Avaya one-X® Deskphone SIP Release 2.6.14 Readme

This file is the Readme for the Avaya One-X® Deskphone SIP Release 2.6.14 software for the 9620C, 9620L, 9630G, 9640, 9640G, 9650, and 9650C IP Deskphones. This file describes the contents of the June 2015 (**2.6.14.1**) software distribution package.

SIP 2.6.14 software is supported on the 9620C, 9620L, 9630G, 9640, 9640G, 9650, and 9650C IP Deskphones. The software will not load or operate on any other models. **SIP 2.6.14 software is specifically not supported on the 9620 IP Deskphone and 9630 IP Deskphone.**

This release supersedes all previous Avaya one-X® Deskphone SIP releases. Avaya recommends that all customers upgrade both new and installed IP Deskphones to this version at their earliest convenience.

The information in this document is accurate as of the issue date and subject to change.

Please refer to the Advisements in this file for important information prior to deploying this software.

Avaya Aura® Compatibility

The 9620C, 9620L, 9630G, 9640, 9640G, 9650, and 9650C IP Deskphones using one-X® Deskphone SIP Release 2.6.14 software are supported on:

- Avaya Aura® Platform 6.2 FP2 (Avaya Aura® Communication Manager 6.3.0 with Avaya Aura® Session Manager 6.3.2) and associated service packs
- Avaya Aura® Platform 6.2 FP3 (Avaya Aura® Communication Manager 6.3.4 with Avaya Aura® Session Manager 6.3.4) and associated service packs
- Avaya Aura® Platform 6.2 FP4 (Avaya Aura® Communication Manager 6.3.6 with Avaya Aura® Session Manager 6.3.8) and associated service packs

Avaya one-X® Deskphone SIP Release 2.6.14 is not supported with SIP Enablement Services (SES).

New Features in SIP 2.6.14

There is no new functionality with this release.

Documentation for SIP 2.6.14

The following document has been updated for this release of software.

- [Administering Avaya one-X® Deskphone SIP Release 2.6](#)

The following documentation has not been updated and is included below for reference.

- [Avaya one-X® Deskphone SIP Installation and Maintenance Guide Release 2.6](#)
- [Avaya one-X® Deskphone SIP 9620, 9620C, 9620L IP Telephone User Guide](#)
- [Avaya one-X® Deskphone SIP for 9640/9640G IP Telephone User Guide](#)
- [Avaya one-X® Deskphone SIP for 9650/9650C IP Telephone User Guide](#)
- [Avaya one-X® Deskphone SIP for 9620/9620C/9620L IP Telephones Quick Reference Guide](#)
- [Avaya one-X® Deskphone SIP for 9640/9640G IP Telephones Quick Reference Guide](#)
- [Avaya Deskphone H.323/SIP for 9600 Series – API Guide](#)

This documentation is available on http://support.avaya.com under "9600 Series IP Deskphones" -> "SIP 2.6.x" -> Documents.

SIP 2.6.14 Package Content

The SIP 2.6.14 package (96xx-IPT-SIP-R2_6_14-151805.zip) contains all the files necessary to upgrade new or previously installed 9620C, 9620L, 9630G, 9640, 9640G, 9650, and 9650C IP Deskphones to the SIP 2.6.14 software.

The following files are included in this package:

- hb96xxua3_00.bin – The SIP 2.6.x boot application file

- SIP96xx_2_6_14_1.bin – The SIP 2.6.14 phone application file for all but 9620/9630.

- SIP96xx_2_6_12_1.bin – The SIP 2.6.12.1 phone application file for 9620/9630.

- 96xxupgrade.txt   – To upgrade to this release, you must change our 96xxupgrade.txt file.

  The sample upgrade script that is included in this package is generic, in that it will upgrade all existing 9600 phones (except the 9620/9630) to this maintenance release.

  - **Note that this file is designed for environments in which all 9620C, 9620L 9630G, 9640, 9640G 9650 and 9650C endpoints will be upgraded to the SIP 2.6.14 software.**

    - *Any 9620 IP Deskphone or 9630 IP Deskphone will only upgrade to the 2.6.12 Maintenance Release, since that is the last supported software release on those phones.*

  - **Alternative 96xxupgrade file for mixed H.323 and SIP 96xx deployments -** Available at support.avaya.com the alternate_96xxupgrade.txt file is designed for environments that will support 96xx upgrades for both the H323 and SIP modes of operation. See the Avaya support website for additional information for how to edit this file and setup the SIG setting (the Signaling Procedure) in the 96xx phones.

- release.xml

- Fifteen predefined language files for phone display:
  - Mlf_S96x0_Arabic.xml
  - Mlf_S96x0_BrazilianPortuguese.xml
  - Mlf_S96x0_CanadianFrench.xml
  - Mlf_S96x0_CastilianSpanish.xml
  - Mlf_S96x0_Chinese.xml
  - Mlf_S96x0_Dutch.xml
  - Mlf_S96x0_English.xml
  - Mlf_S96x0_German.xml
  - Mlf_S96x0_Hebrew.xml
  - Mlf_S96x0_Italian.xml
  - Mlf_S96x0_Japanese.xml
  - Mlf_S96x0_Korean.xml
  - Mlf_S96x0_LatinAmericanSpanish.xml
  - Mlf_S96x0_ParisianFrench.xml
  - Mlf_S96x0_Russian.xm

  Note that the names of the language files have changed with this release. Please refer to the advisements.

- Eight extended Korean ring tone files:
  - KoreanRT1.xml
  - KoreanRT2.xml
  - KoreanRT3.xml
  - KoreanRT4.xml

- o KoreanRT5.xml
- o KoreanRT6.xml
- o KoreanRT7.xml
- o KoreanRT8.xml

- Three certificate files:
    - o av_csca_pem_2032.txt - Avaya Call Server CA certificate with an expiration date of 2032
    - o av_prca_pem_2033.txt- Avaya Product Root CA certificate with an expiration date of 2033
    - o av_sipca_pem_2027.txt- Avaya SIP Root CA certificate with an expiration date of 2027

System specific parameters should be entered into the 46xxsettings.txt file, which is available for separate download at http://support.avaya.com. **There are no new or changed configuration parameters introduced with this release of software**.

Advisements with SIP 2.6.14 software

Downgrading to SIP 2.6.12 software is blocked

SIP 2.6.14 and later software includes changes to reduce the use of memory. When downgrading to SIP 2.6.12 software, this could result in a situation where there is insufficient memory to operate. **Therefore, the downgrading of SIP 2.6.14 or later software to SIP 2.6.12 software is blocked.** Attempting such a downgrade will be ignored by the Deskphone.

Recommended SIP Transport Protocols

SIP Proxy / Phone Connection Type	UDP	TCP	TLS
Avaya Session Manager (as primary controller)	Not Recommended	Recommended	Recommended
Avaya Secure Router 2330 and 4134	Not Recommended	Recommended	Recommended
AudioCodes MP-series analog and BRI gateways (as secondary controller)	Not Recommended	Recommended	Not Recommended
Cisco 2811 ISR (as secondary controller)	Not Recommended	Recommended	Not supported
I55 (as secondary controller)	Not Recommended	Recommended	Not supported
Teldat Vyda gateway	Not Recommended	Recommended	Not Recommended

Table of Phone Connection Types for Survivability Configurations

'Recommended' means minimal latency in the detection of a Failover condition

- The Audiocodes SIP gateways tested for interoperability are the MP114 and MP118; the minimum firmware version is 5.60A.010.005 or later.
- The Cisco gateways tested for interoperability are the Cisco [ISR] ; the minimum firmware revision is   c2800nm-ipbasek9-mz.124-20.YA2.bin
- When the phone is failed over to a non-Avaya secondary controller (AudioCodes/Cisco): We expect all the phones in the environment are operating in same transport protocol. There may be a few call-based issues if the phones are using different transport protocols.

Configuration with 3 BMs and few dozen Busy Indicators \ Bridged Appearances administrated

- Release 2.6.11 and above supports 3 x Button Modules with up to 72 features configured on them. The only exception is the number of notifications per second that the phone can process without performance degradation and significant delays visible for the user. For the incoming \ outgoing calls the number of notifications per second for this release should not be more than:
  - o 3 BM with 72 Busy indicators configured:
    - Incoming call – 12 BI NOTIFYs / 1 sec
    - Outgoing call – 8 BI NOTIFYs / 1 sec
  - o 3 BM with 72 Bridged Line Appearances configured:
    - Incoming call – 6 BA NOTIFYs / 1 sec
    - Outgoing call – 4 BA NOTIFYs / 1 sec

NAT

- 96xx SIP telephones should not be provisioned behind a NAT with private network addresses when the CM or SM switching fabric are provisioned on a different network.

Recommended Failback Policy

- Admin failback not recommended in R2.6 and Auto failback policy is recommended.

SRTP

- The Avaya Gateway firmware version must support SDES SRTP
- Crypto suites must match
- Always provision 'None' encryption (setting 9) as one of the encryption selections in the settings file and on CM

Microsoft Exchange 2010 or later – Calendar Integration

Calendar integration is not supported with Microsoft Exchange Server 2010 or later. Customers who are using this functionality on Microsoft Exchange Server 2007 and upgrade to Microsoft Exchange Server 2010 or later are advised to notify their users and disable the functionality in the 46xxsettings.txt file.

Encryption – SHA2 and RSA 2048

Avaya One-X® Deskphone SIP Release 2.6.12 and later software supports RSA 2048 bit length encryption keys and supports the SHA2 (224, 256, 384, and 512) hash algorithm. This has been certified for HTTPS usage for web-based administration of these phone sets. When the TLS server-client handshake is initiated, this IP Deskphone (operating as the client) is able to send its Identity certificate with an enhanced digital signature (SHA2/2048 key). Additionally, this IP Deskphone is able to receive and validate server Identity certificates which have an enhanced digital signature (SHA2/2048 key).

Multi Device Access (MDA)

Refer to the "Avaya Aura Multi Device Access White Paper" which is available on http://support.avaya.com for known limitations.

Language Files

The language file names were renamed in SIP 2.6.13. Language files used by IP Deskphones using SIP 2.6.x software and SIP 6.x.x software utilize the same name. Loading of SIP 6.x.x language files on an IP Deskphone running SIP 2.6.x software may cause performance degradation, or continuous reboots.

The 46xxsettings.txt file must include the new SIP 2.6.14 language file names (prepended with "Mlf_S96x0_"). Deskphones using SIP 6.x.x software will continue to use the language files included in their download package.

There are two ways to configure your http server in a mixed environment of deskphones using SIP 2.6.x software and deskphones using 6.x.x software:

1. The first approach is to have two different settings files - one for deskphones using SIP 2.6.x software which is referenced in the 96xxupgrade.txt file and another one for the deskphones using SIP 6.x.x software which is referenced in the 96x1Supgrade.txt file. In that case you need to modify the SIP 2.6.x version of the settings file only. For example add the following string to enable two additional languages on your Deskphones:

   SET LANGUAGES Mlf_S96x0_German.xml,Mlf_S96x0_ParisianFrench.xml

2. The other approach is to have one settings file for all models. The following shows an example change in a 46xxsettings.txt file to accommodate both SIP 2.6.x and SIP 6.x.x language files.

```
## Languages
IF $MODEL4 SEQ 9601 GOTO 96X1LANG
IF $MODEL4 SEQ 9608 GOTO 96X1LANG
IF $MODEL4 SEQ 9611 GOTO 96X1LANG
IF $MODEL4 SEQ 9621 GOTO 96X1LANG
IF $MODEL4 SEQ 9641 GOTO 96X1LANG
## 96X0 Language files
SET SYSTEM_LANGUAGE Mlf_S96x0_English.xml
SET LANGUAGES Mlf_S96x0_German.xml,Mlf_S96x0_ParisianFrench.xml
GOTO NEXTSTEP
# 96X1LANG
## 96x1 Language files
SET SYSTEM_LANGUAGE Mlf_English.xml
SET LANGUAGES Mlf_German.xml,Mlf_ParisianFrench.xml
GOTO NEXTSTEP
# NEXTSTEP
```

Encrypted SRTCP

Avaya One-X® Deskphone SIP Release 2.6.x software does not support Encrypted SRTCP. With Avaya One-X® Deskphone SIP Release 2.6.14 and later software, a deskphone which receives an SDP offer containing Encrypted SRTCP will properly negotiate to use authenticated but unencrypted SRTCP.

256-bit Advanced Encryption Standard (AES-256) media encryption

Avaya One-X® Deskphone SIP Release 2.6.x software does not support AES-256 media encryption. When deployed in a mixed environment of other deskphones which do support this capability, care must be taken to only provide settings which are supported by the SIP 2.6.x deskphones. This can be accomplished via:
1. Using two different 46xxsettings.txt files.
2. Using GROUPS and separate configurations in the same 46xxsettings.txt file
3. Using a MODEL4 comparison and separate configurations in the same 46xxsettings.txt file.

Interworking – DHCP with Microsoft Windows 2003 server

When using a Microsoft Windows 2003 server to provide DHCP, ensure that the server is configured with "IgnoreBroadcastFlag" to 0.

SIP 2.6.14 Resolved Issues (since SIP 2.6.13.1)

SIP 2.6.14 provides fixes to issues not resolved in prior releases. This software release is based on SIP 2.6.13 and generally includes fixes for customer found issues.

Customers who are using interim patches must consult with Avaya prior to upgrading to this software to ensure that the content of their patch has been included with this version. Failure to take this precaution could lead to the re-appearance of a previously-resolved issue.

Issues resolved in this release include:

External ID	Internal ID	Issue Description
		Reboot
	SIP96X0-8314	Phone reboots due to memory fragmentation when logging out and configured with large number of SBM, languages, busy indicator buttons, and call logs. **NOTE:** *Resolving this issue involves changes to the way that memory is managed. When downgrading to SIP 2.6.12 software, this could result in a situation where there is insufficient memory to operate.* **Therefore, the downgrading of SIP 2.6.14 or later software to SIP 2.6.12 is blocked.**
		User Interface
1-5707316992	SIP96X0-8329	User searches for contacts and add to local contacts. It is incorrectly saved with the handle of the user which is not a diallable number.
1-6007448764	SIP96X0-8339	User is making multiple configuration changes with less than 5 seconds between each change. If the phone receives a request from PPM to update configuration parameters, those changes may be lost.
	SIP96X0-8214	Phone is configured with 36 Bridged Appearances and is receiving updates at a rate of >1 per second. On an incoming call, the ringtone is deformed.
1-507316992	SIP96X0-8329	User searches for contact and adds to local contacts. It is incorrectly saved with the handle of the user which is not a diallable number.
	SIP96X0-8362	Phone A is configured to show Message Waiting Indication of phone B. Phone C calls phone B and leaves a message. The MWI indication appears on phone A. If phone A logs out and then logs back in, the MWI indication does not appear.
	SIP96X0-8331	Phone has an incoming call ringing on a Bridge Call Appearance and the LED on the upper right corner is flashing. While still ringing, another incoming call is made to the main Call Appearance. If the second incoming call is ended, the LED stops flashing even though the Bridge Call Appearance is still ringing.
		Configuration Backup - PPM
1-6007448764	SIP96X0-8339	Periodically, configuration data is not backed up to PPM after a configuration change is made. On the next refresh, the old data is sent back to the phone which causes a deletion of change.
1-5402974256	SIP96X0-8357	In rare cases, personalized settings (such as Button clicks enabled) are reset to default if a user logs into a phone with a different user than was previously using that phone.
		Audio

External ID	Internal ID	Issue Description
	SIP96X0-8379	When deployed on Avaya Aura® Platform 7.0 (scheduled for availability in mid-2015), phone A is talking to phone B. Phone A puts the call on hold and phone B hears music-on-hold. Phone B also puts the call on hold. If phone A takes the call off hold, they do not hear music-on-hold.
Interworking – 1100/1200-Series IP Deskphones with SIP software		
	SIP96X0-8389	An Avaya Aura Platform® 7.0 (scheduled for availability in mid-2015) system is configured for Encrypted SRTCP best effort. If an 1100/1200-Series IP Deskphone with SIP software calls a deskphone, the call will not complete.
Presence		
	SIP96X0-8359	Deskphone does not correctly show the presence status of contacts using other models of Avaya endpoints/clients.
Failover		
	SIP96X0-8241	Phone A is in a call with Phone B. Following a failover from SM1 to SM2, phone A puts the call on hold. Following a failback from SM2 to SM1, phone A presses the Resume softkey to resume the call. The call is successfully resumed but the "failover" icon is still displayed.

Unresolved Issues in SIP 2.6.14

The following table includes unresolved issues with this release of software which were known as of the issue date of this document.

External ID	Internal ID	Issue Description
Administration		
1-654442104	SIP96X0-8396	Deskphone is registered with SM1 and SM2. The user profile is changed in SMGR to have SM2 as primary and no secondary. A "301 moved permanently" is sent to the deskphone but it does not register with SM2 without also receiving a reload notify message.
	SIP96X0-8398	When deployed on Avaya Aura® Platform 7.0 (scheduled for availability in mid-2015) and the 46xxsettings.txt file is configured with SET MEDIAENCRYPTION 10,1,9, calls to or from the deskphone which terminate on a device which is not capable of supporting encryption will fail. *Workaround: Do not configure the deskphone with either parameter 10 or 11 in the first two options.*
Interworking – Video devices		
	SIP96X0-8405	When an incoming call is made from a video device and answered on the deskphone, it sends a "500 internal error" and drops the call.

Appendix 1 – Supported Hardware

SIP 2.6.14 software is supported on the following models of IP Deskphones. The Lifecycle status shows the status of these hardware models as of the date of issue of this file.

Comcode	Short Description	Model	Lifecycle Status
700383938	9650	9650D01A	End-of-sale as of 29 June 2013. Will move to end-of-manufacturer support on 29 June 2016.
700408628	9650 W/O FACEPLATE	9650D01A	End-of-sale as of 3 November 2014. Will move to end-of-manufacturer-support on 3 November 2017.
700480833	9620L TAA	9601D02L	End-of-sale as of 7 October 2013. Will move to end-of-manufacturer support on 7 October 2016.
700480841	9650 TAA	9650D01A	
700405673	9630G	9630GD01A	
700408602	9630G W/O FACEPLATE		
700383920	9640	9640D01A	
700408610	9640 W/O FACEPLATE		
700419195	9640G	9640GD01A	
700429095	9640G W/O FACEPLATE		
700460215	9670G	9670GD01A	
700460215	9670G W/O FACEPLATE		
700461197	9620L	9601D02L	End-of-sale as of 3 March 2014. Will move to end-of-manufacturer support on 3 March 2017.
700461239	9620L W/0 FACEPLATE		
700461205	9620C	9601D03C	
700461247	9620C W/O FACEPLATE		
700461213	9650C	9650D02C	End-of-sale as of 17 March 2014. Will move to end-of-manufacturer support on 17 March 2017.
700461254	9650C W/O FACEPLATE		
700506209	9650	9650D01A	Orderable.

SIP 2.6.14 software is specifically not supported on the following models of IP Deskphones. The Lifecycle status shows the status of these hardware models as of the date of issue of this file.

Comcode	Short Description	Model	Lifecycle Status
700426711	9620	9620D01A	*End-of-manufacturer support on 12 November 2012.* Last release of software is 2.6.12.
700408586	9620 W/O FACEPLATE		
700426729	9630	9630D01A	*End-of-manufacturer support on 12 November 2012.* Last release of software is 2.6.12.
700408594	9630 W/O FACEPLATE		

Appendix 2 – Release History – SIP 2.6.x Software

The following table provides a history of the SIP 2.6 software releases.

Release	Date	Link to Readme file
2.6	June 2010	ftp://ftp.avaya.com/incoming/Up1cku9/tsoweb/9600/060710/96xxSIP_ReadmeR2_6.pdf
2.6.1	August 2010	http://support.avaya.com/css/P8/documents/100107651
2.6.3	October 2010	http://support.avaya.com/css/P8/documents/100113463
2.6.4	November 2010	http://support.avaya.com/css/P8/documents/100120942
2.6.5	September 2011	http://support.avaya.com/css/P8/documents/100147813
2.6.6	October 2011	http://support.avaya.com/css/P8/documents/100151040
2.6.7	March 2012	http://support.avaya.com/css/P8/documents/100157947
2.6.8	August 2012	http://support.avaya.com/css/P8/documents/100164853
2.6.9	November 2012	http://support.avaya.com/css/P8/documents/100167920
2.6.10	May 2013	http://support.avaya.com/css/P8/documents/100171825
2.6.11	December 2013	http://support.avaya.com/css/P8/documents/100176341
2.6.12	May 2014	http://support.avaya.com/css/P8/documents/100179651
2.6.13	November 2014	http://support.avaya.com/css/P8/documents/101001101
2.6.14	June 2015	http://support.avaya.com/css/P8/documents/101011130

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