

Mitel Connect Mobility Router Integration Guide for Mitel MiVoice Connect

September 30, 2019

Document and Software Copyrights Copyright © 1998-2015 by ShoreTel Inc., Sunnyvale, California, USA. All rights reserved.

Printed in the United States of America. Contents of this publication may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without prior written authorization of Shore Tel, Inc. Shore Tel, Inc. reserves the right to make changes without notice to the specifications and materials contained herein and shall not be responsible for any damage (including consequential) caused by reliance on the materials presented, including, but not limited to typographical, arithmetic or listing errors.

Trademarks

ShoreTel, ShoreTel (and logo), Brilliantly Simple, Brilliantly Simple Communication, ShoreTel Connect, ShoreTel Connect ONSITE, ShoreTel Connect HYBRID, ShoreTel Connect CLOUD, ShoreGear, and ShoreWare are registered trademarks of ShoreTel, Inc. in the United States and/or other countries. The ShoreTel logo is a trademark of ShoreTel, Inc. in the United States and/or other countries.

All other copyrights and trademarks herein are the property of their respective owners.

Patents

ShoreTel products are covered by patents as listed at http://www.shoretel.com/about/patents.html.

Version Information

ShoreTel Connect Mobility Router Integration Guide Date: September 28, 2015

Company Information ShoreTel, Inc.

960 Stewart Drive Sunnyvale, California 94085 USA +1.408.331.3300 +1.408.331.3333 (fax) www.shoretel.com

Table of Contents

Chapter 1	ShoreTel Connect Mobility Router Integration
	Introduction
	Hardware Requirements
	Configuring the ShoreTel Connect ONSITE
	Configuring Jitter Buffer 8
	Configuring Off-System Extensions
	Configuring Switch Resources
	Configuring SIP Proxies for Sites
	Configuring SIP Trunk Group for ShoreTel Connect Mobility Router 10
	Configuring DNIS Mapping 12
	Configuring Users on the PBX
	Setting Mobility Only Extension Profiles
	ShoreTel Directory Set Up 14
	Specify the Authorization Directory Servers
	Configuring the ShoreTel Connect Mobility Router
	General Parameters 15
	SIP Trunk Parameters
	Numbering Plan Parameters
	Configuring Access Numbers
	Configuring Groups 19
	Configuring Users
	References and Resources 21

CHAPTER

ShoreTel Connect Mobility Router Integration

This document describes integration of the ShoreTel Connect ONSITE with the ShoreTel mobility solution, and contains the following sections:

Introduction
Hardware Requirements
Configuring the ShoreTel Connect ONSITE
Configuring Jitter Buffer
Configuring Off-System Extensions
Configuring Switch Resources8
Configuring SIP Proxies for Sites 10
Configuring SIP Trunk Group for ShoreTel Connect Mobility Router 10
Configuring DNIS Mapping 12
Configuring Users on the PBX 13
Adding Enhanced Mobility Extension to Existing ShoreTel User Profiles 13
Setting Mobility Only Extension Profiles 14
ShoreTel Directory Set Up
Specify the Authorization Directory Servers 15
Configuring the ShoreTel Connect Mobility Router 15
General Parameters
SIP Trunk Parameters 16
Numbering Plan Parameters 17
Configuring Access Numbers 18
Configuring Groups 19

Configuring Users	20
References and Resources	21

Introduction

This section explains how the ShoreTel Connect Mobility Router integrates with the ShoreTel Connect ONSITE through SIP trunk and SIP device connections. The SIP trunks are used by the ShoreTel Connect Mobility Router to receive inbound calls placed by mobile devices to the ShoreTel Connect Mobility Router's hand-over numbers, and to place outbound PSTN calls on behalf of a mobile user or dialing a mobile user's cellular number directly. The SIP device connection represents each mobile devices as they are considered SIP endpoints in the ShoreTel Connect ONSITE. Features supported (as shown in Figure 2 on page 12) include: handover between Wi-Fi and cellular networks, call forwarding, three-way conferencing, music on hold, Secure Remote Voice, Secure Enterprise Services, remote over-the-air provisioning, simultaneous ring of the desk phone and dual-mode devices.





Hardware Requirements

- ShoreTel Connect Mobility Router
- ShoreTel Connect ONSITE
- Supported handsets
- ShoreTel IP desk phone
- Three DID numbers—one for handover, one for cellular access, one for reverse dial

Refer to the *ShoreTel Connect Mobility Router Platform Support Guide* for more information on supported handsets.

Configuring the ShoreTel Connect ONSITE

This section describes the configuration required on ShoreTel Connect ONSITE to integrate it with ShoreTel Connect Mobility Router. ShoreTel Connect ONSITE must be configured and fully operational.

Configuring Jitter Buffer

Jitter is the variation of latency across the network and the variation in packet processing inside the switches. To compensate for jitter, change the size of the receive jitter buffers to optimize voice quality.

If the jitter buffer is too small, there can be packet loss from buffer underflows. This occurs when the jitter buffer runs out of valid voice samples. If the jitter buffer is too large, there will be unnecessary latency. Both conditions have a negative impact on voice quality.

- 1. Launch ShoreTel Connect Director.
- 2. Click Administration > Features > Call Control > Options.
- 3. In the Maximum Inter-Site Jitter Buffer (msec) field, enter 300 to optimize voice quality for Wi-Fi networks.

Configuring Off-System Extensions

To access the ShoreTel Connect Mobility Router through the cellular network, the ShoreTel Connect Mobility Client calls the ShoreTel Connect Mobility Router's Access Number DID. The ShoreTel IP-PBX then routes the call to the ShoreTel Connect Mobility Router through a SIP trunk group. Three unique DID numbers are used by the ShoreTel Connect Mobility Router: an Access Number DID, a Handover Number DID, and a Reverse Dial DID. DID numbers are configured in the ShoreTel Connect Mobility Router.

These DID numbers are configured in the ShoreTel Connect Mobility Router with off-System Extension. To route the incoming call to the ShoreTel Connect Mobility Router, configure Off-System Extensions (OSEs) on the SIP Trunk Group used between the ShoreTel PBX and the ShoreTel Connect Mobility Router. Inbound calls received by the ShoreTel PBX are routed to the Off-System Extensions by configuring Dialed Number Identification Service (DNIS) Maps. A DNIS map for each DID Number must be created. Refer to *ShoreTel Connect Mobility Router Administration Guide* for more information.



Note

Configure ShoreTel Connect Mobility Router to associate the chosen OSEs with its cellular access numbers.

Configuring Switch Resources

The ShoreTel Connect Mobility Router requires switch resources that are configured on at least one ShoreTel voice switch.

Configuring Line-side Resources and Licenses

To support each Mobility user (user profile on a ShoreTel Connect Mobility Router), ShoreTel Connect ONSITE will use:

- One IP phone switch resource
- One Extension license
- One SIP proxy switch resource
- One SIP Phone license
- One mobile access license (for client functionality)
- One Mailbox license

The ShoreTel Connect Mobility Router will use:

- One End User license
- One Secure Remote Voice license

If a Mobility user also has a ShoreTel IP phone, ShoreTel Connect will use one additional IP phone switch resource.

	P
V	1

Note

ShoreTel Connect will not use an additional Extension license if the ShoreTel Connect user profile uses the "enhanced mobility with extension" option.

Configuring Trunk-side Resources and Licenses

For each concurrent cellular access call, ShoreTel Connect will use:

- One SIP Trunk license
- One SIP trunk switch resource

These resources are required for each cellular access call over a SIP trunk between the ShoreTel Connect Mobility Router and the ShoreTel Connect ONSITE. Additional resources will be used to manage the corresponding PSTN call. SIP trunk resources can be configured on one or more ShoreTel voice switches. SIP trunk requires one SIP trunk license. Each virtual trunk switch can support 500 SIP trunks.



Note

A ShoreTel Connect Mobility Client placing or receiving an enterprise-anchored PSTN call while on the cellular network requires one SIP trunk for each call.

The number of required SIP trunks may vary depending on your requirement. Further explanation as to how many SIP trunks required is explained in Configuring Individual Trunks on page 11. Refer to the *ShoreTel Connect Mobility Router Administration Guide* for more information.

Configuring SIP Proxies for Sites

- 1. Launch ShoreTel Connect Director.
- 2. Click Administration > System > Sites.
- 3. Choose the site that is used for the ShoreTel Connect Mobility Router integration.
- In the General tab, from the Proxy Switch 1 drop-down list, select the ShoreTel switch that hosts the SIP Proxy resources.
- 5. Optionally, enter a Virtual IP address value.

The ShoreTel Connect Mobility Router can only use one IP address for proxy services. If proxy services are configured on more than one ShoreTel Switch, then a "Virtual IP address" needs to be assigned and entered in this field. The virtual IP address is a real and unused IP address that is used by the ShoreTel Connect Mobility Router to utilize one or the other voice switch.



Note

To register the ShoreTel Connect Mobility Router at a specific site, there must be an entry in the IP Phone Address Map. If the ShoreTel Connect Mobility Router is not deployed at the headquarters site, its eth0 IP address must be in the same IP address range as other phones in the same site. The SIP proxy resources must be configured on switches in the same site as the ShoreTel Connect Mobility Router. For information on configuring switch resources, refer to Configuring Switch Resources on page 8.

Configuring SIP Trunk Group for ShoreTel Connect Mobility Router

- 1. Launch ShoreTel Connect Director.
- 2. Click Administration > Trunks > Trunk Groups > Trunk Groups.

The Trunk Groups page is displayed.

3. Click New.

The General tab in the details pane displays parameters for the new trunk group.

- 4. From the **Site** drop-down list, choose the site where the ShoreTel Connect Mobility Router is located.
- 5. From the Trunk type drop-down list, choose SIP.
- 6. In the Name field, enter ShoreTel Connect Mobility Router (or other appropriate name).
- 7. From the Profile drop-down list, choose Mobility Router.
- 8. From the Digest authentication drop-down list, choose None.
- 9. In the Inbound tab:

- **a.** Number of digits from CO: **10** (by default the ShoreTel Connect Mobility Router will send 10 digits)
- b. Uncheck DNIS.
- c. Uncheck DID.
- d. Select Extension.
- e. Leave Translation table, Prepand dial in prefix, and Use site extension prefix fields to their defaults.
- f. Select Tandem Trunking.
- **g.** Select a **User Group** to allow the calls to be presented to the PSTN. The user group assigned to Tandem Trunking (in the PSTN access trunk group) requires access to the ShoreTel Connect Mobility Router SIP trunk group.
- h. Leave the Prepand dial in prefix field to its default.
- 10. Click Outbound tab.
 - a. Select Outgoing check box.
 - b. Enter the Access Code for an outside line, for example 9.
 - c. Enter your Local Area Code, for example 408.
 - d. Uncheck all Trunk Services except Caller ID not blocked by default.
 - e. Under Trunk Digit Manipulation, uncheck all options.
 - f. Click Edit OSE link.
 - g. Add three extensions to be used as OSEs. These OSE extensions are used to route incoming calls from the PSTN to the ShoreTel Connect Mobility Router. When possible, set these three extensions to match the trailing digits of the three DID numbers that are used for the Access Number, Handover Number, and Reverse Dial Number. These OSE extensions are used later by a DNIS Map.
 - h. Click OK to save the OSE list.
- 11. Scroll down to right corner and click **Save** to save the new SIP trunk group.

Configuring Individual Trunks

- 1. Launch ShoreTel Connect Director.
- Click Administration > Trunks > Trunks to configure the appropriate number of trunks for your infrastructure.

The Trunks page is displayed.

3. Click New.

The General tab in the details pane displays parameters for the new trunk group.

- 4. From the Site drop-down list, choose the site where the new SIP Trunk Group was created.
- 5. From the Trunk Group drop-down list, choose the newly created SIP Trunk Group.
- 6. Click Save.
- 7. Enter a Name.
- **8.** From the **Switch** drop-down list, choose a ShoreTel voice switch that has allocated sufficient SIP Trunk resources.
- 9. In the IP address or FQDN field, enter the ShoreTel Connect Mobility Router's eth0 address.
- **10.** Enter the appropriate **Number of Trunks**.
- 11. Click Save.

If you want to configure SIP trunks between the ShoreTel Connect Mobility Router and more than one ShoreTel switch, make sure that you configure SIP trunk resources on each switch. For more information, see Configuring Trunk-side Resources and Licenses on page 9.

Configuring DNIS Mapping

Create a DNIS map that maps the received DID digits to the off-system extension to route incoming DID digits (10 digits in this example) to the OSE (4 digits in this example).





- 1. Launch ShoreTel Connect Director.
- 2. In the navigation pane, click Administration > Trunks > Trunk Groups.

Select the trunk group on which the DIDs are received. This will be the primary or main trunk group at your HQ site such as the "Main PSTN PRI" or "Main SIP trunk group" from the Telco.

3. Click Inbound tab.

- 4. Check the DNIS checkbox and click Edit DNIS link.
- 5. Click New to add DNIS map.
 - a. Select the trunk group from the Trunk group drop-down list.
 - b. Enter one of the access number DIDs in the Received digits filed.
 - c. Enter the Friendly DNIS Display.
 - d. From the Type drop-down list, choose the OSE that was previously defined,
 - e. In the Destination filed, enter the destination as one of the OSE.
 - f. Select music on hold from the Music on Hold drop-down list.
- 6. Add a DNIS map entry for the other two Access Number DID.
- 7. Click Outbound tab. Click Edit OSE link to see the OSEs configured on your system.
- 8. Click Save.

	2
6	

Note

Refer to Numbering Plan Parameters on page 17 for more information on configuring the ShoreTel Connect Mobility Router to properly receive and route these inbound DID numbers.

Configuring Users on the PBX

You must configure the users on the PBX to enable Mobility.

If users have desk phones in addition to ShoreTel Mobility-enabled mobile phones, you must add enhanced mobility extension to their user profiles and set the SIP phone password.

If users have only ShoreTel Mobility-enabled mobile phones, you must add user profiles, if you do not already have them, and set the SIP phone password.

Adding Enhanced Mobility Extension to Existing ShoreTel User Profiles

- 1. Launch ShoreTel Connect Director.
- 2. Click Administration > Users > Users.
- 3. Select a User.
- 4. In the Telephony tab.
- 5. Select Enable Enhanced Mobility with Extension. Select the extension displayed or enter another available extension.
- 6. In the General tab.

- Scroll down to the SIP Phone Password field. Enter a new SIP password. This password is used to configure the line-side password on the ShoreTel Connect Mobility Router in the PBX-Side Security > Digest Password field. Refer to Line Tab on page 21.
- 8. Select Save.

Setting Mobility Only Extension Profiles

- 1. Launch ShoreTel Connect Director.
- 2. Click Administration > Users > Users.
- 3. Select a User.

Select a user to be used with the ShoreTel Connect Mobility Client, or create a new user.

- 4. Enter the client username and password in the Client username and Client password fields.
- Enter a new SIP Phone Password. This password is used to configure the line-side password on the ShoreTel Connect Mobility Router in the PBX-Side Security > Digest Password field. Refer to Line Tab on page 21.
- 6. Click Save.



Note

Mobile users must belong to a group that enables **Allow Trunk-to-Trunk Transfer** in the Telephony Class of Service. ShoreTel desk phone users do not require access to the SIP trunks that ShoreTel Connect Mobility Routers use.

ShoreTel Directory Set Up

Complete the steps in the following sections to set up connection configurations between the ShoreTel Connect PBX and the ShoreTel Connect Mobility Router.



Tip

These steps are ideal for systems that have 100 or fewer mobility clients. If your system is larger than this, contact ShoreTel support for assistance configuring your ShoreTel directory using trusted server applications.

- 1. Launch ShoreTel Connect Mobility Router administration portal.
- 2. Click Configuration > System > Authentication > Directory.
- 3. Select Add.
- 4. Select ShoreTel Directory from the Server Type drop-down list.
- 5. Enter a Name.

- 6. Click Apply.
- 7. Specify the headquarters FQDN or IP address in the Server Address field.
- 8. Enter a system administrator's credentials in **Bind User** and **Bind Password** fields.

You can use the **Query** option to search for a known ShoreTel directory administrator user name and to verify that you can successfully access the ShoreTel directory.

- **9.** From the Security type drop-down list, choose **TLS** if you want a secure connection between ShoreTel Connect Mobility Router and ShoreTel Connect PBX.
- 10. Click Verify to verify the credentials against the server you specified in the Server Address field.
- **11.** When the verification process is complete and has passed, click **Sync ABC Keys** to sync authenticator public keys between the ShoreTel Connect Mobility Router and headquarters.

Specify the Authorization Directory Servers



Tip

Automatic user creation is not applicable to the ShoreTel directory.

- 1. Launch ShoreTel Connect Mobility Router administration portal.
- 2. Click Configuration > Groups and Users.
- **3.** Select the appropriate group, and then select the appropriate directory type and directory from the **External User Authentication/Authorization** drop-down list.
- 4. Click Next. Complete configuration as necessary, and then click Apply.

Configuring the ShoreTel Connect Mobility Router

This section describes the configuration required on the ShoreTel Connect Mobility Router to integrate it with ShoreTel Connect ONSITE.

General Parameters

- 1. Launch ShoreTel Connect Mobility Router administration portal.
- 1. Click Configuration > Voice > IP PBXs.
- 2. Click Add to view the General page.
- 3. In the Name field, type the name for the IP-PBX. For example, ShoreTel-interop.
- 4. Select ShoreTel from the Type drop-down list.

- Select North America Generic from the Numbering Plan Template drop-down list. Select the desired Numbering Plan, for example North America if the PBX resides in North America dropdown list.
- 6. To enable the use of registration on the IP-PBX, in the Line-Side Support area, check the Enable check box. By default, this option is selected.
 - **a.** In the **FQDN or IP Address** field, type the fully qualified domain name (FQDN) or IP address of the ShoreTel voice switch that acts as the SIP Device Proxy for the ShoreTel site.
 - b. In the Port field, enter 5060.
 - c. Leave other fields at their defaults.
- 7. Click **Next** to configure SIP Trunk parameters.

SIP Trunk Parameters

On the SIP Trunk tab, enter the following information.

- 1. In the **Name** field, type the name of the trunk. By default, a name is provided. It is the name you specified on the General tab, with -trunk appended to the name. The name can be up to 50 alphanumeric characters and can contain spaces, hyphens (-), and underscores (-).
- 2. In the **Description** field, type a description for the trunk. By default, a name is provided. It is based on the name that you specified on the General tab, with -trunk appended to the name.
- 3. In the Local SIP End Points area:
 - a. Verify the value of the eth0 Interface, as shown on the Interfaces page. This IP address is also entered as the destination IP address when you configure the SIP trunk on the IP-PBX.
 - **b.** Check **Use Alternate IP Address** if your network topology requires you to use a different IP address for the trunk connection than the interface default address.
 - c. In the Port field, enter 5060.
 - **d.** In the **SIP Domain Name** field, type the local domain name if you are using SIP domain name in your network. If you are not sure, leave this field empty.
- 4. In the **Remote SIP End Point** area, in the **IP Address or FQDN** field, type the IP address or FQDN of the ShoreTel voice switch that will host the SIP trunk group.
 - a. In the Port field, type the remote port number of the IP-PBX (default is 5060).
 - b. In the Transport list, select udp.
 - **c.** In the **SIP Domain Name** field, type the remote domain name if the PBX is using a SIP domain. If you are not sure, leave this field empty.
 - d. In the **Security** type area, select the **None** radio button.
- 5. Click Apply.

Numbering Plan Parameters

Refer to the *ShoreTel Connect Mobility Router Administration Guide* for detailed information on numbering plans.

- 1. Use the **Change Numbering Plan** hyperlink to select a different country if required. A popup window displays **Change Numbering Plan**.
- **2.** Add or modify the information in the following fields:
 - **a.** In the **Anonymous Caller ID** field, enter the phone number the ShoreTel Connect Mobility Router uses as the caller ID when it forwards an anonymous call to the mobile device while on a cellular network. The anonymous caller ID must be in the form of a valid PSTN number but does not need to be valid, such as 4085555555.
 - **b.** Enter the appropriate number in the **International Access Code** field. For example, for United States enter **011**, for Australia, **0011**.
 - c. In the Note field, enter a description as desired.
 - d. Enter the number in the Local Country Code field.
 - e. Enter the number in the National Code Number field.
- 3. Click Apply.
- Each specific extension range (Enterprise Extension Pattern) requires its own number plan parameter set. Select an existing numbering plan, and click Modify to view the parameter in Modify Parameter Set window, or click Add to add a new extension range.
 - Enterprise Country Code ("North America Generic" selection only)—1 for the US. For other countries, select your country code.
 - Enterprise Extension Pattern (EEP)—Pattern that defines a range of extensions within the enterprise. Example, 3XXX.
 - Enterprise Full Number Pattern (EFP)—("North America Generic" selection only)–Pattern that defines a range of full number (DID) within the enterprise. This does not include Enterprise Country code. Example, 4085553XXX.
 - Local area code (LAC)—Area code in which the ShoreTel Connect Mobility Router is located. LAC is not defined in some numbering plan templates (for example, France). A default value for the local area code (LAC) is applied to a numbering plan when it is first added. You must modify the LAC so that it is valid for your enterprise. For example, if you chose the North America numbering plan template when adding an IP-PBX, the default LAC value is 408. If the area code for the region in which the ShoreTel Connect Mobility Router is located, change the LAC value to the appropriate area code. In some countries, the local area code might also be known as city or dialing code.
 - Local exchange code (LEC)— The local exchange code (LEC) is the prefix to the enterprise extension pattern (EEP) to form a valid phone number. For example, for the phone number 9198000, the LEC is 919. A default value for the LEC is applied to a numbering plan when it is first added. Verify that the LEC value is correct for the area in which the ShoreTel Connect Mobility Router is located. Modify the LEC value if necessary.

- Numbering Plan Area Code (NPA)—First set of 3 digits, combined with the NPL (seven digits), that directs telephone calls to a particular region. For example, in the North American template, the NPA first digit must not include a 0 or 1 as this causes confusion with directing a call outside the country. The second digit must not include a 9. For example, 212 is valid, however 121 is not. Some numbering plan templates may not use this value, such as UK.
- Numbering Plan Local Number (NPL)—Second set of seven digits, combined with the NPA (three digits) that directs telephone calls to a particular region. For example, in the North American template, the NPL first digit must not include a 0 or 1 as this causes confusion with directing a call outside the country. For example, 2345678 is a valid telephone number, however 1234567 is not. Some numbering plan templates may not use this value, such as UK.
- Outside line access code (OLC)—Number that is prepended to phone numbers when end users place calls to phone numbers outside of the enterprise. This is also known as trunk access code. The default value for the OLC is 9. Modify this value if is not the number that your enterprise uses to place calls outside of the enterprise.
- 5. Click Apply to continue.
- 6. Click Advanced radio button to modify the details of the plan.
 - a. Choose Access Call Number Mapping from the Table drop-down list.

This table allows you to configure the ShoreTel Connect Mobility Router to translate numbers it receives over its SIP trunks to its Access Numbers (Cellular Access, Reverse Dial, and Handover).

- **b.** Click **Add**. Create a mapping from one of the ShoreTel PBX system extensions to the Cellular Access number,
- c. Click Apply.

The ShoreTel Connect Mobility Router is configured to recognize calls from mobility user devices for making and receiving calls while on cellular networks and for handing out calls from WiFi to cellular networks.

Configuring Access Numbers

Access Numbers are used to terminate calls made on the Cellular network into the Enterprise Access Number (on the ShoreTel Connect Mobility Router), anchoring the call through the enterprise PBX.

- 1. Launch ShoreTel Connect Mobility Router administration portal.
- 2. Click Configuration > Voice > Access Numbers.

The Access Numbers page is displayed.

- 3. Click Add.
- 4. In the Name field, type the name for the access number. The name can be up to 50 alphanumeric characters long and cannot contain special characters except for spaces, hyphens (-), and underscores (_).

- 5. (Optional) In the **Description** field, type a description for the access number.
- 6. In the VoIP Handover Number field, type the access number that the ShoreTel Connect ONSITE uses to hand over an active call from the cellular network to the Wi-Fi network. The ShoreTel Connect ONSITE dials the VoIP handover number when an active call needs to be handed over to a VoIP network.

Make sure that the phone number you specify is a unique phone number, with a valid area code, in your enterprise network. Using a unique phone number ensures that the ShoreTel Connect Mobility Router can identify that an active call needs to be handed over from a cellular network to a Wi-Fi network.

The phone number must also use the appropriate numbering format for the country in which the ShoreTel Connect Mobility Router is located. The ShoreTel Connect Mobility Router uses this phone number as the caller ID when the ShoreTel Connect Mobility Router calls the mobile device to deliver enterprise voice mail notification when the device is on the cellular network. If the phone number is not formatted correctly, the PSTN or cellular network might not deliver the caller ID correctly to the ShoreTel Connect ONSITE.

The phone number cannot contain spaces, hyphens (-), or parentheses [()].

An example of a VoIP handover number for a ShoreTel Connect Mobility Router located in the United States is +4089198000.

- In the Voice Mail Access Number field, type the extension number of the pilot number of the voice mail system, which is the enterprise extension that is dialed for users to access their voice mail.
- 8. In the **Mobile to Fixed Reverse Call Indicator** field, select **None** (will not show the reverse dial number caller ID).
- 9. For Default Cellular Access Numbers parameters:
 - a. Select Country.
 - b. Enter Access Number
 - c. Enter Reverse Dial Number
 - d. Enter Handover Number

Refer to Configuring SIP Trunk Group for ShoreTel Connect Mobility Router on page 10, Step 10g, ensure the Access Number, Handover Number, and Reverse Dial Number match the OSE extensions.

- 10. Click Apply.
- 11. Leave all Country Specific Cellular Access Numbers parameters at their defaults.

Configuring Groups

- 1. Launch ShoreTel Connect Mobility Router administration portal.
- 1. Click Configuration > Groups and Users > Groups.

The **Groups** page is displayed.

- 2. Click Add. The Add Group page is displayed, with the General tab active.
- **3.** In the **Name** field, type the name of the group. The group name can be up to 50 characters long and cannot contain special characters except for spaces, hyphens (-), and underscores (_).
- 4. In the IP PBX list, select the IP-PBX previously created (ShoreTel-interop)
- 5. Select a **Directory Search Group**, or create a new group by clicking **Add**. This is the company directory by which the ShoreTel Connect Mobility Router will search for an individual.
- 6. In the Access Numbers list, select the access number that users in this group use to access ShoreTel Connect Mobility Router services (ShoreTel-interop).
- 7. In the External User Authentication/Authorization filed, select ShoreTel directory. Select the directory created for authentication.
- 8. Click Next.

The Security and Options tabs need not be modified. Leave these parameters at their defaults.

Configuring Users

This section creates the user for the ShoreTel Connect Mobility Router. The fields on this tab are used in conjunction with the ShoreTel Connect Mobility Client settings.

This section creates the user for the ShoreTel Connect Mobility Router.

- 1. Launch ShoreTel Connect Mobility Router administration portal.
- 2. Click Configuration > Groups and Users > Users.

The Users page is displayed.

3. Click Add.

The Add User page is displayed.

4. In the **Group** list, select the group to which the user belongs.

ſ	
I	1
l	P

Note

When a user is created, it inherits all the properties of the group. Any subsequent user customization overrides the group settings. You can override remote-access and call routing options and security settings made for a user by using the "Apply to all existing users in this group" option on the Security and Options tabs for a group.

- In the User ID field, type the username of the user. If the user is authenticating with ShoreTel Directory/Active Directory/LDAP or RADIUS, this ID must match the User ID field on the corporate Active Directory or LDAP server.
- 6. In the Full Name field, type the name of the user.

- 7. Leave the Local User check box unchecked. Newly created user will be authenticated using ShoreTel Directory assigned in the User Group for the user.
- 8. To enable the user, select the **Enabled** check box. If you do not select Enabled, the user is not active on the ShoreTel Connect Mobility Router.
- 9. Click Next to configure the Line parameters.

Line Tab

On the **Line** tab, enter the information that aligns with the mobile user created on the ShoreTel Connect ONSITE.

- 1. Enter the **Enterprise Extension**. This is the primary enterprise extension of a user. This field is displayed as extension on user's mobile phone.
- 2. Enter the Full Enterprise number. Enter the user's DID. For North America, it is a 10 digit number.
- **3.** In the **PBX-Side Security** area, select **Digest**. You must specify a user ID and password. For mobility only extension, user ID must be enterprise extension, and password must be SIP password as defined in Setting Mobility Only Extension Profiles on page 14. For enhanced mobility extension, user ID must be enhanced mobility extension and password must be SIP password as defined in Adding Enhanced Mobility Extension to Existing ShoreTel User Profiles on page 13
- 4. In the Client-Side Security (Wi-Fi) area, select None.
- 5. In the Client-Side Security (Cellular) area, select None.
- 6. To save your changes, click Apply.

Devices Tab

In User options, update the **Maximum Number of devices allowed for the user** as required. The valid range is 1-5.

Other Tabs

The features on the Mobile Device, User Device, Calling Rules, Home Locations, and Options tab need not be modified. Leave these parameters at their defaults. Refer to the *ShoreTel Connect Mobility Router Administration Guide* for details on feature configuration information.

References and Resources

This completes the integration of the ShoreTel Connect Mobility Router with the ShoreTel Connect ONSITE. For more details on installation and complete usage instructions, refer to the following resources:

ShoreTel Connect Planning and Installation Guide

- ShoreTel Connect System Administration Guide
- ShoreTel Connect ONSITE Release Notes
- ShoreTel Connect Mobility Router Administration Guide
- ShoreTel Connect Mobility Router Platform Support Guide