

# Synapse® Administrator's Guide





# **POPULAR TOPICS**

Click any of these shortcuts to get to one of these frequently used topics.

- "Setting Call Forward All and Call Fwd-NA (No Answer)" on page 11
- "Accessing the Administrator WebUI" on page 30
- "Configuring the Auto Attendant" on page 42
- "Configuring Line Appearance" on page 92
- "Configuring Ring Groups" on page 100
- "Updating Devices" on page 158.



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# **PREFACE**

The Synapse Administrator's Guide provides instructions for installing and setting up your Synapse system with software version 3.1.2 or later. See *page 34* for instructions on checking the software version of Synapse devices.

We recommend that you make one person the system administrator. The administrator will be responsible for controlling the system-wide features described in this guide.

#### This guide:

- provides instructions on customizing, maintaining, and expanding the Synapse system
- assumes that Synapse devices are installed, connected, and operating
- assumes that you are familiar with Deskset features and menu navigation.

Before using this AT&T product, please read "Appendix C: Important Safety Instructions" on page 225. Please read this guide thoroughly for all the information necessary to install and operate your new AT&T product.



For customer service or product information, contact the person who installed your system. If your installer is unavailable, visit our web site at <a href="https://www.telephones.att.com/smb">www.telephones.att.com/smb</a> or call 1 (888) 916-2007. In Canada, dial 1 (888) 883-2474.

## **Additional Documentation**



Downloadable copies of all Synapse documents, including user's guides, installation instructions and quick-start guides, are available at www.telephones.att.com/synapseguides.



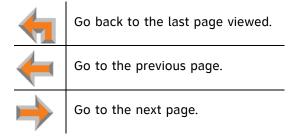
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## **Topic Navigation**

This Synapse Administrator's Guide features easy navigation between topics and the ability to return to your original topic.

Text in blue indicates a link to another page in the document. **Bold text in blue** indicates a hyperlink to an external web site.

You can also click the arrows at the bottom of the page to move around this document.



## **Text Conventions**

Table 1 lists text formats and describes how they are used in this guide.

**Table 1. Description of Text Conventions** 

Text Format	Description	
Screen	Identifies text that appears on a device screen or a WebUI page in a title, menu, or prompt.	
HARD KEY or DIAL-PAD KEY	Identifies a hard key, including the dial-pad keys.	
CallFwd	Identifies a soft key.	
[PSTN], [T1], [ATA], [Handset], [Headset]	Identifies information about devices and capabilities beyond the basic configuration of a Gateway and Desksets.	
Line Appearance mode T1 Gateway	Text in the left-hand margin identifies a step or paragraph that applies to a specific configuration or Synapse device.	
Notes provide important information about a feature or procedure.	Example of a Note.	
A caution means that loss of data or caution unintended circumstances may result.	Example of a Caution.	

8



Preface

CHAPTER

1

# **GETTING STARTED**

This chapter gets you started with configuring the Deskset using the Deskset's **Admin Settings** menu. The **Admin Settings** menu allows you to change extension settings at the Deskset itself.

Some of the functions described in this chapter are duplicated in the Web User Interface (WebUI) described in the next chapter, but if you need to assign static IP addresses, they must be set at each device.

#### This chapter covers:

- "Deskset Admin Settings" on page 10
- "Setting Call Forward All and Call Fwd-NA (No Answer)" on page 11
- "Fwd/Trans to Outside Line" on page 13
- "IP Settings" on page 14
- "Reset User Password" on page 17
- "Upgrade Deskset Software" on page 18
- "Set Time and Date" on page 19
- "Copy/Replace Deskset" on page 20
- "Copy/Replace Gateway" on page 24
- "Call Queue Announcement" on page 27.



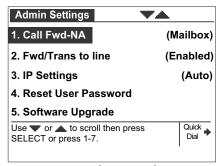
## **Deskset Admin Settings**

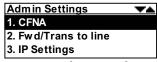
You can use the Deskset Admin Settings to set up the system features described in Table 2. The WebUI also provides an interface for setting up your system. See "Using the WebUI" on page 28.

#### To display the Admin Settings menu:

- 1. On the Deskset, press MENU and then 3.
- Enter the Admin password, and press SELECT.
   The Admin Settings screen appears, as shown in Figure 1.

The default Admin password is **12345**. To change this password, see "To view or modify the System Basic Settings:" on page 39.





SB67030/031 Deskset

SB67020/025 Deskset

Figure 1. Admin Settings Screen

The Admin Settings menu contains the items listed in Table 2.

Table 2. Admin Settings Menu

Menu Item	See
Call Fwd-NA [030/031] CFNA [020/025]	page 11
Fwd/Trans to line	page 13
IP Settings	page 14
Reset User Password	page 17
Software Upgrade	page 18
Set Time and Date	page 19
Copy/Replace Deskset	page 20
Call Appearance mode only—Call Queue Announcement	page 27



## Setting Call Forward All and Call Fwd-NA (No Answer)

Call Forward All and Call Forward-No Answer redirect incoming calls. Once a call is forwarded, it cannot be answered by the original extension. Call Forward All settings override the Call Forward-No Answer Settings.

Call Forward All is a user setting to redirect calls in Call Appearance mode only. Calls are immediately redirected to the assigned phone number, extension, voicemail, Auto Attendant, or Ring Group; the calls cannot be answered at the Deskset.

The Deskset does not ring but a message screen appears to confirm that the call was forwarded. The Deskset does not record the call in its Call Loq. When the Deskset forwards calls to an external number, your company phone number is used as the caller ID. Users set Call Forward All in the WebUI or by pressing CallFwd [030/031] or MENU -> 1 -> 6 [020/025] when the Deskset is idle.

Call Forward–No Answer is an administrator setting to handle unanswered calls. By default, all calls are forwarded to Voicemail after they ring for 15 seconds. You can change the target destination to another extension or to an outside phone number, Auto Attendant, or Ring Group, or you can turn off call forwarding when there is no answer. You can change the delay to a number between 5 and 45 seconds. The Call Forward All setting on a Deskset overrides the system administrator's Call Forward-No Answer setting for that Deskset.

Line Appearance mode only—You can set a Call Forward–No Answer destination for each PSTN line. See "Configuring Line Appearance" on page 92. When the system is in Line Appearance mode, you can also set an Intercom CFNA setting. This setting applies to Intercom calls or to external calls when a PSTN line Call Forward-No Answer setting forwards the incoming external call to an extension. See "To set up Call Forward-No Answer:" on page 12.



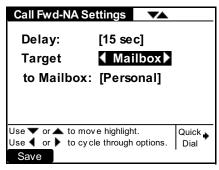
Calls transferred to outside lines use two telephone lines or T1 channels. You can limit the duration of calls transferred to outside lines with the **Timer for** Forwarded and Transferred Outside Calls setting. See "Changing the System Basic Settings" on page 39.

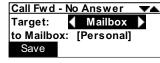
You can also disable Call Forward / Transfer to Outside Telephone Number individually for each extension. See "Fwd/Trans to Outside Line" on page 13. If Call Forward / Transfer to Outside Telephone Number is disabled, you cannot change the target destination to an outside phone number.



#### To set up Call Forward-No Answer:

- 1. Access the Admin Settings menu:
  - a. Press **MENU**, and then press **3** on the dial pad.
  - b. Enter the Admin password, and press **SELECT**.
- 2. Press 1 on the dial pad to display the Call Forward-No Answer Settings. In Line Appearance mode, the **Intercom CFNA** settings appear.





SB67030/031 Deskset

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- 3. Press  $\triangleleft$  or  $\triangleright$  to select a target:
  - **Mailbox**. Press  $\nabla$  and select the mailbox to which you want your calls forwarded.
  - **Ext**. Press  $\nabla$  and enter a valid extension in the **to Ext**: field. Analog telephones connected through the ATA are eligible as targets.
  - **Phone**#. Press  $\nabla$  and enter a valid phone number. This number must include a number for external line access if your dial plan requires it for an outside call. Before you can save this setting, "Fwd/Trans to Outside Line" must be enabled (see "Fwd/Trans to Outside Line" on page 13). An error message appears if you enter a restricted number and press Save (see "Call Restriction Settings" on page 115).
  - **AutoAtt.** Press  $\nabla$  and select an Auto Attendant.
  - **RingGrp**. Press  $\nabla$  and select a Ring Group.



If your system has no Ring Groups, this option does not appear.

- **OFF**. Calls will not be forwarded. Go to Step 6.
- 4. Press  $\triangle$  to highlight **Delay**.
- 5. Press  $\triangleleft$  or  $\triangleright$  to adjust the delay time in five-second increments.
- 6. Press Save to accept the change and display the Admin Settings menu.



**Call Appearance mode only—**If Call Forward All is on, these settings do not apply. The user can enable Call Forward All and set the Call Forward All target NOTE at the Deskset.

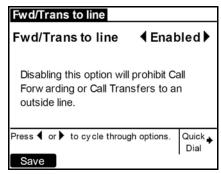


## Fwd/Trans to Outside Line

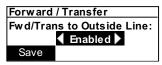
You can enable or disable the ability of each Deskset to forward or transfer a call to an outside line. These features use two of your telephone lines. This function is enabled by default. Disabling this function prohibits the user from sending a call to an outside line via the Gateway.

#### To enable or disable Forward/Transfer to an outside line:

- 1. Access the **Admin Settings** menu:
  - a. Press MENU, and then press 3 on the dial pad.
  - b. Enter the Admin password, and press **SELECT**.
- 2. Press **2** on the dial pad to display the **Forward/Transfer to line** screen.







SB67020/025 Deskset

- 3. Press  $\triangleleft$  or  $\triangleright$  to select **Enabled** or **Disabled**.
- Press Save to accept the changes and return to the Admin Settings menu.



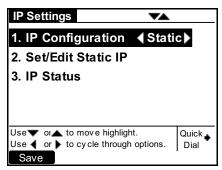
If Call Fwd–NA is set to ◀ Phone# ▶ , setting Forward/Transfer to line to Disabled causes a warning message to appear, warning you that Call NOTE Forward–No Answer is now set to OFF.

## **IP Settings**

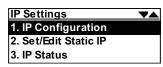
Synapse system devices are connected to a LAN so they can communicate with each other. See "IP Addresses and Connectivity" in the Synapse Installation Guide for a discussion of the Synapse network configuration and IP settings.

#### To display the IP Settings screen:

- 1. Access the Admin Settings menu:
  - a. Press **MENU**, and then press **3** on the dial pad.
  - b. Enter the Admin password, and press **SELECT**.
- 2. Press 3 on the dial pad to display the IP Settings screen.







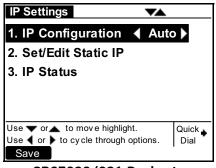
SB67020/025 Deskset

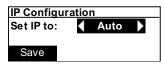
- 3. Do one of the following:
  - a. Press **1** to select **IP Configuration**. See "To set the IP Configuration:" on page 14.
  - b. Press **2** to select **Set/Edit Static IP**. See "To set and edit static IP Address:" on page 15.
  - c. Press 3 to select IP Status. See "To view the IP status:" on page 16.

#### To set the IP Configuration:

- Access the Admin Settings menu:
  - a. Press **MENU**, and then press **3** on the dial pad.
  - b. Enter the Admin password, and press **SELECT**.
- 2. Press **3** on the dial pad to display the **IP Settings** menu. On the SB67030/031 Deskset, go to Step 4.
- 3. On the SB67020/025 Deskset, press 1 to select IP Configuration.
- 4. Press  $\triangleleft$  or  $\triangleright$  to select **Auto** or **Static**.







SB67030/031 Deskset

SB67020/025 Deskset

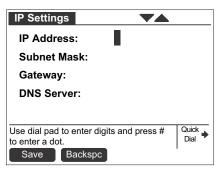
5. Press Save to accept the changes and return to the **Admin Settings** menu.

## **Set/Edit Static IP**

If your business requires a static IP address, you can enter static IP info at each Deskset.

#### To set and edit static IP Address:

- 1. Access the Admin Settings menu:
  - a. Press MENU, and then press 3 on the dial pad.
  - b. Enter the Admin password, and press **SELECT**.
- 2. Press 3 on the dial pad to display the IP Settings screen.
- 3. Press 2 to display the Static IP Edit screen.





SB67030/031 Deskset

4. Enter digits:

- The number field is limited to 12 digits (not including dots).
- On SB67030/031 Desksets, pressing the pound key (#) inserts a dot. On SB67020/025 Desksets, pressing
   "." inserts a dot.
- 5. Press  $\triangle$  or  $\nabla$  to move to another field.
- 6. Press Save to accept the changes and return to the **Admin Settings** menu.

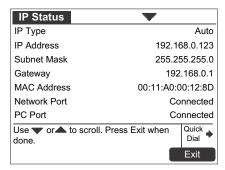


#### **IP Status**

The IP Status screen is for informational purposes only.

#### To view the IP status:

- 1. Access the **Admin Settings** menu:
  - a. Press **MENU**, and then press **3** on the dial pad.
  - b. Enter the Admin password, and press **SELECT**.
- 2. Press 3 on the dial pad to display the IP Settings screen.
- 3. Press 3 to display the IP Status screen.



SB67030/031 Deskset

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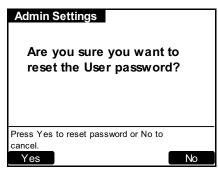
- 4. Press  $\triangle$  or  $\nabla$  to view status entries that are not shown on screen.
- 5. Press **Exit** to return to the **Admin Settings** menu.

### **Reset User Password**

Having a user password is not required. If users forget their passwords, or you want to eliminate the need for a password, or to enter a new user password, you need to reset the user password.

#### To reset the user password:

- 1. Access the Admin Settings menu:
  - a. Press MENU, and then press 3 on the dial pad.
  - b. Enter the Admin password, and press **SELECT**.
- 2. Press 4 to begin the password reset process. The confirmation screen appears.



Reset User Password
Are you sure you want to reset your User password?
Yes
No

SB67030/031 Deskset

SB67020/025 Deskset

3. Press Yes to confirm password reset.

A screen appears, informing you that the password has been reset.

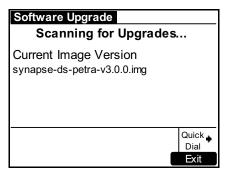
You can now access the settings menus and Voicemail without entering a password.

## **Upgrade Deskset Software**

You can upgrade Deskset software from the Deskset or using the WebUI. To update the Deskset software from the WebUI, see "Updating Devices" on page 158.

#### To access the Deskset Software Upgrade feature:

- 1. Access the Admin Settings menu:
  - a. Press MENU, and then press 3 on the dial pad.
  - b. Enter the Admin password, and press **SELECT**.
- 2. Press 5 to display the Software Upgrade screen. The system scans for an upgrade.



Software Upgrade
Scanning for upgrades...
synapse-ds-67020-v3.0.0.img

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- If an upgrade is available, the **Found New Version** screen appears. Press

  Upgrade to install the upgrade or press Exit to return to the Admin Settings menu.
- If no upgrade is available, the **No New Version** screen appears. Press to return to the Admin Settings menu.



If the device is sluggish or unresponsive during the upgrade process, see "A Synapse device becomes sluggish or unresponsive during or immediately after software upgrade." on page 185.

The Deskset automatically resets at the end of the software upgrade process. If a PC is connected to the Deskset that you are using, any network traffic involving that PC halts until the Deskset has resumed operation. Avoid updating the Deskset when the user is likely to be at the workstation.

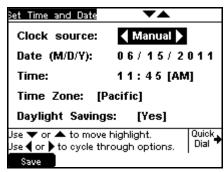


### **Set Time and Date**

You can set the system time and date using a Deskset. To set the system time and date from the WebUI, see "System Basic Settings" on page 36.

#### To set the System time and date:

- 1. Access the Admin Settings menu:
  - a. Press MENU, and then press 3 on the dial pad.
  - b. Enter the Admin password, and press **SELECT**.
- 2. Press 6 to display the screen shown below.



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- 3. Press < or > to select the Clock source. You can set the system time to follow a Network Time Protocol (NTP) Server (recommended) or you can set the time and date manually.
  - If you select **NTP Server**, the manual time and date settings disappear from the screen. Ensure that you have configured the NTP Server on the WebUI. See "Changing the System Basic Settings" on page 39.
- 4. If you select **Manual**, use the dial-pad keys and press  $\triangleleft$  or  $\triangleright$  and  $\nabla$  or  $\triangle$  to manually set the Date, Time, Time Zone and Daylight Savings.
- 5. Press Save to return to the Admin Settings menu.

## **Copy/Replace Deskset**

Use the Copy/Replace Deskset feature when you need to replace an old Deskset with a new "out of the box" unit. To replace an old Deskset with a new Deskset, first use the Copy function to copy settings from the old Deskset to the replacement Deskset. Once the settings are copied, you can disconnect the old Deskset and then use the Replace function to assign the extension number from the old Deskset to the replacement Deskset.



The Copy/Replace feature is also available on the WebUI. For more information, see "Copying and Replacing Devices" on page 156.

## **Copying a Deskset**

The Copy function copies the following items from an old Deskset to a new Deskset added to the system:

- Programmable Feature Keys
- Calls: New Missed Calls, New Messages, Redial, Call Log
- Messages and Lists: Voicemail messages, Personal Directory, Quick Dial, Voicemail Distribution Lists
- Deskset Settings: Display, Sounds, Preferred Audio Mode
- User Settings: Greetings, Call Forward All, Name Recording, Auto Answer
- Admin Settings: CFNA, Fwd/Trans to Line, User Password, Call Queue Announcement.

#### To copy a Deskset:

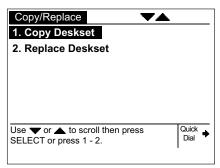
1. Ensure the Deskset to be copied is powered and connected to the Synapse network.



If the Deskset to be copied cannot power up and connect to the Synapse network, then only a Deskset Replace will be possible. See "Replacing a Deskset" on page 22. Unless a backup file exists, all settings will be lost.

- 2. Connect the new Deskset to the system. It will join the site and be assigned a new extension number.
- 3. On the new Deskset, access the Admin Settings menu:
  - a. Press MENU, and then press 3 on the dial pad.
  - b. Enter the Admin password, and press **SELECT**.
- 4. Press 7 to display the Copy/Replace menu.



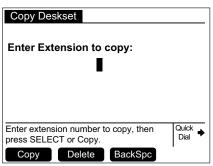






SB67020/025 Deskset

5. On the Copy/Replace menu, highlight Copy Deskset (if necessary) and press **SELECT**. The **Copy Deskset** screen appears.



SB67030/031 Deskset

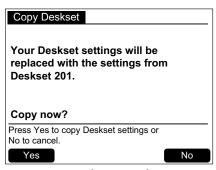


SB67020/025 Deskset

6. On the Copy Deskset screen, enter the extension number that you want to copy, then press **SELECT** or **Copy** .



If possible, select an identical model deskset to copy. Programmable feature CAUTION keys and quick-dial settings are not restored if you replace a SB67030/031 Deskset with a SB67020/025 Deskset, or replace a SB67020/025 Deskset with a SB67030/031 Deskset.



SB67030/031 Deskset

Your settings will be replaced with those from Deskset 201. Copy now? Yes

SB67020/025 Deskset

7. On the confirmation screen, press Yes to proceed, or No

The message Copy in progress... appears. When the copying process is complete, the phone restarts.

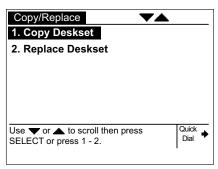


## Replacing a Deskset

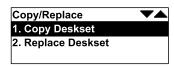
After you have copied the settings from the old Deskset to the new Deskset (see "Copying a Deskset" on page 20), you can disconnect the old Deskset. To assign the extension number from the old Deskset to the new Deskset that will replace it, use the Replace feature.

#### To replace a Deskset:

- 1. Disconnect the network cable from the Deskset you want to replace.
- 2. On the new Deskset, access the **Admin Settings** menu:
  - a. Press MENU, and then press 3 on the dial pad.
  - b. Enter the Admin password, and press **SELECT**.
- 3. Press 7 to display the Copy/Replace menu.

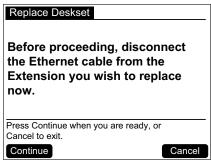


SB67030/031 Deskset

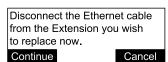


SB67020/025 Deskset

4. On the Copy/Replace menu, highlight Replace Deskset and press SELECT. The Replace Deskset screen appears.



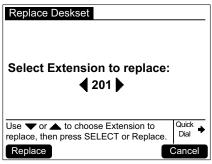
SB67030/031 Deskset



SB67020/025 Deskset

5. Follow the instructions on the screen, and then press **Continue** . The **Replace Deskset** screen appears.







SB67030/031 Deskset

SB67020/025 Deskset

- 6. Select the Deskset extension you want to assign to the Deskset you are configuring and then press Replace .
- 7. On the confirmation screen, press Yes to proceed, or No to cancel.
- 8. If you press Yes , the message Please wait... appears, followed by Replace complete. The Deskset now has the extension number you selected earlier.

## Copy/Replace Gateway

Use the Copy/Replace Gateway feature when you need to replace an old PSTN Gateway with a new "out of the box" unit.



The Copy/Replace feature is also available on the WebUI. For more information, see "Copying and Replacing Devices" on page 156.

To replace an old Gateway with a new Gateway, first use the Copy function to copy settings from the old Gateway to the replacement Gateway. These settings include all the existing Auto Attendant voice prompts. Once the settings are copied, you can disconnect the old Gateway and then use the Replace function to assign the old Gateway's device ID to the replacement unit.

In addition, the Replace function transfers the assignment of PSTN line numbers from the old Gateway to the replacement Gateway. For example, when the new Gateway is first connected to a system that has an existing PSTN Gateway assigned lines 1 to 4, the new Gateway is automatically assigned lines 5 to 8. After removing the old Gateway and using the Replace function to transfer its device ID to the new Gateway, the new Gateway is assigned lines 1 to 4.



The Copy Gateway and Replace Gateway features are available only on the PSTN Gateway.

## **Copying a Gateway**

The Copy function copies the following settings from one Gateway to the Gateway you are currently configuring:

- Appearance mode and Line Appearance settings
- Auto Attendant names, managers, tree structure and menus
- Auto Attendant user prompts
- Auto Attendant schedule
- Assigned Operator set
- Timer for Forwarded and Transferred Outside Calls
- System Time settings
- Extension prefixes and dial plan settings

- Ring Group definitions
- Call Oueue
- Call Restriction Configuration
- Paging Zones
- Hold settings
- System Directory
- Trunk Reservations
- Trunk Routing
- Trunk Naming
- Voicemail to email settings.

The following items are not copied:

- The extension list
- The assignment of line numbers to the PSTN lines.



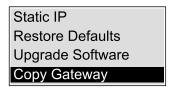
#### To copy a Gateway:

1. Ensure the Gateway to be copied is powered and connected to the Synapse network.

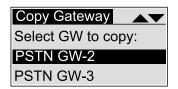


If the Gateway to be copied cannot power up and connect to the Synapse network, then only a Gateway Replace will be possible. See "Replacing a NOTE Gateway" on page 26. Unless a backup file exists, all settings will be lost.

- 2. Connect the new PSTN Gateway to the system. It will join the site and be assigned line numbers.
- 3. On the front panel of the new Gateway, press **SELECT**.
- 4. Press the down arrow button to highlight Configuration and press SELECT.
- 5. Highlight Copy Gateway and press SELECT.



6. On the Copy Gateway screen, select the Gateway you want to copy, and then press SELECT.



7. On the next screen, press **SELECT** to begin the copying process.



The message Copy in progress... appears. When the process is complete, the message Copy complete. Rebooting... appears. After the Gateway reboots and the idle screen appears, you can start the Replace function as described below.



## Replacing a Gateway

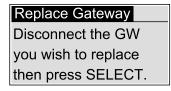
After you have copied the settings from the old Gateway to the new Gateway (see "Copying a Gateway" on page 24), you can disconnect the old Gateway. To assign the device ID and line assignments from the old Gateway to the new Gateway that will replace it, use the Replace feature.

#### To replace a Gateway:

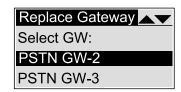
- 1. Disconnect the network cable from the Gateway you want to replace.
- 2. On the front panel of the new Gateway, press **SELECT**.
- 3. Press the down arrow button to highlight Configuration and press SELECT.
- 4. Highlight Replace Gateway and press SELECT.



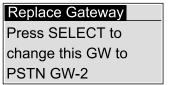
5. Follow the instructions on the Replace Gateway screen, and then press SELECT.



If the system detects a disconnected Gateway, the following screen appears.



- 6. On the Replace Gateway screen, highlight the Gateway you want to replace, and then press **SELECT**.
- 7. On the confirmation screen, press **SELECT**.



The message **Replace in progress...** appears. When the process is complete, the message **Replace complete. Rebooting...** appears. When the Gateway reboots and returns to idle mode, it has the line assignments from the Gateway it replaced.



## **Call Queue Announcement**



This setting applies to Call Appearance mode only.

You can use the Deskset instead of the WebUI to record a Call Queue Announcement up to two minutes long. This announcement will be heard by callers waiting in the Call Queue. For more information on the Call Queue feature, see "Call Queue Settings" on page 59.

**Call Queue Announcement** appears in the Admin Settings menu only if Call Queue is enabled. If Call Queue is disabled, this menu item does not appear.

#### To record a Call Queue announcement:

- Access the Admin Settings menu:
  - a. Press MENU, and then press 3 on the dial pad.
  - b. Enter the Admin password, and press **SELECT**.
- 2. Press 8 to display the Play/Rec Announcement screen.



SB67030/031 Deskset



SB67020/025 Deskset

- 3. Pick up the handset and press **Record** . If you want to record your announcement using the speakerphone, simply press **Record** .
  - The Record soft key changes to the Stop soft key while you record.
- 4. Press Stop when you are finished recording.

Recording stops automatically if the two-minute limit is exceeded.

- 5. You can now press:
  - Play to review the recording.
  - Delete to delete the recording.
  - [030/031] Exit or [020/025] CANCEL to save the recording and return to the Admin Settings menu.



CHAPTER

2

# **USING THE WEBUI**

The WebUI allows you to configure Synapse devices and the Synapse system. The WebUI is embedded in every Gateway, Deskset, and optional SB67050 Analog Terminal Adapter (ATA). When you access the WebUI, you are accessing it on the device, not on the Internet.

This chapter describes how to access the WebUI and configure basic settings for the Synapse system. The remaining WebUI menus and settings are covered in following chapters. This chapter covers:

- "The Web User Interface (WebUI)" on page 29
- "Accessing the Administrator WebUI" on page 30
- "Changing the Appearance Mode" on page 37
- "Changing the System Basic Settings" on page 39
- "Recording Voice Prompts and Greetings" on page 41.



## The Web User Interface (WebUI)

The WebUI opens in your Web browser and has editable settings that allow you to administer the system and each Synapse device. These pages include:

- "System Settings" on page 33
- "Extension Settings" on page 111
- "PSTN Gateway Settings" on page 128
- "ATA Settings" on page 130
- "SIP Gateway Settings" on page 134
- "T1 Gateway Settings" on page 143
- "Expansion Module Settings" on page 146
- "Device Management" on page 147
- "Help" on page 163.

Please register your Synapse system to keep your system up to date with the latest upgrades and ensure timely warranty support. See "Product Registration" on page 164.



The feature descriptions and sample pages in this chapter demonstrate a system that includes optional devices. Your Deskset screens and WebUI pages may be different. For example, if your system does not include the ATA, the Fax Configuration, Group Mailbox, Overhead Paging, and ATA Settings items do not appear in the WebUI menu.

## **WebUI Overview**

If two Synapse devices are connected to the LAN, and as long as one Synapse device is currently on the same subnet as a PC, you can use the WebUI to administer the system. Only one person should log on as system administrator at a time to prevent accidentally overwriting and losing intended changes.

Any PCs used for configuring the WebUI must be connected to the same IP subnet as devices they will manage, or to other subnets that the PCs can communicate with. Confirm either that all devices are connected to the same router, or that the first three octets of the IP address are the same for all system devices. The Gateway displays its IP address in the Idle mode as shown in Figure 2. To determine the Deskset IP address, press **MENU** then **4** on the Deskset dial pad to display the **Deskset Information** screen.



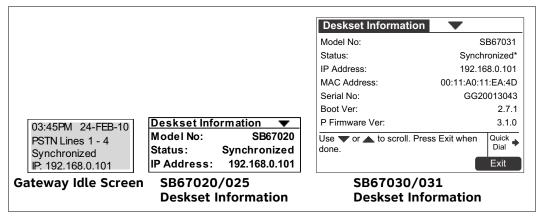


Figure 2. Device IP Addresses



In most cases there are multiple settings on one page. Changing a setting does CAUTION not instantly apply the new value. Click Apply on the WebUI to save all changes on that page.



Changes made on the WebUI are transmitted to all connected devices when applied. If changes are being made at the Deskset and WebUI simultaneously, a first-come-first-served policy on resource allocation applies. System configuration changes are transmitted globally when the session ends, either by pressing Save on the Deskset or clicking Apply on the WebUI.

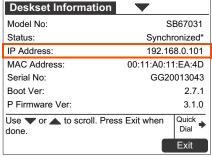


WebUI information for individual users is contained in the "Web Interface" chapter of the SB67020/025 Deskset User's Guide and the SB67030/031 Deskset and Accessories User's Guide at www.telephones.att.com/synapsequides.

## Accessing the Administrator WebUI

#### To access the WebUI and log on:

- 1. Ensure your computer is connected to the same IP subnet as the Synapse system. You can connect your computer to the PC port on the back of a Deskset.
- 2. On the Deskset, press MENU and then 4. The Deskset Information screen appears.



SB67030/031 Deskset

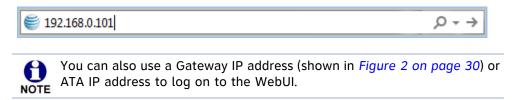
Deskset Information Model No: SB67020 Status: Synchronized IP Address: 192.168.0.101

SB67020/025 Deskset

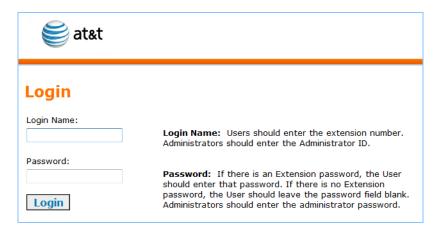
3. Find the IP address on the **Deskset Information** screen.



- 4. On your computer, open an Internet browser.
- 5. Type the Deskset **IP Address** in the browser address bar and press **ENTER** on your computer keyboard.



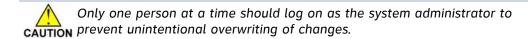
The Login page appears.



6. Enter admin in the Login Name field and 12345 in the Password field, then click Login. You can change your Admin ID and password once you have logged on.

Click topics from the navigation list on the left side of the WebUI to see them. You view and change settings in two different types of fields: drop-down lists and entry fields into which you type information. For your security, the WebUI times out after 10 minutes. If it is idle for that time, you must log on again.

The remaining procedures in this chapter assume that you have already logged on to the WebUI as administrator.





## **Error Handling**

If you type an invalid value into one of the WebUI fields and click Apply, the page is not saved. The WebUI displays an error message at the top of the page. The field with the incorrect value is highlighted in yellow. You can view a more detailed error description by resting your mouse pointer on the highlighted field.



## **System Settings**



When making changes to the System Settings through the WebUI, ensure that CAUTION no one is using the system. You might need to make the changes after normal office hours.

The System Settings consist of:

- "System Information and WebUI Menus" on page 34
- "System Basic Settings" on page 36
- "Configuring the Auto Attendant" on page 42
- "Call Queue Settings" on page 59
- "Call Restriction Configuration" on page 62
- "Dial Plan Settings" on page 64
- "Direct Inward Dial" on page 77
- "Fax Configuration (Requires ATA)" on page 80
- "Configuring Group Mailboxes (Requires ATA)" on page 83

- "Configuring Hold/Park Settings and Music on Hold" on page 88
- "Overhead Paging Overview (ATA Required)" on page 93
- "Creating, Editing and Deleting Paging Zones" on page 98
- "Configuring Ring Groups" on page 100
- "System Directory" on page 104
- "Trunk Naming" on page 105
- "Trunk Reservation (Outgoing Calls)" on page 106
- "Trunk Routing (Incoming Calls)" on page 108
- "Voicemail to Email" on page 109.



T1 Gateway, SIP Gateway, and ATA settings and features are only available in the WebUI when those devices are installed.



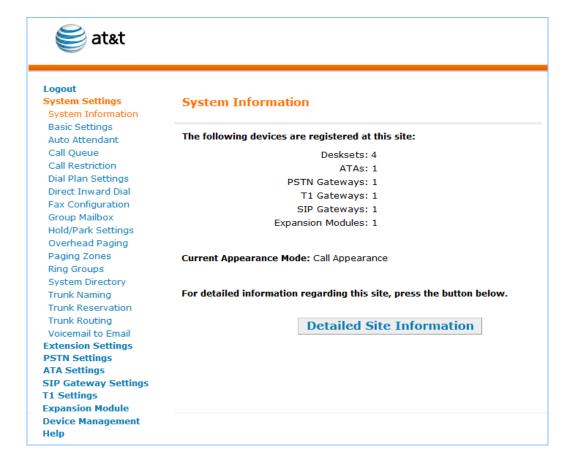
## **System Information and WebUI Menus**

The **System Information** page displays the count of Desksets, Gateways, and the ATA. The information on this page depends on which Synapse devices are installed.

You can also expand the **System Information** page to display **Detailed System Information**, which lists information specific to each installed device (such as the **IP Address** and **Software Version**).

#### To view System Information:

Log on as administrator. See "Accessing the Administrator WebUI" on page 30.
 The System Information page appears.





#### **To view Detailed System Information:**

1. On the **System Information** page, click **Detailed Site Information**. Information specific to each installed device appears. There may be a delay as the system gathers this information.



The Connected column indicates whether or not the listed device is synchronized with the system, so that communication can occur.  ${f No}$  means the device is registered with the system, but not currently powered on or detected.

		Detailed	Site Informat	ion	
ANALOG T	ERMIN	IAL ADAPTERS		МО	DEL: SB6705
				Software	
Device ID		MAC Address	IP Address	Version	Connected
ATA (202,	203)	00:11:A0:17:99:FD	192.168.0.126	3.1.0	Yes
PSTN GAT	EWAY!	s		MOD	EL: SB67010
Device ID		Lines Connected	IP Address	Software Version	Connected
PSTN GW-	1	1,2,3	192.168.0.125	3.1.0	Yes
		_,_,_			
T1 GATEW	AYS				DEL: SB6706
Device ID		Trunk Status	IP Address	Software Version	Connected
T1 GW-1		Up	192.168.0.129	3.1.0	Yes
SIP GATE\			IP Address	Software Version	Connected
SIP GW-1			192.168.0.200	3.1.0	Yes
EXPANSIO	N MOI	DULES		МО	DEL: SB6708
Device ID		MAC Address	IP Address	Software Version	Connected
EM-1 (200	)	00:11:A0:29:8B:44	192.168.0.111	3.1.0	Yes
DESKSETS	1				DEL: SB67xx
	ODEL	Name	IP Address	Software Version	Connected
Ext Number N		Graham Bell	192.168.0.64	3.1.0	Yes
Number N	20	Granam Beil			
Number N	20	Angela Martin			No
Number No. 200 00 201 00			192.168.0.88	3.1.0	No Yes



## **System Basic Settings**

The System Basic Settings include configuring the appearance mode and setting the system time and date. To begin configuring the System Basic Settings, see "Changing the System Basic Settings" on page 39.

## **About Appearance Modes**

You can configure the Synapse system to operate in one of two appearance modes: Call Appearance mode and Line Appearance mode. The appearance mode affects how Deskset users make, answer, and manage calls. Each mode provides a unique set of configurable features.

## **Call Appearance Mode**

In Call Appearance mode, each Deskset has virtual "lines" (5 on SB67030/031 Desksets, and up to 10 on SB67020/025 Desksets) for calls to and from external numbers (232-555-0176, for example) or other extensions (Extension 220, for example). These virtual lines are called Call Appearances.

Systems using Call Appearance mode can have any combination of up to 4 PSTN Gateways, one T1 Gateway, one SIP Gateway, and an optional ATA. In Call Appearance mode, SB67030/031 Desksets can have SB67040 Cordless Handsets and TL7600 Cordless Headsets.

### **Line Appearance Mode**

In Line Appearance mode, each line that Deskset users can access corresponds to an actual physical line connected to the PSTN Gateway. Incoming lines are mapped to programmable feature keys on Desksets. Users can make and receive calls only on lines that have been assigned to their Desksets. You can assign different lines to different Desksets or groups of Desksets. You can configure SB67020/025 Desksets to access up to 9 lines and SB67030/031 Desksets to access up to 4 lines.

Other Desksets in the system can share these lines and display the line status. Incoming calls on a line ring at all Desksets that share that line. Users at Desksets that share lines can see when lines are ringing, busy, or on hold.

By default, one programmable feature key on each Deskset is reserved for internal "Intercom" calls, so that users can call other extensions. By default, the Intercom key is the bottom Programmable Feature key on the SB67020/025 Deskset and the fifth key on the SB67030/031 Deskset. However, you can configure additional Intercom keys. See "SB67020/025 Deskset Programmable Feature Keys (PFKs)" on page 120 and "SB67030/031 Deskset Programmable Feature Keys (PFKs)" on page 125.

Systems using Line Appearance mode must use PSTN Gateways only. An optional ATA is also compatible with Line Appearance mode. A system using Line Appearance mode does not support the T1 Gateway, SIP Gateway, Call Queue, and some Deskset-specific features, including Call Forward All and Cordless Handset registration.

In Line Appearance mode, SB67030/031 Desksets cannot use SB67040 Cordless Handsets, although TL7600 Cordless Headsets are compatible with Line Appearance mode.



### Changing the Appearance Mode



Changing appearance mode has a significant impact on Synapse system features and Deskset operation. The appearance mode should be changed only once during system installation. If you must change the appearance mode, do so when all calls are idle (after office hours, for example), and inform all Deskset users of the change.

Before changing the appearance mode, you should consider how your system will be affected.

### Changing from Call Appearance Mode to Line Appearance Mode



The T1 Gateway and SIP Gateway are not compatible with Line Appearance mode. If your system uses a T1 Gateway and/or SIP Gateway, before changing the appearance mode, disconnect the T1 Gateway and SIP Gateway and delete them from the system. See "Deleting Devices" on page 147.

After changing from Call Appearance mode to Line Appearance mode, the following features are disabled and disappear from the WebUI:

- Call Queue
- Direct Inward Dial
- Dial Plan Default Routing Priority and Dialing Rules
- T1 Gateway settings
- SIP Gateway settings
- Park Extension prefix Trunk Reservation and Call Parking

### In addition:

- Call Forward All settings are disabled on Desksets.
- Desksets lose the "Forward to Voicemail" option for incoming external calls.
- Desksets cannot screen calls—a user cannot listen to a voicemail message as it is being recorded.
- Cordless handset accessories deregister from Desksets and remain disabled when the system is in Line Appearance mode. TL7600 Cordless Headsets remain registered in Line Appearance mode.

After changing from Call Appearance mode to Line Appearance mode, you should log on to the WebUI and:

- Name the incoming PSTN lines for display on SB67030/031 Desksets. See "Trunk Naming" on page 105.
- Assign lines to Deskset programmable feature keys. By default, PSTN Gateway lines 1 to 4 will be assigned to programmable feature keys 1 to 4 on all Desksets. If you have additional PSTN Gateways, you will have to manually assign lines to Desksets. See "SB67020/025 Deskset Programmable Feature Keys (PFKs)" on page 120 and "SB67030/031 Deskset Programmable Feature Keys (PFKs)" on page 125.
- Check your PSTN fax line configuration. If you have a PSTN fax line connected to a Gateway, this line may have been automatically assigned to programmable feature keys on some Desksets. If you do not want a shared fax/voice line, then delete this line from the Desksets.



If you want the fax line to be used for voice calls as well, you can assign the fax line to Deskset programmable feature keys. Ensure that your users are aware that incoming voice calls on this shared fax/voice line will ring at Desksets after an 8-second delay. This delay is a fax detection period during which the system determines where to route the call. If the system detects incoming fax tones, it routes the call through the configured ATA FXS port to the fax machine. During the delay, the Desksets indicate that the line is in use—the key LEDs are solid red. If no fax signal is detected after 8 seconds, the Desksets ring.

- Set the Call Forward–No Answer destination for each line. See "Configuring Line Appearance" on page 92.
- Reconfigure Trunk Routing, if you want to use Trunk Routing in Line Appearance mode. See "Trunk Routing (Incoming Calls)" on page 108.
- Ensure that System Directory entries are formatted correctly. If you used a number for external line access in Call Appearance mode, you must remove it from the phone numbers in System Directory entries. In general, numbers stored in lists on Desksets (the Redial list, for example) may not work for outside calls after switching to Line Appearance mode.
- Review the system configuration and extension settings described in this guide and verify that the Synapse system works as desired.

### **Changing from Line Appearance Mode to Call Appearance Mode**

After changing from Line Appearance mode to Call Appearance mode, a T1 Gateway and/or SIP Gateway can be connected to your system. You should configure or verify the settings listed in Table 3.

Table 3. Call Appearance Settings to Verify

Feature	See page	Feature	See page
Auto Attendant	42	Ring Group Types	100
Call Queue	59	Trunk Reservation	106
Call Restriction Settings	62	Trunk Routing	108
Dial Plan Settings	64	SIP Account Settings	134
Direct Inward Dial	77	T1 Basic Settings	143

There are many other system and extension settings that can affect system operation. After changing from Line Appearance mode to Call Appearance mode, you should review the system configuration and extension settings described in this guide and verify that the Synapse system works as desired.

After changing from Line Appearance mode to Call Appearance mode, you can register SB67040 Cordless Handsets to SB67030/031 Desksets.

### To register a Cordless Handset:

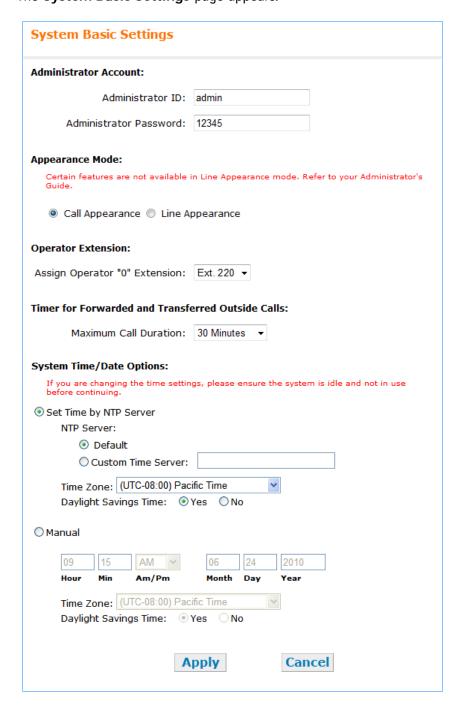
- 1. Ensure the Cordless Handset charger has power.
- 2. Remove and replace the Cordless Handset from its charger.
- 3. On the SB67030/031 Deskset, press **MENU** -> **2** -> **6** -> **1**.
- 4. On the Cordless Handset Registration screen, press Register



### **Changing the System Basic Settings**

### To view or modify the System Basic Settings:

In the navigation menu at left, click Basic Settings.
 The System Basic Settings page appears.





- 2. If necessary, change the **Administrator Account**. The **Administrator ID** can be up to 16 characters long. The **Administrator Password** is limited to four to six digits. Values outside this range generate an error message.
- 3. Select the **Appearance Mode**. For more information, see "About Appearance Modes" on page 36.
- 4. Select the **Operator Extension**. Any Deskset can be designated as the system operator. The default is Extension 200 for systems with three-digit extension numbers.

Incoming calls are forwarded to the operator extension if the caller presses **0** (zero) after the Auto Attendant answers. If the Auto Attendant is off, incoming calls are forwarded to the destination you have set in **Auto Attendant General Settings**. See "Configuring the Auto Attendant" on page 42.

5. Set the Timer for Forwarded and Transferred Outside Calls. This sets the Maximum Call Duration for incoming calls when they are forwarded to non-system phone numbers, such as to cell phones. When you forward these calls, two phone lines are in use for the duration of the forwarded call: one for the incoming call and one for the call to the forwarded line. The default time is 30 minutes, adjustable from 15 to 120 minutes. Calls exceeding the Maximum Call Duration are dropped with no warning to the callers.

## Line Appearance 6. mode

- Not shown—Enable or disable **Hook Flash** for all Desksets. When enabled, Desksets in Line Appearance mode display a **Flash** soft key. The **Flash** key simulates a hook flash, which signals the telephone service provider to activate a feature.
- 7. Set the **System Time/Date Options**. You can set the system time to follow a Network Time Protocol (NTP) Server (recommended) or you can set the time and date manually.

### Click Set Time by NTP Server:

- a. Click **Default** to set the time automatically from the Internet.
- b. Click **Custom Time Server** if you have your own preferred time server, then enter the server's URL.
- c. Select your Time Zone.
- d. Click Yes or No for Daylight Savings Time.

#### OR

To set the time and date manually, click Manual.

- a. Enter the current time and date.
- b. Select your **Time Zone**.
- c. Click Yes or No for Daylight Savings Time.
- 8. Click Apply to save these settings or click Cancel.

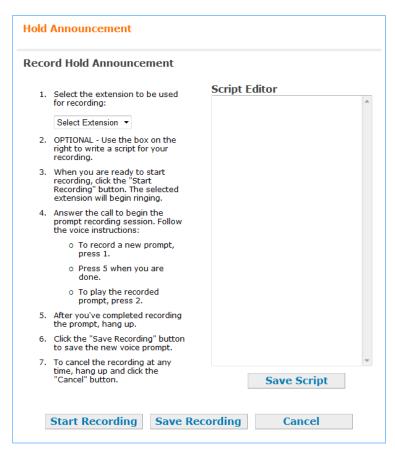


### **Recording Voice Prompts and Greetings**

You may need to record voice prompts and announcements for certain Synapse features. The following WebUI pages have recording options:

- Auto Attendant Menu Editor (see "Creating Auto Attendant Menus" on page 51)
- Create Call Queue (see "Call Queue Settings" on page 59)
- Create Group Mailbox (see "Creating a Group Mailbox" on page 85)
- Hold Settings (see "Configuring Hold/Park Settings and Music on Hold" on page 88).

To record your voice using the WebUI, click Play/Record on the WebUI page you are on. When the recording page appears, follow the instructions on how to make your recording. The recording page also has a **Script Editor** field where you can enter and save text.



The instructions ask you to select an extension from which to record the voice prompts. After you start the recording process, you will hear voice instructions for making the recording.



CHAPTER

# **CONFIGURING THE AUTO ATTENDANT**

You can enable the Auto Attendant to answer and direct incoming calls. When the Auto Attendant is on, incoming callers hear the Auto Attendant main menu. Synapse provides a default main menu, or you can create a custom menu with voice prompts that tell callers how to use a touch-tone telephone to reach the appropriate person, Ring Group, Auto Attendant Directory, operator, or message (such as a voice prompt to announce hours of operation, location, special sales, and so on). You can schedule this menu to change at different times of the day or week.

Use the Auto Attendant General Settings to configure up to four Auto Attendants and to determine where calls will ring when an Auto Attendant is off. You may wish to route trunks to each Auto Attendant in order to support a multi-tenant office or several divisions within a company. See "Trunk Routing (Incoming Calls)" on page 108.



In Line Appearance mode, the Auto Attendant does not answer and direct incoming calls by default. You can set the Auto Attendant as a Call Forward-No Answer target for a line. In this mode, the Auto Attendant can answer calls during periods when your office is closed or when calls go otherwise unanswered. See "Configuring Line Appearance" on page 92.

The procedures in this chapter assume that you have logged on to the WebUI as administrator. For more information, see "Accessing the Administrator WebUI" on page 30.

This chapter covers:

- "Auto Attendant General Settings" on page 44
- "Creating Auto Attendant Menus" on page 51



"Name Recording for the Auto Attendant Directory" on page 55.



### **Auto Attendant General Settings**

On the **Auto Attendant General Settings** page, you can:

- create and edit Auto Attendants.
- change the Auto Attendant mode (turn the Auto Attendant off or have it redirect calls temporarily)
- set the Auto Attendant schedule
- select destination menus.

### An Auto Attendant consists of:

- A Name. The Auto Attendant name appears in the lists on the Trunk Routing, DID Assignments, and Auto Attendant Menu Editor pages.
- An Auto Attendant Manager—the Operator extension (defined on the Basic Settings page), or any other extension. The Auto Attendant Manager can change the Auto Attendant mode. For more information, see "Auto Attendant Mode" on page 47.
- A Weekly Schedule, consisting of Start and End ranges, and an incoming-call destination for each range.
- An Unscheduled Destination, where incoming calls ring outside of the Weekly Schedule.
- An optional Holiday schedule that replaces the Weekly Schedule, consisting of start-and-end ranges (configurable by calendar date) and destinations for incoming calls.

The Auto Attendant can direct incoming calls to the following destinations:

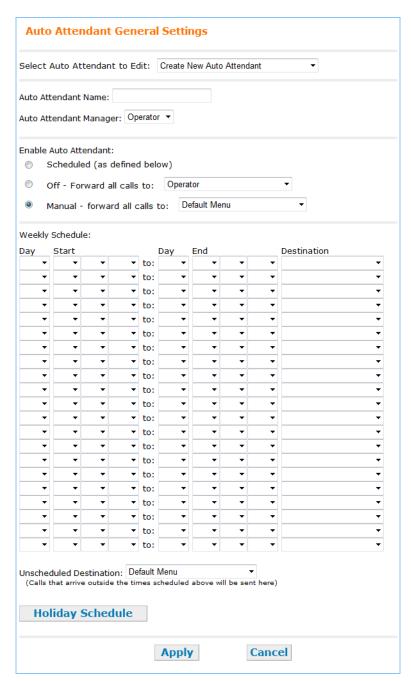
- Operator extension or any other extension (including ATA extensions assigned to Voice)
- Any Auto Attendant menu. You can create up to 20 Auto Attendant menus. Auto Attendant menus consist of recordings that tell callers about their options for directing their call. See "Creating Auto Attendant Menus" on page 51.
- Call Queue (Call Appearance mode only)
- Ring Groups
- Group Mailboxes
- System Directory numbers
- Personal Voicemail for any extension (excluding ATA extensions).



### To create or edit an Auto Attendant:

In the navigation menu at left, click Auto Attendant.

The Auto Attendant General Settings page appears.



2. In the **Select an Auto Attendant to Edit** list, select an Auto Attendant.

### OR

If you are creating a new Auto Attendant, enter a new **Auto Attendant Name**. The name can be up to 16 characters long.



- 3. Select an **Auto Attendant Manager** from the list of extensions. You can assign up to four Auto Attendants to one extension. The user at the Auto Attendant Manager extension can change the Auto Attendant mode from the Deskset.
- 4. To continue creating or editing an Auto Attendant, see:
  - "Auto Attendant Mode" on page 47
  - "Auto Attendant Schedule" on page 48
  - "Creating Auto Attendant Menus" on page 51.



### **Auto Attendant Mode**

In the Enable Auto Attendant section of the Auto Attendant General Settings you can choose the active mode of the Auto Attendant, or turn the Auto Attendant off.

A Deskset user at the Auto Attendant Manager extension can also set the Auto Attendant mode by pressing **MENU**, then **5**, then selecting an Auto Attendant.

### To set the Auto Attendant mode:

1. In the navigation menu at left, click **System Settings**, then **Auto Attendant**, then General Settings.



- 2. Select an Enable Auto Attendant option:
  - Select Scheduled to enable the Auto Attendant to handle incoming calls according to the schedule you set up. See "Auto Attendant Schedule" on page 48.
  - Select **Off** to forward incoming calls to a single destination. You can select the destination from the list.

You can have incoming calls ring the operator, any extension, a Ring Group, a Ring Group of all extensions (Call Appearance mode only), the Call Queue (Call Appearance mode only), a Group Mailbox, System Directory number, or Personal Voicemail. The Off - Forward All Calls to: option can be used by small businesses that do not have a receptionist or where all employees share call answering duties. Since you can set a Ring Group to contain any or all extensions, you can have incoming calls ring wherever you want them to ring.



If an incoming call to an extension or Ring Group is not picked up, the Call Forward-No Answer settings for either the extension or the Ring Group NOTE apply.

- Select Manual to immediately forward calls to a different menu. After selecting Manual, select one of the menus you have defined, or the Default Menu.
- 3. Click Apply to save these settings or click Cancel to refresh the page without saving the changes.



### **Auto Attendant Schedule**

You can use the bottom portion of the Auto Attendant General Settings page to configure when and where the Auto Attendant directs incoming calls.

Under Weekly Schedule, you can configure how the Auto Attendant handles incoming calls—by playing a custom Auto Attendant menu that lists options for callers, or by forwarding calls to a Ring Group, for example—during different periods of time. You can define up to 21 time ranges. A range has a Start time and an End time, and can span one day or multiple days. For example, you can have calls go to the same destination from Monday at 9:00 AM to Friday at 5:00 PM. You can configure multiple ranges and destinations for one day—morning, lunch, and afternoon, for example. Time ranges cannot overlap, but end and start times can be identical. For example, if one range is from 9:00 AM to 5:00 PM, the following range can be from 5:00 PM to 9:00 AM. Setting identical Start and End times (Monday 9:00 AM to Monday 9:00 AM, for example) will enable the Auto Attendant for the entire week.

You can select a unique destination for each range you define. The Auto Attendant sends callers to this destination for the duration of the time range. Possible destinations include an Auto Attendant menu, a Call Queue, Ring Groups, Group Mailboxes, System Directory numbers, Extensions, or Personal Voicemails.



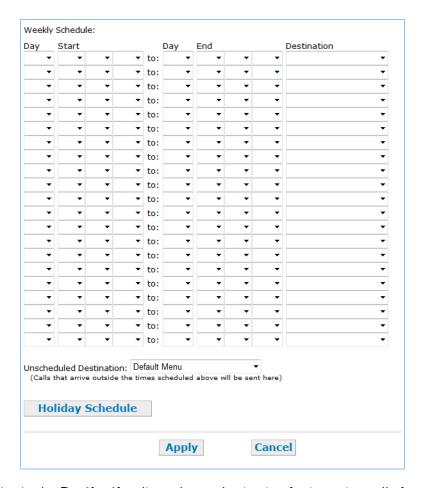
Call Queue is not supported in Line Appearance mode. Any Auto Attendant settings that direct calls to a Call Queue will be lost if you change the Synapse System from Call Appearance to Line Appearance mode.

If you have not created custom Auto Attendant menus (see "Creating Auto Attendant Menus" on page 51), the destination for each range is set to the Default Menu. The default prompt for incoming callers is: "Enter the extension number or enter 0 for the operator".



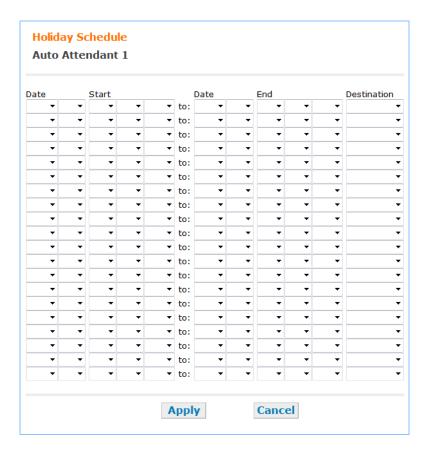
### To set the Auto Attendant schedule:

- 1. In the navigation menu at left, click **System Settings**, then **Auto Attendant**. The **Auto Attendant General Settings** page appears.
- 2. In the **Select an Auto Attendant to Edit** list, select an Auto Attendant.
- 3. Under **Weekly Schedule**, click the Day, hour, minute, and AM/PM boxes to define a Start time and End time according to when you want incoming calls to use the selected destination.



- 4. In the **Destination** list, select a destination for incoming calls for the time range.
- 5. Repeat Step 3 and Step 4 to complete the Auto Attendant Weekly schedule.
- 6. In the **Unscheduled Destination** list, select a destination for calls that arrive outside the ranges defined in the Weekly schedule.
- 7. Optional: Click Holiday Schedule to save these settings and create a Holiday schedule. The Holiday Schedule page appears.





- a. Define ranges and destinations for holidays and other periods that your Weekly schedule is no longer valid. During the date and time ranges you define in the Holiday schedule, the Holiday schedule replaces the Weekly schedule.
- b. Click Apply to return to the Auto Attendant General Settings page.
- 8. Click Apply to save these settings or click Cancel to refresh the page without saving the changes.

### **Creating Auto Attendant Menus**

You can create up to 20 menus that consist of the recordings that the callers hear and lists of actions they can take. To create the menus, plan what you want callers to be able to do. In preparation for voice prompt recording, write down the announcements you want callers to hear when their call reaches the menu. You can also enter and save text in the Auto Attendant Voice Prompts Script Editor (see "Recording an Auto Attendant Voice Prompt" on page 54).

### **Auto Attendant Menu Choices**

On the **Auto Attendant Menu Editor** page, you can assign an action for a digit key (**Press 1**, **Press 2**, **Press 3**). The available actions are described in Table 4. When the caller presses that key, the selected action occurs. Click **Apply** when done.

**Table 4. Auto Attendant Menu Choices** 

Menu Choice	Action
None	No action.
Replay	Replays the current message.
Auto Attendant Directory	Accesses the Auto Attendant Directory, which allows callers to spell a name, followed by the pound (#) sign.
Previous Menu	Plays the previous menu.
Main Menu	Plays the Auto Attendant main menu.
Default Menu	Plays the assigned default menu.
<aa menus=""></aa>	Accesses other menus that you have created. Select any menu that you have created to establish a structure of nested menus.
<call queue=""></call>	<b>Call Appearance mode only</b> —Sends calls to a Call Queue that you have created. When callers select the Call Queue, the Desksets of all available Call Agents ring.
<ring groups=""></ring>	Sends calls to a Ring Group that you have created. When callers select a Ring Group, every extension in that group rings.
<group mailboxes=""></group>	Sends calls to the Group Mailbox you have created.
<system directory=""></system>	Sends calls to an external System Directory number.
<extensions></extensions>	Sends calls directly to a specific extension.
<personal voicemail=""></personal>	Sends call directly to a specific extension's personal voicemail.





If no digit keys have been pressed five seconds after the voice prompt, the voice prompt replays. After replaying the voice prompt three times, the Auto Attendant says "Goodbye" and hangs up the call.

If the caller hangs up the phone, the Auto Attendant stops.

#### To create or edit a menu:

1. In the navigation menu at left, click **System Settings**, then **Auto Attendant**, then **Menus**. The **Auto Attendant Menu Editor** page appears.



This page may take up to 10 seconds to load. Please wait until you see **Press 1** below **Enable Operator** before editing the menu.



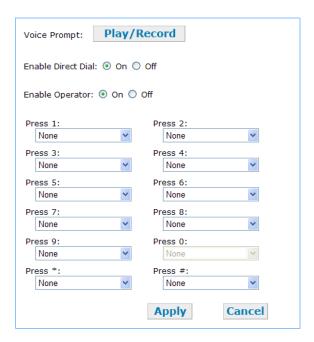
- 2. You can add, edit, or delete a menu.
  - To add a new menu (you can define up to 20 menus):
    - a. In the Select Menu to Edit list, select Create New Menu.
    - b. Enter a Menu Name. The name should describe the menu's purpose. For instance, a menu listing your business hours might be called "Hours".
  - To edit an existing menu:
    - a. In the **Select Menu to Edit** list, select the menu that you want to edit.
    - b. Change the name, if desired.
  - To delete an existing menu:
    - a. In the Select Menu to Edit list, select the menu that you want to edit.
    - b. Click Delete Menu . The menu is deleted and the page refreshes.
- 3. Optional: Click Play/Record to record a menu voice prompt. The Auto Attendant Voice Prompts page appears. Follow the instructions on that page to record a prompt.



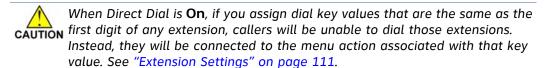
For more information, see "Recording Voice Prompts and Greetings" on page 41 and "Recording an Auto Attendant Voice Prompt" on page 54.

4. Set Enable Direct Dial. Select On to allow callers to directly dial extensions.





- 5. Set **Enable Operator**. Select **On** to allow callers to press zero (**0**) to reach the operator. (The default operator extension is 200 for systems with three-digit extension numbers.) When **Enable Operator** is **On**, callers cannot press **0** for other actions.
- 6. Set the dial key values. Program an action for each digit as needed by selecting the action from the list for each digit. See "Auto Attendant Menu Choices" on page 51.



7. Click Apply to save these settings or click Cancel to refresh the page without saving the changes.



### **Recording an Auto Attendant Voice Prompt**

The **Auto Attendant Voice Prompt** page has instructions on how to record a voice prompt. After you start the recording process, you will hear voice instructions for making the recording. For more information, see "Recording Voice Prompts and Greetings" on page 41.

Auto Attendant voice prompts can be up to 60 seconds long.

The Auto Attendant Voice Prompt page has a Script Editor field where you can enter and save text. Here is an example of a daytime script that could be part of the Opening Day menu:

"This is the Widget Company. If you know your party's extension, dial it now. For Sales, press 1. For Customer Service, press 3. To hear a recording of our office hours, press 9. To hear our company directory, press 0. To reach someone by spelling their name, followed by the pound sign, press 7."

Then if the caller selects **1**, they may hear, "For North America, press 1; For Asia, press 3." When you record this menu, you might want to call it the Sales Team menu.



### Name Recording for the Auto Attendant Directory

The administrator and individual users can create name recordings at the Desksets. When callers access the Directory through the Auto Attendant, the name recordings play to confirm the selection.

To create consistent Auto Attendant name recordings for incoming callers, ask Deskset users to state their name slowly, clearly, and at a reasonable volume. You may also recommend that users state both their name and their extension number to assist incoming callers further.

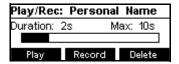


You are limited to a 10-second recording. Recording stops automatically if you exceed the limit.

#### SB67020/025

### To record, play, or delete a personal name:

1. Press **MENU**, then **2**, then **1**, and then **2** to display the **Name Recording** menu. The **Play** and **Delete** soft keys do not appear if the name has not already been recorded.



- 2. Pick up the handset and press Record to record a personal name. The Record key changes to Stop .
- 3. Press Stop when finished.
- 4. Press Play to review the recorded name or press Delete to delete the greeting.
- 5. Press **CANCEL** to return to the **Message Greetings** menu.

#### SB67030/031 To red

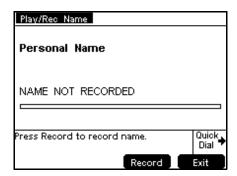
### To record a personal name:

1. Call Appearance mode—Press MENU, 2, and 5.

Line Appearance mode—Press MENU, 2, and 4.

The **Name Recording** screen appears.

2. Press 1 to display the Play/Rec Name screen.



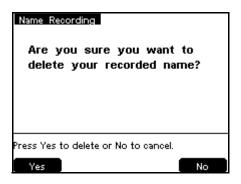
3. Pick up the handset and press **Record** to record a personal name.



- 4. When you are finished recording, press Stop . The screen changes to display Play and Record .
- 5. Press Play to review the name recording.
- 6. To return to the **User Settings** screen, press **Exit**

#### SB67030/031 To delete a name:

- 1. Call Appearance mode—Press MENU, 2, and 5.
  - Line Appearance mode—Press MENU, 2, and 4.
  - The Name Recording screen appears.
- 2. Press 2. A confirmation screen appears.



3. Press Yes to confirm.

After deleting the name recording, the extension number plays to callers when they look up your name in the Auto Attendant Directory.



CHAPTER

4

## **SYSTEM CONFIGURATION**

This chapter includes the remaining WebUI System Settings not covered in the earlier chapters, as well as:

- "Extension Settings" on page 111
- "PSTN Gateway Settings" on page 128
- "ATA Settings" on page 130
- "SIP Gateway Settings" on page 134
- "T1 Gateway Settings" on page 143
- "Expansion Module Settings" on page 146
- "Device Management" on page 147.

If you have an optional ATA installed, use the WebUI to configure analog phone support, fax routing, external overhead paging, Music on Hold, and Private Line Automatic Ringdown.

This chapter also covers device management using the WebUI. As the system administrator, you will use the WebUI to delete devices from the system, change extension numbers, back up your settings, copy/replace devices, and upgrade devices.

Except where noted, all the procedures in this chapter assume that you have logged on to the WebUI as administrator. For more information, see "Accessing the Administrator WebUI" on page 30.



After completing the configuration of the system, back up the system settings. See "Back Up and Restore Settings" on page 151.



### **System Settings**

You can use a Gateway, Deskset, or ATA IP address to log on to the WebUI as the administrator and make changes to the system or to individual Desksets.



When making changes to the System Settings through the WebUI, ensure that CAUTION no one is using the system. To ensure the system is idle, you might need to make the changes outside of normal office hours.

The System Settings covered in this chapter include:

- "Call Queue Settings" on page 59
- "Call Restriction Configuration" on page 62
- "Dial Plan Settings" on page 64
- "Direct Inward Dial" on page 77
- "Fax Configuration (Requires ATA)" on page 80
- "Configuring Group Mailboxes (Requires ATA)" on page 83
- "Configuring Hold/Park Settings and Music on Hold" on page 88
- "Configuring Line Appearance" on page 92

- "Overhead Paging Overview (ATA Required)" on page 93
- "Creating, Editing and Deleting Paging Zones" on page 98
- "Configuring Ring Groups" on page 100
- "System Directory" on page 104
- "Trunk Naming" on page 105
- "Trunk Reservation (Outgoing Calls)" on page 106
- "Trunk Routing (Incoming Calls)" on page 108
- "Voicemail to Email" on page 109



ATA, T1 Gateway, SIP Gateway, and Expansion Module settings and features are NOTE only available and visible in the WebUI when those devices are installed.



### **Call Queue Settings**



These settings apply to Call Appearance mode only.

If the Auto Attendant is off, the system administrator can forward incoming calls to a Call Queue. Create the Call Queue using the **Call Queue Summary** page. On Desksets that you assign as Call Agents to answer Call Queue calls, set a programmable feature key as the Call Queue key to give users quick access to the Queued Calls list. The Call Queue key LED also flashes orange slowly when there are calls waiting in the Call Queue, providing a visual indicator for Call Agents.

To set one of the SB67020/025 Deskset programmable feature keys, see "SB67020/025 Deskset Programmable Feature Keys (PFKs)" on page 120. If you do not set a Deskset programmable feature key as a Call Queue key, the Call Agent can access the Queued Calls list using the SB67020/025 Deskset menu.

To set the SB67030/031 Deskset programmable feature key as the Call Queue key, see "SB67030/031 Deskset Programmable Feature Keys (PFKs)" on page 125. If you do not set the programmable feature key as the Call Queue key, the Call Agent can answer Call Queue calls, but they cannot access the Queued Calls list.

### **Call Queue Considerations**

When you set up a Call Queue and have set the Auto Attendant to **Off – Forward all calls to Call Queue**, you can still direct incoming calls to a specific extension, bypassing the Call Queue.

T1 Gateway, SIP Gateway

To direct incoming T1 Gateway or SIP Gateway calls to a specific extension and bypass the Call Queue, assign a DID number to a designated extension. See "Direct Inward Dial" on page 77.

**PSTN Gateway** 

To have incoming PSTN Gateway calls bypass the Call Queue and ring a specific extension, Group Mailbox, or Ring Group, see "Trunk Routing (Incoming Calls)" on page 108.

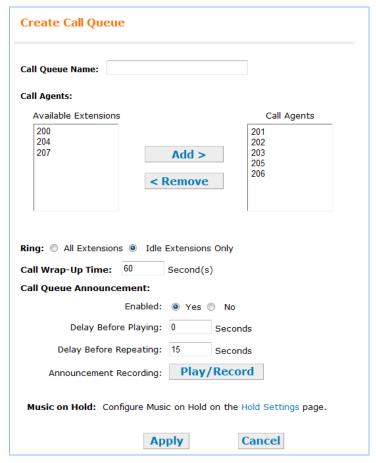
### To create the Call Queue:

 In the navigation menu at left, click Call Queue. The Call Queue Summary page appears.



On the Call Queue Summary page, press Create New Call Queue. The Create Call Queue page appears.





- 3. Enter a Call Queue Name.
- 4. Assign Call Agents to the Call Queue.

Select one or more extensions from the **Available Extensions** list and click Add > .

### OR

Select one or more extensions to remove from the **Call Agents** list and click < Remove .

- 5. Select the option to enable incoming calls to ring **All Extensions** or **Idle Extensions Only** in the Call Queue.
  - When set to All Extensions, Call Queue calls ring at Call Agent Desksets if they are idle or busy on a non-Call Queue call.
  - When set to Idle Extensions Only, Call Queue calls ring at idle Call Agent Desksets only.
- 6. Enter a **Call Wrap-Up Time** between 0 to 3600 seconds. Set the amount of time after ending a call before a Call Agent can receive another call from the Queue.
- 7. Enable or Disable the **Call Queue Announcement**, which is separate from the system Hold Announcement.
  - If you select Yes, callers hear the Call Queue Announcement.



- If you select **Yes**, but do not record an announcement, callers hear only ringback tones. If Music on Hold is enabled, callers hear hold music.
- If you select No, callers hear ringback tones. If Music on Hold is enabled, callers hear hold music.
- 8. Specify the **Delay Before Playing** the Call Queue Announcement for the first time and the **Delay Before Repeating** the Call Queue Announcement.
  - Callers hear ringback tones during the Delay Before Playing unless the delay is set to 0. Callers hear silence between repeating Call Queue Announcements unless you set Delay Before Repeating to 0.
  - If Music on Hold is enabled, callers hear hold music during the **Delay Before**Playing unless the delay is set to 0. Callers hear hold music between repeating

    Call Queue Announcements unless you set **Delay Before Repeating** to 0.
- 9. Click Play/Record . The Call Queue Announcement Greeting page appears.
- Follow the procedure on the Call Queue Announcement Greeting page to record a Call Queue Announcement. For more information, see "Recording Voice Prompts and Greetings" on page 41.

### OR

Click Delete Recording to delete an existing announcement.

- 11. Click Apply to save the Call Queue settings or click Cancel to return to the previous page without saving the changes.
- 12. To configure Music on Hold, click the **Hold Settings** link on the **Create Call Queue** page.

All Call Queue settings are saved and the **Hold/Park Settings** page appears (see "Configuring Hold/Park Settings and Music on Hold" on page 88).

13. Click Apply to save the Music on Hold settings or click Cancel to refresh the page without saving the changes.

ATA

**ATA** 



### **Call Restriction Configuration**



These settings apply to Call Appearance mode only.

Call Restriction enables you to prohibit certain types of calls from being made from certain extensions. The feature affects outgoing calls only. No matter how Call Restriction is configured, users can answer and transfer all incoming calls.

How you configure Call Restriction depends on the needs of your site. You can use it to prevent groups of employees from making long-distance calls on company phones. Call Restriction settings can also be applied to Desksets in meeting rooms or common areas where unauthorized personnel might have access to your phone lines.

If users need to call a restricted number on a call-restricted Deskset, they can enter their extension number and user password to make the call, as long as their extension's call restriction settings allow such a call.

You configure Call Restriction on two WebUI pages:

- Under System Settings, configure the call restriction settings on the Call Restriction Configuration page. You can enter prefixes for each restricted call type, and enter any exceptions to the prefix list.
- Under Extension Settings, on the Call Restriction Settings page, select the types of calls to be restricted for each extension (see "Call Restriction Settings" on page 115).

### To configure call restrictions and exceptions:

1. In the navigation menu at left, click **Call Restriction**. The **Call Restriction Configuration** page appears.

Call Restriction Configuration		
Call Restriction Prefix List:  Enter the prefix for each restricted call type. For multiple entries, insert a comma after each entry. The following wildcards are accepted:  X = 0-9  M = 1-9  N = 2-9		
10-digit Long Distance:		
11-digit Long Distance:	1-NXX	
Premium Long Distance:	1-900,1-976	
International:	011	
Equal Access:	1010,101X	
Operator-Assisted:	0	
Local Service:	N11	
7-digit Local:		



2. Enter or edit the prefix for each type of call you want to restrict. The default settings are as follows:

10-digit Long Distance: none Equal Access: 1010, 101X

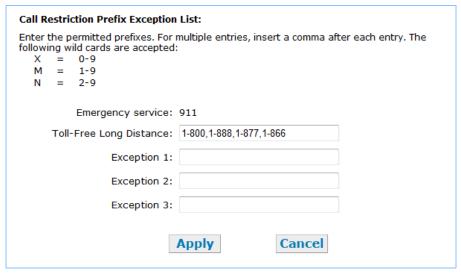
11-digit Long Distance:1-NXXOperator-Assisted:0Premium Long Distance:1-900, 1-976Local Service:N11International:0117-digit Local:none



Each prefix is limited to 16 digits. Multiple entries must be separated by a comma, and you can enter 10 entries per field.

3. Enter any exceptions to the restricted prefixes you entered in Step 2. For example, you can enter the toll-free prefix 1-800 as an exception while still restricting long-distance calls that begin with 1-NXX. Any prefix that is not listed in the Call Restriction Prefix List is considered an exception, even if you do not enter it in the Exception list. The default settings are as follows:

Emergency Service: 911 Toll-Free Long Distance: 1-800, 1-888, 1-877, 1-866



4. Click Apply to save the settings.



### **Dial Plan Settings**

Synapse features a configurable dial plan, with which you can configure settings for internal calls and outgoing external calls. You can select formats for Deskset extension numbers and parked call extension numbers. You can also configure how numbers for outgoing calls are dialed to maximize user convenience and compatibility with your Synapse equipment, location, and service provider.



The default Dial Plan settings will work for most installations. These settings should only be modified to suit the specific needs of your Synapse site and service provider(s). For example, you may need to configure the Dial Plan if you have a combination of PSTN, T1, and SIP connections, and specific numbers you want to route through each device.

The Dial Plan Settings differ depending on whether the system is in Call Appearance mode or Line Appearance mode. To set the Dial Plan for Call Appearance mode, see page 72. To set the Dial Plan for Line Appearance mode, see page 75.

On the **Dial Plan Settings** page in Call Appearance mode and Line Appearance mode, you can set up:

- extension numbers for the Synapse system as either three- or four-digit extension numbers in the range of 100 to 999, or 1000 to 9999.
- the Default Phone Extension Prefix, which determines the first digit to use for extension auto assignment.

In Call Appearance mode, you can set up:

- the Park Extension Prefix, which determines the first digit to use for parked calls.
- the Default Routing Priority, which determines the order of Gateways that the system attempts to use for outgoing calls if there are multiple Gateways connected to a Synapse site. By default the system attempts to use the Gateways in the following order for outgoing calls:
  - a. SIP Gateway, if it is connected.
  - b. T1 Gateway, if the SIP Gateway is unavailable or busy.
  - c. PSTN Gateway, if the T1 Gateway is not available.
- the Call Log/Message Prefix, which is the digit(s) added to numbers dialed from the Call Log and Messages list if your Dialing Rules specify that a number for external line access is required for outside calls.
- the Dialing Rules, which consist of unique dialing patterns (formats for types of outgoing calls) and trunks through which each pattern is routed when dialed. You can set a pattern to follow your Default Routing Priority, or you can route a pattern through a specific trunk that you select. For example, you can configure long distance calls to use the SIP Gateway only and configure local calls to use a PSTN Gateway trunk only.

For more information about the system-wide effects of changing the Dial Plan, see "Reconfiguring an Existing System" on page 76.



### **About Dialing Rules**

A Synapse dialing rule consists of two elements: a pattern and a route. A pattern is an alpha-numerical string consisting of the elements described in Table 5. The route is an available trunk in the system, and might include a PSTN line, a T1 line, or a SIP account, depending on your system setup. You can create your own dialing rules by editing or adding patterns and selecting new routes for patterns on the **Dial Plan Settings** page.

The purpose of a dialing rule pattern is to:

- validate a number that a user dials
- modify the number, if necessary, to remove a line-access prefix or add a prefix to access a low-cost provider, for example
- route the call through the selected Gateway(s) to the CO.

Synapse has a default set of dialing rule patterns for how the system formats numbers. See "Default Dialing Rule Patterns" on page 67.

When a user dials a number, the system compares the number against the dialing rules using the order in which the rules are entered on the **Dial Plan Settings** page. When the system finds the first pattern that matches, the number is dialed. Therefore, you should pay attention to the order in which you enter a new dialing rule. For example, although **xxxxxxx** and **xxxxxxxT** will both dial **555-1234**, **xxxxxxx** supersedes **xxxxxxxX** if it is listed first. If **xxxxxxxXT** was listed first, **555-1234** would be dialed according to **xxxxxxxXT**, which adds a four-second pause (indicated by **T**). This may not be desirable for a routine local call.

**Table 5. Dialing Rule Pattern Elements** 

Element	Format	Description	
Digits	1234567890#*	Any digit, including # and *. Indicates a specific dial string where the order of the digits is taken as is (6045551234, for example).	
Wild Card	Х	Any digit from <b>0</b> to <b>9</b> , including <b>#</b> and <b>*</b> .	
Range	[0-9]	Any two numbers separated by a hyphen, where the second number is greater than the first. All numbers within the range or valid, excluding # and *.	
List	[123#*]	List of digits, including # and *. Any number within the list is valid, but the order is not significant. Indicates an OR function (such as 1 OR 2 OR 3).	
Timeout	T	A four-second timeout. Tells the system to wait for four seconds before dialing the number, in case the user has not completed entering the dialing rule pattern.	
		■ T must be the last element of a pattern	
		■ <b>T</b> cannot be the only element of a pattern.	



**Table 5. Dialing Rule Pattern Elements** 

Element	Format	Description	
Dot		Indicates zero or more of the previous digits. Allows any number of digits to be used. A dot cannot start a pattern. A dot:	
		cannot be in a substitution, nor in a range	
		<ul><li>cannot follow another dot</li></ul>	
		is only valid after 1234567890#* and ] or a wild card.	
Substitution	!a:b!	Substitutes value <b>a</b> for value <b>b</b> . If value <b>b</b> is not entered, value <b>a</b> will be stripped from the dialing rule pattern. If value <b>a</b> is not entered, value <b>b</b> will be added to the pattern. Tells the system to modify the dialing rule pattern before sending it to the CO. This element can be used if a number for external line access (Trunk Access Code) is required.	
		Substitution can only be placed at the beginning of a pattern.	
		Value a can be blank, a wild card (x), or digits 0 to 9, including # and *. Digit map patterns for range, list, timeout, or dot are not permitted.	
		Value b can be blank, or digits 0 to 9, including # and *. Digit map patterns for wild card, range, list, timeout, or dot are not permitted.	
Separator		Indicates the start of a new pattern. Can be used to add multiple dialing rules to one pattern edit box.	



### **Default Dialing Rule Patterns**

You can view and modify the Dialing Rule patterns on the **Dial Plan Settings** page. See To set the Dial Plan in Call Appearance mode: on page 72.

### **Extension numbers**

A three or four-digit number in the 100 to 999 (excluding 911) or the 1000 to 9999 range. When a matching Extension number is detected, the system calls the Extension. You can set this under **Number of Digits** and **Default Phone Extension Prefix**.

Format	User Dials, for example	System Dials
xxx or xxxx	200 or 2000	200 or 2000

#### Parked call

A three or four-digit number in the 100 to 999 (excluding 911) or the 1000 to 9999 range. When a matching Park Extension is detected, the system connects to the parked call. The leading digit for parked calls must be different from the leading digit for Extension numbers. You can set the leading digit (the Park prefix) under **Park Extension Prefix**. Other than setting the leading digit, you cannot configure this Dialing Rule pattern.

Format	User Dials, for example	System Dials
Park prefix + xx or Park prefix +xxx	800 or 8000	800 or 8000

#### Local External call

External line access. **!9:!** is an optional element that requires the user to dial a 9 in front of a number. You can configure this pattern for external line access, for example. After the user dials a number that matches the pattern, the system strips the 9 when dialing the number. You can use 9 or another number that doesn't match the Park Extension Prefix or the Default Phone Extension Prefix.

Format	User Dials, for example	System Dials
!9:![2-9]xxxxxxxxx	9-604-555-1234	604-555-1234
or !9:![2-9]xxxxxxT	9-555-1234	555-1234 (with four-second pause)
or !9:![2-8]11	9-411	411
or !9:!0T	9-0	0 (with four-second pause)

#### Long Distance call

External line access for a long distance call within North America. **!9:!** is an optional element that requires the user to dial a 9 in front of a number.

Format	User Dials, for example	System Dials
!9:![01][2-9]xxxxxxxx	9-1-503-555-1234	1-503-555-1234
or !9:![01][2-9]xxxxxXT	9-1-555-1234	1-555-1234 (with four-second pause)



### International call

External line access for a long distance international call outside North America. **!9:!** is an optional element that requires the user to dial a 9 in front of a number. If **!9:!** is not required, there will be a four-second pause after the user dials zero. If no further digits are pressed, the call will go to the operator Extension (**0**).

Format	User Dials, for example	System Dials
!9:!011x.T	9011440208694657	011440208694657

### **Operator call**

This is a special case of an internal call connecting to the designated operator extension (such as 203) by dialing 0.

Format	User Dials	System Dials
0	0	0

### **Emergency call**

This dialing rule ensures that, in emergency situations, users can call 911 either by dialing 911, or 9-911 (when 9 is used to access an external line).

Format	User Dials	System Dials
!9:!911   911	9-911 911	911 911

#### **Equal Access call**

Users can call Equal Access services by dialing this sequence. There will be a four-second pause after the user dials the final number before the system calls the number.

Format	User Dials, for example	System Dials
!9:!10[12]xxxxx.T	9-101-58726-1-555-123-1234	101-58726-1-555-123-1234



### **Other Dialing Rule Pattern Examples**

Table 6 shows some dialing rule pattern examples.

**Table 6. Dialing Rule Pattern Examples** 

Pattern	User Dials	System dials	Description
[12]xx	220	220	Any three-digit number starting with 1 or 2.
!9:!x.T	9-604-555-5555	604-555-5555 (with four-second pause)	9, followed by any number of digits. The dialing rule pattern is complete after four seconds of no user input. Strips the leading 9 before sending the pattern to the CO.
ОТ	0	0 (with four-second pause)	Dials zero after four seconds of no user input. This pattern can be used to dial the Operator. The timeout would be required if other patterns also use a leading zero, such as 011 for international calls.
!0:!:OT	00	0 (with four-second pause)	Two zeros will dial a PSTN Operator rather than the Synapse Operator, assuming that a Trunk Access Code is not being used.
!8:1234!xxxxxxxxx	8-604-555-5555	1234-604-555-5555	Substitutes 8 with 1234 then adds 1234 to a ten-digit number before sending it to the CO.
!:1234!xxxxxxxxxx	604-555-5555	1234-604-555-5555	Adds 1234 to any ten-digit number before sending it to the CO.



### **Dialing Rules for Remote Sites**

When you configure remote sites, each using a SIP Gateway on a different subnet, you must create Dialing Rules to enable users to reach remote extensions or external numbers. For more information about remote sites, see "Configuring Remote Sites" on page 139. After you configure a remote site, the remote site appears in the list of available routes for a Dialing Rule pattern.

With remote sites, you want the Dialing Rules to enable users to do two things:

- 1. Call Remote Extensions
- 2. Call external numbers through the remote site.

Depending on your current system configuration or preferences, you can create Dialing Rules to enable users to make both types of calls with or without dialing a number for external trunk access (a trunk access code).

### Calling Remote Extensions without a trunk access code

You must first ensure that Extension numbers are not duplicated across remote sites. If extension 201 exists on Site 1 and Site 2, users on Site 1 who dial 201 will reach extension 201 on Site 1, not Site 2.

Synapse sites should use the same number of digits for extension numbers. If one site has three-digit extensions and another site has four-digit extensions, you should avoid assigning "overlapping" extension numbers, such as 201 and 2010.

Ensure that the local **Park Extension Prefix** does not match the first digit of any extension numbers at a remote site.

Table 7. Sample Dialing Rules

Site 1: Ext. 201, 202, 203	Site 2: Ext. 204, 205, 206	Site 3: Ext. 207, 208, 209
Pattern: 20[4-6]	Pattern: 20[1-3]	Pattern: 20[1-3]
Route: Site 2	Route: Site 1	Route: Site 1
Pattern: 20[7-9]	Pattern: 20[7-9]	Pattern: 20[4-6]
Route: Site 3	Route: Site 3	Route: Site 2

#### Calling Remote Extensions using a trunk access code

This option allows you to have duplicate extension numbers across remote sites. Users must enter a trunk access code to call remote extensions.

This scenario can create complications with calling from the Call Log or Messages screen. For more information, see "Trunk Access Codes" on page 71.

Table 8. Sample Dialing Rules

Site 1: Ext. 201, 202, 203	Site 2: Ext. 204, 205, 206	Site 3: Ext. 207, 208, 209
Pattern: !9:!20[4-6]	Pattern: !9:!20[1-3]	Pattern: !9:!20[1-3]
Route: Site 2	Route: Site 1	Route: Site 1
Pattern: !9:!20[7-9]	Pattern: !9:!20[7-9]	Pattern: !9:!20[4-6]
Route: Site 3	Route: Site 3	Route: Site 2



### Calling External Numbers without a trunk access code

To route an external call through the remote site, the Dialing Rule must format the number according to the local dialing requirements at the remote site. For example, the rule may not need to include the "1" that is typically used for long distance—a local number format, such as 503-555-1234, may be sufficient, as shown in Table 9. Note that long distance calls can still be dialed through the local Gateway by entering 1-503-555-1234, and long-distance charges may apply.

Table 9. Sample Dialing Rules

Site 1: Ext. 201, 202, 203	Site 2: Ext. 204, 205, 206	Site 3: Ext. 207, 208, 209
Pattern: 971xxxxxxx	Pattern: 609xxxxxxx	Pattern: 609xxxxxxx
Route: Site 2	Route: Site 1	Route: Site 1
Pattern: 503xxxxxxx	Pattern: 503xxxxxxx	Pattern: 971xxxxxxx
Route: Site 3	Route: Site 3	Route: Site 2

### Calling External Numbers using a trunk access code

A trunk access code for calling external numbers through a remote site may help users be aware of which site they are calling. Again, the Dialing Rule must format the number according to the local dialing requirements at the remote site.

This scenario can create complications with calling from the Call Log or Messages screen. For more information, see "Trunk Access Codes".

Table 10. Sample Dialing Rules

Site 1: Ext. 201, 202, 203	Site 2: Ext. 204, 205, 206	Site 3: Ext. 207, 208, 209
Pattern: !9:!971xxxxxxx	Pattern: !9:!609xxxxxxx	Pattern: !9:!609xxxxxxx
Route: Site 2	Route: Site 1	Route: Site 1
Pattern: !9:!503xxxxxxx	Pattern: !9:!503xxxxxxx	Pattern: !9:!971xxxxxxx
Route: Site 3	Route: Site 3	Route: Site 2

### **Trunk Access Codes**

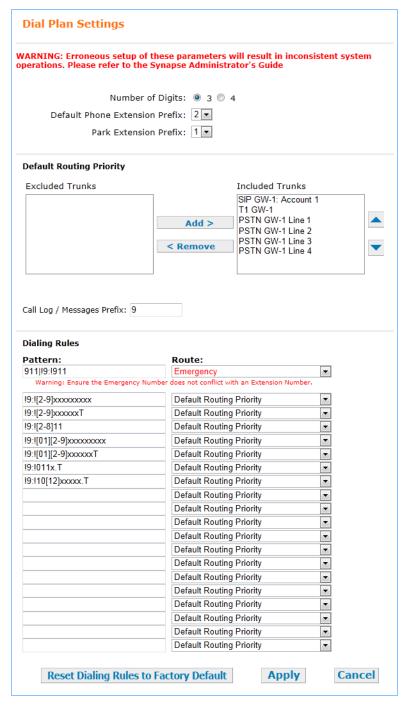
If external numbers and Remote Site/SIP Account numbers use different Trunk Access Codes, then Deskset users may have difficulty reaching the intended number when making calls from the Call Log or Messages screen. You may need to create additional Dialing Rules to complement the Call Log/Messages Prefix.

For example, assume the PSTN Gateway Trunk Access Code is 9, the SIP Account Access Code is 8, and the Call Log/Messages Prefix is 9. Extensions at the remote site begin with 3 (300, 301, and so on). In this configuration, when users try to call a Remote Extension from the Call Log or Messages list, the Call Log/Message Prefix will add a 9 to the extension number. The call will be routed through the PSTN Gateway and will not reach the remote site. To fix this, you should create a Dialing Rule, such as "!9:!3xx" as well as "!8:!3xx" to ensure that all Remote Extension numbers are routed through the Remote Site SIP Account regardless of which Access Code is being used.



### To set the Dial Plan in Call Appearance mode:

1. In the navigation menu at left, click **Dial Plan Settings**. The **Dial Plan Settings** page appears.



2. Select the Number of Digits for all extension numbers.





When changing an existing system from 3-digit to 4-digit extensions or from 4-digit to 3-digit extensions, the system automatically attempts to convert all existing extensions. This process takes up to two minutes, depending on how many extensions you have. All errors or extension number discrepancies are reported on the WebUI page. A table of all changed extension numbers appears when the process is complete.

3. Select the **Default Phone Extension Prefix** to be the initial digit used for automatically assigned extension numbers. For example, if set to 3, and you have existing extensions 2000 and 2001, the next automatically assigned extension numbers will increment beginning with 3000. The **Default Phone Extension Prefix** should not match any number required for external line access, if you enable one in your dialing rules (using a pattern such as !9:![2-9]xxxxxxxxx, for example).

You can still manually assign an extension with a different prefix number. See "Change an Extension Number" on page 150.



If you assign an extension number whose first digit is the same as an Auto CAUTION Attendant menu dial key, callers will be unable to dial that extension. Instead, they will be connected to that Auto Attendant menu action. See "Configuring the Auto Attendant" on page 42.

4. Select the **Park Extension Prefix** to be the initial digit used for parked calls. For example, if set to 8, the park extension range would be from 800 to 899. The Park Extension Prefix should not match any number required for external line access, if you enable one in your dialing rules (using a pattern such as !9:![2-9]xxxxxxxxx, for example).

If you don't require a number for external line access, ensure that the Park Extension Prefix does not conflict with the first digit needed to dial long-distance calls. For example, if the Park Extension Prefix is 1, then a PSTN call beginning "1-60" is not completed because the system instead looks for a parked call at extension 160.

- 5. Set the **Default Routing Priority**. By default, all trunks in the system are included in the priority list. You can:
  - exclude a trunk by selecting it, then clicking < Remove. You may want to exclude a trunk if it is being used for a fax line or a door phone line, for example.
  - move a trunk up or down the priority list by selecting it, then clicking  $\triangle$  or  $\nabla$ .
- 6. Set the Call Log/Messages Prefix according to your Dialing Rules. You can enter a maximum of eight digits using only the characters 0-9, #, \*, or P. Leave the field blank if the Dialing Rules do not use a number for external line access.
- 7. Enter or modify Dialing Rule patterns. For more information, see "About Dialing Rules" on page 65.
- 8. Select a Route for each Dialing Rule pattern as required. The list of routes includes all available trunks in the system, as well as the Default Routing Priority.





Ensure that you are aware of which trunks, if any, are reserved. If you select a reserved trunk for a Dialing Rule, only the reserved extension can make a call using that Dialing Rule. All other extensions will display an error message when users dial numbers that match that Dialing Rule. See "Trunk Reservation (Outgoing Calls)" on page 106.



The top pattern is reserved for emergency calls. The Route box only contains one option: Emergency. 911 does not use the Default Routing Priority. Instead, emergency calls are routed according to the following priority:

1. T1 Gateway -> 2. PSTN Gateway -> 3. SIP Gateway (Account 1)

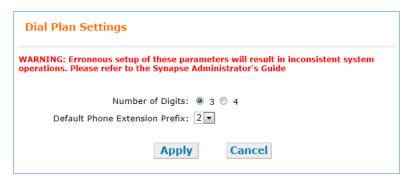
You can change the Dialing Rules for emergency calls by editing the default pattern. However, use caution when changing these rules, because Desksets may not be able to make emergency calls if these settings are configured incorrectly.

- 9. Click Apply to save these settings or click Cancel to refresh the page without saving the changes.
- 10. If you installed any Desksets before applying the Dial Plan settings in the WebUI, and if you changed the **Default Phone Extension Prefix**, individually change those Desksets' extension numbers. See "Change an Extension Number" on page 150.



## To set the Dial Plan in Line Appearance mode:

1. In the navigation menu at left, click Dial Plan Settings. The Dial Plan Settings page appears.



2. Select the Number of Digits for all of your extension numbers.



When changing an existing system from 3-digit to 4-digit extensions or from 4-digit to 3-digit extensions, the system automatically attempts to convert all existing extensions. This process takes up to two minutes, depending on how many extensions you have. All errors or extension number discrepancies are reported on the WebUI page. A table of all changed extension numbers appears when the process is complete.

3. Select the **Default Phone Extension Prefix** to be the initial digit used for automatically assigned extension numbers. For example, if set to 3, and you have existing extensions 2000 and 2001, the next automatically assigned extension numbers will increment beginning with 3000.

You can still manually assign an extension with a different prefix number. See "Change an Extension Number" on page 150.

4. Click Apply to save these settings or click Cancel to refresh the page without saving the changes.



## **Reconfiguring an Existing System**

#### **Considerations**

- Ensure that the first digit of any extensions does not match one of the Auto Attendant commands. If Direct Dial has been enabled in an Auto Attendant menu, and a menu action key matches the new Extension Prefix, the Direct Dial will not work, because the Auto Attendant command occurs before the extension number can be dialed.
- Ensure that the first digit of any extensions does not match the park extension prefix.
- If a number for external line access is not required and not defined in the dialing rules, ensure that the first digits of the Extension Prefix and the Park Extension Prefix do not match the first digits of phone numbers that might be dialed from your location.
- AT&T strongly recommends setting up the desired number of digits for extensions before all the Desksets are installed. Doing so enables the correct auto-assignment of extension numbers as each additional Deskset is installed. Changing the number of extension digits after installing all the Desksets may result in Desksets being assigned undesired extension numbers. The last three digits of previous extension numbers may not be preserved.

#### Results

- If the Dial Plan Settings are changed when Desksets are already connected, a warning message appears and the Synapse system does not change any existing extension numbers. Manually change any existing extension numbers.
- If the Extension Prefix is changed, the Synapse system applies the new prefix to extension numbers for newly connected Desksets. Desksets already connected keep their current extension numbers. The Administrator can manually adjust any extension numbers.
- If the Park Extension Prefix is changed to a value currently being used by a Deskset, the extension number in conflict remains assigned to the Deskset and will not be used for Parked calls.
- If a number for external line access is no longer defined in the dialing rules and any x11 extensions already exist (such as 411 or 611), then the extensions take precedence. Dialing 411 calls extension 411, not the 411 directory service.
- Changing an extension number, even if it was related to a DID number, does not automatically change the DID number.
- When changing an existing system from 3-digit to 4-digit extensions or from 4-digit to 3-digit extensions, the system automatically attempts to convert all existing extensions. This process takes up to two minutes, depending on how many extensions you have. All errors or extension number discrepancies are reported on the WebUI page. A table of all changed extension numbers appears when the process is complete.



The Synapse system does not allow 911 to be assigned as an extension so that emergency calls can still be dialed.



## **Direct Inward Dial**



Direct Inward Dial settings are only available when the Synapse system includes a T1 Gateway or SIP Gateway.

Direct Inward Dial (DID) allows outside callers to bypass the Call Queue, Auto Attendant, or Operator by using DID telephone numbers. The T1 Gateway and SIP Gateway use the DID data from your Telephone Service Provider to automatically route incoming calls. You can assign unique DID numbers to specific Desksets and other destinations.

You can configure Direct Inward Dial on two WebUI pages: Direct Inward Dial Configuration and DID Assignments.

## **DID Configuration**

On the Direct Inward Dial Configuration page, you can add DID numbers and ranges for the Synapse system to use. The DID numbers are provided by your Telephone Service Provider.

You can also enable the system to automatically assign DIDs to new extensions. When enabled, newly added Desksets are assigned the lowest available Extension and lowest matching DID number in the first range entered. The Extension number will match the last three or four digits of the DID number, depending on how you have configured the dial plan. For example, a new Deskset will be assigned Ext. 203 and DID number 232-555-5203 if those are the first numbers available.



When all DID numbers in the first range are assigned, the system assigns the lowest DID number of the second range, and so on. To avoid unexpected results, NOTE ensure that you enter DID ranges in ascending order. For example,

232-555-5200 - 232-555-5210, 232-555-5215 - 232-555-5220,

232-555-5225 - 232-555-5230, and so on.

If there are no available extension numbers with corresponding DID numbers, the new extension is created with no DID number. For example, if a new Deskset was connected under the following conditions, the new Deskset would be assigned extension 204 and no DID number.

Current Extensions: 201–203 taken, 204 and up available

Current DIDs: 232-555-5201 available

232-555-5202 available

232-555-5203 taken

You can also manually assign DID numbers. See "DID Assignments" on page 79.

If automatic assignment is enabled, FXS extensions on a connected ATA are also included unless the FXS port has been assigned to an Overhead Paging System (OHP).

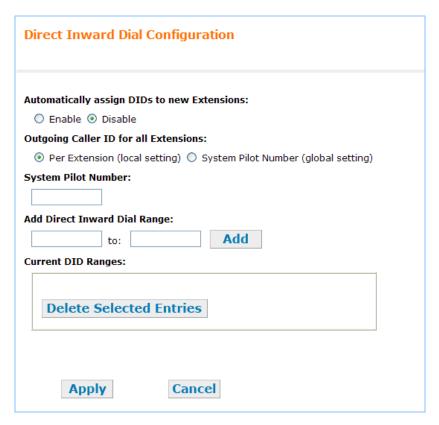


DID numbers are not retroactively assigned to Desksets or ATAs already present in the system. If possible, set this feature up before connecting the Desksets.

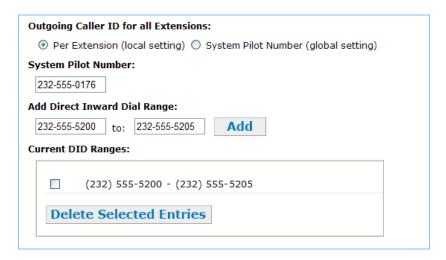


## To set up Direct Inward Dial numbers:

1. In the navigation menu at left, click **Direct Inward Dial**. The **Direct Inward Dial**. **Configuration** page appears.



- 2. Choose to **Enable** or **Disable** automatically assigning DIDs to new extensions.
- 3. Select the **Outgoing Caller ID for all Extensions**. The outgoing caller ID is the Synapse user's name and phone number that appears on the destination telephone if it is set up to receive and display the information.





Select Per Extension (local setting) to have each extension send either the DID or System Pilot Number for the caller ID number. To set the phone number that the extension sends, see "Extension Basic Settings" on page 112.

Select System Pilot Number (global setting) to have every extension send the System Pilot Number for the caller ID number.

- 4. Enter the **System Pilot Number**. The System Pilot Number is usually the company's main telephone number.
- 5. Enter the DID range into the boxes beneath Add Direct Inward Dial Range. Click Add to enter the phone number range into the Current DID Ranges list. These ranges describe the DID numbers that your service provider assigned to you. The system cannot check whether you have subscribed to these DID numbers, but it checks that all numbers are ten digits long, with no spaces or hyphens, and that there are no more than 200 DID numbers.

To add only one DID number, enter it into both range fields.

You can define up to 50 ranges.



If you assign Direct Inward Dial numbers with the first digit of any extension CAUTION that overlaps an Auto Attendant menu numeric key value, callers will be unable to dial those extensions. Instead, they will be connected to that Auto Attendant menu action. See "Configuring the Auto Attendant" on page 42.

- 6. Optional: To delete DID number ranges, select the DID number range in the Current **DID Ranges** list and click **Delete Selected Entries**.
- 7. When you are done, click Apply to save these settings or click Cancel to refresh the page without saving the changes.

#### **DID Assignments**

The **DID** Assignments page displays all DID numbers and their assignments. You can route DID numbers to the following destinations (if available):

- **Auto Attendants**
- Call Queue
- Ring Groups
- **Group Mailboxes**
- System Directory numbers
- Extensions (including the Operator extension and ATA FXS port extensions)
- Personal Voicemails.

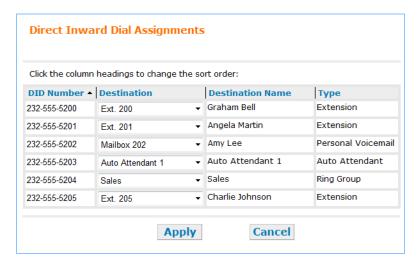
If you did not enable automatic assignment (see "DID Configuration" on page 77), you must manually assign DID numbers.

If you are reconfiguring an existing system, see "Reconfiguring an Existing System" on page 76.



## To manually assign Direct Inward Dial numbers:

In the navigation menu at left, click **Direct Inward Dial**, and then **DID** Assignments. The **Direct Inward Dial Assignments** page appears.



- 2. In the **Destination** column, select a destination for each DID number. You can select the same destination for several DID numbers.
  - DID Numbers that do not have a destination assigned show **Default Menu** as the destination. This destination is the Default Auto Attendant Menu.
- 3. Sort the fields in the **Direct Inward Dial Assignments** table as desired. Clicking the title above each column changes which column the information is sorted by. Click the column title again to change between ascending and descending order.
- 4. When you are done, click Apply to save these settings or click Cancel to refresh the page without saving the changes.

## **Fax Configuration (Requires ATA)**

A fax machine can be connected to one of the FXS ports on an ATA, as shown in Figure 3. Incoming fax transmissions are routed from the Gateway over your LAN and through the ATA to your fax machine. Similarly, faxes travel from your fax machine through the ATA and over the LAN to the Gateway for transmission to the far-end fax machine.



Figure 3. Fax Machine Connected to FXS Port



You must select a PSTN Gateway line or a DID number as your fax line. Selecting a PSTN line is done in **Fax Configuration** in the WebUI. To select a DID number for incoming faxes, see "DID Assignments" on page 79.

If the fax machine has an integrated telephone, you cannot use that telephone for incoming or outgoing phone calls.

#### **Fax Caller ID for Direct Inward Dial Numbers**

T1 Gateway, SIP Gateway

After you assign a DID number for your fax line, incoming faxes will use the assigned DID number. However, your outgoing faxes will use a PSTN line first (if a PSTN Gateway is installed), and then, if a PSTN line is not available, follow the Dialing Rules for the outbound number. The caller ID for the fax may not match its assigned DID number. Anyone receiving your faxes may not see the correct fax number with which to reply to your fax.

You can configure the system to ensure that faxes are transmitted with caller ID information matching the specific DID number for your fax.



Caller ID is a subscription service. You must subscribe to this service from your local telephone service provider for this feature to work.

Both you and your caller's telephone companies must use caller ID-compatible equipment.

#### To configure DID caller ID for outgoing faxes:

- 1. On the **Direct Inward Dial Configuration** page, select **Per Extension** for the **Outgoing Caller ID for all Extensions**. See "DID Configuration" on page 77.
- 2. On the ATA Settings page, for the FXS port assigned as **Fax**, select **DID** for the **Outgoing Caller ID**. See "Configuring ATA FXS Ports" on page 131.

#### **Fax Transmission Modes**

The ATA supports two modes for fax transmission: G.711 and T.38.

- G.711 is a pass-through method that is the older, simpler fax protocol. G.711 mode provides the best compatibility with most fax machines and therefore is the default mode.
- T.38 is the standard protocol for faxing over IP networks and is more resistant to network impairments. However, users will not hear Call Progress Tones (CPT) such as ringback and busy signals. Fax machine compatibility issues are common. T.38 is not available if the fax telephone number is through the T1 Gateway or SIP Gateway.

The best mode for your installation depends on both your fax machine and your telephone line.



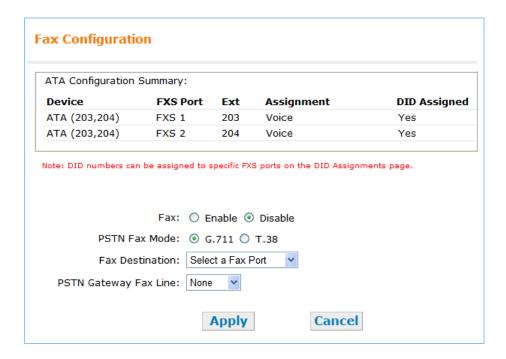
For more information about fax installation, see the Synapse Installation Guide at **www.telephones.att.com/synapseguides**. To troubleshoot fax operation, see "Fax Configuration" on page 211.

Use the WebUI to specify the Gateway and PSTN line being used as the fax line.



## To configure the fax settings:

1. In the navigation menu at left, click Fax Configuration. The Fax Configuration page appears, showing the current ATA FXS Port settings.



2. Enable or Disable the fax. When disabled, any FXS ports that you previously assigned for Fax get reassigned to Voice after you click Apply. Incoming fax calls are directed like any other incoming calls, but faxes cannot be received.



Disabling the fax later does not release any DID numbers assigned to Fax. The DID numbers remain assigned to the FXS port, but as Voice instead. However, enabling an Overhead Paging System (OHP) on the FXS port does release DID numbers assigned to that port.

PSTN Gateway 3. Select the PSTN Fax Mode: G.711 or T.38.

The Fax default setting is G.711. When a PSTN Gateway is connected, if the fax fails to work in G.711 mode, switch to T.38.

4. Select the **Fax Destination** from the list. This is the ATA FXS port to which the fax machine is connected, for example, ATA (200, 201): FXS 1. All ATAs in the system appear in the **Fax Destination** list.



If you select a new FXS port later, the associated PSTN Gateway line is retained, but DID numbers remain with the previous FXS port. For example, when switching from FXS1 to FXS2, DID numbers remain assigned to FXS1 (but as a voice port, not Fax).

- PSTN Gateway 5. Select the PSTN Gateway Fax Line from the list. This is the PSTN Gateway line to be used for fax communications. If no PSTN Gateway is connected, the setting cannot be changed from None.
  - 6. Click Apply to save these settings.



## **Configuring Group Mailboxes (Requires ATA)**

If your system includes one or more ATAs, Group Mailboxes enable general delivery of Voicemail messages to a group of people within an organization. Assign extensions as subscribers to Group Mailboxes as needed. Extensions can be assigned to one or more Group Mailboxes. Only subscribers can access and manage messages stored in Group Mailboxes.

All Group Mailbox messages are stored on the ATA. Up to ten Group Mailboxes on each ATA can be created through the WebUI.

Each ATA supports a maximum of 32 simultaneous sessions. A session could consist of a subscriber accessing a Group Mailbox at a Deskset or an outside caller leaving a message.

## **Group Mailbox Quotas**

Each ATA provides 180 minutes of Group Mailbox recording time. This time can be flexibly shared among the mailboxes, or a quota can be set for each mailbox. A mailbox quota is the maximum amount of time that a mailbox is allocated. However, the quota does not reserve the time. If the Sales mailbox has a 60-minute quota that is enabled and the Accounts mailbox quota is disabled, it is possible that Accounts could take up all 180 minutes of record time, leaving Sales with none.

The quotas can be set up to total more than 180 minutes and each mailbox quota can be enabled or disabled. If the quotas are all enabled and the total time does not exceed 180 minutes, then each mailbox quota becomes reserved space.

When a quota or the Group Mailbox is full, callers are told that Voicemail is full.

See "Creating a Group Mailbox" on page 85.

#### **Virtual Extensions for Group Mailboxes**

You can assign a "virtual" extension number to a Group Mailbox. The Group Mailbox can then be accessed independently of a Deskset. Calls can reach the virtual extension from the Auto Attendant, direct dialing from a Deskset, from the Deskset Extension list (using the **ExtList** soft key), or the Deskset Directory.

You can also assign the Group Mailbox virtual extension as an Auto Attendant destination, a Trunk Routing destination, or a Direct Inward Dial destination.

Users can access the Group Mailbox remotely and listen to messages through the Auto Attendant by dialing the virtual extension number, then pressing \*\*, as they would for voicemail at their own extension. You can enable or disable remote access, and protect the Group Mailbox with a password.

It is not necessary to assign subscribers to a Group Mailbox that has a virtual extension number. However, if you require someone to monitor the message count and manage messages from their Deskset, you can add one or more subscribers to the Group Mailbox.



Virtual Extensions are not supported in Line Appearance mode.

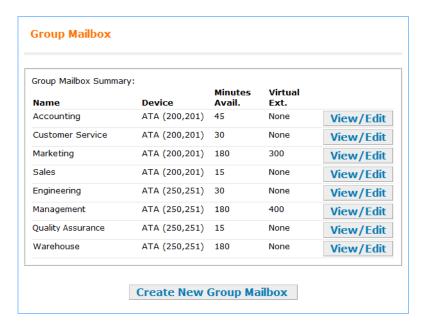


## **Viewing Group Mailboxes**

## To view Group Mailbox settings:

1. In the navigation menu at left, click **Group Mailbox**. The **Group Mailbox Summary** page appears. The list is initially empty.

The **Group Mailbox Summary** page shows an alphabetical list of Group Mailboxes on each ATA, along with each Mailbox's available recording time and Virtual Extension (if assigned).



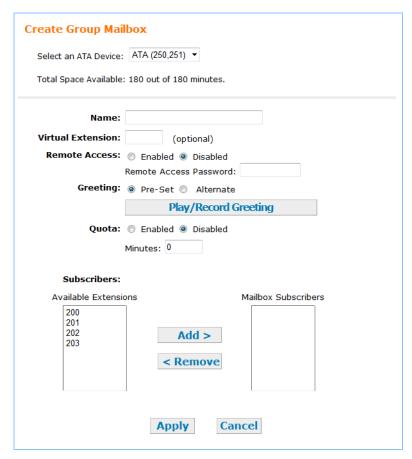


## **Creating a Group Mailbox**

## To create a Group Mailbox:

- 1. In the navigation menu at left, click **Group Mailbox** to display the **Group Mailbox Summary**.
- 2. Click Create New Group Mailbox to create a new Group Mailbox.
- 3. Select the ATA that will host the new Group Mailbox.

The Create Group Mailbox page appears.



- 4. Enter an appropriate Name for the new Group Mailbox.
- 5. Enter a Virtual Extension number if desired.
- 6. Enable or Disable **Remote Access**. When Enabled, outside callers can access the mailbox (and listen to messages) through the Auto Attendant if the Group Mailbox is set as an Auto Attendant destination, a Trunk Routing destination, or a Direct Inward Dial destination.
- 7. Set a **Remote Access Password**. If Remote Access is enabled, you can protect the mailbox with a password of up to six digits.
- 8. Select the **Greeting**. The preset greeting is "Please leave a message after the tone".



If you want to record your own greeting up to 60 seconds in length, select Alternate, then click Play/Record Greeting . The Group Mailbox Alternate Greeting page appears. Follow the instructions on that page. For more information, see "Recording Voice Prompts and Greetings" on page 41.

9. Set a Quota. Click Enabled or Disabled. If enabled, specify the Minutes (0 through 180) for this mailbox.



If you set the Quota to 5 minutes or less, <5 Min [030/031] or <5M [020/025] constantly appears on the Deskset screen.



10. Assign Subscribers.

Select one or more extensions that you want in this Group Mailbox from the Available Extensions list and click Add > .

OR

Select one or more extensions to remove from this Group Mailbox from the Mailbox **Subscribers** list and click < Remove.

11. Click Apply to save these settings or click Cancel to return to the previous page without saving the changes.

The new Group Mailbox appears on each subscribed Deskset when users access their messages.

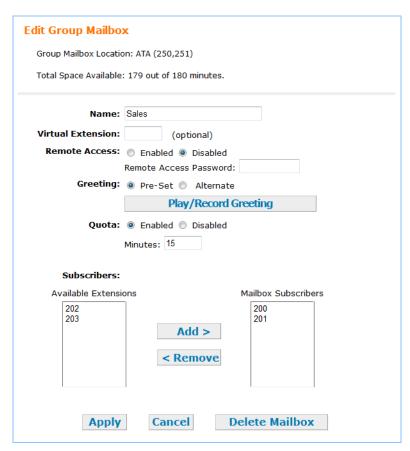


## **Editing or Deleting a Group Mailbox**

When you delete a Group Mailbox, all messages are removed and the memory can be used by other mailboxes. If any Desksets have set their Call Forward or Call Forward–No Answer (CFNA) targets set to the deleted mailbox, the setting reverts to the Personal mailbox.

#### To edit or delete a Group Mailbox:

- 1. In the navigation menu at left, click **Group Mailbox** to display the **Group Mailbox Summary**.
- 2. If you want to edit a Group Mailbox, click the View/Edit button for that mailbox. The Edit Group Mailbox page appears.



#### OR

If you want to delete a Group Mailbox, click the <u>View/Edit</u> button for that mailbox, then click <u>Delete Mailbox</u> on the **Edit Group Mailbox** page.

- If the deleted mailbox was an Auto Attendant menu destination, the destination field reverts to **None**. See "Auto Attendant Menu Choices" on page 51. If the deleted mailbox was a Ring Group CFNA target, the target field reverts to **Off**. See "Setting Call Forward All and Call Fwd-NA (No Answer)" on page 11.
- 3. Click Apply to save your settings or click Cancel to return to the previous page without saving the changes.



## **Configuring Hold/Park Settings and Music on Hold**

You can create a hold announcement for callers to hear when they are on hold or on a parked call. The default is silence.

If you have an optional ATA installed, you can also play music on hold (MoH) with or without a hold announcement. If there is a hold announcement, the music is periodically interrupted to play the announcement.

In Call Appearance mode, you can configure settings for both held and parked calls. In Line Appearance mode, you can configure settings for held calls only.



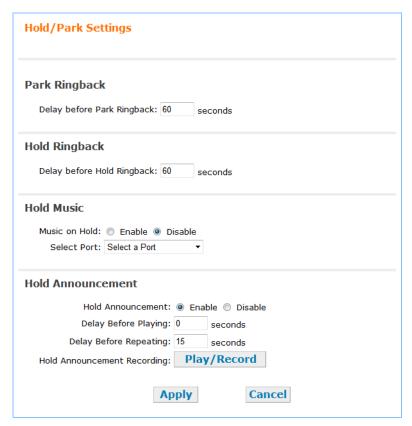
For ATA installation instructions, see the Synapse Installation Guide at www.telephones.att.com/synapseguides.



The hold announcement and MoH do not play when placing a conference on hold, or if one of the parties drops out of the conference.

#### To configure Hold/Park Settings in Call Appearance mode:

 In the navigation menu at left, click Hold/Park Settings. The Hold/Park Settings page appears.



2. Change the **Park Ringback** delay, if desired. When a Deskset user parks a call, the Deskset rings back if the call is still parked after the delay has expired.



- 3. Change the **Hold Ringback** delay, if desired. When a Deskset user puts a call on hold, after the delay has expired, the Deskset sends a reminder tone every 30 seconds to alert the user that the call is still on hold.
- 4. If you have an ATA installed, complete the **Hold Music** section:
  - Enable or Disable Music On Hold.
  - Select the desired ATA AUX IN port to be used, for example ATA (200, 201): AUX IN. All ATAs in the system appear in the list.
- 5. If you want a hold announcement, complete the Hold Announcement section:
  - Enable Hold Announcement.
  - If you are combining the announcement with Music on Hold, enter the amount of delay before playing the announcement and the delay before the announcement repeats. Your message will periodically interrupt the music and play.

To play, record, or delete the announcement, click Play/Record .

■ Follow the instructions on the **Hold Announcement** page to record a prompt. For more information, see "Recording Voice Prompts and Greetings" on page 41.

#### OR

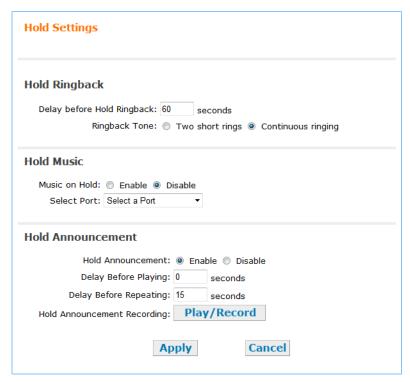
Click Delete Recording to delete the announcement.

- 6. On the **Hold/Park Settings** page, click **Apply** to save these settings or click **Cancel** to return to the previous page without saving the changes.
- 7. If Music on Hold is enabled, test the audio quality. Call an extension from an outside telephone. At the extension, place the call on hold. At the outside telephone, listen to the hold music as you or someone else adjusts the volume.
  - Set the MoH output volume level by adjusting the playback volume of the music source device connected to the ATA. You may need to set the volume near the maximum.
  - Some MoH sources without volume controls, such as those with audio-out jacks, are usually very loud and might be too loud.
  - Synapse limits the volume of the sound delivered to the phone line. Because of this, there may be audio clipping (missing sounds) for some sources.
  - Some forms of music do not play well over a telephone line.



## To configure Hold Settings in Line Appearance mode:

1. In the navigation menu at left, click Hold Settings. The Hold Settings page appears.



- 2. Change the Hold Ringback delay, if desired. When a Deskset user puts a call on hold, the Deskset begins to ring back after the delay to alert the user that the call is still on hold.
- 3. Select the **Ringback Tone** to set how the Deskset rings after the Hold Ringback delay time has expired. If you select **Two short rings**, the Deskset rings twice every 30 seconds. If you select Continuous ringing, the Deskset rings as it would for an incoming call.



If the Deskset ringer is turned off, the Deskset rings back audibly with the Two short rings ringback tone. This applies even if Continuous ringing was selected. The **Continuous ringing** setting only applies when the Deskset ringer is turned on.

- 4. If you have an ATA installed, complete the **Hold Music** section:
  - Enable or Disable Music On Hold.
  - Select the desired ATA AUX IN port to be used, for example ATA (200, 201): AUX IN. All ATAs in the system appear in the list.
- 5. If you want a hold announcement, complete the Hold Announcement section:
  - Enable Hold Announcement.



If you are combining the announcement with Music on Hold, enter the amount of delay before playing the announcement and the delay before the announcement repeats. Your message will periodically interrupt the music and play.

To play, record, or delete the announcement, click Play/Record .

■ Follow the instructions on the **Hold Announcement** page to record a prompt. For more information, see "Recording Voice Prompts and Greetings" on page 41.

OR

Click Delete Recording to delete the announcement.

- 6. On the **Hold/Park Settings** page, click **Apply** to save these settings or click **Cancel** to return to the previous page without saving the changes.
- 7. If Music on Hold is enabled, test the audio quality. Call an extension from an outside telephone. At the extension, place the call on hold. At the outside telephone, listen to the hold music as you or someone else adjusts the volume.
  - Set the MoH output volume level by adjusting the playback volume of the music source device connected to the ATA. You may need to set the volume near the maximum.
  - Some MoH sources without volume controls, such as those with audio-out jacks, are usually very loud and might be too loud.
  - Synapse limits the volume of the sound delivered to the phone line. Because of this, there may be audio clipping (missing sounds) for some sources.
  - Some forms of music do not play well over a telephone line.

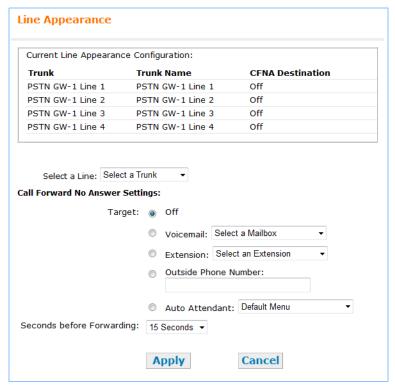


## **Configuring Line Appearance**

If you have set **Appearance Mode** to Line Appearance on the System Basic Settings page, you can set the Call Forward–No Answer settings for each PSTN Gateway line. For more information about Line Appearance, see "About Appearance Modes" on page 36.

## To configure line appearance:

1. In the navigation menu at left, click **Line Appearance**. The **Line Appearance** page appears.



- 2. Select a line. The lines are listed according to their Trunk Names. See "Trunk Naming" on page 105.
- 3. Select a Call Forward–No Answer **Target** for the line.
  - Off. The line rings until the call is answered or the caller hangs up.
  - Voicemail.
  - Extension.
  - Outside Phone Number. After selecting this, enter a telephone number.
     You do not need to enter hyphens or format the number in any way. For example, 2325550176 will work fine.
  - Auto Attendant.
- 4. Select the **Seconds before Forwarding**, from 0 to 45 seconds.
- 5. Click Apply to save the setting. The new setting appears in the **CFNA Destination** column at top. To configure another PSTN line, return to step 2.



## **Overhead Paging Overview (ATA Required)**

There are two types of overhead paging (OHP) systems that work with the Synapse system: single-zone systems and multi-zone systems. You may need to adjust paging settings in the WebUI to make your OHP system work with Synapse. Refer to your OHP system's product documentation for installation and configuration instructions.

## **Single-Zone Paging**

Single-zone paging means that all speakers connected to the OHP system are activated together (that is, they are in the same zone).

Desksets and single-zone OHPs can be included in the same zone. In the case of a single-zone OHP connected to the ATA FXS port, the paging system and the Desksets generate different paging tones.

You can specify a paging delay to compensate for the fixed delay introduced by the OHP system. This delay ensures that the paging tones are played simultaneously on both Desksets and on the OHP system. See "Single-Zone Overhead Paging Delay" on page 96. When set, the paging delay applies to every paging zone, even if the OHP is not part of the chosen paging zone. In systems where multiple ATAs and single-zone paging systems are installed, the paging delay applies to every ATA.

## **Multi-Zone Paging**

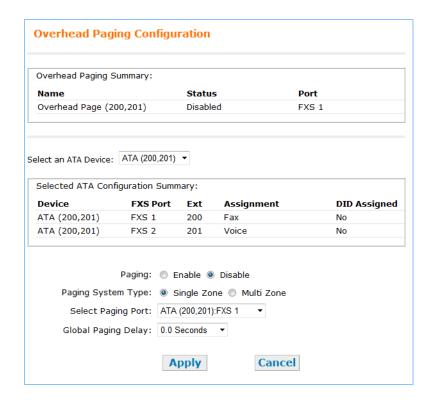
Multi-zone paging broadcasts to speakers grouped into separate zones. Since the multi-zone OHP systems require zone selection, they cannot be combined into one zone together with Synapse Desksets.



## **Setting Up Overhead Paging**

## To set up external overhead paging:

- 1. In the navigation menu at left, click **Overhead Paging**. The **Overhead Paging Configuration** page appears, showing the **Overhead Paging Summary** table.
- 2. Select the ATA for which you want to configure overhead paging. The **ATA Configuration Summary** table appears.



- 3. Enable or Disable the overhead Paging.
- 4. Select the **Paging System Type**.
- Select the Paging Port. This is the FXS port or AUX OUT jack into which the OHP is connected.
- 6. If you have a single-zone system connected to an FXS port, select the **Global Paging Delay**. See "Single-Zone Overhead Paging Delay" on page 96.



If multiple ATAs and single-zone paging systems are installed, the Global Paging Delay applies to every single-zone paging system.

If you have a multi-zone system, ignore this setting.

7. Click Apply to save these settings or click Cancel to return to the previous page without saving the changes.

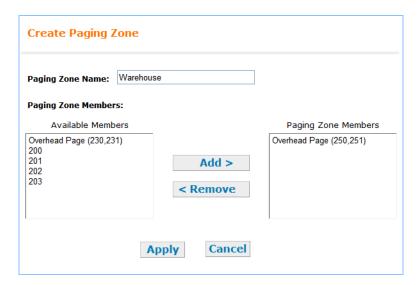


## **Single-Zone Overhead Paging**

A single-zone overhead paging system issues a one-way broadcast to all overhead speakers. These speakers cannot be grouped into separate zones. A single OHP can be connected to either the AUX OUT jack or an FXS port. Single-zone OHP is automatically included when you page all extensions.

## To create a single overhead paging zone:

- 1. Follow the instructions in "Creating, Editing and Deleting Paging Zones" on page 98 to either Create New Paging Zone, or View/Edit an existing Paging Zone.
- 2. Select Overhead Page from the Available Members list and click Add > .
- 3. Click Apply to save these settings or click Cancel to return to the previous page without saving the changes.





#### Single-Zone Overhead Paging Delay

When attached to an FXS port, single-zone overhead paging may require the page tone to be delayed. If this delay is too short, the beginning of the page heard through the OHP speakers may be cut off. You or the system installer need to experiment to find the correct delay for the system. Set the delay in the WebUI. See "Setting Up Overhead Paging" on page 94.

The delay starts after the user presses Start [030/031] or SELECT [020/025] on the Deskset, as shown in Figure 4.

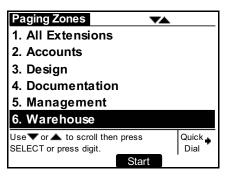




Figure 4. Paging Zones Including Single Overhead Zone

Once the delay ends, the page tone sounds and the display switches to the Page screen, as shown in Figure 5.

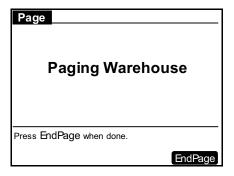




Figure 5. Page to a Single Overhead Zone



When OHP is enabled, the delay is used even if a single **Overhead Paging** zone is not included in the page (that is, when there are only Desksets in the paging NOTE zone).

On the Deskset, the **All Extensions** option in the Paging Zones selection screen includes the single Overhead Paging zone automatically.

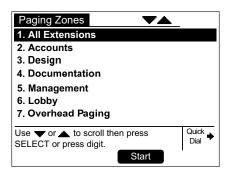
## **Multi-Zone Overhead Paging**

Unlike single-zone paging, multi-zone paging requires user input. In a multi-zone system, overhead speakers are grouped into zones. Each zone is assigned a number. The user pages the zone by starting a page and then entering the zone number (the exact method may vary depending on the third-party OHP system being used). Refer to your OHP system's product documentation for installation and configuration instructions.

Because the multi-zone OHP requires the OHP to signal the user to begin speaking, it must be connected to an FXS port and will not work if connected to the AUX OUT jack.

Unlike single-zone paging, multi-zone paging systems cannot be included in the Synapse paging zones described in "Creating, Editing and Deleting Paging Zones" on page 98.

A multi-zone page will, however, automatically appear at the bottom of the list of paging zones on the Deskset **Paging Zones** screen, as shown in Figure 6.



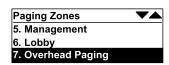


Figure 6. Paging Zones Including Overhead Paging

When users select overhead paging, the **Overhead Page** screen shown in Figure 7 appears.





Figure 7. Overhead Page



Note that the third-party paging system uses its own tones, so there is no local Deskset paging tone accompanying this screen.

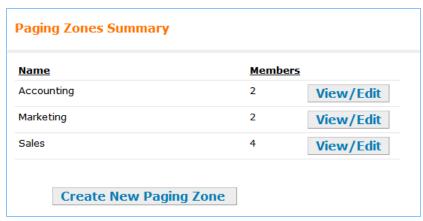


## **Creating, Editing and Deleting Paging Zones**

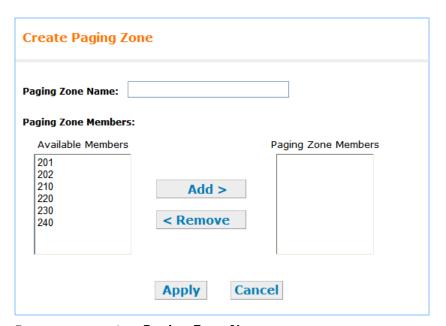
Use paging zones to set up extensions that can be paged as a group. For example, all extensions in the sales department could be defined as a paging zone. Any Deskset user can initiate a page to all extensions or only to the members of a paging zone. You can configure up to seven paging zones, each with one or more members. You can place every extension in a paging zone.

## To create a paging zone:

1. In the navigation menu at left, click **Paging Zones**. The **Paging Zones Summary** page appears.



2. Click <u>Create New Paging Zone</u> to create a new paging zone. The **Create Paging Zone** page appears.



- 3. Enter an appropriate Paging Zone Name.
- 4. Select one or more extensions that you want in this paging zone from the **Available**Members list and click Add > .



#### OR

Select one or more extensions to remove from this paging zone from the **Paging Zone Members** list and click **Delete**.

5. Click Apply to save these settings or click Cancel to return to the previous page without saving the changes.

The new paging zone appears on each Deskset when the user presses the soft key.

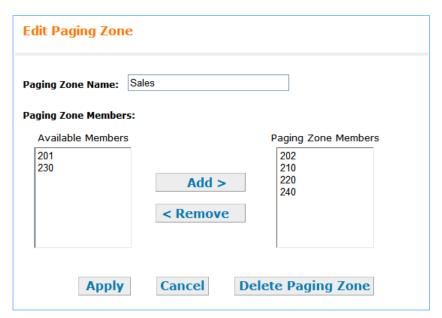


Single-zone overhead paging speakers can be included in a paging zone. Select **Overhead Page** from the **Available Members** list and click Add > .

Multi-zone overhead paging speakers cannot be included in a paging zone.

## To edit or delete a paging zone:

1. On the **Paging Zones Summary** page, click the **View/Edit** button for the paging zone you want to edit or delete. The **Edit Paging Zone** page appears.



2. Select one or more extensions that you want in this paging zone from the **Available Members** list and click Add > .

#### OR

Select one or more extensions to remove from this paging zone from the **Paging Zone Members** list and click **Remove**.

#### OR

Click Delete Paging Zone to delete this paging zone.

3. Click Apply to save these settings or click Cancel to return to the previous page without saving the changes.



## **Configuring Ring Groups**

Extensions can be grouped together to form up to 10 Ring Groups. For example, all extensions in the sales department can be defined as a "Sales" Ring Group. All extensions at your location can be in a "Ring All" group. Incoming calls can reach a particular Ring Group through the Auto Attendant. When the Auto Attendant is off, you can have all incoming calls go to a Ring Group.

See "Auto Attendant Menu Choices" on page 51 for information on using Ring Groups in the Auto Attendant.

Use the WebUI to configure the Ring Group so when the call is forwarded, all extensions assigned to the group ring at the same time (**All Ring**), or in sequence (**Linear**), or in sequence from the last-called extension (**Round Robin**). Ring Groups can be called hunt groups when the extensions ring sequentially.

In order for Round-Robin Ring Group distribution to work correctly, the time and date must be synchronized on all devices. See "System Basic Settings" on page 36 for information on time and date configuration.



In Line Appearance mode, only the All Ring setting applies. The **Type** option does not appear on the **Create Ring Group** page.

If you create a Ring Group in Call Appearance mode with either the Linear or Round Robin Ring Types, then the **Type** will revert to All Ring if you put the system in Line Appearance mode.

You can configure unanswered Ring Group calls to be forwarded to an extension, Group Mailbox, personal voicemail, outside phone number, Auto Attendant, or another Ring Group.

An extension can be in more than one Ring Group. In Line Appearance mode, if a Deskset in a Ring Group is not assigned the line that an incoming Ring Group call is on, the call will ring the Deskset's Intercom line.

Internal callers cannot call Ring Groups.



## To create, edit, or delete a Ring Group:

1. In the navigation menu at left, click **System Settings**, then **Ring Groups**. The **Ring Groups Summary** page appears.

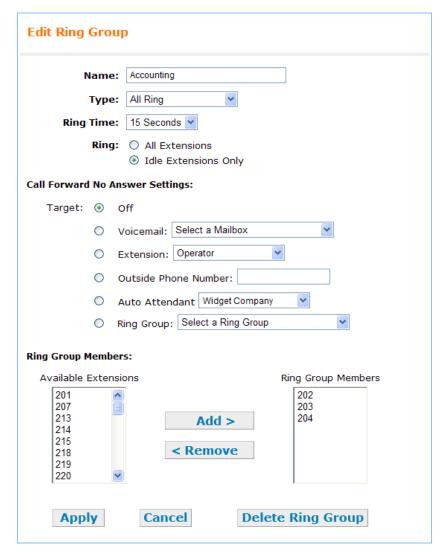


2. Click <u>Create New Ring Group</u> to create a new Ring Group. The **Create Ring Group** page appears. For a new Ring Group, enter an appropriate **Ring Group Name**.

#### OR

To view or edit a Ring Group, click View/Edit . The Edit Ring Group page appears. OR

To delete this Ring Group, click Delete Ring Group on the Edit Ring Group page.



Before you delete a Ring Group, delete references to the Ring Group in the Auto Attendant. See "Auto Attendant Menu Choices" on page 51.

# Call Appearance 3. mode

Select the **Type** of Ring Group.

- **All Ring**: All available Desksets in the Ring Group ring simultaneously for the amount of time set for the **Ring Time**. The call is then forwarded to the Ring Group Call Forward–No Answer (CFNA) target.
- Linear: The lowest numbered extension in the group rings for the amount of time set in the Ring Time. If this Deskset does not answer, the next Deskset in numerical order rings, and so on until all Desksets have been rung. If the last Deskset does not answer, the call is forwarded to the Ring Group CFNA target.
- Round Robin: The extension that has the next higher extension number after the last-called extension rings. If this Deskset does not answer, the next Deskset in numerical order rings. This continues until all Desksets have been rung. If the last Deskset does not answer, the call is forwarded to the Ring Group CFNA target.



- 4. Select the **Ring Time**. The Ring Time determines how long the extensions ring in **All Ring** mode, or how long each extension rings before moving on to the next extension in **Linear** or **Round Robin** mode.
- Call Appearance 5. Select if All Extensions or Idle Extensions Only (Desksets being used are skipped) will ring.
  - 6. Select the Call Forward–No Answer (CFNA) **Target** destination. When no one in a Ring Group answers a call, the call is sent to the selected **Target**, as listed below:
    - Off. Let the Ring Group ring until the call is answered or the caller hangs up.
    - Voicemail. Forward the call to a Group Mailbox or Personal Mailbox.
    - Extension.
    - Outside Phone Number. This number must include a number for external line access if your dial plan requires it. You do not need to enter hyphens or format the number in any way. For example, 2325550176 will work fine.
    - Auto Attendant. Forward the call to the selected Auto Attendant main menu.
    - Ring Group.
  - 7. Select the **Ring Group Members** from the **Available Extensions** list. Analog phones connected to the ATA can be members of Ring Groups.

Click to highlight extensions you want to add, and then click Add > .

#### OR

Click to highlight extensions you want to remove, and then click < Remove .

8. Click Apply to save these settings or click Cancel to return to the previous page without saving the changes.

The new Ring Group appears on the Ring Groups Summary page.



## **System Directory**

Create a list of up to 100 phone numbers (referred to as the **System list** on the Deskset) that people at your business frequently call. These numbers are available to all of the extensions.

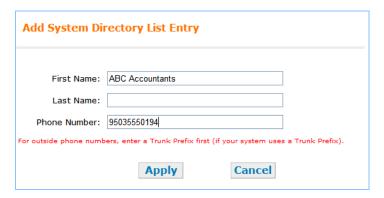
## To set up the System Directory:

1. In the navigation menu at left, click System Directory. The System Directory List page appears.



- 2. Click **Add New Entry**
- 3. Complete the Add System Directory List Entry page with the information indicated.

Ensure that you enter a number for external line access if your dial plan requires it for an outside call.



4. Click Apply to save the entry. The System Directory menu appears with the entry added.

#### OR

Click Cancel to return to the previous page without saving the changes.



To edit an entry, click [Edit] to the right of the entry. The Edit System **Directory List Entry** page appears with the fields populated with the entry NOTE to be edited.



## **Trunk Naming**

You can name the system trunks for easier identification. For PSTN Gateways, all four lines can be named. For the T1 Gateway, there is only one physical trunk, so only that one trunk can be named regardless of how many slots the T1 trunk supports.

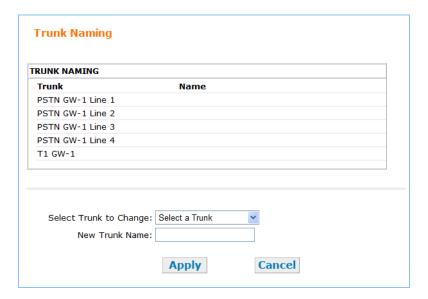


You can name SIP accounts on the SIP Account Settings page. See "SIP Gateway Settings" on page 134.

Renaming Gateway trunks is recommended for Line Appearance mode and when reserving trunks. See "Trunk Reservation (Outgoing Calls)" on page 106.

#### To name a trunk:

1. In the navigation menu at left, click **Trunk Naming**. The **Trunk Naming** page appears.



- 2. In the **Select Trunk to Change** list, select a trunk. All PSTN Gateway and T1 Gateway trunks are listed.
- 3. Enter the **New Trunk Name** using up to 16 characters. In Line Appearance mode, trunk names appear on SB67030/031 Deskset screen. Because of space requirements on the screen and varying character widths, limiting trunk names to four to six characters is recommended.
- 4. Click Apply to save the entry. The new Trunk Name appears in the Trunk Naming summary table.



## **Trunk Reservation (Outgoing Calls)**



These settings apply to Call Appearance mode only.

You can reserve a PSTN telephone line, T1 channel, or SIP account for an extension, so that only that extension can use that line, channel or account for outgoing calls. Trunk reservations apply only to outgoing calls. A user with a reserved trunk will not be able to make outgoing calls if all lines and channels are busy with incoming calls. If necessary, 911 calls use trunks that are reserved for other extensions.



Trunk reservation limits the number of total outgoing calls possible by other, non-reserved, extensions or call appearances. Ensure that the trunk reservations you configure do not negatively affect the line availability of the rest of your Synapse system.

#### **Dial Plan Considerations**

The Synapse Dial Plan settings affect how Trunk Reservation functions. Before configuring Trunk Reservations, ensure that you have configured Dial Plan settings as described in this section. See also "Dial Plan Settings" on page 64.

A user can make outgoing calls according to the Deskset trunk reservation if:

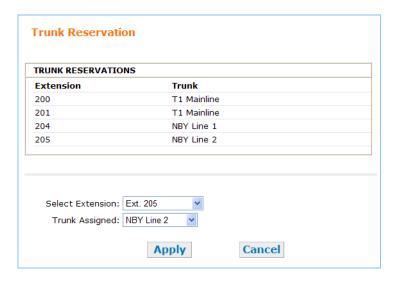
- the user dials a number matching a Dialing Rule Pattern that uses the Default Routing Priority as its Route destination. In other words, "Default Routing Priority" is selected in the Dialing Rule Route drop-down list on the **Dial Plan Settings** page. If the reserved trunk is busy or otherwise available, the system attempts to make the call using the Default Routing Priority.
- the reserved trunk appears in the Included Trunks Default Routing Priority box on the Dial Plan Settings page. If the reserved trunk is in the Excluded Trunks list, the Trunk Reservation does not apply.

An extension will bypass its Trunk Reservation when a Dialing Rule Pattern uses a non-default routing destination. For example, if a dialing rule routes the pattern !9:![01][2-9]xxxxxxxxx through the SIP Gateway, an extension with PSTN Line 1 reserved will still use the SIP Gateway when the user dials 9-1-503-555-1234.



#### To reserve a trunk:

1. In the navigation menu at left, click **Trunk Reservation**. The current Trunk Reservation list appears.



- 2. Select an Extension. All extensions are listed, including FXS ports on the optional ATA that have been assigned to a telephone or Fax. Only one telephone line/channel can be reserved for each extension.
- 3. Select an available trunk from the Trunk Assigned list. Trunks that are reserved for other extensions do not appear in the list. The T1 Gateway appears as one trunk in the list. Selecting T1 reserves one T1 channel for the extension. You can select T1 for as many extensions as there are channels. Your service provider determines the number of available T1 channels. See "T1 Gateway Settings" on page 143.



The trunk that you assign must appear in the Included Trunks Default Routing Priority box on the Dial Plan Settings page. See "Dial Plan **NOTE** Settings" on page 64.

4. Click Apply to save the entry or click Cancel to return to the previous page without saving the changes.



To route an incoming call directly to an extension, see "Direct Inward Dial" on page 77 (for a T1 Gateway or SIP Gateway) or "Trunk Routing (Incoming Calls)" on page 108 (for a PSTN Gateway).



## **Trunk Routing (Incoming Calls)**

You can route incoming calls to an extension, Auto Attendant, Call Queue (in Call Appearance mode), Ring Group, Group Mailbox, System Directory, or Personal Voicemail. Incoming calls that are routed to an external System Directory number will establish an outgoing call and use additional system resources.

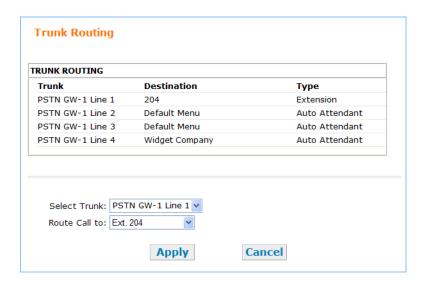
Call Appearance You can also route calls on the T1 Gateway and SIP Gateway through Direct Inward mode Dialing. See "DID Assignments" on page 79. Any destination can have more than one trunk routed to it.



Trunk Routing settings are not preserved when you change the system appearance mode. You must reconfigure Trunk Routing for each mode.

## To route incoming calls on a trunk:

1. In the navigation menu at left, click **Trunk Routing**. The current Trunk Routing list appears, showing the **Trunk**, **Destination** and **Type** of destination.



- 2. Under **Select Trunk**, select an available trunk. All PSTN Gateway trunks, T1 Gateways, and SIP Gateway Accounts appear in the list.
- 3. Under Route Call to, select a destination.



Routing a trunk already assigned as a fax line to another destination will cause the incoming call to undergo fax signal detection at the Gateway. If the call is a fax call, it goes to the fax instead of the Trunk Routing destination.

4. Click Apply to save the entry.



#### Voicemail to Email

The Voicemail to Email feature converts voicemail messages to .WAV files and sends them to a user's email account as an attachment. Users can choose to receive an email notification of a new message without the .WAV attachment. The feature also enables users to forward messages from their personal voicemail or Group Mailbox to their email account.

Configure global settings for Voicemail to Email on the Voicemail to Email page.

If SMTP Authentication is required by your email server, you must enter the Server address or host name, username, and password. The feature supports only one SMTP Server.

#### To configure Voicemail to Email:

1. In the navigation menu at left, click **Voicemail to Email**. The **Voicemail to Email** page appears.



- Click Yes to enable Voicemail to Email for all Desksets. After enabling Voicemail to Email, you can edit the local Voicemail to Email settings for individual Desksets on the Extension Basic Settings page. See "Extension Basic Settings" on page 112.
- 3. Enter the **Outbound SMTP Server** IP address or host name, as supplied by your email service provider. For example, **10.88.3.45** or **smtp.domain.com** (where domain.com is the domain name of your service provider).
- 4. Enter the **Outbound SMTP Server Port** if your SMTP server does not use the default port setting. Consult your email service provider.
- 5. Enter the Outbound SMTP Username.



- 6. Enter the Outbound SMTP Password.
- 7. Select the **Encryption** setting as required by your email service provider. The **Outbound SMTP Server Port** changes according your selection.
- 8. Enter the **"From" Address** for Voicemail notification emails. The format should be **noreply@localhost.localdomain**.
- 9. Click Apply to save the settings.



## **Extension Settings**

Use the WebUI to configure the following Extension Settings:

- "Extension Basic Settings" on page 112
- "Call Restriction Settings" on page 115
- "Personal Directory" on page 118
- "SB67020/025 Deskset Programmable Feature Keys (PFKs)" on page 120
- "SB67030/031 Deskset Programmable Feature Keys (PFKs)" on page 125.



Change extension settings on only one Deskset at a time.

When making configuration changes to a device using the IP address of another Deskset, ensure that Deskset is not in use or the configuration changes may fail.



## **Extension Basic Settings**

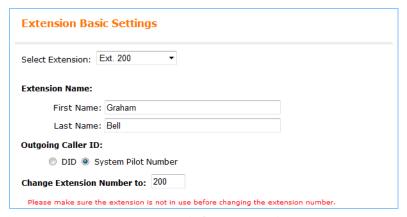
You can modify the settings for individual extensions from the Extension Basic Settings page.



Deskset users have different Extension Settings available when they log on to the WebUI. They are described in "Web Interface" of the SB67030/031 Deskset and Accessories User's Guide and the SB67020/025 Deskset User's Guide at www.telephones.att.com/synapsequides.

#### To set the Extension Basic Settings as the administrator:

1. In the navigation menu at left, click Extension Settings, then Basic Settings. The Extension Basic Settings page appears.



- 2. Select an extension from the **Select Extension** list to display the current settings for that extension.
- 3. Enter a new Extension Name into the First Name and Last Name fields. Enter up to 16 characters for each, although only the first 18 characters from the entire name display on screen.

Extension Name displays the name for the current extension. This name is used on the Idle screen of the Deskset and in the Auto Attendant Directory. Callers spell the Extension Name, followed by the pound (#) sign, using their touch-tone phones when they search for extensions in the Auto Attendant Directory.

- T1 Gateway, SIP 4. Gateway
- If the extension has an assigned DID, the **Outgoing Caller ID** option appears. Select whether the Outgoing Caller ID is the **DID** number or the **System Pilot Number**.
  - 5. You can enter a new extension number in the range 100-999 or 1000-9999 into the Change Extension Number to box. The first digit of the extension number need not match the default extension number first digit.



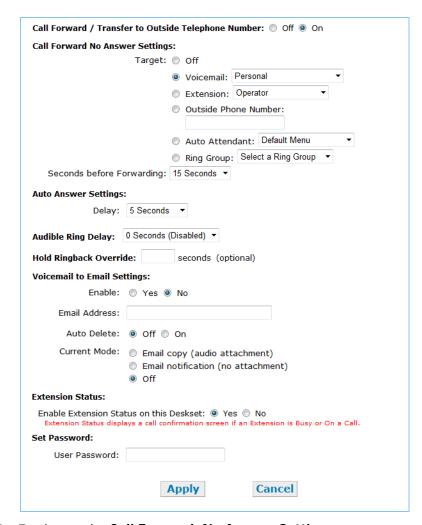
Ensure that the extension is not in use and do not assign an extension number CAUTION with the first digit of any extension that is the same as an Auto Attendant menu digit key value, as callers will be unable to dial that extension. Instead, they will be connected to that Auto Attendant menu action. See "Configuring the Auto Attendant" on page 42.





Desksets do not lose their assigned extensions even if a Deskset is disconnected and unplugged. If you want to remove a Deskset from the system, the Deskset must be deleted using the WebUI. (See *"To delete an extension, Gateway, or ATA:" on page 149.*) This ensures that the extension number becomes available again.

6. You can select Call Forward/Transfer to Outside Telephone Number to enable or disable forwarding or transferring of calls to an external number. This function is enabled by default and uses two outside lines or channels when calls are forwarded. Disabling this function prohibits the user from setting the Call Forward All target to Phone #.



- 7. To change the **Call Forward–No Answer Settings**:
  - a. Select the Target for unanswered calls:
    - Off. The extension rings until the call is answered or the caller hangs up.
       Conference room extensions typically have Call Forward–No Answer Settings set to Off and have their ringers set very low or off.
    - Voicemail.



- Extension.
- Outside Phone Number. This number must include a number for external line access if your dial plan requires it. You do not need to enter hyphens or format the number in any way. For example, 2325550176 will work fine.

You cannot use a restricted number as a Call Forward-No Answer destination. See "Call Restriction Settings" on page 115. An error message appears if you enter a restricted number and click Apply.

- Auto Attendant.
- Ring Group.
- b. Select the number of Seconds before Forwarding.



The Call Forward All settings on each Deskset override Call Forward-No. Answer settings. See "Setting Call Forward All and Call Fwd-NA (No NOTE Answer)" on page 11.

In Line Appearance mode, the extension Call Forward–No Answer settings apply only to Intercom calls and external calls forwarded from a PSTN line's Call Forward-No Answer settings.

# mode

Line Appearance 8. Select the **Automatic Off-hook Line Selection**. You can configure the extension to use a PSTN line or an Intercom line when the user goes off hook with the corded handset, SPEAKER key or HEADSET key.

- 9. Select the Auto Answer **Delay** (in Line Appearance mode, this is the Intercom Auto Answer delay). You can set the Deskset to automatically answer calls after the delay. Without touching the Deskset, the Deskset user can speak to and be heard by the person who called.
- Call Appearance 10. Select the Audible Ring Delay. You can delay audible ringing at some Desksets. mode Users can also set this delay at their Desksets. Setting the Delay to zero disables this feature.
  - 11. Set the Hold Ringback Override, if desired. You can set a Hold Ringback delay for this extension that will override the system-wide Hold Ringback delay you set on the Hold/Park Settings page. See "Configuring Hold/Park Settings and Music on Hold" on page 88.
  - 12. Configure the Voicemail to Email Settings.
    - a. Click Yes or No to enable or disable Voicemail to Email for this extension.
    - b. Enter the user's Email Address. Audio files and notifications will be sent to this address.
    - c. Click Off or On to disable or enable Auto Delete. When on, messages are automatically deleted from the extension's personal mailbox once they are sent to email as audio files. This setting does not apply to Group Mailboxes.
    - d. Select the Current Mode for Voicemail to Email.
      - Email copy (audio attachment)
      - Email notification (no attachment)
      - Off.





The **Voicemail to Email Settings** are also available to Deskset users when they log on to the WebUI.

- **Call Appearance 13.** Enable or Disable **Extension Status**. When enabled, the Deskset displays a call confirmation screen when calling other extensions that are busy or have Do Not Disturbed enabled.
  - 14. Under **User Password**, create or change the Deskset password. The password must consist of up to 6 digits.
  - 15. Click Apply to save any changes or click Cancel to return to the previous page without saving the changes.

## **Call Restriction Settings**



This feature is available in Call Appearance mode only.

You can prohibit certain types of calls from being made from certain extensions on the Call Restriction Settings page. Each type of call listed on the Call Restriction Settings page matches a prefix that you defined on the Call Restriction Configuration page. See "Call Restriction Configuration" on page 62.

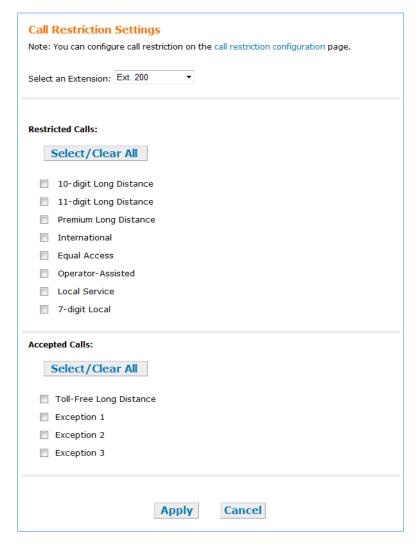


If an extension is Call Restricted after you set a restricted number as a Call Forward All or Call Forward–No Answer destination, the destination reverts to default (Voicemail).

#### To restrict calls for an extension:

- 1. In the navigation menu at left, click **Extension Settings**, then **Call Restriction Settings**. The **Call Restriction Settings** page appears.
- 2. Select an extension to configure.





- 3. Under **Restricted Calls**, select the types of calls to be restricted for the extension. You can select each type individually, or click **Select/Clear All** to select every type.
- 4. Under Accepted Calls, select the numbers that are excluded from the restricted call types for the extension. These are the exceptions that you entered on the Call Restriction Configuration page. You can select each item individually, or click Select/Clear All to select every item.
- 5. Click Apply to save these settings.



## **Direct Intercom Settings**



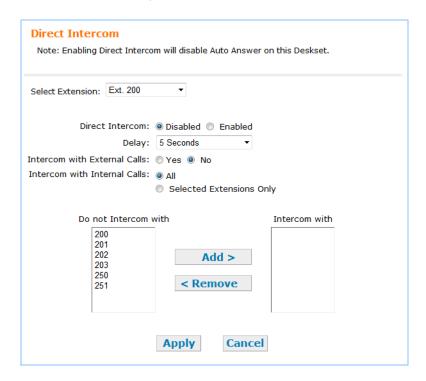
This feature applies to Call Appearance mode only.

Direct Intercom is an automatic-answering feature that you can set for each extension. When Direct Intercom is enabled, INT ON appears at the top of the Deskset screen. The Deskset will auto answer internal calls from certain extensions or all extensions, depending on how you have set Direct Intercom. You can also enable the Deskset to auto answer all external calls.

Once Direct Intercom is enabled, the user cannot override the feature with the Deskset Auto Answer feature. Only the system administrator can disable or change Direct Intercom settings.

### To configure Direct Intercom settings:

1. In the navigation menu at left, click **Extension Settings**, then **Direct Intercom**. The **Direct Intercom** page appears.



- 2. Select an Extension to configure.
- 3. Enable or Disable Direct Intercom.
- 4. Set the Auto Answer Delay.
- 5. Select whether the extension will auto answer external calls.
- 6. Select whether the extension will auto answer calls from **All** extensions or **Selected Extensions Only**.



- 7. If you selected **Selected Extensions Only**, select extensions in the **Do not Intercom with** list and click the Add button to add them to the **Intercom with** list.
- 8. Click Apply to save these settings.

## **Personal Directory**

The Personal Directory is only available at the extension for which it is created. Personal Directory entries can be created by the administrator or by a Deskset user.

#### To manage the Personal Directory:

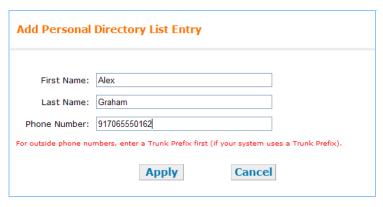
- 1. In the navigation menu at left, click **Extension Settings**, then **Personal Directory**. The **Directory List for Extension**: page appears.
- 2. Select the desired extension number from the list.

The Directory list appears. You can add, edit, delete, and sort the entries, as described on the following pages.





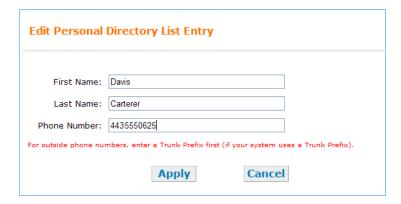
To add a new entry, click Add New Entry . The Add Personal Directory List Entry page appears.



a. Complete the form with the information indicated.

The Phone Number must include a number for external line access if your dial plan requires it for an outside call.

- b. Click Apply to save the entry. The **Directory List** page appears with the entry added.
- To edit an entry, click [Edit] to the right of the entry. The Edit Personal Directory List Entry page appears with the fields populated with the entry to be edited.



Click Apply to save the entry. The **Directory List** page appears with the entry added.

- To sort entries by last name, click Sort By Last Name. The list updates and the button changes to Sort By First Name.
- To delete Directory List entries:
  - a. Mark the entries to delete by selecting the check box to the left of each entry.
  - b. Click Delete Selected Entries. The selected entries are removed.

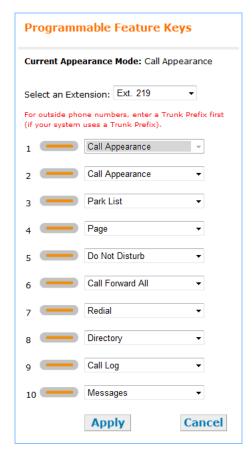


## SB67020/025 Deskset Programmable Feature Keys (PFKs)

Use the **Programmable Feature Keys** page to set the PFKs on the SB67020/025 Desksets in your Synapse system.

#### To edit SB67020/025 programmable feature key assignments:

- 1. In the navigation menu at left, click Extension Settings, then Feature Keys.
- 2. Select the desired SB67020/025 Deskset Extension from the **Select an Extension** list. The default PFK assignments appear (Call Appearance mode is shown below).



- 3. Reassign functions to each key. The lists of functions vary depending on whether you have set Call Appearance mode or Line Appearance mode in System Basic Settings. See "Programmable Feature Keys in Call Appearance mode" on page 121 and "Programmable Feature Keys in Line Appearance mode" on page 122.
- 4. Line Appearance mode—Select Ignore Incoming Calls for any lines that you do not want to ring at the Deskset. See Figure 8 on page 123. Users will be able to monitor activity on that line and answer incoming calls by pressing the key.
  Answer soft
- 5. Click Apply to save the entries or click Cancel to refresh the page without saving the changes.



#### **Programmable Feature Keys in Call Appearance mode**

Key  ${\bf 1}$  is fixed as a Call Appearance. You can assign the remaining nine PFKs as Call Appearance keys.

You can assign the following features to the keys:

<ul><li>Auto Attendant</li></ul>	<ul><li>Directory</li></ul>	Park List
<ul><li>Call Appearance</li></ul>	<ul><li>Do Not Disturb</li></ul>	Page
<ul><li>Call Forward All</li></ul>	<ul><li>Extension Monitor</li></ul>	Quick Dial
<ul><li>Call Log</li></ul>	<ul><li>Help</li></ul>	Redial
<ul><li>Call Queue</li></ul>	Messages	

Up to nine PFKs can be assigned as quick-dial keys. You can assign all other features to one key only. After a feature has been assigned, it disappears from the list for the other PFKs.

By default, the SB67020/025 has two Call Appearance keys assigned. If you assign the second Call Appearance key to another function, the Deskset user cannot transfer calls or create conference calls. If you use a Call Queue, you should assign two Call Appearance keys to allow the Deskset user to retrieve a call from the Call Queue list while a Call Queue call is ringing the Deskset.

The Auto Attendant option appears only for Desksets assigned as an Operator station. Pressing the Auto Attendant PFK is a shortcut to the Deskset Auto Attendant menu.

#### **Extension Monitor Keys**

Selecting an extension under **Extension Monitor** enables the Deskset user to monitor call activity at that extension. The PFK LED changes according to the extension status. You can select up to nine PFKs as **Extension Monitor** keys.

Table 11. Extension Monitor PFK Behavior

Call Status	LED
Active or Paging	Solid Green
Incoming Call	Fast Green Flash
Held Call	Slow Green Flash
Do Not Disturb	Solid Orange
Incoming Call with Do Not Disturb ON	Fast Orange Flash
Idle	Off

The user can also press the Extension Monitor key to dial the monitored extension, and answer incoming calls to the monitored extension when the PFK LED is flashing.



#### **Programmable Feature Keys in Line Appearance mode**

Key **1** is assigned to PSTN Gateway line 1 and Key **10** is fixed as an **Intercom** key to enable internal, extension-to-extension calls.

You can assign the following features to the keys:

<ul><li>Any available PSTN Trunk</li></ul>	<ul><li>Held Calls List</li></ul>	Page
<ul><li>Call Log</li></ul>	<ul><li>Help</li></ul>	Quick Dial
<ul><li>Directory</li></ul>	Intercom	Redial
<ul><li>Do Not Disturb</li></ul>	<ul><li>Messages</li></ul>	<ul><li>Extension Monitor</li></ul>



Configuring Line Appearances causes all calls to be dropped. Before reassigning PSTN Gateway lines, ensure that there are no calls in progress.

You can assign **Intercom**, **Quick Dial**, and **Extension Monitor** to multiple keys. Every other feature can be assigned only once. After one of these features has been assigned, it disappears from the list for the other PFKs.

If all 10 PFKs are assigned to Intercom, the Deskset cannot make external calls.

#### **Extension Monitor Keys**

Selecting an extension under **Extension Monitor** enables the Deskset user to monitor call activity at that extension. The PFK LED changes according to the extension status. You can select up to nine PFKs as **Extension Monitor** keys.

Table 12. Extension Monitor PFK Behavior

Call Status	LED
Active or Paging	Solid Green
Incoming Call (see Note)	Fast Green Flash
Held Call	Slow Green Flash
Do Not Disturb	Solid Orange
Incoming Call with Do Not Disturb ON	Fast Orange Flash
Idle	Off

The user can also press the Extension Monitor key to dial the monitored extension, and answer incoming calls to the monitored extension when the PFK LED is flashing.



In Line Appearance mode, the Extension Monitor key LED flashes green for an incoming call when:

- the call is on the Intercom line
- an external call is forwarded to an extension through a Call Forward-No Answer setting
- an external call is transferred to an extension.



In Line Appearance mode, the **Ignore Incoming Calls** option is available for each key assigned to a PSTN Gateway line. Select this option if you do not want the Deskset to ring for incoming calls on that line.

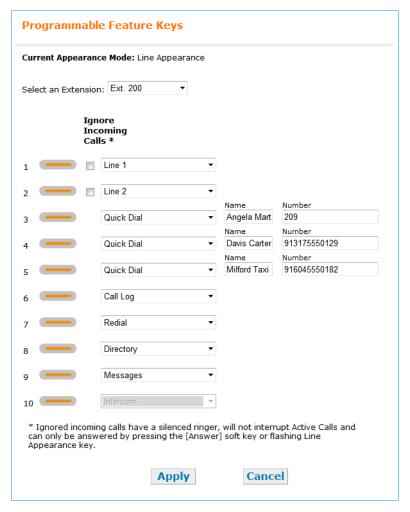


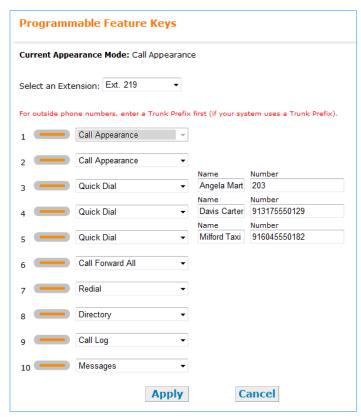
Figure 8. SB67020/025 Deskset Programmable Feature Keys (Line Appearance mode)

## SB67020/025 Deskset Quick-Dial Keys

On the SB67020/025 Deskset, quick-dial entries are only available if you have assigned PFKs as quick-dial keys. After assigning quick-dial keys, you or a SB67020/025 Deskset user can assign phone numbers to the keys.

## To edit SB67020/025 quick-dial entries:

- 1. Log on, either as administrator or a user. To log on as a user, enter an extension number and the user's password, if needed.
- 2. In the navigation menu at left, click Extension Settings, then Feature Keys.
- 3. If necessary, select the desired SB67020/025 Deskset extension number from the **Select an Extension** list. When logging on as a user, you cannot select a different extension.
- 4. On the **Programmable Feature Keys** page (Call Appearance mode shown), enter a name and number for every quick-dial entry you want to create. Any hyphens in phone numbers are ignored.



This number must include a number for external line access if your dial plan requires it for an outside call. For example, **9-1-555-0123**. Enter **P** for a pause in the number.

- 5. Click Apply to save the entries or click Cancel to refresh the page without saving the changes.
- 6. To verify the entries, try a quick-dial key on the Deskset, as shown in Figure 9.



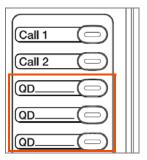


Figure 9. SB67020/025 Quick-Dial Key Location

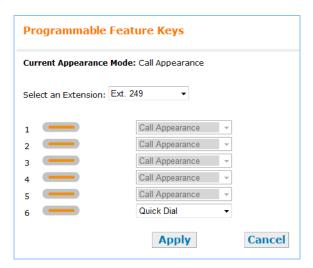
## SB67030/031 Deskset Programmable Feature Keys (PFKs)

On the **Programmable Feature Keys** page you can set the PFKs for a SB67030/031 Deskset in your Synapse system. Different PFKs are available depending on the appearance mode.

### To configure programmable feature keys in Call Appearance mode:

- 1. In the navigation menu at left, click Extension Settings, then Feature Keys.
- Select the desired Extension from the Select an Extension list.

The **Programmable Feature Keys** page appears, showing the default PFK assignments.



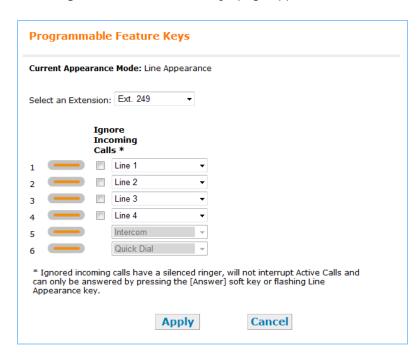
- 3. Select a setting for key 6 from the list:
  - Quick Dial enables the quick-dial feature. The Quick Dial label appears in the bottom right corner of the Deskset screen.
  - Call Queue enables the user to access the Queued Calls list. The Call Queue label appears in the bottom right corner of the Deskset screen.
  - None disables both quick dial and Call Queue on this Deskset.
- 4. Click Apply to save the setting or click Cancel to refresh the page without saving the changes.



#### To configure programmable feature keys in Line Appearance mode:

- 1. In the navigation menu at left, click Extension Settings, then Feature Keys.
- 2. Select the desired Extension from the **Select an Extension** list.

The **Programmable Feature Keys** page appears.



- Select a setting for keys 1 to 4 from the lists:
  - PSTN Trunks lets you select an available PSTN line to assign to the key.
  - Features lets you assign Intercom to the key, providing another virtual line for the user to make internal calls.
  - None disables the key. Selecting None also "releases" a PSTN line so you can assign it to another key.



Configuring Line Appearances causes all calls to be dropped. Before reassigning PSTN Gateway lines, ensure that there are no calls in progress.

- 4. Select **Ignore Incoming Calls** for any lines that you do not want to ring at the Deskset. Users will be able to monitor activity on that line and answer incoming calls by pressing the **Answer** soft key.
- 5. Click Apply to save the setting or click Cancel to refresh the page without saving the changes.



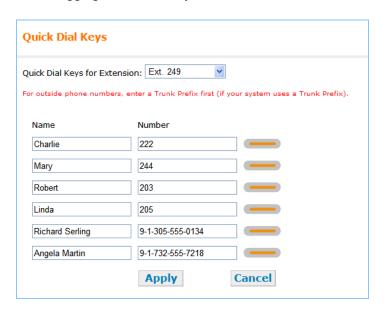
## SB67030/031 Deskset Quick-Dial Keys

On the SB67030/031 Deskset, quick-dial entries are only available at the extensions for which they are created. You or a Deskset user can enter quick-dial entries.

### To create or edit SB67030/031 quick-dial entries:

- 1. Log on, either as administrator or a user. To log on as a user, enter an extension number and the user's password, if needed.
- 2. Click Extension Settings, then Quick Dial Keys in the navigation menu at left. The Programmable Feature Keys page appears.

If necessary, select the desired extension number from the **Select an Extension** list. When logging on as a user, you cannot select a different extension.



3. Enter a name and number for every quick-dial entry you want to create. Any hyphens in phone numbers are ignored.

The number must include a number for external line access if your dial plan requires it for an outside call. For example, **9-1-555-0123**. Enter **P** for a pause in the number.

- 4. Click Apply to save the entries or click Cancel to refresh the page without saving the changes.
- 5. To verify that the entries have been created, on the Deskset, press the key to the right of Dial to display the quick-dial entries, as shown in Figure 10.

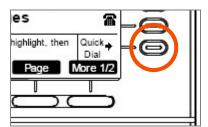


Figure 10. 030/031 Quick-Dial Key Location



## **PSTN Gateway Settings**

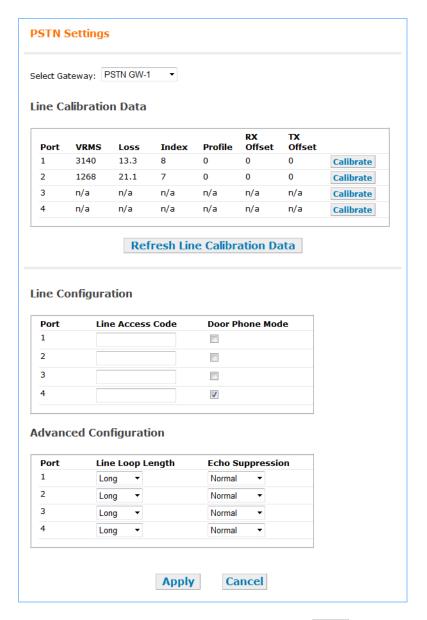
The **PSTN Settings** page provides calibration and configuration options for any PSTN Gateways in your system. These options apply to installation and troubleshooting audio problems on your PSTN lines. The settings include:

- Line Calibration Data. View calibration data for each PSTN Gateway port and manually recalibrate each line. For more information, see "Resolving Audio Echoes (PSTN Gateway)" on page 168.
- Line Configuration. Enter a calibration code for each line (used for Centrex lines) and enable Door Phone mode for a selected line. For more information, see "Line Configuration" and "Door Phones Overview" in the Synapse Installation Guide, available at www.telephones.att.com/synapsequides.
- Advanced Configuration. Select a loop length and echo suppression setting for each line. These settings can be used if you need to troubleshoot audio echoes that persist after recalibrating the PSTN lines. For more information, see "Resolving Audio Echoes (PSTN Gateway)" on page 168.



### To configure a PSTN Gateway:

- 1. In the navigation menu at left, click **PSTN Settings**. The **PSTN Settings** page appears.
- 2. Select the desired PSTN Gateway from the list. The full page appears.



3. After performing the necessary configuration, click Apply to save the settings.

## **ATA Settings**

Use the WebUI to configure the two FXS ports on the ATA. Once an ATA is connected to the Synapse network, the WebUI is updated to show all ATA-related menus and configuration items within menus. (The ATA must be running a compatible software version.) If the ATA is deleted (using the WebUI's **Modify Device** page), all the ATA-related menus and configuration items disappear.

## **PLAR Setup**

Using the Private Line Automatic Ringdown (PLAR) feature, you can configure a private intercom line or a door phone. When you enable the PLAR feature through the WebUI, an analog device—an analog telephone or Station Port (FXS) door phone, for example—connected to an ATA FXS port will ring a destination when it goes off hook. The destination can be an Synapse Deskset extension or a Ring Group. You can configure this destination on the **ATA Settings** page of the WebUI.



Synapse supports two types of door phones: Station Port (FXS) and Trunk Port (FXO). You can connect a Station Port (FXS) door phone to the ATA and configure it using PLAR. For information about installing a Trunk Port (FXO) door phone, see the Synapse Installation Guide, available at <a href="https://www.telephones.att.com/synapseguides">www.telephones.att.com/synapseguides</a>.

During a call on the PLAR line, a Deskset user can press dial-pad keys to transmit DTMF tones (touch tones) to the analog device. The DTMF tones can control a door relay or other function. This feature depends on your analog device; you cannot program an entry code using the WebUI.

You should configure the PLAR destination to respond appropriately to PLAR calls:

- For a Ring Group destination, set the Call Forward–No Answer target appropriately. For example, if couriers needing access to your building use a door phone when members of the Ring Group are absent, you should set Call Forward–No Answer to ring another Ring Group or extension.
- For an extension destination, ensure that the Ring Delay, Auto Answer, Call Forward All and Call Forward–No Answer settings are configured appropriately. For example, if the extension is sometimes left unattended, you may want to record a custom greeting for callers, or set Call Forward–No Answer to ring another extension.

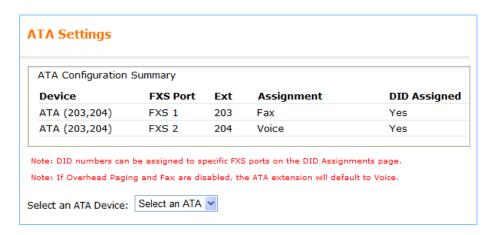


## **Configuring ATA FXS Ports**

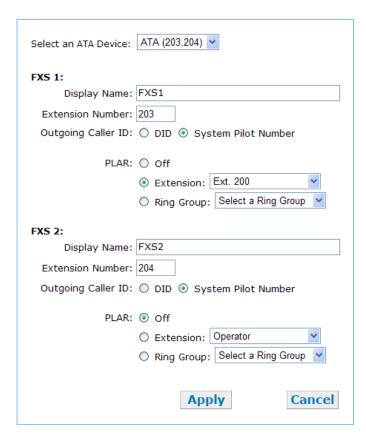
Use the ATA Settings page to configure the two ATA FXS ports.

## To configure the two ATA FXS ports:

1. In the navigation menu at left, click ATA Settings. The ATA Settings page appears.



2. Select the ATA from the **Select an ATA Device** list. The rest of the **ATA Settings** page appears.





- 3. For each FXS port:
  - Enter the Display Name. The Display Name is used as part of the caller ID when an analog phone connected to the FXS port is used for internal calls.
  - Enter an **Extension Number**. Ensure that this is the same extension as selected in Fax Destination. See "Fax Configuration (Requires ATA)" on page 80.

T1 Gateway, SIP Gateway

- Select whether the Outgoing Caller ID will be the DID number or the System Pilot Number.
- Enable PLAR if desired. Select an Extension or a Ring Group to ring when an analog device connected to the FXS port goes off hook.
- 4. Click Apply to save these settings. or click Cancel to return to the previous page without saving the changes.

## **Configuring ATA Call Restriction Settings**



This feature is available in Call Appearance mode only.

On the ATA Call Restriction Settings page, you can prevent users from using an analog telephone to call certain phone numbers. Each type of call listed on the Call Restriction Settings page matches a prefix that you defined on the Call Restriction Configuration page. See "Call Restriction Configuration" on page 62.

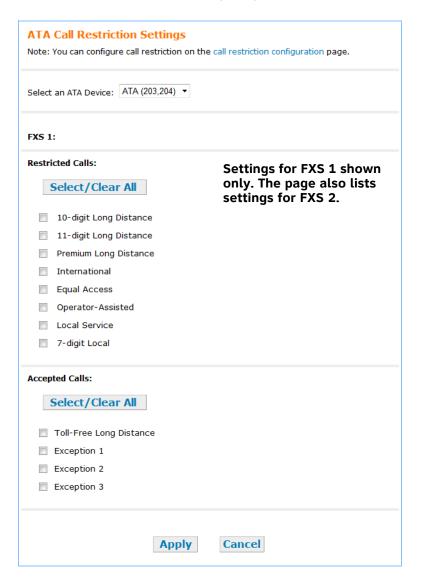


Users cannot override call restrictions when making a call on an analog phone connected to an ATA FXS port.



#### To restrict calls for the ATA FXS ports:

1. In the navigation menu at left, click ATA Settings, then Call Restriction Settings. The ATA Call Restriction Settings page appears.



2. Select the types of calls to be restricted for the ATA.

You can select each type individually, or click Select/Clear All to select every type.

Select the numbers that are excluded from the restricted call types for the ATA.
 These are the exceptions that you entered on the Call Restriction Configuration page.

You can select each item individually, or click Select/Clear All to select every item.

4. Click Apply to save these settings.

## **SIP Gateway Settings**



The SIP Gateway is compatible with Call Appearance mode only.



When modifying SIP Account settings, ensure that there are no active calls using that account. Changes to SIP accounts do not get made until the account becomes idle. You might need to make the changes outside of normal office hours.

The WebUI has two pages on which you configure settings for the SIP Gateway. The first page is the SIP General Settings. Set the starting Real-time Transport Protocol (RTP) port on this page. This setting specifies the starting RTP port that the system will use for audio, and applies to all SIP accounts.

You can register the SIP Gateway with your service provider on the **SIP Account Settings** page. The SIP Gateway supports up to 10 accounts and up to 16 simultaneous voice calls.



These settings should be modified only after consulting your SIP service provider, who can provide most of these settings. For application notes and other information regarding configuring Synapse for certain SIP service providers, call **1** (888) 916-2007. In Canada, dial **1** (888) 883-2474.

### To configure SIP General Settings:

 In the navigation menu at left, click SIP Settings and then click SIP General Settings. The SIP General Settings page appears.



2. Enter the Starting RTP Port number.



The default setting is 16384, which is the common starting RTP audio port. Do not change this setting unless required by your service provider or network administrator.

3. Click Apply to save your changes.

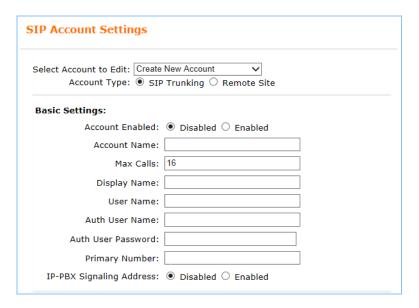


Ensure that you verify your settings with your SIP service provider.



#### To configure SIP Account Settings:

 In the navigation menu at left, click SIP Settings and then click SIP Account Settings. The SIP Account Settings page appears.



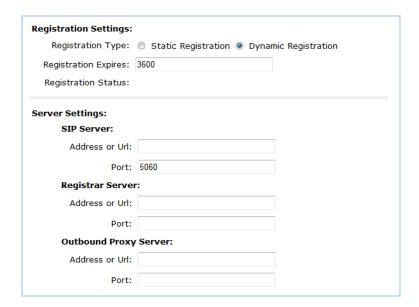
- Select an account to edit, or select Create New Account. If you have already created an account, a Delete Account button appears. Clicking Delete Account deletes the account and loads an empty account page.
- 3. Select the **Account Type**. If this SIP Account is a shared Remote Site account, select **Remote Site** and see "Configuring Remote Sites" on page 139.
- 4. Enter the SIP Gateway Basic Settings.
  - Enable or Disable the account. You must enable the account before it can be used. Disabling the account does not erase the settings associated with the account.
  - Enter the Account Name. The SIP account name appears on the Dial Plan Settings page and the Trunk Reservation page.
  - c. For Max Calls, enter the maximum number of simultaneous voice calls to which you have subscribed from your service provider. The maximum value is 16. Setting the Max Calls to a value that is less than the current number of Trunk Reservations for the SIP Account will generate an error.
  - d. Enter the **Display Name**. The Display Name is the text portion of the caller ID that is displayed for outgoing calls.



Depending on your service provider, caller ID information from your service provider can replace the Display Name setting.



- e. Enter the **User Name** (supplied by your service provider). The User Name, also known as the Account ID, is usually the company's main number and is used as part of the caller ID displayed for outgoing calls. Synapse will only accept digits for a User Name.
- f. Enter the **Auth User Name** (supplied by your service provider). The Auth User Name, also known as the Authentication ID, is used for authentication with the service provider and in most cases is the same as the User Name.
- g. Enter the Auth User Password (supplied by your service provider). The Auth User Password is for authentication with the service provider. Masking of this password is not necessary.
- h. (Optional) Enter the **Primary Number**, as advised by your service provider. Sometimes when the account uses dynamic registration, the **User Name** and **Auth User Name** are used only for registering with the service provider, and are not valid DID numbers. The Primary Number is a DID number that will appear as part of the caller ID for outgoing calls.
- i. Enable or disable the IP-PBX Signaling Address. This setting appears only for the SIP Trunking account type. If enabled, the "From" header in SIP packets will use the local IP address.
- 5. Enter the SIP Gateway Account Registration Settings.



a. Select Static Registration if your provider does not use dynamic registration.



If using Static Registration, ensure that the SIP NAT port forwarding has been configured. For more information, see the Synapse Installation Guide.

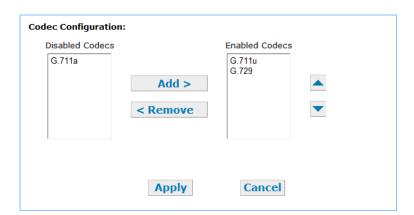


- b. Enter the number of seconds for **Registration Expires**. This setting applies to dynamic registration. It is a reregistration timeout value sent to the SIP Provider. This is usually overriden by a reregistration interval determined by the service provider's response. The default setting is 3600 seconds and should only be changed on the advice of your service provider.
- 6. Enter the SIP Gateway Account Server Settings. These are supplied by your service provider.
  - a. Enter the SIP Server address or URL.



Ensure that there are no blank spaces before or after addresses or URLs in any of the SIP Account Settings fields.

- b. Enter the **SIP Server** Port. Port 5060, the default setting, is typically used for SIP transmission.
- c. (Optional) Enter the Registrar Server address or URL.
- d. (Optional) Enter the Registrar Server Port. If a Registrar Server address or URL is entered in the field above, it may not be necessary to enter a Registrar Server Port.
- e. (Optional) Enter the Outbound Proxy Server address or URL.
- f. (Optional) Enter the Outbound Proxy Server Port. If an Outbound Proxy Server address or URL is entered in the field above, it may not be necessary to enter an Outbound Proxy Server Port.
- 7. Configure the Codec Configuration.
  - a. Enable or disable audio codecs. Click Add > to add the selected codec to the Enabled Codecs list, or click Remove to place it in the Disabled Codecs list.



b. Arrange the enabled audio codecs. Select a codec, then click  $\blacktriangle$  or  $\blacktriangledown$  to change the order.

The SIP Gateway uses the audio codecs in the order they are listed on a per call basis. You can choose codecs based on the speed versus audio performance required.



8. Click Apply to save your changes.



Ensure that you verify your settings with your SIP service provider.

The Registration LED on the SIP Gateway should turn green when the SIP Gateway has successfully registered with your service provider.

9. To confirm the registration status after clicking Apply, click the **Refresh Status** button. The Registration Status should change to "Registered."



## **Configuring Remote Sites**

If two separate Synapse systems both have SIP Gateways, then they can communicate with each other as "remote sites" on a Virtual Private Network (VPN). Remote sites allow users to make extension-to-extension calls between Synapse sites, thus avoiding long-distance charges. Users can also call external numbers at a remote site by routing a call through a remote Gateway, thereby completing a long-distance call as a local call.

Configuring remote sites requires some coordination between the system administrators for each site. To configure remote sites, you must configure one Remote Site SIP Account for every other remote site. This rule holds true even if a remote site receives calls from another site, but does not intend to make outgoing calls to a remote site.

For the two Synapse sites shown in Figure 11, Synapse Site 1 must configure Remote Site Account A to communicate with Synapse Site 2. In addition, Synapse Site 2 must configure Remote Site Account B to communicate with Synapse Site 1. Both Account A and B must use the same **Auth User Name** and password. SIP Account A must use the Static WAN IP Address for Synapse Site 2 in the **Remote Site Address or Url** field. Conversely, SIP Account B must use the Static WAN IP Address for Synapse Site 1.

In addition to configuring remote sites on the SIP Account Settings page, you should also configure the Dial Plan so that calls will reach remote extensions or external numbers. See "Dial Plan Settings" on page 64.



For information about network setup requirements for remote sites, see the Synapse Installation Guide, available at

www.telephones.att.com/synapseguides.

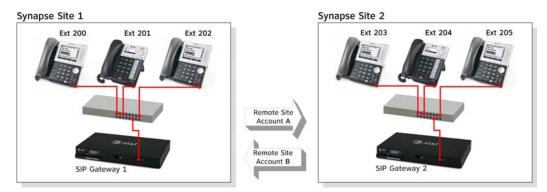
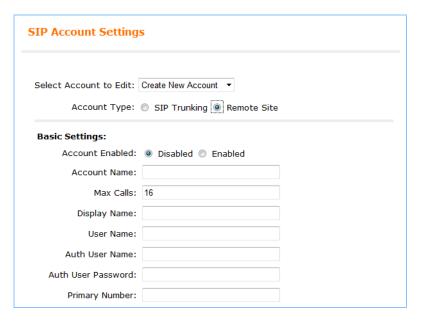


Figure 11. Remote Sites

#### To configure a remote site SIP Account:

 In the navigation menu at left, click SIP Gateway Settings. The SIP Account Settings page appears.



- Select an account to edit, or select Create New Account. If you have already created an account, a Delete Account button appears. Clicking Delete Account deletes the account and loads an empty account page.
- 3. For the Account Type, select Remote Site.
- 4. Enter the SIP Gateway Basic Settings.
  - a. Enable or Disable the account. You must enable the account before it can be used. Disabling the account does not erase the settings associated with the account.
  - Enter the Account Name. The SIP account name appears on the Dial Plan
     Settings page and the Trunk Reservation page.
  - c. For **Max Calls**, enter the maximum number of simultaneous voice calls. The maximum value is 16. Setting the Max Calls to a value that is less than the current number of Trunk Reservations for the SIP Account will generate an error.
  - d. Enter the **Display Name**. The Display Name is the text portion of the caller ID that is displayed for outgoing calls.



Depending on your service provider, caller ID information from your service provider can replace the Display Name setting.

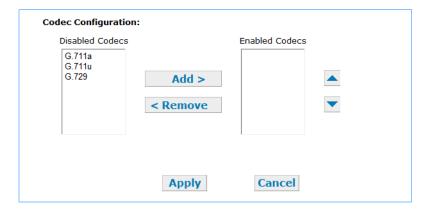
e. Enter the **User Name** (as you have arranged with your service provider). The User Name, also known as the Account ID, is usually the company's main number and is used as part of the caller ID displayed for outgoing calls. Synapse will only accept digits for a User Name.



- f. Enter the **Auth User Name** (as arranged with your service provider). The Auth User Name, also known as the Authentication ID, is used for authentication with the service provider and in most cases is the same as the User Name.
- g. Enter the **Auth User Password** (as arranged with your service provider). The Auth User Password is for authentication with the service provider. Masking of this password is not necessary.
- h. (Optional) Enter the **Primary Number**, as advised by your service provider. Sometimes when the account uses dynamic registration, the **User Name** and **Auth User Name** are used only for registering with the service provider, and are not valid DID numbers. The Primary Number is a DID number that will appear as part of the caller ID for outgoing calls.
- 5. Enter the SIP Gateway Account Server Settings.



- Enter the Remote Site Address or Url. This is the static IP address of the remote site.
- b. Enter the **Remote Site Port**. Port 5060, the default setting, is typically used for SIP transmission.
- c. (Optional) Enter the **Outbound Proxy Server Address or Url**.
- d. (Optional) Enter the **Outbound Proxy Server Port**. If an Outbound Proxy Server Address or Url is entered in the field above, it may not be necessary to enter an Outbound Proxy Server Port.
- Set the Codec Configuration.





- a. Enable or disable audio codecs. Click Add > to add the selected codec to the **Enabled Codecs** list, or click < Remove to place it in the **Disabled Codecs** list.
- b. Arrange the enabled audio codecs. Select a codec, then click ▲ or ▼ to change the order.

The SIP Gateway uses the audio codecs in the order they are listed on a per call basis. You can choose codecs based on the speed versus audio performance required.

7. Click Apply to save your changes.



Ensure that you verify your settings with your SIP service provider.



## **T1 Gateway Settings**



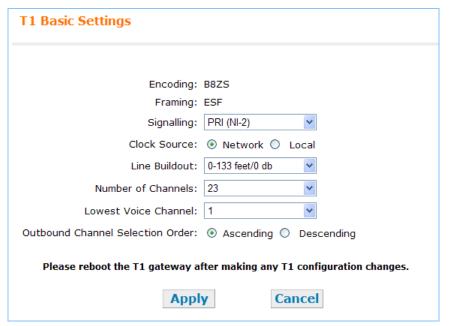
The T1 Gateway is compatible with Call Appearance mode only.

You can modify the settings of your T1 connection. We expect that most installations will use the default settings.

Changing T1 settings resets the T1 Gateway and interrupts telephone service. To avoid disrupting service, AT&T recommends changing T1 settings outside of business hours.

#### To configure the T1 settings:

1. In the navigation menu at left, click **T1 Settings**. The **T1 Basic Settings** page appears.



The system assumes that your T1 circuit uses **B8ZS** (Bipolar with 8 Zeros Substitution) **Encoding**.

The system assumes that your T1 circuit uses **ESF** (Extended Super Frame), used in conjunction with B8ZS, for signaling and to control line **Framing**.

2. Select the Signaling protocol from the **Signaling** list. Signaling information is sent with the data to convey certain connection parameters. The default is Primary Rate Interface (PRI NI-2), which is the modern standard for carrying voice transmissions.

The other choices are Nortel Digital Multiplex Switch 100 (DMS-100), and Class 5 Electronic Switching System (5ESS). With these two protocols, only the caller ID number, not the caller ID name, is provided to the Desksets.

- 3. Select the Clock Source for Gateway synchronization:
  - Network. The telephone network maintains an extremely accurate timing source.



- Local. A clock source that is internally generated in the CSU (Channel Service Unit).
- 4. Select the Line Buildout value from the **Line Buildout** list. The value and it units are determined by whether the CSU is on your premises or not. The default value is 0-133 feet/0 db.

For short haul installations, where a CSU is at your location, the T1 Gateway supports Line Equalization based on the distance between the T1 Gateway and the CSU in feet. Estimate the cable length and select accordingly.

For long haul installations, where the T1 Gateway connects directly to a Network Interface Device, the T1 Gateway supports Line Attenuation. Estimate the line loss and set the Line Buildout value accordingly.

- 5. Select the Number of Channels. You can set the number of voice channels available on the T1 trunk according to the current service subscription. Channel 24 is reserved for PRI signaling.
- 6. Select the **Lowest Voice Channel** in cases where some channels are reserved for data transfer or if there are limited slots available.
- 7. Select the **Outbound Channel Selection Order**, either **Ascending** or Descending.
- 8. Click Apply to save any changes or click Cancel to return to the previous page without saving the changes.



When you click Apply, the T1 Gateway resets itself. If there are Active Calls on the system, the system waits until the last call ends and the system is NOTE Idle. No new incoming or outgoing calls can be made until the reset is complete. During the reset, all LEDs on the T1 Gateway front panel turn off for approximately five to ten seconds. All Phone Lines Busy message appears on all Desksets attempting to make a call.

- 9. Restart the T1 Gateway. Restarting the T1 Gateway hangs up any active calls that are using the T1 Gateway.
  - Press the **RESET** button on the T1 Gateway front panel for less than 5 seconds. OR
  - Disconnect and reconnect T1 Gateway AC power.

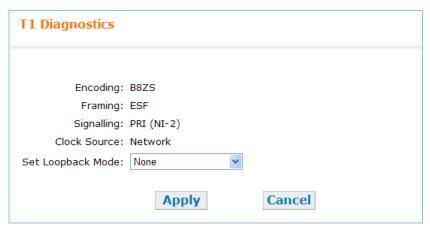


# **T1 Gateway Diagnostics**

You can check the status of the T1 Gateway and select a loopback mode. Setting the loopback mode terminates any phone calls that are using the T1 Gateway.

#### To view the T1 Status:

1. In the navigation menu at left, click **T1 Diagnostics**. The **T1 Diagnostics** page appears, showing the current T1 configuration.



2. Optional: Put the T1 in loopback test mode by selecting from the **Set Loopback Mode** list, then clicking Apply. Note that the Alarm State color changes accordingly.

Selecting **Network** loopback allows the service provider to test the T1 circuit.

Selecting **Payload** loopback allows the service provider to test both the circuit and the T1 Gateway's ability to encode and decode the T1 data.

Once loopback testing is completed, select **None**, then click **Apply** to cancel any loopback test mode.



Be sure to cancel loopback testing so that telephone calls can again occur.

# **Expansion Module Settings**

If an SB67080 Expansion Module is connected to the system, you can configure the Expansion Module on the WebUI **Expansion Module** page. Configuring the Expansion Module consists of:

- Pairing the Expansion Module with a Deskset. When you pair an Expansion Module with a Deskset, calls that are dialed using the Expansion Module keys are made from the paired Deskset.
- Configuring the Expansion Module keys for Extension monitoring or quick dial.



For complete SB67080 Expansion Module configuration instructions, see the SB67080 Expansion Module Installation and Configuration Guide, available at www.telephones.att.com/synapseguides.



# **Device Management**

Use the **Device Management** page to delete devices from the system and to change Deskset extension numbers. If you unplug a Deskset from the system, the extension remains in the system database until you use the **Device Management** page to delete the device. All local settings and personal information (Call Logs and Voicemail, for example) remain stored in the Deskset.

Device Management consist of:

- "Deleting Devices" on page 147
- "Change an Extension Number" on page 150
- "Back Up and Restore Settings" on page 151
- "Copying and Replacing Devices" on page 156
- "Updating Devices" on page 158
- "Device Log" on page 161.

# **Deleting Devices**

You can delete any device in the system from the **Device Management** page. Disconnect the device before deleting it from the system. If the device is not disconnected, an error message appears and you are not be able to delete it.

### **Deleting an Extension (Deskset)**

If you unplug a Deskset from the system, such as when an employee leaves, it remains in the system database until you use the **Device Management** page to delete the device.

Before deleting an extension, ensure that you deregister any cordless accessories registered to the Deskset. See "Deregistering a Cordless Handset or Headset" in the SB67030/031 Deskset and Accessories User Guide.

When you delete a Deskset, only the extension number is removed from the system database—all local settings and personal information (Call Logs, Voicemail, etc.) remain stored in the Deskset. To erase all data on the Deskset (if, for example, the Deskset is being given to another user), press the **RESET** button on the Deskset for more than 5 seconds to return all settings to factory defaults. If the deleted extension had been assigned a DID number, that number is put back into the available pool of DID numbers and remains there even when the deleted extension number is restored. See "Extension Basic Settings" on page 112 to assign the DID number to the extension.

Deleted extensions disappear from defined Ring Groups, Paging Zones, and the Call Queue.

If the Auto Attendant menu programming has set a far-end key press to ring that extension or leave a message in its personal voice mailbox, that key assignment reverts to **None**.

If the operator extension is deleted, the lowest extension number is automatically assigned as operator.

ATA The ATA extensions do not appear in the device list and cannot be individually deleted.



### **Deleting a PSTN Gateway**

If you unplug a Gateway from the system, perhaps to replace it, delete the old Gateway before installing the new Gateway if you want the new line numbers to begin with Line 1. System settings other than specific T1, SIP, and ATA settings and PSTN line numbers are stored in all devices, so deleting devices does not erase these settings.

### **Deleting a T1 Gateway or SIP Gateway**

Once a T1 Gateway or SIP Gateway is deleted from the system, all Gateway-related menus and configuration items disappear, including the T1 Settings, T1 Diagnostics, SIP Account Settings, DID Configuration, and the DID Assignments from the WebUI. The DID and Outgoing Caller ID options on the Extension Basic Settings and ATA Settings pages also disappear.

Deleting the T1 Gateway or SIP Gateway does not delete DID ranges. When a new T1 Gateway or SIP Gateway is added, any existing DID ranges reappear on the DID WebUI pages, but you will need to enable automatic DID Assignment again. If an extension is no longer eliqible for DID assignment, that DID number is released.

If both a T1 Gateway and a SIP Gateway are connected to the system and you delete one of them, the **DID Configuration** and **DID Assignments** web pages remain. If the deleted device was the only device handling DIDs, then Automatic DID Assignment becomes disabled. (Your service provider determines which Gateways handle DID numbers. You cannot configure this through Synapse.) If both devices were handling DIDs, then Auto Assignment is not disabled.



### **Deleting an ATA**

Once an optional ATA is deleted from the system, all ATA-related configuration items and menus disappear.

If any Desksets have their Call Forward or Call Forward–No Answer targets set to an FXS extension, the target reverts to the default (Forward to Personal Voicemail). If the extension was an Auto Attendant menu target, that setting reverts to default (**None**), and will no longer be searchable in the Auto Attendant Directory.

In addition, if a Group Mailbox was an Auto Attendant menu destination or a Ring Group Call Forward–No Answer target, it is removed. The Auto Attendant setting reverts to **None** and the Ring Group Call Forward–No Answer target reverts to **Off**. If any Desksets have set their Call Forward or Call Forward–No Answer targets to the deleted Mailbox, they are removed and the setting reverts to **Personal**.

### To delete an extension, Gateway, or ATA:

- 1. Disconnect (unplug) the device to be deleted.
- 2. In the navigation menu at left, click **Device Management**. The **Modify Device** page appears.



3. Select the device and click Delete Device .

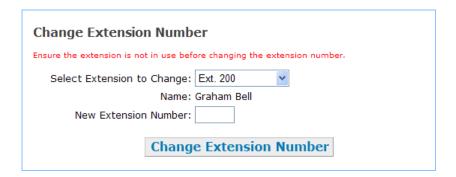


# **Change an Extension Number**

You can change extension numbers. Ensure that the extension is not in use when you make the change.

### To change a Deskset extension number:

- 1. On the **Modify Device** page, under **Change Extension Number**, select the desired extension.
- 2. Enter the New Extension Number.



3. Click Change Extension Number.



# **Back Up and Restore Settings**

Back up individual Deskset settings and system settings so that they can be restored if the network or a Deskset loses its settings. You can also back up a Deskset to copy the settings to other Desksets.



Backup files are automatically saved on your computer using the following naming convention:

### backup\_[device]\_[extension number]\_[year]-[month]-[day]\_[time].cfg.

The device will be either "ds" for a Deskset or "system" for a system backup:

The backup file for extension 208 that was created at 4:29 PM on October 26, 2010 would be named backup\_ds\_208\_2010-10-26\_1629.cfg.

The backup file for system that was created at 4:35 PM on October 26, 2010 would be named **backup\_system\_208\_2010-10-26\_1635.cfg**.

If you are using Safari®, the backup file will be saved as a .tar file instead of a .cfq file. You will still be able to restore this file safely.

### **Back Up and Restore Extension Settings**

Each extension has its own settings and must be backed up and restored individually.

The following items are backed up:

- Calls: New Missed Calls, New Messages, Redial, and Call Logs
- Messages and Lists: Voicemail Messages, Personal Directory, Quick Dial, and Voicemail Distribution lists
- Deskset Settings: Display, Sounds (including Audible Ring Delay), and Preferred Audio mode
- User Settings: Greetings, Call Forward All, Name Recording, and Auto Answer
- Admin Settings: CFNA, FWD/Trans Line, programmable feature keys, and User Password.



SB67030/031 Deskset Cordless Registration and the extension number will NOT be backed up.



Only back up one Deskset at a time. Only restore one Deskset at a time.

CAUTION Programmable feature keys and quick-dial settings are not restored if you restore a SB67030/031 Deskset with a SB67020/025 Deskset backup file, or restore a SB67020/025 Deskset with a SB67030/031 Deskset backup file.

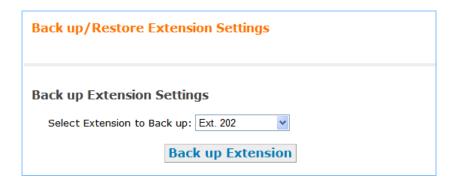
If you back up an extension less than one minute after creating another backup for that extension, you may overwrite the earlier one, since the file names may be identical.

### To back up the Extension Settings:

In the navigation menu at left, click Device Management, then Back up/Restore.
 The Back up/Restore Extension Settings page appears.



2. Select the desired extension from the **Select Extension to Back up** list.



3. Click Back up Extension.



If the desired extension does not appear in the list, then you may need to reconnect that extension. See "Reconnecting a Deskset to the System" on page 170.

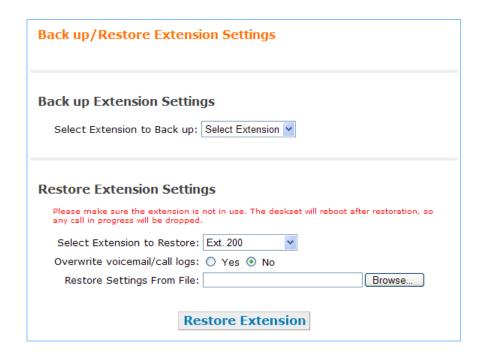
4. Your web browser opens a window asking if you would like to save the backup file; click save |.

#### To restore the Extension Settings:

 On the Back up/Restore Extension Settings page, choose the desired extension from the Select Extension to Restore list.



Ensure that there are no calls in progress or they will be dropped.





- 2. Select whether you want to overwrite Voicemail and Call Logs.
- 3. Enter the file name or click Browse... and select a file.

Make sure you select the correct file to restore. The restore file name includes your extension number and the date and time.

4. Click Restore Extension .

Deskset settings are restored and the Deskset restarts. You are then logged off of the WebUI.



If a PC is installed in series with the Deskset, restarting the Deskset causes the PC to lose its network connection briefly.

### **Back Up and Restore System Settings**

The system settings are distributed over all the Desksets, Gateways, and the optional ATA. System settings are globally backed up once, and restored to the whole system at one time. The following items are backed up and restored:

- Appearance mode and Line Appearance settings
- Auto Attendant names, managers, tree structure and menus
- Auto Attendant user prompts
- Auto Attendant schedule
- **Assigned Operator set**
- Timer for Forwarded and Transferred **Outside Calls**
- System Time settings
- Extension prefixes and dial plan settings

- Ring Group definitions
- Call Queue
- Call Restriction Configuration
- Paging Zones
- Hold settings
- System Directory
- **Trunk Reservations**
- Trunk Routing
- Trunk Naming
- Voicemail to email settings.

The following items are not backed up:

- The extension list
- The assignment of line numbers to the PSTN lines.

Do not use the system backup file to restore your system if you have changed CAUTION the Number of Digits in the Dial Plan Settings after creating the system backup file. For example, if you restore a system that now uses three-digit extensions with a backup file created on a system that used four-digit extensions:

- Existing Desksets have three-digit extensions, and new Desksets will be assigned four-digit extensions.
- If you change the Dial Plan Settings from four-digit extensions to three-digit extensions, all three-digit extension numbers are changed to different three-digit extension numbers.



T1 Gateway If a T1 Gateway is connected, the following items are backed up and restored:

- Automatically assign DIDs to new extensions
- Outgoing Caller ID
- System Pilot Number
- Current DID Ranges
- DID Assignments
- Line Encoding
- Line Framing

- Signalling
- Clock Source
- Line Buildout
- Number of Channels
- Lowest Voice Channel
- Outbound Channel Selection Order
- Loopback Mode on T1 Diagnostics page.

The following items are not backed up:

- Static IP address on the T1 Gateway (configured through the front panel)
- Sort order on the DID Assignments page.

SIP Gateway If a SIP Gateway is connected, the following items are backed up and restored:

- Automatically assign DIDs to new extensions
- Outgoing Caller ID
- System Pilot Number
- Current DID Ranges
- DID Assignments
- SIP Account Settings.

The following items are not backed up:

- Static IP address on the SIP Gateway (configured through the front panel)
- Sort order on the DID Assignments page.

ATA If an optional Analog Terminal Adapter is connected, the following items are backed up and restored:

- Enable / Disable status on Fax
- OHP and Music on Hold
- FXS device assignments (which port is being used for which device)
- Fax mode
- Fax line assignment
- Paging System Type
- Paging Delay.

### To back up the System Settings:

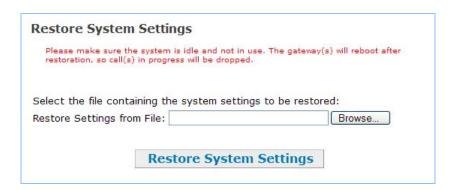
1. In the navigation menu at left, click **Device Management**, then **Back up/Restore**, then **System Settings**. The **Back up/Restore System Settings** page appears.



- 2. Click Back up System Settings .
  - Your web browser opens a window asking you if you would like to save the backup file. Click Save .
  - Save the file to a location on your computer so that you can restore your settings later.

#### To restore the System Settings:

- 1. If practical, unplug the PSTN and T1 lines from each Gateway while restoration is in progress to ensure you do not receive any incoming calls.
  - If you have more than one PSTN Gateway, and you log on to one of the Gateways, you do not need to unplug all of the other outside lines from the other Gateways, just the one to which you are logged on.
- 2. In the navigation menu at left, click **Device Management**, then **Back up/Restore**, then **System Settings**. The **Back up/Restore System Settings** page appears.



- 3. Enter the name for the restore file or click Browse... and select a system file.
  - Make sure you select the correct file to restore. The restore file name includes "system" and the date and time.
- 4. Click Restore System Settings . The system settings are restored and the Gateway restarts. You are then logged off from the WebUI.



# **Copying and Replacing Devices**

Use the Copy/Replace feature when you need to replace an old Deskset or PSTN Gateway with a new "out of the box" unit. To replace an old device with a new device, first use the Copy function to copy settings from the old device to the replacement device. Once the settings are copied, you can disconnect the old device and then use the Replace function to assign the extension number or device ID from the old device to the replacement device.

If you do not have access to a PC, the Copy/Replace functions are available on the Deskset Admin Settings menu or the Gateway front panel (see "Copy/Replace Deskset" on page 20 and "Copy/Replace Gateway" on page 24).

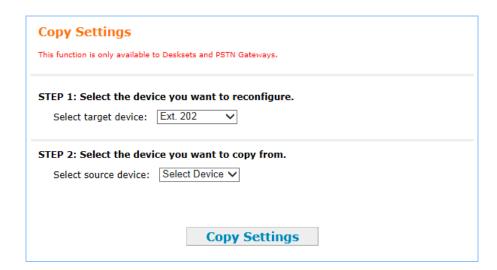
The Copy function copies settings from one device to a new device added to the system. These settings are listed under "Copying a Deskset" on page 20 and "Copying a Gateway" on page 24.

The Replace function replaces:

- the extension number of a Deskset (for example, Ext. 200) with the extension of another Deskset.
- the device ID of a PSTN Gateway with the device ID of another Gateway. This includes PSTN line assignments.

### To copy a device:

- 1. Ensure the device to be replaced is powered and connected to the Synapse network.
- 2. Connect the new device (Deskset or PSTN Gateway) to the system. It will join the site and be assigned a new extension number or device ID.
- 3. On the WebUI, click **Device Management**, and then **Copy/Replace**. The **Copy Settings** page appears.
- 4. On the **Copy Settings** page, select the device you want to reconfigure. This is the new Deskset or PSTN Gateway that you connected earlier.





5. Select the device you want to copy from. This is the old device that you will eventually remove from the system.



When copying a Deskset, select an identical model Deskset to copy. CAUTION Programmable feature keys and quick-dial settings are not restored if you replace a SB67030/031 Deskset with a SB67020/025 Deskset, or replace a SB67020/025 Deskset with a SB67030/031 Deskset.

6. Click Copy Settings

The settings from the source device are copied to the target device.

### To replace a device:

1. Disconnect the network cable from the device you want to replace.



Ensure you have not logged on to the WebUI using the IP address of the device you have disconnected.

- 2. On the WebUI, click **Device Management**, and then **Copy/Replace**.
- 3. Click **Replace Device**. The **Replace Device** page appears.



- 4. Select the new device.
- 5. Select the device to be replaced.
- 6. Click Replace Device .



# **Updating Devices**

New software versions improve system functionality. All Synapse devices should be running the same software version number. (The optional Cordless Handsets and Cordless Headsets have different software version number sequences.)

You can update all devices with one command, or you can update the Synapse devices individually.

AT&T recommends automatic device software upgrades for installations with Internet access. This allows your system to obtain the latest upgrade from our server. Automatic upgrades may not work if your network's firewall prohibits connection to the AT&T servers, or if you do not have DNS services provided by your ISP. If you need to manually initiate updates, see "To update all devices to the latest software version:" on page 159. If Internet access is not available, see "To update a single device to the latest software version:" on page 160.

Bilingual (English and French) Synapse software releases are available. Bilingual software releases include a Language page under System Settings in the WebUI that enables you to change the language for the entire system, including the WebUI, Deskset screens, and Auto Attendant voice prompts.

Please be aware that bilingual releases do not support all the features included in the latest English-only software release.



For more information, see the Product Release Notices available at smbtelephones.att.com/smb/index.cfm/product-support.



Sometimes devices with different versions of software cannot detect each other in the WebUI. Some versions of Synapse software codes are incompatible, so that when you use one device's IP address for logging on to the WebUI, only the devices with compatible code versions appear in the device lists. For this reason, if you are updating devices individually, wait until all other devices are updated before updating the software version of the device whose IP address was used for logging on to the WebUI. When an updated device restarts with new software, it may disappear from the device list.



When you add a new "out of box" device to the system, the device automatically gets new software from the network and then restarts. Allow this process to complete before using the device. The process may take anywhere between 30 seconds to a few minutes, depending on server speed.



Although unlikely, some types of software upgrades could interfere with CAUTION system settings and directories. Therefore, back up the system settings and Deskset settings before updating the system software. If you receive automatic updates, back up each device after each configuration change. See "Back Up and Restore Settings" on page 151.

> The device restarts after a software upgrade. Ensure that there are no calls in progress or they will be dropped.

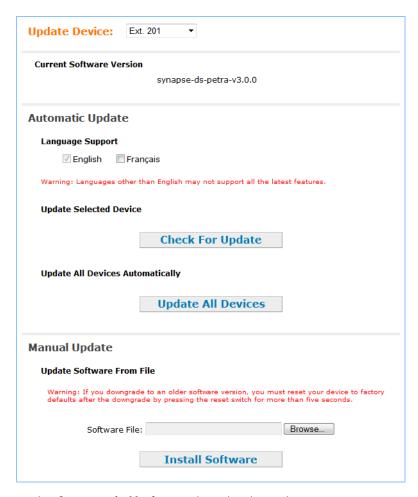


If a PC is installed in series with the Deskset, restarting the Deskset causes the PC to lose its network connection briefly.



### To update all devices to the latest software version:

In the navigation menu at left, click Device Management, then Update Device.
 The Update Device page appears.



- Under Automatic Update, select the desired Language Support. When only English is selected, the system will update all devices to the latest English-only release. If Français is selected, the system will update all devices to the latest bilingual (English and French) software version.
- 3. At the bottom of the page, click **Update All Devices**. The system looks on the Internet for the latest software and systematically updates and then restarts each device. All calls are dropped.

A caution appears to remind you that all devices will be restarted as each is updated.



Any Desksets registered with the system but disconnected at the time of the update will be updated as soon as they are reconnected to the system.

After you have started an update using **Update All Devices**, attempts to manually update a device through the device itself or the WebUI may be interrupted by the system software update in progress.





Using Update All Devices requires a minimum Internet download bandwidth of 1 Mbps and an Internet router that can handle the same number of total simultaneous connections as the number of Synapse devices. Refer to your router specification. Performing an update without meeting the minimum requirement may cause some or all devices not to update correctly. See "System Upgrade" on page 185.

The total time to update all the devices varies. The update time depends on Internet connection speed, the number of connections to the server, and the number of devices in the system. AT&T recommends conducting system updates overnight to reduce the impact on Deskset users.

If the Update All Devices process does not work, you can upgrade a Deskset, Gateway, or ATA individually.

### To update a single device to the latest software version:

- 1. In the navigation menu at left, click **Device Management**, then **Update Device**.
- 2. In the **Update Device** list, select a Gateway, ATA, or Deskset to update.

The Current Software Version for that device appears.



You can only update one device at a time. Only the selected device is updated.

3. Click Check For Update.

If there is an update available on the Internet, the message "There is new software available" appears. Click Install Update. The specified device restarts.

#### OR

In the **Update Software From File** section of the page, enter a file name or click

Browse... to select a previously acquired upgrade file. Once selected, click

Install Software . The specified device restarts.

4. After the device restarts, check the software version number at the device to confirm that the upgrade was successful.

SB67030/031

Press MENU, then 4. Check the P Firmware Ver.

SB67020/025

Press MENU, then 4. Check the Software Ver.

Gateway, ATA

Press SELECT, SELECT and DOWN. Check the SW Ver.



If the device is sluggish or unresponsive during the upgrade process, see "A Synapse device becomes sluggish or unresponsive during or immediately after software upgrade." on page 185.

When an updated device restarts with the new software, it may disappear from the device list if its software version is incompatible with the device whose IP address was used for logging on to the WebUI.



### **Device Log**

If you have trouble with your system and you contact the installer or customer service, they may need the device log for troubleshooting purposes. You can generate a device log on the **Device Log** page.

You can also configure a device log prior to generating the log. Your installer or Synapse Product Support specialist may want to see specific information in the device log. If so, you must configure the device log using a configuration file that your Synapse support person provides.



For customer service, repair, replacement, or warranty service, and all questions about this product, contact the person who installed your system. If your installer is unavailable, visit our web site at

www.telephones.att.com/smb or call 1 (888) 916-2007. In Canada, call 1 (888) 883-2474.

### To generate the Device Log:

 In the navigation menu at left, click Device Management, then Device Log. The Device Log page appears.



- 2. In the **Device Log** list, select the desired device and click **Save Device Log** .
- 3. It takes a minute for the file to generate. A pop-up box then asks you where to save the file on your computer.
- After the download is complete you should provide the file to the installer or customer service.



### To configure the Device Log:

- 1. In the navigation menu at left, click **Device Management**, then **Device Log**.
- 2. In the **Device Log** list, select the desired device.
- 3. Under **Configure Device Log**, click **Browse**... and select the Device Log Configuration file.



4. Click **Configure Device Log**. After configuration is complete, you can proceed with generating the Device Log, as described on page 161.

# Help

### To display the Help menu:

1. In the navigation menu at left, click **Help**.

A PDF Help file opens.

# **Help Menu**

#### Online Resources

Accessing Synapse Demo Videos Accessing Synapse Product Documentation

#### **Extension Settings**

Setting the User Password Configuring Call Forward All Configuring Auto Answer

#### Personal Directory

Adding a New Personal Directory entry Editing a Directory entry Deleting Personal Directory entries Sorting the Personal Directory list by First or Last Name

#### **Ouick Dial**

Adding / Editing Quick Dial entries

2. To view a topic, click the link for that topic. The page for that topic appears.

#### **Online Resources**

#### **Accessing Synapse Demo Videos**

You can view Synapse demo videos at http://telephones.att.com/smb. In the left navigation menu, click on **Customer Support**, then **Demo Videos**.

#### Accessing Synapse Product Documentation

For additional information on these features, see the "Synapse Administrator's Guide" at http://telephones.att.com/synapseguides.

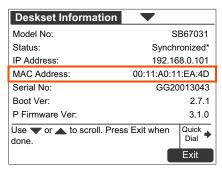


# **Product Registration**

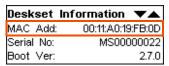
In order to keep your system up to date with the latest upgrades and ensure timely warranty support, it is extremely important to register your system. To register a device, you need its MAC address.

#### To find a Deskset MAC address:

For Desksets, at the Desksets, press MENU, then press 4. Note the MAC Address line.



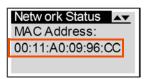




SB67020/025 Deskset

### To find a Gateway or ATA MAC address:

For Gateways and the ATA, at the devices, press SELECT, DOWN, SELECT, and then press DOWN until MAC Address appears.



### To register your Synapse system:

- 1. Open a new browser tab and navigate to the product registration web site <a href="http://smbtelephones.att.com/registration">http://smbtelephones.att.com/registration</a>
- 2. Select your products, then complete the form.
- 3. When the form is complete, click Register Product.



CHAPTER

# **TROUBLESHOOTING**

If you have difficulty operating your system, try the following suggestions in this section:

- "Common Troubleshooting Procedures" on page 166
- "Display Messages" on page 174
- "Initial Installation" on page 179
- "WebUI" on page 180
- "Deskset Menu" on page 186
- "PC/Deskset Interaction" on page 186
- "Calls" on page 187
- "SB67050 Analog Terminal Adapter" on page 198
- "SIP Gateway" on page 217.



For customer service or product information, contact the person who installed your system. If your installer is unavailable, visit our web site at www.telephones.att.com/smb or call 1 (888) 916-2007. In Canada dial 1 (888) 883-2474.



# **Common Troubleshooting Procedures**

Follow these procedures to resolve common issues.

# **Resolving General Functional Issues**.

#### To resolve a blank screen or device that does not work at all:

- Ensure the AC plug is plugged into an electrical outlet not powered by a wall switch.
- Verify that the AC power outlet has power. Try plugging in some other AC device. If nothing works, contact an electrician or use another power outlet.
- Verify that the DC plug is plugged into the power jack on the device.
- The system devices are not immediately active when powered up and after a power interruption. Allow at least 30 seconds for the device to boot up.
- If this is a Gateway or ATA, check the LED status. The POWER LED should be GREEN.
- For Desksets connected to Power over Ethernet (PoE), check whether any PoE switch ports have been configured for devices that require less power. If so, configure your PoE switch to auto-detect device power requirements. For Deskset PoE specificiations, see the Synapse Installation Guide.

### To resolve a sluggish, unresponsive, or unusually behaving device:

Reset the device by pressing the **RESET** button for less than five seconds (see *Figure 12* on page 167) or by removing and restoring AC power.



Pressing the **RESET** button for more than five seconds will erase all data and settings.

#### To resolve an incorrect system clock:

If the system clock displays the wrong time, the system lacks Internet access for acquiring current time data.

- 1. Log on to the WebUI as administrator and click **System Basic Settings**.
- 2. In the **System Time/Date Options** section, specify a local Network Time Protocol (NTP) Server, or manually set the time.
- 3. Click Apply.



### To restore a Deskset to factory defaults:

To restore a Deskset to factory defaults, insert a pen or paper clip into the reset hole on the bottom of the Deskset (as shown in Figure 12) and press the **RESET** button for more than five seconds.

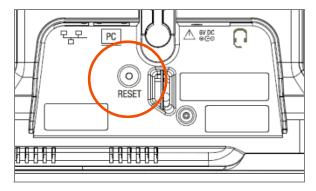


Figure 12. Deskset Reset Button

### To resolve problems with a cordless device:

For problems with features or audio, make sure that the Deskset associated with the cordless device does not share the problem.

- 1. Verify that the device battery has power.
  - When removed from the charger, the handset screen is lit for about 30 seconds.
  - When removed from the charger, the headset emits a dial tone or three beeps when you press **ON**/OFF.
- 2. Verify that the Deskset **Cordless Settings** screen indicates that the device is registered.
  - Press MENU -> 2 -> 6.
  - If the handset is not registered, register it:
    - a. Place the handset in the charger.
    - b. At the Deskset, press MENU -> 2 -> 6 -> 1 ->Register
  - If the headset is not registered, register it:
    - a. Place the headset in the charger.
    - b. At the Deskset, press MENU -> 2 -> 6 -> 2 -> Register . In Line Appearance mode, press MENU -> 2 -> 3 -> 2 -> Register.



# **Resolving Audio Echoes (PSTN Gateway)**

If excessive echo occurs on outside calls consistently, there are two approaches you can take to troubleshoot the condition:

- Check line calibration and parallel devices. The SB67010 PSTN Gateway uses
  automatic telephone line calibration to ensure optimal audio performance on outside
  calls. You can observe the Gateway line calibration data to understand any telephone
  line issues and recalibrate the lines, if necessary. Echoes may sometimes be caused
  by other devices using your PSTN lines, or by an outside caller's phone.
- 2. Adjust Echo Suppression and Line Loop Length settings.

### To check line calibration and parallel devices:

- Log on to the WebUI as administrator. Click PSTN Settings in the navigation menu at left.
- 2. Select a PSTN Gateway from the **Select Gateway** list. Line Calibration Data appears as shown in Figure 13.

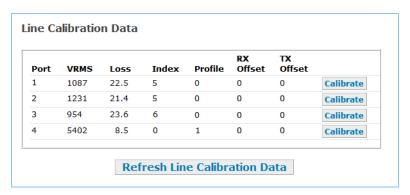


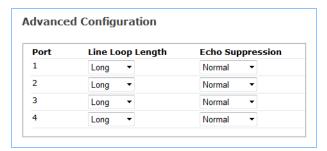
Figure 13. Line Calibration Data

- 3. Check the loss numbers within the Line Calibration Data table for each telephone line on each Gateway. (A loss number above 10 indicates good audio performance.)
- 4. If the loss number is below 10, the system will most often function normally, but there is an increased likelihood of audio performance issues like echo. If the loss number is below 10 the following procedures can be used to increase the loss value:
  - a. Click the Calibrate button for the affected line.
  - b. Wait one minute, then click Refresh Line Calibration Data.
- 5. If the recalibration has no effect, a parallel device such as a fax adapter, alarm system, DSL modem, or DSL splitter/filter may be connected to the system. Parallel external devices may affect line calibration. Disconnect these devices from the telephone wall jacks that are connected to the same telephone lines, as follows:
  - a. Unplug these non-system external devices from their telephone wall jacks.
  - b. Recalibrate the affected line.
  - c. If there is a significant increase in the loss number and improved audio performance on those lines after disconnecting a parallel device, you may want to install separate lines for those parallel devices.



### To adjust Echo Suppression and Line Loop Length settings:

1. If line recalibration and checking parallel devices do not resolve audio echoes, go to the **Advanced Configuration** section on the **PSTN Settings** page.



- 2. Under Echo Suppression for the affected line(s), select Aggressive.
- 3. Click Apply to save the settings.
- 4. Test your line(s) by establishing a call under the same conditions in which the echo condition was previously heard.
- 5. If the condition persists, leave the **Echo Suppression** set to **Aggressive**, and adjust the **Line Loop Length**. This setting compensates incoming and outgoing audio levels depending on line loop length. Try **Medium** first, click **Apply**, then make a test call.
- 6. If the condition persists, try **Short**, click Apply, then make a test call.



You may need to test different combinations of Echo Suppression and Line Loop Length settings to achieve the desired results.



# **Resolving General Audio Issues**

Check the following if you hear static, sudden silences, gaps in speech, echoes, distorted speech, or qarbled speech.

### To resolve general audio issues:

You may be experiencing network problems.

- Your LAN administrator should ensure the following minimum quidelines are met:
  - A switched network topology, which requires attaching network components to switches rather than hubs, is recommended. The network should use standard 10/100 Ethernet switches that carry traffic at a nominal rate of 100 Mbit/s.
  - The office network infrastructure should use Cat.-5 wiring.
- Do not connect a network server PC to the PC port on the Deskset.

If you have Digital Subscriber Line (DSL) service, you may be experiencing telephone line problems.

- Make sure you have a DSL filter plugged in between each DSL line and the telephone wall jack.
- You may need a higher quality DSL filter than you are currently using. You can also try plugging in multiple DSL filters in sequence to decrease DSL interference.
- Move the DSL line to the lowest priority line, which is Line 4 on the highest numbered PSTN Gateway, as indicated on the Gateway display.

The PSTN Gateway might not have recognized a new outside telephone line, so line calibration—which allows the PSTN Gateway to adjust its performance depending on the phone lines' characteristics—did not occur. After unplugging the telephone line, wait two full seconds for the LED to turn red before plugging the telephone line back into the Gateway.

# **Reconnecting a Deskset to the System**

If there are no more than 100 Desksets in the system and a Deskset screen displays **Synch Failed** or **Synchronizing** for a long time, you may need to remove the Deskset from the system and reconnect it. This problem may have been caused by a network disruption, the Deskset having been part of a different network, or by an AC power failure.

#### To reconnect a Deskset to the system:

- Ensure that the Deskset is connected to the same LAN subnet as other system
  Gateways and Desksets. Ensure that the PC you will use to access the WebUI is either
  on the same subnet as Synapse, or that the PC subnet can communicate with the
  Synapse subnet. Devices on the same subnet generally share the first three octets of
  their IP addresses. If the subnets are different, contact your installer.
- 2. If you want to retain the programming for a problem Deskset, back up the Deskset.
  - Log on to the WebUI as administrator on the problem Deskset. Click Device
     Management, then Back up/Restore, and then Extension Settings in the
     navigation menu at left.



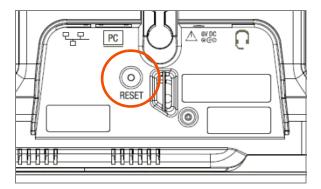
b. Select the extension from the **Select Extension to Back up** list, and click

Back up Extension to save the file to a specified location on your computer. You will need to locate and retrieve this file later, so make sure you remember where you saved it. The default file name will be in the format:

### backup\_ds\_[extension number]\_[year]-[month]-[day]\_[time].cfg.

If you back up the same extension less than one minute after creating the backup, you may overwrite the earlier backup file.

- 3. Perform a complete factory reset to return to the values set at the factory.
  - a. Unplug the LAN cable.
  - b. Insert a pen or the end of a paper clip into the **RESET** button, located on the underside of the Deskset. Hold until **Restoring to Factory Defaults** appears on the screen (approximately 5 seconds).



After the Deskset restarts, the screen displays EXT 0.

c. Reconnect the LAN cable.

The Deskset rejoins the system. Unless the entire system was reset, the Deskset retains its previous extension number. After the Deskset rejoins the system, the screen changes from **EXT 0** to the previous extension number.

- 4. If you backed up the Deskset settings in Step 2, restore your settings.
  - a. Log on to the WebUI as the Administrator at the PC where you stored the backup file.

Synapse Desksets with static IP addresses need to have new addresses assigned if the Deskset IP addresses are to be used for logging on to the WebUI. At the Deskset, press **MENU**  $\rightarrow$  3  $\rightarrow$  2 to set the **IP address**.

- b. Click Device Management, then click Back up/Restore.
- c. Under Restore Extension Settings, select the Deskset's extension number from the Select Extension to Restore list. See "Back Up and Restore Settings" on page 151.
- d. Select the backup file.
- e. Click Restore Extension.



### Reconnecting a Gateway or ATA to the System

If there are no more than five Gateways in the system (four PSTN Gateways and one T1 Gateway), and a Gateway or ATA screen displays **Synch Failed** or **Synchronizing** for more than a few minutes, you may need to remove the Gateway or ATA from the system and reconnect it. This problem may have been caused by the Gateway or ATA having been part of a different network or by a network disruption, which may have been caused by an AC power failure.

### To reconnect a Gateway or ATA to the system:

- Ensure that the Gateway or ATA is connected to the same LAN as other system Gateways, Desksets, and the PC you will use to access the WebUI. Confirm that the first three octets of the IP address match other devices in the system.
- 2. Back up the system if you are reconnecting a Gateway and this is the only Gateway.



If you are reconnecting a Gateway or ATA, and there are other Gateways NOTE that are synchronized, this step is not necessary.

- a. Log on to the WebUI as administrator using the Gateway or ATA IP Address shown on the Gateway or ATA display.
- b. Click Device Management, then Back up/Restore, then System Settings in the WebUI navigation menu at left.
- c. Click Back up System Settings and save the file to a specified location on your computer. You will need to locate and retrieve this file later, so make sure you remember where you saved it. The file name will be in the format:

### backup\_system\_[year]-[month]-[day]\_[time].cfg.

If you back up the system less than one minute after creating another backup, you may overwrite the earlier file.

The system backup also saves ATA setup information.

- 3. Disconnect the Gateway or ATA from the network by unplugging the Ethernet cable from the Gateway or ATA LAN port.
- 4. Complete a factory reset to restore factory values. Insert a pen or the end of a paper clip into the RESET button (located on the front of the Gateway and ATA) and hold it for more than five seconds until the LCD displays Restoring to factory defaults.
- 5. Reconnect the Gateway or ATA to the network and ensure that it synchronizes with the other devices.
- 6. If you are reconnecting the only system Gateway, restore your settings.
  - a. Log on to the WebUI as administrator at the PC where you stored the backup file.
  - b. Click Device Management, then Back up/Restore, then System Settings in the navigation menu at left.
  - c. Under Restore System Settings, click Browse... and select the correct backup file.
  - d. Click Restore System Settings.



# **Power Failure Recovery Procedure**

The Synapse system automatically recovers after a power failure. The following describes the recovery process.

Allow about a minute for the Gateways and ATA to boot up when power returns after a power failure. The power-up sequence for the Gateways and ATA follows:

- 1. About 20 seconds after turning on power to the device, the POWER LED turns on.
- 2. When the device finds the network, **Synchronizing** momentarily appears, indicating that the device is in the process of detecting and synchronizing with other system devices.

03:45PM 24-FEB-10 PSTN Lines 1 - 4 Synchronizing...

3. Once the device has successfully finished synchronizing with the rest of the system, **Synchronized** appears.

03:45PM 24-FEB-10 PSTN Lines 1 - 4 Synchronized IP: 192.168.0.101

When AC power returns after a power failure, the system self-assigns a link-local address to the Deskset beginning with number 169.254.

- If the Deskset is set for automatic IP address configuration, it searches for the DHCP server. If the DHCP server is found, it assigns an IP address.
- If the Deskset is set with static IP addresses, the address does not change.

We recommend that you check each Deskset, Gateway and ATA to confirm that it has started up properly.

If any of the system devices' screens report **Synch Failed** or **Synchronizing** for more than 10 minutes, see "Reconnecting a Deskset to the System" on page 170 and "Reconnecting a Gateway or ATA to the System" on page 172 for recovery methods from these states.



The time and date may not be correct. The time and date are set on the WebUI. See "System Basic Settings" on page 36.

The Desksets also automatically restart and synchronize after an AC power failure.



Some systems will take longer than others depending on the network topology.



# **Display Messages**

# The Gateway screen is blank.

Probable Cause	Corrective Action	
Many.	See "To resolve a blank screen or device that does not work at all:" on page 166.	

### The Gateway screen displays Joining Site... for more than one minute.

Probable Cause	Corrective Action	
The Gateway is failing to synchronize with a Deskset configured for a different system configuration.	<ul> <li>Always disconnect the LAN cable before restoring factory defaults (by pressing the RESET button more than five seconds).</li> </ul>	
The system already has the maximum allowable number of Gateways connected.	None. The Gateway cannot join the site.	

### The device screen displays Network Down.

Probable Cause	Corrective Action	
The Ethernet cable is unplugged.	Ensure that one end of the Ethernet cable is plugged into the port marked LAN on the device and that the other end is plugged into your office LAN.	
	<ul> <li>Confirm that the Ethernet port light next to the Ethernet port is green. If it is not, unplug the cable and plug it in again.</li> </ul>	
There may be a problem with the office network.	<ul> <li>Check if other network devices, such as computers, are communicating with the network.</li> <li>If not, then contact your IT administrator.</li> </ul>	

### The device screen displays Synch Failed.

Probable Cause	Corrective Action	
The device synch failed when trying to connect to the system.	Reset the device. Insert a pen or paper clip into the reset hole and press for more than five seconds.	
The device was disconnected, then reconnected after configuration changes were made to the system.	See "Reconnecting a Deskset to the System" on page 170 or "Reconnecting a Gateway or ATA to the System" on page 172.	



Probable Cause	Corrective Action	
The device was configured on another network or has returned to the system after being deleted from the system.	Reset to factory defaults by using a paper clip to press and hold the RESET button for more than five seconds. See "Reconnecting a Deskset to the System" on page 170 or "Reconnecting a Gateway or ATA to the System" on page 172.	
The maximum number of that type of device has been reached.	<ul> <li>A device must be removed from the network and deleted from the system before another device can be added.</li> </ul>	
The same Deskset extension number already exists.	Reset the Deskset to factory defaults without the network cable connected. Use a paper clip to press and hold the RESET button for more than five seconds.	

# The device screen displays Synchronizing.

Probable Cause	Corrective Action
Not enough time has elapsed.	The device may display Synchronizing for a few seconds. This is normal and does not indicate a problem.
This device is the first Synapse device on the network.	Connect another Synapse device to the network.
The devices are on different subnets.	If you use static IP addresses, ensure that the first three octets of the device IP address matches the IP addresses of the other system devices. For more information, see the Synapse Installation Guide.
The device may have been configured on another	Power cycle the Deskset by unplugging the power cord and plugging it back in.
network.	If power cycling does not work, back up your Deskset and reset to factory defaults.
	a. Back up the Deskset. See "Back Up and Restore Settings" on page 151.
	b. Unplug the LAN cable.
	<ul> <li>c. Press the <b>RESET</b> button for at least five seconds.</li> </ul>
	<ul> <li>Restore your settings after the Deskset restarts.</li> </ul>



### Deskset cannot make or receive phone calls and the Deskset screen displays Synchronizing.

Probable Cause	Corrective Action
The Deskset may have an incompatible software version.	Log on to the WebUI using the IP address of the Deskset and update the software. See "Updating Devices" on page 158.

### A Synapse device displays Host Not Found after a user attempts a software upgrade.

Probable Cause	Corrective Action	
The user attempted a software upgrade with no outside Internet connection.	•	Ensure you have Internet connectivity and that your connection to your Internet Service Provider is operating normally.
	•	Ensure your firewall is not blocking http requests.
	•	Ensure that http requests are not being directed to a firewall log-in page.
	•	Ensure that your http requests are not being routed through a proxy server.

# A Synapse device displays an error message other than Host Not Found after a user attempts a software upgrade.

Probable Cause	Co	Corrective Action	
The device encountered an unexpected problem.	1.	Disconnect the power to the device, wait a few minutes, then reconnect the power and try the upgrade process again.	
	2.	If the error message persists, contact the person who installed your system.	
	3.	If your installer is unavailable, visit our web site at www.telephones.att.com/smb or call 1 (888) 916-2007. In Canada, call 1 (888) 883-2474.	



# **T1 Gateway Indicators**

I cannot make or receive phone calls and the T1 Gateway SYN/ACT LED is GREEN.

Probable Cause	Corrective Action	
There are no T1 channels available to make the call.	Check the T1 trunk configuration.	
	<ul> <li>Log on to the WebUI as administrator, click System Settings, then T1 Settings.</li> </ul>	
	<ul> <li>Verify that Number of Voice Channels and Lowest Voice Channel have been configured correctly according to your T1 service.</li> </ul>	
	<ul> <li>c. Click <b>Trunk Reservation</b> and verify that the assignments are correct.</li> </ul>	

I cannot make or receive phone calls and the T1 Gateway RAI/LOF/LOS LED is YELLOW.

Probable Cause	Co	rrective Action
The Yellow Alarm is a Remote Alarm Indication.	1.	Check the T1 Settings to confirm that the configuration parameters (Signaling type,
Telephone equipment outside of your Synapse system is sending an alarm that signals that it is receiving unreliable signals.	2.	<ul><li>Buildout) correspond to the service provider's.</li><li>2. If the problem remains, contact your T1 service provider.</li></ul>

I cannot make or receive phone calls and the T1 Gateway RAI/LOF/LOS LED is RED.

Probable Cause	Corrective Action
The Red Alarm indicates Loss of Frame. A signal is present, but its pattern cannot be	<ol> <li>Check the T1 Settings to confirm that the configuration parameters (Signaling type, Build out) correspond to the service provider's.</li> </ol>
interpreted.  There is an error in the signal from the service provider.	<ol><li>If the problem remains, contact your T1 service provider.</li></ol>



### I cannot make or receive phone calls and the T1 Gateway RAI/LOF/LOS LED is flashing RED.

Probable Cause	Co	Corrective Action	
The Flashing Red alarm indicates Loss of Signal	1.	Verify that your T1 cable is connected to the equipment.	
There is loss of valid signal from the service provider.	2.	Check the T1 Settings to confirm that the configuration parameters (Signaling type, Build out) correspond to the service provider's.	
	3.	If the problem remains, contact your T1 service provider.	

### I cannot make or receive phone calls and the T1 Gateway AIS LED is flashing BLUE.

Probable Cause	Corrective Action	
The Blue Alarm is an Alarm Indication Signal.	<ul><li>Contact your T1 service provider.</li></ul>	
The T1 circuit is operating correctly, but the service provider is not sending proper data.		

# I cannot make or receive phone calls and the T1 Gateway LOOPBK LED is GREEN or flashing GREEN.

Probable Cause	Corrective Action	
The system is in Local Network or Loopback test mode.	The LOOPBK LED should only be ON when you have activated a Loopback test. If this test should not be running, disable the Loopback Test in the Admin WebUI.	
	<ul> <li>Log on to the WebUI as administrator, click</li> <li>T1 Settings, then T1 Diagnostics.</li> </ul>	
	b. In the <b>Set Loopback Mode</b> list, select <b>None</b> .	
	c. Click Apply.	

### I cannot make or receive phone calls and the T1 Gateway LOOPBK LED is RED.

Probable Cause	Corrective Action	
The T1 Gateway is not synchronized with the Synapse system.	<ul> <li>Check the Ethernet connection to your Synapse T1 Gateway.</li> </ul>	



I cannot make or receive phone calls and the T1 Gateway SYN/ACT LED is OFF and RAI/LOF/LOS LED is RED.

Probable Cause	Corrective Action
The T1 Gateway is not synchronized with the T1 service.	Check the correct T1 cable is used and that it is properly connected to the T1 Gateway.

# **Initial Installation**

The device screen displays Synchronizing.

Probable Cause	Corrective Action
The device has previous data and settings that are now inconsistent with current system settings.	<ul> <li>Erase all Deskset data and settings by unplugging the LAN cable and pressing the reset button on the bottom of the Deskset for more than five seconds.</li> </ul>
	■ The Ethernet cable may be connecting the Network port on the bottom of the Deskset, marked  , to another system device, rather than to the Network. Make sure the Ethernet cable is attached to the LAN.

# **PSTN Gateway Setup**

Line-Status LEDs do not flash red when the telephone line cords are plugged into the Gateway after power is switched on.

Probable Cause	Corrective Action
Line calibration allows the PSTN Gateway to adjust its performance depending on the phone lines' characteristics. The Gateway may not have performed calibration.	<ul> <li>Make sure an Ethernet cable is plugged into the port marked LAN.</li> <li>Unplug the PSTN telephone line and wait two full seconds for the Gateway line LED to turn red before plugging it back in.</li> </ul>

Bypass jack does not work during power failure.

Probable Cause	Corrective Action
The PSTN line is not in the	Make sure there is a PSTN line plugged into Line 4.
correct jack.	<ul> <li>Make sure an analog phone is plugged into the Bypass jack (using a modular line cord).</li> </ul>



# WebUI

# **Administrator WebUI**

The WebUI is unresponsive.

Probable Cause	Co	rrective Action
The web browser encountered an unexpected	1.	Close the unresponsive web browser, reopen the browser, and log on as administrator.
problem.	2.	If this does not work, try again using the IP address of a Deskset that is connected to the PC you are using.
	3.	If this does not work, try closing the browser and waiting 10 minutes before logging on again.

The WebUI displays "Login to target device failed."

Probable Cause	Corrective Action
The software version of the device you are currently logged on to is no longer compatible with the software version of other devices within the network.	<ol> <li>Log on to the WebUI as administrator using the IP address of the device that caused the problem. Click Device Management, then Update Device in the WebUI navigation menu at left.</li> </ol>
	<ol><li>Click <u>Install Update</u>. The selected device updates its software and reboots.</li></ol>
	<ol><li>After the device reboots, check the software version number on the device to confirm that the upgrade was successful.</li></ol>
	<ul> <li>On the Deskset, press MENU -&gt; 4. Note the P Firmware Ver [030/031] or Software Ver [020/025] value.</li> </ul>
	<ul> <li>On the Gateway or ATA, press the SELECT key to access the main menu. Then select Device Information, then SW Ver.</li> </ul>
The device to be updated is unplugged.	Verify that the device is powered up.
The device to be updated has failed to synchronize with the system.	Verify that the other device says Synchronized. If it does not, see "Reconnecting a Deskset to the System" on page 170 or "Reconnecting a Gateway or ATA to the System" on page 172.



A Synapse device upgrade failed, the WebUI displays "Login to target device failed", and the WebUI and device screens display the old software version.

#### **Probable Cause**

#### **Corrective Action**

The software version of the device you are currently logged on to is no longer compatible with the software version of other devices within the network.

- Log on to the WebUI as administrator using the IP address of a device that does not have updated software and is not having any problems. Click Device Management, then Update Device.
- Select a device from the **Update Device** list. Do not select the device whose IP address you are using.
- 3. Click <u>Install Update</u> . The selected device updates its software and reboots.
- After the device reboots, check the software version number on the device to confirm that the upgrade was successful.
  - On the Deskset, press MENU -> 4. Note the P Firmware Ver [030/031] or Software Ver [020/025] value.
  - On the Gateway or ATA, press the SELECT key to access the main menu. Then select Device Information, then SW Ver.
- 5. After updating all other devices, upgrade the device whose IP address you are using.



Some devices did not update after using Update All Devices .

#### **Probable Cause Corrective Action** Did not allow enough time for Wait 30 minutes, then check whether additional software to update due to a devices have been updated. If devices are still slow Internet connection. being updated, then the Internet connection is slow and you must wait for all the devices to complete the update process. If the update has failed (you see a failure message), click Update All Devices again. Allow sufficient time for the upgrade process to complete. You may prefer to schedule a system update to take place overnight. Update individual devices manually either through the front panel or through the WebUI for that particular device. If you are using the WebUI to upgrade the device, ensure that you log on using that device's IP address. Power cycle each device that did not get upgraded. Unplug the power cord and plug it back in. As each device reboots, it automatically updates (if it detects updated software in the

The Outgoing Caller ID option does not appear on the Extension Basic Settings page of the administrator WebUI.

Probable Cause	Corrective Action
A DID number has not been assigned.	Assign a DID number to the extension. See "DID Assignments" on page 79.

system).

An extension number was not changed correctly.

Probable Cause	Corrective Action
That extension may have been on a call while the extension number was changed in the WebUI, or someone tried to change the extension number to a	<ul> <li>Change the extension number again. Make sure no one is using that extension while you are changing its settings.</li> </ul>
	<ul> <li>Log on to the WebUI as administrator, click Extension Settings, then Basic Settings.</li> </ul>
number that was already being used.	<ul> <li>Enter a new extension number in the Change Extension Number to box.</li> </ul>



#### I changed an extension number, but the DID number did not change.

Probable Cause	Co	rrective Action
DID numbers do not change when extension numbers are changed.	•	Assign a DID number to the extension. See "DID Assignments" on page 79.

#### I cannot find the specific DID number for assignment on the DID Assignments page.

Probable Cause	Corrective Action
There may be a DID range error. The DID is not within the DID ranges configured.	<ul> <li>Check the DID ranges configuration. See "DID Configuration" on page 77.</li> </ul>

#### WebUI reverts to Log-in page after clicking a navigation link.

Probable Cause	Corrective Action	
The browser is not checking for newer versions of pages.	Ensure that your Internet browser is working normally. It may not be automatically caching pages. In your browser settings, enable the browser to automatically check for newer versions of stored pages.	

#### Changes made to the T1 Settings WebUI page do not change the system.

Probable Cause	Corrective Action
Clicking Apply alone may not perform the needed reset of the T1 Gateway.	After you make changes to the T1 Settings WebUI page and click Apply, press the T1 Gateway RESET button for less than five seconds or remove and restore AC power to the T1 Gateway.
	Pressing the <b>RESET</b> switch for more than five seconds will erase all data and settings.



#### Changes made to System Configuration from the WebUI are not saved.

Probable Cause	Corrective Action
The device whose IP address you used to log on to the WebUI failed to synchronize with the system. The WebUI displays "Unable to save data at this time. Please re-enter and try again."	■ Check the device status in the footer of the WebUI page. If the status reads "Synch Failed," see "Reconnecting a Deskset to the System" on page 170 or "Reconnecting a Gateway or ATA to the System" on page 172.
More than one person is using the WebUI to change System Configuration at the same time.	Make sure only one person at a time logs on as the administrator.
Apply must be clicked on each page to confirm the changes.	Click Apply on each page to confirm the changes.

#### A voice prompt recording is not saved.

Probable Cause	Corrective Action
You must hang up the extension before saving the recording.	<ul> <li>After recording a voice prompt, hang up the extension before clicking <u>Save Recording</u> in the WebUI.</li> </ul>

#### I cannot record a voice prompt.

Probable Cause	Corrective Action
Calls to the extension you want to use may be immediately forwarded.	Choose an extension that is not set up to automatically forward calls.

### My hold announcement is cut off.

Probable Cause	Co	rrective Action
Hold announcements in later versions of Synapse are limited to two minutes.	•	Record your hold announcement again. Keep it under two minutes in length.



### **System Upgrade**

A Synapse device becomes sluggish or unresponsive during or immediately after software upgrade.

Probable Cause	Corrective Action
Cannot connect to AT&T server or the device encountered an unexpected problem.	Disconnect the power to the device, wait a few minutes, then reconnect the power and try the upgrade process again.

During device upgrade one of the following messages appears: "UNKNOWN ERROR Current image version" or "UNKNOWN ERROR".

Probable Cause	Corrective Action
A communication error between the devices and the server.	■ If this failure occurred after clicking  Update All Devices, power cycle each device that did not get upgraded. Unplug the power cord and plug it back in. As each device reboots, it automatically updates (if it detects updated software in the system).
	Wait 30 minutes to allow for the device to update. If the system has a very low bandwidth Internet connection, it may take up to 4 hours.
	If this failure occurred during a manual single-device update, power cycle the device that did not get upgraded. Unplug the power cord and plug it back in. As the device reboots, it automatically updates (if it detects updated software in the system).



### **Deskset Menu**

The menu does not work.

Probable Cause	Corrective Action
There may be no power or	If the screen is blank, verify that power is applied.
the Deskset may need to be reset.	Reset the Deskset. Insert a pen or paper clip into the reset hole and press for less than five seconds.

# **PC/Deskset Interaction**

Internet connection or access to the local network on my computer does not work after installing the Deskset.

Probable Cause	Corrective Action
The Ethernet cords are not installed correctly.	■ Check that the Ethernet cord from the computer is plugged into the Deskset port labeled PC. A second Ethernet cord should be plugged into the Ethernet port on the Deskset marked □ with the other end plugged into your LAN.

My PC is slower now that I have connected it to the LAN through the Deskset.

Probable Cause	Corrective Action	
A computer connected through the Deskset will be limited to 100 Mbits/s.	<ul> <li>Use separate Ethernet connections for the Deskset and the computer so that the computer can take advantage of the network's greater bandwidth.</li> </ul>	

My PC, which is connected to the LAN through the Deskset, briefly loses its network connection.

Probable Cause	Corrective Action
For PCs connected to the LAN through Desksets, disruption to the Deskset operation affects the PC. For example, when the Deskset restarts (possibly due to a	<ul> <li>If the PC is connected to the LAN through the Deskset, avoid updating software or restoring the Deskset settings when a user is at the workstation.</li> <li>If the PC is connected to the Deskset, and if the PC is connected to an Uninterruptible Power</li> </ul>
software upgrade) the connection to the LAN is	Supply (UPS), plug the Deskset into a UPS.
temporarily lost.	<ul> <li>Use separate Ethernet connections for the Deskset and the computer.</li> </ul>



### **Calls**

### **Calls Generally**

#### Calls are dropped.

Probable Cause	Corrective Action	
Restoring Deskset settings or updating software while that extension is in use will cause all calls to be dropped.	Avoid updating software or restoring Deskset settings when a user is likely to be using the phone.	
The network is down.	■ Ensure that the Ethernet cable is securely plugged into the network port beneath your Deskset labeled  and that the other end is plugged into your office LAN.	
The Deskset extension was changed during the call.	If you made changes to an extension while the extension was on a call, that call is dropped.	
Maximum Call Duration was exceeded.	None. Adjust the Timer for Forwarded and Transferred Outside Calls if necessary. See "Changing the System Basic Settings" on page 39.	

#### Deskset cannot make or receive phone calls.

Probable Cause	Corrective Action
Putting the T1 Gateway into loopback test mode prevents phone calls from occurring.	Do not run loopback tests while the T1 trunk is in use.
Your Deskset is not connected to the LAN.	Ensure that the Ethernet cable is securely plugged into the network port beneath your Deskset and that the other end is plugged into your office LAN.

#### On outside calls, I hear an excessive echo at the Deskset.

Probable Cause	Corrective Action	
The automatic PSTN Gateway line calibration did not run properly.	There may be non-system equipment connected in parallel to the telephone line. See "To check line calibration and parallel devices:" on page 168.	



#### I cannot retrieve parked calls.

Probable Cause	Corrective Action	
The first digit of an extension number matches the first digit of parked calls.	<ul> <li>Correct your Dial Plan. Do not have extension numbers whose first digits match the park extension prefix. Log on to the WebUI as administrator, then click <b>Dial Plan Settings</b>.</li> </ul>	

You hear static, sudden silences, gaps in speech, or garbled speech.

Probable Cause	orrective Action	
You may be experiencing network problems.		nistrator should ensure the num guidelines are met:
	recommend Ethernet sv	network topology is ded (using standard 10/100 vitches that carry traffic at a te of 100 Mbit/s).
	The office in Cat5 wiring	network infrastructure should use
	Do not connect port on the De	t a network server PC to the PC skset.
		network cable is plugged in tug on the cable, the plug should d.

#### A call is forwarded or transferred to an outside telephone number and the call is disconnected.

Probable Cause	Corrective Action
Telephone line to telephone line call times have been restricted. Calls that are forwarded or transferred to an outside phone number use two PSTN lines or voice channels for the duration of the call. To avoid tying up two outside lines, these calls are on a timer.	<ul> <li>Reset the timer.</li> <li>a. Log on to the WebUI as administrator and click Basic Settings.</li> <li>b. Under the Timer for Forwarded and Transferred Outside Calls feature, select the Maximum Call Duration (15 to 120 minutes).</li> </ul>



#### I am unable to transfer a call to an extension.

Probable Cause	Corrective Action	
The extension is unavailable.	Check if the destination extension is disconnected from the network.	
	Ensure that the extension exists.	
	The destination extension's call appearances or lines may be busy.	
	If the party you have on hold hangs up, call back and start the transfer process again.	

#### My Deskset does not automatically forward a call to another extension.

Probable Cause	Corrective Action	
The Call Forward All settings are incorrect.	Check that Call Forward All is on. FWD ON [030/031] or FWD [020/025] should appear in the top right corner of the Idle screen.	
	<ul> <li>Ensure that a valid extension number has been entered as a destination extension.</li> </ul>	
	Confirm that the Call Forward All Target is set to Ext.	

#### I am unable to transfer a call to an outside phone number.

Probable Cause	Corrective Action
Transferring to an outside phone number has been disabled, or no lines are available.	<ul> <li>Check that transferring to an outside phone number is enabled. On the WebUI, go to Extension Basic Settings -&gt; Call Forward / Transfer to Outside Telephone Number.</li> </ul>
	Ensure that a valid outside number is shown in the to Phone # field. The number must include a number for external line access if your dial plan requires it for an outside call. For example, 9-1-555-0123.
	Ensure that the Gateway is connected to the network.
	<ul> <li>All phone lines may be in use. If so, try again later.</li> </ul>



#### Deskset does not automatically forward a call to an outside phone number.

#### **Probable Cause Corrective Action** Check that Call Forward All is on. FWD ON Forwarding to outside phone number has been disabled or [030/031] or FWD [020/025] should appear in Call Forward All or the Call the top right corner of the Idle screen. Press Forward–No Answer settings CallFwd [030/031] or MENU -> 1 -> 6[020/025] to turn this feature on. are incorrect. Check that forwarding to an outside phone number has been enabled. See "Fwd/Trans to Outside Line" on page 13. Ensure that a valid outside number is shown in the to Phone # field. The number must include a number for external line access if your dial plan requires it for an outside call. For example, 9-1-555-0123. Confirm that the Call Forward All Target is set to Phone#. On the Deskset, press MENU -> 2 -> 2 [030/031] or MENU -> 2 -> 2 -> 1 [020/025].

#### I am unable to manually forward a call to Voicemail.

Probable Cause	Corrective Action
Incoming Ring Group calls and incoming Call Queue calls cannot be forwarded to Voicemail by a Deskset user.	You can designate a Deskset as a forwarding destination if the Ring Group call is unanswered. If that Deskset does not answer the forwarded call, the call will be forwarded again according to that Deskset's settings. See "To create, edit, or delete a Ring Group:" on page 101.

#### I don't hear a Park Ringback tone.

Probable Cause	Corrective Action
The Ringer volume is set to OFF.	On the Deskset, press the VOL + button.



### **Incoming Calls**

My Deskset does not receive incoming calls.

#### **Probable Cause Corrective Action** Incoming call notifications Verify that Do Not Disturb is off. Make sure that have been suppressed or DND ON [030/031] or DND [020/025] is not in the top right corner of the Idle screen. Turn this delayed, or incoming calls are redirected by the Deskset, or feature off by using the Deskset Idle screen soft incoming calls are not keys. directed to the Deskset. Call Appearance mode only—Verify that Call Forward All is off. Make sure that FWD ON [030/031] or FWD [020/025] is not in the top right corner of the Idle screen. Press CallFwd [030/031] or MENU -> 1 -> 6 [020/025] to turn this feature off. ■ Call Appearance mode only—Verify that the Audible Ring Delay is not set too long. Press $MENU \rightarrow 1 \rightarrow 2 \rightarrow 2 [030/031] \text{ or } MENU \rightarrow 2$ -> **3** -> **2** [**020/025**] to adjust the ring delay. If the Deskset does not ring on an incoming call, press the **VOL+** key to increase ringer volume. Incoming calls may be directed to a Ring Group or Call Queue that you are not part of. Calls may also be redirected via DID numbers and Trunk Routing. **Line Appearance mode only—**Incoming calls on the line are being forwarded to a CFNA destination and the Seconds before Forwarding setting is 0 Seconds. The ringer volume is too low Press the **VOL+** key to increase ringer volume. or a ring delay is set. **Call Appearance mode only—**Verify that the Audible Ring Delay is set to 0 seconds. Press

I receive only caller ID numbers, not caller ID names.

Probable Cause	Corrective Action
Your T1 telephone service provider may use DMS-100 or 5ESS signaling protocols, which do not support caller ID name delivery.	<ul> <li>Talk to the service provider about obtaining PRI-NI2 signaling.</li> </ul>

MENU -> 1 -> 2 -> 2 [030/031] or MENU -> 2 -> 3 -> 2 [020/025] to adjust the ring delay.



#### Outside caller cannot find an extension in the Auto Attendant Directory.

Probable Cause	Corrective Action
The user for that Deskset has not recorded a Personal Name.	<ul> <li>Record a name at the Deskset. Press MENU -&gt; 2</li> <li>-&gt; 5 [030/031] or MENU -&gt; 2 -&gt; 1 -&gt; 2</li> <li>[020/025] to record a Personal Name to be played to callers.</li> </ul>
A first and last name have not been entered into the Extension list.	■ To enter a name, see "Extension Basic Settings" on page 112.
The outside caller may not be waiting long enough for the search.	Tell callers that after spelling the name, they can press the pound (#) sign to start the search.

#### Calls directed to the operator do not get there.

Probable Cause	Corrective Action
You deleted an old Deskset and replaced it with a new one. Even though you backed up the Deskset settings first and restored them to the new Deskset, the system operator assignment must be redone.	■ If you remove a Deskset from the system, any system settings, such as operator assignment to that extension, will change to the lowest-numbered extension. See "Deleting Devices" on page 147.

# Caller fails to get though or hears "Invalid extension" when calling a Direct Inward Dial phone number.

Probable Cause	Corrective Action
There may be a DID settings error or the Deskset is not connected to the system.	Verify that the Deskset status is Synchronized by pressing MENU -> 4 and looking at the Status.
	<ul> <li>Verify that the DID has been assigned to the correct extension. See "DID Assignments" on page 79.</li> </ul>

#### Call does not Auto Answer.

Probable Cause	Corrective Action
The Deskset is set to Call Forward All.	<ul> <li>Deactivate Call Forward All on the user's Deskset.</li> <li>On the idle screen, press CallFwd [030/031]</li> <li>or MENU -&gt; 1 -&gt; 6 [020/025].</li> </ul>



Probable Cause	Corrective Action
The Deskset is in DND mode.	<ul> <li>Deactivate DND on the user's Deskset. On the Idle screen, press DND [030/031] or MENU -&gt; 1 -&gt; 5 [020/025].</li> </ul>
Your Auto Answer delay is greater than your Call-Forward—No Answer delay.	Adjust the Auto Answer delay. On the Deskset, press MENU -> 2 -> 3 [030/031] or MENU -> 2 -> 2 -> 2 [020/025].
Direct Intercom is enabled and only calls from certain extensions are automatically answered.	<ul> <li>Disable Direct Intercom, then enable Auto Answer on the Deskset. On the Deskset, press</li> <li>MENU -&gt; 2 -&gt; 3.</li> </ul>
Ring Group calls cannot be automatically answered.	If possible, assign a DID number to the extension. The Deskset user should ask people whose calls the user wants auto answered to dial the DID number.

Caller ID is not working. The display shows 

Phone# 

and a digit for the name, and the same digit for the phone number.

Probable Cause	Corrective Action
Your organization does not subscribe to caller ID service or you have DSL phone lines without filters installed.	Caller ID is a subscription service. You must subscribe to this service from your local telephone service provider for this feature to work on your phone.
	The caller must be calling from an area that supports caller ID.
	Both you and your caller's telephone companies must use caller ID-compatible equipment.
	If you have DSL phone lines, confirm that you have a DSL filter plugged in between each Deskset and DSL wall jack. The DSL filter must be plugged into the wall jack, not the Gateway.

A caller hears, "That key is not recognized" or "The key you have pressed is not recognized".

Probable Cause	Corrective Action
The caller pressed an invalid key when interacting with the Auto Attendant.	<ul> <li>Confirm that your Auto Attendant main menu presents the correct options for the Auto Attendant flow you have created.</li> </ul>



#### A caller hears, "Invalid extension" while working with the Auto Attendant.

Probable Cause	Corrective Action
The caller entered an extension number that does not exist in your system.	Provide callers with the correct extension number.
The caller was forwarded to an extension number that does not exist in your system when interacting with the Auto Attendant.	A Deskset may have been disconnected from the network since the Auto Attendant was set up.

### Incoming calls do not come in.

Probable Cause	Corrective Action
Caller dialed a DID fax number.	<ul> <li>Use your Pilot number for your outgoing caller ID and make sure others know that your DID fax number should not be used for incoming calls.</li> </ul>

#### The Auto Attendant does not send calls to the correct extension.

Probable Cause	Corrective Action
You deleted an old Deskset and replaced it with a new one. Even though you backed up the Deskset settings first	If you remove a Deskset from the system, any Auto Attendant menu assignment to that extension reverts to None.
and restored them to the	<ul> <li>Review your Auto Attendant menus. Log on to the</li></ul>
new Deskset, the Auto	WebUI as administrator and click
Attendant settings for that	Auto Attendant, then Menus.
set were deleted. If any Auto	Use the Copy/Replace feature when adding a
Attendant menus used that	replacement Deskset to the system. See
Deskset as a destination,	"Copy/Replace Deskset" on page 20 and
those settings were erased.	"Copying and Replacing Devices" on page 156.

#### Outside callers cannot directly dial extensions after the Auto Attendant answers.

Probable Cause	Corrective Action
The first digit of the extension matches an Au Attendant Menu item.	Ensure that the first digits of the extension numbers do not match any Auto Attendant menu choices. Change the Auto Attendant menu choices or the first digits of the extensions so they do not match.
	Ensure that the Phone Extension Prefix does not match any Auto Attendant menu choices. Change the Auto Attendant menu choices or the Phone Extension Prefix so they do not match.



Probable Cause	Corrective Action
Direct Dial is not enabled.	<ul> <li>On the Auto Attendant menu page, turn Enable Direct Dial On.</li> </ul>

#### Ring Group Round Robin extensions do not ring in the correct order.

Probable Cause	Corrective Action	
The system time is not properly configured.	All devices' time settings need to be synchronized.	
	<ul> <li>Log on to the WebUI as administrator an click Basic Settings. Set the System Time/Date Options.</li> </ul>	d
	<ul> <li>Set the System Time/Date Options to automatic (if the Internet is available) or manual.</li> </ul>	

#### Incoming DID calls do not reach my extension.

Probable Cause	Corrective Action
Outside caller dialed the caller ID number that came with a fax or an outgoing voice call was made on the	<ul><li>Ensure that fax line uses the Pilot Number for outgoing CID.</li><li>a. Log on to the WebUI as administrator and</li></ul>
fax line. Outside calls placed	click <b>Direct Inward Dial</b> .
to the DID fax number go directly to the fax machine.	<ul> <li>b. Set the Outgoing Caller ID for all Extensions to System Pilot Number (global setting).</li> </ul>
	c. Click Apply.

#### Extension Monitor key does not flash for incoming calls.

Probable Cause	Corrective Action
The system is in Line Appearance mode.	None. In Line Appearance mode, the Extension Monitor key LED flashes green for an incoming call when:
	the call is on the Intercom line
	<ul> <li>an external call is forwarded to an extension through a Call Forward-No Answer setting</li> </ul>
	an external call is transferred to an extension.



### **Outgoing Calls**

I cannot dial an outside number. I reach an extension instead.

#### **Probable Cause Corrective Action** The extension prefix matches Configure your dial plan to require a unique the first digit of the outside number for external line access. Log on to the phone number you tried to WebUI as administrator, click System Settings, dial, and you don't have to then Dial Plan Settings. dial a digit before dialing If you want to maintain the ability to dial outside outside phone numbers. phone numbers without a preceding digit, change the extension prefix to avoid matching the first digits of commonly called outside phone numbers. a. Log on to the WebUI as administrator, click Extension Settings, then Basic Settings. b. Enter a new extension number in the range 100-999 or 1000-9999 into the **Change** Extension Number to box.

#### Unable to make outside calls.

Probable Cause	Corrective Action
An outside phone number cannot be accessed through the Gateway.	Ensure that you enter a 9 or whatever digit, if any, that must be dialed first for an outside call. For example, 9-1-555-0123.
	If you see All Phone Lines Busy on the Deskset screen, try again later because all outside lines may be in use.
	<ul> <li>Ensure that a Gateway is connected to the network and that it resides on the same subnet as the Deskset.</li> </ul>

#### I cannot make international long distance calls.

Probable Cause	Corrective Action
If no number for external line access is set, phone numbers, including international or country codes, that start with 0 (zero) will go to the Synapse system operator.	<ul> <li>Configure your dial plan to require a unique number for external line access. Log on to the WebUI as administrator, click System Settings, then Dial Plan Settings.</li> </ul>



#### I cannot access phone company services like 411.

#### **Probable Cause Corrective Action** Change the extension number. If any x11 extensions already exist (such as 411, or 611), a. Log on to the WebUI as administrator, click then the extensions take Extension Settings, then Basic Settings. precedence. In other words, dialing 411 calls extension b. Enter a new extension number in the range 100-999 or 1000-9999 into the Change 411, not the 411 directory service. 911 cannot be Extension Number to box. assigned as an extension Ensure that you enter a 9 or whatever digit, if any, number. that must be dialed first for an outside call. For example, 9-1-555-0123.

#### Even though I have a Trunk reservation, there is no outside line available for dialing calls.

Probable Cause	Corrective Action
Incoming calls can use reserved trunks or channels. All available channels may be busy with the incoming calls.	Wait for an available channel or contact your service provider to add more voice channels.

#### The PSTN Trunk reservation is not being honored.

Probable Cause	Corrective Action
An incoming call may be using that line. Parking calls and forwarding calls on a reserved trunk does not free up the trunk.	<ul> <li>Set up Trunk Routing to reserve the incoming path to the "special" extension. On the administrator WebUI, click System Settings, then Trunk Routing.</li> <li>Forwarded call must end before the reserved trunk is available.</li> </ul>

#### I cannot make an outgoing call on a system with reserved trunks.

Probable Cause	Corrective Action
All lines and channels are being used for active or incoming calls, or are reserved for other extensions.	If all trunks are reserved, extensions with trunk reservations cannot make calls. You can either remove the reservations from some trunks or arrange for additional analog telephone lines or T1 channels.

#### DDNs (Directory Dial Numbers) do not dial out properly from the Call Log.

Probable Cause	Corrective Action	
This system does not support DDN.	<ul> <li>DDNs in the Call Log are treated like all other caller ID phone numbers.</li> </ul>	



# **SB67050 Analog Terminal Adapter**

### **General Troubleshooting**

ATA does not work at all. The Power LED is off.

Probable Cause	Corrective Action	
There is no power to the device.	Ensure the AC plug is plugged into an electrical outlet not powered by a wall switch.	
	<ul> <li>Verify that the AC power outlet has power. Plug in a lamp. If the lamp won't light, contact an electrician or use another power outlet.</li> </ul>	
	<ul> <li>Verify that the DC plug is a 12V 1500mA adapter and plugged into the power jack marked DC 12V</li> <li>⊙ ⊕⊕ on the front of the ATA.</li> </ul>	

#### ATA screen displays Network Down.

Probable Cause	Corrective Action	
The Ethernet cable is unplugged.	Ensure that one end of the Ethernet cable is plugged into the port marked LAN on the front of the ATA and that the other end is plugged into your office LAN.	
	Confirm that the Ethernet port light next to the Ethernet port on the ATA is green. If it is not, unplug the cable and plug it in again.	
There may be a problem with the office network.	Check if other network devices, such as computers, are communicating with the network. If not, then contact your IT administrator.	

#### ATA screen displays Synch Failed.

Probable Cause	Corrective Action	
The ATA was disconnected, then reconnected after configuration changes were made to the system.	See "Reconnecting a Gateway or ATA to the System" on page 172.	
The ATA was configured on another network or has returned to the Synapse system after being deleted from the system.	Reset to factory defaults by using a paper clip to press and hold the RESET button (located on the front of the unit) for more than five seconds. See "Reconnecting a Gateway or ATA to the System" on page 172.	



#### ATA is not active immediately after a power interruption.

Probable Cause	Corrective Action	
The ATA needs time to restore service.	Allow at least 30 seconds for the ATA to boot up again after a power failure.	

### Music on Hold (MoH)

Music on Hold (MoH) is not playing and the AUX IN LED (right of the ATA LCD screen) is OFF.

Probable Cause	Corrective Action
MoH is disabled.	Log on to the WebUI as administrator. On the Hold/Park Settings page, enable Music on Hold and set Select Port for the desired ATA, then click Apply.

MoH is not playing and the AUX IN LED (right of the ATA LCD screen) is solid RED, but MoH is enabled in the WebUI.

Probable Cause	Corrective Action	
MoH not properly connected and no connected equipment is detected in AUX IN.	Verify that an audio source is connected to AUX IN on the ATA and power is applied.	

#### MoH audio is interrupted.

Probable Cause	Corrective Action	
Hold Announcement is enabled.	The Hold Announcement is a feature that repeats a recorded audio clip at regular intervals during MoH. See "Configuring Hold/Park Settings and Music on Hold" on page 88.	

My audio player jack is not the same size as the supplied audio cable.

Probable Cause	Corrective Action	
Your audio device does not have a 3.5 mm audio out jack.	<ul> <li>Use a different audio cable with ends to fit your audio device and the 3.5 mm AUX IN jack on the ATA.</li> </ul>	



### MoH is not playing and the AUX IN LED (right of the ATA LCD screen) is GREEN.

Probable Cause	Co	Corrective Action	
MoH not properly configured.	•	Verify that the audio source is playing and not muted.	
	•	Set the MoH output volume level by adjusting the playback volume of the music source device connected to the ATA. You may need to set the volume near the maximum.	
	•	Some MoH sources without volume controls, such as those with audio-out jacks, are usually very loud and might be too loud.	
	•	Synapse limits the volume of the sound delivered to the phone line. Because of this, there may be audio clipping (missing sounds) for some sources.	
	•	Use different hold music. Some types of music sound better than others when played across a telephone line. For example, classical music with extreme volume fluctuations may not sound very good when used as MoH.	
	•	Verify that the audio source meets the electrical specifications for ATA AUX IN. See "Appendix A: Technical Specifications" in the Synapse Installation Guide.	
	•	Verify that Hold Announcement is not playing a silent message. See "Configuring Hold/Park Settings and Music on Hold" on page 88.	



#### MoH audio is too quiet, fluctuating, or dropping out.

#### **Probable Cause**

#### **Corrective Action**

The volume on the audio source is too low or too high. If the volume is too high, overdriven audio components may be causing short periods of sound to drop out (not be heard).

- If you can adjust the output volume of your audio source (like the headset jack of an MP3 player), call into your Synapse system, place the call on hold, listen to MoH on the outside line, and adjust the audio volume on your audio source up or down until the best sound quality is achieved.
- If your audio source does not have adjustable volume, such as the AUX OUT on a radio, verify that the audio source meets the electrical specs for ATA AUX IN. See "Appendix A: Technical Specifications" in the Synapse Installation Guide.
- If you created a recording to use as the audio source, try to adjust the recording volume by speaking louder or speaking closer to the microphone.
- Use different hold music. Some types of music sound better than others when played across a telephone line. For example, classical music with extreme volume fluctuations may not sound very good when used as MoH.

Using audio source outputs whose levels are not adjustable, such as RCA "Line Out", may result in unacceptable background music levels.

Use an audio source with output volume control.



Do not exceed the ATA AUX IN input specifications. Grossly exceeding these CAUTION specifications can damage the ATA. See "Appendix A: Technical Specifications" in the Synapse Installation Guide available at www.telephones.att.com/synapseguides.



# **Overhead Paging (OHP)**

### **OHP General Troubleshooting**

Overhead paging (OHP) is not working.

Cause	Action		
You don't know whether your OHP is single-zone or multi-zone and whether it needs an FXS or an	•	There are three possible configurations for OHP:	
	•	<ul><li>Single-zone paging connected to the AUX OUT jack.</li></ul>	
Audio-Out connection.	•	<ul> <li>Single-zone paging connected to one of the two FXS ports.</li> </ul>	
	•	<ul> <li>Multi-zone paging connected to one of the two FXS ports.</li> </ul>	
	9	Select the appropriate configuration for your specific paging equipment. See "Overhead Paging Overview (ATA Required)" on page 93.	
	1	Refer to your OHP product documentation and the respective troubleshooting section below. The paging equipment, the jack it is plugged into, and the WebUI must all match.	
The OHP may not be properly installed.		For OHP equipment connected to an FXS port, verify WebUI configuration:	
	i	<ul> <li>Connect a corded phone to the FXS port configured for paging and verify that the phone rings when it is paged.</li> </ul>	
	l	<ul> <li>If the phone does not ring, there is a problem with the WebUI configuration or the installation at the ATA.</li> </ul>	
	(	c. If the phone rings, the configuration allows communication with the OHP. Verify that your paging equipment has power and is on.	
		Refer to your paging equipment documentation if there are still problems.	

### I cannot add a multi-zone Paging Zone to other Paging Zones.

Cause	2	Ac	tion
allow equip	zone paging does not a combination of OHP ment and Desksets a one Paging Zone.	•	Page multi-zone OHP zones separately from extensions.



### Unable to make phone calls on the extension configured for the FXS OHP port.

Cause	Action	
System limitation.	<ul> <li>Once an FXS is configured for OHP, it cannot be used for audio calls, nor will it receive voice calls.</li> </ul>	



#### **Single-Zone OHP Connected to AUX OUT Jack**

For OHP equipment connected to the AUX OUT jack, this Troubleshooting refers to the ATA front-panel AUX OUT LED. This describes the behavior of these LEDs:

- **OFF**: There is a problem with the WebUI configuration for OHP. Either **Paging** is disabled, or the selected **Paging Port** is not AUX OUT.
- **RED**: Although the WebUI supports OHP, no connection is detected.
- Steady GREEN: The WebUI is configured for OHP on AUX OUT, it is enabled, and the ATA has detected that a cable is connected.
- Flashing GREEN: An OHP is in progress.

We also use these LEDs to help diagnose problems.

#### Single-zone OHP on AUX OUT is not working and the AUX OUT LED (right of the ATA screen) is OFF.

Cause	Action	
The OHP is not configured in the WebUI for use on AUX		/erify the Single-Zone on AUX OUT WebUI configuration:
OUT.	ā	a. Log on to the WebUI as administrator, click System Settings, then Overhead Paging.
	t	<ul> <li>Verify that Paging is Enabled. If not, select Enable.</li> </ul>
	C	<ul> <li>Verify that the Paging System Type is set to Single Zone.</li> </ul>
	C	d. Verify that <b>Select Paging Port</b> is set to <b>AUX OUT</b> and that your OHP system is plugged into the AUX OUT jack.
	e	e. Click Apply.
The OHP is not a member of a Paging Zone.	F	Verify that the OHP equipment is part of the Paging Zone that you are trying to page. See 'Creating, Editing and Deleting Paging Zones" on page 98.

Single-zone OHP on AUX OUT is not working and AUX OUT LED (right of the ATA screen) is solid RED.

Cause	Action	
The OHP is configured for use, but no connector is detected in the jack.	Verify that your paging equipment is connected to AUX OUT. If not, connect it, or change the OHP configuration in the WebUI if your OHP equipment is intended to be connected to an FXS port. For background information and configuration instructions, see "Overhead Paging Overview (ATA Required)" on page 93.	



Single-zone OHP on AUX OUT is not working and the AUX OUT LED (right of the ATA screen) is solid GREEN and the WebUI is configured for paging through the AUX OUT jack.

Cause	Action	
The ATA has detected a cable connected to the AUX OUT jack. There may be a problem with your paging equipment or its configuration.	<ul> <li>Refer to your OHP product documentation for installation and configuration instructions.</li> <li>To isolate OHP-related problems, connect PC speakers to the AUX OUT jack configured for paging. If the page is broadcast through the speakers when paged, refer to the documentation that came with your OHP.</li> </ul>	
	Verify your paging equipment configuration. Check to see if the OHP system has settings that need to be adjusted to work with Synapse. Refer to your paging equipment documentation or to your VAR.	

Single-zone OHP on AUX OUT is not working and the AUX OUT LED (right of the ATA screen) is flashing GREEN.

Cause	Action	
Paging is active (a user on	Verify your paging equipment configuration.	
the system is paging the	Check to see if the OHP system has settings that	
OHP system). There may be a	need to be adjusted to work with Synapse. Refer	
problem with the paging	to your paging equipment documentation or to	
equipment or its setup.	your installer.	

In single-zone paging, paging starts on Desksets before the paging starts on the OHP system.

Cause	Action		
Paging delay is too short.	<ul> <li>Verify that the Paging Delay is set to an appropriate delay to work with your OHP system.</li> </ul>		
	<ul> <li>a. Log on to the WebUI as administrator, click</li> <li>System Settings, then Overhead Paging.</li> </ul>		
	b. Set the <b>Paging Delay</b> .		
	c. Click Apply .		



### **Single-Zone OHP Connected to an FXS Port**

For OHP equipment connected to an FXS port, this Troubleshooting refers to the ATA front-panel FXS LED for the FXS port you are using for the OHP equipment. When the equipment is properly installed, and everything is configured correctly, this is the behavior of these LEDs:

- OFF: There is no paging activity.
- Flashing GREEN: A user has initiated a page.
- Solid **GREEN**: A device other than an OHP (such as a fax machine) is connected to the FXS port and has gone off hook.

We also use these LEDs to help diagnose problems.

#### Single-zone OHP on FXS is not working.

Cause	Ac	tion	
The OHP may not be properly	•	Te	st basic OHP functionality.
installed.		a.	Connect a corded phone to the FXS port configured for paging.
		b.	Page all extensions and verify that the phone rings when paged.
		C.	If the phone does not ring, there is a problem with the WebUI configuration or the installation at the ATA.
		d.	If the phone rings, the configuration allows communication with the OHP, verify that your paging equipment has power and is on.
			Refer to your paging equipment documentation if there are still problems.
There may be a problem with the paging equipment or its setup.	•	Ch ne to	rify your paging equipment configuration. eck to see if the OHP system has settings that ed to be adjusted to work with Synapse. Refer your paging equipment documentation or to ur installer.



Cause	Action		
There may be a problem with the connection between the FXS port and the OHP system.	Verify that your paging equipment is connected to FXS 1 or FXS 2. If not, connect it, or change the OHP configuration in the WebUI if your OHP equipment is intended to be connected to the AUX OUT jack. For background information and configuration instructions, see "Overhead Paging Overview (ATA Required)" on page 93.		
	Verify the Single-Zone on FXS WebUI configuration:		
	<ul> <li>Log on to the WebUI as administrator click Overhead Paging.</li> </ul>	and	
	b. Verify that <b>Paging</b> is set to <b>Enable</b> .		
	<ul> <li>Verify that the Paging System Type i Single Zone.</li> </ul>	s set to	
	d. Verify that Select Paging Port is set FXS 1 or FXS 2 on the desired ATA as your OHP system is plugged into the Fa you selected.	nd that	
	e. Click Apply .		
There may be a problem with the Paging Zone setup.	Verify that the Paging Zone you are pagir includes Overhead Page.	ıg	

Single-zone OHP on FXS is not working and the FXS LED (right of the ATA screen) for the FXS port that is used for the OHP equipment is solid GREEN.

	Cause	Ac	Action	
(	A device other than an OHP (such as a fax machine) is	٠	Ensure that the OHP is connected to the correct ATA port.	
	connected to the FXS port and has gone off hook.	•	Refer to your OHP product documentation for installation and configuration instructions.	
		٠	Verify WebUI configuration (see "Verify the Single-Zone on FXS WebUI configuration:" above).	



Single-zone OHP on FXS is not working and the FXS LED (right of the ATA screen) for the FXS port that is used for the OHP equipment is OFF.

Cause	Action	
No signal is detected.	There is no signal when no one is paging or the FXS ports are not configured for overhead paging.	
	<ul> <li>Verify that your paging equipment is connected to FXS 1 or FXS 2. If not, plug it in, and verify your OHP equipment connections.</li> </ul>	
The OHP is not a member of a Paging Zone.	See "Creating, Editing and Deleting Paging Zones" on page 98.	

In single-zone paging, paging starts on Desksets before the paging starts on the OHP system.

Cause	Action		
Paging delay is too short.	<ul> <li>Verify that the Paging Delay is set to an appropriate delay to work with your OHP system.</li> </ul>		
	<ul> <li>Log on to the WebUI as administrator, click System Settings, then Overhead Paging.</li> </ul>		
	b. Set the <b>Paging Delay</b> .		
	c. Click Apply .		



#### **Multi-Zone OHP Connected to an FXS Port**

For OHP equipment connected to an FXS port, this Troubleshooting refers to the ATA front-panel FXS LED for the FXS port you are using for the OHP equipment. When the equipment is properly installed, and everything is configured correctly, this is the behavior of these LEDs:

- **OFF**: There is no paging activity.
- Flashing GREEN: A user has initiated a page.
- Solid **GREEN**: A device other than an OHP (such as a fax machine) is connected to the FXS port and has gone off hook.

We also use these LEDs to help diagnose problems.

#### With multi-zone paging, paging all extensions does not broadcast over my OHP equipment.

Cause	Action	
Multi-zone OHP cannot be paged at the same time as Desksets.	To page the OHP, the user must select Overhead Paging from the Paging Zones selection screen on the Deskset. Selecting any other zone will not page the OHP system, even if the Paging Zones did include Overhead Paging prior to changing the Paging System Type to multi-zone.	

#### Multi-zone OHP is not working.

Cause	Action	
Inconsistent configuration.	Verify tl	ne Multi-Zone WebUI configuration:
	-	on to the WebUI as administrator, click stem Settings -> Overhead Paging.
	b. Veri	ify that <b>Paging</b> is set to <b>Enable</b> .
		ify that the <b>Paging System Type</b> is set to <b>Iti Zone</b> .
	FXS	ify that <b>Select Paging Port</b> is set to an port and that your OHP system is gged into that FXS port.
	e. Clic	k Apply .
The OHP cannot be paged at the same time as the Desksets.	■ Page th	e Desksets and OHP separately.
There may be a problem with the paging equipment or its setup.	Check t need to	our paging equipment configuration. o see if the OHP system has settings that be adjusted to work with Synapse. Refer paging equipment documentation or to staller.



Cause	Action	
There may be a problem with the Paging Zone setup.	<ul> <li>Verify that the Paging Zone you are paging is Overhead Paging.</li> </ul>	
There may be a problem with the connection between the FXS port and the OHP system.	Verify the connection between the FXS port and your OHP system. For background information and configuration instructions, see "Overhead Paging Overview (ATA Required)" on page 93.	

Multi-zone OHP is not working and the FXS LED (right of the ATA screen) for the FXS port that is used for the OHP equipment is OFF.

Cause	Action	
No signal is detected.	There is no signal when no one is paging.	
	Verify that your paging equipment is connected to FXS 1 or FXS 2. If not, connect it, and check your OHP equipment connections.	
Inconsistent configuration.	Verify the WebUI configuration. See "Setting Up Overhead Paging" on page 94.	

Multi-zone OHP is not working and the FXS LED (right of the ATA screen) for the FXS port that is used for the OHP equipment is solid GREEN.

Cause	Action	
A device other than an OHP (such as a fax machine) is	<ul> <li>Refer to your OHP product documentation for installation and configuration instructions.</li> </ul>	
connected to the FXS port and has gone off hook.	Verify the WebUI configuration. See "Setting Up Overhead Paging" on page 94.	

Multi-zone OHP is not working and the FXS LED (right of the ATA screen) for the FXS port that is used for the OHP equipment is flashing GREEN.

Cause	Action	
Someone has initiated a page, but the OHP equipment has not yet acknowledged the	Verify the connection between the FXS port and your OHP system. See "Overhead Paging Overview (ATA Required)" on page 93.	
page request.	Verify your paging equipment configuration. Check to see if the OHP system has settings that need to be adjusted to work with Synapse.	



### **Fax Configuration**

While using T.38 mode, unable to receive faxes or having persistent fax transmission failures.

Cause	Action	
Incompatible Fax Mode setting.	Change the Fax Mode setting:	
	<ul> <li>a. Log on to the WebUI as administrator, click</li> <li>System Settings, then Fax Configuration.</li> </ul>	
	b. Set PSTN Fax Mode to G.711.	
	c. Click Apply .	

While using T.38 mode, fax usually works with occasional failures.

Cause	Action	
Network impairment issues.	Resend the fax later or use the fax machine's retransmission feature.	

While using G.711 mode, fax usually works with occasional failures.

Cause	Act	Action	
Network impairment issues.		Resend the fax later or use the fax machine's retransmission feature.	
	If the above does not work, try switching the Fax Mode setting.		
		<ul> <li>Log on to the WebUI as administrator, click System Settings, then Fax Configuration.</li> </ul>	
		b. Set PSTN Fax Mode to T.38.	
		c. Click Apply .	



The fax is not working and the ATA FXS LED that corresponds to the port connected to the fax machine is OFF when the fax is attempting to send or receive a fax.

Cause	Act	Action	
The Gateway and the fax are not communicating.	•	<ul> <li>Verify the connection between the FXS port and your fax machine. For background information and configuration instructions, see "Overhead Paging Overview (ATA Required)" on page 93.</li> <li>Verify the fax configuration on the WebUI:</li> </ul>	
	•		
		a.	Log on to the WebUI as administrator, click <b>System Settings</b> , then <b>Fax Configuration</b> .
		b.	Verify that <b>Fax</b> is set to <b>Enable</b> and that <b>PSTN Fax Mode</b> is set to the appropriate setting. See "Fax Configuration (Requires ATA)" on page 80.
		c.	Verify that <b>Fax Destination</b> is set to the appropriate ATA FXS port and that the fax machine is physically connected to that jack.
		d.	Verify that <b>PSTN Gateway Fax Line</b> is set to the correct Gateway line. Verify that the physical outside line on which incoming faxes are received is connected to the chosen <b>PSTN Gateway Fax Line</b> on the Gateway. If not, outgoing faxes will work but incoming faxes will be directed to the Auto Attendant instead of being directed to the fax.
		e.	Click Apply .
		f.	Make sure the fax machine has power and is turned on.

The fax is not working and the ATA FXS LED that corresponds to the port connected to the fax machine is solid GREEN.

Cause	Action	
The FXS port is configured for fax, and a phone connected to the FXS port is off hook.	Verify the fax machine settings.	



The fax is not working and the ATA FXS LED that corresponds to the port connected to the fax machine is flashing GREEN.

Cause	Action	
The ring voltage is present but your FXS configuration may be wrong.	<ul> <li>Change the PSTN Fax Mode:</li> <li>a. Log on to the WebUI as administrator, click System Settings, then Fax Configuration</li> </ul>	
b.	b. Change the <b>PSTN Fax Mod</b> e setting, then click <b>Apply</b> .	
	The default <b>PSTN Fax Mode</b> is G.711. If the fax fails to work in G.711 mode, switch to T.38.	е

The fax machine is connected to the telephone line through the Synapse system and the FXS LED indications appear correct, yet outgoing faxes fail.

Cause	Action	
Number dialed incorrectly.	To send faxes, ensure that you enter a 9 or whatever digit, if any, that must be dialed first for an outside call. For example, 9-1-555-0123.	

#### Unable to receive incoming faxes.

Cause	Action		
Fax line not configured properly.	<ol> <li>Log on to the WebUI as administrator, click System Settings, then Fax Configuration.</li> </ol>		
	<ol><li>Verify that PSTN Gateway Fax Line is set to the correct line.</li></ol>		
	<ol> <li>Verify that the physical outside line on which incoming faxes are received is connected to the chosen PSTN Gateway Fax Line on the Gateway. If not, outgoing faxes will work but incoming faxes will be directed to the Auto Attendant instead of being directed to the fax.</li> </ol>		
	4. Click Apply.		

#### Problems sending and receiving faxes through the SIP Gateway.

Cause	Action		
G.729 codec is not compatible with fax transmission.	<ul> <li>On the SIP Accounts page, remove G.729 from the Enabled Codecs list.</li> </ul>		



Unable to make phone calls on the telephone that is part of my fax machine.

Cause	Action	
System limitation.	Once an FXS is configured for fax, the fax machine's integrated telephone cannot be used for audio calls. If the fax machine has a corded handset, it will not receive voice calls, and even though a user may get a dial tone, dialing out is not possible.	

# **Analog Phone**

Analog phone connected to FXS port does not work as expected.

Cause	Ac	tion				
The WebUI configuration is incorrect.	•	or tel yo	rify that your telephone is connected to FXS 1 FXS 2. If not, plug it in, or change the analog ephone configuration in the WebUI. Verify that ur phone is connected to the correct FXS port d that the phone has power.			
	1.		g on to the WebUI as administrator and click <b>A Settings</b> .			
	2.	ass tel oth	rify that the desired FXS port has a <b>Voice</b> signment. If not, try connecting the analog ephone to the other FXS port or disable the ner assignment. <b>Voice</b> is the default setting en no other assignments are enabled.			
		If t	he desired FXS port is assigned to <b>Fax</b> :			
		a.	Click <b>System Settings</b> , then <b>Fax Configuration</b> .			
		b.	Set Fax to Disable.			
		c.	Click Apply.			
						he desired FXS port is configured for rerhead Paging:
		a.	Click <b>System Settings</b> , then <b>Overhead Paging</b> .			
		b.	Set Paging to Disable.			
		c.	Click Apply .			



Cause	Action
Analog phone is working	Consider the analog phone limitations:
with Synapse, but does not have Deskset capabilities.	<ul> <li>To make outgoing calls on an analog phone connected to the FXS port on the ATA, the outside phone number must be preceded by</li> <li>9 or whatever digit, if any, that must be dialed first for an outside call (same as on a Deskset).</li> </ul>
	■ The analog phone connected to the FXS port on the ATA can pick up incoming calls and make outgoing calls. Idle, Ringing, Dial, caller ID, and Active states are all supported, but advanced features such as Call Waiting, Call Forward, Hold, Transfer, DND, Paging, Park, and Voicemail are not supported on analog phones.



### **Group Mailbox**

#### **Group Mailbox does not work.**

Cause	Action		
An ATA is not available.	<ul> <li>Group Mailboxes reside on the ATA. Connect an ATA to the Synapse system.</li> </ul>		

#### Group Mailbox is full even though it has not reached quota.

Cause	Action
The sum of the quotas for individual Group Mailboxes may exceed 180 minutes or some Group Mailboxes do not have quotas enabled. In other words, quotas do not reserve recording time for a given Group Mailbox. Quotas only limit the maximum amount of recording time available for a Group Mailbox.	<ul> <li>The ATA allows for a total of 180 minutes of recording time for all Group Mailboxes. You can assign quotas for individual Group Mailboxes. Note that the sum of the quotas for individual Group Mailboxes may exceed 180 minutes.</li> <li>To free additional recording time for a Group Mailbox, delete messages on any of the Group Mailboxes.</li> <li>To prevent this problem from occurring again, reduce quotas to add up to 180 minutes or less, and make sure that all Group Mailboxes have quotas enabled.</li> <li>Note that personal messages reside on the specific Desksets and do not affect Group Mailbox recording time.</li> </ul>

#### Unable to find a message.

Cause	Action	
Group Mailboxes are accessed by multiple users.	None. Another user may have deleted the message you are looking for.	

#### The number of new messages changed spontaneously.

Cause		Action		
Group Mailboxes are accessed by multiple users.	•	None. Another user may have listened to the new messages or cleared "New" indicators from messages.		



## **SIP Gateway**

SIP Gateway REG LED is RED or SIP Registration status on the WebUI is Unknown.

Cause	Action	
Incorrect SIP account settings.	Make sure your SIP Account settings are set as per your SIP service provider's requirements.	
	<ul> <li>On the WebUI SIP Account Settings page, ensure Static Registration is not selected.</li> </ul>	
Network connection problems.	Make sure you have a reliable Internet connection for the SIP Gateway.	
	Make sure the SIP service is not down.	

#### SIP Gateway is not working.

Cause	Action		
No power to the Gateway.	Check the front panel LEDs on the Gateway:		
	<ul> <li>Make sure the Power LED is on. If not, connect power to the Gateway.</li> </ul>		
	<ul> <li>Make sure that the SYN/ACT and REGISTRATION LEDs are both on solid GREEN.</li> </ul>		
Incorrect SIP account settings.	<ul> <li>Make sure your SIP Account settings are set as per your SIP service provider's requirements.</li> </ul>		
Network connection problems.	<ul> <li>Make sure the SIP Gateway is synchronized to the system. Check the WebUI Detailed System Information page.</li> </ul>		
	<ul> <li>On the WebUI SIP Account Settings page, ensure Static Registration is not selected.</li> </ul>		
	Make sure you have a reliable Internet connection for the SIP Gateway.		
	Make sure the SIP service is not down.		



#### Calls on the SIP Gateway terminate unexpectedly.

Cause	Action	
Issues with SIP account settings.	Make sure that your SIP account is registered. The REGISTRATION LED on the SIP Gateway front panel should be solid GREEN and the Registration Status on the WebUI SIP Account Settings should show Registered.	
	<ul> <li>On the WebUI SIP Account Settings page, ensure Static Registration is not selected.</li> </ul>	
Network connection problems.	Make sure the SIP Gateway is synchronized to the system. Check the WebUI Detailed System Information page.	
	<ul> <li>Make sure you have a reliable Internet connection for the SIP Gateway</li> </ul>	
	Try port forwarding on the router, the port specified for the SIP Server (see "SIP Gateway Settings" on page 134) to the SIP Gateway LAN address.	
	Make sure that the SIP service is not down.	

#### Calls on the SIP Gateway have intermittent audio.

Cause	Action
Too many simultaneous calls approaching or exceeding available network bandwidth.	<ul> <li>Enable G.729 codec, or give G.729 priority over G.711.</li> <li>Increase network bandwidth to allow for the maximum number of simultaneous calls you have purchased.</li> </ul>

#### Calls on the SIP Gateway have one-way audio.

Cause	Action
Incorrect LAN configuration.	<ul> <li>Check your LAN configuration for the Gateway.</li> <li>We recommend using the IP subnet 192.x.x.x.</li> </ul>



# **APPENDIXES**

## **Appendix A: Default Settings**

Table 13 through Table 16 list the default settings for the Synapse system, Desksets, SB67040 Cordless Handset, and SB67050 ATA.

Table 13. System Default Settings

Barrantan	Salastian	Default
Parameter	Selection	Default
Admin Password	4 through 6 digits	12345
Administrator Login Name	16 characters max	Admin
Auto Attendant Digit Assignment (1–9, *, #)	None, Replay, Directory, Previous Menu, Main Menu, Default Menu, (user created)	None
Auto Attendant Enable Direct Dial	On, Off	On
Auto Attendant Enable Operator	On, Off	On
Auto Attendant Unscheduled Destination	Operator, AA Menus, Call Queues, Ring Groups, Group Mailboxes, System Directory, Extensions, Personal Voicemails	Default Menu
Backup/Restore Settings	All extensions	Nothing
Call Forward Unconditional	On, Off	Off
Call Forward Unconditional Target Type	Voicemail, Extension	Voicemail
Call Forward-No Answer	On, Off	On
Call Forward–No Answer Extension Number	All extensions	Operator
Call Forward–No Answer Seconds Before Forwarding	5 though 45	15
Call Forward–No Answer Target Type	Off, Voicemail, Extension, Outside Phone Number	Voicemail
Call Forward–No Answer Telephone Number	32 Digits Maximum	Nothing
Delete Device	All devices	Nothing
Directory First and Last Name Fields	20 Digits Maximum	Nothing

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Table 13. System Default Settings (Continued)

Parameter	Selection	Default
Directory Number Field	32 Digits Maximum	Nothing
Directory Sort	First Name, Last Name	First Name
Display First and Last Name	16 characters maximum	Nothing
Enable Auto Attendant	Scheduled, Manual, Off	Manual
Hold message: Extension for Recording	All extensions	Nothing
Hold ringback delay	10 to 1800 seconds	180 seconds
Operator Extension	All extensions	Lowest number extension
Park ringback delay	10 to 1800 seconds	180 seconds
Ring Group No Answer Target Extension	All extensions	Operator
Ring Group Seconds Before Forward	5 to 45 Seconds	15
System Time/Date Option	NTP Server, Custom Server, Manual	NTP Server
Timer for Forwarded and Transferred Outside Calls	15 through 120 (in 15-minute increments)	30
User Password	6 digits maximum	Nothing



**Table 14. Deskset Default Settings** 

Parameter	Selection	Default
Backlight	Hi, Lo, Off	Hi
Call Forward All Target	Ext, Mailbox, Phone #	Mailbox
Call Forward–No Answer Delay	5 through 45 (in 5-second increments)	15
Call Forward–No Answer Target	Mailbox, Ext, Phone #, OFF	Mailbox
Call Forward/Trans to outside line	Enabled/Disabled	Enabled
Contrast	1 through 9	5
Current Greeting	Primary, Alternate, Pre-Set	Pre-Set
Current Name	Personal, Pre-Set	Pre-Set
Date and Time (when server is not available)		12:00PM, January 1, 2009
Directory List	All, Personal, System, Extension	All
First Name/Last Name toggle	First Name, Last Name	First Name
Handset	Registered, Not Registered	Not Registered
Headset	Registered, Not Registered	Not Registered
IP Configuration	Auto, Static	Auto
Key Beeps	On, Off	On
Preferred Audio Mode	Speakerphone, Headset	Speakerphone
Ring Volume	0 through 9	3
Ringtones	1 through 9	1
User Password	0 through 6 Digits	Nothing

**Table 15. Cordless Handset Default Settings** 

Parameter	Selection	Default
Contrast	1 through 9	5
Key Beeps	On, Off	On
Ring Volume	0 though 9	3
Ringtones	1 though 9	1





Table 16. ATA Default Settings

Parameter	Selection	Default
AUX IN	Enable, Disable	Disable
AUX OUT	Enable, Disable	Disable
Fax Enable	Enable, Disable	Disable
Fax Mode	G.711, T.38	G.711
Fax Destination	FXS 1, FXS 2	None. "Select a Fax Port" appears
PSTN Fax Line	Line 1, 2, 3, 4	None. "Select a Fax Line" appears
FXS1	Voice, Fax, OHP	Voice
FXS2	Voice, Fax, OHP	Voice
Group Mailbox Greeting	Pre-Set, Custom	Pre-Set
Group Mailbox Quota	Enable, Disable	Disable
IP Address	Auto (DHCP), Static	Auto (DHCP)
Music on Hold Port	AUX IN	None. "Select a Port" appears
Overhead Paging Delay	0 though 5	0
Overhead Paging Enable	Enable, Disable	Disable
Overhead Paging Port	FXS 1, FXS 2, AUX OUT	None. "Select a Port" appears
Overhead Paging System Type	Single Zone, Multi Zone	Single Zone

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**Table 17. SIP Gateway Default Settings** 

Parameter	Selection	Default
Starting RTP Port	0 to 65535	16384
Select Account to Edit	Up to ten SIP accounts	Create New Account
Account Type	SIP Trunking, Remote Site	SIP Trunking
Account Enabled	n/a	Disabled
Account Name	16 characters/digits	blank
Max Calls	1 to 16	16
Display Name	32 characters/digits	blank
User Name	32 digits (no characters allowed)	blank
Auth User Name	32 characters/digits	blank
Auth User Password	32 characters/digits	blank
Primary Number	32 digits (no characters allowed)	blank
IP-PBX Signaling Address	Enabled, Disabled (SIP Trunking accounts only)	Disabled
Registration Type	Static Registration, Dynamic Registration	Dynamic Registration
Registration Expires	0 to 23 <sup>2</sup> -1	3600 seconds
SIP Server Address or URL	252 characters/digits (no special characters)	blank
SIP Server Port	0 to 65535	5060
Registrar Server Address or URL	254 characters/digits (no special characters)	blank
Registrar Server Port	0 to 65535 (blank is acceptable)	blank
Outbound Proxy Server Address or URL	254 characters/digits (no special characters; blank is acceptable)	blank
Outbound Proxy Server Port	0 to 65535 (blank is acceptable)	blank
Disabled Codecs	n/a	G.711a
Enabled Codecs	n/a	G.711U, G.729





### **Appendix B: Maintenance**



Your system contains sophisticated electronic parts, so it must be treated with care

#### **Avoid Rough Treatment**

Handle the unit gently. Save the original packing materials to protect your equipment if you ever need to ship it.

#### **Avoid Water**

Your unit can be damaged if it gets wet. Do not use the equipment outdoors in the rain or handle it with wet hands. Do not install the equipment near a sink, bathtub, or shower.

#### **Electrical Storms**

Electrical storms can sometimes cause power surges harmful to electronic equipment. For your own safety, exercise caution when using electrical appliances during storms.

#### **Cleaning Your Unit**

Your unit has a durable plastic casing that should retain its luster for many years. Clean it only with a soft cloth slightly dampened with water or a mild soap solution. Do not use excess water or cleaning solvents of any kind.



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### **Appendix C: Important Safety Instructions**



This symbol alerts you to important operating or servicing instructions in this CAUTION document. Always follow basic safety precautions when using this product to reduce the risk of injury, fire, or electric shock.

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury, including the following:

- Read and understand all instructions.
- Follow all warnings and instructions marked on the product.
- Unplug this product from the wall outlet before cleaning. Do not use aerosol or liquid cleaners. Use a damp cloth for cleaning.
- Do not use this product near water (for example, near a bathtub, kitchen sink, or swimming pool).
- Do not place this product on an unstable surface.
- This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply in your home or office, consult your dealer or local power company.
- Do not allow anything to rest on the power cord. Do not install this product where the cord may be walked on.
- Never push objects of any kind into this product through the slots in the unit because they may touch dangerous voltage points or create a short circuit. Never spill liquid of any kind on the product.
- To reduce the risk of electric shock, do not disassemble this product; take it to an authorized service facility. Opening or removing parts of the unit other than specified access doors may expose you to dangerous voltages or other risks. Incorrect reassembling can cause electric shock when the product is subsequently used.
- Do not overload wall outlets and extension cords.
- The power adapter is intended to be correctly oriented in a vertical or floor mount position. The prongs are not designed to hold the plug in place if it is plugged into a ceiling or an under-the-table or cabinet outlet.

Unplug this product from the wall outlet and refer servicing to an authorized service facility under the following conditions:

- When the power supply cord or plug is damaged or frayed.
- If liquid has been spilled on the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally when following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and often requires extensive work by an authorized technician to restore the product to normal operation.
- If the product has been dropped and the unit has been damaged.



**Appendixes** 225 • If the product exhibits a distinct change in performance.



## **Appendix D: GPL License Information**

Portions of the software associated with this product are open source, and fall within the scope of the GNU General Public License (GPL). Accordingly, those portions of code are available to the public, consistent with the requirements of the GPL, in either source code format or object code format, depending upon the nature of the code at issue. If you would like to exercise your right to receive the available code, please send a cashier's check, payable to VTech Communications, Inc., in the amount of \$15.00 (U.S.\$) to:

VTech Communications, Inc., 9590 SW Gemini Drive, Suite 120 Beaverton OR 97008

ATTN: Information Technology Group—Synapse/Syn248 GPL code request, along with a written request for the available code. If your request does not fully comply with the foregoing requirements, VTech reserves the right to reject your request. Further, by requesting and receiving the available code, you release VTech, its affiliates, and its and their officers, directors, employees, and representatives ("VTech Parties") from any liability or responsibility relating to such code, and you acknowledge that the VTech Parties make no representations with respect to the origin, accuracy, usability, or usefulness of such code, and the VTech Parties have no responsibility to you whatsoever concerning the code, including without limitation any responsibility to provide explanation, support, upgrade, or any communication whatsoever. Your review or use of the available code is at your sole risk and responsibility.



# **GLOSSARY**

This glossary provides definitions that pertain to the Synapse telephone system.

**10/100 Ethernet Port:** An Ethernet port that supports two different speeds of Ethernet on the same port. The two speeds supported are 10Base-T and 100Base-TX.

10Base-T/100Base-TX: An Ethernet network operating at up to 100 megabits per second

active call: An established telephone call that is not on hold.

analog: A continuously variable signal.

**analog phone:** A non-Synapse telephone that plugs directly into a normal telephone wall plug or into the Synapse ATA FXS port.

**ATA (Analog Terminal Adapter):** Allows the integration of non-Synapse analog telephones, a fax machine, overhead paging equipment, and a music-on-hold source into the Synapse system. It also provides Group Mailboxes to allow different people to access the same Mailbox.

**Auto Answer**: You can set the Deskset to automatically answer calls after a delay that you specify. Without touching the Deskset, you can speak to and be heard by people who call you.

**Auto Attendant:** A system that automatically answers incoming calls and provides instructions to callers.

**Auto-MDIX (Automatic Medium-Dependent Interface Crossover):** A computer networking technology that automatically detects the required cable connection type (straight-through or crossover) and configures the connection appropriately.

**Aux In**: A 3.5 mm jack on the ATA that allows connection to a streaming audio source, such as a radio or MP3 music player. This jack is typically used to connect a music player for Music on Hold.

**Aux Out**: A 3.5 mm jack on the ATA that can be used to connect some single-zone overhead paging devices.

Available ( ): An SB67030/031 Deskset screen icon that indicates a Call Appearance key that is not busy with predialing, dialing, ringing, or an active or held call.

**BYPASS port:** An RJ-11 jack on the PSTN Gateway that allows for communication during power outages. Plug an analog telephone into this jack.

**Call Appearance:** On the SB67020/025 Deskset, the programmable feature keys identified as Call Appearance keys on the right side of the Deskset. On the SB67030/031 Deskset, the five icons on the right side of the Deskset display and the keys and LEDs associated with those icons. These keys access active and held calls, and calls that are being dialed or predialed. The LEDs and icons indicate the state of each call or potential call.

**Call Forward All:** Automatically forward calls before they ring. All calls are immediately forwarded to the specified destination.



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**Call Forward–No Answer:** Automatically forward unanswered calls to Voicemail, an extension, or outside phone number.

call screening: Listening to a Voicemail message while it is being recorded.

**Cat.-5 wiring:** A twisted pair data cable commonly used in offices for computer communication.

**CO (Central Office):** An office to which subscriber home and business lines are connected. The central office has switching equipment that can switch calls locally or to long-distance carrier phone offices.

**CPT (Call Progress Tones):** Audible tones sent from the telephone company central office to indicate the status of phone calls such as ringback and busy tones.

**CSU (Channel Service Unit):** A line-bridging device that is part of the PSTN, that resides on the customer premises and is connected to Synapse, and is also used to perform loopback and other tests on T1 connections. This device is typically provided by the T1 phone service provider.

**DECT (Digital Enhanced Cordless Telecommunication):** A wireless telephone technology developed specifically for cordless telephones using frequencies between 1.8 and 1.9 Gigahertz. DECT communication is resistant to interference from other electronic equipment, has longer range, and improved battery life.

default: The original product settings.

**deregister:** To remove the association between an SB67030/031 Deskset and a Cordless Handset or Cordless Headset.

**DHCP (Dynamic Host Configuration Protocol):** A network protocol that automatically assigns computer IP addresses.

**dial pad:** The **0** through **9**, \*, and # keys on the Deskset and the SB67040 Cordless Handset.

**direct dial:** Allows callers to directly dial users' extension numbers after the Auto Attendant answers.

**Directory:** A list of names and phone numbers.

**Display Names:** The names that the system administrator enters to identify each extension number. The Auto Attendant uses these names to assist callers in forwarding calls.

**DID:** This feature allows outside caller to directly dial an extension, bypassing the Auto Attendant and the operator.

**DND (Do Not Disturb):** A feature that suppresses audible ringing and incoming paging at the Deskset.

**DND ON (DND):** An indicator in the top right corner of the Deskset display that illuminates when you turn on the Do Not Disturb feature.

**DNS (Domain Name System) server:** A server that stores the Domain Name System records, such as address, name server, and mail exchanger records for a domain name and responds with answers to queries against its database.



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**DSL (Digital Subscriber Line):** High-speed Internet service through your telephone line. Telephone lines with DSL service require DSL filters to separate the telephone and data signals.

**DTMF (Dual-Tone Multi-Frequency):** Telephone tones commonly known as "touch-tone".

dynamic IP address: An IP address that is automatically assigned by the server.

**Emergency Bypass Port:** The fifth SB67010 PSTN Gateway jack that can provide telephone operation during a power failure when used with an analog phone.

**ESD (Electrostatic Discharge):** A sudden and momentary electric current that flows between two objects at different electrical potentials that may cause damage to electronic equipment.

**ESF (Extended Super Frame):** A telecommunication standard for T1 framing that includes a cyclic redundancy check and a 4000 bit/s channel capacity for the data link channel.

**Ethernet:** A type of computer networking technology that connects devices via Local Area Networks (LANs).

**Extension Directory:** A private list of names and phone numbers available to only a single extension (referred to as "Personal list" on the Deskset).

**Extension list:** A list of names and extension numbers for the Synapse system telephones.

**extension number:** The three-digit or four-digit number representing each individual Deskset.

factory default: The original product settings.

**FDL (Facility Data Link):** A 4-kbps channel provided by the Extended Super Frame (ESF) T1 framing format that allows a service provider to check error statistics on customer premises equipment without interfering with the customer premises.

flash memory: Reprogrammable system storage used for storing software upgrades.

**FWD ON (FWD):** An indicator in the top right corner of the Deskset display that appears when the Call Forward feature has been turned on. This feature causes calls to that extension number to be automatically forwarded to another extension, outside phone number, or to Voicemail.

**FXO (Foreign Exchange Office):** The Gateway telephone signaling interface between the PSTN telephone lines and the LAN.

**FXS station port:** A port on the ATA for connecting non-Synapse analog telephone equipment to the Synapse system.

G.711: A digital fax protocol.

**Gateway:** A network device equipped for interfacing with another network that uses different protocols.

**greeting, preset:** The voice message that plays to callers if the user has not recorded an outgoing message.



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**grounding:** An electrical ground connection that minimizes interference, reduces the risk of equipment damage due to lightning, eliminates electrostatic buildup, and helps protect people who service the equipment.

**Group Mailbox:** Provide general delivery of Voicemail messages to a group within an organization. Only subscribers can access these Voicemail messages.

hard key: Any physical key on the Deskset, Cordless Handset or Gateway. Examples include MENU and 1 on a Deskset; PHONE and 1 on the SB67040 handset; and SELECT and CANCEL on the SB67010 Gateway.

hard reset: An action that restores factory default settings.

**Hold announcement:** A recorded message to play while calls are on hold. It can be combined with music on hold.

**hub:** A network hub or repeater hub is a device for connecting electronic devices, making them act as a single link.

**hunt group:** A telephone company feature that allows calls to a busy phone number to roll over to the next available line or a Synapse system Ring Group feature where unanswered calls are forwarded to the next available extension in a predefined group of extensions.

icon: A small picture in the display that presents status information.

**Idle:** The mode of a device when it is not involved in call or call setup activity.

**inside call:** A phone call placed from one of your Synapse system extensions to another extension.

**interference:** Electrical signals close by that cause degraded audio performance for cordless devices.

**IP address (Internet Protocol address):** An individual numeric identification assigned to devices on your LAN.

**ISDN (Integrated Services Digital Network):** A set of communication standards for simultaneous digital transmission of voice, video, data, and other network services over the traditional circuits of the public switched telephone network.

**IT Controller:** Part of a computer network infrastructure that connects different parts of the network, so that different LANs and subnets can exchange information. Also known as a backbone network or a network backbone.

**key beep:** When enabled, pressing a key plays a tone.

**LAN (Local Area Network):** A communications network that allows data devices to communicate with each other.

LCD (Liquid Crystal Display): The screen that provides instructions and feedback.

LED (Light Emitting Diode): A small light on a device that indicates status.

**link loss:** Occurs when the connection between two RF devices fail, such as between the SB67030/031 Deskset and the optional Cordless Headset or Cordless Handset.

**link-local address:** A local address used for network address creation when no external source of network addressing information is available.

live dial: Dialing after the phone is off hook.



MAC address (Media Access Control address): A unique identifier assigned to most network adapters or network interface cards that is required for registering your devices.

main menu, Auto Attendant: The Auto Attendant messages and actions that are available to callers before the callers take additional actions.

MDI/MDIX: (Medium-Dependent Interface Crossover): A computer networking technology.

**MoH (Music on Hold):** Music or other audio that plays to an outside caller that has been placed on hold by a Synapse user.

**multi-zone paging**: Paging through a multi-zone overhead paging system. The overhead loudspeakers are configured in multiple areas and transmit messages independently.

mute: Stop sending your voice to the other party during a phone call.

**NTP (Network Time Protocol):** An Internet standard protocol that assures time synchronization in a computer network.

Network Termination Unit (NTU): A device that terminates a network access point.

**octet:** Octets are used in Internet Protocol computer network addresses. These consist of a series of four octets, usually shown in decimal and separated by dots.

**off hook:** Indicates that you are on a phone call, have lifted the corded handset, or have pressed **SPEAKER** or **HEADSET** to answer a call or to prepare to place a call. You are off hook from the moment that you hear a dial tone to when you hang up a call.

OHP (overhead paging) system: An amplified public address system.

**on hook:** Indicates that no corded handset, speakerphone, Cordless Handset, or corded or cordless headset is active.

**operator:** The extension that callers reach by dialing **0** (zero) when the Auto Attendant operator feature is enabled or that system users reach at any time by dialing **0** (zero).

**outside call:** A phone call between a phone not a part of your Synapse system and an extension within your Synapse system.

overwrite: Replace existing information.

**P2P (Peer-to-Peer):** A telecommunication system architecture in which some resources associated with a device are directly available to other similar system devices.

**page:** Broadcasts your voice to all idle extensions that do not have Do Not Disturb turned on.

**page caching:** Most web browsers store recently obtained web site data on a local hard drive. The browser then only asks for data that has changed since the last download. Caching helps reduce the amount of traffic on the Internet.

paging zone: A set of extensions that can be paged as a group.

**park:** A form of hold that allows held calls to be retrieved by any Deskset or the SB67040 Cordless Handset.

**Park List:** The list of parked external calls. Users can view the Park List and answer parked calls.

pass code: Another term for password.



**Personal list:** A private list of names and phone numbers available to only a single extension (referred to as "Personal Directory" on the WebUI).

**Pilot Number:** Usually the company's main telephone number.

**POTS (Plain Old Telephone Service):** Basic telephone operation. The ability to make and receive phone calls.

predial: Enter digits before going off hook to place a call.

**PRI (Primary Rate Interface):** A standardized telecommunications service level within the ISDN specification for carrying multiple voice and data transmissions between a telephone network and a user.

PSTN (Public Switched Telephone Network): The world's telephone network.

**Quick Dial:** Provides two-touch dialing for frequently called phone numbers.

quota: The maximum recording time for a using.

reboot: Restart a device.

Redial: Accesses the log of outgoing calls.

**Remote site:** A Synapse site in another location that is linked to your office through a SIP Gateway. You can call remote Desksets by dialing their extension number. You can also make long-distance calls through a remote site as if you were dialing a local call. Depending on your system configuration, you may need to dial a prefix such as 9 to make remote site calls. Consult your system administrator.

**RF (radio frequency):** The communication channel for most Cordless Handsets and Cordless Headsets.

**Ring Group**: Groups of extensions configured by the system administrator to all ring in a predetermined pattern within the group when calls come in for that group.

**router:** An electronic device that connects two or more other electronic devices to each other, allowing them to communicate.

**single-zone paging**: Paging to a single set of overhead loudspeakers. All speakers transmit the same announcement simultaneously.

**SIP:** Session Initiation Protocol, a signaling protocol used for voice and video communications over the Internet.

**soft key:** The Synapse Desksets and Cordless Handsets feature keys below the LCD screen. The bottom of the LCD displays the appropriate label for each key as the function of the key changes.

**standby time:** The amount of time that a Cordless Handset or Cordless Headset can sit idle out of its charger while still capable of operating normally.

**static IP address:** An IP address that is manually assigned to a computer by a system administrator. This type of addressing requires specific knowledge of the LAN.

**subnet (subnetwork):** Typically a LAN served by one router.

subscriber: A user who can access messages in a Group Mailbox.

**supervised transfer:** Occurs when you communicate with the transfer recipient before completing a transferred call.



**switch:** A network switch links electronic devices. The switch processes and routes data flexibly, allowing more data to be handled without error.

**system administrator:** A person to perform functions such as setting up and modifying system configurations. This system administrator can be an employee or your telephone equipment provider.

System Directory: (see System list).

**System list:** This list of names and phone numbers is created and maintained by the system administrator. All system users can sort and view this list.

**system operator:** The extension that callers reach by dialing **0** (zero) when the Auto Attendant operator feature is enabled or that system users reach at any time by dialing **0** (zero).

T1: A digital signaling standard to transmit voice and data between devices.

T.38: An analog fax protocol that encodes fax-modem codes over VoIP.

**trunk:** A communications connection between the Synapse system and the telephone company.

**unsupervised transfer:** Occurs when you do not communicate with the transfer recipient when transferring calls. The transfer recipient does not have to pick up the phone and talk to you before receiving the transferred call.

**UPS (Uninterruptible Power Supply):** A battery-powered emergency power supply device.

URL (Uniform Resource Locator): An Internet address.

**VoIP (Voice over Internet Protocol):** A transmission technology for delivery of voice communications over IP networks such as the Internet or other packet-switched networks. Other synonymous terms include IP telephony, Internet telephony, Voice Over BroadBand (VoBB), broadband telephony, and broadband phone.

**WebUI (Web User Interface):** A means of interacting with a product using a computer interface. Connection to the World Wide Web is not necessary.

