CounterPath Corporation

Suite 300, Bentall One Centre
505 Burrard Street Box 95
Vancouver BC V7X 1M3
Canada V6B1R8

Telephone: +1.604.320.3344
www.counterpath.com

Release Notes for
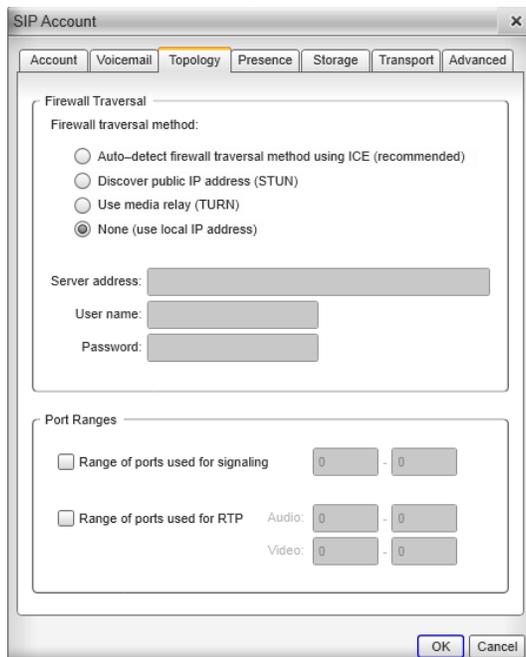# CounterPath Bria 3 *for Windows*
Version 3.5.5

October 7, 2013

1 New and Changed Features

New and Changed Features in Bria 3.5.5

Port Ranges

Previously, only the range for SIP signaling could be configured. Now, SIP, audio and video can all be configured. The Softphone > Account Settings > Topology tab has been changed to show these fields.

XMPP Cross Domain

With this feature, the user can send/receive IMs and send/receive presence subscriptions for addresses that are foreign to any of the XMPP accounts set up in Bria. For example, if the XMPP account is zippy-phone.com, the user can receive IMs from kperera11@gmail.com without having to set up gmail.com as an XMPP account. (Previously, to receive these IMs, a gmail.com XMPP account would have to be set up).

Account selection: If two XMPP accounts are set up, traffic for a foreign domain will go through one of these two accounts. Usually it will go through the first enabled account in the list, but there is no guarantee. The foreign-domain address becomes linked to this account, so subscription to this address only occurs if that account is enabled.

The XMPP server must allow passthrough of foreign addresses. So Bria will allow the user to attempt to subscribe to kperera11@gmail.com, but zippy-phone.com may or may not send the subscription request on its merry way.

DTMF Improvements

Handling of DTMF has improved.

Specifically, if you disabled the SILK codec because it prevented DTMF working, you can now re-enable SILK.

New and Changed Features in Bria 3.5.4

Qos

QoS is no longer supported on XP. QoS can be set if you are using Windows 7 or Windows 8, but via the operating system group policy (not via Bria Preferences).
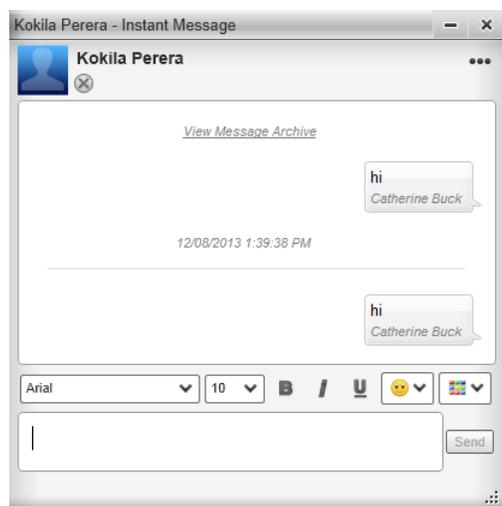
Provisioning

If you are configuring Bria via remote provisioning, you can set the priority for codecs using the new setting codecs:<codec name>:quality. Assign a number to each codec; a higher number means the codec has a higher priority. (K1534)

Codecs

Under Softphone > Preferences > Codecs, the "Honor first codec" field has been removed. Now, Bria always honors the first codec. (The option for letting Bria override the first codec and choose the "best codec in the situation" is no longer supported.) (K1616)

IM Window

In the IM window, the layout for timestamps has been improved. The timestamp for the previous IM session has been moved above the line to show that it belongs to the previous session, not the current one. (K1513)
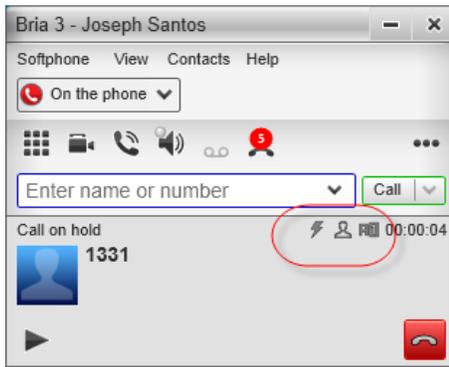

Favorites

Previously if you imported a contact list that had been previously exported from a Bria that supported Favorites, the Favorites were lost. Now, when you export and import, the Favorites information is retained. (K1507)

Privacy

The matching of blocked numbers has been improved. For example, if "6045551234" is blocked, then a call from "**1**6045551234" will also be blocked. (K1518)

Call Option Indicators

"Call option" indicators have been added to the call panel. These indicators show when one of the call options has been selected: Auto answer, Hide my number (anonymous calling), Letters to numbers.

New and Changed Features in Bria 3.5.3

Improved Handling of Audible IM Alert

Previously, if you had a HID-compliant headset selected as your audio in device and your speakers selected as your "Ring on" device, then incoming calls would ring on the speakers but the alert for incoming IMs would go to your headset.

With Bria 4.5.3, the alerts for both incoming calls and IMs go to the "Ring on" device. Note also that this new behavior always applied to non-HID headsets. (K-1167)

Improved Contact Matching

There have been improvements in the matching of contacts to the phone number on incoming calls. (K-1417, K-1168)

Detection of 64-bit Outlook

The Outlook account works only with 32-bit Outlook. Bria now detects if the 64-bit version of Outlook 2013 is installed and disables the ability to enable the Outlook account in the Accounts list. (K-1360)

New and Changed Features in Bria 3.5.2

Opus Codec
Bria now supports the Opus wideband codec. The codec is enabled by default.

Picture-in-picture Video on Bria *for Windows*
Bria *for Windows* now shows the local user's video in a picture-in-picture format:

New and Changed Features in Bria 3.5.1

Windows 8® Notifications
Bria now supports visual alerts (for example, for an incoming call) when Bria is running on Windows 8.
- Bria running on Windows 7 and earlier will use the classic notifications, not the Windows 8 notifications
- Bria running on Windows 8 will use the Windows 8 notifications, in both the Metro and Desktop environments.

IM Recent History
The IM window now shows the content of the most recent session between the user and this contact.

New and Changed Features in Bria 3.5

System Requirements
- Microsoft .NET 4.0 (instead of 3.5)
- VC 2010 Redistributable package (instead of VC 9.0 Runtime)
- Internet Explorer is no longer a requirement.

Improved Media and New Codecs
Changes have been made to drastically reduce latency, improve audio quality, and improved handling when audio and video packets are lost.

Bria 3.5 also has changes to the supported codecs:
- SILK narrowband, SILK wideband and SILK super-wideband are now included.
- VP8 (video codec) is now included.
- DVI4 and DVI4 are no longer included
- GSM is no longer included.

Support for Windows 8

Bria can be run on Windows 8, but in the "classic" Desktop environment, not within the Metro environment.

Bria is not officially supported on Windows 8 tablets, although it may run on that device. Bria is not tailored for use with Windows 8 touch screen displays, so the end user experience may be sub-optimal.

New Look for Icons

- Many of the icons and buttons on the softphone have been redesigned.
- On the main softphone, the Mute button has moved from the toolbar down into the panel for each established call.

New Look for Instant Messages and Web Tabs

IM content and Web Tab content now uses Webkit rather than the native Internet Explorer® browser. Use of WebKit provides improved stability and ensures that rendering of content in web tabs (within Bria) better conforms to the rendering of the content in a regular web browser.

Another minor change to IM: now, the key combination to insert a return is Shift-click. Previously it was Ctrl-click.

Reorganization of Preferences

In the Preferences panels, the following changes have been made:

- The Media Quality panel has been removed. Its fields have been moved to the Devices panel as follows:
  - Automatic gain control: moved to Audio tab on Devices panel
  - Reduce background noise: moved to Audio tab on Devices panel
  - Reduce Echo: moved to Speakerphone Mode tab on Devices panel
  - Camera resolution: moved to Other Devices tab on Devices panel
  - Fix upside down video: moved to Other Devices tab on Devices panel
- The Call Automation panel has been renamed "Calls".
- The Network panel has been removed.
- The Advanced panel has been removed. Its fields have been moved as follows:
  - DTMF fields: moved to Calls panel
  - RTP fields: moved to Calls panel
  - File Locations: moved to File & Web Tabs panel
  - Web Page Tabs: moved to File & Web Tabs panel
- The File & Web Tabs panel is a new panel that holds some of the fields previously on the Advanced panel.

Integration with Plantronics Devices

Changes have been made to the way that Bria *for Windows* integrates with Plantronics HID-compliant devices. Now, if Bria 3.5 detects the new Plantronics HID library (Spokes™ Software for Windows™) on the user's computer, it uses that library. If Bria does not detect the library, it uses a CounterPath custom library.

As a result of the usage of this library, you can no longer modify the button mapping on a HID device. The Setup button beside the HID field on Preferences > Devices has been removed in Bria 3.5.

If you want to install the Spokes on your computer, go to http://www.plantronics.com/us/support/software-downloads/business-windows.jsp.

Five Concurrent Calls

Bria 3.5 decreases the maximum concurrent calls allowed to five calls.

DHCP Login Option

Bria 3.5 Retail brand no longer includes the option in the Login screen to detect the login server using DHCP. However, the option is still available to customers who purchase a branded Bria 3.5 client.

Support for Quality of Service (QoS)

The QoS implementation in Bria is not the recommended way of implementing this feature when using a Windows 7 or later.

In the Preferences dialogs:

* If the computer has Windows XP, the Prefs > QoS screen shows
* If the computer has Vista, Win7, Win8, the Prefs > QoS screen is hidden.

For customers who configure Bria through provision, if Bria is configured for QoS via the appropriate setting but the operating system is Windows 7 or later, then the settings are simply ignored and QoS is still not enabled.

2 Resolved Issues

Resolved Issues in Bria 3.5.5

In some cases, a contact whose computer has gone to sleep or into hibernate mode would appear to the user as online. This issue has been fixed, and the contact now appears as offline. (K-402)

Resolved Issues in Bria 3.5.4

Calls

* An issue whereby calls would drop after a few minutes has been resolved. (K-1629)
* An issue whereby numbers dialed using the dialpad were reversed has been resolved. (K-1498)

Video Calls

* In some cases, when you place a video call, Bria will not allow the H.263 codec, even though both parties support it. This issue has been resolved. (K-1531)
* Previously, in order to set the video resolution (Softphone > Preferences > Devices, a video camera must be attached. With this new release, resolution can be set without a camera being attached. (K-1543)

Alerts

* A problem whereby IM sounds could not be heard when using a HID headset has been resolved. (K-1167)
* A problem whereby the ringer keeps ringing in the Plantronics headset when Spokes is used has been fixed. (K-1525)

TLS

* Previously, when you used TLS as the transport and encrypted the media, the media did not actually get encrypted. This problem has been resolved. (K1539)

Resolved Issues in Bria 3.5.3

Audio/video

- Bug with audio jitter if you are on a call and simultaneously sending instant messages (K-1460)
- Hazy video when pause/resume video with H264. (K-1446)
- Ability to access camera settings from video window. (K-1440)

Devices

- Remember device headset settings between sessions – consistent with behavior in 3.4.x (K-1169)
- Proper behavior for "Reset to Default" on Preferences – notably for audio/video codecs. (K-1362)

File transfer

- Fix reliability of XMPP file transfer for files larger than 20mb. (K-1376)
- Proper file transfer progress indication on large file transfers. (K-1379)

IM

- Reliably flash the taskbar on unread instant messages. (K-1278, K-1401)

Other

- Protocol handlers working again on Windows 8 (e.g. sip://, callto:// , tel://) (K-1237)
- Sharper jumplist icons when > 100% DPI settings (K-1260)

Presence

- Allow "On the Phone" status to update dynamically even when a custom presence status message is used. (K-1272)

XMPP

- Fix ability to set up a Gmail™ account as the XMPP account. (K-1487)

Resolved Issues in Bria 3.5.2

In general, there have been improvements in the stability of Bria.

Resolved Issues in Bria 3.5.1

In general, there have been improvements in the stability of Bria.

IM Window

Previously, when opening a new IM window, you needed to click in the window before typing. Now, when the window opens, focus automatically moves to the window so you can start typing immediately. (K293)

3 Known Issues

New Issues for Bria 3.5.2

If you minimize the Install window during an installation, then when the installation ends, the window moves to the top left corner of the screen where it becomes difficult to close. This is a known issue with the type of installer used with Bria. When the providers of the installer resolve the problem, CounterPath will implement the solution. (K851)

Workaround: Do not minimize the Install window during an installation.

New Issues for Bria 3.5.1

If you are running Bria on Windows XP® do not open the IM Archive while on a phone call. Doing so may cause problems on Bria. This issue will be resolved in an upcoming release. (K1106)

New Issues with Bria 3.5

Video and Low Hardware Acceleration

If you are using Windows XP and have set the hardware acceleration very low (perhaps because another program that you use requires a low setting), then video will not work.

Workaround: Increase the acceleration when you use Bria:

- Click Start > Control Panel > Display.
- Click the General tab > click Advanced
- Click the Troubleshoot tab. Adjust the levels. (K688)
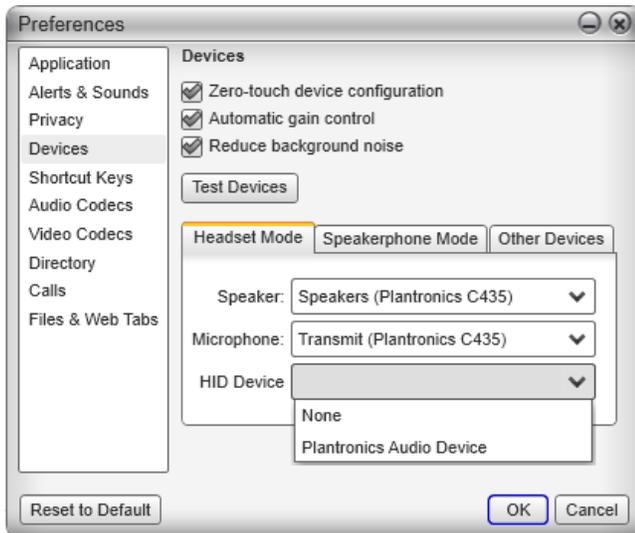
Video Problems with Logitech Pro 9000

When using a Logitech HD9000 camera in Windows XP, video may be skewed when hardware acceleration is set to a value less than Full (high).

Workaround: Increase the acceleration to Full. (K689)

Plantronics Devices: Buttons May not Work

When you have the Plantronics Spokes library installed (page 6) and you attach a newer Plantronics device, Bria will detect the device and detect that it uses the library. However, it may not automatically select to use the library to operate the device buttons, with the result that the buttons will not work. This issue will be resolved in an upcoming release.

Workaround: If you want to control audio through the device buttons, always choose Preferences > Devices > Headset mode and look at the HID Device field. If the field currently shows no value, then click the down arrow and choose the device. (K716)
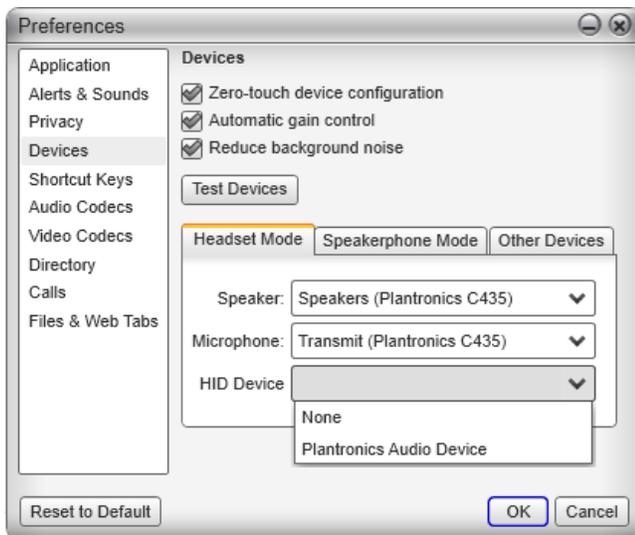
Problem Answering Second Call with some Plantronics Devices

Before the introduction of the Plantronics Spokes library (page 6), some one-button Plantronics devices could be set up to work as follows: You receive an incoming call; you click button X to answer the call. You then receive another call; you click button X to put the first call on hold and answer the second call.

With the introduction of the library, this behavior is not supported. If you click button X when you are already on a call, you hang up the first call.

Workaround: The only workaround is to stop using the buttons. To prevent yourself accidentally hanging up because you forget and click the button, choose Preferences > Devices > Headset mode and set the HID Device field to "None". (K842)

No Video on Video Window

The video window may show a white screen instead of the video image, after the computer wakes up from sleep (hibernation).

Workaround: Close and reopen the video window. (K229)

Crash if Decimal Separator is Set to Comma

If your Windows operating system is set to English-US and you set the decimal separator (in Windows to be a comma instead of a dot), then Bria will crash on startup.

Bria does not crash when using English-US and a dot as the separator (that is, the standard North American combination). It does not crash when using, for example, French and a comma as the separator (that is, the standard combination in France).

This problem with non-standard combinations is a known issue with Microsoft Windows.

Workaround: Do not use a decimal separator that is not standard to the language you have set for Windows. (K814)

Existing Known Issues

Workgroup

When setting up a workgroup in peer-to-peer mode, the activity of the people the local user adds may not start to show immediately. Workaround: click on the Retry button on the Workgroup window to refresh the subscription. (70314)

Presence when Sleep or Hibernate

When the computer goes to sleep or into hibernation, Bria *for Windows* does not send out the appropriate offline status, so the local user appears online to others. (71316)

Directory Searches

If you are working in the Directory in Search on Demand mode and you switch to Type to Filter list, you must restart Bria. Otherwise, you will not be able to fetch the desired directory entries. (60594)

Microsoft Windows Vista or Windows XP Guest Accounts

You cannot use Bria on Windows Vista® or Windows® XP using the restricted "Guest" Windows account.

V-cards and XMPP Account

If the XMPP server supports v-cards they will be pulled in along with the roster when the XMPP account is enabled. If the v-cards are malformed, then Bria may crash when the XMPP account is enabled.

ICE Incompatibility

In some environments, Bria will not work with any other CounterPath client. (27161)

Mobile Intel Express Graphics Chipset

Computers with Mobile Intel® Express graphics chipsets that are running Windows XP may see visual artifacting when running Bria. This is a known issue with WPF graphics and this line of hardware. Bria will still operate correctly in this state when the Windows XP graphics acceleration is turned down:

- Click Start > Control Panel > Display.
- Click the General tab > click Advanced
- Click the Troubleshoot tab and drag the slider to the None at the extreme left of the scale. You can also choose to turn down the hardware acceleration by selecting an intermediate value.
- Click OK.

Transferring with Multiple Accounts Enabled

Currently, you cannot transfer a call made on one account by phoning the second person on a different account. For example, you establish a call with person A using account 1 (for example). You then try to transfer the call to person B by phoning person B on a different account. The transfer hangs and will not complete, and you will have to cancel the attempt to transfer. (33888)

Codec Selection

Currently, Bria does not select the best codec based on the available bandwidth and network conditions. When making an offer, Bria will offer all enabled codecs. When accepting an offer, Bria will accept the first supported codec from the offered list.

Video Issues

- Under certain scenarios, HD widescreen remote video will appear squished.
- Video is not recorded properly on the Windows 7 operating system. The latest version of Windows Media® tries to use hardware acceleration wherever it can, so a bad driver may cause faulty playback which results in a green video screen. (39246)
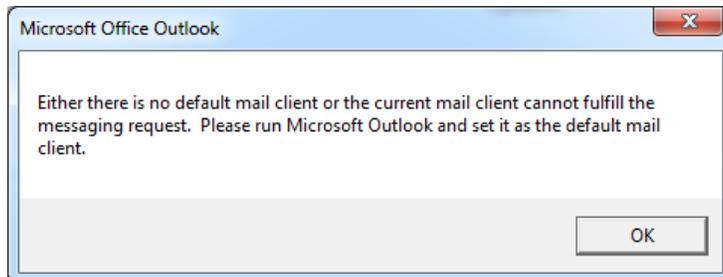
Using the Bria Add-in with 64-bit Outlook

The legacy Bria Add-in does not work with 64-bit Outlook. (55904)

The legacy Bria Add-in is no longer shipped with Bria. However, if you have been upgrading from an earlier version of Bria that did include the Add-in, then the Add-in may still work, but only if are using 32-bit Outlook.

Create an Outlook Account in Bria with 64-bit Outlook

The Outlook account is supported only with 32-bit Outlook. You can enable the Outlook account if you are using 32-bit Outlook. If you are using 64-bit Outlook, the and you try to enable the Outlook account (Softphone > Accounts), then you will get this error message:

Garbled Audio when Resuming a Call

When using certain PBX systems, you may experience garbled audio after putting a call on and then off hold. The workaround is to choose Softphone > Preferences > Audio Codecs and turn on "Honour first codec". Doing so will resolve the problem for future phone calls. (81519)

4 Third-party Software Notices

AES

This product includes software copyright (C) Mok-Kong Shen 2003. http://www.mokkong-shen.privat.t-online.de/

The original software has been revised. A copy of the revised package is available at forums.counterpath.com.

Ares

This product includes software Copyright 1998 by the Massachusetts Institute of Technology.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of M.I.T. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

M.I.T. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Awesomium

This product includes software Copyright 2012 byKhrona LLC. All Rights Reserved.

Awesomium (c) 2012 Khrona LLC. All rights reserved. Awesomium is a trademark of Khrona LLC.
Copyright (c) 2008. The Chromium Authors. All rights reserved.
Copyright (c) 1995-2009 International Business Machines Corporation and others. All rights reserved.
This software is based in part on the work of the Independent JPEG Group.
This software is copyright (c) 1991-1998, Thomas G. Lane. All Rights Reserved except as specified.
Copyright (c) 2000-2002 Glenn Randers-Pehrson.
Copyright (c) 1998-2003 Daniel Veillard. All Rights Reserved

Crypto, Libeay, Libeay32, Open SSL

This product includes software Copyright (c) 1998-2005 The OpenSSL Project. All rights reserved. This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

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.

 ==

/

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, lhash, 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.]

CURL

This product includes software Copyright © Daniel Stenberg, daniel@haxx.se. All rights reserved.

COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1996 - 2008, Daniel Stenberg, <daniel@haxx.se>.

All rights reserved.

Permission to use, copy, modify, and distribute this software for any purpose
with or without fee is hereby granted, provided that the above copyright
notice and this permission notice appear in all copies.

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 OF THIRD PARTY RIGHTS. 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.

Except as contained in this notice, the name of a copyright holder shall not
be used in advertising or otherwise to promote the sale, use or other dealings
in this Software without prior written authorization of the copyright holder.

Expat

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

Copyright (c) 2001, 2002 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.

G.722

This product includes software Copyright © 1996-2005 VoiceAge Corporation. All Rights Reserved.

iLBC

This product includes software Copyright © 1999-2005 Global IP Sound Inc. All Rights Reserved .

All use of the Original Code (GIPS iLBC, and code provided by GIPS as part of any related IETF Standard or draft standard) is subject to the complete Global IP Sound iLBC Public License, IETF Standard, Limited Commercial Use (the (License").

The Source Code version of the Original Code is available under the terms of the Global IP Sound Public License, v2.0, IETF Version – Limited Commercial Use.

Libxml2

This product includes software Copyright (C) 1998-2003 Daniel Veillard. All Rights Reserved.

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 DANIEL VEILLARD 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.

Except as contained in this notice, the name of Daniel Veillard shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from him.

NTP

This product includes code that is Copyright © Tom Horsley, 1997-2004. All rights reserved. The right to unlimited distribution and use of this program is granted to anyone who agrees to keep the copyright notice intact and not alter the program.

Opus

This product includes software Copyright © opus-codec.org, 2011-2012. All rights reserved.

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

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

- 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.

- Neither the name of Internet Society, IETF or IETF Trust, nor the names of specific contributors, may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``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 COPYRIGHT OWNER 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.

SILK

This product includes software Copyright (c) 2006-2011, Skype Limited. All rights reserved.

/***

Copyright (c) 2006-2011, Skype Limited. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, (subject to the limitations in the disclaimer below) are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

- 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.

- Neither the name of Skype Limited, nor the names of specific contributors, may be used to endorse or promote products derived from this software without specific prior written permission.

NO EXPRESS OR IMPLIED LICENSES TO ANY PARTY'S PATENT RIGHTS ARE GRANTED BY THIS LICENSE. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "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 COPYRIGHT OWNER 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.

***/

SOCI

This product includes software Copyright (C) 2004-2008 Maciej Sobczak , Stephen Hutton. All rights reserved.

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

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, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Speex

This product includes software © 2002-2003, Jean-Marc Valin/Xiph.Org Foundation.

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

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

- 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.

- Neither the name of the Xiph.org Foundation nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "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 FOUNDATION 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.

SQLite

Portions of this application were written using SQLite, http://sqlite.org/

SRTP

This product includes software Copyright (c) 2001-2005 Cisco Systems, Inc.
All rights reserved.

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

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 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.
- Neither the name of the Cisco Systems, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "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 COPYRIGHT HOLDERS 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.

VP8

This product includes software Copyright (c) 2010, The WebM Project authors. All rights reserved.

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

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

- 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.

- Neither the name of Google, nor the WebM Project, nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "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 COPYRIGHT HOLDER 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.

This product includes software Copyright (c) 2010, Google Inc. All rights reserved.

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

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

- 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.

- [Neither the name of Google nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "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 COPYRIGHT HOLDER 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.

WebRTC

This product includes software Copyright 2011, The WebRTC project authors. All rights reserved.

Copyright (c) 2011, The WebRTC project authors. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 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.
- Neither the name of Google nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "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 COPYRIGHT HOLDER 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.