

COUNTERPATH

Bria Professional Administrator Guide

CounterPath Corporation
Suite 300, One Bentall Centre
505 Burrard Street, Box 95
Vancouver, BC V7X 1M3
Tel: 604.320.3344
sales@counterpath.com www.counterpath.com

© July 2008 CounterPath Corporation. All rights reserved.

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

This document contains information proprietary to CounterPath Corporation, and shall not be used for engineering, design, procurement, or manufacture, in whole or in part, without the consent of CounterPath Corporation.

CounterPath and the  logo are trademarks of CounterPath Corporation.

The content of this publication is intended to demonstrate typical uses and capabilities of the CounterPath Bria Professional 2.4 softphone application from CounterPath Corporation. Users of this material must determine for themselves whether the information contained herein applies to a particular IP-based networking system.

CounterPath makes no warranty regarding the content of this document, including—but not limited to—implied warranties of fitness for any particular purpose.

In no case will CounterPath or persons involved in the production of this documented material be liable for any incidental, indirect or otherwise consequential damage or loss that may result after the use of this publication.

This manual corresponds to Bria Professional version 2.4.

Contents

Overview	1
Deploying Bria Professional	2
Getting Ready	2
Logging in	3
Configuring Bria Professional	4
How Bria Professional Selects an Account	7
Creating a Contact List	8
Account Configuration Reference	9
Accounts Settings Window	9
XMPP Account	10
SIP Account Properties – Account	12
SIP Account Properties – Voicemail	14
SIP Account Properties – Topology	16
SIP Account Properties – Presence	18
SIP Account Properties – Storage	20
SIP Account Properties – Security	21
SIP Account Properties – Advanced	23
Preferences Reference	25
Preferences – Privacy	25
Preferences – Network	26
Preferences – Audio Codecs	27
Preferences – Video Codecs	29
Preferences – Quality of Service	30
Preferences – LDAP	31
Preferences – Contact Storage	32
Preferences – Diagnostics	33
Preferences – Advanced	34
A Configuration Form	36
B Dial Plan	39
C Contact List Headings	45
D Glossary	46

1 Overview

This manual is intended for a system administrator who is setting up Bria Professional for use by the staff in an enterprise. The administrator should be familiar with PBX solutions, telephony and VoIP telephony.

You can deploy Bria Professional by manually configuring via the softphone GUI, or using a provisioning server.

Deploying through Manual Configuration

If you have chosen to manually configure Bria Professional, read this entire manual. The general procedure is:

1. Install Bria Professional on your computer and use the Account Settings window and the Preferences window to configure Bria Professional to work on your network and with your services.
2. When you are satisfied with the configuration, push the Bria Professional installation file to all employees.
3. Then either configure the application for each employee, or provide them with a list of settings so that they can configure it themselves. Keep in mind that manual configuration does not support login; you must make sure that each user's installation is configured for no login.

For more information on the documents you should read, go to <http://www.counterpath.com/bria.html>, click Resources, and read the orientation guide.

Deploying through Provisioning

If you are deploying through remote provisioning, read this manual in order to configure on a test computer. When you are happy with your configuration, see the Bria Provisioning Guide for information on setting up for remote login and remote provisioning.

For more information on the documents you should read, go to <http://www.counterpath.com/bria.html>, click Resources, and read the orientation guide.

2 Deploying Bria Professional

2.1 Getting Ready

System Requirements

Processor	Minimum: Intel Pentium III 1.3 GHz or equivalent Optimal: Pentium 4® 2.4 GHz or equivalent
Memory	512 MB RAM
Hard Disk Space	50 MB
Operating System	Windows® Vista® Windows 2000 Windows XP
Connection	IP network connection (broadband, LAN, wireless)
Sound Card	Full-duplex, 16-bit

Microsoft Internet Explorer® 6.0 or later.

Multimedia Device Requirements

Bria Professional requires both speakers and a microphone to make calls. Any of the following configurations are acceptable:

- External speakers and microphone
- Built-in speakers and microphone
- Dual-jack multimedia headset
- Bluetooth® multimedia headset
- USB multimedia headset
- USB phone.

Optimized Devices

Bria Professional is optimized to work with the following:

- Actiontec Internet Phone Wizard
- GN Netcom GN 8120 USB and GN Netcom 8110 USBXP
- Plantronics CS50-USB Wireless Office Headset System
- Polycom® Communicator C100S Wideband USB Speakerphone
- TigerJet RJ11 to USB Phone Adaptor (incorporating the Tiger560C)
- TigerJet USB Phone Set (incorporating the Tiger560C)

- Yealink USB-P1K USB hand phone

Video Cameras

Calls made with Bria Professional will work without a video camera, but one is necessary to allow users to see each others' images. Bria Professional will work with most USB video cameras.

2.2 Logging in

Start Bria Professional as you would any other program: Use the Windows Start menu or double-click the desktop icon. The Login window appears.



If, as a system administrator, you are accessing Bria Professional prior to deploying it across your enterprise, you can bypass the login for an initial install as follows:

1. Click Sign in on the Login window. Bria Professional will attempt to detect a login server and will fail. The Login window will appear again, this time with a Skip button.
2. Click the Skip button. Bria Professional starts.
3. You should immediately choose File > Preferences > Advanced and choose set up the Login fields to match your initial setup. Typically, this will be "No login server is available".
 - If you are reading this manual as the first step to deploying a provisioning server, you will later change the login setup back to the initial values, as described in the *Provisioning Bria* guide.
 - If you are configuring Bria Professional manually, then all users must be set up with "No login server is available".

2.3 Configuring Bria Professional

You configure Bria Professional by completing the fields on the Account Settings window and the Preferences window. The following table lists configurable features in alphabetical order and specifies the window where the feature is configured.

Topic	Window	Reference
Account credentials (SIP accounts)	Accounts > Account (SIP)	page 12
Account credentials (XMPP accounts)	Accounts > Account (XMPP)	page 10
Bandwidth	Preferences > Network	page 26
Buddy list and privacy rules for SIP accounts, storage	Accounts > Storage	page 20
Codecs	Preferences > Audio Codecs and Video Codecs	page 27
Contact list, setting up a corporate contact list		page 8
Contact list, storage	Preferences > Contact Storage	page 32
File transfer (SIP account)	Accounts > Topology	page 16
LDAP	Preferences > LDAP	page 31
Logging (troubleshooting)	Preferences > Diagnostics	page 33
Login	Preferences > Advanced	page 3, page 34
Media Encryption	Accounts > Security	page 21
Network (SIP accounts)	Accounts > Account (SIP)	page 12
	Accounts > Topology	page 16
	Accounts > Advanced	page 23
Network (XMPP accounts)	Accounts > Account (XMPP)	page 10
Presence	Accounts > Presence	page 18
Privacy (black lists and white lists)	Preferences > Privacy	page 25
Quality of service	Preferences > Quality of Service	page 30
Transport	Accounts > Security	page 21
Voicemail and call forwarding	Accounts > Voicemail	page 14

File Transfer

File transfer lets users send and receive files. There are two ways to support this feature:

- Via content indirection. In this case, files are sent via a SIP account. You must set up a file transfer server. See page 17 for information.
- Using the XMPP account. This method does not require special setup, but you must, obviously, be planning to create XMPP accounts for your users.

Setting up Accounts

You must set up SIP accounts to allow your users to make phone calls. If the VoIP service provider offers instant messaging using SIMPLE, users will also use this account for instant messaging.

You must set up an XMPP account if you are using an XMPP service for instant messaging and presence.

SIP Accounts

Each user requires the following information:

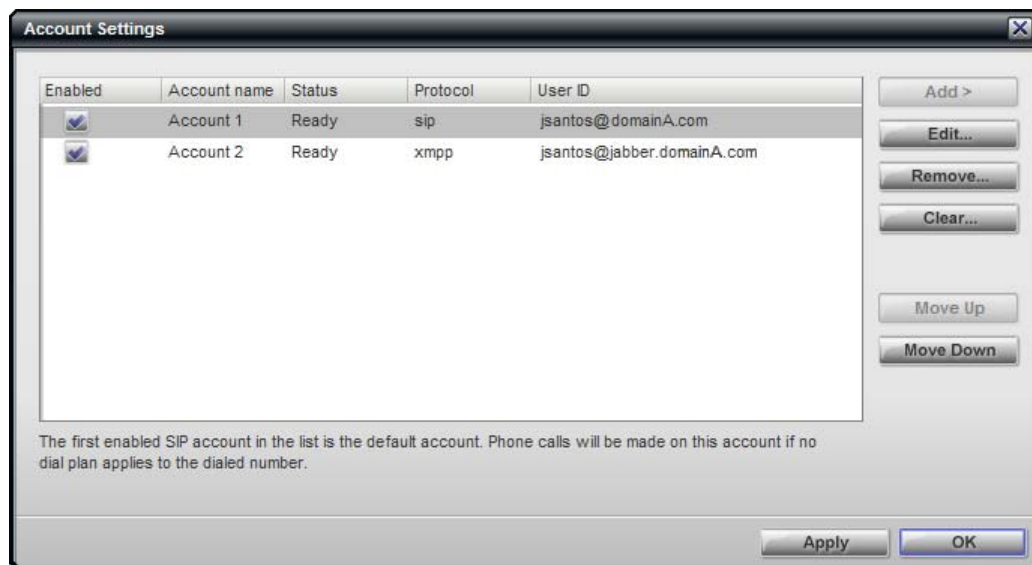
- User name
- Password
- Authorization Name (if applicable)
- Domain

XMPP Accounts

If you use an XMPP service for instant messaging or presence, you will need the following information:

- Jabber ID: user name and domain. For example, jsantos@domainXMPP.com.
- Password.

1. From the Bria Professional menu, choose File > Account Settings. The Account Settings window appears.



2. Click Add > New SIP Account. The SIP Account window appears. Complete the tabs as follows:
 - Account: The User Details section will be different for each user. The remaining fields will be identical for all users.
 - Voicemail: Some of these fields will be different for each user.
 - Other tabs: All other tabs will be identical for all users.
 See "Account Configuration Reference" on page 9 for details.
3. If you are setting up an XMPP account, click Add > New XMPP Account. The XMPP Account window appears. Complete the tabs as follows:
 - User Details will be different for each user.
 - Other fields will be identical for all users.

For more information, see “XMPP Account” on page 10.

4. If you have more than one SIP account, decide which is the default and move it to be the first SIP account in the list. Similarly, if you have more than one XMPP account, decide which is the default and move it to be the first XMPP account. For information on the role that the default account plays, see “How Bria Professional Selects an Account” on page 7.
5. Enable the desired accounts. An account must be enabled in order to be used for phone calls, presence, instant messaging, subscriptions, and file transfers. An account must be enable for Bria Professional to retrieve the buddy list from remote storage associated with that account.
6. On the Account Settings window, click Apply to register the newly added accounts. Click Close when the Status column is “Ready”.

Configuring Global Settings (Preferences)

Use the Preferences window to configure features that apply globally, rather than on a per-account basis. The panels that you, as the system administrator, should set are:

- Privacy, but only the Corporate panel. Leave the General panel for users to complete.
- Network. You should complete these fields to suit your network.
- Audio Codecs and Video Codecs. You should enable the codecs that are suitable to your environment.
- Quality of Service. If your VoIP service provider supports QoS, you can configure Bria Professional for it.
- LDAP. You can set up a company directory on a server and connect Bria Professional to it via the LDAP protocol. The directory will appear in the Directory tab. Information in this tab will update automatically whenever the information on the LDAP changes.
- Contact Storage. This panel lets you set up a remote storage system for your contact list via WebDAV or XCAP. Note that the storage that is configured here is for the contact list (which contains SIP addresses and other addresses), while the storage that is configured on each SIP account is for the buddy list (which contains only presence/availability information).
- Advanced. On this panel you should configure only the login server fields; leave other fields for users to complete.

See “Preferences Reference” on page 25.

2.4 How Bria Professional Selects an Account

Bria Professional determines which account to use for the various activities: phone calls, instant messages, presence subscriptions, and file transfers. If you have set up more than one SIP account and/or more than one XMPP account, read this section to make sure you set the default account to obtain the desired behavior.

Incoming Phone Calls

The account that an incoming phone call comes in on is controlled by the other party. However, an account must be enabled in order for a phone call to be received on it.

Outgoing Phone Calls

The account to use is selected as follows:

- If the user selects a specific account when placing the call, that account is used.
- If not, the phone number SIP address is run through the dial plan process; see “How Dialing Plans Are Used” on page 39.
- If that does not select an account, use the domain specified in the SIP address.
- If no domain is specified, use the first enabled SIP account.

Presence Subscriptions and Outgoing Instant Messages

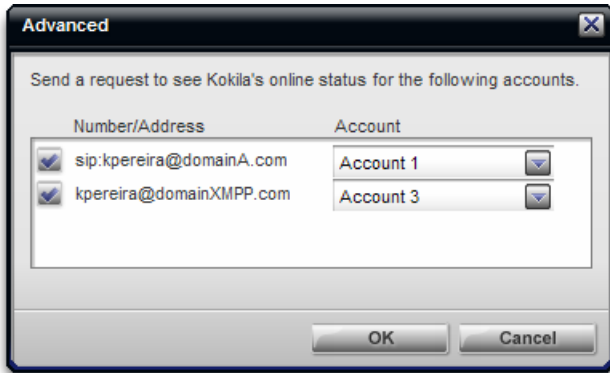
When the user creates a contact, Bria Professional associates each SIP address and each XMPP address with a specific account. That associated account is then used for presence subscription requests to that contact (these requests are typically initiated as soon as the contact is created) and for instant message sessions that are initiated by the user. The account to use is selected as follows:

- Match the domain of the contact's address to the domain portion of an account of the same type (i.e., match a SIP address to a SIP account). For example, sip:kpereira@domainA.com will match the “domainA.com” SIP account in the account list.
- If no match is made, use the first “useable” account in the account list. An account is useable if it is enabled and of the correct type (SIP or XMPP) and it is set up for presence (if a SIP account; XMPP accounts are always set up for presence).

The user can change this initial selection for any contact by displaying the Contact Profile and clicking the Advance button. However, if you have set up the default accounts appropriately, the user should not have to change this selection.

If a user has problems with presence for a particular contact, view this Advanced dialog and make sure the Account is set correctly.

- If there is no presence subscription (Account specifies “Unavailable”), then select an appropriate account.
- If an account is selected but presence information is not being received, try selecting a different account. The presence subscription should be sent via the account that “owns” the address; proxies may not pass through addresses that do not belong to them.



2.5 Creating a Contact List

Typically, users will want to create contacts in order to easily make phone calls, send IMs and transfer files. You can provide a file (for example, the company contact list) that your users can import into their individual softphones. This file can be:

- A comma-separated file. Use this method to import from a Microsoft® Excel® file. You will first have to set up the file; see below.
- A Microsoft® Outlook® or Microsoft® Exchange contact list (a *.pst file).
- A vCard file (*.vcf file). A vCard is an electronic business card that is often attached to an email.

Setting up an Excel File for Import

1. Remove any introductory text or headings from the top of the file. (You can keep text at the end of the file; it will be ignored during the import.)
2. Insert a blank row as the first row, then insert the headings that Bria Professional will use to interpret the meaning of each column. The columns can be in any order. The most popular headings are:
 - display-name
 - entry_id
 - given_name
 - surname
 - postal_address.

For a complete list of headings, see “Glossary” on page 46.

3. Save the file as *.csv.

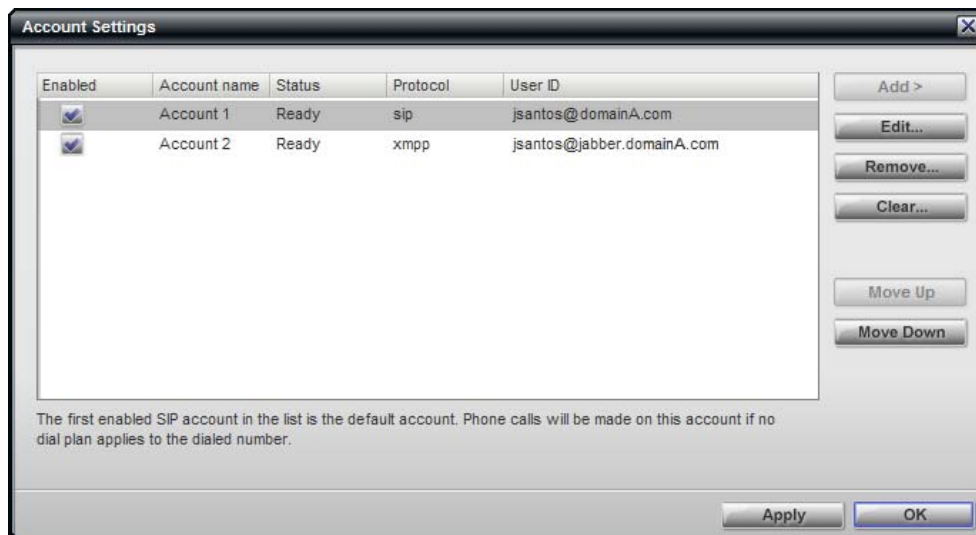
To test out the import process, see the procedure in the Address Book chapter of the *Bria Professional User Guide*.

3 Account Configuration Reference

The Account Settings window lets you configure features that apply on a per-account basis. (The preferences window lets you configure features that apply across all accounts.)

3.1 Accounts Settings Window

Choose File > Account Settings from the menu. The Account Settings window appears, showing all the accounts set up.



You can:

- Add or remove an account.
- Enable one or more accounts.
- Set one default for each account type (SIP and XMPP). See “How Bria Professional Selects an Account” on page 7 for information on the importance of the default account.
- Set or change the properties of an account. These properties control how Bria Professional interacts with your network, and are set individually for each account. Click the **Properties** button, then see the following pages for details.

3.2 XMPP Account

A red dot appears here to alert you when the Jabber ID field is blank or when the Jabber ID is incomplete. The alert disappears after you type "@" in the Jabber ID.

A red dot appears here to alert you when the Password field is blank. The alert disappears after you enter a password.

Table 1: XMPP Account Properties – Account

Field	Description
Account name	If desired, change the account name to something that is meaningful to you.
Protocol	Read-only. Always specifies XMPP.
User Details	
Jabber ID	Typically the account number for the softphone account plus the domain. For example, kpereira@domainXMPP.com.
Password	
Display name	This name is displayed in the Bria Professional display. Other parties will see this name they are when connected to the user.
Advanced	
Port selection	Configures the port to use. If you choose "User selected", complete the Connect port field.
Connect port	Complete only if Port selection is set to "User selected"

Table 1: XMPP Account Properties – Account

Field	Description
Outbound proxy	<p>The value in Jabber ID and in this setting may be used by Bria Professional to compose a valid jid:</p> <ul style="list-style-type: none"> • If Jabber ID=bob@ABC.com and Outbound proxy is empty, jid=Jabber ID: bob@ABC.com • If Jabber ID=bob@ABC.com/home and Outbound proxy is empty, jid=Jabber ID: bob@ABC.com • If Jabber ID=bob@ABC.com and Outbound proxy=XYZ.com, ignore the Outbound proxy; Jabber ID=bob@ABC.com • If Jabber ID=bob@ABC.com and Outbound proxy=IP address or host address, jid=Jabber ID. (IP address is used as the outbound proxy). • If JabberID=bob and Outbound proxy=ABC.com, jid=bob@ABC.com.
Resource	<p>Optional resource, as specified in RFC 3920. For example "/home". If this setting is blank and the Jabber ID includes a resource, the value from that ID is used. If both are specified, the value from this Resource field is used.</p> <p>If no resource is specified, the XMPP server will assign a temporary resource.</p>
Priority	The priority, as per RFC 3921. The default is 0.

3.3 SIP Account Properties – Account

The screenshot shows the 'SIP Account' dialog box with the 'Account' tab selected. The 'User ID' field contains 'jsantos@internal.xten.net' and has a small red dot to its right. An arrow points from the text on the right to this red dot. Below the User ID field, there is a text 'e.g. joseph@domain.com'. The 'Domain Proxy' section has a checked checkbox for 'Register with domain and receive calls' and radio buttons for 'Domain' and 'Proxy'.

A red dot appears here to alert you when the User ID field is blank or when the User ID is incomplete. The alert disappears after you type "@" in the User ID.

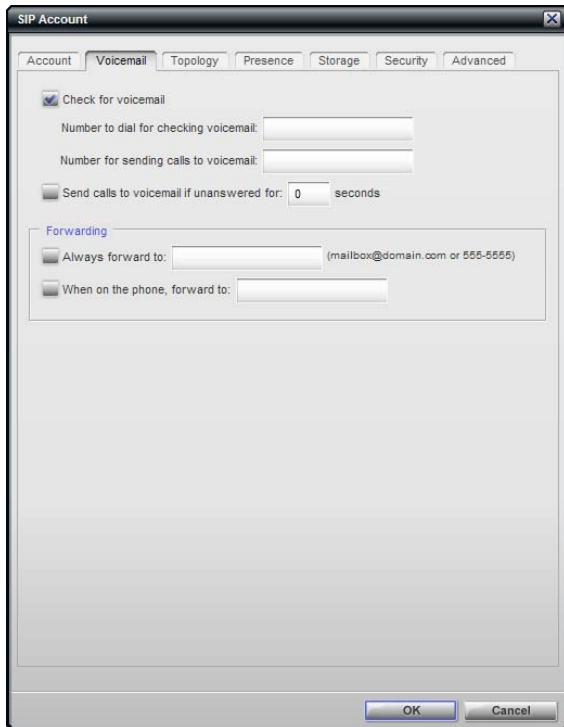
Table 2: SIP Account Properties – Account

Field	Description
Account name	If desired, change the account name to something that is meaningful to you.
Protocol	Read-only. Always specifies SIP.
User Details	
User ID	Typically the account number for the softphone account plus the domain. For example, kpereira@domain.com.
Password	
Display name	This name is displayed in the Bria Professional display. Other parties will see this name they are when connected to the user.
Authorization name	Typically not used in an enterprise environment. This anem is useful if, for example, you allow user IDs that are short and therefore easy to guess. The authorization name is used in place of the user name to register the account with the SIP registrar.
Domain Proxy	
Register with domain and receive calls	Typically, this field is checked. A situation in which this field is unchecked is, for example, if your level of service does not include the ability to receive incoming calls. In this case, turning this field on may cause registration to fail (when you close the Account Properties window), meaning that your Bria Professional cannot register.-

Table 2: SIP Account Properties – Account

Field	Description
Send outbound via	<ul style="list-style-type: none">• Domain: If your VoIP service provider requires that traffic be directed to proxies that are discovered via the domain.• Proxy Address: If your VoIP service provider has an outbound proxy address and requires that you provide the address to Bria Professional. For the address enter a domain name (for example, domain.com) or an IP address (for example, 123.456.789.012). <p>If you are using Bria Professional in a test lab, it is possible that neither of these settings is suitable; see page 24 for a third way to direct traffic.</p>
Dial Plan	<p>The default plan is: #1\a\a.T;match=1;prestrip=2; See “Dial Plan” on page 39.</p>

3.4 SIP Account Properties – Voicemail



These settings let you configure client-side voicemail features.

Your IP PBX may also provide the ability to configure voicemail (server-side handling). An incoming phone call first goes through server-side handlers and then through the client-side handlers. Keep in mind that the fields on this Voicemail tab are not writing to the server; they are configuring a second, separate handler.

You must decide how you want phone calls to be handled: by the server only, by the Bria Professional client only, or by both. Instruct your users accordingly.

If you decide to allow both, you must make sure that your users understand how the server-side and client-side voicemail configuration must be synchronized to work together. You must also check what the server-side settings are and make sure you enter compatible information in Bria Professional.

Table 3: SIP Account Properties – Voicemail

Field	Description
Check for voicemail	Choose the setting appropriate to your IP PBX: <ul style="list-style-type: none"> On: Bria Professional will subscribe to be notified when there is a voicemail for you. Off: the IP PBX may be set up to advise Bria Professional when there is a voicemail for you. Voicemail is controlled by your IP PBX, not by Bria Professional.
Number to dial for checking voicemail	This is the number that will be called when a user clicks the Check for voicemail icon on the softphone, in order to connect to voicemail and listen to messages. If you leave this field empty, then this icon will not work; users will have to manually dial this number in order to connect to voicemail.
Number for sending calls to voicemail	This is the number that incoming calls will be forwarded to if they are unanswered after the specified interval (below).
Send calls to voicemail if unanswered	To send to voicemail after the specified number of seconds. Your IP PBX may also provide a similar feature that is set up outside of Bria Professional. If so, make sure you do not enter competing information in Bria Professional and in the IP PBX's user interface. For example, if you turn off this field, make sure the same feature at your service provider is also turned off. Otherwise, all your calls will continue to be forwarded.

Table 3: SIP Account Properties – Voicemail

Field	Description
Always forward to:	<p>To always forward phone calls received on this account.</p> <p>Enter the address to forward to, but leave the checkbox cleared (the individual user will click it when desired). Phone calls received on other accounts (if you have them) are not affected by enabling this field for this particular account.</p>
When on the phone, forward to:	<p>To forward only when you are on another phone call.</p> <p>Enter the address to forward to, but leave the checkbox cleared (the individual user will click it when desired). Phone calls received on other accounts (if you have them) are not affected by enabling this field for this particular account.</p> <p>Your service provider may provide a similar feature that is set up outside of Bria Professional. If so, your users must make sure they do not enter competing information in Bria Professional and in the service provider's user interface. For example, if they turn off this field, make sure the same feature at your service provider is also turned off.</p>

3.5 SIP Account Properties – Topology

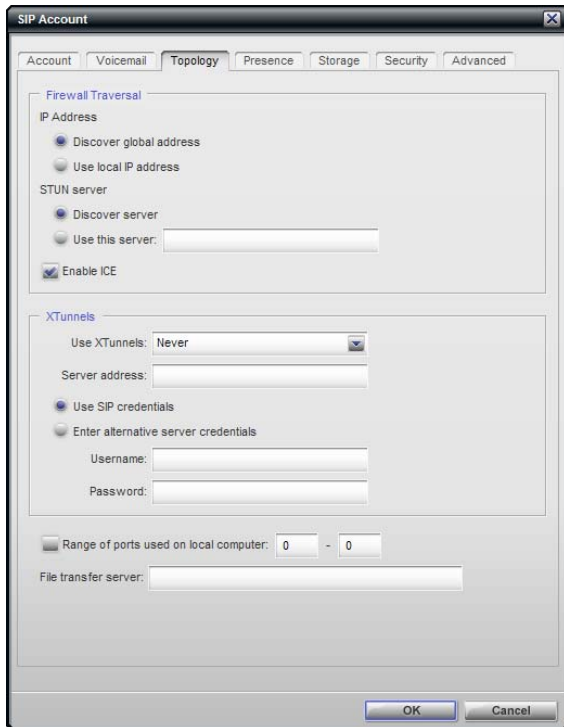


Table 4: SIP Account Properties – Topology

Field	Description
Firewall Traversal	
IP Address	<p>This setting controls how your IP address is presented.</p> <ul style="list-style-type: none"> Discover global address: Let Bria Professional determine your public IP address. Use local IP address: use the IP address of the Bria Professional computer. <p>The recommended setting is Discover global address.</p>
STUN Server	<p>This setting specifies the STUN server to use.</p> <ul style="list-style-type: none"> Discover the server: Choose this option to let Bria Professional find the address of a STUN server. Use this server: To use a different STUN server. For the address enter a domain name or an IP address. <p>The recommended setting is Discover server.</p>
Enable ICE	<p>ICE optimizes traffic and may help with firewall traversal.</p> <p>Typically, ICE is enabled. However, you may need to disable it if have implemented a firewall traversal solution that is not compatible with ICE enabled.</p>
XTunnels	
Use XTunnels	<ul style="list-style-type: none"> Automatic: Use Xtunnels when Bria Professional detects a firewall that prohibits communications. This is the recommended setting if your service provider has an XTunnels server. Always: Always use XTunnels. Never: Do not use XTunnels. This is the correct setting if your service provider does not have an XTunnels server.
Server Address	<p>Optionally, specify the name or IP address of the XTunnels server to use.</p> <ul style="list-style-type: none"> If the field is completed, Bria Professional will use that server. If it is blank, Bria Professional will perform a DNS lookup to discover the server.
Username and Password	<p>Check this box to use the username and password from your SIP account in order to log into the XTunnels server.</p> <p>Otherwise, uncheck this box and complete the Username and Password fields.</p>

Table 4: SIP Account Properties – Topology

Field	Description
Range of Ports on Local Computer	
Range of ports used on local computer	<p>The appropriate setting depends on your computer setup:</p> <ul style="list-style-type: none"> • Checked: If your computer is behind a restrictive firewall that only allows specific port ranges to be used. Enter the range of ports to use for your SIP account. (You must also open those ports on your firewall; refer to applicable firewall documentation for information.) • Unchecked: If your computer is not behind a restrictive firewall.
File Transfer	
File transfer server	<p>Optional. If you are supporting file transfer via content indirection on a SIP account, specifies the URL of the file transfer server where files your users send will be stored before they are retrieved by the recipient.</p> <p>For example, <code>http://AcmeCorp/FileTransfer</code>, where AcmeCorp is the server and FileTransfer is the root folder.</p> <p>You must set up this server if you want to send files. See below. You do not need to set it up in order to receive files.</p>

Configuring the File Transfer Server

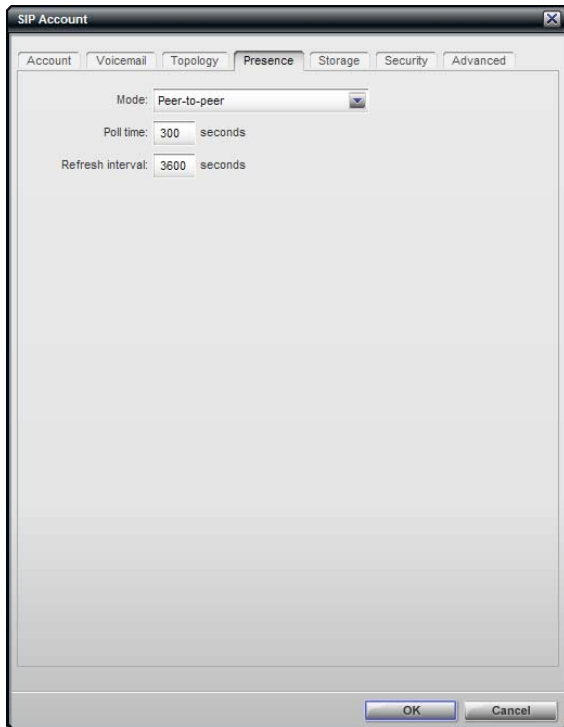
If you are supporting file transfer via content indirection over a SIP account, you must set up a server. You do not need to set up any servers for file transfer over an XMPP account; that kind of file transfer is handled peer-to-peer.

It is recommended that the file transfer server be within your enterprise firewall.

File transfer via content indirection is performed over HTTP or HTTPS. You must:

- Configure the HTTP server to allow PUT. If you enable WebDAV on an HTTP server, then PUT is automatically enabled.
- Create the root folder on the HTTP server.
- Set the File transfer server field on the Topology panel.

3.6 SIP Account Properties – Presence



This tab lets you set up to share presence information with contacts who have addresses associated with this SIP account. (For information on account association, see “How Bria Professional Selects an Account” on page 7).

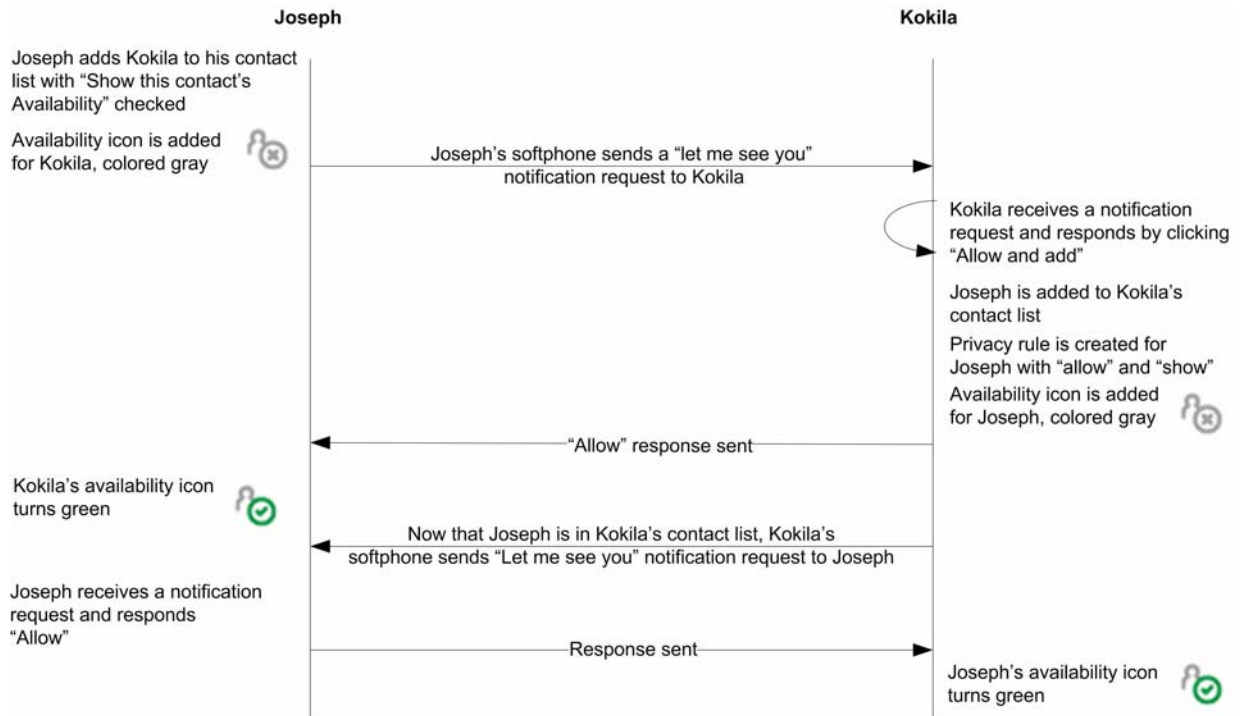
Note that you do not have to set up to share presence information on an XMPP account.

Table 5: SIP Account Properties – Presence

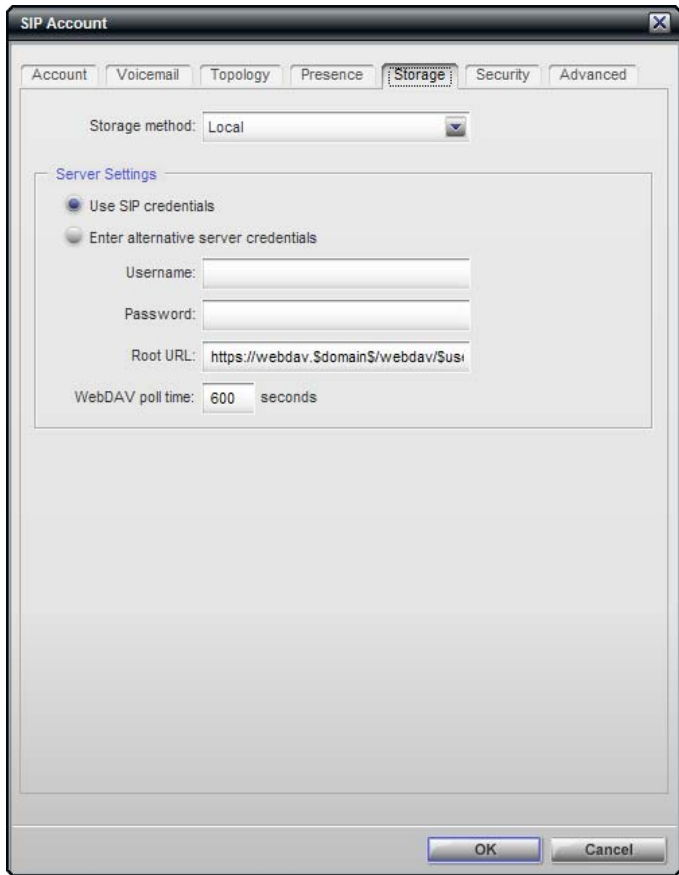
Field	Description
Mode	<ul style="list-style-type: none">• Disabled: Presence is not supported.• Presence Agent.• Peer-to-Peer.
Poll time	The factory setting is 300.
Refresh interval	The factory setting is 3600.

How Presence Subscriptions Work

The following chart illustrates how the sharing of presence status occurs. This chart illustrates a peer-to-peer subscription, but the same principle applies when a presence agent is used.



3.7 SIP Account Properties – Storage



These settings let you set up a remote storage system for the buddy list for this SIP account. (Note that the buddy list for an XMPP account is always stored on the XMPP server; no configuration is required).

Table 6: SIP Account Properties – Storage

Field	Description
Storage method	The storage method to be used for the buddy list and presence rules. The file can be stored locally or both locally and on a remote computer.
Server Settings	
Use SIP credentials	Check this box to use the username and password from your SIP account in order to log into the storage server. Otherwise, uncheck this box and complete the Username and Password fields. Not used for “Local”.
Root URL	URL of an appropriate root folder on the remote server. Not used for “Local”. The factory setting is https://webdav.\$domain\$/webdav/\$username\$/
WebDAV poll time	Enabled only for WebDAV. The time that elapses between polling for new data from the remote server. The factory setting is 600.

3.8 SIP Account Properties – Security

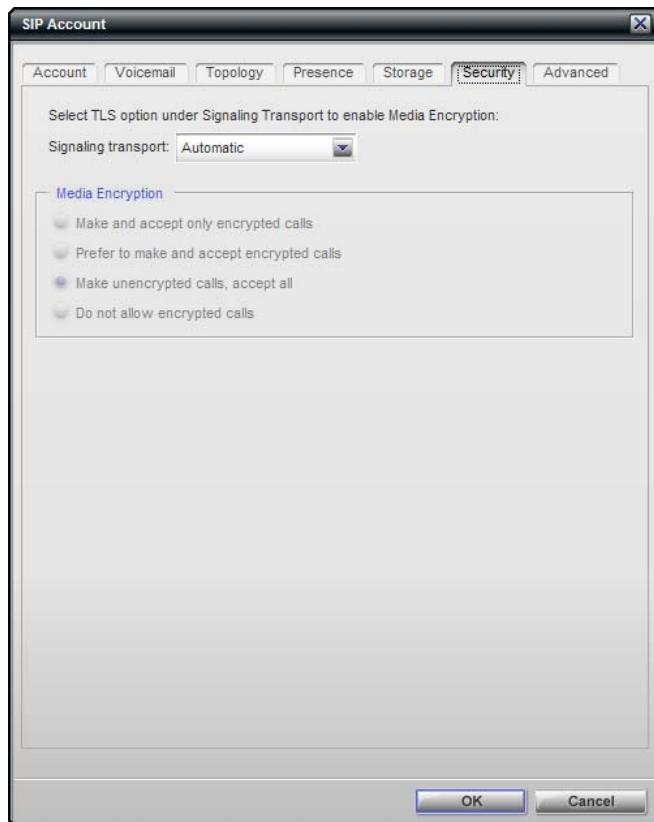


Table 7: SIP Account Properties – Security

Field	Description
Signaling Transport	<ul style="list-style-type: none"> Automatic: Bria Professional sets up the transport based on the capabilities of the network and the Bria Professional computer. Choose this option if you do not care which transport is used. TCP: This transport provides no signaling security. UDP: This transport provides no signaling security. TLS: Choose this option to request signaling encryption or both signaling and media encryption.
Media Encryption	<p>See Table 8 on page 22.</p> <p>The factory setting is Make unencrypted calls, accept all calls.</p>

You can set up Bria Professional for the type of security (encryption) you want for incoming and outgoing calls.

Bria Professional supports:

- Signaling encryption using TLS
- Media encryption using SRTP.

Setting up for Security outside of Bria Professional

When using TLS, you must have the root certificate that signs the proxy's chain of certificates. In most cases, the root certification will already be installed. Procedures for the exchange of certificates are outside the scope of this documentation. The certificates must be stored on the Bria Professional computer, in the root certificate store.

Setting up the root certificate on your computer ensures that the connection to the proxy is TLS secure (the first hop). Any proxy in the chain (between you and the caller) that does not support TLS may cause an insecure link

in the chain. Therefore, if the other party is outside your domain, you cannot be completely sure that the call is secured at the signaling level, which means that you cannot be sure that it is secured at the media level.

When a call with both signaling and media encryption is established, Bria Professional displays the encryption icon (🔒). This icon indicates that the call is secure between each caller and their proxy (first and last hop) and that it may or may not be secure for other hops.

Setting up for Security within Bria Professional

The options for media encryption are described in the following table.

Table 8: Media Encryption Options

Option	How Outgoing Calls are Handled	How Incoming Calls Are Handled
Make and accept only encrypted calls	Bria Professional will place all calls with TLS. The call INVITE will specify SRTP media encryption. If the correct certificates are not in place or if the other party does not accept encrypted calls, the call will fail.	Bria Professional will only accept INVITES that are for encrypted calls. If Bria Professional receives a call INVITE that is not encrypted, the call will be rejected.
Prefer to make and accept encrypted calls	Bria Professional will place all calls with TLS. The call INVITE will specify SRTP media encryption. If the correct certificates are not in place or if the other party does not accept encrypted calls, the call will fail. Bria Professional will then place the call without encryption.	Bria Professional will accept INVITES for both encrypted and unencrypted calls.
Make unencrypted calls, accept all calls	Bria Professional will place only unencrypted calls. If the other party does not accept unencrypted calls, the call will fail.	Bria Professional will accept INVITES for both encrypted and unencrypted calls.
Do not allow encrypted calls	Bria Professional will place only unencrypted calls. If the other party does not accept unencrypted calls, the call will fail.	Bria Professional will only accept INVITES that are for unencrypted calls. If Bria Professional receives a call INVITE that is encrypted, the call will be rejected.

3.9 SIP Account Properties – Advanced

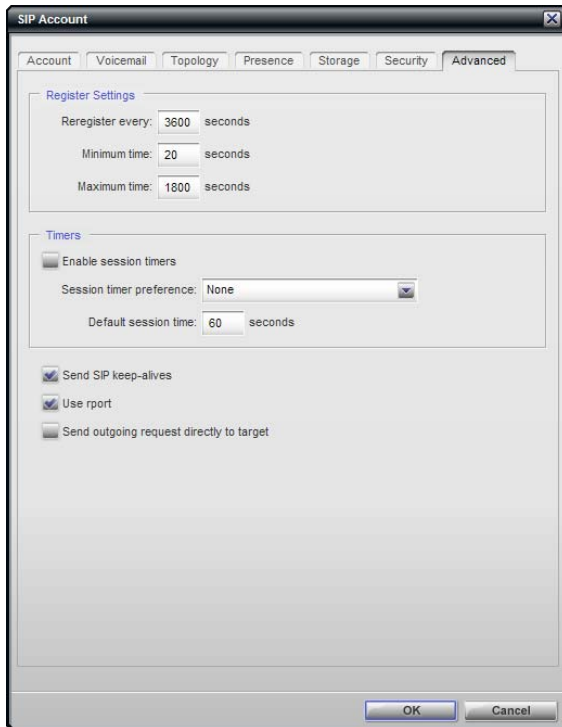


Table 9: SIP Account Properties – Advanced

Field	Description
Register Settings	
Reregister every	The time interval between Bria Professional’s attempts to reregister in order to refresh the account registration. A value of zero means not to reregister after the initial registration. This value is placed in the “Expires” header field of the REGISTER message. The factory setting is 3600.
Minimum time	If the reregistration fails, Bria Professional will wait this amount of time, then attempt to reregister. If the second attempt fails, Bria Professional will wait twice this time and try again, then four times this time, and so on, until reregistration succeeds. The factory setting is 20.
Maximum time	This is the maximum wait time between attempts to reregister. Once this maximum is reached, Bria Professional will wait this time for all subsequent attempts. For example, the min. time is 20 secs, the maximum time is 120 secs. Bria Professional will attempt to reregister as follows: <ul style="list-style-type: none"> • Wait 20 secs. • Attempt to connect. • If fail, wait 40 secs. • Attempt to connect. • If fail, wait 80 secs. • Attempt to connect. • If fail, wait 120 secs (the maximum) • Attempt to connect. • If fail, wait 120 secs, and so on. The factory setting is 1800.

Table 9: SIP Account Properties – Advanced

Field	Description
Timers	
Enable session timers Default session time	<p>A session timer is a mechanism to detect whether a call session is still active from the signaling point of view. When the timer expires, a refresh is sent from one party to the other. The timer is then reset.</p> <ul style="list-style-type: none"> • Turn on to enable session timer. Enter a value in Default session time. The factory setting is 60. • Turn off to disable session timer; refreshes will never be sent.
Session timer preference	<p>This field specifies your preference for which party should send the refresh. The preference is not a guarantee that the refresh will be performed by the specified party. The choices are:</p> <ul style="list-style-type: none"> • None: No preference. • Local refreshes: Your computer sends. • Remote refreshes: The other party sends. • UAC refreshes: The user agent client (the party that initiated establishment of the communications) sends. • UAS refreshes: The user agent server (the other party) sends.
Send SIP keep-alives	Typically on, to instruct Bria Professional to send SIP keep-alive messages in order to maintain a “pinhole” through your firewall for SIP messaging.
Use rport	Typically on.
Send outgoing request directly to target	<p>When checked, requests with a complete URI (user@ABC.com) go to ABC.com and the “Send outbound via” field on the Account tab (page 12) is ignored.</p> <p>Typically off. This field is intended for test labs and may cause problems in a NAT environment.</p>

4 Preferences Reference

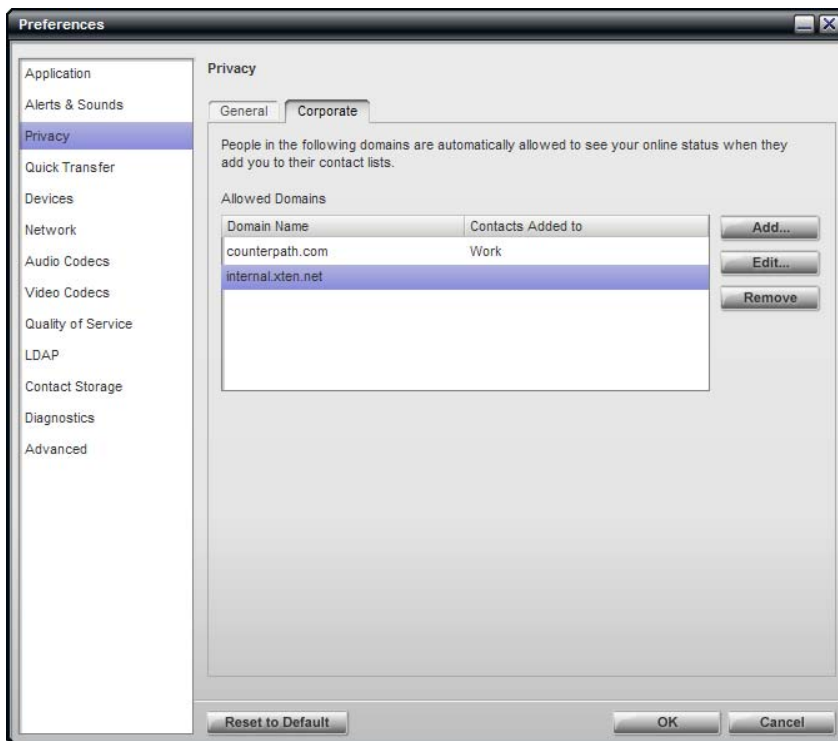
Choose File > Preferences. The Preferences window appears.

The Preferences panels let users control the way that they work with Bria Professional. It also contains fields to configure features that apply globally, rather than on a per-account basis.

4.1 Preferences – Privacy

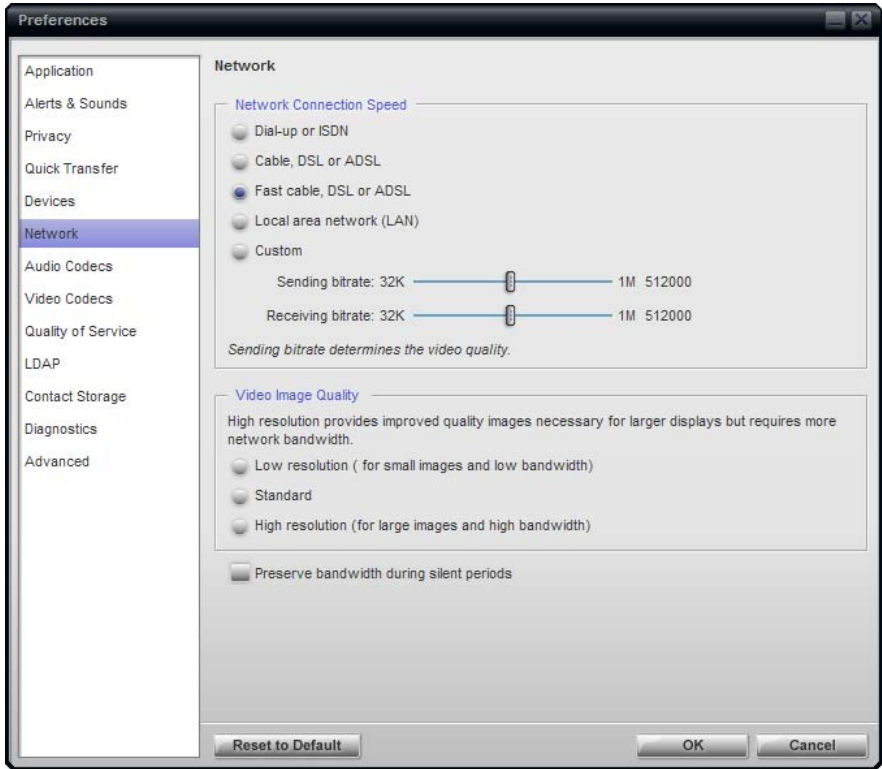
On this panel, you should complete only the Corporate tab.

It is very useful to enter your own corporate domain in the list of allowed domains, so that users automatically accept presence subscriptions from each other, and do not get bombarded with presence (availability) requests.



If you enter a domain in this list, people in that domain will automatically be allowed to see your availability online. You will no longer see Presence Request dialogs from these people in this domain.

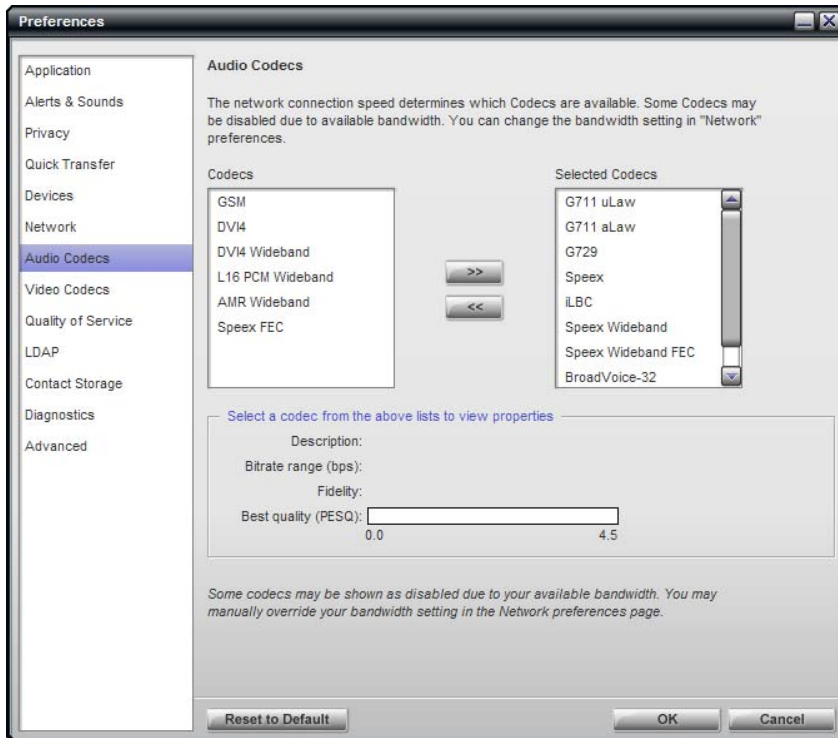
4.2 Preferences – Network



On this panel, complete the network connection speed section and Preserve bandwidth field to suit your environment. Leave the Video Image Size for the user to complete.

Field	Description
Network Connection Speed	<p>Select the type of network connection for your computer.</p> <p>The sliders move to show the bitrate that will be used for sending and receiving. These rates are typical rates for the selected configuration.</p> <p>If you know that your computer and network can handle a faster sending speed, click Custom and move the slider.</p> <p>It is recommended that you not change the receiving speed.</p> <p>You will know that you have set the sending speed too high if:</p> <ul style="list-style-type: none"> • The remote video shows black areas or is slow or jerky. • The remote audio is garbled. <p>You will know that you have set the sending speed too low if the audio is good but the video is of poor quality (grainy).</p>
Preserve bandwidth	<p>When this feature is on, Bria Professional stops sending audio when you are not talking.</p> <p>When this feature is off, Bria Professional always sends audio, which uses more bandwidth but may result in better call quality.</p> <p>Typically off. However, if you are using a slow (dial-up or ISDN) connection, you may want to turn it on.</p>

4.3 Preferences – Audio Codecs



This panel shows all the codecs that are included in the retail version of Bria Professional. You can enable or disable codecs as desired.

With only one codec enabled, all calls made will use that codec. With more than one codec enabled, Bria Professional automatically chooses the best codec based on the other party's capability, the available bandwidth, and network conditions.

You cannot change the properties of any codecs.

About Codecs

Audio codecs describe the format by which audio streams are compressed for transmission over networks. Codecs can be categorized as either narrowband or wideband:

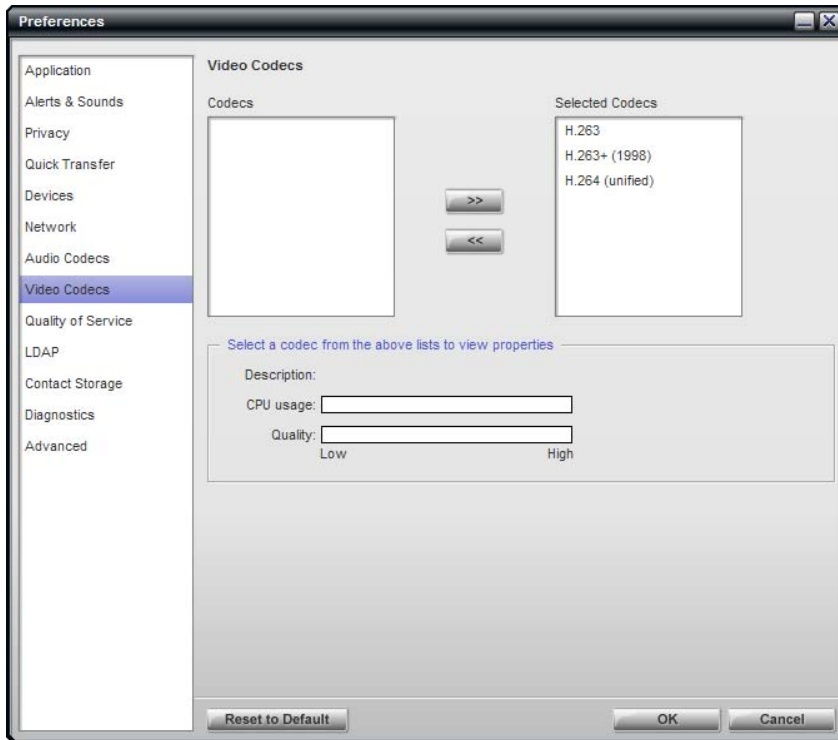
- Narrowband codecs work with low bandwidth such as a dialup internet connection. These codecs have a sampling rate of 8 kHz.
- Wideband codecs work with high bandwidths and result in better audio quality. However, they do not work with PSTN. These codecs have a sampling rate of 16 kHz.

Supported Codecs

Bria Professional supports a wide range of codecs. See the table.

Codec	Narrowband	Wideband	Royalty-bearing	Included in Retail Bria Professional
AMR Wideband (G.722.2)		✓	✓	
Broadvoice-32		✓		✓
Broadvoice-32 FEC		✓		✓
DVI4	✓			✓
DVI4 Wideband		✓		✓
EVRC	✓		✓	
G.711aLaw *	✓			✓
G.711uLaw *	✓			✓
G.722	✓			
G.723	✓		✓	
G.726		✓	✓	
G.729 *	✓		✓	✓
GSM	✓			✓
iLBC	✓			✓
L16 PCM Wideband	✓			✓
Speex	✓			✓
Speex FEC	✓			✓
Speex Wideband		✓		✓
Speex Wideband FEC		✓		✓
* Generally, at least one of these codecs must be enabled in order to place a PSTN (land line) call.				

4.4 Preferences – Video Codecs



Video codecs describe the format by which video streams are compressed for transmission over networks. Some codecs require less bandwidth than others, but may result in lower video quality.

You can enable or disable codecs as desired.

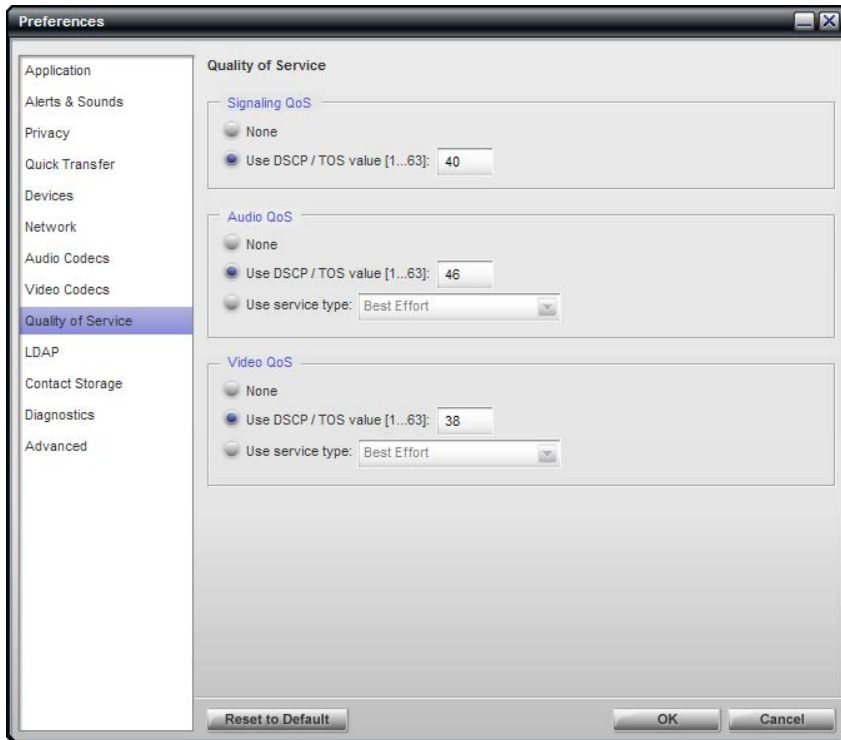
With only one codec enabled, all calls made will use that particular compression format. With more than one codec enabled, Bria Professional automatically chooses the best codec based on the other party's capability, the available bandwidth, and network conditions.

You cannot change the properties of any codecs.

Supported Codecs

Codec	Royalty-bearing	Included in Retail Bria Professional
H.263		✓
H.263+ 1998		✓
H.264 (unified)	✓	✓

4.5 Preferences – Quality of Service



The Quality of Service panel lets you request a specific transport service for audio, video and signaling traffic.

There are two types of services. The service to use depends on what your VoIP service provider supports:

- GQoS, which is available for audio and video.
- DSCP (also known as ToS), which is available for audio, video and signaling.

In a network that has the default configuration, the recommended value for audio is 46, because “46” is the standard marking for audio.

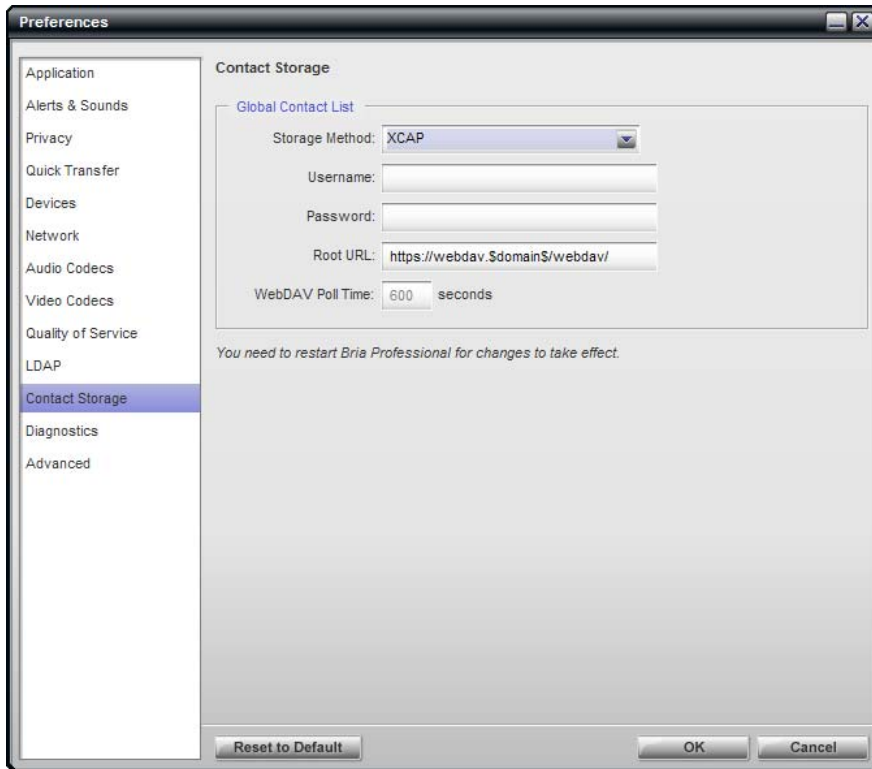
Bria Professional supports 802.1p QoS packet tagging. If you set up for QoS, Bria Professional will include the specified information in the packets that it sends to the network provider. Whether the packet is delivered with the specified service depends on whether your broadband router and the network provider between you and the other party supports multiple transport services. In other words, whether each network provider reads the QoS information and prioritizes packet delivery based on the requested service.

4.6 Preferences – LDAP

If you have access to an LDAP directory, you can configure Bria Professional to automatically download the directory and display it in the Directory tab in the Address Book.

Field	Description
LDAP	
Enable LDAP	Click to enable. Assuming that the other fields in this section have valid information, the directory data will be retrieved and displayed in the Directory tab in the Address Book. The data will be updated as specified in the query polltime.
Other other fields	Complete these settings to configure Bria Professional to locate and subscribe to your LDAP server.
LDAP Attribute Mapping	
All fields	In this section, map the names of the attributes that are in your LDAP directory to the corresponding fields in Bria Professional. The field label is the Bria Professional field. The field box specifies the attribute name. Be careful with this mapping because when users create a contact from an LDAP entry, the phone number is mapped into the different contact methods in the contact. For example, the phone number in “Softphone” will appear as a softphone number contact method in the contact, and Bria Professional will allow/disallow certain actions (for example sending an IM) to that phone number.

4.7 Preferences – Contact Storage



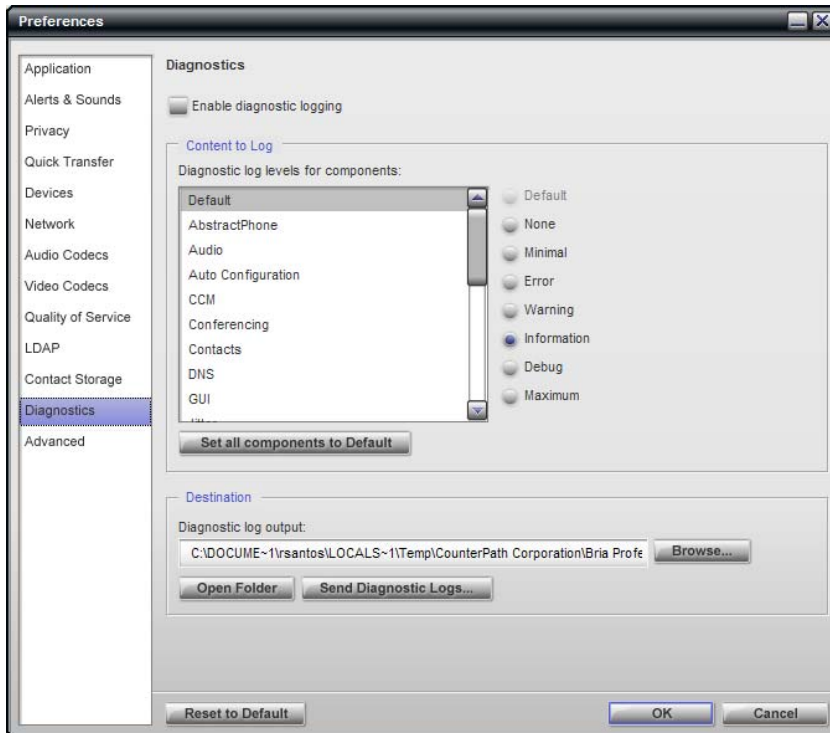
These settings let you set up a remote storage system for user contact lists via WebDAV or XCAP. (The contact list is always stored locally, even when you set up for remote storage.) Note that the storage that is configured here is for the contact list (which contains SIP addresses and other addresses), while the storage that is configured on each SIP account (page 20) is for the buddy list (which contains only presence/availability information).

The contact list is automatically loaded at startup, and is loaded even if no accounts are enabled.

Table 10: SIP Account Properties – Storage

Field	Description
Storage method	The storage method to be used for the Contact list file. The file can be stored locally or both locally and on a remote computer.
Username and password	The user name and password to log into the storage server. Not used for “Local”.
Root URL	URL of an appropriate root folder on the remote server. Not used for “Local”. The factory setting is <code>https://webdav.\$domain\$/webdav/\$username\$/\$</code>
WebDAV poll time	Enabled only for WebDAV. The time that elapses between polling for new contact data from the remote server. The factory setting is 600.

4.8 Preferences – Diagnostics



This panel lets the user enable logging to files. Logging uses computer resources, so you should make sure your users only enable it when you or a customer support representative instruct them to do so.

Configuring

You should configure the folder where logging files will be saved. You should also make sure the logging is initially disabled.

Activity on Bria Professional will be logged to.csv files in the specified folder. A new set of files is started each time the user logs on. In order not to create large files when logging (which may create computer problems), make sure your users do not remain logged on indefinitely when logging. They should occasionally exit and restart Bria Professional.

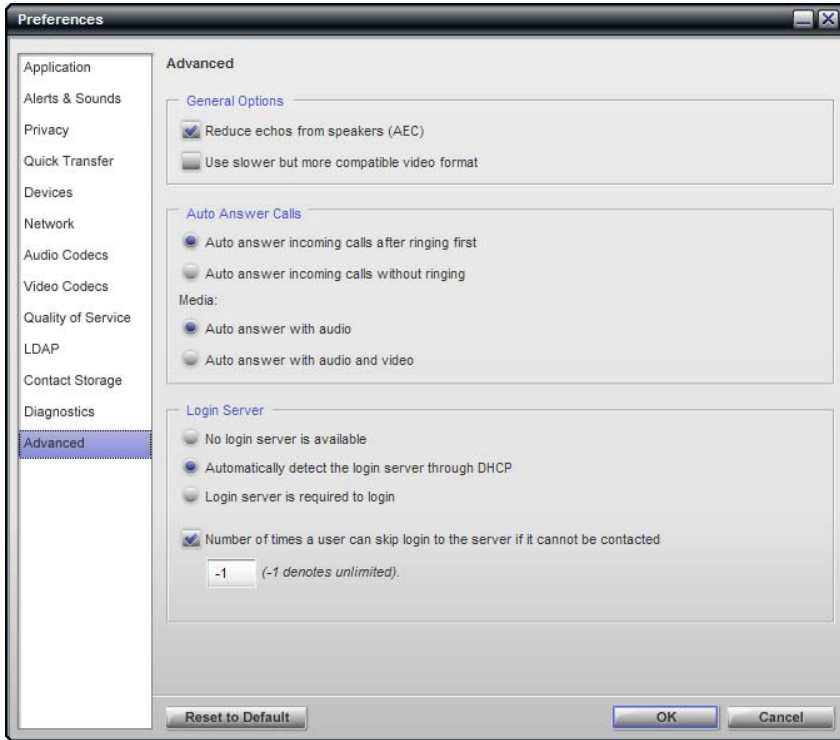
You can delete log files from the specified folder as you would any other data file.

Sending Files to Customer Support

If requested by a customer support representative, you can:

- Open the logging folder and then open a log file using a text editor.
- Email the logs in the specified folder to customer support: Click Send logs to customer support. A dialog box appears showing all the logs. Select files and click Open; the selected files are sent and the dialog box closes.

4.9 Preferences – Advanced



Field	Description
Reduce echoes from speakers	Turning this feature on improves sound quality. This feature is typically on.
Use slower but more compatible video format	Turning this field on may improve performance when running Bria Professional on older hardware.
Auto Answer Calls	
Auto answer incoming calls <ul style="list-style-type: none"> • after ringing first • without ringing 	From the first set of radio buttons, choose how quickly you want Bria Professional to auto-answer an incoming call.
Auto answer with	From the second set of radio buttons, choose how you want to handle your own video (the video you send), if the other party has placed a video call: <ul style="list-style-type: none"> • Auto answer with audio: Your video is not sent. However, if necessary, the video panel opens so you can view the other person’s video. • Auto answer with audio and video: Your video is sent. If necessary, the video panel opens, showing both your video and the other person’s video.
Login Server	
See below	

Configuring the Login Option

If You Are Deploying through Manual Configuration

If you are configuring Bria Professional manually, then all users must be set up with “No login server is available”. The other login fields are ignored.

If You Are Deploying through Provisioning

If you are reading this manual as the first step to deploying a provisioning server, then leave the default values:

- Choose “Automatically detect the login server through DHCP”.
- Check “Number of times a user can skip”.
- Enter -1 in the field.

With these settings, login will be handled in one of two ways:

- While you are exploring your deployment options on a test computer and do not yet have a login server set up, you will skip login and manually set up your accounts. See “Logging in” on page 3.
- When you have deployed the login server, then login will occur as described in the *Provisioning Bria Professional Guide*.

A Configuration Form

Dialog	Field	Account 1	Account 2
Main Page	Default Account		
	Account Type		
Account > Account Tab	Account Name		
	User ID		
	Password		
	Display name		
	Authorization name		
	Register with domain		
	Send outbound via		
	Dial plan		
Account > Voicemail Tab	Check for Voicemail		
	Number to dial for checking voicemail		
	Number for sending calls to voicemail		
	Send calls to voicemail if unanswered		
	seconds		
	Always forward to		
	When on phone, forward to		
Account > Topology Tab	IP address		
	STUN server		
	Enable ICE		
	XTunnels - Use		
	XTunnels - Server address		
	XTunnels - Credentials (radio button)		
	XTunnels - Username		
	XTunnels - Password		
	Range of ports (checkbox)		
	Range of ports (from, to)		
	File transfer server		
Account - Presence Tab	Mode		
	Poll time		
	Refresh interval		

Dialog	Field	Account 1	Account 2
Storage Tab	Storage method		
	Credentials (radio button)		
	Username		
	Password		
	Root URL		
	WebDAV poll time		
Account > Security Tab	Signaling Transport		
	Media Encryption (for TLS)		
Account > Advanced Tab	Reregister every		
	Min. time		
	Max. time		
	Enable session timers		
	Session timer preference		
	Default session time		
	Send SIP keep-alives		
	Use rport		
	Send outgoing request directly to target		
Preferences > Audio Codecs	Enabled codecs		

Preferences > Video Codecs	Enabled codecs		

Preferences > Quality of Service	Signaling Qos		
	Audio Qos		
	Video Qos		

Dialog	Field	Account 1	Account 2
Preferences > LDAP	Enable		
	Server		
	Authentication method		
	Username		
	Credential		
	Root DN		
	Search expression		
	Query timeout		
	Maximum records		
	Query polltime		
	Display name		
	First name		
	Last name		
	Home number		
	Work number		
	Mobile number		
	E-mail		
Softphone			
Jabber			
Preferences > Contact Storage	Storage method		
	Username		
	Password		
	Root URL		
	WebDAV Poll time		
Preferences > Advanced	Login Server		
	Number of times (checkbox)		
	Number of times (field)		

B Dial Plan

When a call attempt is made, the call input (what you type, select or drag onto the Call display) is processed to select the SIP account to use and to modify the input if that is required to ensure that the call gets placed successfully. This ability to select an account and modify the input relies on the existence of a “dial plan” for each account.

B.1 How Dialing Plans Are Used

When you make a call, Bria Professional takes the phone number (the input) and performs the following:

Cleanup

Input is cleaned up by removing spaces, dashes, open brackets, and close brackets. Cleanup allows Bria Professional to support calls placed using contacts from a contact list, including Microsoft® Outlook®.

Matching

The input is compared to the patterns defined by the dial plan for each enabled account. Each account has one dial plan, and each dial plan has one or more patterns.

- When a match is found between the input and the pattern, the account that this pattern belongs to is selected and the transformation for this pattern is performed.
- If no match is found, the default account is selected and no transformation is performed.

For details on matching see “How the Input Is Processed” on page 42.

Transformation

The selected transformation is performed.

Place Call

Then the call is placed using the transformed input.

The Default Dial Plan

The default dial plan is:

```
#n\a\a.T;match=1;prestrip=2;
```

where #n is the account prefix (#1 for the first account in the list (proxy0), #2 for the second account (proxy1), and so on).

If the input is the account prefix and the number, then the Account for this dial plan is selected. The account prefixed is stripped from the number before the call is placed.

If all Accounts use this dial plan, then the behavior is as follows: if the input includes the account, then that account is used. In other words, you can force selection of a specific account by including the account prefix. If the input does not include #n, then the default account is used.

B.2 Dial Plan Syntax

In Bria Professional, the dial plan establishes the expected patterns of characters for a telephone number or softphone address, and allows for modification (transformation) of input based on the match to a pattern. The dial plan has the following syntax:

```
pattern[ |pattern];match=1;<transformation>=<value>;[match=2;
<transformation>=<value>;]
```

Where:

- Items in [] are optional.
- Pattern: the pattern that will be matched. One or more patterns. Each pattern is separated by a | pipe. The pipe is optional after the last pattern. Each pattern is implicitly numbered, starting from 1.
- Match; Transformation: A pair that identifies the pattern number to compare with the input, and the transformation to perform on the input when a match is obtained. The transformation is optional (meaning that if there is no transformation for a pattern, then the input that matches this pattern is not transformed). One or more pairs.

“match=” is a literal. “n” identifies the pattern. “transformation=” is replaced by a keyword, see below.

“value” is replaced by a value.

Spaces are allowed only in the <value> items.

Remember that dialing plans are applied after the input has been cleaned up (page 39)!

Example

```
\a\a.T|xxxxxxxxxx;match=1;prestrip=2;match=2;pre=8;
```

where:

- \a\a.T is the first pattern.
- xxxxxxxxxxxx; is the second pattern.
- match=1;prestrip=2; is the first match-transformation pair.
- match=2;pre=8; is the second match-transformation pair.

Pattern

Valid Content

The content for a pattern follows the digit map rules of RFC 2705, supplemented by the rules for regular expressions. Where there is an overlap between the digit map and regular expression rules, the digit map rules apply. For this reason, there are some special cases, included in the table below.

The following table describes the most common elements. As mentioned, all regular expression elements are supported.

Element	Origin	Description
0 1 2 3 4 5 6 7 8 9	Literals	Literal digits, used as is.
# * a to z	Literals	Literal characters, used as is. Special cases: <ul style="list-style-type: none"> • The literal x character is represented by \x. • The literal t character is represented by \t.

Element	Origin	Description
x	Digit map rules	Wildcard for any single digit, 0 to 9.
\a	Regular expression rules	Wildcard for any single alphanumeric character.
[digit-digit]	Regular expression rules	A digit within the specified range.
[character-character]	Regular expression rules	A character within the specified range.
[digit1, digit2, digit3]	Regular expression rules	One of the characters in the collection.
.	Digit map rules	Repeat the last element 0 or more times. For example, xxxx. means repeat the last x 0 or more times, which means this pattern matches three or more digits (not four or more digits)! Use of this element results in a pattern with “minimum requirements”.
T	Digit map rules	<p>A timeout period will take place before automatic dialing starts.</p> <p>The T timer forces Bria Professional to wait after a match is made. This timer should always be included in these situations:</p> <ul style="list-style-type: none"> Any pattern that uses the . (dot). For example, if the pattern is xxxx. then adding a timer lets you type three or more digits. If there is no timer, then as soon as you type three digits, Bria Professional makes the match as soon as you type three digits. Any dial plan that has two patterns that are similar in elements but different in length. For example, if one pattern is xxx and the other pattern is xxxxxx, then adding the timer lets you continue typing past three digits, in order to get a match on the second pattern. <p>In this situation, the T timer should be included in the shorter pattern.</p>

Timers

There are two timers:

- T timer is 4 seconds.
- The long timer is 20 seconds.

These timers are used in input comparison, as described in “How the Input Is Processed” on page 42.

Transformation Keywords

Keyword	Description
prestrip	Strip the first n characters from the input before placing the call.
poststrip	Remove n number of characters from the end of the input before placing the call.
pre	Add the specified account prefix to the input before placing the call.
post	Attach the specified postfix to the input before placing the call.
replace	Replaces the input with the specified string before placing the call.

Order of Transformations

These transformations are always performed in the following order (the order in which the transformations are entered in the dial plan is not significant):

prestrip > poststrip > pre > post > replace

B.3 How the Input Is Processed

Comparing Input to the Dial Plan Patterns

The input is compared to each dial plan in turn, starting with the first listed account. The process is slightly different depending on how the call is placed:

- If the input was dragged or selected, then the entire input is compared to each dial plan. If a complete match is found, then that account is selected and the associated transformation is performed. If no match is found, the default account is selected and no transformation is performed.
- If you are typing the input, the digits are compared one by one as they are entered. The comparison will result in one of the types of matches described in the table below.

It is possible for the same input to get matched to different dial plans depending on whether the input is entered on the fly or dragged. It is important to keep this in mind when designing dial plan patterns.

Results of the Comparison

Type of Match	Conditions	Result if You Press Enter or Dial	Result if You Stop Typing
Partial match	The characters typed so far follow the pattern but there are not yet enough characters for a pending or complete match.	The default account is selected. No transformation is performed.	If you stop typing for the long timer length (20 seconds), then the default account is selected. No transformation is performed on the characters typed so far.
Pending match	<ul style="list-style-type: none"> • The pattern has no . (dot) but does have the T timer. There is a perfect match. • The pattern has a . (dot) and the T timer. The minimum requirements are met. 	This pattern's account is selected and the transformation is performed.	If the T timer expires, this pattern's account is selected and the transformation is performed.
Complete match	<ul style="list-style-type: none"> • The pattern has no . (dot) and no T timer. There is a perfect match. • The pattern has a . (dot) but does not have the T timer. The minimum requirements are met. 	This pattern's account is selected and the associated transformation is performed.	This pattern's account is selected and the associated transformation is performed.
No match	The characters typed do not match the patterns for any dial plan.	The default account is selected and no transformation is performed.	Nothing happens even after the T timer and long timer have expired.

B.4 Examples

Example 1

```
\a\a.T|xxxxxxx.T;match=2;pre="9"
```

This simple example shows how to differentiate between a PSTN number and a softphone address, and how to add a “9” dialing prefix only to the PSTN number.

Example 2

```
3xxT|1xxxxxxxxxx|[2-9]xxxxxxxxxx|+x.T;match=2;pre="9";
match=3;pre="91";match=4;prestrip=1;pre="9011"
```

3xxT	The first pattern is any three-digit number beginning with 3. No transformation. The assumption is that this is an internal extension. The timer forces Bria Professional to wait after detecting a three-digit number beginning with 3, in case you are actually dialing a local call starting with 3.
1xxxxxxxxxx	The second pattern is any eleven-digit number beginning with 1. Prefix with 9 and dial as is. The assumption is that this is a long-distance PSTN call within North America (within North America, all long-distance calls start with 1).
[2-9]xxxxxxxxxx	The third pattern is any ten-digit number beginning with a number other than 1. The assumption is that this is a local PSTN call within a ten-digit dialing zone.
+x.T;	The fourth pattern is a number of any length that begins with +, to indicate an international PSTN call from North America. Delete the +, prefix with 9011 (011 is the number to access an international line from North America).
match=2;pre="9";	For the second pattern, prefix 9 to access an outside line.
match=3;pre="91";	For the third pattern, prefix 9 and 1 to access an outside line and enter the long-distance code.
match=4;prestrip=1;pre="9011"	For the fourth pattern, remove the + and prefix 9011 to access an outside line and enter the international code.

Example 3

```
#1xxxxxxxxT|#19xxxxxxxx|xxxxxxxxT|9xxxxxxx|;match=1;prestrip=2;pre=9;match=2;
prestrip=2;match=3;pre=9;
```

#1xxxxxxxxT	The pattern is an account prefix followed by seven digits. The timer forces Bria Professional to wait to allow a match to the second pattern. The #1 is stripped off and 9 is prepended to access an outside line.
#19xxxxxxxx	The pattern is an account prefix followed by a 9 and seven digits. The #1 is stripped off.
xxxxxxxxT	The pattern is seven digits. The timer forces Bria Professional to wait to allow matching to the fourth pattern. 9 is prepended to access an outside line.
9xxxxxxx	The pattern is a 9 and seven digits. The input is not transformed.

This example assumes that the dial plan belongs to the first account.

The dial plan is slightly trivial, because it does not cover all the situations that a dial plan should be designed for (local calls, long-distance calls, international calls, and so on for the locale).

However, the example does illustrate two ideas:

- Handling of the account prefix (#1), if you are upgrading from eyeBeam and are accustomed to entering the account number.
Use of # to identify the account is now deprecated. The dial plan should be capable of determining the account to use for this number. However, since users may still be in the habit of entering the account prefix, you may want to include this pattern to handle such a scenario.
- Distinguishing between a local seven-digit call in which 9 is not dialed (to access an outside line) and one in which 9 is dialed to access an outside line.

C Contact List Headings

Following is a list of all the headings that are used in the Bria Professional contact list. This list can be useful when formatting a contact list in order to import it into Bria Professional. For details, see “Creating a Contact List” on page 8.

uri	business_number	sms_address5
display-name	business_number2	ms_address2
entry_id	business_number3	sms_address3
given_name	business_number4	sms_address4
surname	business_number5	sms_address5
email_address	business_number6	sms_address6
email_address2	mobile_number	custom_fields
email_address3	mobile_number2	custom_fields2
email_address4	mobile_number3	custom_fields3
email_address5	mobile_number4	custom_fields4
email_address6	mobile_number5	pres_subscription
sip_address	mobile_number6	
sip_address2	fax_number	
sip_address3	fax_number2	
sip_address4	fax_number3	
sip_address5	fax_number4	
sip_address6	fax_number5	
home_number	fax_number6	
home_number2	groups	
home_number3	comment	
home_number4	postal_address	
home_number5	default_address	
home_number6	default_address_type	

D Glossary

AEC	Acoustic echo cancellation. Processing of the audio or video signal to reduce the echo effect that can arise with a speakerphone or that can arise if the sound from the speakerphone or headphone leaks into the microphone.
AGC	Automatic gain control. Processing of the audio or video signal to adjust the microphone volume level so that the other party does not hear the distortion that might be caused by too high a microphone input or too low volume (due to too low input level).
AVI	Audio Video Interleave. A multimedia container format. AVI files contain both audio and video data in a standard container that allows simultaneous playback.
Broadband	Broad or wide bandwidth. In data transmission, the wider the band, the more data it is possible to transmit in a given time span. A cable, DSL and ADSL connection to the network provide broadband for data transmission. A dialup or ISDN connection typically provide a narrow bandwidth for data transmission.
Codec	The format by which audio or video streams are compressed for transmission over networks.
Dial plan	The rules that Bria Professional follows in order to interpret the softphone address or phone number that the user has entered and to modify the number or address, as required, to ensure that the call will be placed successfully.
DTMF	Dual-tone multi frequency. DTMF is the system that is used in interactive voice-response menu systems such as the menu system for accessing voicemail messages. The DTMF system allows the user to interact with the menu by pressing keys on a dialpad or keyboard.
IM	Instant Messaging. A technology that lets users send text message and files for near instantaneous delivery and display on each others' computers.
IP	Internet Protocol. A data-oriented protocol used for communicating data across a network. IP is the most common protocol used on the internet.
IP address	A unique number that devices use in order to identify and communicate with each other on a computer network using the IP standard.
Media	In a VoIP phone call, the audio and video portion of the information in a call. Compare to "Signaling".
MWI	Message Waiting Indicator. An indicator that there is a voicemail message for the owner of an account.
Narrowband	In data transmission, the wider the band, the more data it is possible to transmit in a given time span. A cable, DSL and ADSL connection to the network provide broadband for data transmission. A dialup or ISDN connection typically provide a narrow bandwidth for data transmission.
Presence	An instant messaging feature that allows users to share information about their availability, mood, location and so on.
Proxy	See SIP account.
PSTN	Public Switch Telephone Network. The traditional land-line phone network.
RFC	Request for Comment. A document that describes an aspect of an internet technology. An RFC may be a proposed, draft or full internet standard.
RTP	Real-time Transport Protocol. A protocol for delivering the media portion of a data transmission over an IP network. SRTP is another media protocol.
Signaling	In a VoIP phone call, the information in a call that deals with establishing and controlling the connection, and managing the network. The non-signaling portion of the call is the Media.

SIMPLE protocol	Session Initiation Protocol for Instant Messaging and Presence Leveraging Extensions. The instant messaging (IM) protocol followed by Bria Professional. It encapsulate the rules for exchanging instant messages.
SIP	Session Initiation Protocol. The signaling protocol followed by Bria Professional for handling phone calls.
SIP account	An account that provides the user the ability to make VoIP phone calls. The account encapsulates the rules and functions the user can access.
softphone address	The address used to connect to a SIP endpoint. In other words, the “phone number” used in a VoIP phone call. For example, sip:joseph@domainA.com.
SRTP	Secure Real-time Transport Protocol. A protocol for delivering the media portion of a data transmission over an IP network. SRTP is a secure protocol, which means that the media is encrypted. RTP is another media protocol.
TCP	Transmission Control Protocol. A transport protocol for delivering data over an IP network. Other transport protocols are TLS and UDP.
TLS	Transport Layer Security. A transport protocol for delivering data over an IP network. TLS is a secure transport protocol, which means that all the data being transmitted (signaling and media) is encrypted. Other transport protocols are TCP and UDP.
UDP	User Datagram Protocol. A transport protocol for delivering data over an IP network. Other transport protocols are TCP and TLS.
URI	Uniform Resource Identifier. A name or address that identifies a location on the world wide web. A softphone address is a type of URI.
URL	Uniform Resource Locator. A URI that both identifies a name or address and indicates how to locate it.
USB device	Universal Serial Bus device. A device that follows a specific communications standard. A headset may be a “USB type” of headset.
VAD	Voice Activity Detection. A technology that detects if audio is a human voice or background noise. Bria Professional includes a feature (Preserve bandwidth on the Network panel of the Preferences window) that controls whether audio is transmitted when VAD determines that none is actually speaking.
vCard	An electronic business card that is often attached to an email. It often appears as a “signature” block that identifies the person, their title, and their business.
VoIP	Voice over Internet Protocol. A variation of IP used for sending voice data over the internet, in other words, used for making phone calls over the internet.
VoIP service provider	A business that provides a VoIP service, allowing a user to connect to the internet in order to make VoIP phone calls using Bria Professional. The VoIP service provider sets up a SIP account for the user.
WAV	Or WAVE. A file format standard for storing audio on PCs.

