Release Notes for Cisco SIP IP Phone 7940/7960 Release 7.3

November 3, 2004

Contents

This document lists the known problems in Cisco Session Initiation Protocol (SIP) IP Phone 7940/7960 Release 7.3 and contains information about the Cisco SIP IP Phone 7940/7960 (hereafter referred to as the Cisco SIP IP phone) that is not included in the most recent release of the phone documentation.

This document includes the following sections:

New and Changed Information

There are no new features in this release.

Installation Notes

For Cisco SIP IP phones, follow the instructions in the "Upgrading the Cisco SIP IP Phone Firmware" section at the following URL:

http://www.cisco.com/univercd/cc/td/doc/product/voice/c_ipphon/english/ipp7960/addprot/mgcp/frmwrup.htm

For these instructions, use P023-07-3-00 as the image name for Release 7.3. You can find the current images at the following URL:

http://www.cisco.com/cgi-bin/tablebuild.pl/sip-ip-phone7960

Caveats

This section documents possible unexpected behavior by Cisco IP Phone 7940/7960 Release 7.3. This section lists only severity 1 and 2 caveats and select severity 3 caveats.

Open Caveats—Release 7.3

- **CSCef46202**: 7960 is not sending ARP request after getting DHCPACK message

  Symptom: Cisco 7960 SIP IP Phone configured to use DHCP may not detect a duplicate IP Address assignment.

  Condition: This problem was observed on a 7960 SIP IP Phone running 7.1 software version.

  Work-around: None

Resolved Caveats—Release 7.3

- **CSCea49094**: SIP: 79x0 phones are not escaping RESERVED characters in URI/URLs

  Note   As per SIP RFCs (both 2543 and 3261), when non-alphanumeric characters that are not in the unreserved set is used in URI/URLs (ReqURI, From, To, Contact, Refer-To, RPID, etc.) must be escaped with %hexhex. Prior to this bugfix, the SIP 7940/7960 phone did not escape such characters that needed escaping. Similarly, the phone did not unescape the escaped characters present in the received messages. When the escape characters are in URI/URL, basic calls do not complete and the features do not work as well; the phone sends the 404 NOT FOUND message.

  The SIP stack code has been changed through this defect fix to "escape" the characters that need escaping in URL/URI when a request/responses is sent and to "unescape" the escaped characters from the received request/responses before a request/responses is processed.

- **CSCed72708**: Phone crashes when vcm dtmf debugs are on during dtmf press on conference.

  Workaround: None

- **CSCed84163**: Loader may fail - Application Invalid

  Symptom: When a phone is upgrade to release 6.0(1.0), from a 5.0 release, the upgrade may fail to complete. The Display will read "Application Invalid"

Conditions: This may occur if any of the following is true:

- There is no option 150 Set on the DHCP server on the native VLAN
- CDP on the Switch and Phone do not converge in a timely fashion.

Workaround: Insure that if a DHCP server is configured on the native VLAN, that it's option 150 information points to a known good call manager.

- **CSCef10221**: SIP IP Phone * key enters (.) when in speed dial

  Symptom: When editing the speed dials in a 7940/60 running the SIP image, a "." is entered instead of an "*"

  Workaround: None

- **CSCef11018**: Digit followed by dial key press results in stuck DTMF

  Symptom: When running a SIP load on the IP Phone 7960 or 7940 you can get into a situation where a pressed number gets stuck and you just hear its DTMF tone.

  Conditions: This happens when you would do the following:

  - Press the "NewCall" softkey
  - Press the "Number" softkey if not already in number entry mode
  - Press "0" and keep it held down
  - Press the "Dial" softkey
  - Release "0" - the DTMF tone for "0" will keep playing

  Workaround: Avoid pressing this combination when possible until the problem is fixed.

  Further Problem Description: This problem was not seen when running version 5.3 It was seen starting with 6.0 up to 7.1.

- **CSCef11614**: 7940/7960 SIP phones not handle out of order/mis-sequence packets

  Symptom: 7940/7960 SIP phones do not handle out of order packets / mis-sequence packets.

  Condition: This is SIP and customer is using the NS/RS Proxy. The mis-ordered packets are only from the Gateway to SIP Phone due to network routing. The latest phone load that experiencing these issues is POS3-07-1-00.

  Workaround: None

- **CSCef17407**: SIP 7960 phone: consult transfer does not work - Refer-To incorrect
- **CSCef33135**: 7960 struck with Booting Dsp alarm on its display

  Symptom: The phone display the message "Booting DSP"

  Condition: CCM failover

  Workaround: Reset the phone from the CCM page, unpower and repower the phone or press "**#**"

- **CSCef33488**: 79x0 SIP: ACK to 407 Auth sent to incorrect IP addr. w/ outbound pxy

  Symptom: 7940 / 7960 SIP phone sends SIP messages to an outbound proxy. The outbound proxy challenges the SIP messages from the phone and the phone sends ACK response to incorrect IP address and hence the response never reaches the outbound proxy.

  Conditions: The SIP network must have two proxies, one acting as outbound proxy to the SIP phones and the phones be registered to the main proxy. Also, the proxy authentication must be turned on.

  Workaround: Remove outbound proxy and route SIP messages through main proxy

- **CSCef35516**: 79x0: SIP Phone transfer fails when ONHOOK event during hold state

Symptom: When doing a consultative transfer, if the phone doing the transfer hangs up immediately following the Trnsfer softkey press, the phone will never complete the transfer and result in both calls being left on hold.

Workaround: Do not hang up transferrer until transfer completes. Also, the user could delay the phone hangup as it is a very tight window for the race condition to occur.

- **CSCef40058**: 79x0: DNS SRV/A record handling of Outbound Proxy results in reorder

  Symptom: When Outbound Proxy configured with an A record the phone will not do a DNS lookup properly and fail the transaction.

  Workaround: Change DNS entry to SRV, or configure Outbound Proxy with an IP address.

- **CSCef40821**: Phone responds with g729 to a g711 midcall renegotiation

  Symptom: Phone may respond with the incorrect codec g729 to a midcall g711 reinvite for conference.

  Workaround: None

- **CSCef41027**: 7940/7960 resets with Last=Initialized and no DebugDisplay

  Symptoms: Intermittent phone rests with reason code Last=Initialized

  Conditions: 7940/7960 phone load 6.0(4.2)

  Workaround: None

- **CSCef44958**: 79x0: Outbound Proxy DNS Error Handling not correct

  Symptom: When a FQDN is provisioned for Outbound Proxy, failover may not work properly due to retransmit and ICMP logic not being correct.

  Workaround: Ensure success path for DNS, or use dotted IP.

- **CSCef46533**: 79x0: Attended Transfer is delayed when using dotted IP due to DNS

  Symptom: Phone will attempt a DNS lookup on a dotted IP address, thus causing a delay in an Attended Transfer.

  Workaround: Configure a hostname, or remove the DNS server.

- **CSCef63485**: SIP 7960 phone misses certain digits pressed by users

  Symptom: Certain digit presses are heard as tone by the IP Phone user but do not show up in dialed digits or on the display. This problem is intermittent.

  Conditions: SIP phone load 7.2 on a 7960 phone when using an outbound proxy that has a registration timer of 60 seconds and timer_registration_delta on the phone is set to 60 seconds as well

  Workaround:

  – Change outbound proxy registration timer to higher than 60

  – Change timer_registration_delta on phone config to a lower value, for example, 5 seconds

- **CSCef67187**: 7960 sends out CANCEL to the Record-Route IP in 183 Session Progress

  Symptom: Cisco 7960 SIP IP Phone malforms a CANCEL message by not adhering to the IP address and port number specified in the INVITE. Instead of sending it to the IP address and port number of the INVITE, the sends out the CANCEL to the IP address that it had received in the "Record-Route" header of a 183 Session Progress message.

  Condition: Observed in SIP IP Phone load 7.1 and 7.2

  Workaround: None

- **CSCef70735**: SIP 7940/7960 send incorrect invite

  Symptom: Using a SIP 7940/7960 phone if Hold and Resume and then Hold are pressed in quick succession, the reINVITE to put the call back on hold does not send the appropriate SIP message to put the call on hold. (the "c=" line in the SDP body is set to the IP address of the phone rather than to "0.0.0.0")

  Workaround: Leave a second or two before putting a call on hold/off hold and back on hold.

- **CSCef75275**: Symptom: Phones are intermittently stuck at Universal Application Loader. Phone Displays message "Configuring VLAN"

  Condition: Phone load P0030700100. CDP used but no Voice VLAN (Aux VLAN) configured.

  Workaround: Configure a Voice VLAN

- **CSCef77639**: Phone sends SIP register message every second

  Symptom:Cisco 7960 will constantly send SIP register messages to the proxy every second

  Conditions: Occurs with 7960 running SIP load to a Broadworks proxy with Register timer on proxy at 60 seconds and timer_register_delta on phone at 60 seconds

  Workaround:

  – Change the expires register timer to be higher than 60 seconds (3600 seconds is normal)

  – Set the timer_register_delta to something lower than the expires timer

- **CSCef81642**: Cisco 7960 phones fail to send a REGISTER req. to the Outbound_proxy

  Symptom: Cisco 7960 SIP IP Phone fails to send out a REGISTER message to the configured Outbound_Proxy server if it fails to resolve the DNS name of the Proxy server configured in Proxy1_address

  Condition: Observed in the release 5.2, 5.3, 6.3, 7.2 but works in the 4.X release

  Workaround: a

  – Have an IP Address instead of DNS name for the proxy1_address

  – Use a DNS name that can be resolved c) Use 4.X release

- **CSCef87670**: 7960 requests files from invalid address

  Symptom: Under rare circumstances, the Universal Application Loader may attempt to TFTP files from address 12.204.204.204, ignoring whatever has been set as the TFTP address.

  Conditions: This is a rare situation, and seems to occur only in lightly-loaded networks, when using DHCP to supply the TFTP address, and when no voice VLAN is configured, and when upgrading from a 5.0(x) phone load.

  Workaround: In most cases, the phone will eventually recover by itself. If a console cable is available, the condition can also be corrected by logging in to the phone, manually setting the TFTP address (i.e. set tftp-addr x.y.z.w), and the issuing the restart command. This will cause the phone to be set for alternate TFTP; after the phone has finished upgrading and has registered, the network configuration can be updated to turn alternate TFTP off again.

- **CSCef91521**: DHCP Option 66 is ignored

  Symptom: The phone will ignore DHCP option 66 if it has previously resolved an address for TFTP.

  Condition: When the value of option 66 is changed, or the DNS address for the current option 66 value is changed, the phone will ignore the change and continue to use the old value.

  Workaround: Allow the phone to boot, erase the current network configuration, and then power cycle the phone.

- **CSCef93943**: Phone may crash intermittently while answering a call

  Symptom: Cisco SIP Phone running 7.2 may occasionally crash while answering a call if the phone is using an outbound proxy FQDN and there is another dns query (sntp/ping/etc) going during the incoming call.

  Workaround: Use an IP address for the outbound proxy FQDN.

- **CSCuk52432**: Echo fades in and out when talking IP phone to IP phone

  Symptom: Under some circumstances it is possible to have echo when talking between IP phones on handsets. We are still investigating the cause.

  Workaround: None

- **CSCuk52433**: speaker phone volume too low on CCM 3.3 phone loads

  Symptom: This is a duplicate of CSCee77604 for SIP/MGCP. The following is the SCCP description. Customer upgraded from CCM 3.2.2c and 7940/7960 load P00303020204, to CCM 3.3.4 and now all signed phones loads are significantly quieter on the speakerphone. Lab testing shows that max speakerphone volume on P003030204 load is much louder than the 5-0-4, 5-0-5, and 6-0-3 phone loads.

  Workaround: None (cannot revert to unsigned load)

Related Documentation

- *Cisco SIP IP Phone Administrator Guide, Release 7.2*
- *Cisco IP Phone 7960/7940 Series - Quick Reference*
- *Regulatory Compliance and Safety Information for the Cisco IP Phone 7960, 7940, and 7910 Series*
- *Installing the Wall Mount Kit for the Cisco IP Phone*

Obtaining Documentation

Cisco provides several ways to obtain documentation, technical assistance, and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

Cisco.com

You can access the most current Cisco documentation on the World Wide Web at this URL:

http://www.cisco.com/univercd/home/home.htm

You can access the Cisco website at this URL:

http://www.cisco.com

International Cisco websites can be accessed from this URL:

http://www.cisco.com/public/countries_languages.shtml

Ordering Documentation

You can find instructions for ordering documentation at this URL:

http://www.cisco.com/univercd/cc/td/doc/es_inpck/pdi.htm

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products MarketPlace:

 http://www.cisco.com/cgi-bin/order/order_root.pl

- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:

 http://www.cisco.com/go/subscription

- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, U.S.A.) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

You can submit e-mail comments regarding Cisco IOS software release notes and caveats documentation to relnote-feedback@cisco.com.

You can submit e-mail comments about technical documentation to bug-doc@cisco.com.

You can submit comments by using the response card (if present) behind the front cover of your document or by writing to the following address:

Cisco Systems
Attn: Customer Document Ordering
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

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http://www.cisco.com/warp/public/732/docsurvey/rtg/ to give us your feedback.

Obtaining Technical Assistance

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, the Cisco Technical Assistance Center (TAC) provides 24-hour-a-day, award-winning technical support services, online and over the phone. Cisco.com features the Cisco TAC website as an online starting point for technical assistance. If you do not hold a valid Cisco service contract, please contact your reseller.

Cisco TAC Website

The Cisco TAC website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The Cisco TAC website is available 24 hours a day, 365 days a year. The Cisco TAC website is located at this URL:

http://www.cisco.com/tac

Accessing all the tools on the Cisco TAC website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a login ID or password, register at this URL:

http://tools.cisco.com/RPF/register/register.do

Opening a TAC Case

Using the online TAC Case Open Tool is the fastest way to open P3 and P4 cases. (P3 and P4 cases are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Case Open Tool automatically recommends resources for an immediate solution. If your issue is not resolved using the recommended resources, your case will be assigned to a Cisco TAC engineer. The online TAC Case Open Tool is located at this URL:

http://www.cisco.com/tac/caseopen

For P1 or P2 cases (P1 and P2 cases are those in which your production network is down or severely degraded) or if you do not have Internet access, contact Cisco TAC by telephone. Cisco TAC engineers are assigned immediately to P1 and P2 cases to help keep your business operations running smoothly.

To open a case by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)
EMEA: +32 2 704 55 55
USA: 1 800 553-2447

For a complete listing of Cisco TAC contacts, go to this URL:

http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml

TAC Case Priority Definitions

To ensure that all cases are reported in a standard format, Cisco has established case priority definitions.

Priority 1 (P1)—Your network is "down" or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Priority 2 (P2)—Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Priority 3 (P3)—Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Priority 4 (P4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- The Cisco Product Catalog describes the networking products offered by Cisco Systems, as well as ordering and customer support services. Access the Cisco Product Catalog at this URL:

  http://www.cisco.com/en/US/products/products_catalog_links_launch.html

- Cisco Press publishes a wide range of networking publications. Cisco suggests these titles for new and experienced users: Internetworking Terms and Acronyms Dictionary, Internetworking Technology Handbook, Internetworking Troubleshooting Guide, and the Internetworking Design Guide. For current Cisco Press titles and other information, go to Cisco Press online at this URL:

  http://www.ciscopress.com

- Packet magazine is the Cisco quarterly publication that provides the latest networking trends, technology breakthroughs, and Cisco products and solutions to help industry professionals get the most from their networking investment. Included are networking deployment and troubleshooting tips, configuration examples, customer case studies, tutorials and training, certification information, and links to numerous in-depth online resources. You can access Packet magazine at this URL:

  http://www.cisco.com/go/packet

- iQ Magazine is the Cisco bimonthly publication that delivers the latest information about Internet business strategies for executives. You can access iQ Magazine at this URL:

  http://www.cisco.com/go/iqmagazine

- Internet Protocol Journal is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:

  http://www.cisco.com/en/US/about/ac123/ac147/about_cisco_the_internet_protocol_journal.html

- Training—Cisco offers world-class networking training. Current offerings in network training are listed at this URL:

  http://www.cisco.com/en/US/learning/index.html

This document is to be used in conjunction with the documents listed in the "Related Documentation" section on page 6.