<a href="#">CSCuo31475</a>	SIP 69XX phones do not play audio after 488, ICMP port unreachable seen.
<a href="#">CSCuo38884</a>	6945 does not log received calls from external number in call history.
<a href="#">CSCuo54855</a>	6945 phone not passing IPV6 router advertisement to attached PC for DHCP.

Identifier	Headline
<a href="#">CSCuo79130</a>	Audio does not always play on 69xx phones.
<a href="#">CSCup51386</a>	RT-lite Phones: All 69XX phones unregister and re register randomly.
<a href="#">CSCup59745</a>	SIP 69XX phones do not play audio after 488, ICMP port unreachable seen.
<a href="#">CSCup77434</a>	6945 - Incorrect Hunt Group LED status.
<a href="#">CSCup92230</a>	RT_Lite phones invalid garp packet behaviour.
<a href="#">CSCup99597</a>	ONE WAY AUDIO on secure call between a 6945 & Jabber in 15-20 mins.
<a href="#">CSCuq05680</a>	Multiple Vulnerabilities in OpenSSL - June 2014.
<a href="#">CSCuq06176</a>	Recording Stream audion quality issue with 6945.
<a href="#">CSCuq17530</a>	6921 with headsets double talk has bad Audio performance.
<a href="#">CSCuq30042</a>	XML Error [4]: Parse Error 6921 SCCP phone - Directory - name too long.
<a href="#">CSCuq60463</a>	Multiple Vulnerabilities in OpenSSL - August 2014.
<a href="#">CSCuq61271</a>	69xx phones re-using source port after power is removed.
<a href="#">CSCuq69197</a>	Dialing issue with select button from corporate directory - 6945.
<a href="#">CSCuq81230</a>	Phones running SIP firmware unregister during the below call flow.
<a href="#">CSCur12019</a>	Directories not working for 6941s with SBD on GGSG loads w/FIPS enabled.
<a href="#">CSCur16878</a>	On-hook should not remove call park toast.
<a href="#">CSCur24122</a>	CLONE - 628731299: after the link speed between the phone and the switch changes (because of the port sync feature), we see that the phone goes to "unavailable" state for a while.
<a href="#">CSCus28530</a>	SIP/SCCP doesn't send TLS request on 6921/41/61/45 phone models.
<a href="#">CSCus31298</a>	Oct 2014 OpenSSL Vulnerabilities.
<a href="#">CSCus42734</a>	JANUARY 2015 OpenSSL Vulnerabilities.
<a href="#">CSCus61117</a>	631951125 E call pickup - SCCP phone shows blank received call & unknown placed call.
<a href="#">CSCus92484</a>	6945 Phones not registering to CUCM.
<a href="#">CSCut35284</a>	6945 SCCP: The call change into one-way talk after parked call is pickup.

Identifier	Headline
<a href="#">CSCut46189</a>	MARCH 2015 OpenSSL Vulnerabilities.
<a href="#">CSCuu55228</a>	6945 Doesn't Pass EAP Until Done Booting.

## 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 `ciscoem.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 <http://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.



### Note

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**

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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.

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

**Tip**

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

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## Cisco IP Phone Firmware Support Policy

For information on the support policy for Cisco IP Phones, see <http://www.cisco.com/c/en/us/support/docs/collaboration-endpoints/unified-ip-phone-7900-series/116684-technote-ipphone-00.html>.

## Documentation, Service Requests, and Additional Information

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/c/en/us/td/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

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