

Avaya One-X[®] Deskphone H.323 Release 3.1 Service Pack 4 Readme

This file is the Readme for the Avaya One-X[®] Deskphone H.323 Release 3.1 Service Pack 4 (H.323 3.1 SP4) for the 9610, 9620, 9620C, 9620L, 9630, 9630G, 9640, 9640G, 9650, 9650C and 9670G IP Deskphones. This file describes the contents of the **March 2012** Service Pack software distribution package.

H.323 3.1 SP4 software is supported on the 9610, 9620, 9620C, 9620L, 9630, 9640, 9640G, 9650C and 9670G IP Deskphones. It will not load or operate on any other models.

This Service Pack supersedes all previous Avaya One-X Deskphone H.323 Release 3.1 service packs. Avaya recommends that all customers upgrade both new and installed IP Deskphones to this version at their earliest convenience.

To upgrade your 9600-Series IP Deskphones:

- 1. Unzip the zip file in the root directory of your HTTP server.
- 2. Make any adjustments required by your environment to your 46xxsettings.txt file.
- 3. Reset your Avaya 9600-Series IP Deskphone.

This document was updated in April 2012 to change the download location for the R3.941a patch. This document was updated in June 2012 to revise the "Unresolved Issues" information.

Avaya Aura® Communication Manager (CM) Compatibility

Avaya One-X[®] Deskphone H.323 Release 3.1 Service Pack 4 is supported on Avaya Aura Communication Manager 5.2.1 and higher. We recommend using the latest Communication Manager release with these models of IP Deskphones. See the "Communication Manager Software & Firmware Compatibility Matrix" at http://support.avaya.com for the supported software/firmware versions of the Media Server, Media Gateway, and circuit packs.

The 9670G is not natively supported on CM 5.2.1 or higher. It is recommended that the 9670G be administered as a 9630.

For more details refer to the H.323 configuration section in the CM Administration Guide which can be downloaded from http://support.avaya.com.

Avaya IP Office (IPO) Compatibility

Note that the H.323 3.1 SP4 software may not be included in the latest IP Office Service Pack.

The 9620L/9620C/9630G/9640/9640G/9650/9650C IP Deskphones are supported on IP Office 6.0 or later and IP500 V2 hardware only.

IP Deskphone software is included in the IP Office software download available from http://support.avaya.com.

Please consult the IP Office Technical Bulletin(s) for details on specific IP Office software compatibility and the included version of IP Deskphone software.

Avaya B5800 Branch Gateway (B5800) Compatibility

Note that the H.323 3.1 SP4 software may not be included in the latest B5800 Service Pack.

The 9620L/9620C/9630G/9640/9640G/9650/9650C IP Deskphones are supported on B5800 6.1 or later.

IP Deskphone software is included in the B5800 software download available from http://support.avaya.com.

Please consult the B5800 Release Note(s) for details on specific B5800 software compatibility and the included version of IP Deskphone software.

H.323 3.1 SP4 Package Content

The H.323 3.1 SP4 package contains all the files necessary to upgrade Avaya new or previously installed IP Deskphones to H.323 3.1 SP4.

The following files are included in each package:

- hb96xxua3_1_04_S.bin signed binary for Boot Burner Application for all but 9670 models
- hb9670ua3_1_04_S.bin signed binary for Boot Burner Application for 9670 model
- ha96xxua3_1_04_S.bin signed binary for IPT Domestic Application for all but 9670 models
- ha9670ua3_1_04_S.bin signed binary for IPT Domestic Application for 9670 model
- 96xxupgrade.txt To upgrade to this service pack, you must change your 96xxupgrade.txt file. The sample upgrade script that is included in this package is generic, in that it will upgrade all existing 9600 phones to this service pack. If you have other phones that are using this script for other software upgrades and installations, please note the changes between the scripts. Make a backup copy of your current upgrade script, and incorporate the binary name changes for this release into your 96xxupgrade.txt file. If you are going to modify your 46xxsettings file, make a backup copy of this file, and incorporate the feature changes for this service pack.
- Sixteen predefined language files for phone display:
 - mlf S31 v71 arabic.txt
 - o mlf_S31_v71_chinese.txt
 - o mlf_S31_v71_dutch.txt
 - mlf_S31_v71_english_large.txt
 - o mlf_S31_v71_french_can.txt
 - o mlf_S31_v71_french_paris.txt
 - o mlf S31 v71 german.txt
 - o mlf_S31_v71_hebrew.txt
 - o mlf_S31_v71_italian.txt
 - mlf_S31_v71_japanese.txt
 - o mlf_S31_v71_korean.txt
 - mlf_S31_v71_portuguese.txt
 - mlf_S31_v71_russian.txt
 - mlf_S31_v71_spanish.txt
 - mlf_S31_v71_spanish_latin.txt
 - mlf_S31_v71_template_english.txt
- Eight Language and Grammar files for Voice Initiated Dialing Feature
 - o DUN_S20_v3.tar (Dutch).
 - ENG_S20_v3.tar (UK English)
 - ENU_S20_v3.tar (US English)
 - FRF_S20_v3.tar (Parisian French)
 - GED_S20_v3.tar (German)

- o ITI_S20_v3.tar (Italian)
- o PTB_S20_v3.tar (Brazilian Portuguese)
- SPE_S20_v3.tar (Spanish)
- av_prca_pem_2033.txt (Avaya Product Root CA certificate)
- release.xml

The signatures in the signatures subdirectory of the .zip distribution packages are only intended to be used by the file server, and the file server that is on the CM 6.x Utility Server is the only file server that currently supports this.

System specific parameters should be entered into the 46xxsettings.txt file which is available for separate download at http://support.avaya.com

The H.323 3.1 SP4 package is available in the following versions:

- o 96xx-IPT-H323-R3_1_4-031612.zip
- o 96xx-IPT-H323-R3_1_4-031612.tar

Important Note for customers that use 802.1x to authenticate phones on their network

Customers running Avaya One- X^{\otimes} Deskphone H.323 Release 3.1 SP2 (R3.102S) software who use 802.1x for authenticating their phones on their network, i.e. they have 802.1x Supplicant enabled on their phones, should **NOT** upgrade directly to H.323 3.1 SP4. Upgrading to H.323 3.1 SP4 will cause the Supplicant on their phones to be turned OFF, with the result that they will no longer be able to connect to the data network.

Customers running Avaya One-X[®] Deskphone H.323 Release 3.1 SP2 (3.102S) software and use 802.1x for authenticating the phones on their network require a two-step upgrade process:

- Upgrade first to R3.941a, available at: <u>ftp://ftp.avaya.com/incoming/Up1cku9/AvayaT4APP/IPT/96xxPatchesAndSoftware/R3.1SP3xx/96xx-IPT-H323-R3941-112911.zip</u> This patch contains the contents of H.323 3.1 SP3, but without turning OFF 802.1x Supplicant on the phones, thus avoiding the problem of their phones being disconnected from the network.
- 2. Upgrade next to Release 3.1 SP4.

Please note, this advisory does **NOT** apply to customers who do not use 802.1x to authenticate phones (i.e. the Supplicant on their phones is turned OFF) but instead use it to authenticate devices connected to the network via the secondary Ethernet port on the phones. Such customers can safely upgrade to H.323 3.1 SP4.

New Features introduced with this Service Pack

Support of EAP-TLS for 802.1x Authentication

Customers use 802.1x to provide authentication of an IP Deskphone prior to allowing it to access the network. Avaya One-X[®] Deskphone H.323 software has only supported EAP-MD5 as the authentication protocol. With this service pack, customers now have the choice of also using EAP-TLS as the authentication protocol.

Avaya has tested this functionality with the following configurations:

- Certificate authorities and SCEP server:
 - Microsoft Windows Server 2008 CA
- Radius servers:
 - Microsoft Windows Server 2008 NPS (tested with Microsoft Windows Server 2008 CA in Enterprise Mode)
 - o FreeRadius
 - o Steel Belt Radius Server
 - o Cisco ACS 4.1

For complete implementation details, please refer to the Avaya One-X[®] Deskphone Edtion for 9600 Series IP Telephones Administrator Guide.

To implement this feature, the following parameter in the 46xxsettings.txt file is used.

DOT1XEAPS Specifies the EAP authentication method to be used with IEEE 802.1X.

Valid values: MD5 (default) – EAP-MD5

TLS - EAP-TLS

Support for SLAMon and Operations Intelligence Suite (OIS)

OIS is an Avaya-driven offering to provide a holistic approach to the management and serviceability of a distributred Avaya communications solution including related hardware, software and network elements. Additional information on OIS can be found at http://www.avaya.com/usa/services/category--support-services?view=tools

The operation of OIS is dependent upon software (SLA Mon) which is integrated in the software of the IP Deskphone. To enable the SLA Mon software agent within the IP Deskphone, the following parameters in the 46xxsettings.txt file are used.

SLMSTAT Enables or disables the SLA Monitor software agent.

0 (default) – SLA Monitor software agent is disabled.

1 - SLA Monitor software agent is enabled

SLMPERF Enables or disables the SLA Monitor performance monitoring module.

0 (default) - Disabled, 1 - Enabled

SLMCAP Enables or disables the SLA Monitor packet capture module. **NOTE**

that this module can give access to private information.

0 (default) – Disabled, 1 – Enables the capture of packets without VoIP payloads, 2 – Enables the capture of packets including VoIP payloads.

SLMCLIENT Enables or disables the SLA Monitor command line interface.

0 (default) - Disabled, 1 - Enabled

SLMPORT Defines the SLA Monitor command port.

Acceptable values are from 6000 to 65535, initial value is 50011.

SLMTEST Defines the SLA Monitor test port.

Acceptable values are from 6000 to 65535, initial value is 50012.

SLMSRVR To restrict the SLA Monitor server IP address/port set SLMSRVR as

desired.

Acceptable values are one of the formats:

- a.b.c.d - where a.b.c.d is the IP address of the SLA Monitor server

- a.b.c.d:p where a.b.c.d is the IP address of the SLA Monitor server and p is the registration port
- p where p is the registration port of the SLA Monitor server The initial value is "" which means that the agent will accept a registration request from any IP address and any port.

TRUSTCERTS

Specifies a list of names of files that contain copies of CA certificates (in PEM format) that will be downloaded and used by the IP Deskphone to authenticate server certificates.

If this variable is set, the SLA Monitor software agent will only accept registration requests from an SLA Monitor server that presents a certificate matching one of the certificates in TRUSTCERTS.

Support for Hearing Aid Compatability (HAC) Option

Hearing Aid Compatibility (HAC) allows for audio performance when IP Deskphones are used in conjunction with hearing aids. Providing an acceptable level of audio quality for users without a hearing aid may conflict with meeting the stricter HAC criteria. With this service pack, a configurable option has been introduced which allows the choice of tuning the handset to meet either TIA 810/920 audio standards or FCC Part 68 HAC audio standards.

This option can be enabled either via

1. the local menu:

Menu -> Options & Settings -> Advanced Options -> Handset Equalization followed by choice of Default, Audio Opt. (compliant with TIA 810/920), or HAC Opt. (compliant with FCC Part 68 HAC)

2. the 46xxsettings.txt file with the following parameter.

ADMIN_HSEQUAL Specifies handset audio equalization standards compliance.

Valid values: 1 (default) – Use handset equalization which is compliant with TIA 810/920

2 – Use handset equalization which is compliant with FCC Part 68 HAC requirements.

Issues resolved with H.323 3.1 SP4

 $\rm H.323~3.1~SP4$ provides fixes to issues not resolved in prior releases. This software release is based on $\rm H.323~3.1~SP3$ and includes a improvements from post SP3 interim patches.

Issues resolved in this release include:

WI	JIRA	Patch	Issue
wi00975906	H32396X0-4045	3.934a	After upgrading to 3.1SP2 9630G with SBM24 will not stay powered up and goes into rolling reboot when LLDP enabled into SP3
wi00968639	H32396X0-3390	3.932b	96x0 R3.1 SP2 with SBM24 fail to backup personalized label.
wi00973139	H32396X0-4035	3.949a	9620L Phones do not send the correct Power Value in LLDP MED MDI TLV
wi00969656	H32396X0-4001	3.945a	Phone hangs when it receives a EAPOL packet with Transaction id of 0
wi0097298 6	H32396X0-4033	N/A	While on a call, a second call from Call Log not possible with CALL button
	H32396X0-4120	N/A	9650 phone reports high packet loss in RTCP reports - This was found recently to be a Medpro firmware issue. Please contact Avaya Services for an update/patch for Medpro firmware, which addresses this issue.

Unresolved issues in H.323 3.1 SP4

WI number	JIRA	Issue
wi00959992	H32396X0-3967	Phone unable to download upgrade and settings files from HTTPS server, when customers use their own security certificates.
wi00962138	H32396X0-4111	Weather and Time applications on the 9670G are not functioning.
wi00968234	H32396X0-4110	9650 R3.1 SP3 is in rolling reboot when a DOMAIN name is provided in DHCP OFFER
	H32396X0-4107	96x0 sending continous DHCP request.
	H32396X0-4102	If phone hasn't downloaded any TRUSTED CERTS, then it will accept HTTPS connection from any server.

	132396X0-4089	Tranmit voice is clipped when far end is loud.
wi00955293 H	122206V0 40EE	
	132396X0-4055	9670 reboots during Bluetooth device discovering, but only if attempt is made to pair phone with a non-headset device.
Н	l32396X0-4054	On the 9670 if a user in a call-pickup group, picks an incoming call, it is logged as a outgoing instead of an incoming call in the call log.
wi00975183 H	I32396X0-4043	Upgrading 96x0 IP Phones from 3.0 SP2 to 3.1 SP2 or 3.1 SP3 may cause button labels on expansion modules to either change position or disappear altogether.
wi00975001 H	I32396X0-4042	Repeated login/logout of phones using hot desking and Feature Access Codes, could cause phones to reboot, if Backup/Restore is enabled.
wi00972980 H	I32396X0-4031	Redirect notification does not work for 96x0 series phone, no half ring
wi00971903 H	132396X0-4023	9670 ip phone resets when modifying personal labels, if user presses the Back button while the label is being saved.
wi00970314 H	132396X0-4002	With Enhanced Call pick-up active and Edit Dial option active on the phone, the numbers entered by user during Edit Dialing, get erased, on an incoming call.
wi00968880 H	132396X0-3999	Dial tone heard on both SPEAKER & HEADSET, when switching from HEADSET to SPEAKER, after releasing previous call on HEADSET.
wi00968653 H	I32396X0-3997	9630G Fails Autonegotiation on PC Port
wi00968652 H	I32396X0-3996	Button Labels on Expansion Module are corrupted after upgraded from 3.191a to 3.1SP2
wi00968642 H	132396X0-3992	Speaker LED is not turning off,no voice heard when swapping from speaker and handset
wi00968641 H	I32396X0-3991	Poor Data Performance on 9670G, when PC port is at 1Gbps and LAN port is at 100 Mbps
wi00963402 H	132396X0-3978	9620 VPN cannot establish connection in subnet
wi00920478 H	I32396X0-3792	9670 HTTPS download fails intermittently when downloading upgrade and settings files.
	132396X0-4005	Phone reboots after conference 4 parties, if RSVP is enabled on one or more of the parties' network regions. \Box
wi00970652 H	132396X0-4009	Phone suspends after dropping a call and pressing Mute CRAFT, if RSVP is enabled in the network region. \Box
	I32396X0-3931	VPN issue in 9620 ip phone version 3.1 SP2 (3.102S) while working with Cisco ASA
wi00920807 H	I32396X0-3811	96x0: off setting for AUDIOSTHS is wrong in 3.1.1

 \square If RSVP is turned ON in any network region, 96x0 IP endpoints in that region may suffer from unexplained reboots. Therefore it is recommended that you turn OFF, RSVP in such network regions.

License Agreements

1) Expat 2.0

Downloaded website: http://expat.sourceforge.net

Copyright notice: Copyright (c) 1998, 1999, 2000 Thai Open Source Software

Center Ltd and

Clark Cooper Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006 Expat maintainers.

License URL:

http://expat.cvs.sourceforge.net/viewvc/*checkout*/expat/expat/COPYING?revision=1.4

License version: NA

License text:

Copyright (c) 1998, 1999, 2000 Thai Open Source Software Center Ltd and Clark Cooper

Copyright(c) 2001, 2002, 2003, 2004, 2005, 2006 Expat maintainers.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

2) OpenSSL 0.9.7g

Downloaded website: http://www.openssl.org/

Copyright notice:

Copyright(c) 1998-2005 The OpenSSL Project Copyright(C) 1995-1998 Eric A. Young, Tim J. Hudson All rights reserved. License Name: BSD-style Open Source licenses

License URL: http://www.openssl.org/source/license.html

Licence version: NA

License text:

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts. Actually both licenses are BSD-style Open Source licenses. In case of any license issues related to OpenSSL please contact openssl-core@openssl.org.

OpenSSL License

* Redistribution and use in source and binary forms, with or without * modification, are permitted provided that the following conditions * are met:

- 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- 3. All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)"
- * 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
- * 5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
- * 6. Redistributions of any form whatsoever must retain the following* acknowledgment:
- "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)"
- * THIS SOFTWARE IS PROVIDED BY THE OPENSSL PROJECT ``AS IS'' AND ANY
 * EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
- * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR
- * PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR
- * ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
- * SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT
- * NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; * LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
- * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,

```
* STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
 * ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED
 * OF THE POSSIBILITY OF SUCH DAMAGE.
  ______
  This product includes cryptographic software written by Eric Young
  (eay@cryptsoft.com). This product includes software written by Tim
  Hudson (tjh@cryptsoft.com).
Original SSLeay License
/* Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)
  All rights reserved.
 * This package is an SSL implementation written
  by Eric Young (eay@cryptsoft.com).
  The implementation was written so as to conform with Netscapes SSL.
* This library is free for commercial and non-commercial use as long as
  the following conditions are aheared to. The following conditions
  apply to all code found in this distribution, be it the RC4, RSA,
  I hash, DES, etc., code; not just the SSL code. The SSL documentation
  included with this distribution is covered by the same copyright terms
  except that the holder is Tim Hudson (tjh@cryptsoft.com).
 * Copyright remains Eric Young's, and as such any Copyright notices in
 * the code are not to be removed.
 * If this package is used in a product, Eric Young should be given attribution
* as the author of the parts of the library used.
  This can be in the form of a textual message at program startup or
  in documentation (online or textual) provided with the package.
  Redistribution and use in source and binary forms, with or without
  modification, are permitted provided that the following conditions
  are met:
  1. Redistributions of source code must retain the copyright
     notice, this list of conditions and the following disclaimer.
  2. Redistributions in binary form must reproduce the above copyright
     notice, this list of conditions and the following disclaimer in the
     documentation and/or other materials provided with the distribution.
  3. All advertising materials mentioning features or use of this software
     must display the following acknowledgement:
     "This product includes cryptographic software written by
      Eric Young (eay@cryptsoft.com)"
     The word 'cryptographic' can be left out if the rouines from the library
     being used are not cryptographic related :-).
  4. If you include any Windows specific code (or a derivative thereof) from
     the apps directory (application code) you must include an acknowledgement:
      "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"
 * THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS'' AND
 * ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
 * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
 * ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE
 * FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
 * DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
 * OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
 * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
  LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
  OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
 * SUCH DAMAGE.
```

```
* The licence and distribution terms for any publically available version or * derivative of this code cannot be changed. i.e. this code cannot simply be * copied and put under another distribution licence * [including the GNU Public Licence.] */
```

3) Libwww

Downloaded website: http://www.w3.org/Library

Copyright notice:

Copyright © 1994-2000 World Wide Web Consortium, (Massachusetts Institute of Technology,Institute National de Recherche en Informatique et en Automatique, Keio University). All Rights Reserved.

License URL:

http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231

License version: NA

4) W3C Software License

License text:

This work (and included software, documentation such as READMEs, or other related items) is being provided by the copyright holders under the following license. By obtaining, using and/or copying this work, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions.

Permission to copy, modify, and distribute this software and its documentation, with or without modification, for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the software and documentation or portions thereof, including modifications:

- 1. The full text of this NOTICE in a location viewable to users of the redistributed or derivative work.
- 2. Any pre-existing intellectual property disclaimers, notices, or terms and conditions. If none exist, the W3C Software Short Notice should be included (hypertext is preferred, text is permitted) within the body of any redistributed or derivative code.
- 3. Notice of any changes or modifications to the files, including the date changes were made. (We recommend you provide URIs to the location from which the code is derived.)

THIS SOFTWARE AND DOCUMENTATION IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS

FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENTATION WILL NOT INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS. COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR DOCUMENTATION.

The name and trademarks of copyright holders may NOT be used in advertising or publicity pertaining to the software without specific, written prior permission. Title to copyright in this software and any associated documentation will at all times remain with copyright holders.

Copyright (c) 1998, 1999, 2000 Thai Open Source Software Center Ltd and Clark Cooper Copyright

(c) 2001, 2002, 2003, 2004, 2005, 2006 Expat maintainers.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

HTTP Server functionality is provided by the GoAhead WebServer 2.1, Copyright (c) 2004 GoAhead

Software, Inc.

All Rights Reserved.

This program includes Fribidi software to which Avaya is licensed under a commercial license from

Behdad Esfahbod and Peter Grobgeld

Notice

While reasonable efforts were made to ensure that the information in this document was complete and accurate at the time of printing, Avaya Inc. can assume no liability for any errors. Changes and corrections to the information in this document may be incorporated in future releases.

Documentation disclaimer.

Avaya Inc. is not responsible for any modifications, additions, or deletions to the original published version of this documentation unless such modifications, additions, or deletions were performed by Avaya.

Link disclaimer

Avaya Inc. is not responsible for the contents or reliability of any linked Web sites referenced elsewhere within this Documentation, and Avaya does not necessarily endorse the products, services, or information described or offered within them. We cannot guarantee that these links will work all of the time and we have no control over the availability of the linked pages.

License

USE OR INSTALLATION OF THE PRODUCT INDICATES THE END USER'S ACCEPTANCE OF THE TERMS SET FORTH HEREIN AND THE GENERAL LICENSE TERMS AVAILABLE ON THE AVAYA WEBSITE AT http://support.avaya.com/LicenseInfo/ ("GENERAL LICENSE TERMS"). IF YOU DO NOT WISH TO BE BOUND BY THESE TERMS, YOU MUST RETURN THE PRODUCT(S) TO THE POINT OF PURCHASE WITHIN TEN (10) DAYS OF DELIVERY FOR A REFUND OR CREDIT. Avaya grants End User a license within the scope of the license types described below. The applicable number of licenses and units of capacity for which the license is granted will be one (1), unless a different number of licenses or units of capacity is specified in the Documentation or other materials available to End User. "Designated Processor" means a single stand-alone computing device. "Server" means a Designated Processor that hosts a software application to be accessed by multiple users. "Software" means the computer programs in object code, originally licensed by Avaya and ultimately utilized by End User, whether as stand-alone Products or pre-installed on Hardware. "Hardware" means the standard hardware Products, originally sold by Avaya and ultimately utilized by End User.

Copyright

Except where expressly stated otherwise, the Product is protected by copyright and other laws respecting proprietary rights. Unauthorized reproduction, transfer, and or use can be a criminal, as well as a civil, offense under the applicable law.

Third-party Components

Certain software programs or portions thereof included in the Product may contain software distributed under third party agreements ("Third Party Components"), which may contain terms that expand or limit rights to use certain portions of the Product ("Third Party Terms"). Information identifying Third Party Components and the Third Party Terms that apply to them is available on Avaya's web site at: http://support.avaya.com/ThirdPartyLicense/

Trademarks

Avaya, Avaya Aura™, and COMMUNICATIONS MANAGER and the Avaya logo are registered trademarks and/or service marks of Avaya Inc. in the U.S. and certain other jurisdictions. All other trademarks are the property of their respective owners. For the most current versions of documentation, go to the Avaya support Web site: http://www.avaya.com/support

Avaya support

Avaya provides a telephone number for you to use to report problems or to ask questions about your contact center. The support telephone number is 1 800 242 2121 in the United States. For additional support telephone numbers, see the Avaya Web site: http://www.avaya.com/support

~~END OF FILE~~