BellCommander ShoreTel Configuration Guide

ShoreTel Configuration

1. Configure ShoreTel to use multiple RTP ports.   Open ShoreTel Director in a web browser and select Call Control…|Options.   In the Options, uncheck "Always Use Port 5004 for RTP" if it's checked:

2. If ShoreTel is configured with multiple sites, make sure that the IP address range includes the BellCommander server's IP address.   To do this, select IP Phones|IP Phone Address Map. Then, edit the corresponding site where BellCommander is located and update the IP range if the BellCommander server's IP address is outside the range.   If there is only a single site, then an IP range isn't required to be defined.

3. Configure a ShoreTel switch to provide the SIP proxy service. Select Platform Hardware|Voice Switches/Service Appliances and select Primary. Then, select the switch that will provide the SIP service. Then, select an available port and set the port type to "100 SIP Proxy".

4. Configure the site's SIP proxy.   Select Sites and then click the site's name to edit its settings.   In the settings for the site, update the following settings under "SIP Proxy":

Virtual IP Address: Enter an available IP address.   The SIP proxy will operate on a separate IP address than the main ShoreTel server. In the example below, the ShoreTel server was at 192.168.2.85 and 192.168.2.84 was available and it was set as the SIP proxy. This address should be noted, since it will be entered in BellCommander.

Proxy Switch 1: Select the switch where the SIP proxy was added.

Proxy Switch 2: Optionally select a second switch for redundancy

5. Create a new user for BellCommander to use. Select Users|Individual Users. Then, add a user with the following settings:

First Name: BellCommander

Last Name: Outbound1

First and last name can be changed.   For the last name, for a simple naming scheme, we recommend "Outbound" followed by a number for the extension.   "Outbound1" would be for the BellCommander first extension to call outbound for paging/bells.   If audio/bells will be scheduled simultaneously to different extensions/groups, then additional users should be added (ex. Outbound2) to allow BellCommander to page out using two different extensions/lines at the same time. For emergency notification and paging, additional "Inbound" extensions should be added.

Number: The extension number. This will be entered in BellCommander.

Client Username: Should be the same as the extension number

SIP Password: Enter a password for the extension.   This will also be entered in BellCommander.

ShoreTel®

Director

Build 18.8.6604.0
Logoff Administrator

Administration
- **Users...**
  - o **Individual Users**
  - o **User Groups**
  - o **Class of Service**
  - o **Anonymous Telephones**
  - o **Extension Lists**
  - o **Batch Update Utility**
  - o **Call Handling Mode Defaults...**
- **Trunks...**
- **IP Phones...**
- **Platform Hardware...**
- **Call Control...**
- **Voice Mail...**
- **Auto-Attendant Menus**
- **Workgroups**
- **Schedules**
- **Communicator...**
- **System Directory**
- **Application Servers...**
- **SIP Servers...**
- **Sites**
- **System Parameters...**
- **Preferences**

Maintenance
- **Quick Look**
- **Connectivity**
- **Voice Mail Servers**
- **Make Me Conferencing**
- **Audio / Web Conferencing**
- **IM**
- **Event Filters**
- **HQ Event Log...**
- **HQ Services**

☑ Accept Broadcast Messages

☑ Include in System Dial By Name Directory

☐ Make Number Private

Fax Support: User - Redirect ▼

Allow Video Calls: None ▼

☑ Allow Telephony Presence

☐ Shared Call Appearances

    Associated BCA: [   ]

☐ Allow Use of Soft Phone

☐ Allow Phone API

☐ Allow Mobile Access

☐ Delayed Ringdown

    ⦿ Extension: [   ] Search

    ○ External Number: [   ] (e.g. 9+1 (408) 331-3300)

    Ringdown Delay: [   ] sec

Client Username: [500   ]

Client Password: [••••••••] [••••••••]

Voice Mail Password: [••••] [••••]   ☑ Must Change On Next Login

SIP Password: [••••••••] [••••••••]

Email Address: [BHeadquarters@changeme.com]

Conferencing Settings:

    Appliance: <None> ▼

Instant Messaging Settings:

6. Add the extension to BellCommander:
    a. Open BellCommander and click the Devices button to open the Device Manager.
    b. Select "SIP Destinations" for the Sound Device Type.
    c. Check "Enable SIP Destinations"
    d. Enter the SIP Server IP. This should be the SIP proxy that was added in step 4.
    e. Click the Apply button.
    f. Click the Add… button under BellCommander SIP Extensions.
    g. In the Add SIP Extension window, enter the following:
       SIP User ID/Extension: Enter the extension number that was added to ShoreTel
       Extension Password: Enter the password for the extension
       Local Port Number: Can use the default value, unless special configuration is needed to work around local firewalls or other application.
    h. After adding the extension, the status should change to "Registered".   If not, double check the settings or view the BellCommander logs (Options|View Log Folder)
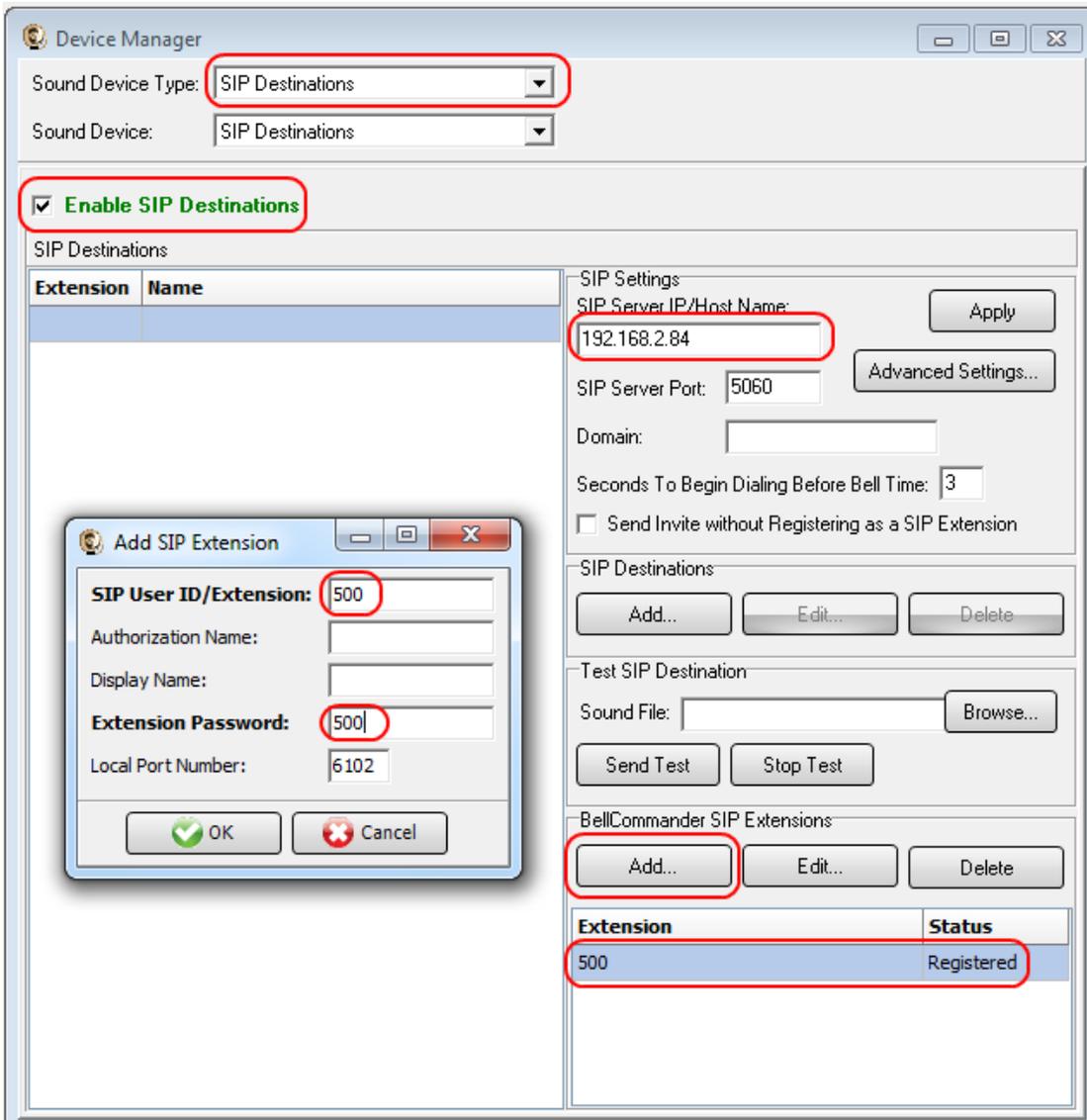
7. After the extension is registered, it should appear in the IP phone list in ShoreTel. Select IP Phones|Individual IP Phones.   Then, look for the SIP extension that BellCommander registered and note the name.

8. Assign the phone to the user.   Select Users|Individual Users. Then, select the BellCommander user that was added.   Check the Primary Phone Port and make sure that it is set to "IP Phones". Then, select the SIP phone registered by BellCommander if it's not selected by default.

Configuring Paging Groups:

BellCommander can call paging groups at scheduled times to page to groups of phone.   To set BellCommander to page to a group of phones, first add a paging group to ShoreTel if one is not already available.

To create a paging group, first add an extension list in ShoreTel. Select Users|Extension Lists.   Then, add a new extension list.   Assign the phones that should receive the page to the extension list. Multiple extension lists/paging groups may be configured for BellCommander.   For example, a school may have a group with all phones and other groups for different grades or buildings. Make sure not to add the BellCommander extensions to the extension lists.

Then, create a paging group by selecting Call Control|Paging Groups.   For the new paging group, use the following settings:

Name: Add any name to help identify the group in ShoreTel
Extension: The extension that will be dialed for the paging group
Group Paging Server: Should typically be the server where the SIP paging gateway resides
Enable Priority Paging/Speakerphone: Will send pages through the speakerphones
Group Paging Synchronization Delay: Can be set to 1 to minimize delay.

Finally, add the group as a SIP Destination in BellCommander.   Click Add under SIP Destinations and enter the paging group extension and a name to identify the group/zone by in BellCommander. After adding the group try sending a test .WAV audio file.   Click the Browse button, select a WAV audio file, then click the Send Test button.   The phones in the group should first beep for the page and the sound should follow approximately 2-3 seconds later.
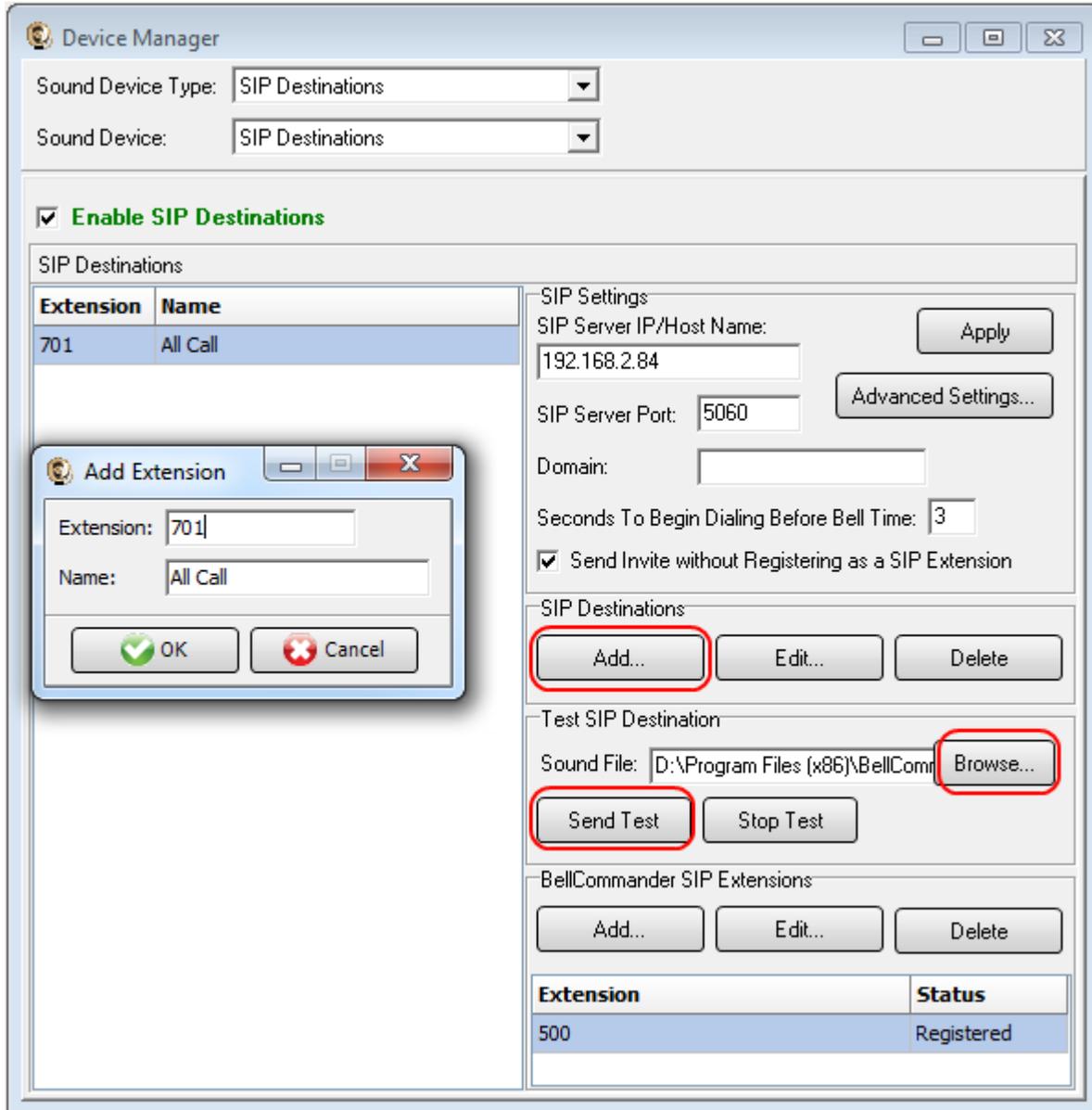
Configuring Emergency Notification:

BellCommander also allows users to call into BellCommander to trigger emergency notifications.   The user would pick up a phone that is allowed to call into BellCommander, call a SIP extension registered by BellCommander, and enter the emergency code followed by the # key.

To configure emergency notification, follow the ShoreTel Configuration steps 1-4 if a SIP destination was not added to configure the ShoreTel system for SIP.

Then, follow the steps below to add the SIP extension:

1. Follow step 5 in the SIP Configuration to add a new user.   For the last name, use "Inbound1" for the first inbound extension.
2. Add the SIP extension to BellCommander:
   a. Open BellCommander and click the Devices button to open the Device Manager.
   b. Select "SIP Extensions" for the Sound Device Type.
   c. Check "Enable SIP Extensions"
   d. Enter the SIP Server IP, which should be the ShoreTel SIP Proxy IP configured in step 4 of the ShoreTel configuration.
   e. Click the Add… button under Local SIP Extensions and enter the following information in the Add Local SIP Extension window:
      SIP Extension: The extension number that was added to ShoreTel
      Extension Password: The SIP password for the extension in ShoreTel
      Map to Zone: Should be left unselected for emergency notification, but can be used for paging for directly paging to a zone with multicast devices or Barix devices.
      Play Sound on Connect: Optionally play a WAV audio file to the user's phone when BellCommander answers
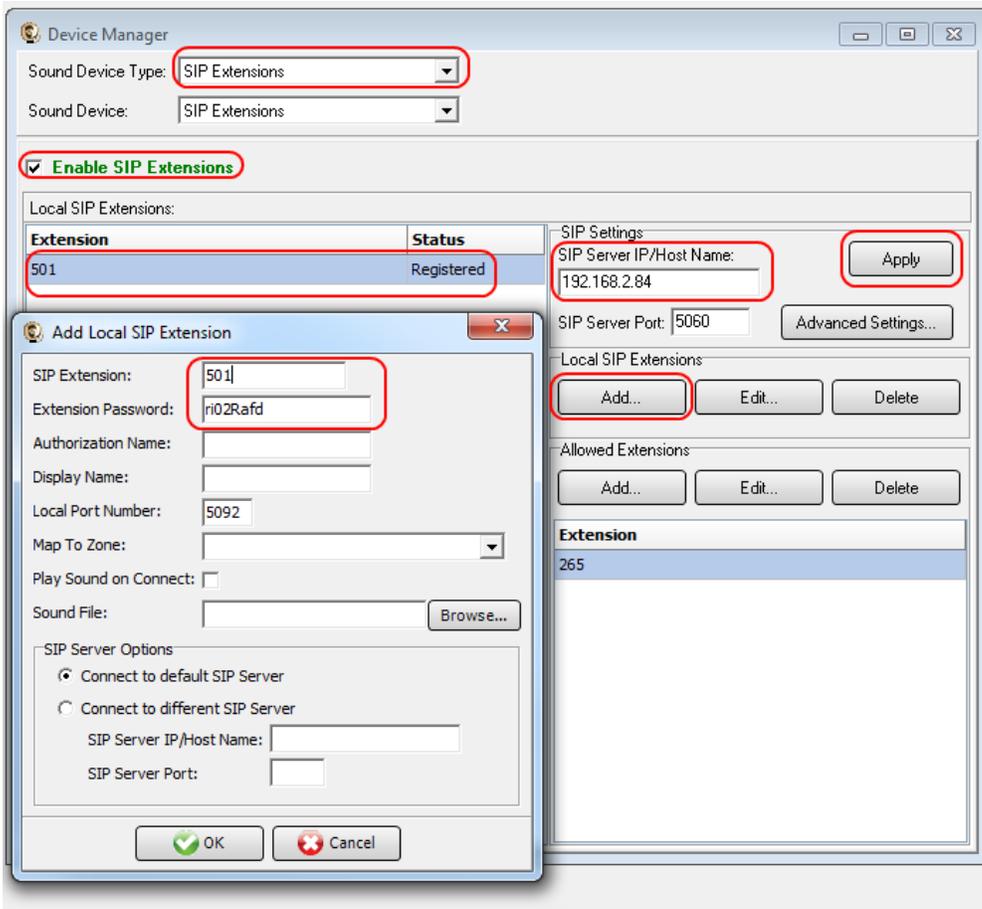
3. Click the Add button under Allowed Extensions and add the extension numbers that will be allowed to call into BellCommander. The SIP license that was purchased controls the maximum number of allowed extensions.

4. Configure the notification in BellCommander with a SIP code and update the actions, if necessary. To determine which code will be used for a notification, add or edit a notification. The "SIP Code" is the numeric code that users should enter from a phone for the notification. In the notification actions, edit the actions if necessary to change the zone. By default, notifications will play through the sound card zone, but the zone can be changed to a SIP destination or zone with multicast or other devices.
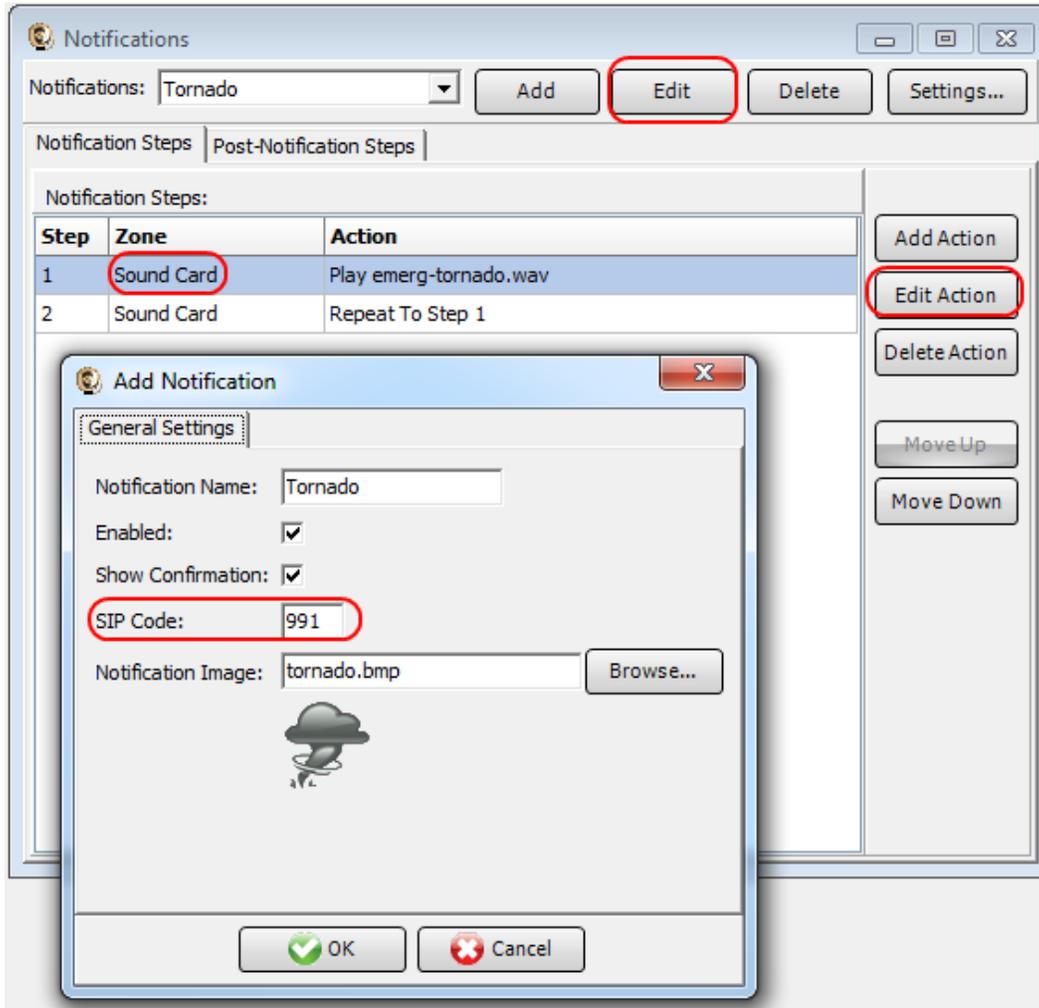
5. Test the notification. To test the notification, first test it by clicking the notification button in the BellCommander window. The notification button should change to a red color when activated. The button can be clicked a second time to de-activate. If the notification functions as expected, try triggering it from a phone. Use a phone in the Allowed Extensions list and call the inbound extension that was registered under SIP Extensions. BellCommander should then answer. Once BellCommander answers, enter the code followed by the # key (ex. 991#). To de-activate the notification by phone enter 999#.