



## Interoperability Guide

# Configuring SIP Mobility for CounterPath Bria on the NetVanta 7100 and NetVanta UC Server Systems

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This interoperability guide provides instructions for configuring Session Initiation Protocol (SIP) mobility using CounterPath's Bria voice over IP (VoIP) softphone application with the NetVanta 7100 and NetVanta Unified Communications (UC) Server systems. It provides an overview and instructions for the SIP mobility solution. Also, this guide provides lists of the required equipment and software for the integration, the features supported by the integration, and the verified functionality of the integration.

This guide consists of the following sections:

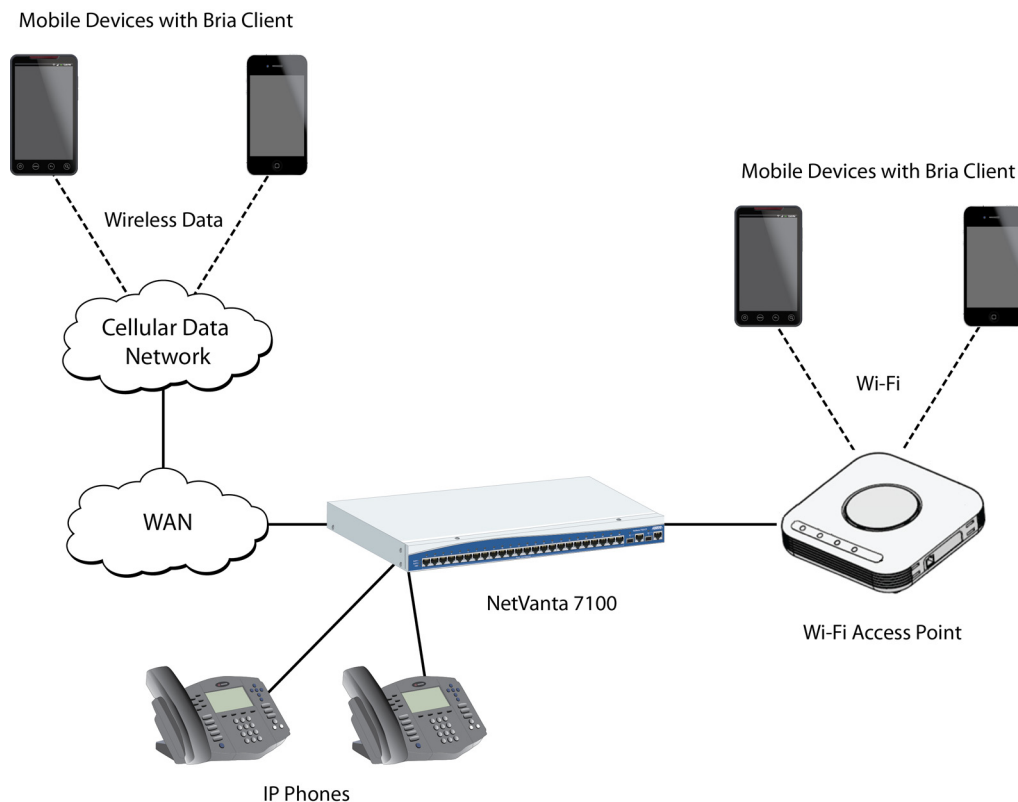
- *SIP Mobility Overview on page 2*
- *Hardware and Software Requirements and Limitations on page 4*
- *Configuration Overview on page 6*
- *Configuring the NetVanta 7100 for SIP Mobility on page 7*
- *Configuring NetVanta BCS Systems for SIP Mobility on page 10*
- *Configuring NetVanta ECS Systems for SIP Mobility on page 16*
- *Downloading and Configuring Bria on a Mobile Device on page 25*

## SIP Mobility Overview

The purpose of this solution is to provide mobile SIP-based communication over on-site (local Wi-Fi) and off-site (remote Wi-Fi or cellular data networks) data connections. With the aid of CounterPath's Bria VoIP softphone application, this SIP mobility solution allows users with iOS and Android mobile devices to make SIP calls, manage voicemail, and perform other tasks on the NetVanta 7100 or NetVanta UC Server system wirelessly, without the need for a dedicated VoIP hard phone.

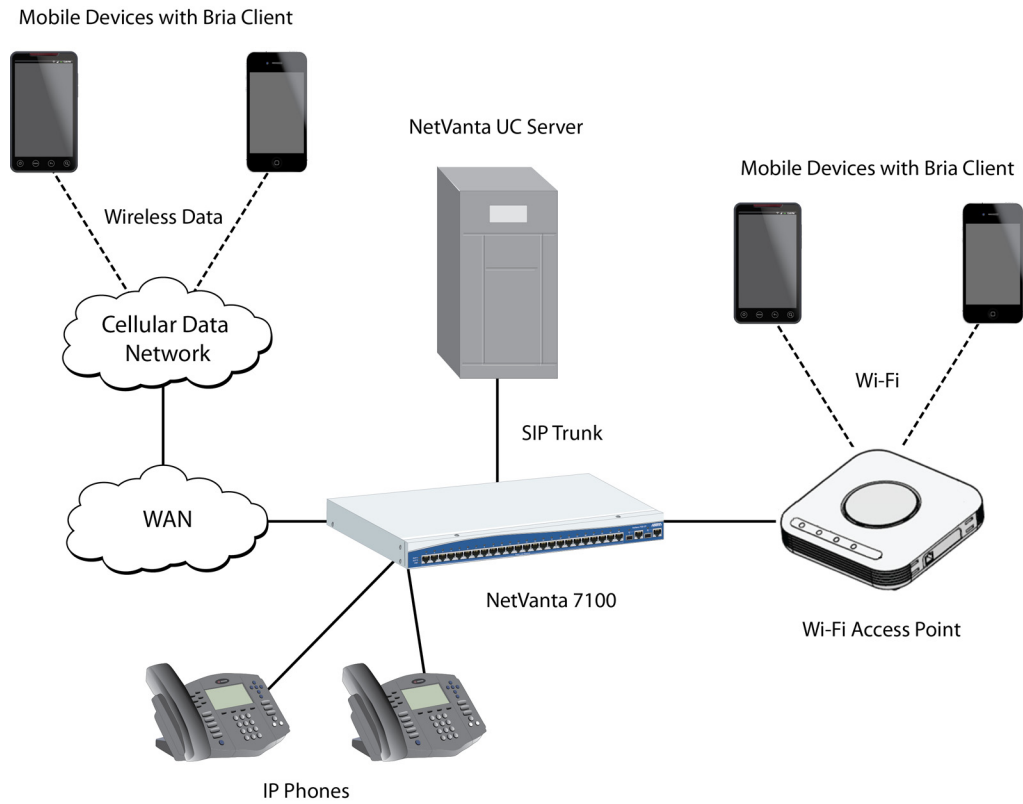
SIP mobility can be configured on the NetVanta 7100, NetVanta Business Communications Server (BCS) systems using a NetVanta 7100 as an IP private branch exchange (PBX), and NetVanta Enterprise Communications Server (ECS) systems using an ADTRAN IP business gateway with Session Border Controller (SBC). This solution provides two possible configurations, an on-site only configuration and an on-site/off-site configuration. The on-site/off-site configuration, which requires the configuration of the Simple Remote Phone feature on the NetVanta 7100 or the Remote Phone feature on the IP business gateway (for NetVanta ECS systems), is more versatile, allowing users to use their softphone on the local business Wi-Fi network, remote Wi-Fi networks, and their cellular data network.

The figure below shows a typical SIP mobility application using a NetVanta 7100.



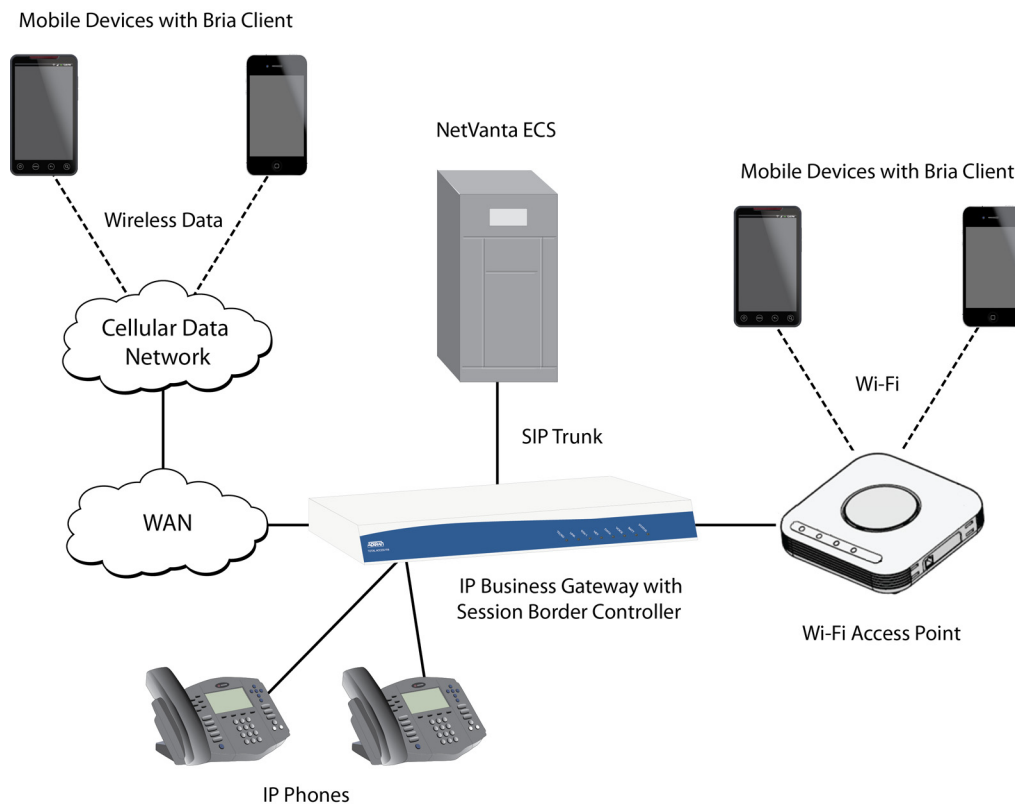
**Figure 1. SIP Mobility on a NetVanta 7100**

The figure below shows a typical SIP mobility application using a NetVanta BCS system with a NetVanta 7100 as an IP private branch exchange (PBX).



**Figure 2. SIP Mobility on a NetVanta BCS System**

The figure below shows a typical SIP mobility application using a NetVanta ECS system with an ADTRAN IP business gateway with SBC.



**Figure 3. SIP Mobility on a NetVanta ECS System**

## Hardware and Software Requirements and Limitations

NetVanta ECS software version 5.2.0 or later is required for SIP mobility.

ADTRAN Operating System (AOS) R10.5.0 or later is required for the IP business gateway unit. Additionally, on-site/off-site SIP mobility configurations require that the IP business gateway unit have the SBC feature pack to allow remote phone support. For more information on which units are SBC capable, refer to the *Feature Matrix* available from the ADTRAN Support Community (<https://supportforums.adtran.com>)

AOS R10.5.0 or later is required for the NetVanta 7100.

## Verified Features and Exceptions

The following sections provide information on the supported features and exceptions of the SIP mobility solution. The features listed in *Verified Functionality on page 4* are the only features you can expect to function with the configuration provided in this guide.

### Verified Functionality

Tests were performed to verify functionality using the following software versions:

- NetVanta ECS version 5.2.0
- NetVanta 7100 with firmware version R10.3.0
- Bria iPhone Edition version 2.1.2 build 12565
- Bria Android Edition version 2.0.3

The following functions have been verified using the firmware and software versions listed above:

- Basic call handling
- Call holding
- Blind transfers
- Supervised transfers
- Call redirect to voicemail
- Unconditional call forwarding

## Exceptions

This SIP mobility solution has the following exceptions:

- On the NetVanta 7100, if a Bria phone client performs a blind transfer to a Bria desktop client, no ringback is heard while the call is presented to the transfer destination.
- On NetVanta ECS or NetVanta 7100, when a Bria desktop client performs a blind transfer to a Bria phone client, the transfer completes and two-way audio is established; however, the phone client does not show the call as connected.
- Handover of active calls between Wi-Fi and cellular networks is not supported by Bria clients. Consequently, active calls will be dropped on the mobile device when transitioning between Wi-Fi and cellular networks, and the call must be re-established by the user.
- Handover between Wi-Fi access points is not supported. Consequently, active calls may be dropped on the mobile device when transitioning between Wi-Fi access points. If a call is dropped during the transition between Wi-Fi access points, the call must be re-established by the user.

## Configuration Overview

Enabling SIP mobility on a NetVanta 7100 requires configuration of the NetVanta 7100 and the mobile device. Enabling SIP mobility on a NetVanta BCS system requires configuration of the NetVanta UC Server, the NetVanta 7100, and the mobile device. Similarly, enabling SIP mobility on a NetVanta ECS system requires configuration of the NetVanta UC Server, IP business gateway, and the mobile device. The configuration steps required on the NetVanta 7100 or IP business gateway differ slightly depending on whether SIP mobility is configured for on-site only or on-site/off-site.

System Type	Configuration Checklist
NetVanta 7100	<p>On-site only SIP mobility:</p> <ul style="list-style-type: none"> <li>Step 1: <a href="#">Configure a SIP Mobility User on the NetVanta 7100 on page 7</a></li> </ul> <p>On-site/off-site SIP mobility:</p> <ul style="list-style-type: none"> <li>Step 1: <a href="#">Configure a SIP Mobility User on the NetVanta 7100 on page 7</a></li> <li>Step 2: <a href="#">Optional. Configure the NetVanta 7100 for On-site/Off-site SIP Mobility on page 10</a></li> </ul>
NetVanta BCS with NetVanta 7100	<p>On-site only SIP mobility</p> <ul style="list-style-type: none"> <li>Step 1: <a href="#">Configure a SIP Mobility User on the NetVanta 7100 on page 10</a></li> <li>Step 2: <a href="#">Configure a SIP Mobility User on the NetVanta UC Server on page 12</a></li> </ul> <p>On-site/off-site SIP mobility:</p> <ul style="list-style-type: none"> <li>Step 1: <a href="#">Configure a SIP Mobility User on the NetVanta 7100 on page 10</a></li> <li>Step 2: <a href="#">Configure a SIP Mobility User on the NetVanta UC Server on page 12</a></li> <li>Step 3: <a href="#">Optional. Configure the NetVanta 7100 for On-site/off-site SIP Mobility on page 16</a></li> </ul>
NetVanta ECS with IP Business Gateway	<p>On-site only SIP mobility:</p> <ul style="list-style-type: none"> <li>Step 1: <a href="#">Configure a SIP Mobility User on the NetVanta UC Server on page 16</a></li> </ul> <p>On-site/off-site SIP mobility:</p> <ul style="list-style-type: none"> <li>Step 1: <a href="#">Configure a SIP Mobility User on the NetVanta UC Server on page 16</a></li> <li>Step 2: <a href="#">Optional. Configure a SIP Mobility User on the IP Business Gateway on page 21</a></li> <li>Step 3: <a href="#">Optional. Configure the IP Business Gateway for On-site/Off-site SIP Mobility on page 23</a></li> </ul>

After making the necessary configurations for SIP mobility on the NetVanta 7100, NetVanta BCS, or NetVanta ECS system, you can download and configure Bria on your mobile device. For directions, refer to [Downloading and Configuring Bria on a Mobile Device on page 25](#).

## Configuring the NetVanta 7100 for SIP Mobility



*The configuration steps provided in this section are for configuring a NetVanta 7100 only for SIP mobility. For more information on configuring the NetVanta 7100 as a part of a NetVanta BCS system, refer to [Configuring NetVanta BCS Systems for SIP Mobility on page 10](#).*

Both on-site only and on-site/off-site SIP mobility for the NetVanta 7100 require that a SIP user be configured on the NetVanta 7100. The necessary configurations are outlined in the following step:

- *Step 1: Configure a SIP Mobility User on the NetVanta 7100 on page 7*

In addition to the step above, on-site/off-site SIP mobility requires that the Simple Remote Phone feature be configured on the NetVanta 7100. This step is not required for on-site only SIP mobility configurations. Configuring on-site/off-site SIP mobility allows users to use their Bria softphone on-site (with the local Wi-Fi network) and off-site (with remote Wi-Fi networks and their cellular data network). The necessary configurations are outlined in the following step:

- *Step 2: Optional. Configure the NetVanta 7100 for On-site/Off-site SIP Mobility on page 10*

After making the necessary configurations for SIP mobility on the NetVanta 7100, you can download and configure Bria on your mobile device. For directions, refer to [Downloading and Configuring Bria on a Mobile Device on page 25](#).

### Step 1: Configure a SIP Mobility User on the NetVanta 7100

This section provides the minimum configuration settings on the NetVanta 7100 that are required for either on-site only or on-site/off-site SIP mobility. For more information on configuring the user account, refer to [Configuring User Accounts on the NetVanta 7100](#) available from the ADTRAN support community (<https://supportforums.adtran.com>). The following steps must be completed for each SIP mobility user:

1. Open a new Web page in your Internet browser.
2. Enter your product's IP address in the browser's address field in the format **http://<ip address>/admin**, for example:  
**http://10.10.10.1/admin**
3. At the prompt, enter your user name and password and select **OK**. The NetVanta 7100 GUI will appear.



*The default user name is **admin** and the default password is **password**.*

4. In the GUI, navigate to **Voice > Stations > User Accounts**. The **User Accounts** menu will appear.

5. Select **New** in the menu options to create a new user account.

	Last Name	First Name	Extension	Port/Status	Station CoS
<input type="checkbox"/>	Doe	Jane	1234	virtual	normal_users
<input type="checkbox"/>	Port 0/1	Analog FXS	2001	fxs 0/1	normal_users
<input type="checkbox"/>	Port 0/2	Analog FXS	2002	fxs 0/2	normal_users

Figure 4. User Accounts Menu

6. In the menu that appears, enter the desired **Extension**, **First Name**, and **Last Name** for the SIP mobility user account, and select **SIP** using the **Phone Type** drop-down menu. Record the extension entered for the user account (in this example, **2005**). This will be used when setting up the Bria account on the mobile device. Select **Apply** to apply the configuration settings and continue editing the user account.

Figure 5. New User Menu



7. In the **General** tab, select the **Enabled** check box next to **Simple Remote Phone** to enable the Simple Remote Phone feature for the user account.

The screenshot shows the 'User Accounts' configuration interface with the 'General' tab selected. The page includes the following fields and controls:

- Extension:** 2005
- First Name:** John
- Last Name:** Roebuck
- Phone Type:** SIP
- Phone MAC Address:** Not Set (with an 'Edit Config...' button)
- Simple Remote Phone:**  Enabled
- PIN:** \*\*\*\* (Must be 4 digits)
- SIP Auth Password:** Generate random password button and a text field containing 'CgVlcwQ6wnp4jbVd'
- DID Numbers:** Show button
- Aliases:** Show button
- Class of Service:** Default: normal\_users; Night: Same as Default; Lunch: Same as Default; Weekend: Same as Default; Override: Same as Default; Custom1: Same as Default; Custom2: Same as Default; Custom3: Same as Default. (with a 'Modify COS Settings...' button)

At the bottom of the form are 'Cancel' and 'Apply' buttons.

**Figure 6. New User General Tab**

8. In the **SIP Auth Password** field, enter a SIP authentication password for the user account. If desired, the **Generate random password** button can be used to generate a random SIP authentication password. Record the SIP authentication password for later use when setting up Bria on the user's mobile device.
9. Select **Apply** to save the user account configurations. Then, select **Save** at the top of the menu to save the configuration.

## Step 2: Optional. Configure the NetVanta 7100 for On-site/Off-site SIP Mobility

In addition to the steps outlined in *Configure a SIP Mobility User on the NetVanta 7100 on page 10*, on-site/off-site SIP mobility requires that the Simple Remote Phone feature be configured on the NetVanta 7100. For more information on configuring the Simple Remote Phone feature for softphones refer to the section titled *Task 1: Configuring Simple Remote Phones through the GUI in Configuring Simple Remote Phones for the NetVanta 7100*, available from the ADTRAN support community (<https://supportforums.adtran.com>).



*Configuring Simple Remote Phones for the NetVanta 7100 includes instructions for specifying the registration expire times using header manipulations rules (HMR) in the section titled **Task 2: Specifying Registration Expire Times through the AOS CLI**. Additionally, it includes instructions for configuring IP phones for the Simple Remote Phone feature in the section titled **Task 3: Altering the IP Phone Configuration Files**. These steps are not necessary when configuring SIP mobility for Bria softphones.*

During the simple remote phone configuration on the NetVanta 7100, for security purposes, you will add a User Datagram Protocol (UDP) SIP port with a non-standard port number for security. Record the UDP port number you choose (**25069** is the port number used in the document). It will be used later when configuring Bria.

## Configuring NetVanta BCS Systems for SIP Mobility

Both on-site only and on-site/off-site SIP mobility for NetVanta BCS systems using a NetVanta 7100 require that a SIP user be configured on the NetVanta 7100 and a user identity be configured on the NetVanta UC Server. The necessary configurations are outlined in the following steps:

- *Step 1: Configure a SIP Mobility User on the NetVanta 7100 on page 10*
- *Step 2: Configure a SIP Mobility User on the NetVanta UC Server on page 12*

In addition to the steps above, on-site/off-site SIP mobility requires that the Simple Remote Phone feature be configured on the NetVanta 7100. This step is not required for on-site only SIP mobility configurations. Configuring on-site/off-site SIP mobility allows users to use their Bria softphone on-site (with the local Wi-Fi network) and off-site (with remote Wi-Fi networks and their cellular data network). The necessary configuration is outlined in the following step:

- *Step 3: Optional. Configure the NetVanta 7100 for On-site/off-site SIP Mobility on page 16*

After making the necessary configurations for SIP mobility on the NetVanta BCS system, you can download and configure Bria on your mobile device. For directions, refer to *Downloading and Configuring Bria on a Mobile Device on page 25*.

## Step 1: Configure a SIP Mobility User on the NetVanta 7100


This section provides the minimum configuration settings on the NetVanta 7100 that are required for either on-site only or on-site/off-site SIP mobility. For more information on configuring the user account, refer to *Configuring User Accounts on the NetVanta 7100* available from the ADTRAN support community (<https://supportforums.adtran.com>). The following steps must be completed for each SIP mobility user:

1. Open a new Web page in your Internet browser.

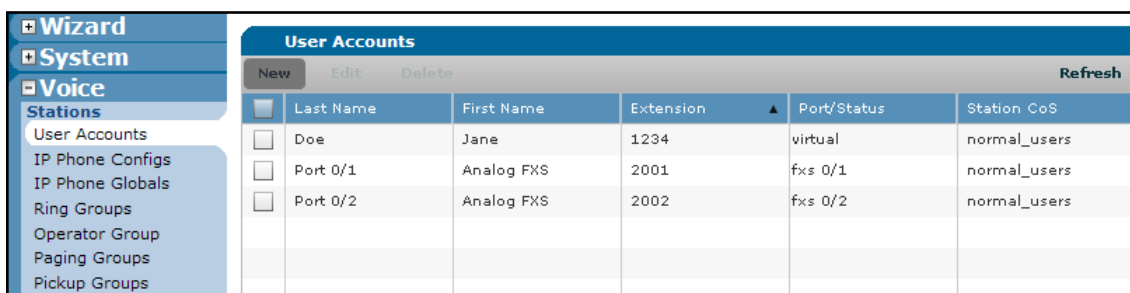
2. Enter your product’s IP address in the browser’s address field in the format **http://<ip address>/admin**, for example:

**http://10.10.10.1/admin**

3. At the prompt, enter your user name and password and select **OK**. The NetVanta 7100 GUI will appear.

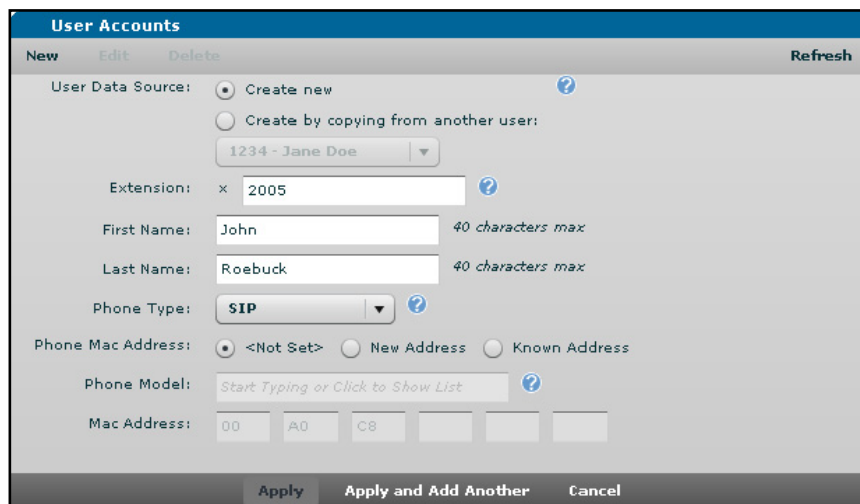
 **NOTE** *The default user name is **admin** and the default password is **password**.*

4. In the GUI, navigate to **Voice > Stations > User Accounts**. The **User Accounts** menu will appear.
5. Select **New** in the menu options to create a new user account.



**Figure 7. User Accounts Menu**

6. In the menu that appears, enter the desired **Extension**, **First Name**, and **Last Name** for the SIP mobility user account, and select **SIP** using the **Phone Type** drop-down menu. Record the extension entered for the user account (in this example, **2005**). It will be used later when setting up a user identity on NetVanta UC Server and the Bria account on the mobile device. Select **Apply** to apply the configuration settings and continue editing the user account.



**Figure 8. New User Menu**

- In the **General** tab, select the **Enabled** check box next to **Simple Remote Phone** to enable the Simple Remote Phone feature for the user account.

The screenshot displays the 'User Accounts' configuration interface, specifically the 'General' tab. The interface includes the following elements:

- Navigation Tabs:** General, User Config, Current Settings, Call Coverage, Voicemail, VoIP, FMFM.
- Extension:** 2005
- First Name:** John
- Last Name:** Roebuck
- Phone Type:** SIP
- Phone MAC Address:** Not Set (with an 'Edit Config...' button)
- Simple Remote Phone:**  Enabled
- PIN:** \*\*\*\* (Must be 4 digits)
- SIP Auth Password:** CgVlcwQ6wnp4jbVd (with a 'Generate random password' button)
- DID Numbers:** Show
- Aliases:** Show
- Class of Service:**
  - Default: normal\_users
  - Night: Same as Default
  - Lunch: Same as Default
  - Weekend: Same as Default
  - Override: Same as Default
  - Custom1: Same as Default
  - Custom2: Same as Default
  - Custom3: Same as Default
- Buttons:** Cancel, Apply, and 'Modify COS Settings...'.

**Figure 9. New User General Tab**

- In the **SIP Auth Password** field, enter a SIP authentication password for the user account. If desired, the **Generate random password** button can be used to generate a random SIP authentication password. Record the SIP authentication password for later use when setting up Bria on the user's mobile device.
- Select **Apply** to save the user account configurations. Then, select **Save** at the top of the menu to save the configuration.

## Step 2: Configure a SIP Mobility User on the NetVanta UC Server

Whether a user account for the SIP mobility user already exists on the NetVanta UC Server determines what configurations must be performed on the system. If a user account for the SIP mobility user already exists on the NetVanta UC Server, only an identity must be created for the user. If a user account does not exist, a user must be created and an identity assigned to the user.

If a user account for the SIP mobility user exists, follow the steps outlined in *Adding an Identity to an Existing User on the NetVanta UC Server on page 13*.

If no user account for the SIP mobility user exists, follow the steps outlined in *Adding a New User and Identity on the NetVanta UC Server on page 15*.

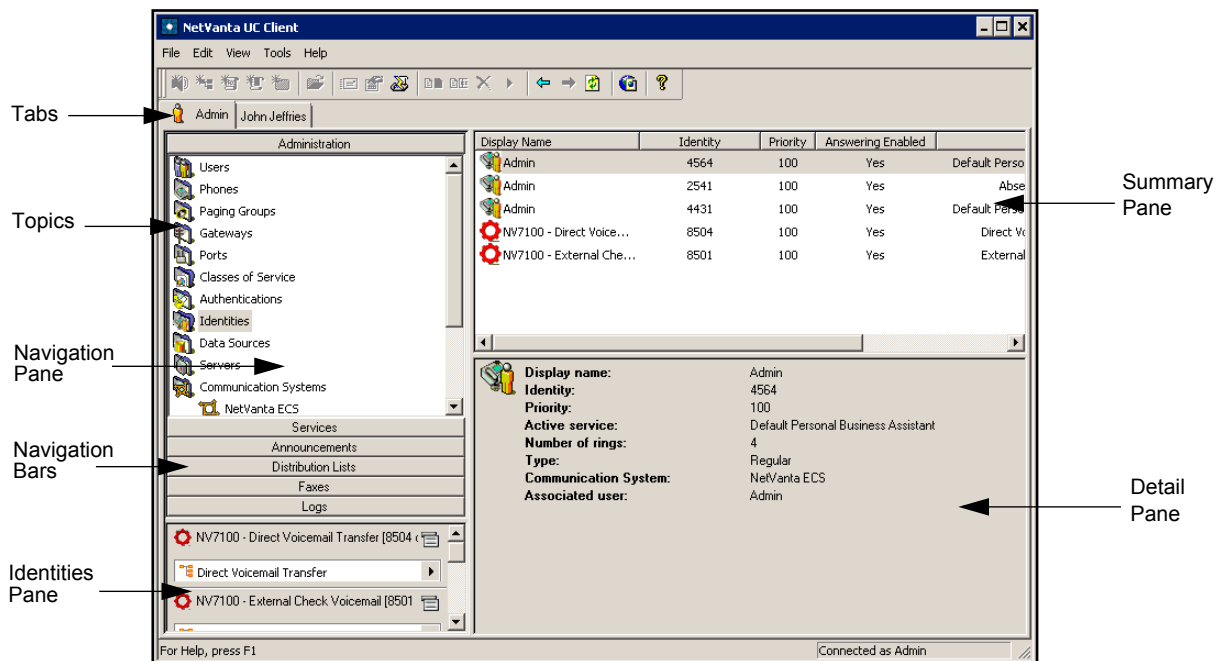
## Adding an Identity to an Existing User on the NetVanta UC Server

If a user account for the SIP mobility user already exists on the NetVanta UC Server, a new user identity for SIP mobility must be added to the system. This identity must match the extension configured on the NetVanta 7100. Use the steps in this section to create a new user identity.



*If a user account for the SIP mobility user does not exist on the NetVanta UC Server, you must create a new user with an identity on the NetVanta UC Server system. For instructions on creating a new user with an identity, please refer to [Adding a New User and Identity on the NetVanta UC Server on page 15](#).*

1. Log in as an administrator to the NetVanta UC Client on the NetVanta UC Server computer.
2. On the **Admin** tab, select the **Administration** navigation bar, then select the **Identities** topic from the navigation pane.



**Figure 10. NetVanta UC Client Layout**

3. Right click in the **Identities** summary pane, and select **New Identity** from the drop-down menu that appears. The **New Identity Wizard** welcome menu appears.
4. Select **Next**. The **Select Identity Type** menu appears.
5. In the **Select Identity Type** menu, use the **Select a communication system** drop-down menu to select the **NetVanta 7000 Series** communication system, use the **Select a user profile** drop-down menu to

select the NetVanta UC Server user profile of the SIP mobility user. Select the **User** radio button, and select **Next**. The **Configure User Identity** menu will appear.

**Select Identity Type**

Determine the class of identity and a user that will manage its call answering behavior.

Select a communication system: NetVanta 7000 Series

Select a user profile: John Roebuck

Select the class of identity:

- User**  
Creates a new identity typically associated with ucCompanion, a soft-phone or a hard-phone
- Attendant service**  
Creates a new identity that handles calls as an automated attendant or service (e.g. IVR, pre-screening, etc.)
- Ring group**  
Distributes calls to all members of the group simultaneously
- Hunt group**  
Distributes calls to members of the group sequentially based on availability

< Back   Next >   Cancel   Help

**Figure 11. Select Identity Type Menu**

6. In the **Configure User Identity** menu, enter a display name for the user identity in the **Name** field (this field is automatically populated with the user profile you associated with the identity in the previous step), and enter the extension of the SIP mobility user account you created on the NetVanta 7100 (refer to *Step 6 on page 11* in *Configure a SIP Mobility User on the NetVanta 7100*) in the **Address** field. Then, select **Next**.

**User Identity**

**Configure User Identity**

Determine the name, identity and default call answering behavior.

Name: John Roebuck

Address: 2005

Priority: 100

**Behavior**

Select the answering behavior to be associated with this identity. User identities can also be phantom: they do not have an associated end point.

- Phantom
- Run Service**   Default: Personal Business Assistant
- Receive Fax

< Back   Next >   Cancel   Help

**Figure 12. Configure User Identity Menu**

7. In the menu that appears, select **Finish** to create the new identity.

## Adding a New User and Identity on the NetVanta UC Server

If a user account for the SIP mobility user does not exist on the NetVanta UC Server, you must create a new user with an identity matching the extension of the SIP mobility user account you created on the NetVanta 7100. For instructions on creating a user using the New User Wizard, refer to the *Using the New User Wizard* section in the *NetVanta Enterprise Communications Server and Business Application Server Administrator Guide* available from the ADTRAN support community (<https://supportforums.adtran.com>).



*If a user account for the SIP mobility user already exists on the NetVanta UC Server, you only need to create an additional identity for the user on the NetVanta UC Server system. For instructions on creating an identity for a user, please refer to [Adding an Identity to an Existing User on the NetVanta UC Server on page 13](#).*

When configuring the new SIP mobility user with the New User Wizard, the new user's identity must match the extension of the SIP mobility user account you created on the NetVanta 7100 (refer to [Step 6 on page 11 of Configure a SIP Mobility User on the NetVanta 7100](#)), and the identity must be associated with the **NetVanta 7000 Series** communication system. Both of these configurations are performed in the **User Information** menu of the New User Wizard. While in the **User Information** menu, enter the extension of the SIP mobility user account in the **Identity #** field and select **NetVanta 7000 Series** using the adjacent drop-down menu.

The screenshot shows the 'User Information (Local)' dialog box. It has a title bar with a close button. Below the title bar, there is a subtitle 'User Information (Local)' and a description: 'Configure the user name and identity numbers associated with the user.' To the right of the description is an icon of three people. The dialog is divided into sections: 'Name information' with fields for 'First name' (John), 'Last name' (Roebuck), 'Display name' (John Roebuck), and a checked 'Include in dial by name directory' checkbox; 'Class of service' (System Voice Mail) and 'Voice' ([System Default Voice]) dropdown menus; and 'Phone number' with 'Identity #' (2005), 'Fax #' (empty), and dropdown menus for 'NetVanta 7000 Seri' and 'NetVanta ECS'. There is also a 'Phantom' checkbox. At the bottom are buttons for '< Back', 'Next >', 'Cancel', and 'Help'.

**Figure 13. User Information Menu**

### Step 3: Optional. Configure the NetVanta 7100 for On-site/off-site SIP Mobility

In addition to the steps outlined in *Configure a SIP Mobility User on the NetVanta 7100 on page 10*, on-site/off-site SIP mobility requires that the Simple Remote Phone feature be configured on the NetVanta 7100. For more information on configuring the Simple Remote Phone feature for softphones refer to the section titled *Task 1: Configuring Simple Remote Phones through the GUI* in *Configuring Simple Remote Phones for the NetVanta 7100*, available from the ADTRAN support community (<https://supportforums.adtran.com>).



*Configuring Simple Remote Phones for the NetVanta 7100 includes instructions for specifying the registration expire times using header manipulations rules (HMR) in the section titled **Task 2: Specifying Registration Expire Times through the AOS CLI**. Additionally, it includes instructions for configuring IP phones for the Simple Remote Phone feature in the section titled **Task 3: Altering the IP Phone Configuration Files**. These steps are not necessary when configuring SIP mobility for Bria softphones.*

During the simple remote phone configuration on the NetVanta 7100, for security purposes, you will add a User Datagram Protocol (UDP) SIP port with a non-standard port number. Record the UDP port number you choose (**25069** is the port number used in the document). It will be used later when configuring Bria.

## Configuring NetVanta ECS Systems for SIP Mobility

On-site only SIP mobility for NetVanta ECS Systems using an IP business gateway with SBC requires that a user identity be configured on the NetVanta UC Server. The necessary configuration is outlined in the following step:

- *Step 1: Configure a SIP Mobility User on the NetVanta UC Server on page 16*

In addition to the step above, support for on-site/off-site SIP mobility requires that a SIP user be configured on the IP business gateway and the Remote Phone feature be configured on the IP business gateway. These steps are not required for on-site only SIP mobility configurations. Configuring on-site/off-site SIP mobility allows users to use their Bria softphone on-site (with the local Wi-Fi network) and off-site (with remote Wi-Fi networks and their cellular data network). The necessary configurations are outlined in the following steps:

- *Step 2: Optional. Configure a SIP Mobility User on the IP Business Gateway on page 21*
- *Step 3: Optional. Configure the IP Business Gateway for On-site/Off-site SIP Mobility on page 23*

After making the necessary configurations for SIP mobility on the NetVanta ECS system, you can download and configure Bria on your mobile device. For directions, refer to *Downloading and Configuring Bria on a Mobile Device on page 25*.

### Step 1: Configure a SIP Mobility User on the NetVanta UC Server

Whether a user account for the SIP mobility user already exists on the NetVanta UC Server determines what configurations must be performed on the system. If a user account for the SIP mobility user already exists on the NetVanta UC Server, only an identity must be created for the user. If a user account does not exist, a user must be created and an identity assigned to the user.

If a user account for the SIP mobility user exists, follow the steps outlined in *Adding an Identity to an Existing User on the NetVanta UC Server on page 17*.



If no user account for the SIP mobility user exists, follow the steps outlined in [Adding a New User and Identity on the NetVanta UC Server on page 19](#).

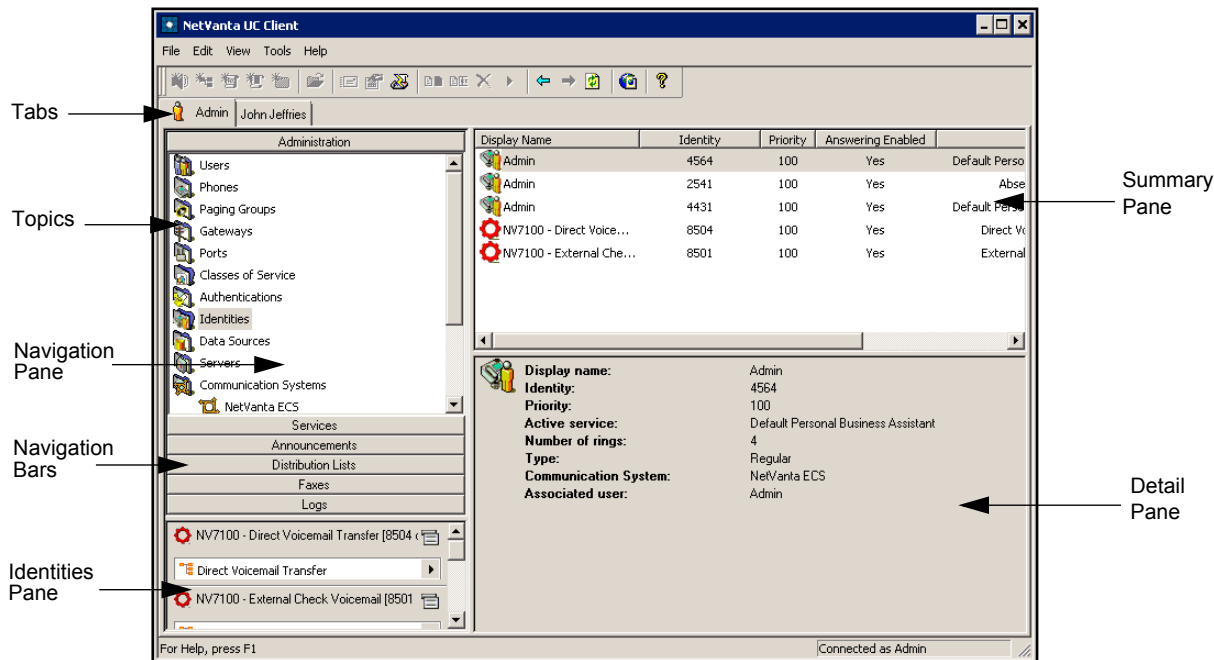
## Adding an Identity to an Existing User on the NetVanta UC Server

If a user account for the SIP mobility user already exists on the NetVanta UC Server, a new user identity for SIP mobility must be added to the system. Use the steps in this section to create a new user identity.



*If a user account for the SIP mobility user does not exist on the NetVanta UC Server, you must create a new user with an identity on the NetVanta UC Server system. For instructions on creating a new user with an identity, please refer to [Adding a New User and Identity on the NetVanta UC Server on page 19](#).*

1. Log in as an administrator to the NetVanta UC Client on the NetVanta UC Server computer.
2. On the **Admin** tab, select the **Administration** navigation bar, then select the **Identities** topic from the navigation pane.



**Figure 14. NetVanta UC Client Layout**

3. Right click in the **Identities** summary pane, and select **New Identity** from the drop-down menu that appears. The **New Identity Wizard** welcome menu appears.
4. Select **Next**. The **Select Identity Type** menu appears.

- In the **Select Identity Type** menu, use the **Select a communication system** drop-down menu to select the **NetVanta ECS** communication system, and use the **Select a user profile** drop-down menu to select the NetVanta UC Server user profile of the SIP mobility user. Select the **User** radio button. Then, select **Next**. The **Configure User Identity** menu will appear.

**Select Identity Type**

Determine the class of identity and a user that will manage its call answering behavior.

Select a communication system: NetVanta ECS

Select a user profile: John Roebuck

Select the class of identity:

- User**  
Creates a new identity typically associated with ucCompanion, a soft-phone or a hard-phone
- Ring group**  
Distributes calls to all members of the group simultaneously
- Attendant service**  
Creates a new identity that handles calls as an automated attendant or service (e.g. IVR, pre-screening, etc.)
- Hunt group**  
Distributes calls to members of the group sequentially based on availability

< Back   Next >   Cancel   Help

**Figure 15. Select Identity Type Menu**

- In the **Configure User Identity** menu, enter a display name for the user identity in the **Name** field (this field is automatically populated with the user profile you associated with the identity in the previous step), and enter the extension of the SIP mobility user in the **Address** field. Record the extension entered in the **Address** field. It will be used later when configuring on-site/off-site SIP mobility on the IP business gateway and Bria. Then, select **Next**. The **Configure SIP Authentication** menu will appear.

**User Identity**

**Configure User Identity**  
Determine the name, identity and default call answering behavior.

Name: John Roebuck

Address: 2005

Priority: 100

**Behavior**

Select the answering behavior to be associated with this identity. User identities can also be phantom: they do not have an associated end point.

- Phantom
- Voice Mail
- Receive Fax

< Back   Next >   Cancel   Help

**Figure 16. Configure User Identity Menu**

7. In the **Configure SIP Authentication** menu, enter the desired SIP authentication password for the SIP mobility user. Record the SIP authentication password. It will be used later when configuring the IP business gateway for on-site/off-site SIP mobility on or when configuring Bria for on-site only SIP mobility.
8. In the menu that appears, select **Finish** to create the new identity.

### Adding a New User and Identity on the NetVanta UC Server

If a user account for the SIP mobility user does not exist on the NetVanta UC Server, you must create a new user and configure the user identity's SIP authentication password. For instructions on creating a user using the New User Wizard, refer to the *Using the New User Wizard* section in the *NetVanta Enterprise Communications Server and Business Application Server Administrator Guide* available from the ADTRAN support community (<https://supportforums.adtran.com>).



*If a user account for the SIP mobility user already exists on the NetVanta UC Server, you only need to create an additional identity for the user on the NetVanta UC Server system. For instructions on creating an identity for a user, please refer to [Adding an Identity to an Existing User on the NetVanta UC Server](#) on page 17.*

When configuring the new SIP mobility user with the New User Wizard, the new user's identity must be associated with the **NetVanta ECS** communication system. This configuration is performed in the **User Information** menu of the New User Wizard. While in the **User Information** menu, enter the extension of the SIP mobility user account in the **Identity #** field, and select **NetVanta ECS** using the adjacent drop-down menu. Record the extension entered in the **Identity #** field. It will be used later when configuring on-site/off-site SIP mobility on the IP business gateway and Bria.

**Figure 17. User Information Menu**

After configuring the new SIP mobility user you must manually change the SIP authentication password for the user's identity and record this password. To manually change the SIP authentication password for the user identity, follow these steps:

1. Log in as an administrator to the NetVanta UC Client on the NetVanta UC Server computer.
2. On the **Admin** tab of NetVanta UC Client, select the **Administration** navigation bar, then select the **Identities** topic from the navigation pane.
3. In the **Identities** summary pane, double-click the identity assigned to the SIP mobility user you created. The **Identity** menu will appear.



*If the SIP mobility user's identity is not listed in the Identities summary pane, select **View** in the menu bar, and select **Display Identities for all Profiles** in the drop-down menu.*

4. In the **Identity** menu, select the **SIP Authentication** button. The **SIP Authentication** menu will appear.

Identity

General information

Display name: John Roebuck

Address: 2005

Priority: 100

Number of rings: 4

SIP Authentication...

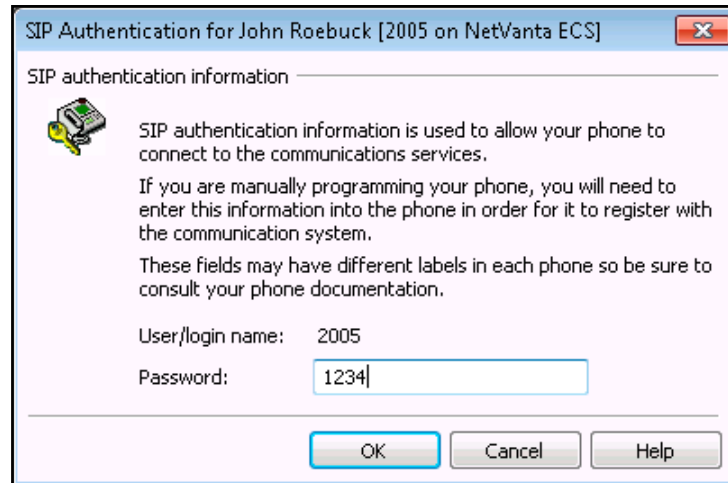
Call answering

Send caller to the Personal Assistant

OK Cancel Help

**Figure 18. Identity menu**

5. In the **SIP Authentication** menu, enter the desired SIP authentication password in the **Password** field. Record the SIP authentication password. It will be used later when configuring the IP business gateway for on-site/off-site SIP mobility or when configuring Bria for on-site only SIP mobility. Then, select **OK**.



**Figure 19. SIP Authentication menu**

6. Select **OK** in the **Identity** menu to save the new SIP authentication password for the SIP mobility user's identity.

## Step 2: Optional. Configure a SIP Mobility User on the IP Business Gateway

This section provides the user configuration settings on the IP business gateway that are required for on-site/off-site SIP mobility. The following steps must be completed for each SIP mobility user:

1. Open a new Web page in your Internet browser.
2. Enter your product's IP address in the browser's address field in the format **http://<ip address>**, for example:  
**http://10.10.10.1**
3. At the prompt, enter your user name and password and select **OK**. the IP business gateway's GUI will appear.



*The default user name is **admin** and the default password is **password**.*

4. In the GUI, navigate to **Voice > Stations > User Accounts**. The **Add/Modify/Delete Users** menu will appear.

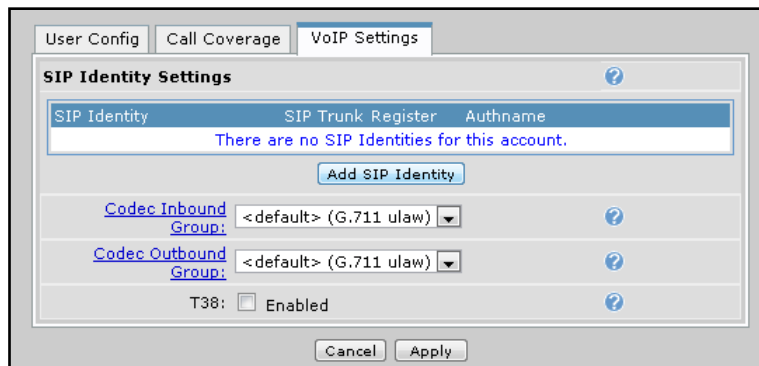
- In the **Add/Modify/Delete Users** menu, enter the **Extension**, **First Name**, and **Last Name** for the SIP mobility user account, and select **SIP** using the **Phone Type** drop-down menu. The **Extension** number used must be the same as the extension entered when you configured the SIP mobility user identity on the NetVanta UC Server (refer to, *Step 1: Configure a SIP Mobility User on the NetVanta UC Server on page 16*). Select **Apply** to apply the configuration settings and continue editing the user account. The **Edit User** menu will appear.

**Figure 20. Add/Modify/Delete Users Menu**

- In the **Edit User** menu, enter a SIP authentication password in the **SIP Auth Password** field. This is the SIP authentication password that the softphone will use to register with the IP business gateway. Record the SIP authentication password for later use when setting up Bria on the user's mobile device.

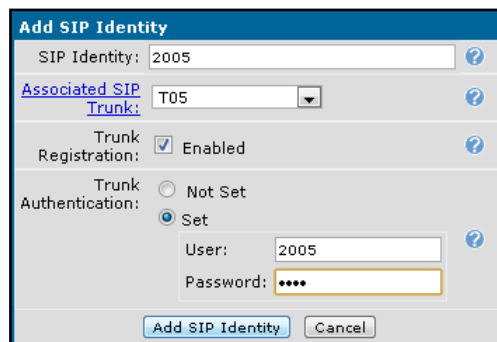
**Figure 21. Edit User Menu**

- In the **VoIP Settings** tab of the **Edit User** menu, select the **Add SIP Identity** button to add a SIP identity for the SIP mobility user. The SIP identity is used for registration with the NetVanta UC Server. The **Add SIP Identity** menu will appear.



**Figure 22. VoIP Settings Tab**

- In the **Add SIP Identity** menu, enter the SIP mobility user extension from *Step 5 on page 22* in the **SIP Identity** field. Use the **Associated SIP Trunk** menu to select the SIP trunk associated with the NetVanta UC Server. Select the **Enabled** check box next to **Trunk Registration** to allow the SIP user to register on the trunk. In the **Trunk Authentication** section, select the **Set** radio button, and enter the SIP mobility user extension in the **User** field. In the **Password** field, enter the SIP authentication password you configured for the SIP mobility user on the NetVanta UC Server (refer to *Step 1: Configure a SIP Mobility User on the NetVanta UC Server on page 16*). Then, select the **Add SIP Identity** button to add the SIP identity to the user. The **Add SIP Identity** menu will close.



**Figure 23. Add SIP Identity Menu**

- In the **Edit User** menu, select **Apply** to apply the user account configurations. Then, select **Save** at the top of the menu to save the configuration.

### Step 3: Optional. Configure the IP Business Gateway for On-site/Off-site SIP Mobility

On-site/off-site SIP mobility requires that the Remote Phone feature be configured on the IP business gateway. For more information on configuring the Remote Phone feature, refer to *Configuring Remote Phones with an AOS SIP Gateway*, available from the ADTRAN support community (<https://supportforums.adtran.com>).

During the remote phone configuration, for security purposes, you will add a UDP port with a non-standard port number. Record the UDP port number you choose (**25069** is the port number used in the document). It will be used later when configuring Bria. Additionally, you will specify the default and maximum SIP registration expires times. Record the default SIP registration expires time value you choose. It will be used later when configuring Bria.

The *Configuring Remote Phones with an AOS SIP Gateway* configuration guide also contains instructions for configuring SIP users for the remote phones in the section titled *Step 3: Configuring a SIP User for Each Remote Phone*. Because you previously created SIP users on the IP business gateway in *Optional. Configure a SIP Mobility User on the IP Business Gateway on page 21*, this step is not necessary. However, you must enable the remote phone option for each SIP mobility user you created using the IP business gateway's command line interface (CLI).

This step can only be accomplished using the CLI on your IP business gateway. To access the CLI on your IP business gateway and enable the remote phone option for each SIP mobility user, follow these steps:

1. Boot up the unit.
2. Telnet to the unit (**telnet** <ip address>), for example:

```
telnet 10.10.10.1
```



*If during the unit's setup process you have changed the default IP address (10.10.10.1), use the configured IP address.*

3. Enter your user name and password at the prompt.



*The AOS default user name is **admin** and the default password is **password**. If your product no longer has the default user name and password, contact your system administrator for the appropriate user name and password.*

4. Enable your unit by entering enable at the prompt as follows:

```
>enable
```

5. If configured, enter your Enable mode password at the prompt.
6. Enter the unit's Global Configuration mode as follows:

```
#configure terminal  
(config)#
```

7. Access the Voice User Account Configuration mode for the user using the **voice user** <extension> command from the Global Configuration mode prompt. For example:

```
(config)#voice user 5555  
(config-5555)#
```

8. Enter the **remote-phone** command from the Voice User Account Configuration mode to enable the remote phone option for the user. For example:

```
(config-5555)#remote-phone
```



9. Exit the Voice User Account Configuration mode for the user using the **exit** command. For example:

```
(config-5555)#exit
```

10. Repeat Steps 7 through 9 for each SIP mobility user you created in *Optional. Configure a SIP Mobility User on the IP Business Gateway on page 21*.

## Downloading and Configuring Bria on a Mobile Device

After you or your administrator have made the necessary configurations for SIP mobility on the system, you can download and configure Bria on your mobile device.

### Downloading Bria on an iOS Device

You can download the Bria iPhone Edition application or the Bria iPad Edition application using the application Store on your iOS device or iTunes on your computer.

### Downloading Bria on an Android Device

You can download the Bria Android Edition application using the Android Market on your device or *Google Play* on the Internet.

### Configuring Bria

The Android, iPhone, and iPad versions of the Bria application have slightly different interfaces; however, the configuration steps used are the same.

In the iPhone application and Android application (left and center figures below), there is a main **Settings** menu with buttons from which the various configuration menus can be accessed. The **Settings** menu can be accessed from any configuration menu by tapping the **Settings** button at the bottom-right corner of the screen. In the iPad application (right figure below), the **Settings** buttons are located on a persistent menu on the left side of the screen. The configuration instructions and menu illustrations in this section are derived from the iPhone application.

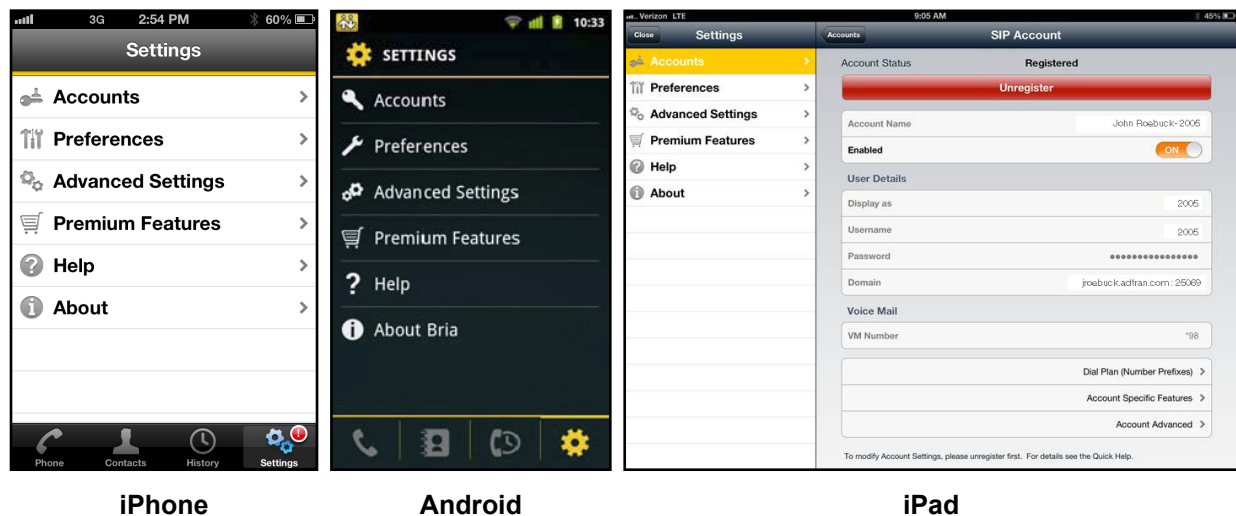


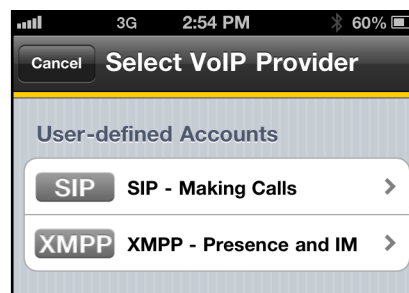
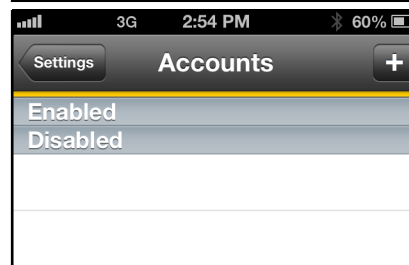
Figure 24. Bria Settings Menus

To configure Bria for SIP mobility on the iPhone, Android, or iPad, follow these steps:

1. Tap the Bria icon to start Bria.
2. If this is your first time running Bria, you will be presented with a menu prompting you to configure a new SIP account. On an iOS device, tap + to add an account. The **Select VoIP Provider** menu will appear. On an Android device, tap **Add Account**. The **Account Types** menu will appear.

If this is not your first time running Bria, you will be presented with the **Settings** menu. In the **Settings** menu, tap **Accounts**. The **Accounts** menu will appear. In the **Accounts** menu, tap + to add an account. The **Select VoIP Provider** (iOS) or **Account Types** (Android) menu will appear.

3. In the **Select VoIP Provider** (iOS) or **Account Types** (Android) menu, tap **SIP - Making Calls**. The **New SIP Account** menu will appear.

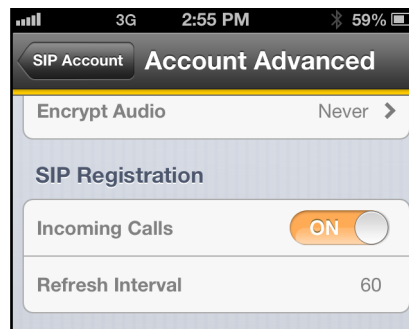


4. In the **New SIP Account** menu, perform the following steps:
- In the **Account Name** field, enter a description for the account.
  - In the **Display as** and **Username** fields, enter the SIP mobility extension created for the user during SIP mobility configuration on the system.
  - In the **Password** field, enter the SIP authentication password created for the user during SIP mobility configuration on the system.
    - If you are configuring either an on-site only or on-site/off-site SIP mobility user on a NetVanta 7100 or NetVanta BCS system, the SIP authentication password is the **SIP Auth Password** you created when configuring the SIP mobility user on the NetVanta 7100.
    - If you are configuring on-site only SIP mobility on a NetVanta ECS system, the SIP authentication password is the SIP authentication password you created when configuring the SIP mobility user on the NetVanta UC Server.
    - If you are configuring on-site/off-site SIP mobility on a NetVanta ECS system, the SIP authentication password is the **SIP Auth Password** you created when configuring the SIP mobility user on the IP business gateway.
  - In the **Domain** field enter one of the following:
    - For on-site only SIP mobility, enter the local area network (LAN) IP address of the NetVanta 7100 or IP business gateway.
    - For on-site/off-site SIP mobility, enter the wide area network (WAN) IP address and the UDP port number recorded during simple remote phone or remote phone configuration in the form *<IP address>:<UDP port>*.
  - Enable the account by sliding **Enabled** to the **ON** position.
  - In the **VM Number** field, enter the access code used to access voicemail on the system. For example, **\*98**.
  - Tap **Account Advanced**. The **Account Advanced** menu will appear.

The screenshot shows the 'New SIP Account' configuration interface. At the top, there are 'Cancel' and 'Save' buttons. The 'Account Status' is 'Not Registered' in red. A green 'Register' button is prominent. Below this, the 'Account Name' is 'John Roebuck - 2005'. The 'User Details' section includes 'Display as' (2005), 'Username' (2005), 'Password' (masked with dots), and 'Domain' (76.100.100.100:25069). An 'Enabled' toggle is currently set to 'OFF'. The 'Voice Mail' section shows 'VM Number' as '\*98'. At the bottom, there are expandable sections for 'Dial Plan (Number Prefixes)', 'Account Specific Features', and 'Account Advanced'. A note at the very bottom states: 'To modify Account Settings, please unregister first. For details see the Quick Help.'

5. In the **Account Advanced** menu, perform the following steps:

- In the **Refresh Interval** field enter the SIP registration expires time value recorded during the simple remote phone or remote phone configuration.
- If necessary, set the **SIP Transport** protocol to **UDP**.
- Then, tap **SIP Account** or use the back key (Android device) to return to the **New SIP Account** menu.



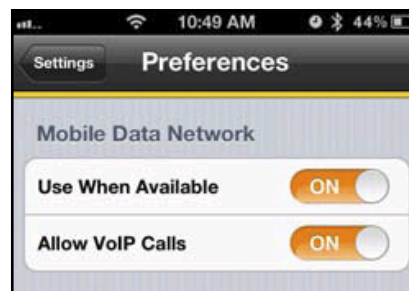
6. In the **New SIP Account** menu, tap **Save** (iOS) or use the back key (Android) to save the SIP account.

7. If you are configuring Bria for on-site/off-site SIP mobility, perform the following additional steps:

- Navigate to the **Settings** menu, and tap **Advanced Settings**. The **Advanced** menu will appear. In the **Advanced** menu, turn on **Use VPN If Active**. This setting is not available in Bria Android Edition.



- Optional. Navigate back to the **Settings** menu and select **Preferences**. The **Preferences** menu will appear. In the **Mobile Data Network** section, turn on **Use When Available**. This setting will allow you to use SIP mobility over your cellular data network. It should not be enabled if you only want to use SIP mobility over Wi-Fi networks.



8. The SIP account should now be fully configured and able to register and place calls.