at&t
Your world. Delivered.

Synapse™

Synapse™ Administrator's Guide

© 2009-2011 Advanced American Telephones. All Rights Reserved. AT&T, the AT&T logo and the slogan "Your world. Delivered." are trademarks of AT&T Intellectual Property licensed to Advanced American Telephones, San Antonio, TX 78219. Synapse™ is a trademark of Advanced American Telephones. Issue 8.0 1/11

POPULAR TOPICS

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

- *"Recommended Installation Sequence" on page 25*
- *"Call Forward All and Call Fwd–NA (No Answer)" on page 46*
- *"Log in as Administrator" on page 68*
- *"Auto Attendant" on page 81*
- *"Ring Groups" on page 134*
- *"Updating Devices" on page 181*

CONTENTS

Popular Topics **2**

"Recommended Installation Sequence" on page 25 2
"Call Forward All and Call Fwd–NA (No Answer)" on page 46 2
"Log in as Administrator" on page 68 2
"Auto Attendant" on page 81 2
"Ring Groups" on page 134 2
"Updating Devices" on page 181 2

Preface **9**

Using This Guide 9
Topic Navigation 10
Text Conventions 12
Deskset and Cordless Handset Menu Navigation 13
Additional Documentation 13

System Description **14**

System Overview 17
[ATA] System Installation Overview with Optional Analog Terminal Adapter 18
Network Configuration 19
System Communication Overview 20
Within-System Communication 20
Communication with the PSTN 20
IP Addresses and Connectivity 21
Extension Assignments 22
Analog Line Bypass Jack 22
Accessories 22

Telephone Line Configuration 23
[ATA] Additional Considerations for Fax Machine Line Assignment 23
[ATA] Analog Telephones 24
Recommended Installation Sequence 25
Site Preparation 26
Network requirements 26
Other Preparations 27
PSTN Gateway Operation 28
[T1] T1 Gateway Operation 30
[ATA] ATA Operation 32
Recovery After Power Failure 35
[PSTN] Using the Analog Line Bypass Jack 36

Getting Started 37

Gateway Front Panel Interface 38
Gateway Configuration 40
Upgrade Gateway Software 41
Gateway Reset 43
Deskset Admin Settings 44
Call Forward All and Call Fwd–NA (No Answer) 46
Call Forward–NA to a Mailbox 48
Call Forward–NA to an Extension 49
Call Forward–NA to an Outside Phone Number 50
Fwd/Trans to Outside Line 51
IP Settings 52
Set/Edit Static IP 54
IP Status 55
Reset User Password 56
Upgrade Deskset Software 57
Deskset Reset 59

[ATA] ATA Front Panel Interface 60
[ATA] Configuration 61
[ATA] Upgrade ATA Software 62
[ATA] Reset 64

System Configuration 65

The Web User Interface (WebUI) 66
WebUI Overview 67
Log in as Administrator 68
Error Handling 70
System Settings 71
System Information and WebUI Menus 72
System Basic Settings 76
Auto Attendant 81
Auto Attendant Timing 82
Auto Attendant Main Menu Selection 84
Auto Attendant Schedule 85
Creating Auto Attendant Menus 86
Auto Attendant Voice Prompts 90
Auto Attendant Menu Choices 92
Name Recording for Auto Attendant Directory 93
Dial Plan Settings 96
[T1] Direct Inward Dial (DID) 101
[T1] DID Configuration 101
[T1] DID Assignments 105
[ATA] Fax Overview 107
[ATA] Fax Configuration 108
[ATA] Fax Settings 109
[ATA] Group Mailbox 110
[ATA] Group Mailbox Quotas 110
[ATA] Group Mailbox Custom Greeting 116

Hold Settings and [ATA] Music on Hold (MoH) 118
[ATA] Overhead Paging Overview 122
[ATA] Single-Zone Paging 123
[ATA] Multi-Zone Paging 125
[ATA] Verified Overhead Paging Devices 126
[ATA] Setting Up Overhead Paging 127
[ATA] Single-Zone Overhead Paging 128
[ATA] Multi-Zone Overhead Paging 130
Paging Zones 131
Ring Groups 134
System Directory 139
Trunk Naming 140
Trunk Reservation (Outgoing Calls) 141
[PSTN] Trunk Routing (Incoming Calls) 142
Reconfiguration of an Existing System 143
Extension Settings 145
Extension Basic Settings 146
Extension Directory 150
Quick-Dial Keys 153
Voicemail Distribution 154
[ATA] ATA Settings 158
[ATA] FXS Ports 159
[ATA] Analog Telephone Overview 161
[T1] T1 Settings 162
[T1] Configure T1 Settings 163
[T1] T1 Diagnostics 166
Device Management 167
Deleting Devices 168
Deleting an Extension (Deskset) 168
Considerations when deleting a Gateway or an ATA 168
[T1] Deleting a T1 Gateway 169

[ATA] Deleting an ATA 169
Delete a Device 170
Change an Extension Number 171
Back Up and Restore Settings 172
Back Up and Restore Extension Settings 173
Back Up and Restore System Settings 177
Updating Devices 181
Device Log 186
Help 187
Product Registration 188

Troubleshooting 189

Common Troubleshooting Procedures 190
[PSTN] Resolving Audio Echoes 190
Resolving General Audio Issues 192
Reintroducing a Deskset Into the System 193
Reintroducing a Gateway or ATA Into the System 196
Power Failure Recovery Procedure 198
General Troubleshooting 199
Gateway Troubleshooting 211
Deskset Troubleshooting 219
[Handset] SB67040 Cordless Handset 233
[Headset] TL7600 Cordless Headset 240
[ATA] SB67050 ATA Troubleshooting 245
[ATA] General Troubleshooting 245
[ATA] Music on Hold (MoH) 247
[ATA] Overhead Paging (OHP) 250
[ATA] Fax Configuration 261
[ATA] Analog Phone 265
[ATA] Group Mailbox 267

Appendixes **268**

Appendix A: Technical Specifications 268
Appendix B: Default Settings 271
Appendix C: Maintenance 275
Appendix D: Important Safety Instructions 276
Appendix E: Limited Warranty 278

Glossary **282**

PREFACE

This administrator's guide provides instructions for setting up your Synapse system with software version 1.6.20. See *page 76* for instructions on checking the software version on the Gateway, the Deskset, and the ATA. We recommend that you make one person the System Administrator (SA) who is responsible for controlling the system-wide features described in this guide.

Before using this AT&T product, please read *"Appendix D: Important Safety Instructions" on page 276* of this manual. Please read this administrator's guide thoroughly for all the information necessary to install and operate your new AT&T product.

NOTE 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**.

Using This Guide

The following sections provide instructions for using this guide:

- *"Topic Navigation" on page 10*
- *"Text Conventions" on page 12*
- *"Deskset and Cordless Handset Menu Navigation" on page 13.*

NOTE Some illustrations in this document contain very small text that is not intended to be read. Sometimes the image is present just to help you find the correct screen, in others, full size text conveys the intended information.

Topic Navigation

This administrator's guide allows easy navigation between topics and the ability to return to your original topic. Figure 1 illustrates the navigation conventions within the administrator's guide.

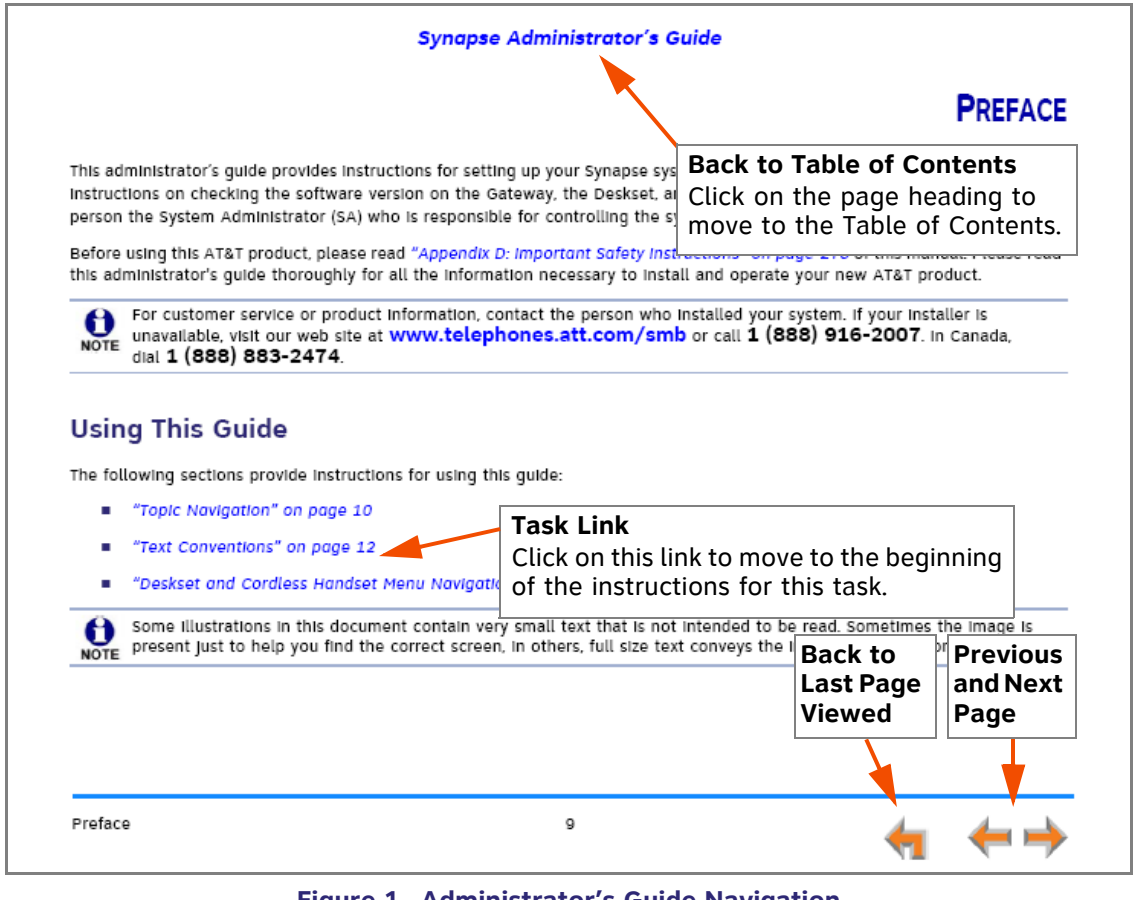


Figure 1. Administrator's Guide Navigation

Figure 2 illustrates the navigation features of Adobe® Reader.

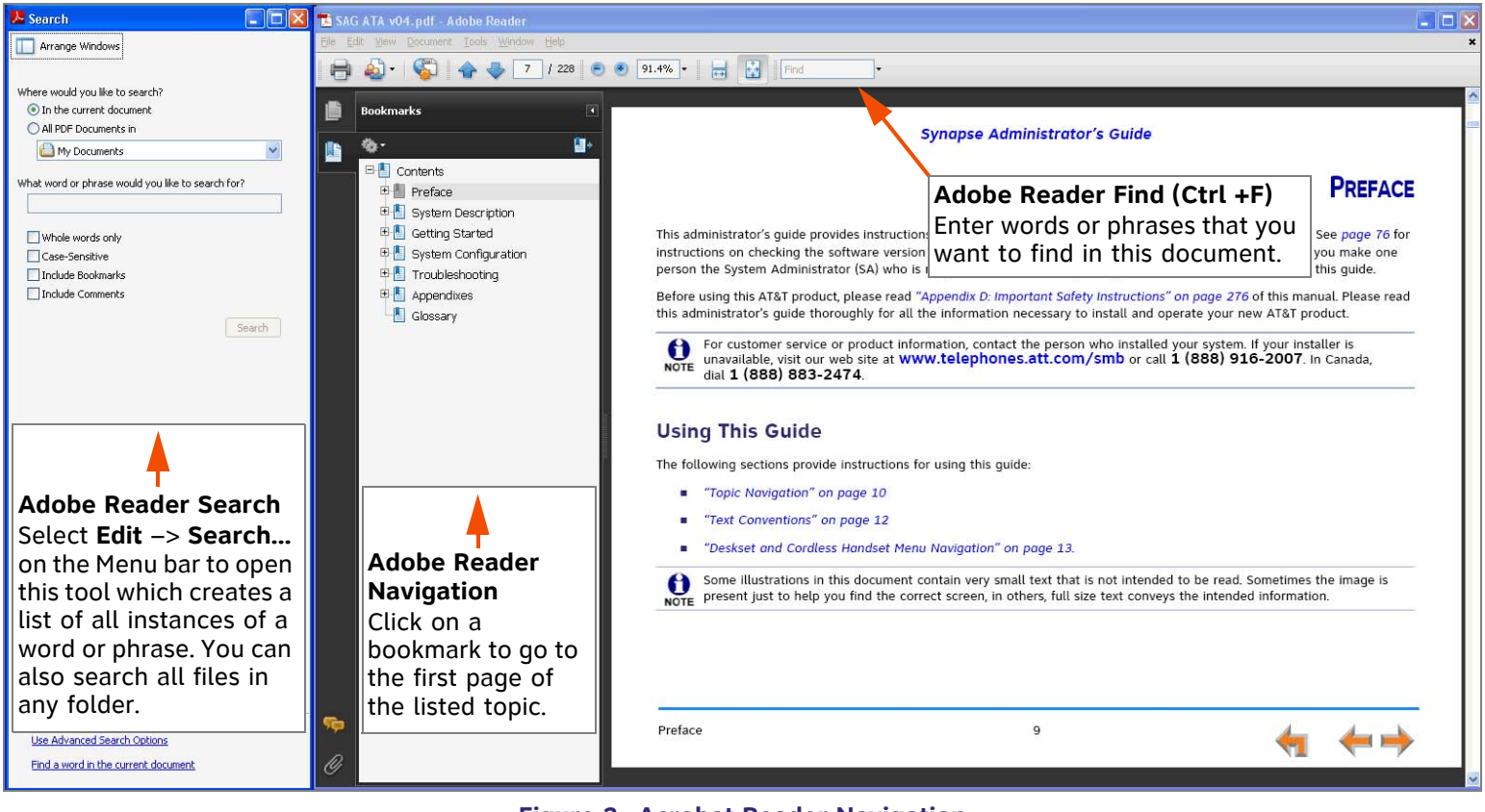


Figure 2. Acrobat Reader Navigation

Text Conventions

Table 1 lists text formats and their uses.

Table 1. Description of Text Conventions

Text Format	Description
Screen	Identifies text that displays on the screen in a title, menu, or prompt.
HARD KEY or **DIAL-PAD KEY**	Identifies a hard key, including the dial-pad keys.
Call	Identifies a soft key.
Figure 1, Table 1	Identifies a figure or table.
"Topic Navigation" on page 10	Identifies a hyperlink to another part of this document or, if it begins with "www", an Internet web site. You need Internet access to view web sites.
[**PSTN**], [**T1**], [**ATA**], [**Handset**], [**Headset**]	Identifies information predominately about devices and capabilities beyond the basic configuration of a Gateway and 67030 Desksets. See *"System Description" on page 14*.
NOTE Notes give more information, usually in a procedure.	Example of a Note.
CAUTION *A caution means that loss of data or unintended circumstances may result.*	Example of a Caution.

Deskset and Cordless Handset Menu Navigation

To access items in the menus, you can either use the Navigation key to highlight the function and press **SELECT** or press a numeric key on the dial pad. The procedures in this guide use the numeric keypad entry as the preferred method for selecting a function.

Additional Documentation

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

CHAPTER

1

SYSTEM DESCRIPTION

The Synapse™ Business Phone System from AT&T is for businesses that need up to 100 extensions. This system can support up to 16 analog phone lines and 23 T1 PRI voice channels. The system can support up to 39 simultaneous calls.

The Synapse Business Phone System provides simplicity without sacrifice—it's simple to install, manage, and use, without sacrificing any of the features you need and expect from a business telephone system.

Each system needs a person to perform system administration functions such as setting up and modifying system configurations. This system administrator (SA) can be an employee or your telephone equipment provider.

Someone may also be designated the system operator. This is the extension that outside 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). When the Auto Attendant is disabled, all outside calls, by default, go to the system operator.

This chapter provides an overview of the functions and features of the Synapse system:

- *"System Overview" on page 17*
- *"Network Configuration" on page 19*
- *"PSTN Gateway Operation" on page 28*
- *"[ATA] ATA Operation" on page 32*
- *"Recovery After Power Failure" on page 35.*

The Synapse system includes the following components. Each system must include at least one Gateway, and it can be either a PSTN or T1 Gateway. Each PSTN Gateway supports up to four analog telephone lines. Up to four PSTN Gateways can support up to 16 analog telephone lines. The T1 Gateway supports up to 23 T1 PRI voice channels.

1. **AT&T SB67010 PSTN Gateway** — Each PSTN Gateway provides access to up to four analog outside telephone lines. The system can have up to four PSTN Gateways, supporting up to 16 telephone lines. Information that is only about the PSTN Gateway is designated by [**PSTN**] in this administrator's guide.

2. **AT&T SB67060 T1 Gateway** — The T1 Gateway supports the T1 PRI (Primary Rate Interface) that provides access to up to 23 voice channels to support up to 23 simultaneous calls. The system can have only one T1 Gateway. Information that is only about the T1 Gateway is designated by [**T1**] in this administrator's guide.

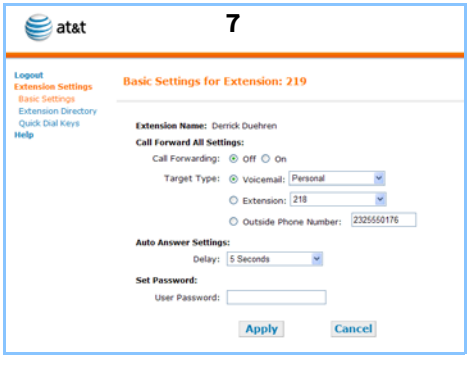
3. **AT&T SB67030 Deskset** — Systems with software versions 1.6.xx and newer support up to 100 Desksets. Previous software versions support up to 50 Desksets.

4. **AT&T SB67040 Cordless Accessory Handset (Optional)** — The Cordless Handset duplicates many of the Deskset features and provides a high degree of mobility. Information that is only about the Cordless Handset is designated by [**Handset**] in this administrator's guide.

5. **AT&T TL7600 Cordless Headset (Optional)** — The Headset lets you work while you talk. Information that is only about the Cordless Headset is designated by [**Headset**] in this administrator's guide.

6. **AT&T SB67050 Analog Terminal Adapter (ATA - Optional)** — The ATA allows the integration of non-Synapse devices, such as 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. A system can have one ATA. Information that is only about the ATA is designated by [**ATA**] in this administrator's guide.

7. **Web User Interface (WebUI)** — The WebUI provides the ability to customize your system for your business from a PC that is on the same Local Area Network. The WebUI resides on the Gateways, ATA, and Desksets, and is updated with the device software updates, which are available online at **www.telephones.att.com/smb**.



Install these system components using the instructions in the Synapse Installation Guide at **www.telephones.att.com/synapseguides**. When your installation is complete, back up the Deskset and system settings. See *"Back Up and Restore Settings" on page 172* in this manual.

Systems with software version 1.6.20 support the features described in this administrator's guide. **All Gateways, ATAs, and Desksets should have software version 1.6.20 installed.**

- To determine the software version of Gateways and the ATA, from their Idle screens, press **SELECT**, **SELECT**, and then **DOWN**. The software version displays, as shown in Figure 3.
- To determine the Deskset software version, press **MENU**, then **Deskset Information**, and then **SELECT**. See the P Firmware version as shown in Figure 4.

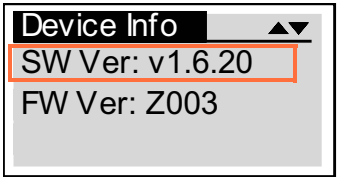


Figure 3. PSTN Gateway Software Version

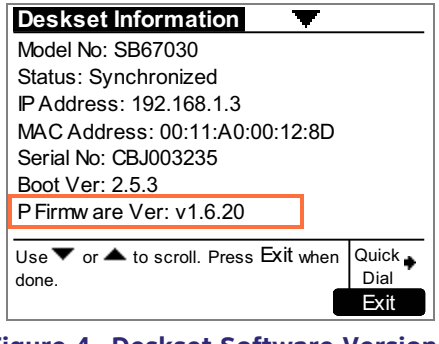


Figure 4. Deskset Software Version

System Overview

If you install one SB67010 PSTN Gateway or SB67060 T1 Gateway and then one Deskset, the feedback described in this administrator's guide matches what you see on your system devices. The first Deskset defaults to being assigned as extension 200. Subsequent Desksets are assigned sequential extension numbers. A system must have at least one PSTN Gateway or one T1 Gateway. There can be up to four PSTN Gateways, and a system can include both a T1 Gateway and PSTN Gateways. Figure 5 illustrates the minimum components needed to make the system work (**blue** line = telephone; **red** lines = Ethernet).

NOTE The system uses a Local Area Network (LAN) for system communication. It uses Public Switched Telephone Network (PSTN) connections for outside calls.

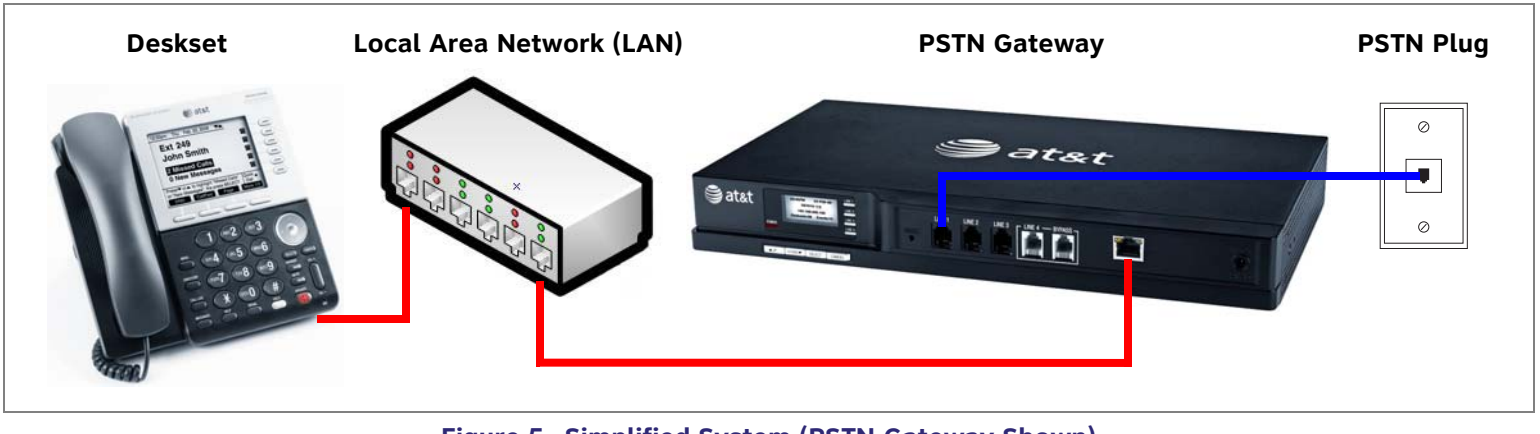


Figure 5. Simplified System (PSTN Gateway Shown)

NOTE You can register only one AT&T SB67040 Cordless Handset and only one AT&T TL7600 Cordless Headset to an SB67030 Deskset, and up to a maximum of five Desksets can have cordless accessories. When a Deskset has cordless accessories, they are all part of the same extension, and only one extension device can be used at a time.

To integrate the Headset into the system, see "User Settings" in the Synapse User's Guide at **www.telephones.att.com/synapseguides**, rather than the manual that is packaged with the Headset.

[ATA] System Installation Overview with Optional Analog Terminal Adapter

If you have non-Synapse devices that you want to attach to the system, you will need an AT&T SB67050 Analog Terminal Adapter (ATA). The ATA allows you to attach hardware such as conference phones, overhead paging equipment, a fax machine, or a source for Music On Hold (MoH) to Synapse. Figure 6 illustrates a more complex installation (blue lines = telephone; red lines = Ethernet; orange lines = audio), but there are different options for attaching some of the equipment to the ATA.

Install the ATA after you have installed at least one Gateway and the Desksets.

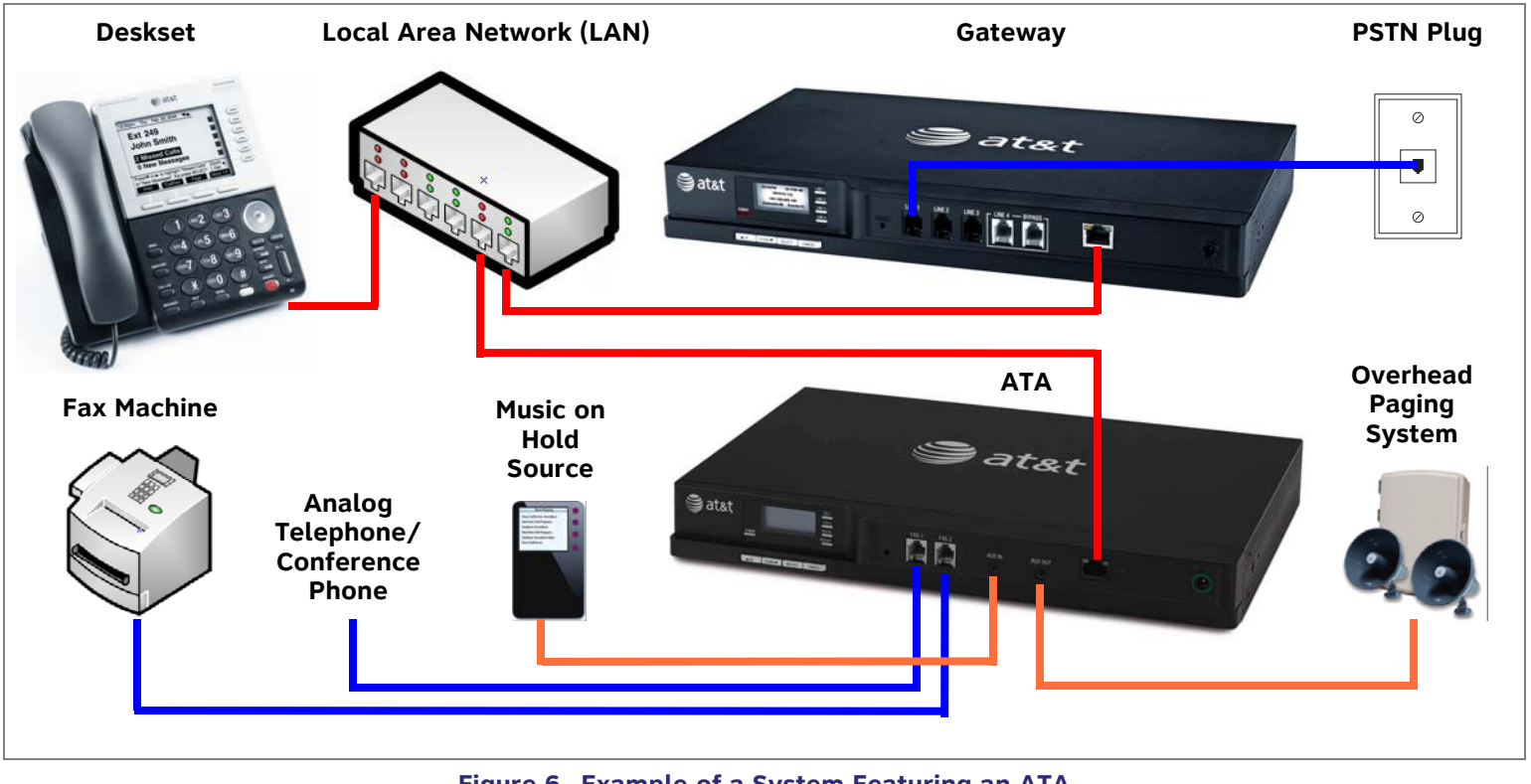


Figure 6. Example of a System Featuring an ATA

Network Configuration

The system shown in Figure 7 differs from conventional telephone systems in that calls are not coordinated by a central controller. Instead, the system uses a distributed control system over a new or existing LAN.

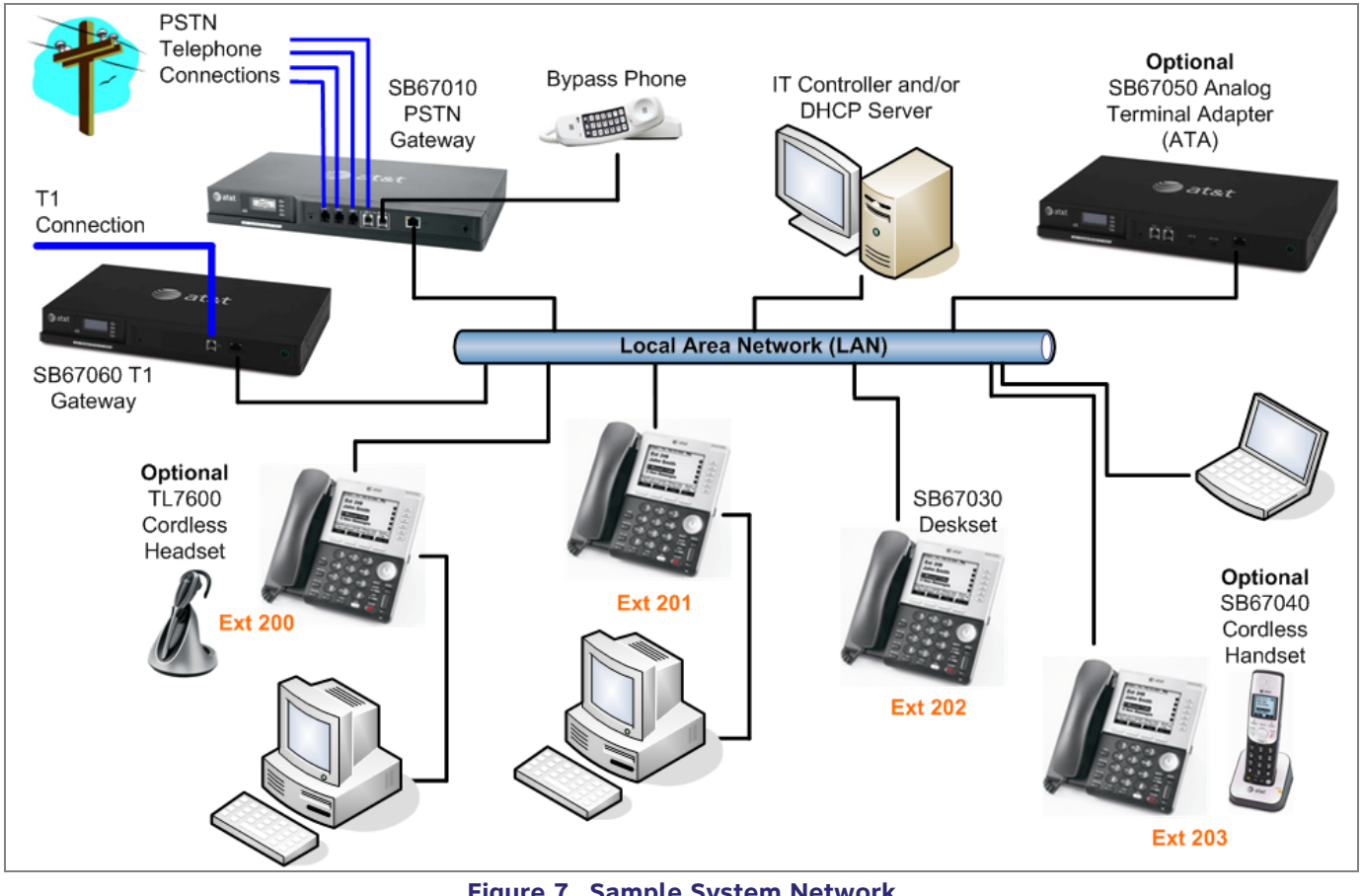


Figure 7. Sample System Network

System Communication Overview

Synapse system devices are connected to a LAN via 10/100 Ethernet ports so they can communicate with each other. Gateways also connect to the Public Switched Telephone Network (PSTN) for outside calls. All devices require AC power.

Within-System Communication

When two or more Synapse devices are connected to the same subnet of a LAN, they automatically recognize each other and synchronize with each other. You can view the connection status of a Deskset by pressing **MENU**, then **4** on the Deskset dial pad to display the Deskset Information screen. The second line of the screen shows the synchronization status, as shown in Figure 8. The third line shows the Deskset IP address. Gateways and the ATA display synchronization status and their IP addresses on their idle screens as shown in Figure 10.

The system also assigns each device a local Internet protocol (IP) address (a link-local address, which starts with 169.254), as shown in Figure 9. The local address is used for communication among the Synapse devices. All local addresses are self-managed at each device.

Communication with the PSTN

Gateways route calls between the PSTN and the internal IP-based Synapse system. Each PSTN Gateway provides four PSTN jacks for plugging in up to four phone lines and the T1 Gateway provides one T1 jack that supports up to 23 voice channels. You can combine up to four SB67010 PSTN Gateways and one T1 Gateway to support up to 39 simultaneous outside phone calls. One hundred Desksets can be connected to the network subnet.

The first PSTN Gateway's lines are assigned as lines 1 through 4. If a second PSTN Gateway is connected to the network, it is assigned lines 5 through 8.

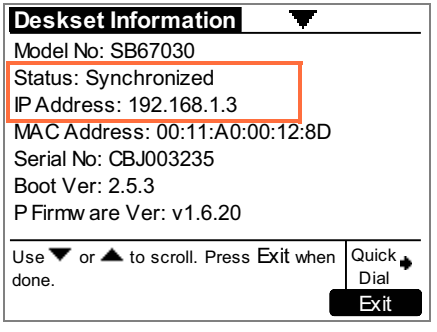


Figure 8. Deskset Information, Top

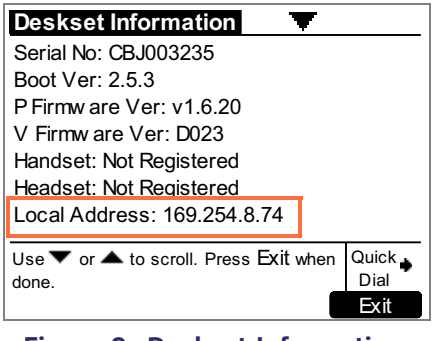


Figure 9. Deskset Information, Bottom

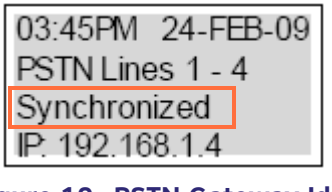


Figure 10. PSTN Gateway Idle Screen

IP Addresses and Connectivity

An IP address is an individual numeric identification assigned to devices on a computer network. At least one Synapse device needs a network-assigned IP address on the subnet shared with any computers that will allow access to the WebUI. Valid IP addresses on the same subnet allow devices on the network to identify each other and enable communication.

This IP address may be assigned from a Dynamic Host Configuration Protocol (DHCP) server, or set statically to the same subnet, and will be separate from the self-assigned 169.254.xxx.xxx link-local address that the Synapse devices use to communicate with each other. When setting up the IP address on a Synapse device, this network IP address used for WebUI connectivity is the only address that the SA can change.

The network IP addresses can be assigned in two ways:

1. The Synapse device can request a network server to automatically assign an IP address. This IP address is a dynamic assignment; the address is on lease from the server. The lease is renewed as long as the device remains connected and there is no change to the network. However, if the device is disconnected, or if there is a network or AC power interruption, the lease may not be renewed (i.e., the IP address expires) and a new IP address may be assigned.

   Most LANs use servers to automatically assign IP addresses. Synapse defaults to assuming that this automatic assignment will occur.

Some servers have default settings that limit the number of network IP addresses assigned to devices on the network. You should log in to your server to confirm that the IP range is sufficient to accommodate at least one of the Synapse devices that you are adding as at least one Synapse device needs an assigned IP address to enable WebUI configuration activities. Consult the IT department or the person that installed this system if you need help checking the server.

2. The Synapse Administrator can manually assign a static system IP address. This IP address does not change, even when there are network or AC power interruptions. Some installations will require manual static IP assignment.

A switched-network topology is recommended. This topology refers to the network virtual shape or structure and does not necessarily reflect the physical layout. Switched networks involve connecting the network components to switches rather than hubs; this improves network communication.

Extension Assignments

Once the Desksets are connected to the same network, they find each other through Peer-to-Peer (P2P) discovery protocols and automatically self-configure. Additional telephony and network configuration is administered through the WebUI.

The system defaults to assigning the first Deskset to join the network as extension 200. You can use the WebUI to set a different first extension-number digit for Desksets that are installed after this change and to change the number of digits from three to four. The system automatically assigns each additional Deskset an extension number in ascending order as it is connected to the LAN. Even if you unplug a unit, its extension number is reserved. If you want to remove an extension from the network, the extension number must be deleted by the SA. Deletion ensures that the Deskset does not tie up an extension. Extension numbers can be changed or deleted by the SA using the WebUI. See *"Extension Basic Settings" on page 146*.

NOTE [**ATA**] If a non-Synapse device is connected to one of the Foreign Exchange Station (FXS) ports on the ATA before a Deskset is connected, that device will be assigned extension 200 or 2000, which is not desirable, since extension 200 or 2000 is the default assignment for the system operator (depending if three- or four-digit extensions are being used).

Analog Line Bypass Jack

The SB67010 PSTN Gateway has an additional RJ-11 bypass jack into which a regular analog phone can be plugged to get direct access to an analog line for emergency calls when the Gateway loses power. See *"[PSTN] Using the Analog Line Bypass Jack" on page 36*.

Accessories

In addition, you can register SB67040 Cordless Handsets and TL7600 Cordless Headsets to a maximum of five SB67030 Desksets. Each of these five Desksets can support one each SB67040 Cordless Handset and TL7600 Cordless Headset. These cordless devices share the extension number of the host Deskset and only one device with that extension number can be active.

Telephone Line Configuration

You can connect up to four telephone lines to each PSTN Gateway. If your telephone lines are part of a hunt group (a telephone company feature that allows calls to a busy phone number to roll over to the next available telephone line), enable calls during power outages by connecting the line with your main telephone number to PSTN Gateway **LINE 4** and by connecting an analog telephone to the analog BYPASS port. If your system features both PSTN and T1 Gateways, outbound calls are placed first through the T1 channels.

If you are using an ATA to integrate analog telephones or a fax machine into the Synapse system, there are other considerations.

If you install the ATA with phones or a fax machine connected to an FXS port before installing a Deskset, that device will default to being the operator. Install the ATA after installing at least one Deskset so that a Deskset is the default operator.

[ATA] Additional Considerations for Fax Machine Line Assignment

The PSTN Fax line can be connected to any FXO port (**LINE 1-4)** on the PSTN Gateway. However, trunks for outgoing calls are seized in ascending order (**LINE 1** then **LINE 2** etc.). To avoid using the fax for outgoing voice calls, make the fax line the highest numbered line. Hunt groups (a telephone company feature) allow incoming calls to a busy phone number to search (hunt) for the next available telephone number in a list of hunt group phone numbers. We recommend making your fax machine phone number the last hunted phone number, so that the fax line becomes the last phone line tried.

When connecting a fax machine, a telephone line must be selected as the fax line. This is done in **Fax Configuration** in the WebUI. The fax can be assigned to any telephone line, but PSTN Gateway users can minimize the likelihood of using the fax line for outgoing voice calls (which could interfere with reception and sending of faxes) by using the second-highest numbered PSTN telephone port on the PSTN Gateway. The main telephone number is typically connected to the highest numbered port.

Except for fax calls that have DID numbers, each incoming call on the designated fax line is automatically checked by the system for a fax signal. This fax detection mode results in a delay of up to eight seconds before the call is put through. If an incoming voice call arrives on this fax line, the caller experiences an eight second delay before the call is connected to the Auto Attendant or Operator. Fax calls dialed using Direct Inward Dialing (DID) numbers go directly to the fax machine, with no eight-second delay.

Using the fax line for outgoing calls is allowed, but the caller ID of the fax number, not the primary business telephone number is sent to the receiving fax machine. This may result in some confusion if the recipient returns a missed call via their caller ID Log as they then experience the eight-second delay mentioned above.

[ATA] Analog Telephones

The FXS ports can provide plain old telephone service (POTS) support for up to two analog phones. These are commonly speakerphones and legacy telephones. One of these ports can also be used to connect a fax machine or some models of Overhead Paging equipment. When you connect analog telephones, they can be assigned using the WebUI to some telephone features, such as Ring Group, Auto Attendant menus, and Call Forward–No Answer targets.

Recommended Installation Sequence

Follow the instructions in the Synapse Installation Guide for details on installing the Synapse system.

The Synapse Installation Guide can be found at **www.telephones.att.com/synapseguides**.

The overall installation sequence is as follows:

1. Prepare your site for installation. See *"Site Preparation" on page 26*.
2. Install the Gateways. See "Gateway Installation" in the Synapse Installation Guide.
3. If you have only one Gateway, install the first Deskset. See "Deskset Installation" in the Synapse Installation Guide. This Deskset is automatically assigned extension number 200 with no Direct Inward Dialing.
4. Optional: Configure the Dial Plan Settings and Direct Inward Dialing. Unless you do this, the Desksets are assigned sequential three-digit extension numbers starting with 200 with no Direct Inward Dialing. See *"Dial Plan Settings" on page 96* and *"[T1] Direct Inward Dial (DID)" on page 101*.

   If you want the extension numbers to be something other than 200 through 2xx or if you need four-digit extension numbers, possibly to correspond to the DID numbers, or if you want the parked-call extension numbers to start with a digit other than 1, use the WebUI to change the Number of Digits in extension numbers or the Default Phone Extension Prefix before installing any more Desksets.

   If you want to use Direct Inward Dialing, configure it now.

   If a Deskset is installed, after changing the Number of Digits and Default Phone Extension Prefix, manually change the first Deskset extension number, and manually set its DID number.
5. Install the other Desksets. See "Deskset Installation" in the Synapse Installation Guide.
6. Optional: Install the AT&T SB67050 Analog Terminal Adapter (ATA). See "[**ATA**] Optional ATA Installation" in the Synapse Installation Guide.
7. Continue configuring the system using the WebUI. See *"The Web User Interface (WebUI)" on page 66*.

8. Complete post-installation tasks. When your installation is complete, back up the Deskset and system settings. See *"Back Up and Restore Settings" on page 172*.

9. Ask all users to record their user names on their Desksets. See *"Name Recording for Auto Attendant Directory" on page 93*.

   - Distribute and register any Cordless Handsets or Headsets. See "[**Handset**] SB67040 Cordless Handset Installation" and "[**Headset**] TL7600 Cordless Headset Installation" in the Synapse Installation Guide.
   - Check for software upgrades. See *"Updating Devices" on page 181*.
   - Register your Synapse system products. See *"Product Registration" on page 188*.

Site Preparation

This section describes how to prepare your site for a successful Synapse system installation.

Network requirements

For more information on the network configuration, see *"Network Configuration" on page 19*.

- A switched network topology is recommended for your LAN (using standard 10/100 Ethernet switches that carry traffic at a nominal rate of 100 Mbit/s).
- The office LAN infrastructure should use Cat.-5 or heavier gauge wiring.
- The LAN connections to Synapse devices should all be wired. However, wireless connections to other devices (such as laptops) in your office network that are not part of the Synapse system will not impede performance.
- All devices in the Synapse system must reside on a single subnet.
- A DHCP server is recommended and must be on the same subnet as the Synapse system so that IP addresses can be auto-assigned. If no DHCP server is present, then static IPs must be assigned. Desksets will self-assign link-local IP addresses.

- Unless you want to manually set the Synapse clock and upgrade Synapse software, an Internet connection to the LAN is required.
- A DNS server is recommended to resolve the path to the Internet and to the AT&T server for software upgrades.
- If a routing path to the Internet is not available, the system administrator can download the upgrade files and use the WebUI to upgrade the software manually.
- For users whose computers require a GigE Ethernet frame rate (a gigabit per second), use separate Ethernet connections for the Deskset and the computer because the Ethernet connection through the Deskset is limited to 100 Mbits/s.

Other Preparations

Before installing the Gateway and Desksets, the following preparations may need to be taken:

- Ensure that there is an electrical outlet not controlled by a wall switch within 6 feet of each device location.
- All PSTN lines must be gathered into one access point situated no more than 9 feet from the Gateway location. If rewiring is required, contact your telephone service provider and request the help of a qualified technician.
- You may need one or more network switches set up to ensure there are sufficient ports available for other devices in the network (such as a DSL modem).
- If you plan to use the emergency bypass feature on the PSTN Gateway, you will need an analog phone.
- An Ethernet Port must be available within 9 feet from each Deskset location. Each Deskset is capable of sharing an Ethernet port with a PC. If one Ethernet port already exists at a workstation, another port is not necessary unless you need a GigE Ethernet frame rate. Use a separate Ethernet connection for the Deskset and the computer.
- AT&T strongly recommends setting up the desired number of digits for extensions as soon as the WebUI can be used. Doing so enables the correct auto-assignment of extension numbers as each additional Deskset is installed. Changing the number of extension digits after installing some Desksets may result in undesired extension number re-assignment, where the last three digits of previous extension numbers may not be preserved.
- In installations where a Deskset must be installed for the WebUI to work, the Deskset's extension number will have to be manually changed if the system is later set for four digits, or if a DID is needed for that extension.

PSTN Gateway Operation

Figure 11 illustrates the PSTN Gateway features and connections.

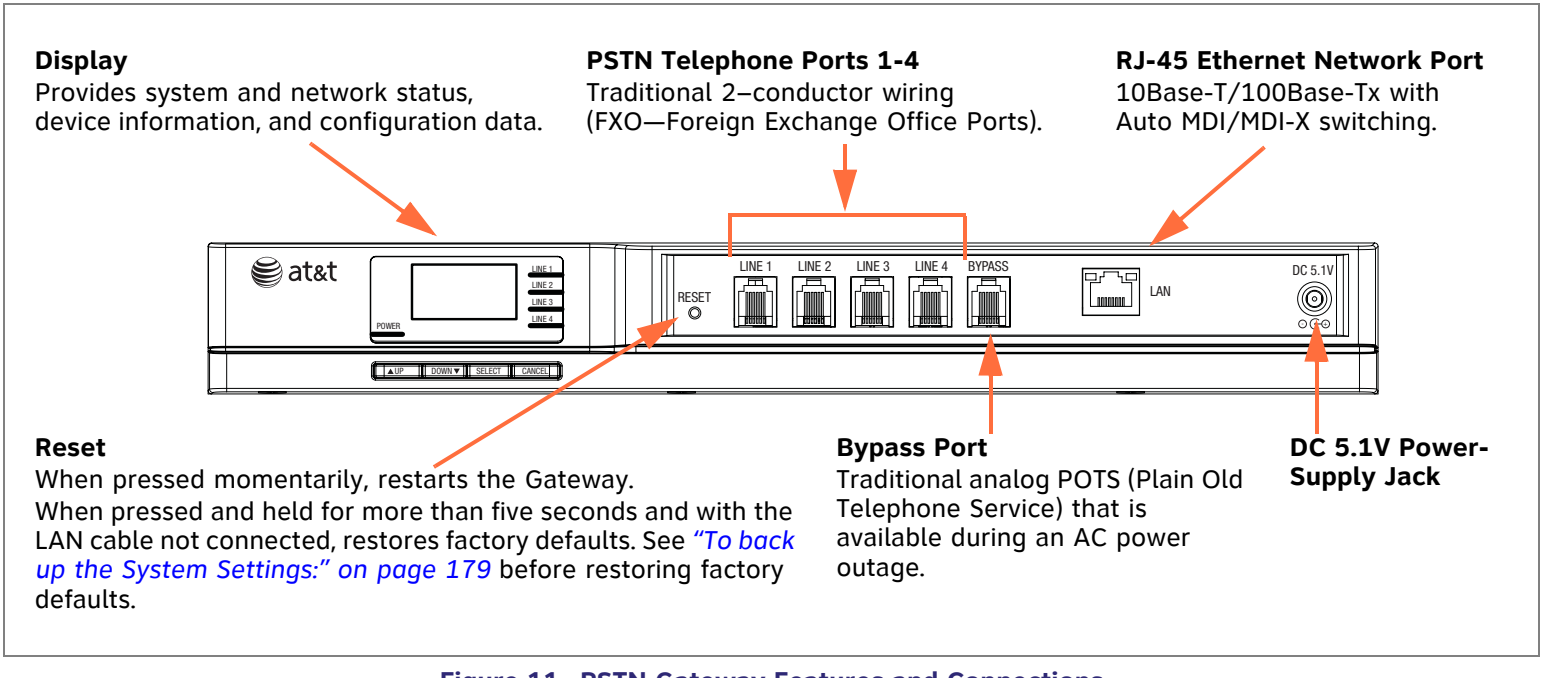


Figure 11. PSTN Gateway Features and Connections

When the Gateway power fails, calls on Line 4 are routed to the bypass line. See "[PSTN] Using the Analog Line Bypass Jack" on page 36.

Figure 12 provides an illustration and description of the PSTN Gateway front panel.

Key	Used To:	LED	Description
▲ UP DOWN▼	Navigate through the menus, and to increase/decrease editable fields. Move the highlight bar to the previous or next item in the list, respectively.		Line-status LEDs indicate the status for each PSTN line. Indications include: Off – Connected. Red (steady) – Disconnected. Green (steady) – In use. Green (flashing) – Ringing. Line-status LEDs flash red after lines are connected (while matching line impedance).
SELECT	Display the Gateway Main menu when in idle mode or while in network detection mode; Save current setting and return to previous menu.		
CANCEL	Terminate current operation without saving new settings and to return to the previous menu.		Off – No power to the device. Green – Power is present.

Figure 12. PSTN Gateway Front Panel Description

[T1] T1 Gateway Operation

Figure 13 illustrates the T1 Gateway features and connections.

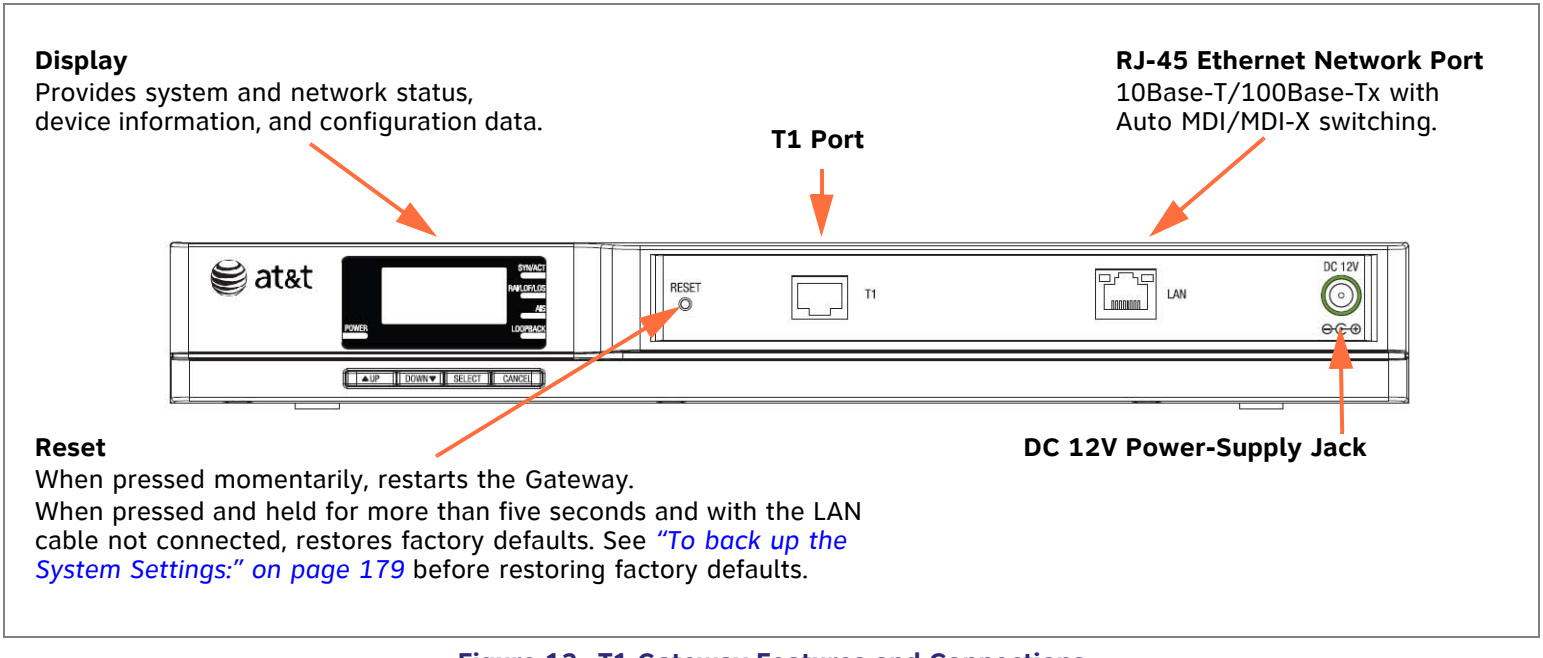
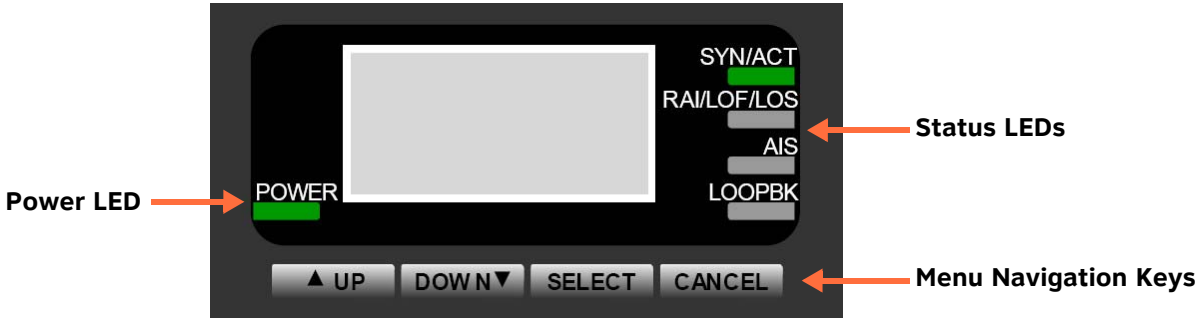


Figure 13. T1 Gateway Features and Connections

Figure 14 provides an illustration and description of the T1 Gateway front panel.



Key	Used To:	LED	Description
▲ UP DOWN▼	Navigate through the menus, and to increase/ decrease editable fields. Move the highlight bar to the previous or next item in the list, respectively.	SYN/ACT	Off – T1 is not synchronized with T1 network. Green – T1 Synchronization. Green (flashing) – Active call.
SELECT	Display the Gateway Main menu when in idle mode or while in network detection mode; Save current setting and return to previous menu.	RAI/LOF/LOS	Off – No RAI/LOF/LOS errors. Yellow – Remote Alarm Indication (RAI). Red (steady) – Loss Of Frame (LOF). Red (flashing) – Loss Of Signal (LOS).
CANCEL	Terminate current operation without saving new settings and to return to the previous menu.	AIS	Off – No Alarm Indication Signal. Blue – Alarm Indication Signal.
POWER	Off – No power to the device. Green – Power is present.	LOOPBK	Off – Network not in local loopback mode. Green (steady) – Network Loopback. Green (flashing) – Payload Loopback. Red – T1 Gateway is not synchronized with the LAN.

Figure 14. T1 Gateway Front Panel Description

[ATA] ATA Operation

The optional ATA allows the integration of non-Synapse analog devices into the Synapse system. Only one ATA can be used with a Synapse system. The ATA allows:

- One or two analog phones (POTS) to share the phone lines and wiring with the Synapse system
- The Synapse system to share the phone lines and wiring with one fax machine
- Paging of a single- or multi-zone overhead paging (OHP) system from a Deskset
- Routing MoH audio input to outside held and parked calls
- Storage of Group Mailbox messages and access of these message from Desksets.

When the ATA is initially powered and connected to your LAN, the two FXS ports are configured as POTS phone lines and assigned the next available extension numbers. ATA extension numbers do not appear in the Extension list on Deskset screens. They do, however, appear on Call Logs, Redial lists, and Message lists. The two ATA extensions do not count toward the 100-extension limit of the Synapse system.

Configure the interface to these analog devices through the WebUI. See *"System Settings" on page 71*.

In addition, one 10/100BT Ethernet port is provided for communication with the Synapse network. The front panel LCD and buttons allow network configuration, firmware upgrades, and information functions.

Figure 15 illustrates the ATA features and connections.

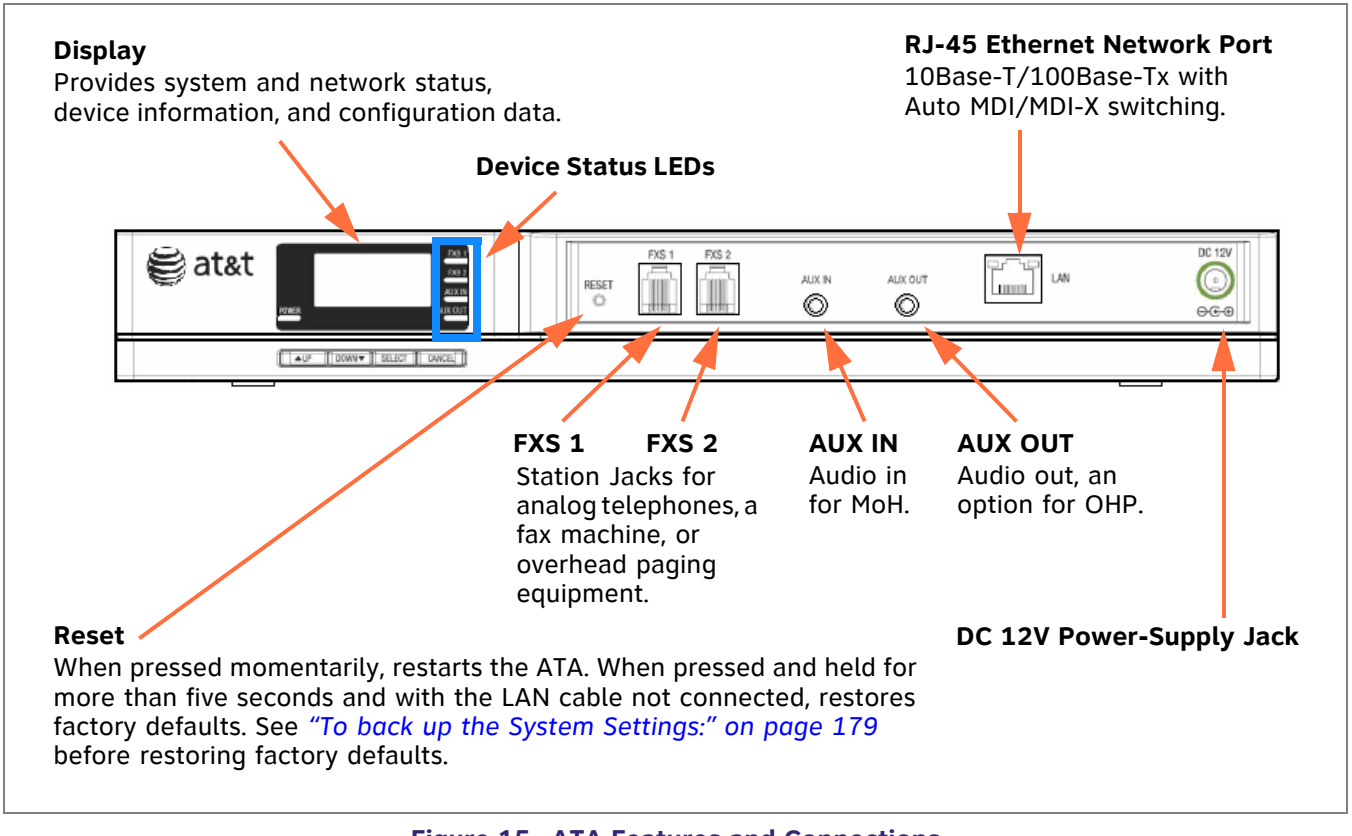


Figure 15. ATA Features and Connections

Figure 16 provides an illustration and description of the ATA front panel.

Key	Used To:	LED	Description
▲ UP DOWN▼	Navigate through the menus, and to increase/decrease editable fields. Move the highlight bar to the previous or next item in the list, respectively.	FSX 1 FSX 2	Station jack status LEDs indicate: Off No connection detected or idle Green (steady) – Line activity detected Green (flashing) – Ringing
SELECT	Display the ATA Main menu when in idle mode or while in network detection mode. Save current setting and return to previous menu.	AUX IN AUX OUT	Audio status LEDs indicate: Off – Not configured in the WebUI Red (steady) – Configured in the WebUI, but no connection detected. Green (steady) – Configured and connected. Green (flashing) – Paging active.
CANCEL	Terminate current operation without saving new settings and to return to the previous menu.	POWER	Off – No power to the device. Green – When power is present.

Figure 16. ATA Front Panel Description

Recovery After Power Failure

The Synapse system automatically recovers after a power failure. The following describes the recovery process.

Allow about a minute for the Gateway to boot up when power returns after a power failure. The Gateway power-up sequence follows:

1. About 20 seconds after turning on power to the Gateway, the POWER LED turns on.
2. When the Gateway finds the network, **Synchronizing...** momentarily displays to indicate that the Gateway is in the process of detecting and synchronizing with other system devices, as shown in Figure 17.
3. Once the Gateway has successfully finished synchronizing with the rest of the system, **Synchronized** displays, as shown in Figure 18.

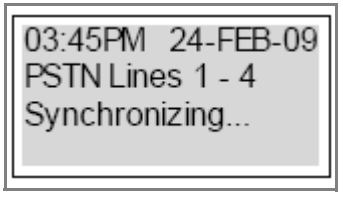


Figure 17. Synchronizing

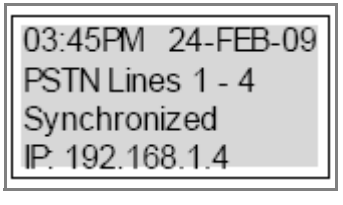


Figure 18. Synchronized

This is the Idle screen that shows the time, date, system status, and IP address.

NOTE

The time and date may not be correct. The time and date are set using the WebUI *"System Basic Settings" on page 76*.

[**ATA**] The optional ATA also automatically restarts and synchronizes after an AC power failure.

The system assigns a link-local address, which starts with 169.254.

Check each Deskset and Gateway to confirm that each has started up properly. A Deskset screen similar to the one shown in Figure 19 appears. If any of the system devices report **Sync Failed** or **Synchronizing...** for more than a few minutes, refer to *"Reintroducing a Deskset Into the System" on page 193* and *"Reintroducing a Gateway or ATA Into the System" on page 196* for probable causes and recovery methods from these states.

NOTE Some systems will take longer than others depending on the network topology.

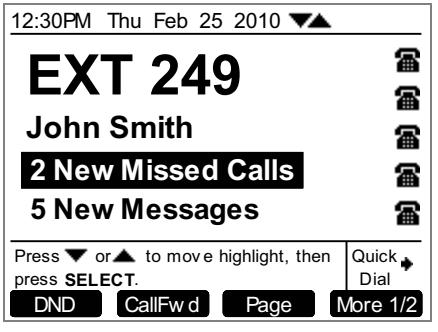


Figure 19. Idle Screen

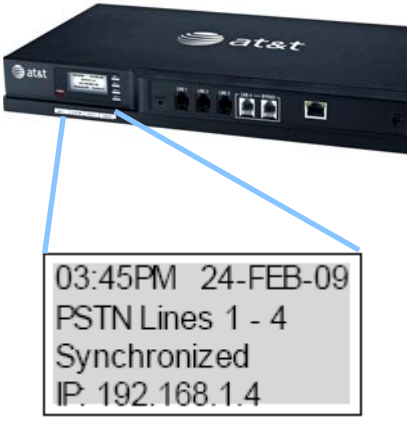
[PSTN] Using the Analog Line Bypass Jack

Plug a non-system analog phone into the RJ-11 jack labeled **BYPASS** for direct access to an analog telephone line for emergency calls when the Gateway loses power. If you have a PSTN line plugged into Line 4, an analog telephone plugged into the bypass jack provides communication during AC power outages. When power returns, a relay disconnects this emergency bypass line so that this bypass line cannot be used to eavesdrop on normal calls.

CHAPTER

2

GETTING STARTED



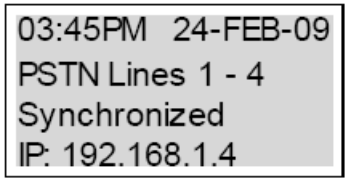
This section gets you started with configuring the Synapse system. This section covers:

- *"Gateway Front Panel Interface" on page 38*
- *"Deskset Admin Settings" on page 44*
- *"Call Forward All and Call Fwd–NA (No Answer)" on page 46*
- *"Fwd/Trans to Outside Line" on page 51*
- *"IP Settings" on page 52*
- *"Reset User Password" on page 56*
- *"Upgrade Deskset Software" on page 57*
- *"[ATA] ATA Front Panel Interface" on page 60.*

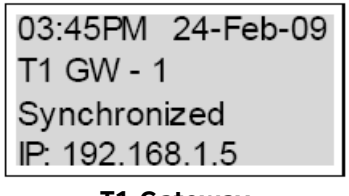
Gateway Front Panel Interface

The Gateway provides an interface to access basic information and to perform some configuration tasks at the Gateway's front panel. Most of these tasks are easier to do using the WebUI. See *"The Web User Interface (WebUI)" on page 66*.

The Gateway displays the Idle menu upon completion of the power-up sequence. Use the Gateway Main menu to perform some system operations.



PSTN Gateway



T1 Gateway

Figure 20. Gateway Idle Screens

- To access the Gateway Main menu from the Idle screen, as shown in Figure 20, press the SELECT key. The menu provides the following functions:
  - **Device Information**
  - **Network Status**
  - **Configuration**

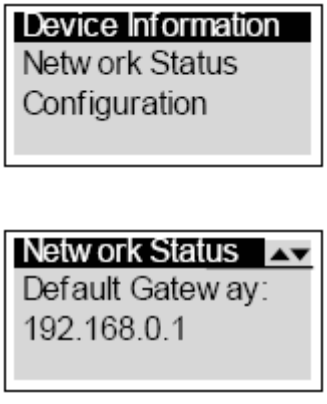


Figure 21. Gateway Menu Screens

- Press the DOWN key to highlight an entry, as shown in Figure 21, then press SELECT to see information about your Gateway or your Network. Select **Configuration** to view or modify some Gateway settings. Here is the information you can see in Device Information and Network Status:

Device Information

- Model #
- Serial #
- Boot Version
- Software Version
- Firmware Version

NOTE The T1 Gateway does not display its firmware version.

Network Status

- IP Address
- Subnet Mask
- Default Gateway
- DNS Server X
- MAC Address
- Network Port
- Local Address

Gateway Configuration

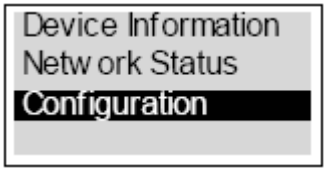


Figure 22. Gateway Configuration

Press ▲ UP / DOWN▼ in the Gateway Main menu until **Configuration** is highlighted, as shown in Figure 22, and press SELECT to display the Configuration menu. The current setting is indicated with [X]. You can use this interface or the WebUI to upgrade software. Here are the configuration settings:

Configuration — Current Gateway settings.

- Auto IP — Is set automatically.
- Static IP — You can change the static IP only from the Gateway. Although the Gateway prompts you through the process, using a static IP address can have serious effects; contact your installer if static IP address editing is required.
- Restore Defaults — Highlight **Restore Defaults** and press and hold SELECT for two seconds when prompted to restore the Gateway to factory defaults. See *"Back Up and Restore Settings" on page 172* before restoring factory defaults.
- Upgrade Software — Highlight **Upgrade Software**, and press SELECT. If new software is available, you are prompted to press SELECT again to accept the upgrade.

Upgrade Gateway Software

If you have system settings that you want to retain, back up the settings before upgrading the system software. See *"To back up the System Settings:" on page 179.*

To upgrade the Gateway software to the latest version:

Figure 23. Upgrade Software

1. Press ▲ UP / DOWN▼ in the Gateway Main menu until **Configuration** is highlighted and press SELECT to display the Configuration menu, as shown in Figure 23.
2. Press DOWN▼ to highlight **Upgrade Software** and press SELECT to initiate the software upgrade process. The device initiates a link to the Synapse Software Updates web site host and any new software.
   - If a host cannot be found or the server name cannot be resolved, **Timeout** or **Host Not Found** appears. Upgrade the software from the PC, which can offer more information about connection issues. See *"To manually update a device to the latest software version:" on page 184*.
   - If the host is found, but there is no new software available, then the **No New Version** message appears.

NOTE If the device is sluggish or unresponsive during the upgrade process, refer to *"A Synapse device becomes sluggish or unresponsive during or immediately after software upgrade." on page 204*.

To upgrade the Gateway software to the latest version: (Continued)

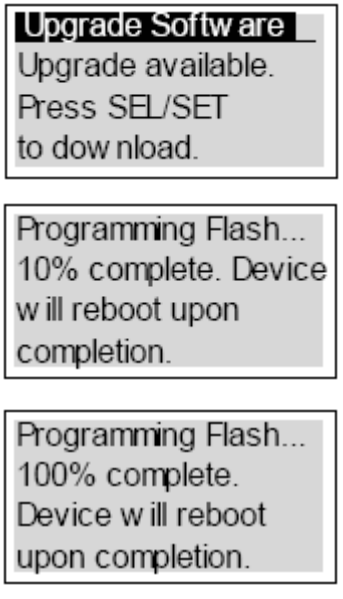


Figure 24. Downloading Software

3. If new software is available, you are prompted to initiate the upgrade by pressing SELECT, or abort by pressing CANCEL.
   - Once the downloading starts, the display indicates the progress as shown by the percentage indicator, as shown in Figure 24.
   - If the upgrade process is interrupted by removing the server connection, no restart occurs. The Gateway remains on the xx% complete screen, until an action is taken at that Gateway. The process does not resume even after the server connection is reestablished.
   - Pressing CANCEL during the programming process terminates the download midstream and returns you to the Configuration menu. The previous software version remains in effect.
   - When the upgrade is complete, the screen briefly displays **100% complete**, then **0% complete** for few seconds, before restarting the Gateway.
4. Press CANCEL repeatedly until you return to the Gateway Main menu.

Gateway Reset

Press the **RESET** button shown in Figure 25 by inserting a pen or paper clip into the hole and applying pressure to the button. The T1 Gateway (not shown) has a **RESET** button in the same location on the front panel.

- If you have already set up the system, see *"Back Up and Restore Settings" on page 172* to back up the Deskset and system settings before resetting the device to factory defaults.
- Press the **RESET** button for less than five seconds to reset the Gateway (your user settings are unaffected). You can get the same result by unplugging the power cord, then plugging it back in. You might do this to cause the Gateway to initialize without losing any settings or data.
- Unplug the LAN cable and press the **RESET** button for more than five seconds to completely reset the Gateway to factory defaults. See *"Appendix B: Default Settings" on page 271*. You might do this if your Gateway is not synchronized.

  If this is the only Gateway, but there are still Desksets connected, then only the voice prompts and hold messages are deleted; the rest of the Auto Attendant settings are maintained on the Desksets. If there is another Gateway, the other Gateway maintains all system configuration settings.

NOTE To reset your entire system to factory defaults and completely clear the system of all settings (Auto Attendant, Ring Groups, hold message, and System Directory) and Voicemail messages, unplug the LAN cables from all devices and press the **RESET** button for more than five seconds on each device. Then reconnect all devices to the LAN.

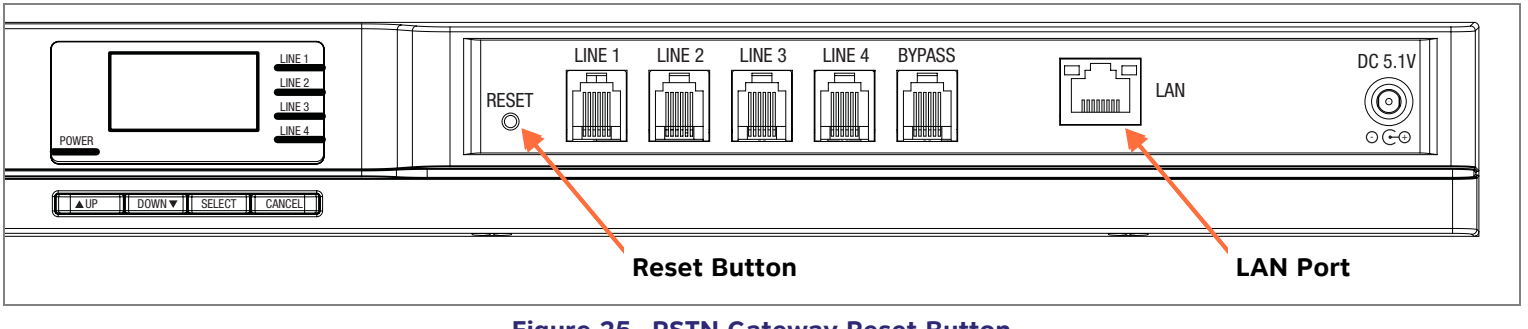


Figure 25. PSTN Gateway Reset Button

Deskset Admin Settings

The WebUI provides an interface for setting up your system. See *"The Web User Interface (WebUI)" on page 66*. You can also use a Deskset to set up some system features, based on a menu structure presented on the Deskset display.

To display the Admin Settings menu:

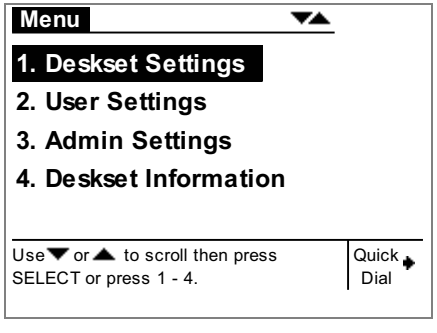


Figure 26. Menu Screen

Figure 27. Admin Password

1. Press **MENU** to display the **Menu** screen shown in Figure 26.
2. Press **3** on the dial pad to display the **Admin Settings** screen shown in *Exercise 2 on page 45*.
3. Enter the Admin password, as shown in Figure 27, and press **SELECT**.

NOTE

The operator's Deskset has a fifth choice, **Auto Attendant Settings**, on the Menu screen.

The default **Admin** password is **12345**. The Synapse Administrator should change this password. See *"System Basic Settings" on page 76*.

Table 2. Admin Settings

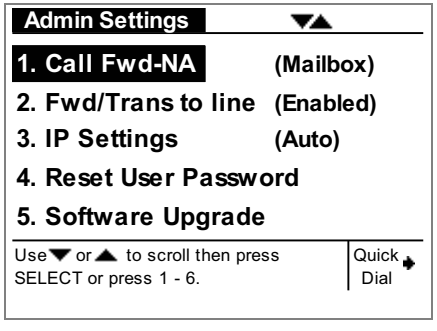
Example Screens	Function	Submenu
	**1.** *"Call Forward All and Call Fwd–NA (No Answer)" on page 46.*	**Call Fwd–NA Delay <5/10/15/20...45>** **Call Fwd–NA Target <Ext/Mailbox/Phone #>** **to Ext: xxx** **to Phone #: xxx-xxx-xxxx**
	2. *"Fwd/Trans to Outside Line" on page 51.*	
	3. *"IP Settings" on page 52.*	**1. IP Configuration <Auto/Static>** **2. Set/Edit Static IP** **3. IP Status**
	4. *"Reset User Password" on page 56.*	
	5. *"Upgrade Deskset Software" on page 57.*	**Software upgrade screen**

Figure 28. Admin Settings

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. Calls are immediately redirected to the assigned phone number, extension, or Voicemail; 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 Log. Your company phone number is the caller ID information sent to outside numbers with the forwarded call. Users set Call Forward All by pressing CallFwd when the telephone is idle or in the WebUI.

- **Call Forward–No Answer** is an administrator setting to handle unanswered calls. The default is to send all calls to Voicemail after they ring for 15 seconds. The SA can change the target destination to another extension or to an outside phone number, or the SA 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–NA Setting for that Deskset.

If **Fwd/Trans to line** is disabled, you cannot change the target destination to an outside phone number.
See *"To toggle the Forward/Transfer to an outside line:" on page 51*.

To set up Call Forward–NA:

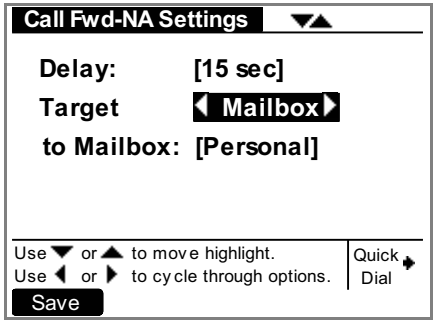


Figure 29. Call Fwd–NA Settings

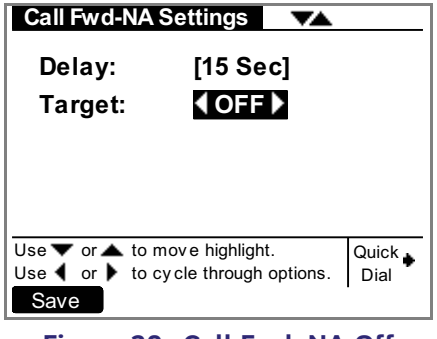


Figure 30. Call Fwd–NA Off

1. Access the **Admin Settings** menu: Press **MENU**, then press **3** on the dial pad, then enter the Admin password, and press **SELECT**.
2. Press **1** on the dial pad to display the **Call Fwd–NA Settings** screen shown in Figure 29.
3. Press the ◁ or ▷ Navigation key to toggle the setting to one of the following target destinations:
   - ◀ Mailbox ▶. See *"Call Forward–NA to a Mailbox" on page 48*.
   - ◀ Ext ▶. See *"Call Forward–NA to an Extension" on page 49*.
   - ◀ Phone# ▶. See *"Call Forward–NA to an Outside Phone Number" on page 50*.
   - ◀ OFF ▶, as shown in Figure 30. Calls will not be forwarded.

NOTE If Call Forward All is on, these settings do not apply. Call Forward All is enabled in the User Settings menu of each individual Deskset.

Call Forward–NA to a Mailbox

To forward all unanswered calls to a Mailbox:

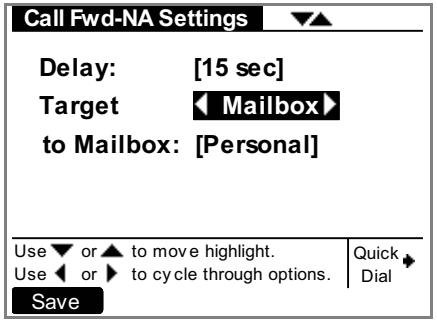


Figure 31. Call Fwd–NA Settings

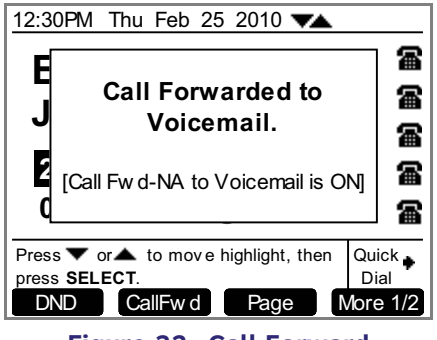


Figure 32. Call Forward Confirmation

1. Access the **Admin Settings** menu. Press **MENU**, then press **3** on the dial pad, then enter the Admin password, and press **SELECT**.
2. Press **1** on the dial pad to display the **Call Fwd–NA Settings** screen shown in Figure 31.
3. Press the ◁ or ▷ Navigation key until Mailbox is highlighted.
4. Press the △ Navigation key to highlight **Delay**.
5. Press the ◁ or ▷ Navigation key to adjust the delay time in five-second increments.

NOTE The minimum delay is five seconds and the maximum delay is 45 seconds. The default setting is 15 seconds.

6. Press Save to accept the change and display the **Admin Settings** menu.

NOTE After each call is forwarded, the Deskset displays the screen shown in Figure 32.

Call Forward–NA to an Extension

To forward all unanswered calls to an extension:

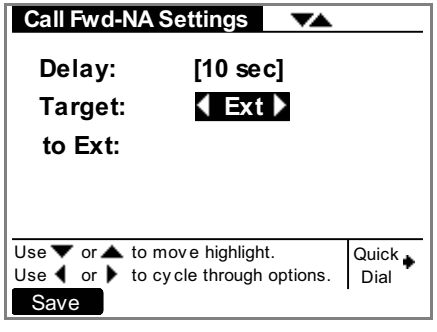


Figure 33. Call Fwd–NA Settings

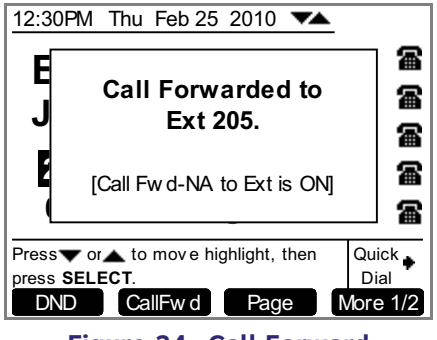


Figure 34. Call Forward Confirmation

1. Access the **Admin Settings** menu. Press **MENU**, then press **3** on the dial pad, then enter the Admin password, and press **SELECT**.
2. Press **1** on the dial pad to display the **Call Fwd–NA Settings** screen shown in Figure 33.
3. Press the ◁ or ▷ Navigation key until Ext is highlighted.
4. Press the ▽ Navigation key to move to the **to Ext:** editable field. A cursor appears in the number field.
5. Enter a valid extension.

NOTE Analog telephones connected through the ATA are eligible as targets.

6. Press the △ Navigation key to highlight **Delay**.
7. Press the ◁ or ▷ Navigation key to adjust the delay time in five-second increments.
8. Press Save to accept the change and display the **Admin Settings** menu.

NOTE After each call is forwarded, the screen shown in Figure 34 appears.

Call Forward–NA to an Outside Phone Number

To forward all unanswered calls to a phone number:

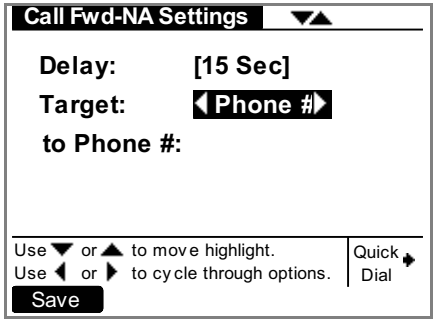


Figure 35. Call Fwd–NA Settings

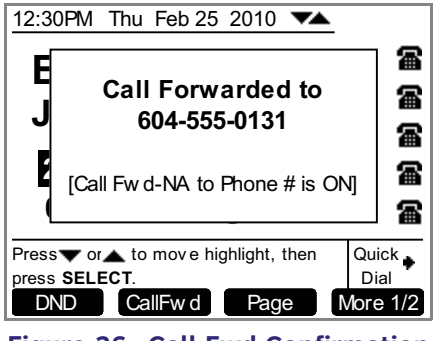


Figure 36. Call Fwd Confirmation

1. Access the **Admin Settings** menu: Press **MENU**, then press **3** on the dial pad, then enter the Admin password, and press **SELECT**.
2. Press **1** on the dial pad to display the **Call Fwd–NA Settings** screen shown in Figure 35.
3. Press the ◁ or ▷ Navigation key until Phone # is highlighted.
4. Press the ▽ Navigation key to move to the **to Phone #:** editable field. A cursor appears in the number field.
5. Enter a valid phone number. A call to an outside phone number has already been specified, so do not dial whatever digit, if any, that must be dialed first for an outside call.
6. Press the △ Navigation key to highlight **Delay**.
7. Press the ◁ or ▷ Navigation key to adjust the delay in five–second increments.
8. Press Save to accept the change and display the **Admin Settings** menu.

Whenever a call is forwarded, the screen shown in Figure 36 appears.

NOTE

You can use the **Timer for Forwarded and Transferred Outside Calls** to limit the duration of calls transferred to outside lines because they use two of your telephone lines. See **Timer for Forwarded and Transferred Outside Calls** *"System Basic Settings" on page 76.* You can also disable **Call Forward / Transfer to Line** individually for each extension. See *"Extension Basic Settings" on page 146.*

Fwd/Trans to Outside Line

The SA may enable or disable the ability of each Deskset to forward or transfer a call to an outside line because 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 toggle the Forward/Transfer to an outside line:

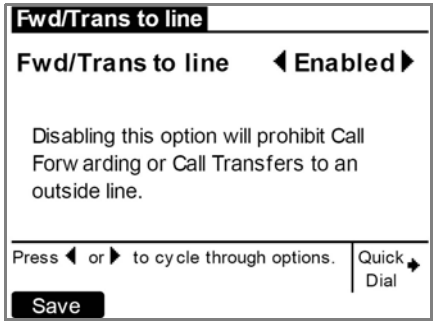


Figure 37. Fwd/Trans to Line

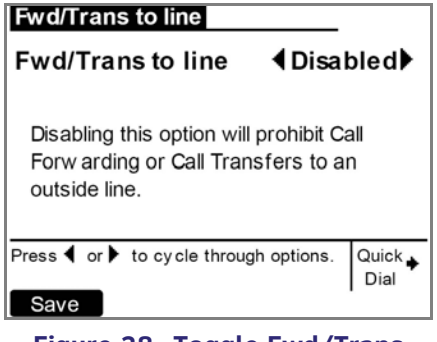


Figure 38. Toggle Fwd/Trans

1. Access the **Admin Settings** menu: Press **MENU**, then press **3** on the dial pad, then enter the Admin password, and press **SELECT**.
2. Press **2** on the dial pad to display the **Fwd/Trans to line** screen shown in Figure 37, with the current setting displayed.
3. Press the ◁ or ▷ Navigation key to toggle the setting between **Enabled** and **Disabled**, as shown in Figure 37 and Figure 38.
4. Press Save to accept the changes and return to the **Admin Settings** menu.

NOTE

If Call Fwd–NA is set to Phone#, pressing Save after changing the **Fwd/Trans to line** from **Enabled** to **Disabled** causes the screen shown in Figure 39 to appear.

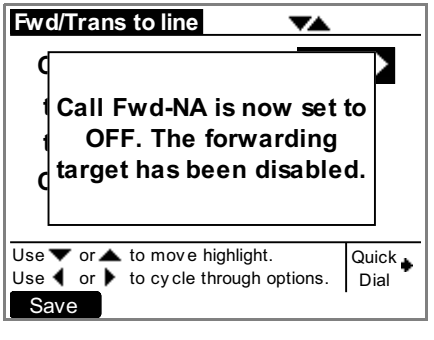


Figure 39. Fwd/Trans to Line Disabled

IP Settings

Synapse system devices are connected to a LAN so they can communicate with each other. See *"[ATA] System Installation Overview with Optional Analog Terminal Adapter" on page 18* for a discussion of the Synapse network configuration and IP settings.

To display the IP Settings screen:

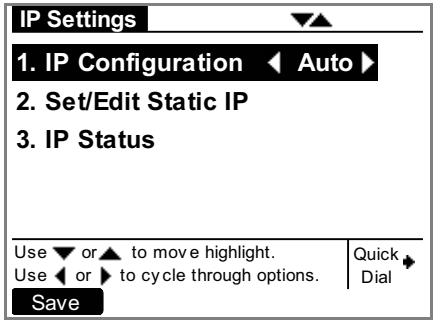


Figure 40. IP Settings

1. Access the **Admin Settings** menu: Press **MENU**, then press **3** on the dial pad, then enter the Admin password, and press **SELECT**.
2. Press **3** on the dial pad to display the **IP Settings** screen shown in Figure 40.
3. Perform one of the following:
   a. Press **1** to select **IP Configuration**. See below.
   b. Press **2** to select **Set/Edit Static IP**. See *"To set and edit static IP Address:" on page 54*.
   c. Press **3** to select **IP Status**. See *"To view the IP status:" on page 55*.

To set the IP Configuration:

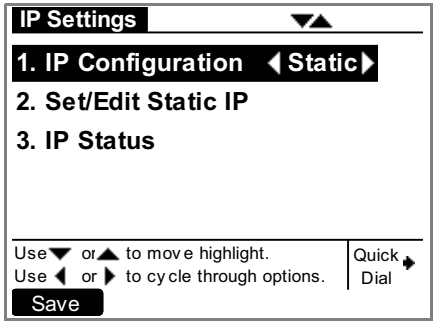


Figure 41. IP Configuration

1. Access the **Admin Settings** menu: Press **MENU**, then press **3** on the dial pad, then enter the Admin password, and press **SELECT**.
2. Press **3** on the dial pad to display the IP Settings menu shown in Figure 40.
3. Press **1** to select **IP Configuration**.
4. Press the ◁ or ▷ Navigation key to toggle between Auto and Static, as shown in Figure 40 and Figure 41.
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, contact your network administrator.

To set and edit static IP Address:

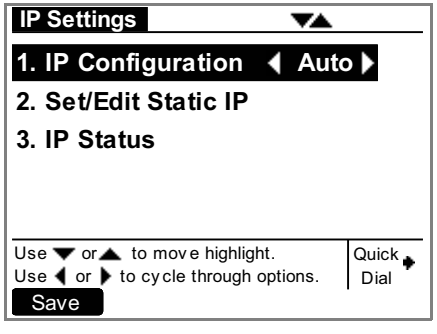


Figure 42. IP Configuration

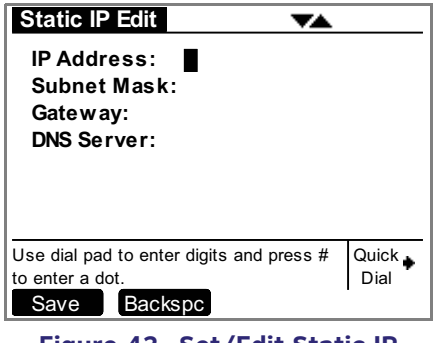


Figure 43. Set/Edit Static IP

1. Access the **Admin Settings** menu: Press **MENU**, then press **3** on the dial pad, then enter the Admin password, and press **SELECT**.
2. Press **3** on the dial pad to display the **IP Settings** screen shown in Figure 42.
3. Press **2** to display the **Static IP Edit** screen shown in Figure 43.
4. Enter digits:
   - There is a 12-digit limit on the number field (not including dots).
   - Pressing the pound key (#) inserts a dot.
   - Pressing Backspc when the cursor is positioned next to a dot deletes the dot and the digit to the left of the dot.
5. Press the △ or ▽ Navigation key to cycle through the four fields.
6. Press Save to accept the changes and return to the **Admin Settings** menu.

NOTE IP Address format: Each octet of the IP address ranges from 0 to 255. You can enter single or double digits and do not need to use zeros as place-markers. For example, enter "192.168.0.1" instead of "192.168.000.001".

IP Status

This screen is for informational purposes only.

To view the IP status:

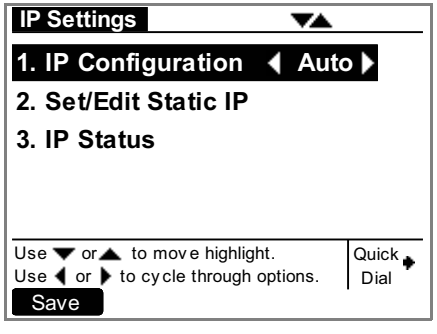


Figure 44. IP Settings

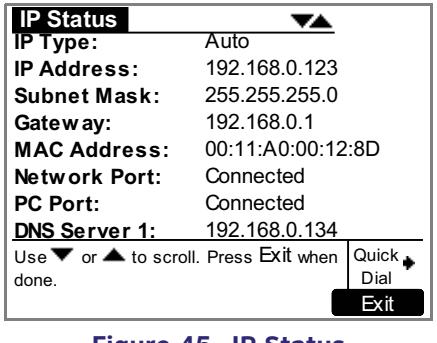


Figure 45. IP Status

1. Access the **Admin Settings** menu: Press **MENU**, then press **3** on the dial pad, then enter the Admin password, and press **SELECT**.
2. Press **3** on the dial pad to display the **IP Settings** screen shown in Figure 44.
3. Press **3** to display the **IP Status** screen shown in Figure 45.
4. Press the ▲ or ▼ Navigation key to view status entries that are not shown on-screen.

> **NOTE** The list is not circular, so when you reach the end of the available text, pressing the ▼ Navigation key has no effect. If you are at the top of the screen, pressing the ▲ Navigation key has no effect.

5. Press Exit when your review is complete.

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:

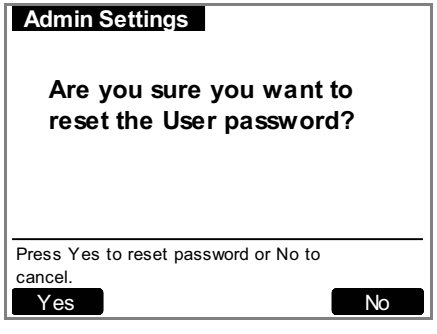


Figure 46. Reset User Password

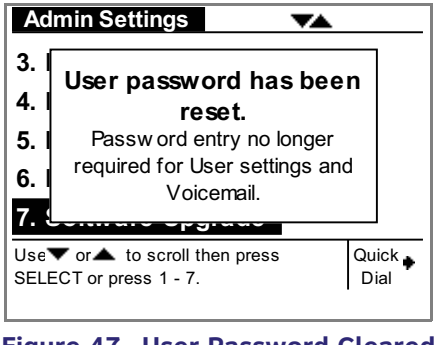


Figure 47. User Password Cleared

1. Access the **Admin Settings** menu: Press **MENU**, then press **3** on the dial pad, then enter the Admin password, and press **SELECT**.
2. Press **4** to begin the password reset process. The confirmation screen shown in Figure 46 appears.
3. Press Yes to confirm password reset.

   The screen shown in Figure 47 appears informing you that the password has been reset.

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

Upgrade Deskset Software

To access the Deskset Software Upgrade feature:

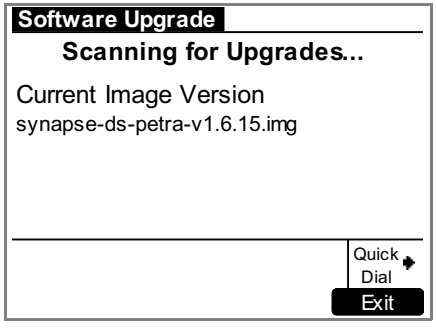


Figure 48. Software Upgrade

Figure 49. Upgrade Available

1. Access the **Admin Settings** menu: Press **MENU**, then press **3** on the dial pad, then enter the Admin password, and press **SELECT**.
2. Press **5** to display the screen shown in Figure 48. The system scans for an upgrade.
   - If an upgrade is available, the screen shown in Figure 49 appears.
   - If no upgrade is available, the screen shown in Figure 50 appears.

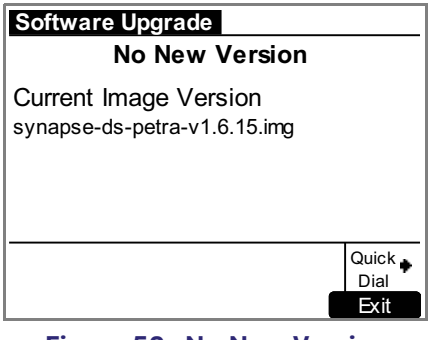


Figure 50. No New Version

To access the Deskset Software Upgrade feature: (Continued)

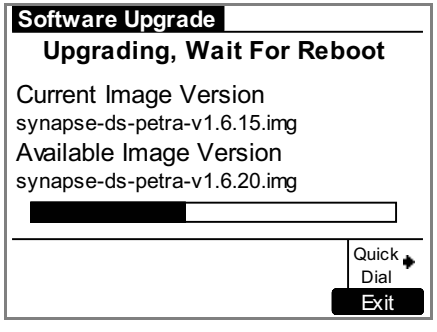


Figure 51. Upgrading

3. Press Upgrade to install the upgrade. The screen shown in Figure 51 appears.

NOTE If the device is sluggish or unresponsive during the upgrade process, refer to *"A Synapse device becomes sluggish or unresponsive during or immediately after software upgrade." on page 204*.

4. If necessary, press Exit when the upgrade is complete to return to the Admin Settings menu.

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.

See *"Updating Devices" on page 181* to update the Deskset software from the WebUI.

Deskset Reset

The Deskset has a reset button underneath that allows you to restart the Deskset or to clear most of the Deskset configuration. Press the **RESET** button shown in Figure 52 by inserting a pen or paper clip into the hole and applying pressure to the button.

- Before resetting the Deskset, you might want to back up its settings. See *"To back up the Extension Settings:" on page 174*.
- Press the **RESET** button for less than five seconds to restart the Deskset (your user settings are unaffected). You can get the same result by unplugging the power cord, then plugging it back in. You can use this partial reset to restart if the Deskset does not respond or fails to synchronize with the system.
- Unplug the LAN cable and press the **RESET** button for more than five seconds to reset the Deskset to factory defaults. See *"Appendix B: Default Settings" on page 271*. The system configuration (your user settings and Personal directory) and Voicemail messages, Call Log, and the Redial list are all deleted. You can use this complete reset when assigning Desksets to new users. If you do not disconnect the LAN cable before pressing the **RESET** button, the extension number is retained.

  During the reset, any PC connected to the PC port momentarily loses network connectivity.

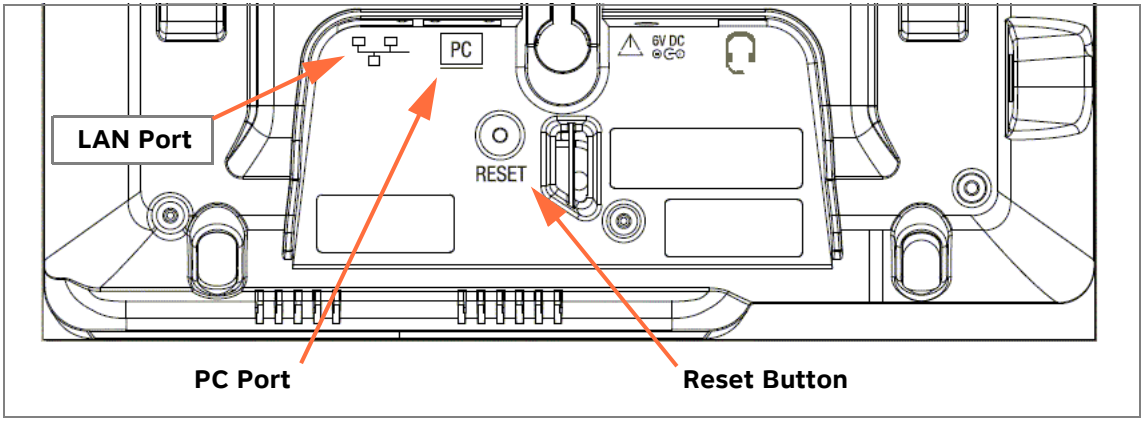


Figure 52. Deskset Reset Button

[ATA] ATA Front Panel Interface

The ATA provides an interface to access basic information and to perform some configuration tasks at the ATA's front panel. These tasks are easier to do using the WebUI. See *"The Web User Interface (WebUI)" on page 66*.

The optional ATA displays the Idle menu upon completion of the power-up sequence. Access the ATA Main menu to perform the system operation functions. The Idle screen is different, but the menus are the same as that of the PSTN Gateway. See *"Gateway Front Panel Interface" on page 38*.

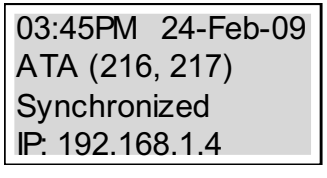
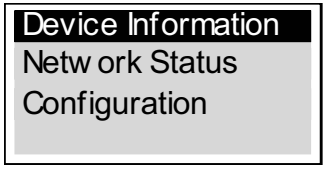


Figure 53. ATA Idle Screen



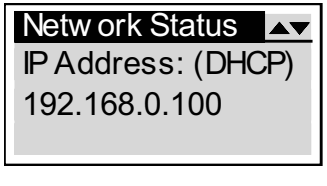


Figure 54. ATA Menu Screens

To access the Gateway Main menu from the Idle screen, as shown in Figure 53, press the SELECT key. The menu provides the following functions:

- **Device Information**
- **Network Status**
- **Configuration**

Press the DOWN▼ key to highlight an entry, then press SELECT to see information about your ATA or your network, as shown in Figure 54. Select **Configuration** to view or modify some ATA settings. Here is the information you can see in Device Information and Network Status:

Device Information

- Model #
- Serial #
- Boot Version
- Software Version
- Firmware Version

Network Status

- IP Address
- Subnet Mask
- Default Gateway
- DNS Server X
- MAC Address
- Network Port
- Local Address

[ATA] Configuration

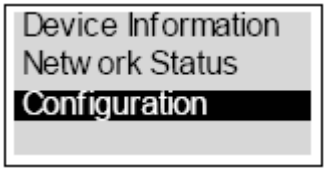


Figure 55. ATA Configuration

Press ▲ UP / DOWN▼ in the ATA Main menu until **Configuration** is highlighted, as shown in Figure 55, and press SELECT to display the Configuration menu. The current setting is indicated with [X]. You can use this interface or the WebUI to upgrade software. Here are the configuration settings:

Configuration — Current ATA settings:

- Auto IP — Is set automatically.
- Static IP — You can change the Static IP only from the ATA. Although the ATA prompts you through the process, using a static IP address can have serious effects; contact your installer if Static IP editing is required.
- Restore Defaults — Highlight **Restore Defaults** and press and hold SELECT for two seconds when prompted to restore the ATA to factory defaults. See *"Back Up and Restore Settings" on page 172* before restoring factory defaults.
- Upgrade Software — Highlight **Upgrade Software**, and press SELECT. If new software is available, you are prompted to press SELECT again to accept the upgrade.

[ATA] Upgrade ATA Software

If you have system settings that you want to retain, back up the settings before upgrading the system software. See *"To back up the System Settings:" on page 179.*

To upgrade the ATA software to the latest version:

Figure 56. Upgrade Software

1. Press ▲ UP / DOWN▼ in the ATA Main menu until **Configuration** is highlighted and press SELECT to display the Configuration menu, as shown in Figure 56.
2. Press DOWN▼ to highlight **Upgrade Software** and press SELECT to initiate the software upgrade process. The device initiates a link to the Synapse software updates web site host and any new software.
   - If a host cannot be found or the server name cannot be resolved, **Timeout** or **Host Not Found** appears. Upgrade the software from the PC, which can offer more information about connection issues. See *"To manually update a device to the latest software version:" on page 184*.
   - If the host is found, but there is no new software available, then the **No New Version** message appears.

NOTE If the device is sluggish or unresponsive during the upgrade process, refer to *"A Synapse device becomes sluggish or unresponsive during or immediately after software upgrade." on page 204*.

To upgrade the ATA software to the latest version: (Continued)

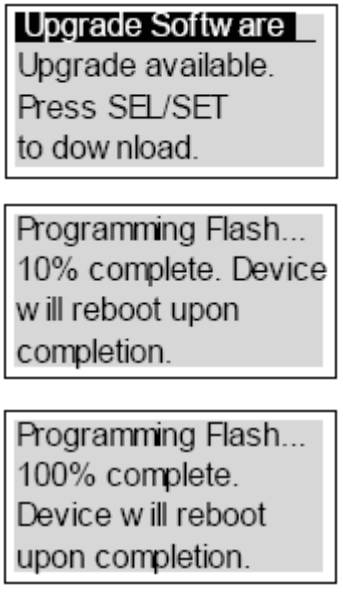


Figure 57. Downloading Software

3. If new software is available, you are prompted to initiate the upgrade by pressing SELECT, or abort by pressing CANCEL.
   - Once the downloading starts, the display indicates the progress as shown by the percentage indicator, as shown in Figure 57. The device restarts automatically once the programming is completed.
   - If the programming process is interrupted by removing the server connection, no restart occurs. The process does not resume even after the server connection is reestablished. The ATA remains on the xx% complete screen until an action is taken at the ATA.
   - Pressing CANCEL during the programming process terminates the download midstream and returns you to the Configuration menu. The previous software version remains in effect.
   - When the upgrade is complete, the screen briefly displays **100% complete**, then **0% complete** for few seconds, before restarting the ATA.
4. Press CANCEL repeatedly until you return to the ATA Main menu.

[ATA] Reset

Press the **RESET** button shown in Figure 58 by inserting a pen or paper clip into the hole and applying pressure to the button.

- Press the **RESET** button for less than five seconds to restart the ATA (your user settings are unaffected). You might do this to cause the ATA to initialize without losing any settings or data. You can get the same result by unplugging the power cord, then plugging it back in.
- Unplug the LAN cable and press the **RESET** button for more than five seconds to reset the ATA to factory defaults. You might do this if your ATA is not synchronized or you want to reset the IP address settings to Auto (DHCP). Any static IP configurations are lost.

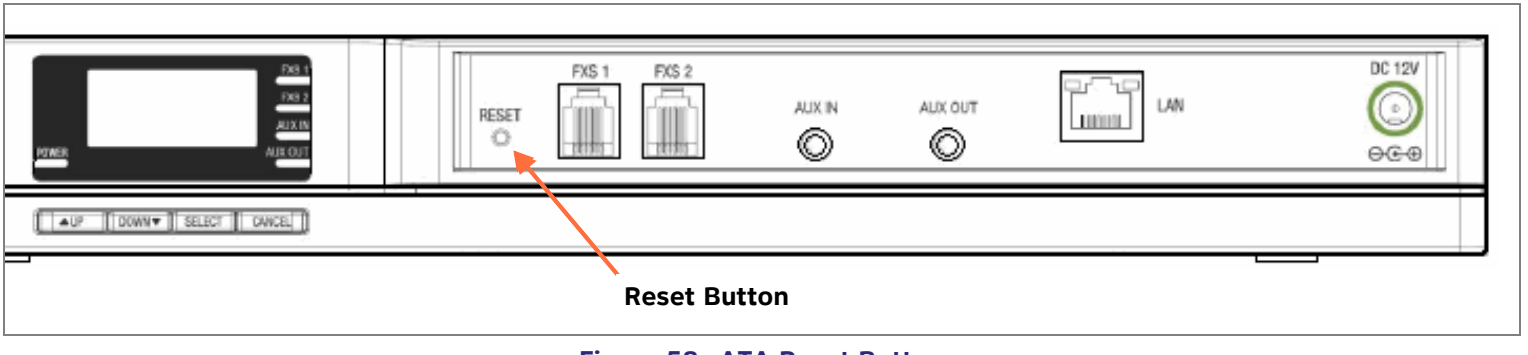
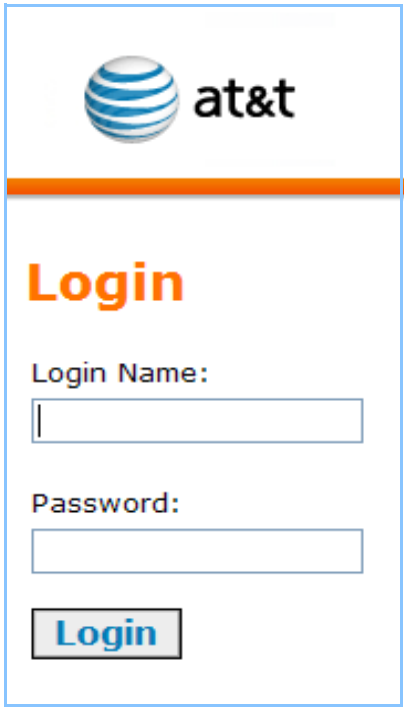


Figure 58. ATA Reset Button

NOTE If you have already set up the system, see *"Back Up and Restore Settings" on page 172* to back up the Deskset and system settings before resetting the device to factory defaults.

CHAPTER 3

SYSTEM CONFIGURATION



The WebUI shown in *Figure 65 on page 72* allows you to configure certain system functions such as global settings and the System Directory. The WebUI is embedded in every SB67010 PSTN Gateway, SB67030 Deskset, and optional SB67050 Analog Terminal Adapter (ATA). When you access the WebUI, you are accessing it on the device, not on the Internet.

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

NOTE After completing the configuration of the system, back up the System settings. See *"Back Up and Restore Settings" on page 172*.

The Web User Interface (WebUI)

The WebUI consists of web pages with editable settings that allow you to administer the system. See "System Configuration" on page 65 for more details. The WebUI consists of

- "System Settings" on page 71
- "Extension Settings" on page 145
- "[ATA] ATA Settings" on page 158
- "[T1] T1 Settings" on page 162
- "Device Management" on page 167
- "Help" on page 187

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 188.

NOTE

Pictures of the WebUI screens are in this document to help you find the correct screen; look at the WebUI itself to read the information on the screens.

The feature descriptions and sample screens in this chapter demonstrate a system that includes optional devices. Your Deskset and WebUI screens 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 and on the Deskset screen.

WebUI Overview

If two Synapse devices have ever been 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 in as SA 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 59. To determine the Deskset IP address, press **MENU**, then **4** on the Deskset dial pad to display the **Deskset Information** screen shown in Figure 60.

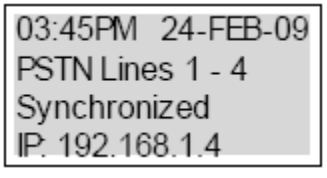


Figure 59. Gateway Idle Screen

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

NOTE 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.

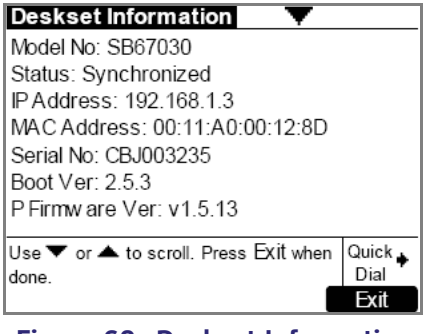


Figure 60. Deskset Information

WebUI information for individual users is contained in "Web Interface" of the Synapse User's Guide at **www.telephones.att.com/synapseguides**.

Log in as Administrator

To access the browser interface and log in:

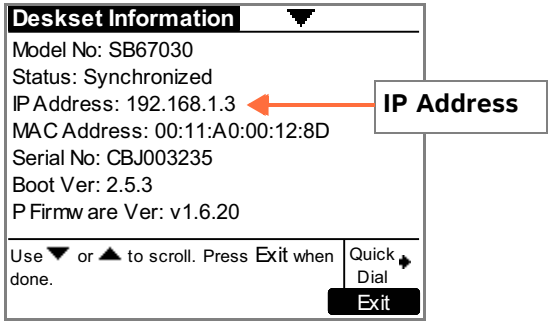


Figure 61. Deskset Information Screen

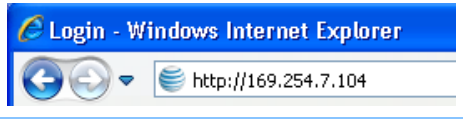


Figure 62. Browser Entry

1. Press **MENU** on the Deskset.
2. Press **4** on the dial pad to display the **Deskset Information** screen shown in Figure 61.
3. Find the IP address on the **Deskset Information** screen.
4. Open a browser. AT&T recommends Internet Explorer 6 or higher for best performance. (If you are using a different browser, some of the screens presented here may look different and have different controls). The PC must be on the same subnet as the Deskset, or your network administrator must have set it up so that devices on different subnets are able to communicate.
5. Type the Deskset **IP Address** in the address bar, as shown in Figure 62, and press **ENTER**. The browser displays a login screen as shown in *Figure 63 on page 69*.

NOTE You can also use a Gateway IP address (shown in *Figure 59 on page 67*) to log into the WebUI. You can log in as the administrator and make changes to the System or to individual Desksets whether you are logged in using the IP address of a Gateway or Deskset.

To access the browser interface and log in: (Continued)

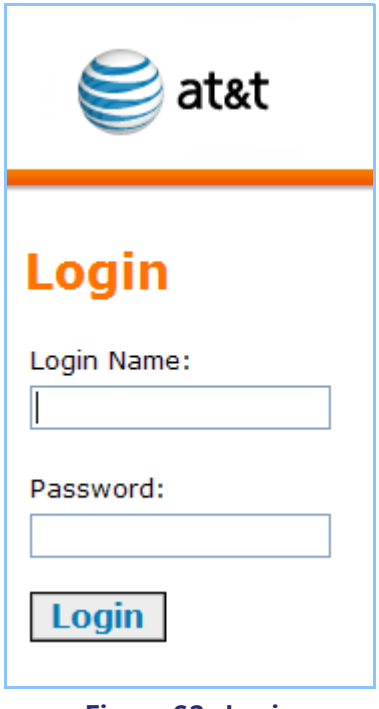


Figure 63. Login

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

   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, so if it is idle for that time, you must log in again.

CAUTION

Only one person at a time should log in as the SA to prevent unintentional overwriting of changes.

In most cases there are multiple settings on one screen. Changing a setting does not instantly apply the new value. Clicking the Apply button saves all changes on that screen.

Error Handling

If you type an invalid value into one of the WebUI fields and click Apply, the screen is not saved. The WebUI displays an error message at the top of the screen. The field with the incorrect value is highlighted in yellow, as shown in Figure 64.

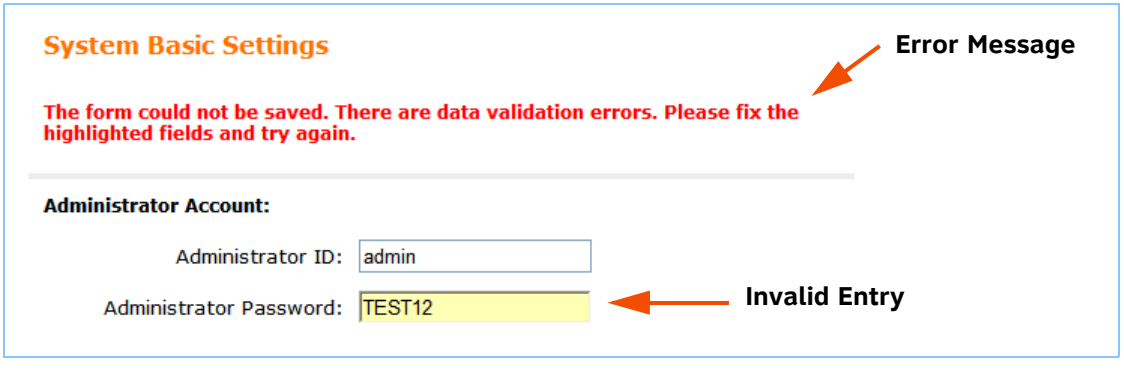


Figure 64. WebUI Error Indication

System Settings

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

CAUTION *When making changes to the System Settings through the WebUI, ensure that 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 72*
- *"System Basic Settings" on page 76*
- *"Auto Attendant" on page 81*
- *"Dial Plan Settings" on page 96*
- *"[ATA] Fax Overview" on page 107*
- *"[ATA] Group Mailbox" on page 110*
- *"Hold Settings and [ATA] Music on Hold (MoH)" on page 118*
- *"[ATA] Overhead Paging Overview" on page 122*
- *"Paging Zones" on page 131*
- *"Ring Groups" on page 134*
- *"System Directory" on page 139*
- *"Trunk Reservation (Outgoing Calls)" on page 141*
- *"[PSTN] Trunk Routing (Incoming Calls)" on page 142.*

NOTE T1 and ATA settings and features are only available and visible in the WebUI when those devices are installed.

System Information and WebUI Menus

To view System Information of a system with a PSTN Gateway:

1. Log in as administrator. See *"Log in as Administrator" on page 68*. The **System Information** screen shown in Figure 65 appears.

   The screen changes as Synapse devices are added or removed from the system as this and the following three screens show.

2. Click **System Information** in the Navigation Menu at left to display the count of Desksets, Gateways, and the ATA.

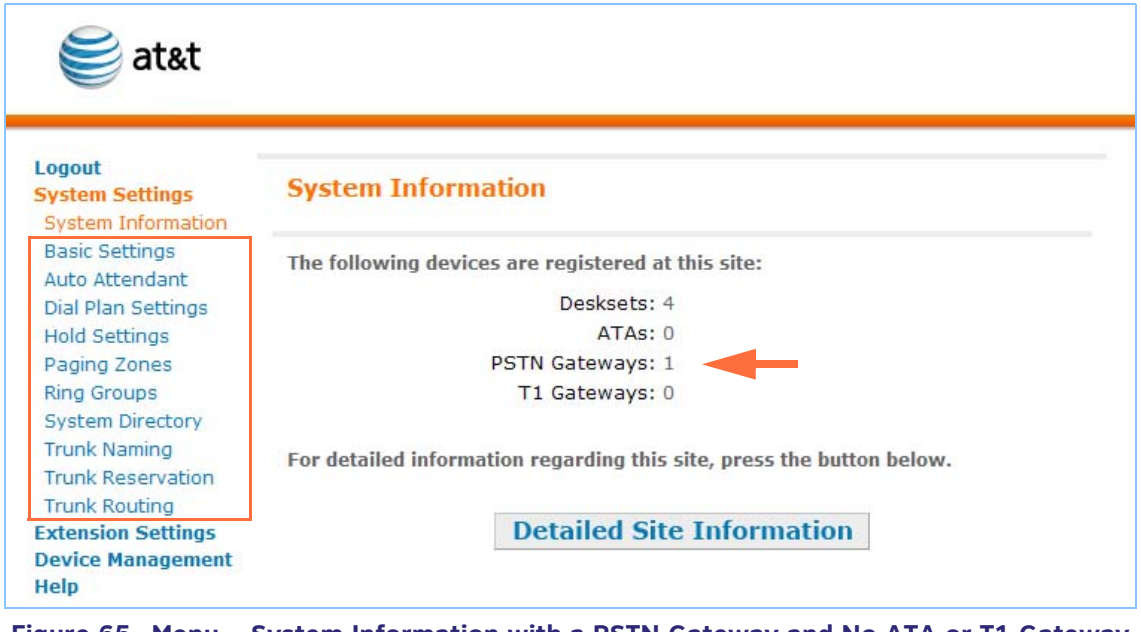


Figure 65. Menu – System Information with a PSTN Gateway and No ATA or T1 Gateway

To view System Information of a system with a PSTN Gateway and an ATA:

1. Log in as administrator. See *"Log in as Administrator" on page 68*. The screen shown in Figure 66 appears. The screen changes as Synapse devices are added or removed from the system.
2. Click **System Information** in the Navigation Menu at left to display the count of Desksets, Gateways, and the ATA.

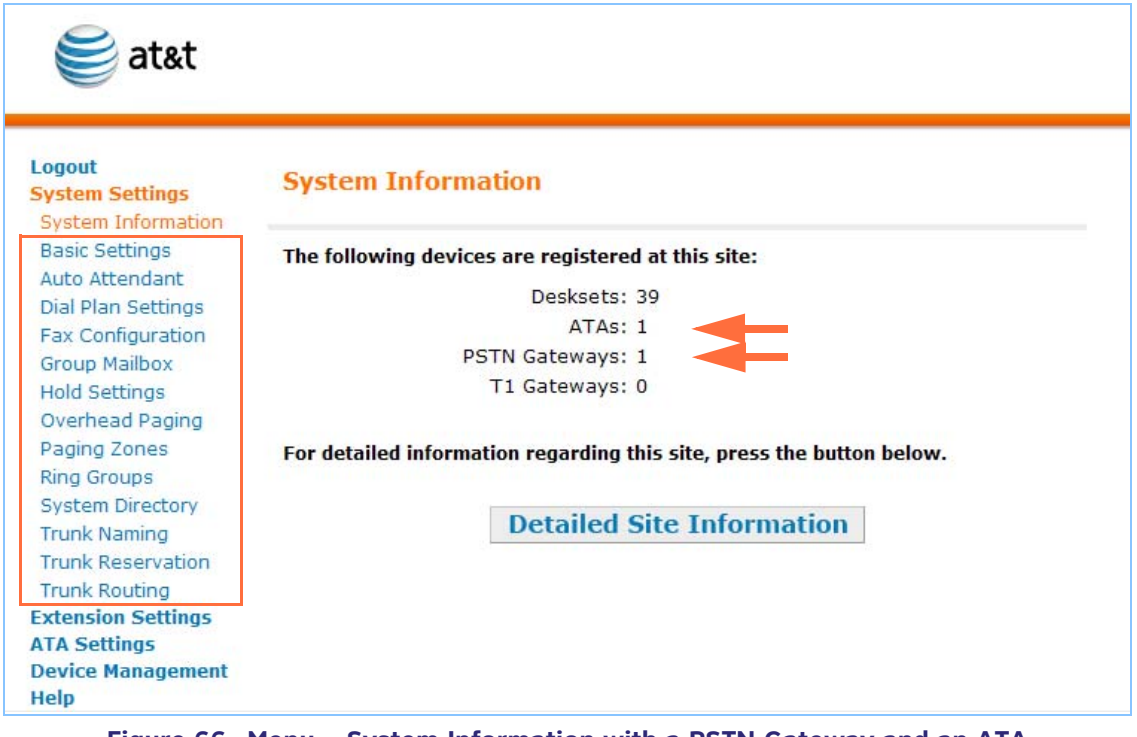


Figure 66. Menu – System Information with a PSTN Gateway and an ATA

To view System Information of a system with a T1 Gateway and an ATA:

1. Log in as administrator. See *"Log in as Administrator" on page 68*. The screen shown in Figure 67 appears. The screen changes as Synapse devices are added or removed from the system.
2. Click **System Information** in the Navigation Menu at left to display the count of Desksets, Gateways, and the ATA.

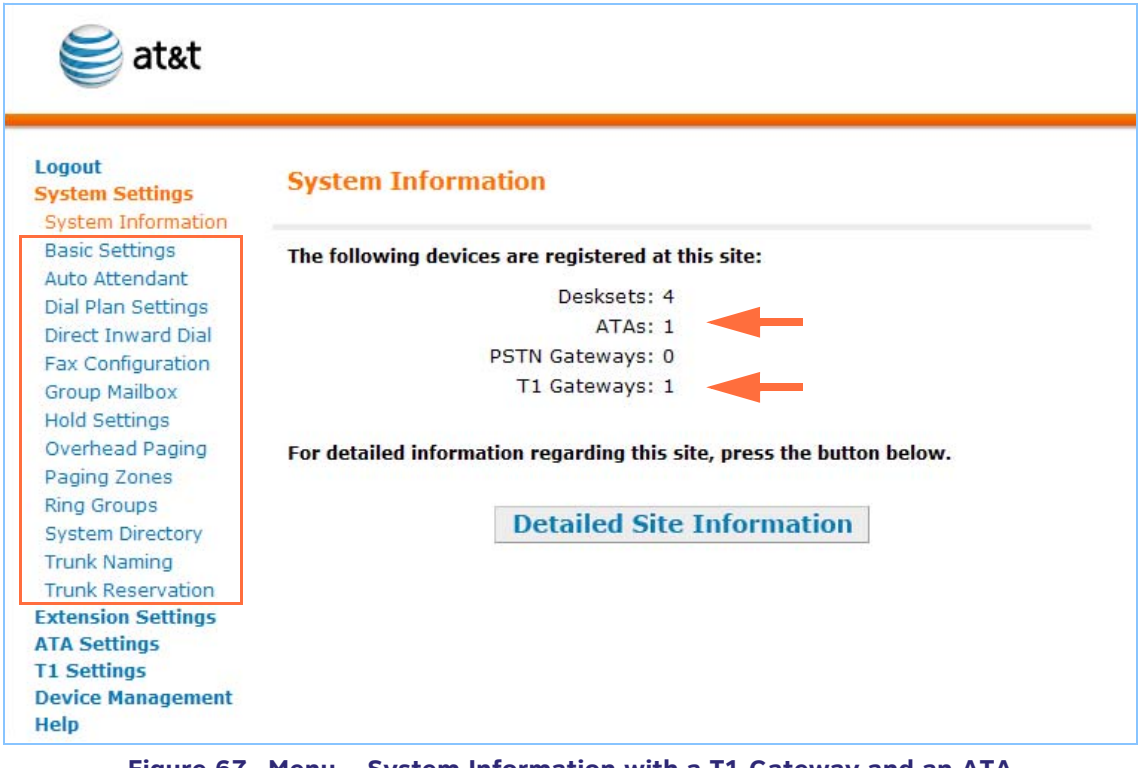


Figure 67. Menu – System Information with a T1 Gateway and an ATA

To view System Information of a system with PSTN and T1 Gateways and an ATA:

1. Log in as administrator. See *"Log in as Administrator" on page 68*. The screen shown in Figure 68 appears. The screen changes as Synapse devices are added or removed from the system.
2. Click **System Information** in the Navigation Menu at left to display the count of Desksets, Gateways, and the ATA.

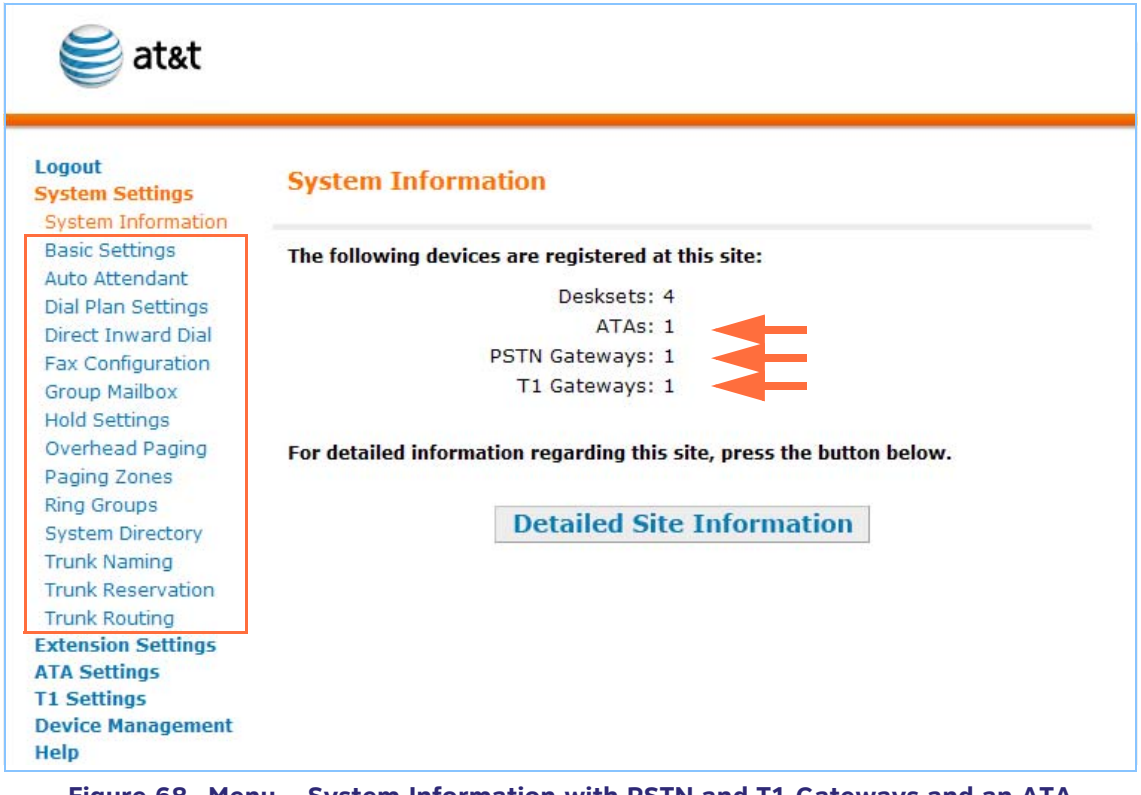
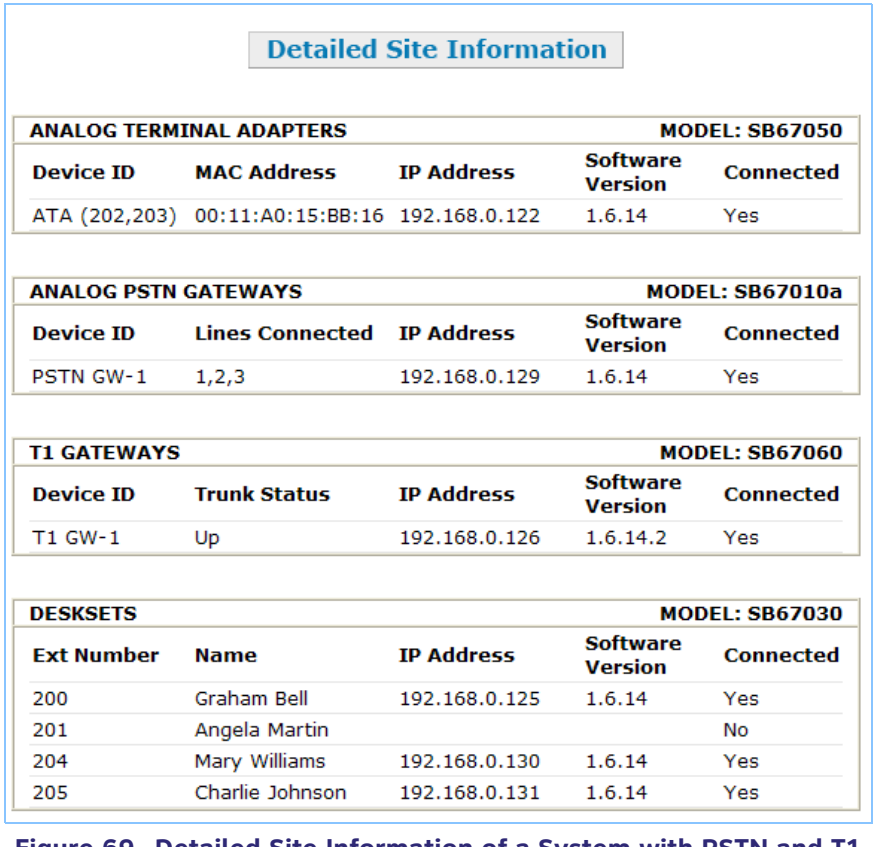


Figure 68. Menu – System Information with PSTN and T1 Gateways and an ATA

System Basic Settings

To view Detailed System Information:



Detailed Site Information

ANALOG TERMINAL ADAPTERS				MODEL: SB67050
Device ID	**MAC Address**	**IP Address**	**Software Version**	**Connected**
ATA (202,203)	00:11:A0:15:BB:16	192.168.0.122	1.6.14	Yes

ANALOG PSTN GATEWAYS				MODEL: SB67010a
Device ID	**Lines Connected**	**IP Address**	**Software Version**	**Connected**
PSTN GW-1	1,2,3	192.168.0.129	1.6.14	Yes

T1 GATEWAYS				MODEL: SB67060
Device ID	**Trunk Status**	**IP Address**	**Software Version**	**Connected**
T1 GW-1	Up	192.168.0.126	1.6.14.2	Yes

DESKSETS				MODEL: SB67030
Ext Number	**Name**	**IP Address**	**Software Version**	**Connected**
200	Graham Bell	192.168.0.125	1.6.14	Yes
201	Angela Martin			No
204	Mary Williams	192.168.0.130	1.6.14	Yes
205	Charlie Johnson	192.168.0.131	1.6.14	Yes

Figure 69. Detailed Site Information of a System with PSTN and T1 Gateways, an ATA, and Four Desksets Installed

1. Log in as administrator. See *"Log in as Administrator" on page 68*.

   A screen similar to the screen shown in *Figure 65 on page 72* appears.

2. Click Detailed Site Information to see the PSTN lines connected, a list of all extensions, and other information specific to each installed device, as shown in Figure 69. There may be a delay as the system gathers this information.

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

To view or modify the System Basic Settings:

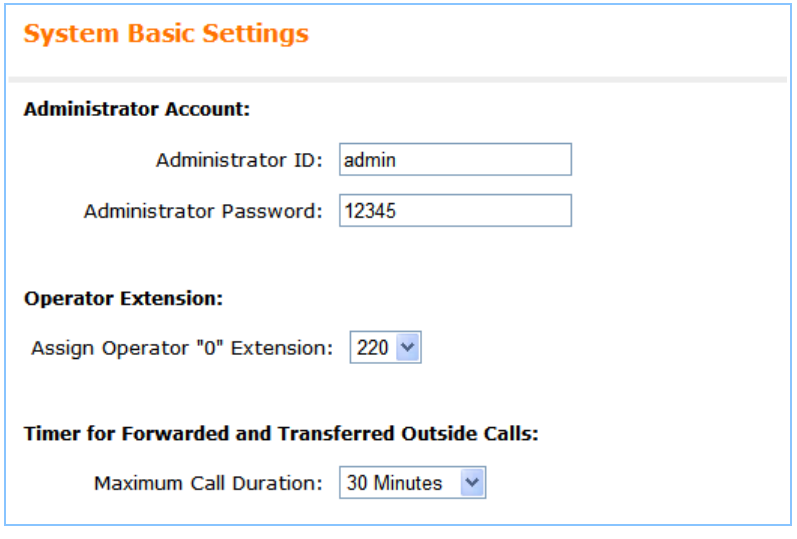
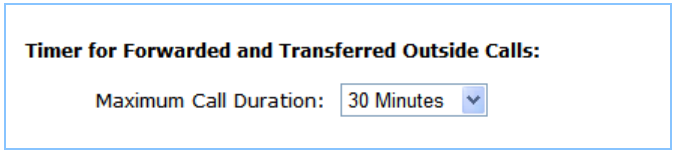


Figure 70. System Basic Settings Menu, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*).
2. Click **System Settings**, then **Basic Settings** in the Navigation Menu at left to display the screen shown in Figure 70.
3. Change the **Administrator User ID** and/or **Administrator Password**. The **Administrator User ID** and **Administrator Password** are limited to four to six digits. Values outside this range generate an error message.
4. Any Deskset can be designated as the system operator. Incoming calls are forwarded to the operator extension if the caller presses **0** (zero) after the Auto Attendant answers. If the Auto Attendant is not enabled, the system defaults to having all incoming calls ring as specified by the SA.
   a. Click the drop-down list under **Operator Extension**.
   b. Select the extension to assign as operator; the default for systems with three-digit extension numbers is 200.
   c. To change where incoming calls ring when the Auto Attendant is off, see *"Auto Attendant Timing" on page 82*.

To view or modify the System Basic Settings: (Continued)	
 **Figure 71. System Basic Settings Menu, Part 2**	5. Select a **Maximum Call Duration** for the **Timer for Forwarded and Transferred Outside Calls** feature to limit the duration of forwarded incoming calls when they are forwarded to non-system phone numbers, such as to cell phones. When you forward these calls, two of your 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.

To view or modify the System Basic Settings: (Continued)

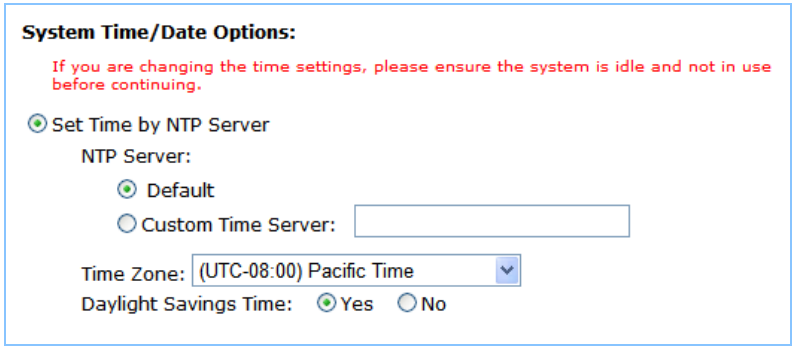


Figure 72. System Basic Settings Menu, Part 3

6. The time can be automatically set from the online Network Time Protocol (NTP) Server (recommended), a custom time server, or within the WebUI.

NOTE Before changing the system time or date, make sure that there are no calls in progress to ensure all Desksets are updated.

- Click the **Set Time by NTP Server** button, as shown in Figure 72:

  a. Click the **Default** button to set the time automatically from the Network Time Protocol (NTP) server.

  b. Click the **Custom Time Server** button if you have your own preferred time server, then enter the server's URL into the field.

  c. Select your time zone from the **Time Zone** drop-down list.

  d. Click the **Yes** or **No** button for **Daylight Savings Time**.

To view or modify the System Basic Settings: (Continued)

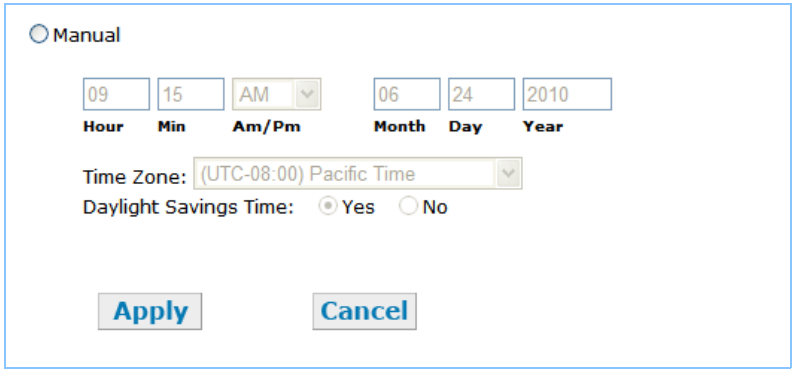


Figure 73. System Basic Settings Menu, Part 4

- Click the **Manual** button.

  a. Enter the current time and date information.

  b. Select your time zone from the **Time Zone** drop-down list.

  c. Click the **Yes** or **No** button for **Daylight Savings Time**.

7. Click Apply to save these settings when you are done or click Cancel to return to refresh the screen without saving the changes.

Auto Attendant

The Auto Attendant automatically answers incoming calls. Use the **Auto Attendant General Settings** to set up the Auto Attendant and to determine where calls will ring when the Auto Attendant is turned off. Depending on your system setup, callers hear the Auto Attendant main menu. This menu tells 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, etc.). This menu can be set up to change at different times of the day (day, lunch, and night).

Figure 74 shows the **Auto Attendant General Settings** screen.

NOTE

If no digit keys are pressed a few seconds after the voice prompt, the voice prompt replays. After replaying the voice prompt a few times, the Auto Attendant hangs up the call.

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

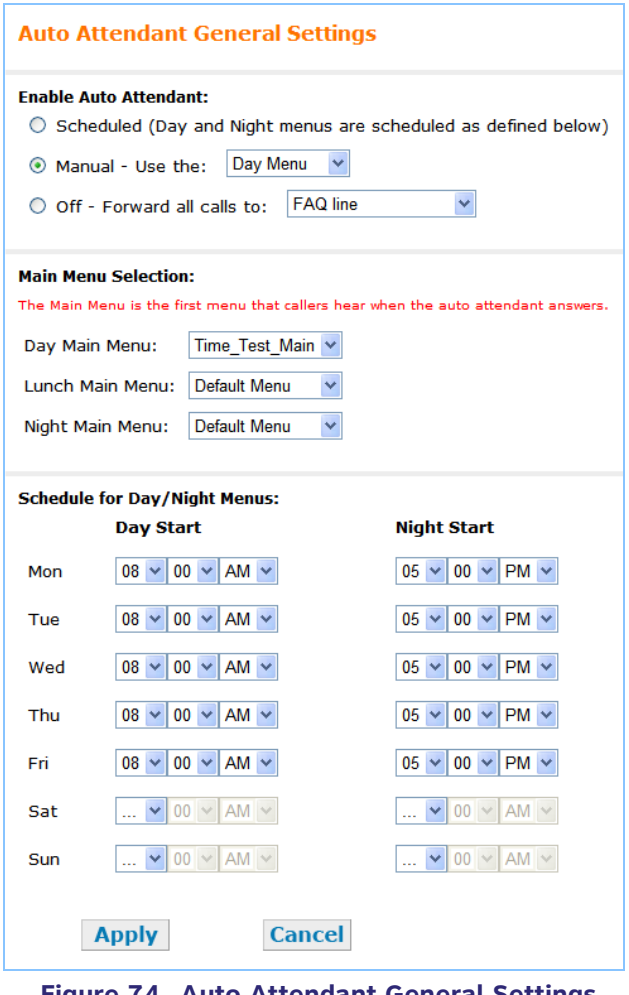


Figure 74. Auto Attendant General Settings

Auto Attendant Timing

Use Auto Attendant Timing to set the system to automatically answer calls, set the times for different opening messages to callers, and determine where incoming calls ring.

To set up the Auto Attendant timing:

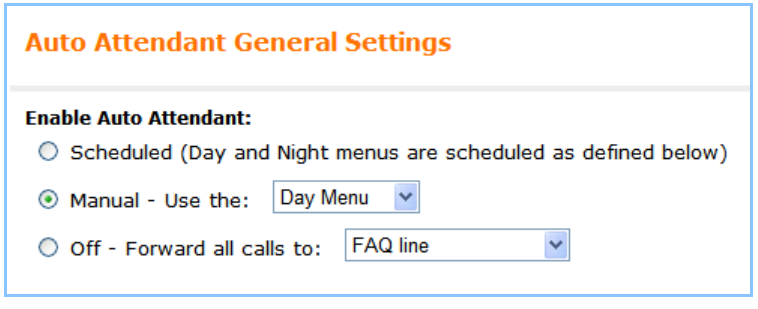


Figure 75. Enable Auto Attendant

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Auto Attendant**, then **General Settings** in the Navigation Menu at left.
3. Locate **Enable Auto Attendant**, shown in Figure 75.
4. Click one of the **Enable Auto Attendant** buttons:
   - To automatically change the message according to the schedule you set up, click the **Scheduled** button. See *"Auto Attendant Schedule" on page 85*.
   - To immediately change to a different time mode, click the **Manual** button.

     To choose a mode, click on the drop-down list beside this option and select **Day Menu**, **Lunch Menu**, or **Night Menu**. The default is **Day Menu**.

To set up the Auto Attendant timing: (Continued)

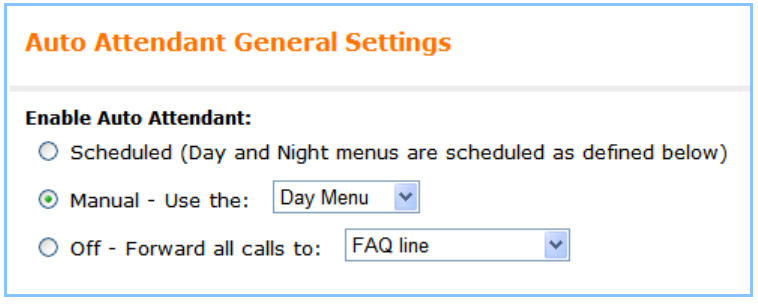


Figure 76. Enable Auto Attendant

- To have all incoming calls ring at a specific Ring Group or extension, click the **Off** button shown in Figure 76.

  Then select the target from the **Off** drop-down box. All outside calls will be forwarded to that target as soon as they arrive.

  You can have outside calls ring at the operator, any extension, a Ring Group, or a Ring Group of all extensions. This 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.

NOTE Note: If the call is not picked up, the Call Forward–No Answer settings for either the extension or the Ring Group apply.

5. When you are done, click Apply to save these settings or click Cancel to refresh the screen without saving the changes.

Auto Attendant Main Menu Selection

The Auto Attendant main menu is what callers hear when the Auto Attendant answers an incoming call. If you have not created custom Auto Attendant main menus (see *"Creating Auto Attendant Menus" on page 86*), the Auto Attendant main menu for each mode is set to the default menu, as shown in Figure 77. The default prompt is: "Enter the extension number or enter 0 for the operator".

Once you have created an Auto Attendant main menu (see *"Creating Auto Attendant Menus" on page 86*), you can select it to play for callers.

▸ ***To select the Main Menus:***

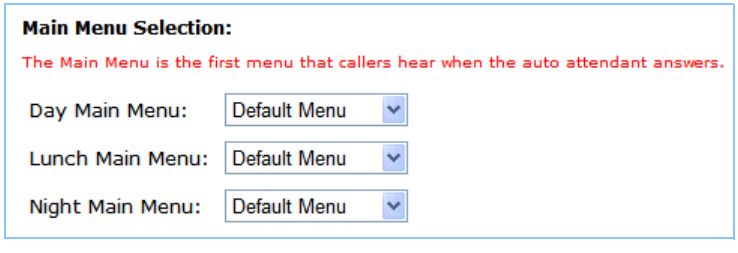


Figure 77. Auto Attendant Main Menu Selection

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Auto Attendant**, then **General Settings** in the Navigation Menu at left.
3. Locate **Main Menu Selection**, as shown in Figure 77, and choose the menu for that time from the drop-down box.
   - You can select a custom menu regardless of the intended mode (Day, Lunch, or Night).
   - You can also create other menus that callers can choose by pressing dial keys on their phone. For instance, callers might choose to access a menu announcing your hours of operation.
4. When you are done, click Apply to save these settings or click Cancel to refresh the screen without saving the changes.

Auto Attendant Schedule

You can accept the default Day and Night Start times or use the bottom portion of the Auto Attendant General Settings screen to set the day and night start times for each day of the week.

To set the Auto Attendant schedule:

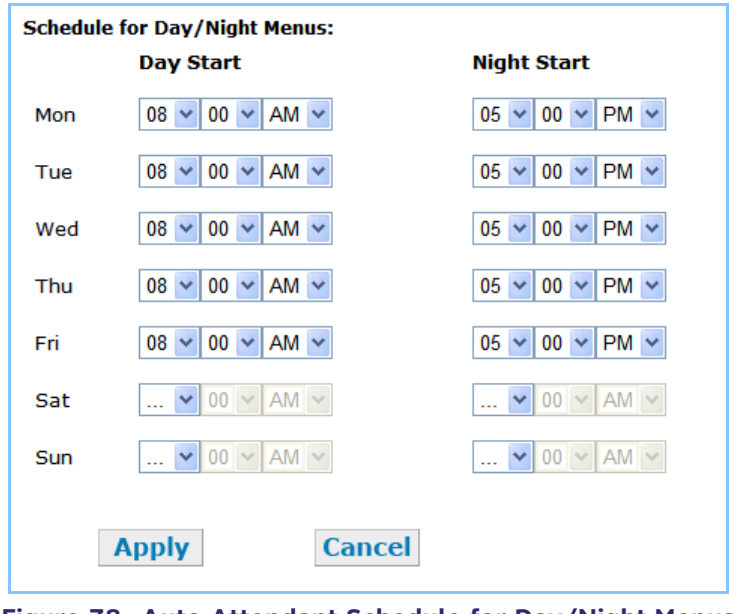


Figure 78. Auto Attendant Schedule for Day/Night Menus

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Auto Attendant**, then **General Settings** in the Navigation Menu at left.
3. Locate **Schedule for Day/Night Menus**, as shown in Figure 78.
4. Click on the drop-down boxes to adjust the time in five-minute increments. Use the three dots (**...**) entry to continue the setting for the previous time period. In Figure 78, for example, the weekend will use the time settings of the Friday night setting.
5. When you are done, click Apply to save these settings or click Cancel to refresh the screen 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 recording, write down the announcements you want callers to hear during daytime, lunchtime, and nighttime calls.

To create or edit a menu:

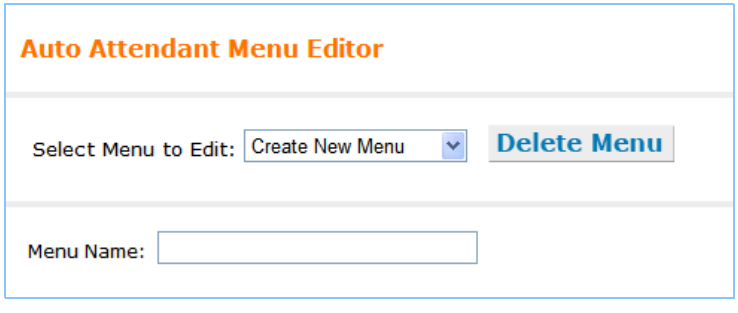


Figure 79. Auto Attendant Menu Editor, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Auto Attendant**, then **Menus** in the Navigation Menu at left to display the screen shown in Figure 79.

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

3. You can add or edit a menu.
   - To add a new menu (you can define up to 20 menus):
     a. Click on the **Select Menu to Edit** drop-down box and select **Create New Menu**.
     b. Give the menu a name that will help you remember its purpose. For instance, if you create a menu listing your business hours, you might call it "Hours".

To create or edit a menu: (Continued)

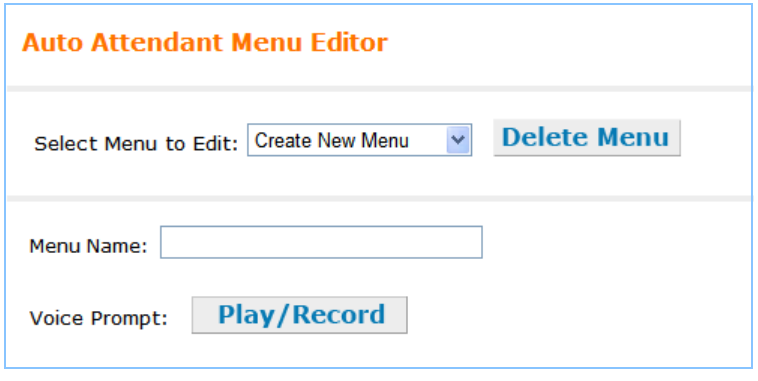


Figure 80. Auto Attendant Menu Editor, Part 2

- To edit an existing menu:

  a. From the **Select Menu to Edit** drop-down box, select the menu that you want to edit.

  b. Change the name, if desired.

4. Optional: Click Play/Record to record a menu voice prompt. The **Auto Attendant Voice Prompts** screen shown in *Figure 83 on page 90* appears.

   a. Select an extension to be used for recording the prompt.

   b. Follow the procedure on the screen to record a prompt. Hang up before you click Save Recording or your recording will not be saved.

To create or edit a menu: (Continued)

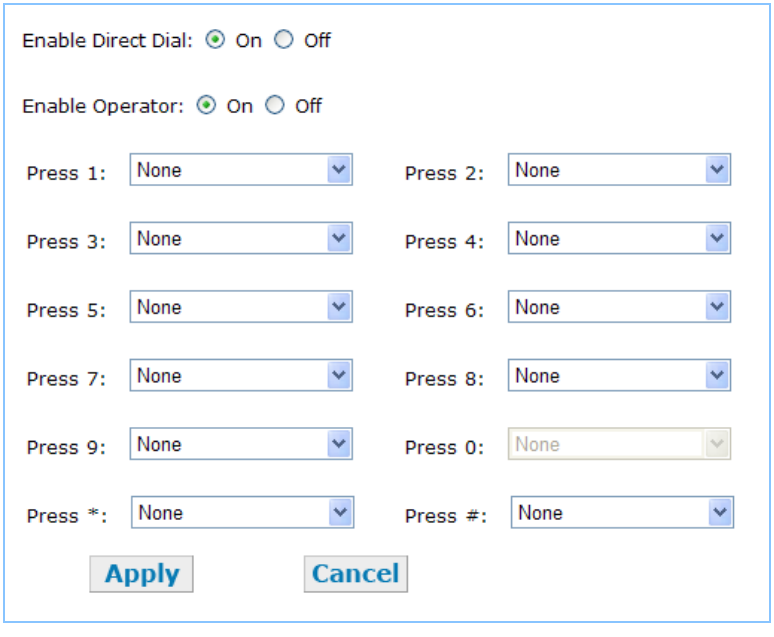


Figure 81. Auto Attendant Menu Editor, Part 3

5. Set Enable Direct Dial:

   Click the **Enable Direct Dial On** button shown in Figure 81 to allow callers to directly dial extensions.

6. Enable the operator:

   Click the **Enable Operator On** button 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.

7. Set the dial key values:

   Program an action for each digit as needed by selecting the action from each digit's drop-down list.

CAUTION

If you assign dial key values that are the same as the first digit of any extension, callers will be unable to dial those extensions. Instead, they will be connected to the menu action associated with that key value. See *"Extension Settings" on page 145**.*

8. When you are done, click Apply to save these settings or click Cancel to refresh the screen without saving the changes.

To delete a current menu:

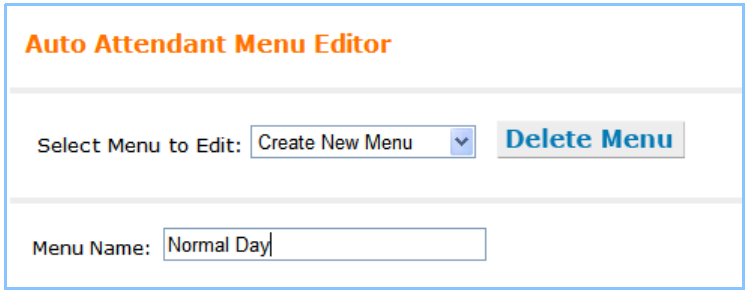


Figure 82. Auto Attendant Menu Editor

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Auto Attendant**, then **Menus** in the Navigation Menu at left to display the screen shown in Figure 82.
3. Select the menu name from the drop-down list. The selected menu name appears in the **Menu Name** dialog box.
4. Click Delete Menu. The menu is deleted and the screen refreshes.

Auto Attendant Voice Prompts

To record Auto Attendant voice prompts:

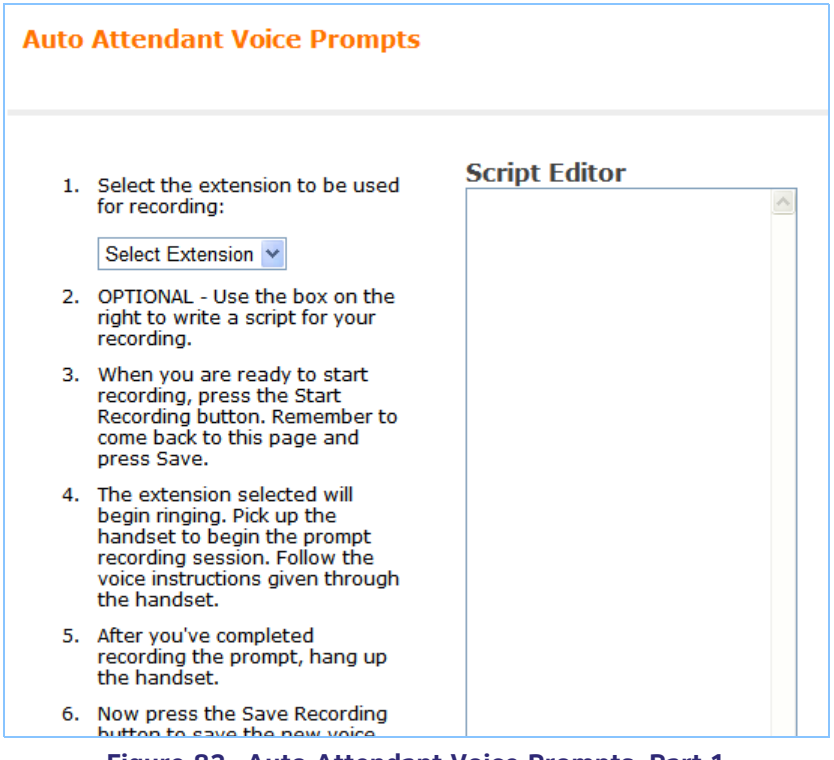


Figure 83. Auto Attendant Voice Prompts, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Auto Attendant**, then **Menus** in the Navigation Menu at the left side of the screen.
3. Click Play/Record to display the screen shown in Figure 83.
4. Record the voice prompt.
   a. Identify an extension from which to record the voice prompts so you can use the telephone microphone for recording. Choose an extension that is not set up to automatically forward calls.
   b. Press Start Recording. The selected extension rings.
   c. Lift the Handset or press **SPEAKER** to hear instructions for making the recording.
      - Press **1** on the Deskset keypad to record the message.
      - Press **5** to stop recording.
      - Press **2** on the Deskset keypad to play the just recorded announcement. Press **1** to record it again.

To record Auto Attendant voice prompts: (Continued)

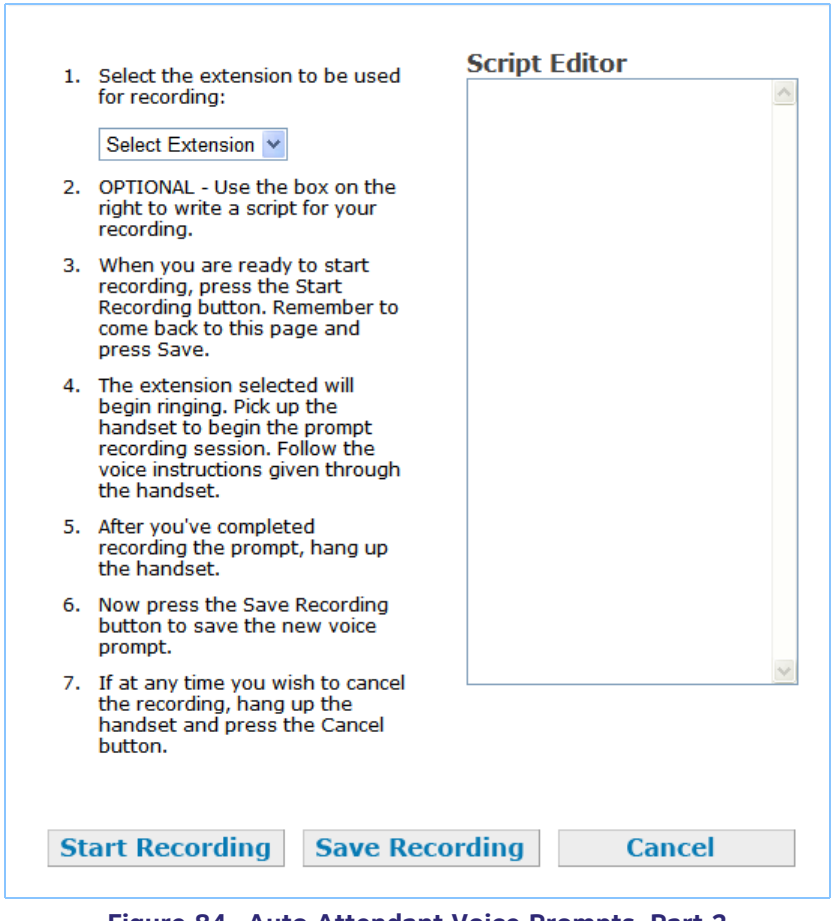


Figure 84. Auto Attendant Voice Prompts, Part 2

d. Hang up when you are finished recording.

e. Press Save Recording, as shown in Figure 84. You return to the Auto Attendant Menu Editor so that you can add actions to the menu. If you press Save Recording before you hang up, the recording is not saved.

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.

OR

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

Auto Attendant Menu Choices

To associate an action with a digit key (**Press 1**, **Press 2**, **Press 3**), select the action from the drop-down list described in Table 3. When the caller presses that key, the described action occurs. Create as many actions as you wish. Click Apply when done.

Table 3. 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. See *"Name Recording for Auto Attendant Directory" on page 93* and *"Extension Basic Settings" on page 146*.
Previous Menu	Plays the previous menu.
Main Menu	Plays the Auto Attendant main menu.
Default Menu	Plays the assigned default menu.
<AA Menus>	Accesses other menus that you have created and named. Select any menu that you have created to establish a structure of nested menus.
<Ring Groups>	Sends calls to a Ring Group that you have created and named. When callers select a Ring Group, every extension in that group rings.
<Group Mailboxes>	Sends calls to the Group Mailbox you have created and named.
<Extensions>	Sends calls directly to a specific extension.

NOTE

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.

Name Recording for 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 record a personal name:

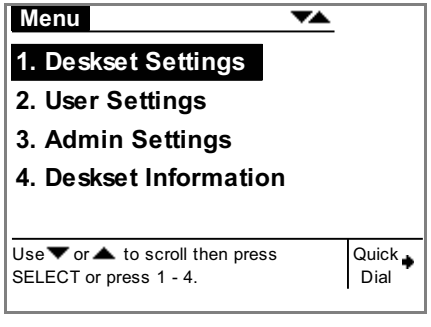


Figure 85. Menu

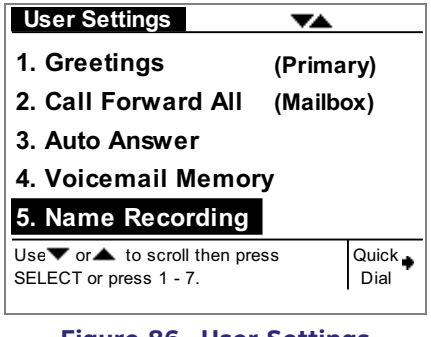


Figure 86. User Settings

1. Press **MENU** to display the **Menu** screen shown in Figure 85.
2. Press **2** to display the **User Settings** screen shown in Figure 86.

   If you have set a user password, enter it, and press **SELECT**.
3. Press **5** to display the **Name Recording** screen shown in Figure 87.

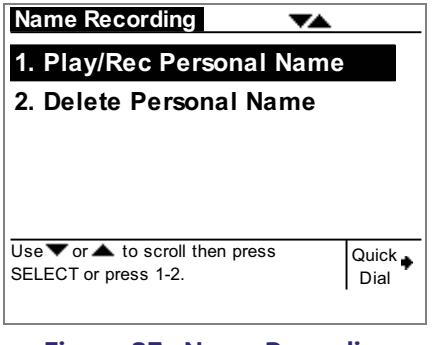


Figure 87. Name Recording

To record a personal name: (Continued)

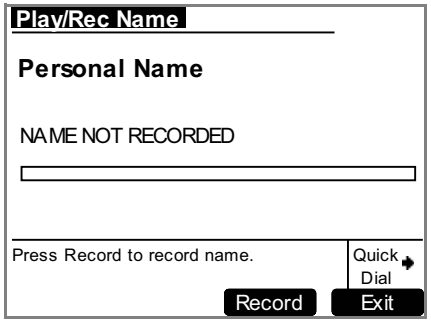


Figure 88. Play/Rec Name

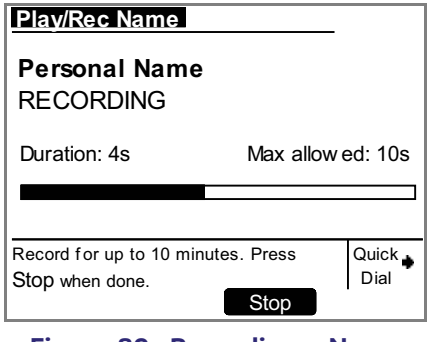


Figure 89. Recording a Name

4. Press **1** to display the **Play/Rec Name** screen shown in Figure 88.
5. Press Record to record a personal name. The screen shown in Figure 89 appears.

   You are limited to a 10-second recording; recording stops automatically if you exceed the limit.
6. When you are finished recording, press Stop. The screen changes to display Play and Record as shown in Figure 90.
7. Press Play to review the name recording.
8. To return to the **User Settings** screen shown in *Figure 86 on page 93*, press Exit.

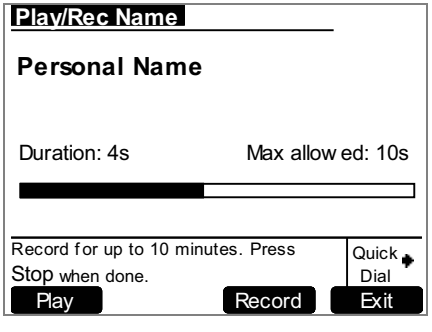


Figure 90. Recording Complete

To delete a personal name:

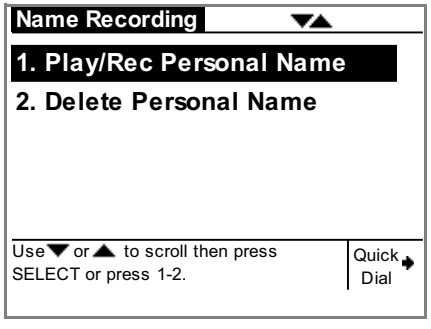


Figure 91. Name Recording

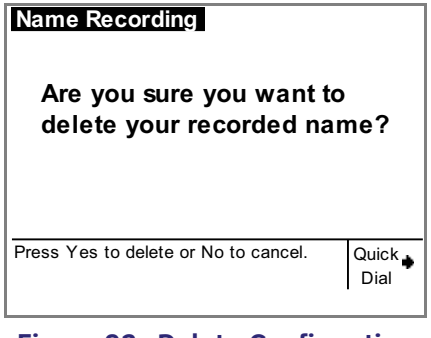


Figure 92. Delete Confirmation

1. Follow steps 1 through 3 of *"To record a personal name:" on page 93* to display the **Name Recording** screen shown in Figure 91.
2. Press **2**. The confirmation screen shown in Figure 92 appears.
3. Press Yes to confirm. After the screen in Figure 93 briefly appears, you return to the **Name Recording** screen shown in Figure 91.

   The extension number will play to callers when they look up your name in the Auto Attendant Directory.

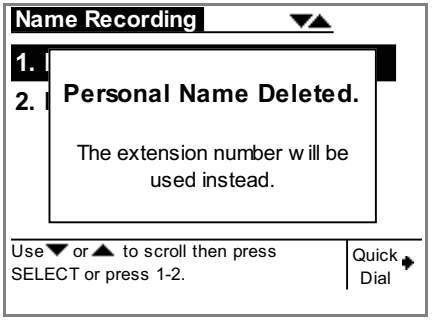


Figure 93. Personal Name

Dial Plan Settings

You can set up extension numbers for the Synapse system as either three- or four-digit extension numbers in the range of 100-999, or 1000-9999. You can also select the Prefix (initial digit) for the following:

- The **Default Phone Extension Prefix** determines the first digit to use for extension auto assignment.
- The **Park Extension Prefix** determines the first digit to use for parked calls.
- The **PSTN Trunk Prefix** determines the digit to dial before dialing outside calls.

Since two devices must be connected to the LAN before you can use the WebUI, you may need to install a Deskset before setting the Dial Plan. In this case, modify that Deskset's settings after you set the Dial Plan. To change existing extension number settings, see *"Extension Basic Settings" on page 146*.

To set the Dial Plan:

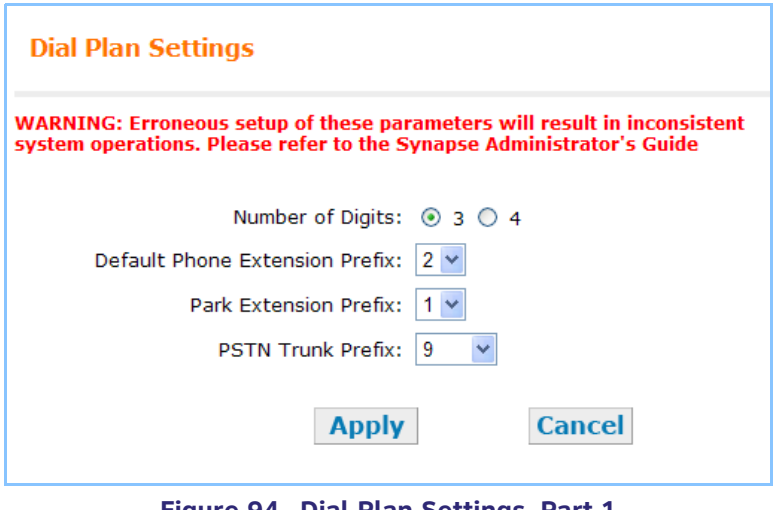


Figure 94. Dial Plan Settings, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Dial Plan Settings** in the Navigation Menu at left. The screen shown in Figure 94 appears.
3. Select the **Number of Digits** for all of your extension numbers.
4. Select the three number prefixes from their drop-down lists. Each prefix number can be used once. The drop-down lists do not include any already used prefix numbers. If you need a number assigned to another prefix, change it to another number first.

   For example, to use **1** as the **Default Phone Extension Prefix**, first reassign the **Park Extension Prefix** to a number other than **1** or **9**.

To set the Dial Plan: (Continued)

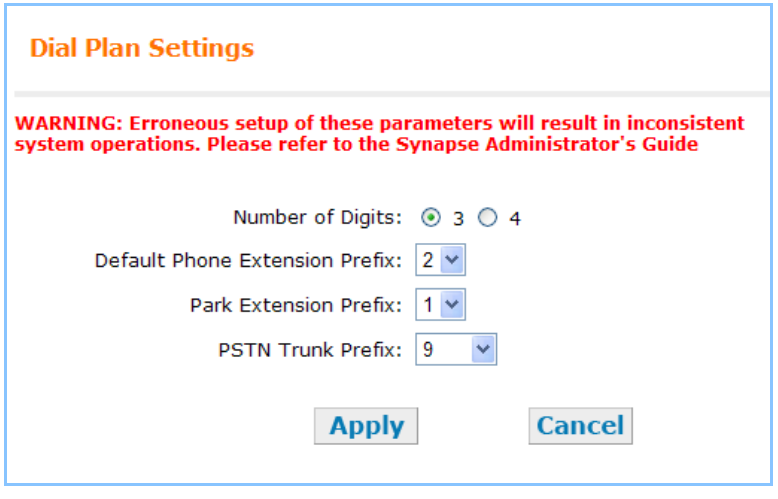


Figure 95. Dial Plan Settings, Part 2

a. 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 the **PSTN Trunk Prefix**.

   You can still manually assign an extension with a different prefix number. See *"Change an Extension Number" on page 171*.

CAUTION

If you assign an extension number whose first digit is the same as an Auto Attendant menu dial key, callers will be unable to dial that extension. Instead, they will be connected to that Auto Attendant menu action. See"Auto Attendant" on page 81.

To set the Dial Plan: (Continued)

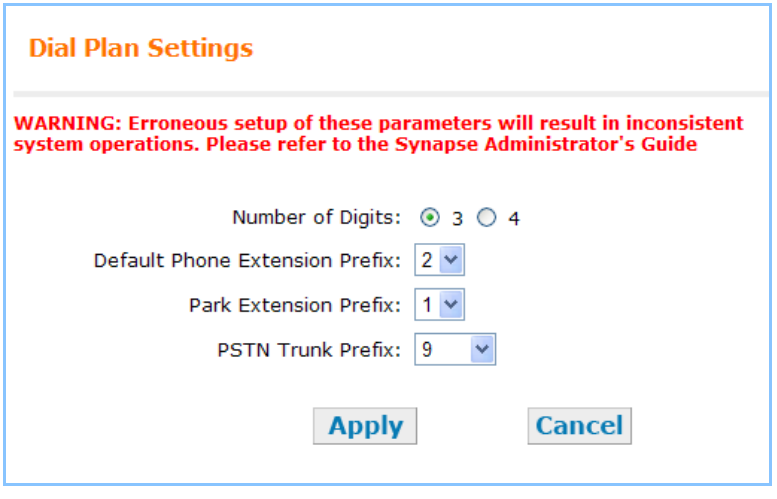


Figure 96. Dial Plan Settings, Part 3

b. Select the **Park Extension Prefix** to be the initial digit used for parked calls, as shown in Figure 95. For example, if set to 8, the park extension range would be from 800 to 899. The **Park Extension Prefix** should not match the **PSTN Trunk Prefix**.

- If the **PSTN Trunk Prefix** is set to **none**, the SA must 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.

To set the Dial Plan: (Continued)

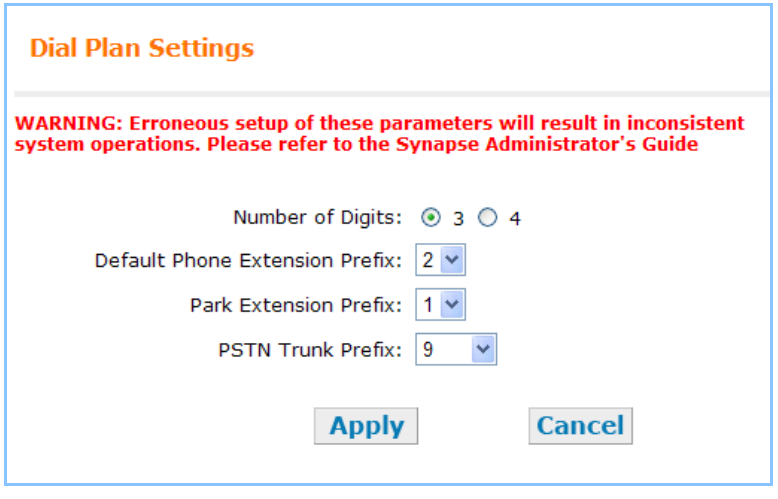


Figure 97. Dial Plan Settings, Part 4

c. Select the **PSTN Trunk Prefix** to determine the digit to have users dial to access an outside line.

- If you manually assign an extension that overlaps with the **PSTN Trunk Prefix**, then dialing an external call dials that extension instead.

  For example: If the **PSTN Trunk Prefix** = **8**, dialing 8-1-6 will ring extension 816.

  The **PSTN Trunk Prefix** should not match the **Default Phone or the Park Extension Prefix**.

Results of setting **PSTN Trunk Prefix** to **none**:

- A user can dial just by entering the outside phone number, such as 232-555-0176.
- When auto-assigning extensions, the system skips all x11 numbers (such as 411, 611, and 911), as these are used for telephone network services.
- If the first few digits of an area code (e.g., 232-555-0176) match an extension (e.g., Ext. 232), the extension is dialed. The SA should ensure that commonly used area codes are not being used as extension numbers.
- If the **Park Extension Prefix** is the default **1**, no long distance calls can be completed, since the system tries to find a parked call for that number.

To set the Dial Plan: (Continued)

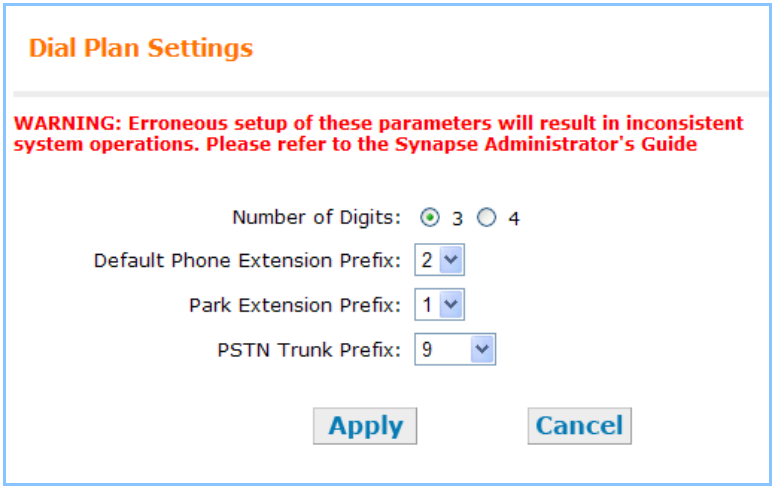


Figure 98. Dial Plan Settings, Part 5

CAUTION

Users will not be able to dial international calls that start with **0** *(zero) because the calls will go to the system Operator.*

5. When you are done, click Apply to save these settings or click Cancel to refresh the screen without saving the changes.

6. 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 171*.

[T1] Direct Inward Dial (DID)

Use the **Direct Inward Dial** screen to assign unique telephone numbers to specific Desksets. Callers can bypass the Auto Attendant or Operator by using those telephone numbers. The T1 Gateway uses the DID data from your Telephone Service Provider to automatically route incoming calls.

[T1] DID Configuration

To set up Direct Inward Dial numbers:

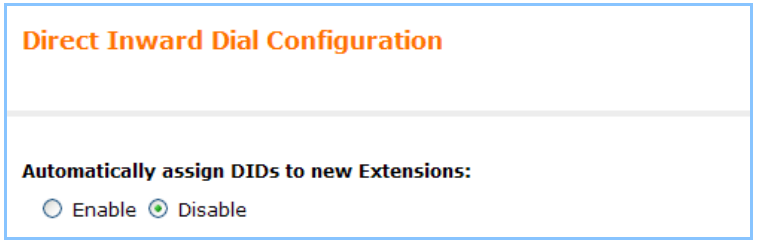


Figure 99. DID Configuration, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings** and then **Direct Inward Dial** in the Navigation Menu at left. The screen shown in Figure 99 appears.
3. Choose to **Enable** or **Disable** automatically assigning DIDs to new extensions. When enabled, newly added Desksets are automatically assigned the lowest available extension number and, if available, the corresponding DID number. If there are no available extension numbers with corresponding DID numbers, the new extension is created with no DID number.

To set up Direct Inward Dial numbers: Continued

For example, if a new Deskset were 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 *"[T1] DID Assignments" on page 105*.

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).

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

To set up Direct Inward Dial numbers: (Continued)

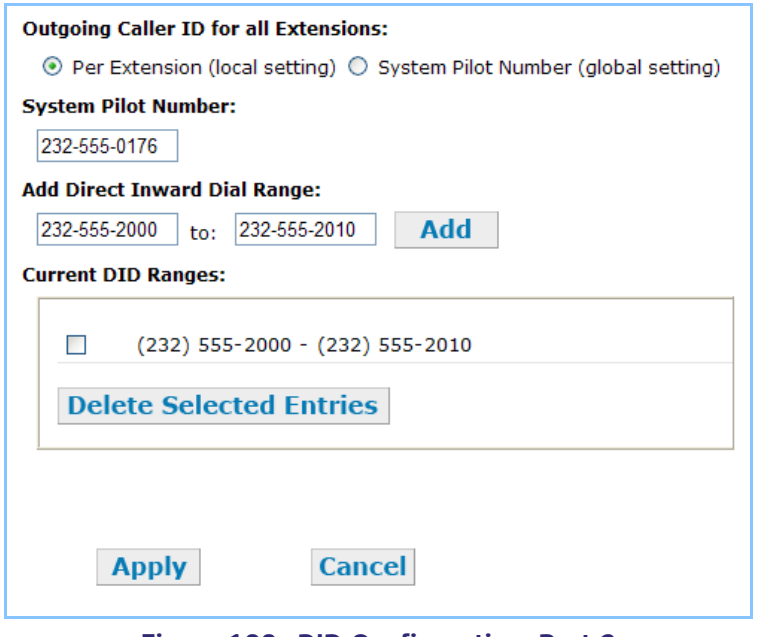


Figure 100. DID Configuration, Part 2

4. As shown in Figure 100, select the **Outgoing Caller ID for all Extensions**. The outgoing caller ID is the Synapse user's name and phone number that displays 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, see *"Extension Basic Settings" on page 146*.

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

5. Enter the **System Pilot Number**. The System Pilot Number is usually the company's main telephone number.

To set up Direct Inward Dial numbers: (Continued)

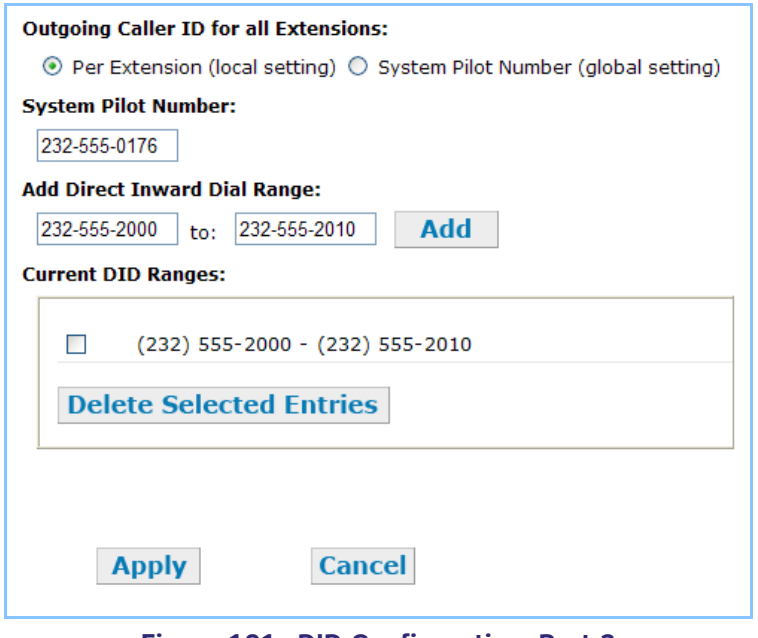


Figure 101. DID Configuration, Part 3

6. 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.

   CAUTION *If you assign Direct Inward Dial numbers with the first digit of any extension 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 "Auto Attendant" on page 81.*

7. Optional: To delete unwanted DID number ranges, select the unwanted DID number range in the **Current DID Ranges** list and click Delete Selected Entries.

8. When you are done, click Apply to save these settings or click Cancel to refresh the screen without saving the changes.

[T1] DID Assignments

If you did not enable automatic assignment (see *"[T1] DID Configuration" on page 101*), you must manually assign DID numbers. In addition to the manual assignment process described in this section, you can also manually assign DID numbers on the **Extension Basic Settings** screen (see *"Extension Basic Settings" on page 146*), and if an optional ATA is present, on the **ATA Settings** screen (see *"[ATA] ATA Settings" on page 158*).

If you are reconfiguring an existing system, see *"Reconfiguration of an Existing System" on page 143*.

The **Direct Inward Dial Assignments** screen, shown in *Figure 100 on page 103*, displays all DID numbers and their assignments.

To manually assign Direct Inward Dial numbers:

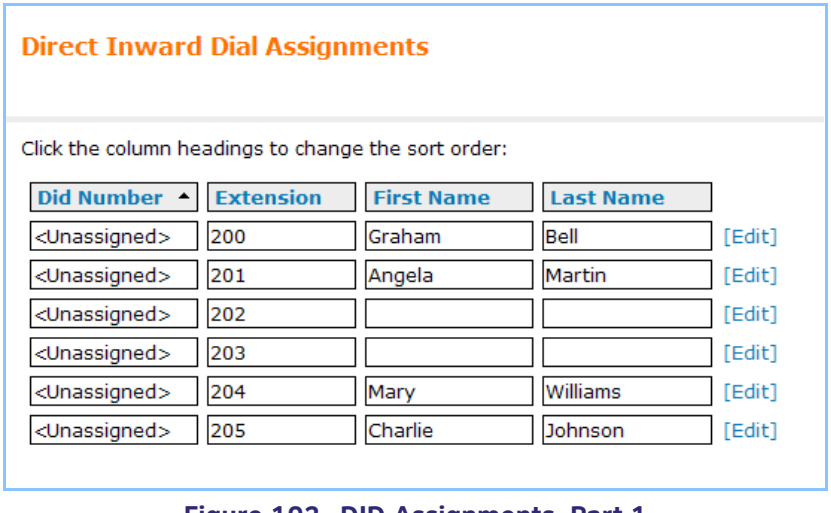


Figure 102. DID Assignments, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings, Direct Inward Dial**, and then **DID Assignments** in the Navigation Menu at left. The screen shown in Figure 102 appears.
3. Sort the fields in the **Direct Inward Dial Assignments** table as desired. Clicking the buttons above each column changes which column the information is sorted by. Press the button again to change between ascending and descending order.
4. Click the [Edit] button to display the **Extension Basic Settings** screen for that extension, as shown in *Figure 103 on page 106*.

To manually assign Direct Inward Dial numbers: (Continued)

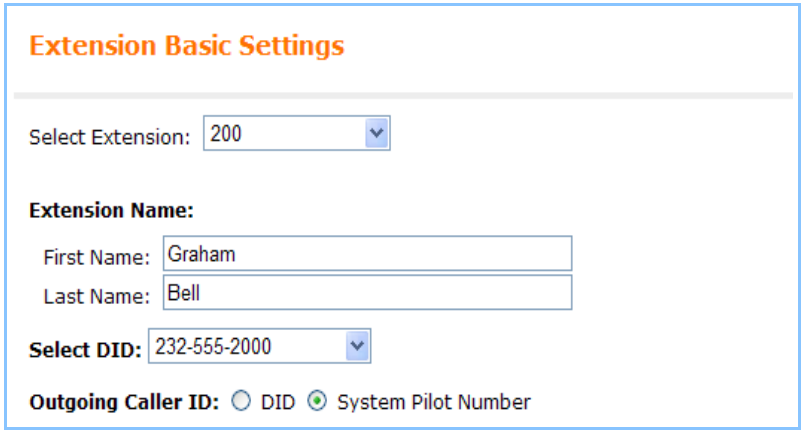


Figure 103. DID Assignment on Extension Basic Settings Screen

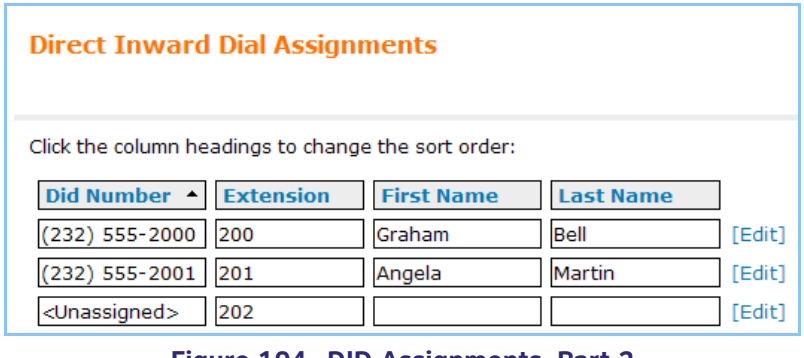


Figure 104. DID Assignments, Part 2

5. In the center of the screen, use the **Select DID** drop-down list to select a DID Number. Only available DID Numbers appear in the list.

   Select **Unassigned** to release the DID Number and make it available.

   If you assign a DID Number to an extension that already has a DID Number assigned to it, the new number is assigned; the old DID Number is released.

6. When you are done, click Apply to save these settings or click Cancel to refresh the screen without saving the changes.

7. To edit the DID numbers of other extensions, select another extension from the **Select Extension** drop-down list and repeat steps 5 and 6.

8. To return to the **Direct Inward Dial Assignments** screen, as shown in Figure 104, press **System Settings**, then **Direct Inward Dial**, and then **DID Assignments**.

[ATA] Fax Overview

This section describes how to configure the optional AT&T SB67050 ATA device for fax reception and transmission.

If you have a dedicated fax line and low fax volume, the optional ATA offers fax switching so that you can use the fax line for both voice calls and faxes. If your fax does not have a DID number, when configured, the system detects incoming fax tones and routes those calls through the configured ATA FXS port to the fax machine. If you are already using fax switching equipment, the ATA can replace that equipment.

[T1] If the fax machine has a DID number, incoming faxes will come directly to the fax machine. Incoming voice calls should not share that channel since the fax machine will answer incoming calls.

Considerations with Using the Fax Line for Voice Calls

If your business uses a fax line for incoming voice calls, unless the fax telephone number has DID, each incoming call on that line is automatically checked by the system for a fax signal. This fax detection mode results in a delay of up to eight seconds before connecting an incoming voice call to the Auto Attendant or Operator. In addition, during the delay, the Ring Back tone generated by the CO (Central Office) is no longer heard by the caller. Instead, the caller hears the Ring Back tone generated by the Gateway.

[T1] When fax machines have DID numbers, there is no eight-second delay.

Using the fax line for outgoing calls is not restricted, but the caller ID of the fax number, not the primary business telephone number, will be sent as caller ID. This may result in some confusion if the recipient returns a missed call via their caller ID Log as they will then experience the eight-second delay mentioned above. Callers who return calls to DID telephone numbers will be calling your fax machine.

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

You cannot start a call in voice mode then switch to fax mode.

Before dialing a fax number, you must dial a 9 or whatever digit, if any, that must be dialed first for an outside call.

[ATA] Fax Configuration

A fax machine can be connected to one of the FXS ports on the ATA, as shown in Figure 105. Incoming fax transmissions are routed from a telephone connection on 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.

A telephone line must be selected as the fax line. This is done in **Fax Configuration** in the WebUI. The fax can be assigned to any telephone number, but if you have a hunt group (a telephone company feature that allows calls to a busy phone number to roll over to the next available telephone number), you should use the last phone number in the hunt group, (the numbers are seized in ascending order) so that the fax number is less likely to receive incoming voice calls. PSTN Gateway users can minimize the likelihood of using the fax line for outgoing voice calls (which could interfere with reception and sending of faxes) by using the highest numbered PSTN telephone port on the PSTN Gateway.

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.

The best mode for your installation depends on both your fax machine and your telephone line. In case of any fax issues, see *"[ATA] SB67050 ATA Troubleshooting" on page 245* for more details.

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

Figure 105. Fax Machine Connected to FXS Port

[ATA] Fax Settings

To configure the fax settings:

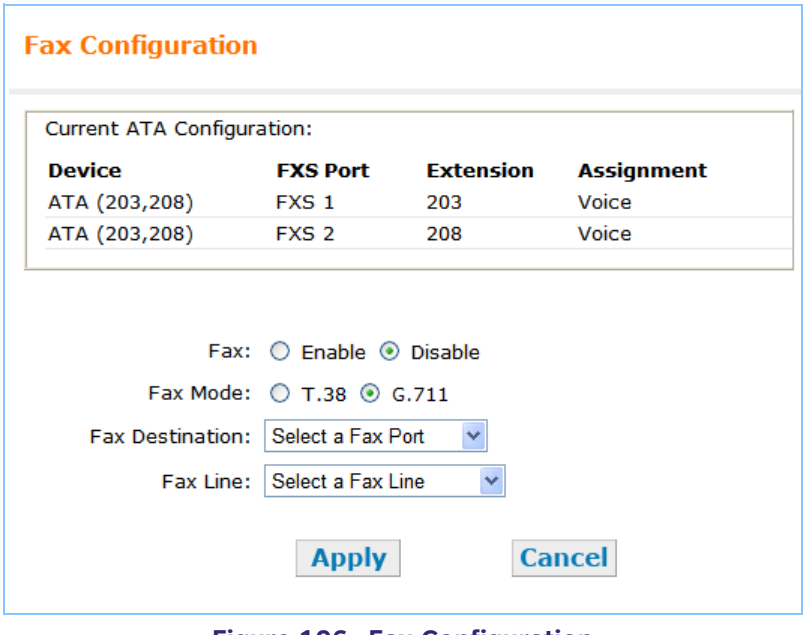


Figure 106. Fax Configuration

NOTE T1 channels cannot be set as fax lines unless they have DID numbers.

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **Fax Configuration** in the Navigation Menu at left. The screen shown in Figure 106 appears.

   The current ATA FXS Port settings are shown.
3. **Enable** or **Disable** the fax. When disabled, the incoming fax calls are directed like any other incoming calls, but faxes cannot be received.
4. [PSTN] Select the **Fax Mode**, **T.38** or **G.711**.

   The Fax default setting is G.711. If the fax fails to work in G.711 mode, switch to T.38.
5. Select the **Fax Destination** from the drop-down list. This is the ATA FXS port to which the fax machine is connected.
6. Select the **Fax Line** from the drop-down list. This is the DID number or one of the PSTN Gateway telephone lines to be used for fax communications.
7. When you are done, click Apply to save these settings or click Cancel to return to the previous screen without saving the changes.

[ATA] Group Mailbox

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 act on messages stored in Group Mailboxes.

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

The 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.

[ATA] Group Mailbox Quotas

The ATA provides 60 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 10-minute quota that is enabled and the Accounts mailbox quota is disabled, it is possible that Accounts could take up all 60 minutes of record time, leaving Sales with none.

The quotas can be set up to total more than 60 minutes and each mailbox quota can be enabled or disabled. If the quotas are all enabled and the total time does not exceed 60 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 *"To create a Group Mailbox:" on page 112*.

To view Group Mailbox settings:

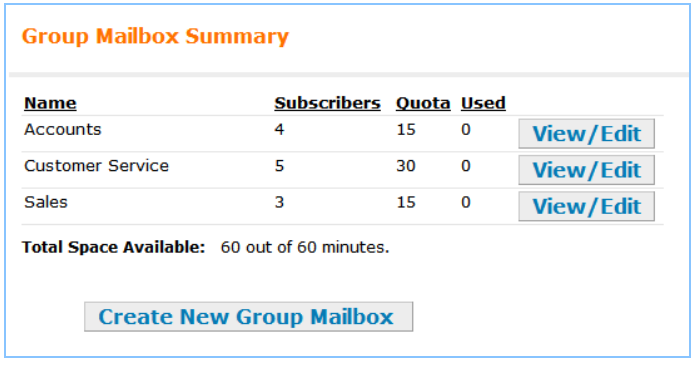


Figure 107. Group Mailbox Summary

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Group Mailbox** in the Navigation Menu at left. The screen shown in Figure 107 appears. The list is initially empty.

   The **Group Mailbox Summary** screen shows a list of configured Mailboxes in alphabetical order with the number of subscribers, the time quota assigned (if any), and the actual amount of space used.

NOTE Only if the quotas are all enabled and the total time does not exceed 60 minutes, does each mailbox quota become reserved space.

To create a Group Mailbox:

Figure 108. Create Group Mailbox Menu, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Group Mailbox** in the Navigation Menu at left to display the **Group Mailbox Summary** screen.
3. Click Create New Group Mailbox to create a new Group Mailbox. The **Create Group Mailbox** screen displays, as shown in Figure 108.
4. Enter an appropriate **Name** for the new Group Mailbox.
5. Select the **Greeting**. The preset message is "Please leave a message after the tone".

   If you want a custom greeting, click **Custom**, then press Play/Record Greeting. The **Group Mailbox Custom Greeting** screen appears. See *"[ATA] Group Mailbox Custom Greeting" on page 116*.
6. Set a **Quota**. Click **Enabled** or **Disabled**. If enabled, specify the **Minutes** (0 through 60) for this mailbox.

NOTE If you set the **Quota** to 5 minutes or less, <5 Min constantly appears on the Deskset screen.

To create a Group Mailbox: (Continued)

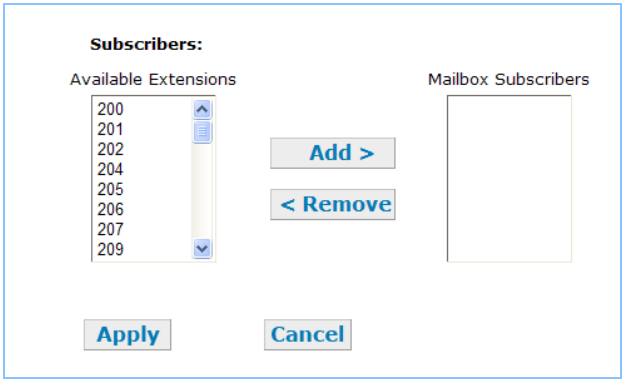


Figure 109. Create Group Mailbox Menu, Part 2

7. Assign **Subscribers**, as shown in Figure 109.

   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.

8. Click Apply to save these settings when you are done or click Cancel to return to the previous screen without saving the changes.

   The new Group Mailbox appears on each subscribed Deskset when **MESSAGES** is pressed.

To edit or delete a Group Mailbox:

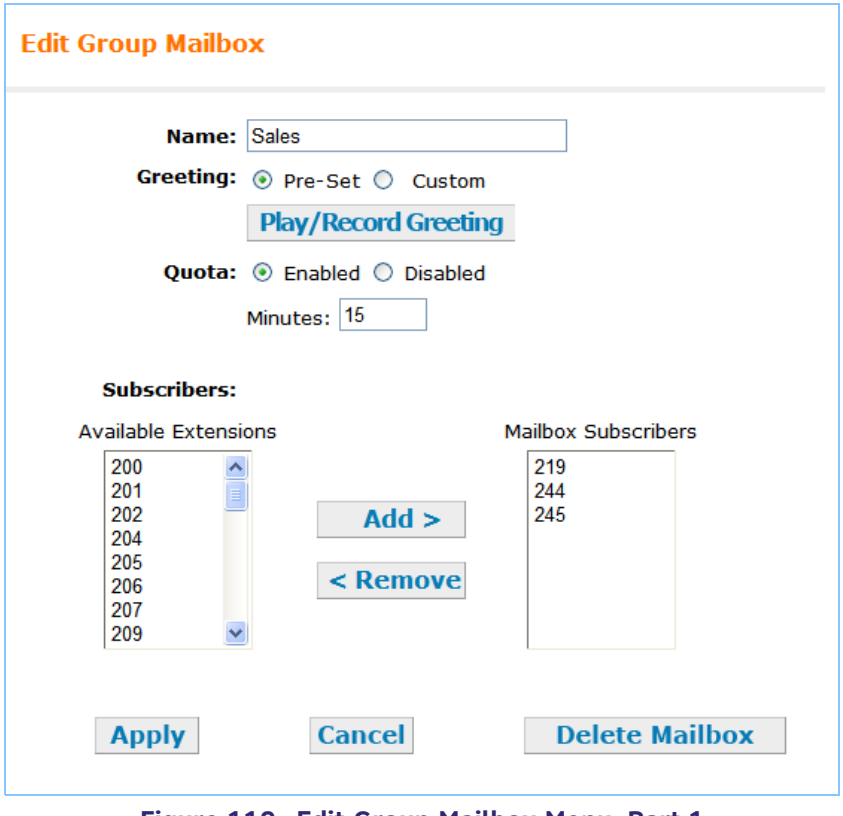


Figure 110. Edit Group Mailbox Menu, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Group Mailbox** in the Navigation Menu at left to display the **Group Mailbox Summary** screen.
3. Select the Group Mailbox you want to edit. Click the associated View/Edit button. The **Edit Group Mailbox** screen displays, as shown in Figure 110.

   OR

   Click Delete Mailbox to delete this Group Mailbox.

   - All messages are removed and the memory freed up for use by other mailboxes.
   - If the deleted mailbox was an Auto Attendant menu destination, the destination field reverts to **None**. See *Figure 81 on page 88*. If the deleted mailbox was a Ring Group Call Forward No Answer (CFNA) target, the target field reverts to "Off". See *Figure 131 on page 136*.
   - If any Desksets have set their Call Forward or CFNA targets set to the deleted mailbox, they are removed and the setting reverts to the Personal mailbox.

To edit or delete a Group Mailbox: (Continued)

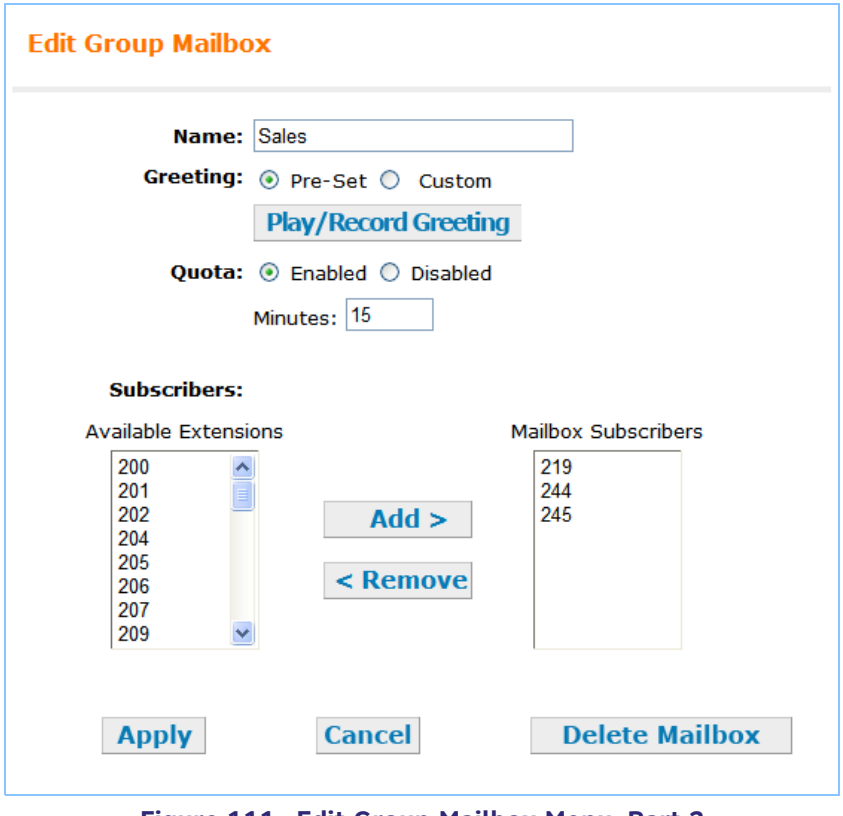


Figure 111. Edit Group Mailbox Menu, Part 2

4. 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.

5. When you are done, click Apply to save these settings or click Cancel to return to the previous screen without saving the changes.

   The new Group Mailboxes appear on each subscribed Deskset when the user presses **MESSAGES**.

[ATA] Group Mailbox Custom Greeting

To record a Group Mailbox custom greeting:

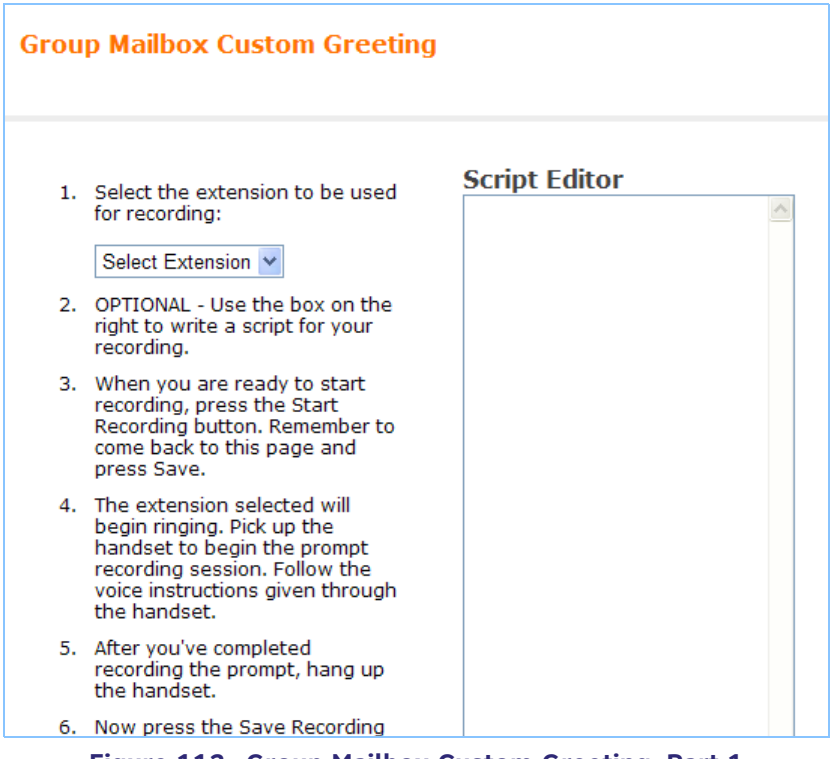


Figure 112. Group Mailbox Custom Greeting, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Group Mailbox** in the Navigation Menu at left, then click Create New Group Mailbox to create a new Group Mailbox. The **Create Group Mailbox** screen appears.
3. Press Play/Record Greeting. The **Group Mailbox Custom Greeting** screen appears, as shown in Figure 112.
4. Record the greeting:
   a. Identify an extension from which to record the voice prompts so you can use the telephone microphone for recording. Choose an extension that is not set up to automatically forward calls.
   b. Press Start Recording. The selected extension rings.

To record a Group Mailbox custom greeting: (Continued)

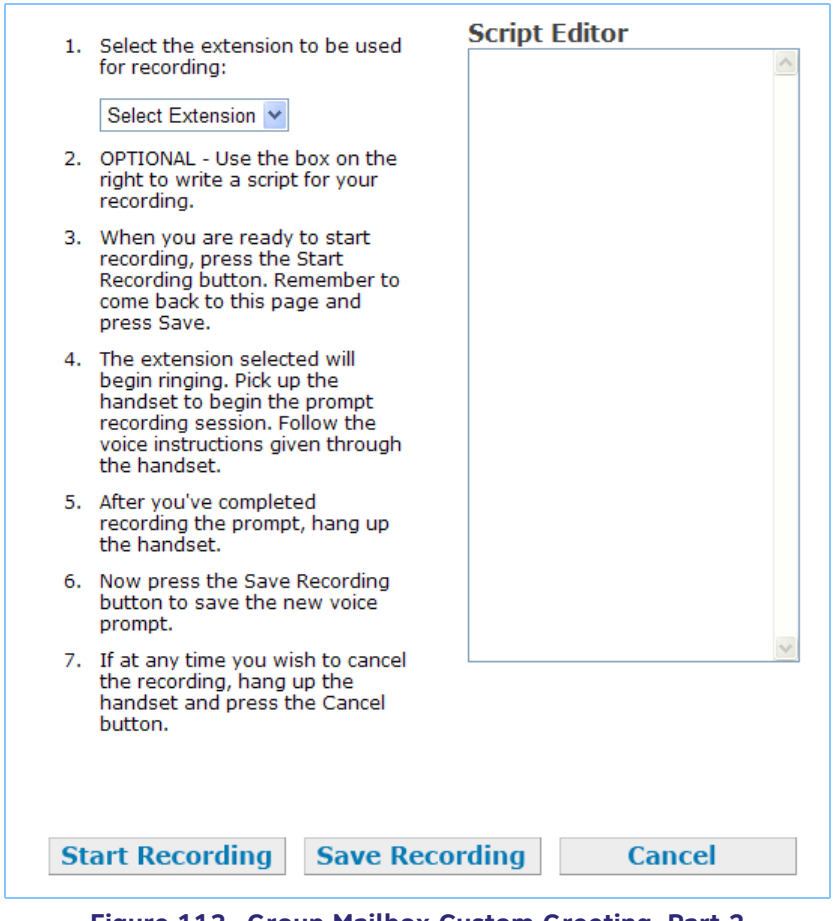


Figure 113. Group Mailbox Custom Greeting, Part 2

c. Lift the Handset or press **SPEAKER** to hear instructions for making the recording.

- Press **1** on the Deskset keypad to record the message. You can record for up to 60 seconds.
- Press **5** to stop recording.
- Press **2** on the Deskset keypad to play the just recorded announcement. Press **1** to record it again.

d. Hang up when you are finished recording.

e. Press Save Recording, as shown in Figure 113. You return to the **Create Group Mailbox** screen. If you press Save Recording before you hang up, the recording is not saved.

OR

Click Cancel to return to the **Edit Group Mailbox** screen without saving the greeting.

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

Hold Settings and [ATA] Music on Hold (MoH)

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

[ATA] 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.

- The MoH input accommodates audio sources with standard 3.5mm headset jack output with a volume adjustment.
- Set the volume of the audio device to obtain the desired level of background music on hold.
- Using other non adjustable audio source outputs such as RCA "Line Out" jacks may result in unacceptable music volume levels and should be avoided.

Figure 114. Music on Hold Source Connected to the AUX IN Jack

- Some forms of music do not play well over a telephone line.

See the Synapse Installation Guide for ATA installation instructions at **www.telephones.att.com/synapseguides**.

CAUTION *Speaker outputs should not be used as MoH audio sources as they can damage the ATA.*

NOTE 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 Settings:

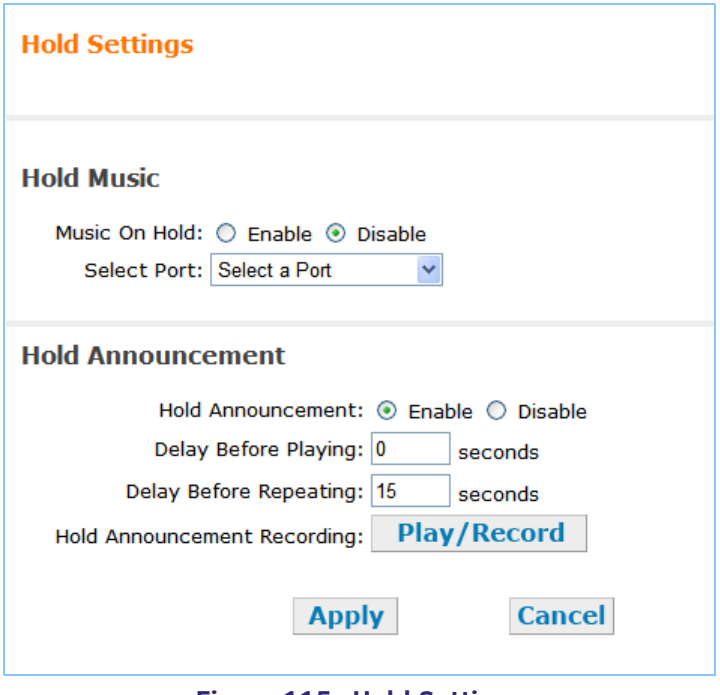


Figure 115. Hold Settings

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Hold Settings** in the Navigation Menu at left. The screen shown in Figure 115 appears.
3. [**ATA**] If you have an ATA installed, complete the Hold Music section:
   - **Enable** or **Disable Music on Hold**.
   - Select the ATA jack used: **AUX IN**.
4. If you want a hold announcement, complete the Hold Announcement section:
   - **Enable** or **Disable Hold Announcement**.
   - If you are combining the announcement with Music on Hold, specify the amount of delay before playing the announcement and the delay before it repeats. Your message will periodically interrupt the music and play.

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

To configure Hold Settings: (Continued)

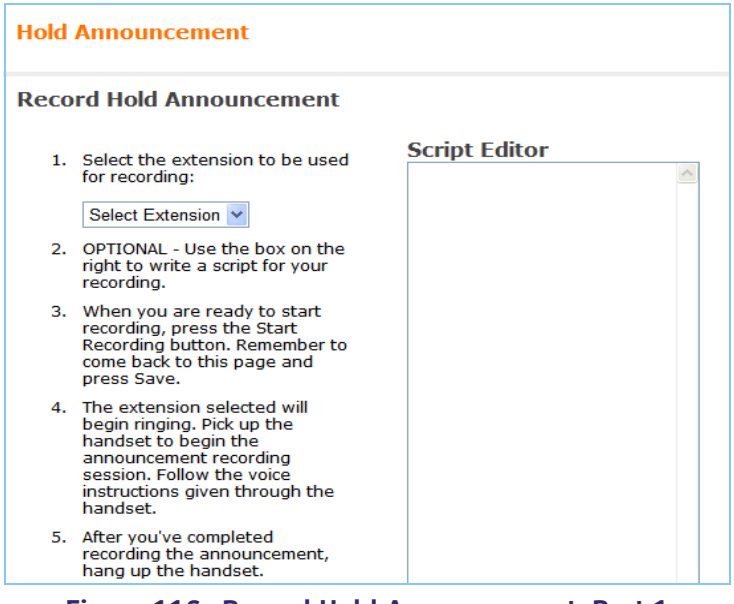


Figure 116. Record Hold Announcement, Part 1

5. Follow the procedure on the screens shown in Figure 116 and Figure 117 to record a prompt.

   a. Identify an extension from which to record the voice prompts so you can use the telephone microphone for recording. Choose an extension that is not set up to automatically forward calls.

   b. Press **Start Recording**. The selected extension rings.

   c. Lift the Handset or press **SPEAKER** to hear instructions for making the recording.

   d. Press **1** on the Deskset keypad to record the message.

      - Press **5** to stop recording.
      - Press **2** on the Deskset keypad to play the just recorded announcement. Press **1** to record it again.

   e. Hang up when you are finished recording.

   f. Press **Save Recording**. If you press **Save Recording** before you hang up the phone, your recording is not saved.

To configure Hold Settings: (Continued)

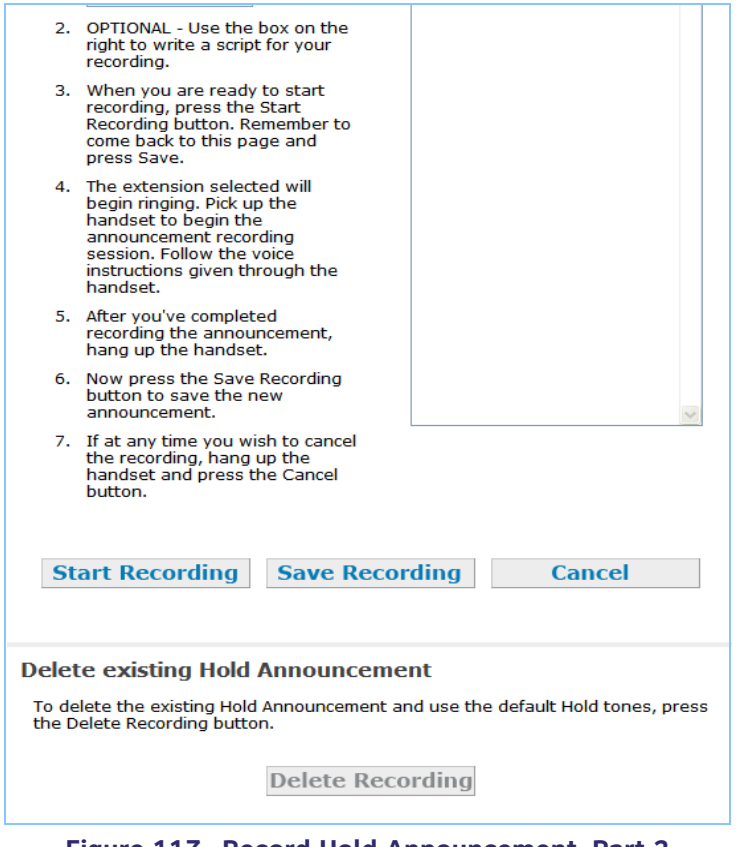


Figure 117. Record Hold Announcement, Part 2

OR

Press Delete Recording to delete the announcement.

6. When you are done, click Apply to save these settings or click Cancel to return to the previous screen without saving the changes.
7. [ATA] Test the Music on Hold 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 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.

[ATA] Overhead Paging Overview

You can set up either single or multi-zone external overhead paging (OHP), as shown in Table 4, but only one OHP system can be connected to the ATA. Synapse supports most OHP systems that can connect to PBX Analog Station (FXS) ports connections as well as those that support direct Audio Input detection, also known as VOX Detect. If you already have an OHP, you need to figure out the necessary configuration before installation and setup. This introduction may help you figure out your system. If not, refer to your OHP system's product documentation for installation and configuration instructions or contact your OHP equipment provider.

Table 4. [ATA] Single- vs. Multi-Zone Overhead Paging Systems

Single-Zone Paging	Multi-Zone Paging
Broadcasts to all overhead speakers at once.	Broadcasts to speakers grouped into separate zones.
Can be included in a Synapse Paging Zone. See *"Paging Zones" on page 131*.	Cannot be included in a Synapse Paging Zone because the multi-zone OHP cannot be paged together with Desksets.
Does not appear in the Deskset Paging Zones menu unless the SA has programmed as a zone.	Automatically appears in the Deskset Paging Zones menu as **Overhead Paging**.
Requires no additional user input to initiate a page.	Requires using the Deskset dial pad to enter digits to address the OHP paging zone.
For a connection through a FXS port, requires the SA to set a delay determined by trial and error. This delay, which starts after the user presses Start, gives the paging equipment time to prepare to broadcast the message. It is required for every page, even if the OHP is not the chosen paging zone. See *"[ATA] Single-Zone Overhead Paging Delay" on page 129*.	There is no programmed delay as the paging equipment provides feedback to the user when to start speaking.
Can be connected to an FXS port or the AUX Out jack.	Must be connected to the FXS port.

If your OHP is single-zone, you will have to decide whether it requires an FXS connection or and AUX OUT connection. You can only connect a multi-zone OHP to an ATA FXS port, i.e. a multi-zone OHP system cannot be connected to the AUX OUT port.

Equipment that can interface with the AUX OUT jack can be "dumb" in its audio output. It doesn't require any exchange of signals to be ready to broadcast.

Equipment that uses an FXS port must be able to go on and off hook, because the FXS ports use telephone signals to exchange information. The OHP generally includes some sort of controller or telephone interface, which often requires setting up things like "PABX loop start trunk port access", or "RJ11 for Tip and Ring connections".

NOTE Even though the OHP has no RJ-11 jack, it may still have a Tip/Ring interface, requiring hard wiring. Whenever possible, try both the AUX OUT jack and an FXS port to find the best configuration for your needs.

There are three possible OHP configurations.

[ATA] Single-Zone Paging

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

Single-Zone OHP equipment connected to the AUX OUT jack:

Use this configuration to connect single-zone paging equipment that uses a 3.5mm audio jack as input. For example, use this configuration if the OHP device is just an amplified speaker. Verify that the OHP input levels are compatible with ATA level. See *"Appendix A: Technical Specifications" on page 268*. Only single-zone paging is supported in this configuration.

Figure 118. Single-Zone Overhead Paging on AUX OUT Jack

Single-Zone OHP equipment connected to one of the FXS ports:

Use this configuration to connect paging equipment that interfaces through a telephone line. Typically, any OHP that connects to an FXS port has some intelligence to go off and on hook or otherwise send a signal back to the pager. These are generally controllers or telephone interfaces with controls and settings.

Figure 119. Single-Zone Overhead Paging on FXS Port

In this configuration, you can specify a paging delay to compensate for the fixed delay introduced by the OHP system. This delay ensures that the paging tone is played simultaneously on both Desksets and on the OHP system. See *"[ATA] Single-Zone Overhead Paging Delay" on page 129*.

[ATA] 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.

Multi-Zone OHP equipment connected to one of the FXS ports:

When paging is configured as a multi-zone OHP, a dedicated **Overhead Paging** zone automatically appears as the last entry in the Deskset paging menu.

NOTE Overhead paging can not be added to Synapse specific paging zones (see *"[ATA] Multi-Zone Overhead Paging" on page 130*) because the multi-zone OHP can not be paged together with Desksets.

Figure 120. Multiple-Zone Overhead Paging on FXS Port

NOTE

The OHP system may have settings that need to be adjusted to work with Synapse. Refer to your OHP system's product documentation for installation and configuration instructions.

See *"[ATA] ATA Operation" on page 32* for more information on making connections to the ATA.

Desksets and single-zone OHPs can be included in the same zone. In the case of a single-zone OHP connected to the FXS port, this Paging System and the Desksets generate different global tones. Note that users hear both tones at the same time if the paging delay is set properly in the WebUI settings.

[ATA] Verified Overhead Paging Devices

Table 5 lists OHP systems that have been demonstrated to work with the Synapse System as of the publication of this document. More OHP systems may also have qualified for this list. For more information, contact the person who installed your system. If your installer is unavailable call **1 (888) 916-2007**. In Canada, dial **1 (888) 883-2474**.

Table 5. [ATA] Verified Overhead Paging Devices

Single Zone	Multi Zone
Aux Out Jack • Bogen TPU35B • Valcom 1030c FXS Port • Bogen TAMB • Bogen TPU15A • Bogen TPU35B (alternate to TPU15A) • Viking CPA-7B • Valcom V-9940 • Valcom V-9941A	FXS Port • Bogen PCM 2000 • Bogen PCM TAMB • Bogen TPU15A or TPU35B • Bogen ZPM3

[ATA] Setting Up Overhead Paging

To set up external overhead paging:

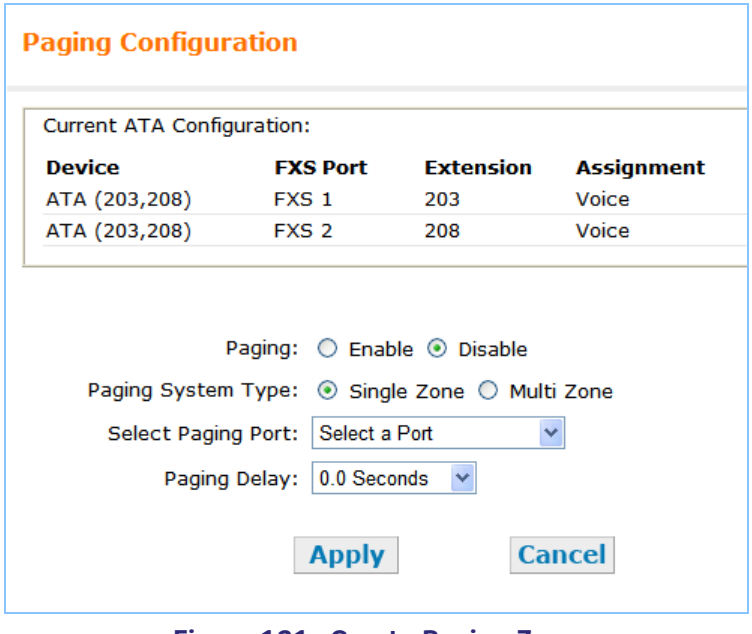


Figure 121. Create Paging Zone

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **Overhead Paging** in the Navigation Menu at left. The screen shown in Figure 121 appears.

   The current ATA FXS port settings are shown.
3. **Enable** or **Disable** the overhead **Paging**.
4. Select the **Paging System Type**.
5. Select the **Paging Port**. This is the FXS port or AUX OUT jack into which the OHP is connected
6. Select the **Paging Delay**.

   If you have a single-zone system connected to an FXS port, select an appropriate delay. See *"[ATA] Single-Zone Overhead Paging Delay" on page 129*.

   If not, this setting is ignored.
7. Click Apply to save these settings when you are done or click Cancel to return to the previous screen without saving the changes.

[ATA] 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:

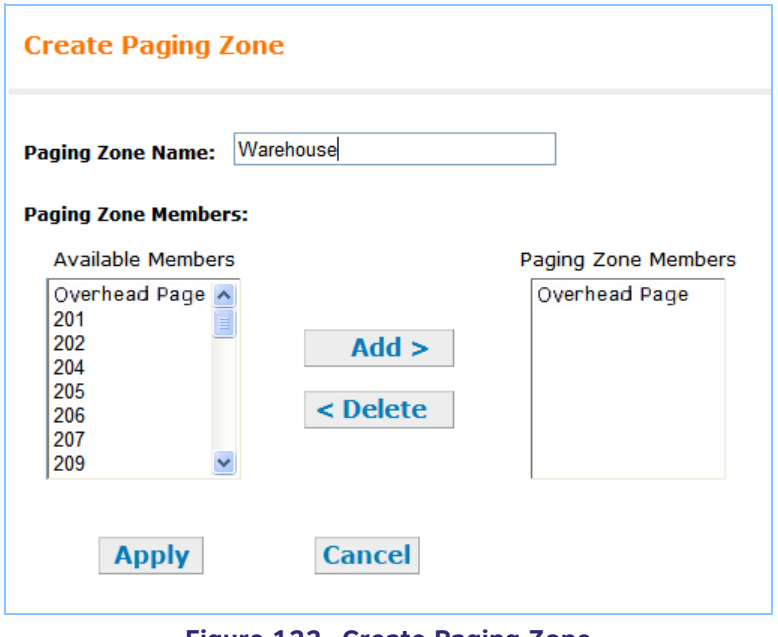


Figure 122. Create Paging Zone

1. Follow the instructions in *"Paging Zones" on page 131* to either **Create New Paging Zon**e, or **View/Edit** an existing Page Zone.
2. Select **Overhead Page** from the **Available Members** list and click Add >.
3. Click Apply to save these settings when you are done or click Cancel to return to the previous screen without saving the changes.

[ATA] 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. The system installer or the SA need to experiment to find the correct delay for the system. Set the delay in the WebUI. See *"[ATA] Overhead Paging Overview" on page 122*.

The delay starts after the user presses Start on the Deskset, as shown in Figure 123. Once the delay ends, the page tone sounds and the display switches to the **Page** screen, as shown in Figure 124.

NOTE

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

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

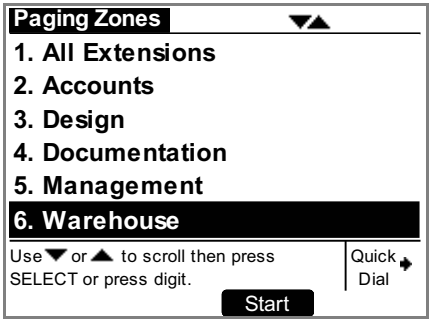


Figure 123. Paging Zones Including Single Overhead Zone

.

Figure 124. Page to a Single Overhead Zone

[ATA] 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 *"Paging Zones" on page 131*.

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 125.

When users select overhead paging, the **Overhead Page** screen shown in Figure 126 appears.

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

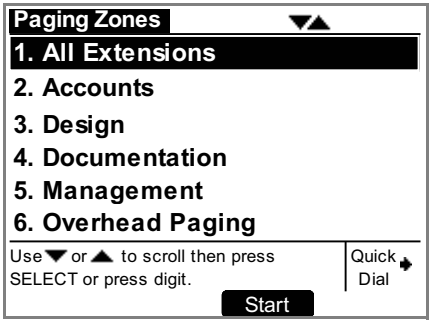


Figure 125. Paging Zones Including Overhead Paging

Figure 126. Overhead Page

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 Desket user can initiate a page to all extensions or only to the members of a paging zone. You can configure up to six paging zones, each with one or more members. You can place every extension in a paging zone.

To create a paging zone:

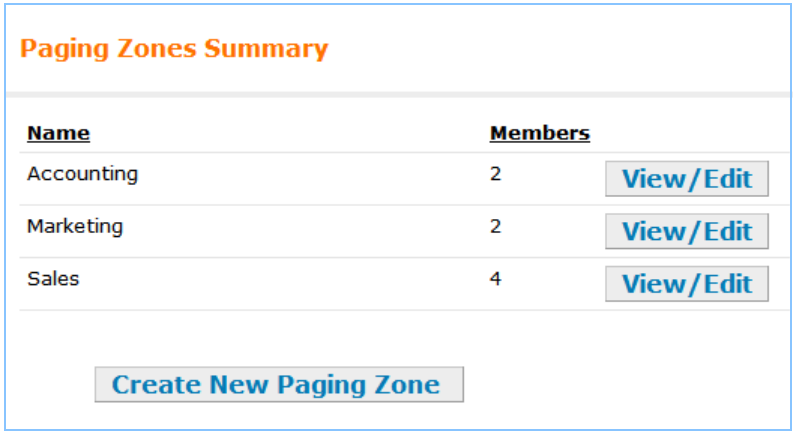


Figure 127. Paging Zones Summary

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Paging Zones** in the Navigation Menu at left. The screen shown in Figure 127 appears.
3. Click Create New Paging Zone to create a new paging zone. The **Create Paging Zone** screen displays, as shown in *Figure 128 on page 132*.

   OR

   To view or edit a paging zone, click View/Edit. The **Edit Paging Zone** screen displays, as shown in *Figure 129 on page 133*.

To create a paging zone: (Continued)

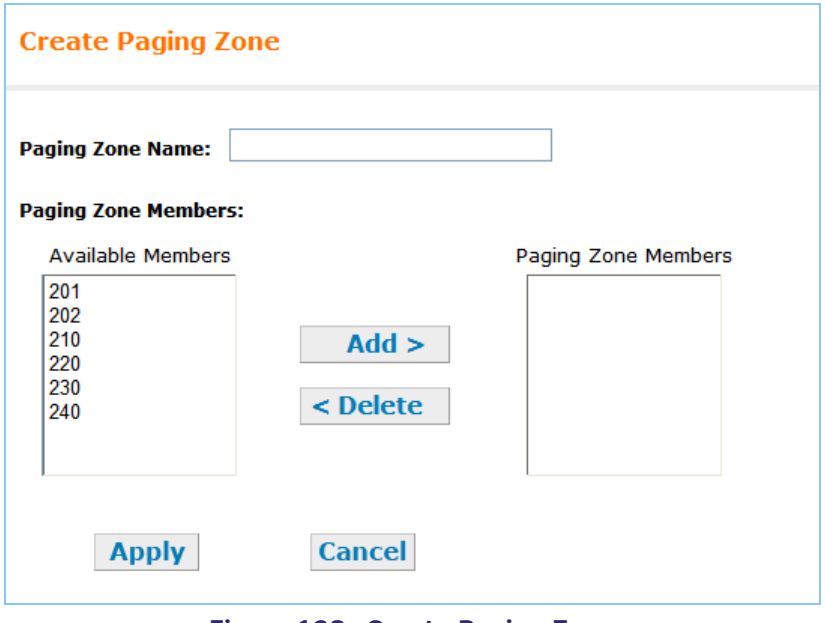


Figure 128. Create Paging Zone

4. Enter an appropriate name for the new paging zone, as shown in Figure 128.
5. 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.
6. Click Apply to save these settings when you are done or click Cancel to return to the previous screen without saving the changes.

   The new paging zone appears on each Deskset when the Page soft key is pressed.

NOTE 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:

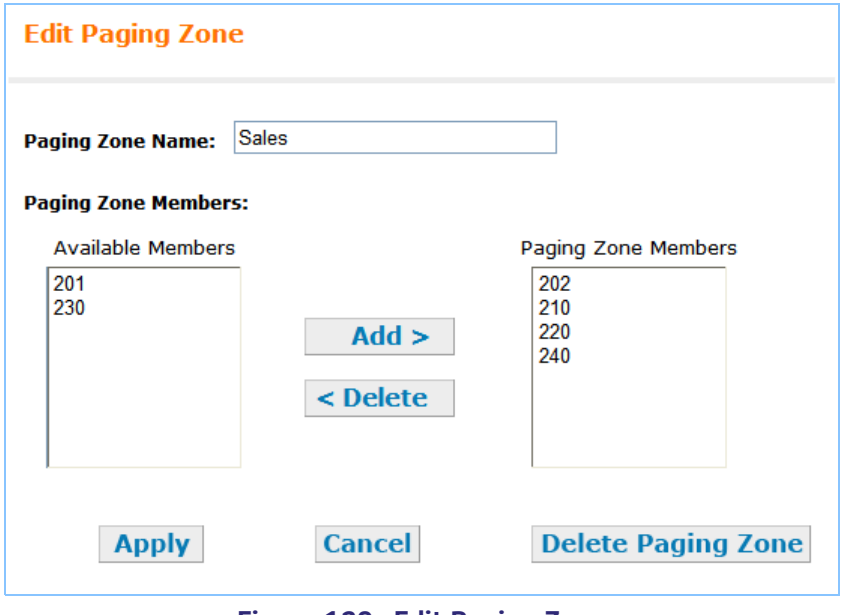


Figure 129. Edit Paging Zone

1. Do steps 1 and 2 of *"To create a paging zone:" on page 131*.
2. Select the paging zone you want to edit from the Paging Zones Summary. Click the associated View/Edit button. The **Edit Paging Zone** screen displays, as shown in Figure 129.
3. 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.

   OR

   Click Delete Paging Zone to delete this paging zone.
4. When you are done, click Apply to save these settings or click Cancel to return to the previous screen without saving the changes.

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 may be forwarded to 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.

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 76* for information on time and date configuration.

You can set one extension, personal mailbox, or group mailbox to forward to when no one answers a Ring Group call. The extension can then ring or the caller can be sent directly to Voicemail.

An extension can be in more than one Ring Group.

Internal callers cannot call Ring Groups.

See *"Auto Attendant Menu Choices" on page 92* for information on using Ring Groups in the Auto Attendant.

To create, edit, or delete a Ring Group:

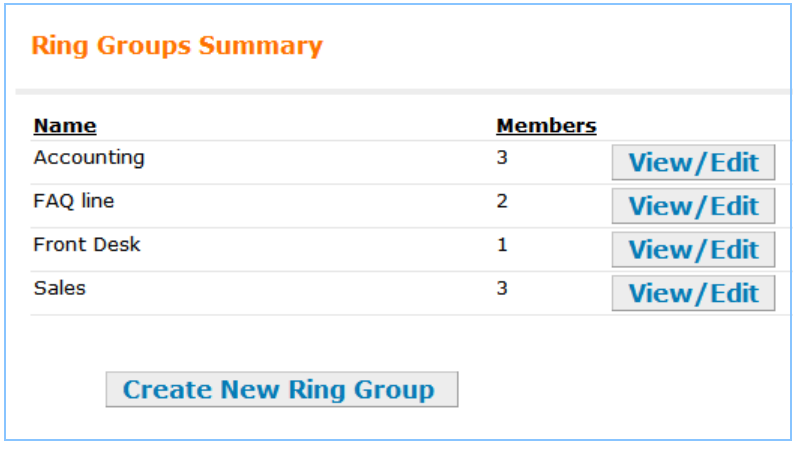


Figure 130. Ring Groups Summary

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Information**, then **Ring Groups** in the Navigation Menu at left. The screen shown in Figure 130 appears.
3. Click Create New Ring Group to create a new Ring Group. The **Create Ring Group** screen displays, which is similar to the **Edit Ring Group** screen shown in *Figure 131 on page 136*. 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** screen displays, as shown in *Figure 131 on page 136*.

   OR

   To delete this Ring Group, click Delete Ring Group, as shown in *Figure 133 on page 138*.

   Before you delete a Ring Group, delete references to the Ring Group in the Auto Attendant. See *"Auto Attendant Menu Choices" on page 92*.

To create, edit, or delete a Ring Group: (Continued)

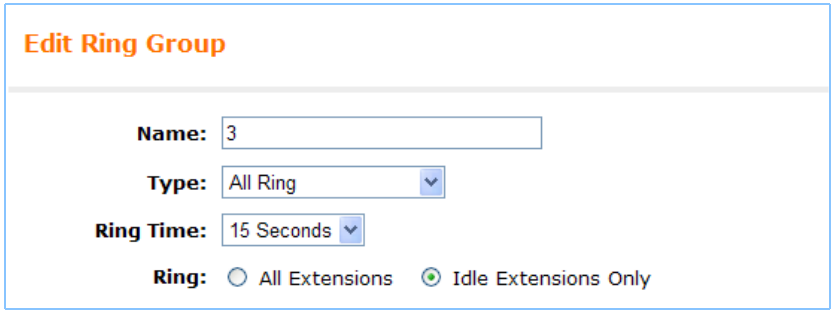


Figure 131. Edit Ring Group, Part 1

4. 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 be forwarded to the Ring Group Call Forward No Answer (CFNA) destination.
   - **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 destination.
   - **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 destination.
5. Select the **Ring Time**; how long each extension rings before moving on to the next extension.
6. Select if **All extensions** or **Idle Extensions Only** (Desksets being used are skipped) will ring.

To create, edit, or delete a Ring Group: (Continued)

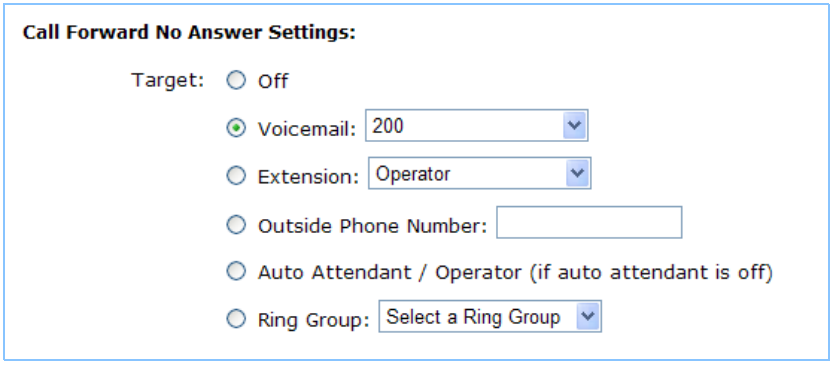


Figure 132. Edit Ring Group, Part 2

7. Select the Call Forward No Answer (CFNA) **Target** destination, as shown in Figure 132. 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 or Personal Mailbox which you select from the drop-down list.
   - **Extension**. Forward the call to an extension which you select from the drop-down list.
   - **Outside Phone Number.** Forward the call to a telephone number. Enter the phone number.
   - **Auto Attendant / Operator**. Forward the call to the Auto Attendant main menu.
   - **Ring Group**. Forward the call to a Ring Group, which you select from the drop-down list.

To create, edit, or delete a Ring Group: (Continued)

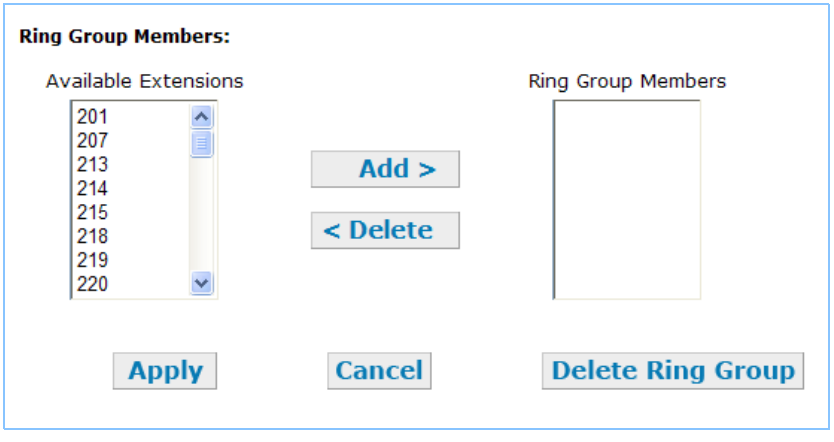


Figure 133. Edit Ring Group, Part 3

8. Select the **Ring Group Members** for the Ring Group, one at a time, from the **Available Extensions** list, as shown in Figure 133. Analog phones connected to the ATA can be members of Ring Groups.

   Click Add > to add the highlighted extensions.

   OR

   Click < Delete to remove the highlighted extensions.

9. Click Apply to save these settings when you are done or click Cancel to return to the previous screen without saving the changes.

The new Ring Group appears on the **Ring Groups Summary** screen, as shown in *Figure 130 on page 135*.

System Directory

Create a list of phone numbers (referred to as 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:

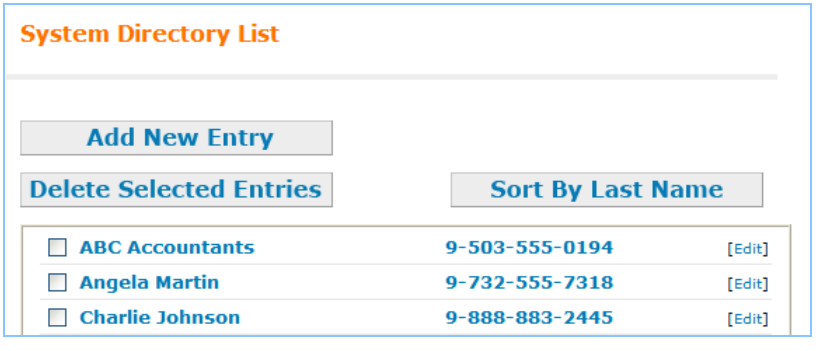


Figure 134. System Directory

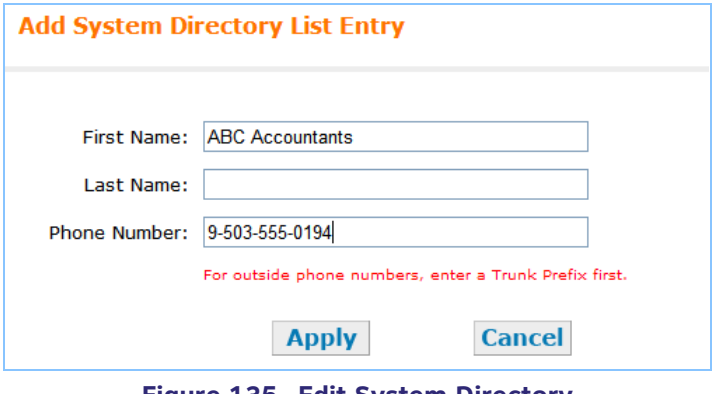


Figure 135. Edit System Directory

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Directory** in the Navigation Menu at left. The screen shown in Figure 134 appears.
3. Click Add New Entry.
4. Complete the form shown in Figure 135 with the information indicated.

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

   OR

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

NOTE To edit an entry, click [Edit] as shown on right side of Figure 134. A screen similar to the screen shown in Figure 135 appears with the fields populated with the entry to be edited.

Trunk Naming

You can name the system trunks for easier identification. For PSTN Gateways, all 4 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.

Renaming Gateway trunks can be useful when reserving trunks. See *"Trunk Reservation (Outgoing Calls)" on page 141*.

To name a trunk:

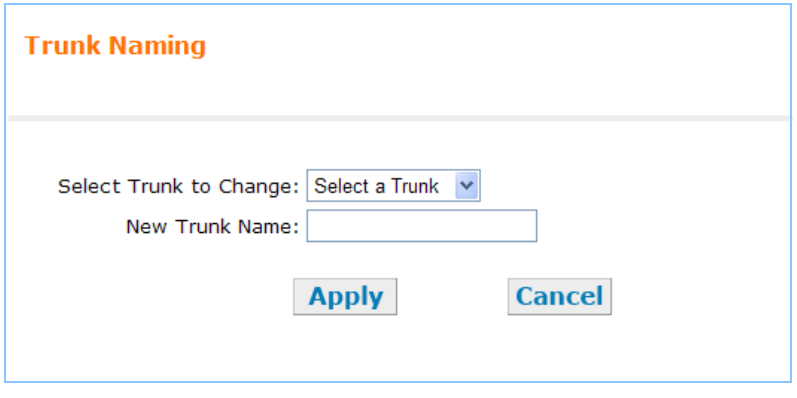


Figure 136. Trunk Naming

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Trunk Naming** in the Navigation Menu at left. The screen shown in Figure 136 display.
3. **Select a Trunk to Change** from the drop-down list. All trunks are listed.
4. Enter the **New Trunk Name** using up to 16 characters.
5. Click Apply to save the entry or click Cancel to refresh the screen without saving the changes.

Trunk Reservation (Outgoing Calls)

You can reserve a PSTN telephone line or a T1 channel for an extension, so that only that extension can use that telephone line (or channel) 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

To reserve a trunk:

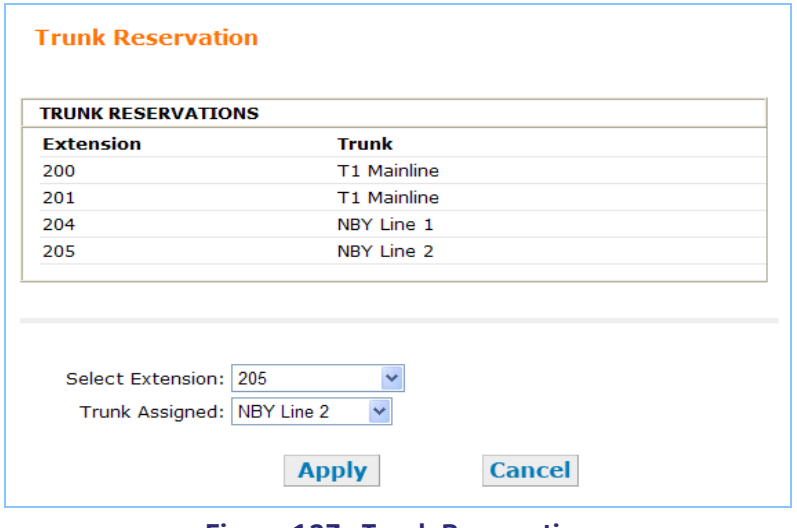


Figure 137. Trunk Reservation

NOTE To route an incoming call directly to an extension, see *"[T1] Direct Inward Dial (DID)" on page 101* (for a T1 Gateway) or *"[PSTN] Trunk Routing (Incoming Calls)" on page 142* (for a PSTN Gateway).

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Trunk Reservation** in the Navigation Menu at left. The screen shown in Figure 137 displays with the current list of trunk reservations.
3. Select an **Extension** from the first drop-down list. 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.
4. Select an available **Trunk** from the second drop-down list. Trunks that are fully reserved for other extensions do not appear in the list. The T1 has up to 23 channels, but the channels may not be individually reserved; therefore, the T1 Gateway appears in the list as one trunk, but it can be reserved as many times as there are channels.
5. Click Apply to save the entry or click Cancel to return to the previous screen without saving the changes.

[PSTN] Trunk Routing (Incoming Calls)

With a PSTN Gateway, all incoming calls to a specific telephone number can go directly to a specific destination. Calls to that phone number can be routed to an extension, Group Mailbox, or Ring Group. The **Trunk Routing** WebUI screen only appears if there is a PSTN Gateway connected to the system. Route calls on the T1 Gateway through Direct Inward Dialing. See *"[T1] DID Assignments" on page 105*. If both a PSTN Gateway and a T1 Gateway are connected, then both options are available. Any destination can have more than one trunk routed to it.

To route calls to a trunk:

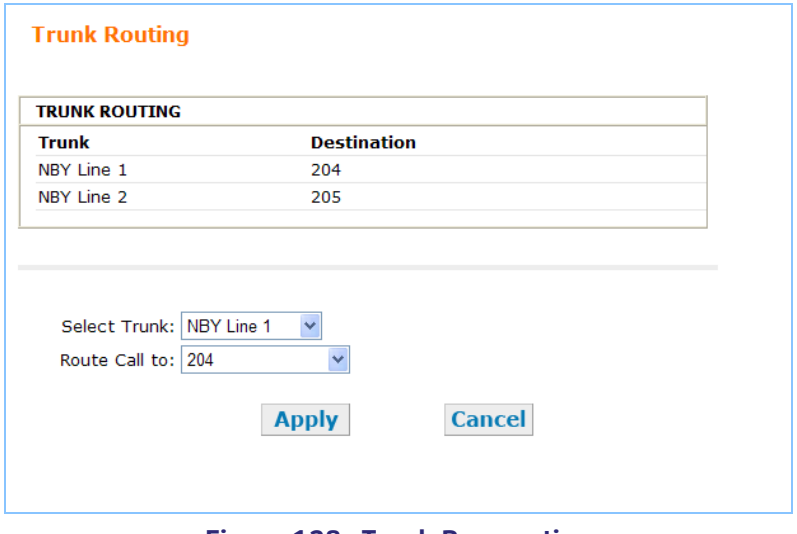


Figure 138. Trunk Reservation

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **Trunk Routing** in the Navigation Menu at left. The screen shown in Figure 138 displays with the current list for trunk routing appears.
3. Select an available **Trunk** from the first drop-down list.
4. Select a destination to **Route Call** to from the second drop-down list.
5. Click Apply to save the entry or click Cancel to return to the previous screen without saving the changes.

Reconfiguration of an Existing System

Considerations:

- Ensure that the first digit of any extensions do 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 do not match the park extension prefix.
- If you set the PSTN Trunk Prefix to none, 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.
- If you change from 3- to 4-digit extensions or from 4- to 3-digit extensions, 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 undesired extension number re-assignment, where 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, all newly connected Desksets' assigned extension numbers begin with that prefix. 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 the **PSTN Trunk Prefix** is changed, the Call Log prepends the new Prefix (or **none**) to numbers when dialing. In addition, Call Fwd and Call Forward No Answer (CFNA) outside phone number targets automatically use the correct Prefix. However, all entries in the System and Deskset Directory and Quick-Dial list must be manually edited to update the Prefix.
- If the **PSTN Trunk Prefix** is set to **none** and any x11 extensions already exist (such as 411, or 611), then the extensions takes 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- to 4-digit extensions or from 4- 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 screen. A table of all changed extension numbers displays when the process is complete.

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

Extension Settings

Use the WebUI to configure basic extension settings

- "Extension Basic Settings" on page 146
- "Extension Directory" on page 150
- "Quick-Dial Keys" on page 153
- "Voicemail Distribution" on page 154

CAUTION

Change phone 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** screen.

Individual users have different phone setting screens. They are described in "Web Interface" of the Synapse User's Guide at **www.telephones.att.com/synapseguides**.

To set the Extension Basic Settings for the administrator:

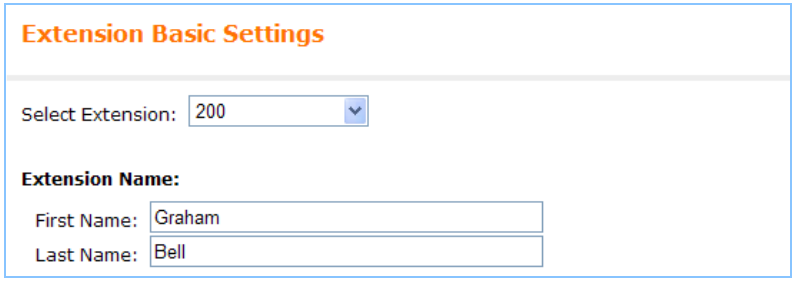


Figure 139. Basic Extension Settings, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **Extension Settings**, then **Basic Settings** in the Navigation Menu at left. The screen shown in Figure 139 appears.
3. Select an extension from the **Select Extension** drop-down list to display the current settings for that extension.
4. **Extension Name** displays the name for the current extension. This name is used in two ways: on the Idle screen of the Deskset and with 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.

   Enter a new name into the **First Name** and **Last Name** fields. Enter up to 16 characters, although only the first 10 characters display on screen.

To set the Extension Basic Settings for the administrator: (Continued)

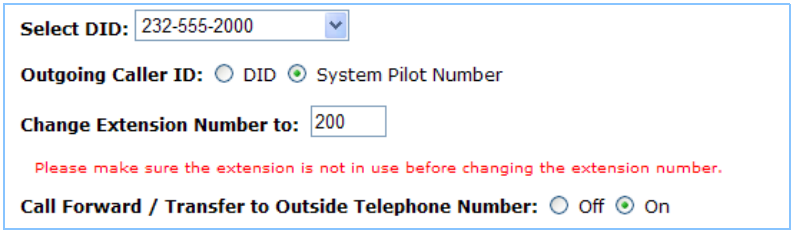


Figure 140. Basic Extension Settings, Part 2

NOTE

Desksets do not lose their assigned extensions even if a Deskset is disconnected and unplugged for a substantial length of time. If you want to remove a Deskset from the network, the extension must be deleted. (See *"To delete an extension, Gateway, or ATA:" on page 170*.) This ensures that the Deskset does not tie up an extension.

5. [T1] You can assign or change a Direct Inward Dialing number for this extension using the **Select DID** drop-down list, as shown in Figure 140. Select **Unassigned** to release a previously assigned DID number.
6. [T1] If you selected a DID number for the extension, the **Outgoing Caller ID** option appears. Select whether the Outgoing Caller ID is the **DID** number or the **System Pilot Number**.
7. 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.

CAUTION

Ensure that the extension is not in use and do not assign an extension number 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"Auto Attendant" on page 81.

8. You can select **Call Forward/Transfer to Outside Telephone Number** to enable or disable forwarding or transferring of calls to an outside telephone via the outside phone lines plugged into the Gateway. This function is enabled by default and uses two phone lines when calls are forwarded. Disabling this function prohibits the user from forwarding or transferring a call to an outside phone number.

To set the Extension Basic Settings for the Administrator: (Continued)

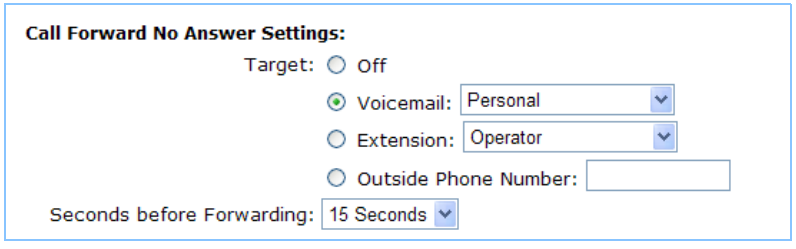


Figure 141. Basic Extension Settings, Part 3

9. To change the **Call Forward No Answer Settings** shown in Figure 141:

NOTE The Call Forward All settings on each Deskset override these Call Forward–NA Settings. See *"Call Forward All and Call Fwd–NA (No Answer)" on page 46*.

   a. Select the **Target** for unanswered calls:

   - **Off**. The extension rings until the call is answered or the caller hangs up.

NOTE Conference room extensions typically have **Call Forward No Answer Settings** set to **Off** and have their ringers set very low or off.

   - **Voicemail**. The call is sent to Voicemail.
   - **Extension**. The call is sent to the extension you set when you enter the **Target Extension Number**.
   - **Outside Phone Number**. The call is sent to the specified outside phone number.
   - Enter the **Telephone Number**.

   b. Enter the number of **Seconds before Forwarding** from the drop-down list.

To set the Extension Basic Settings for the Administrator: (Continued)

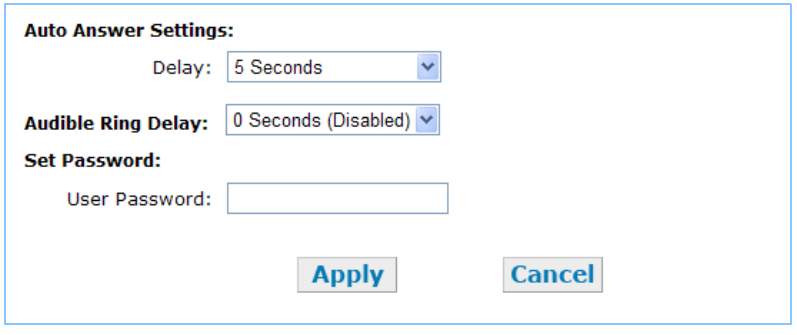


Figure 142. Basic Extension Settings, Part 4

10. You can set the Deskset to automatically answer calls after a delay that you specify. Without touching the Deskset, someone can speak to and be heard by the person who called. Select the Auto Answer **Delay** from the drop-down list.
11. You can delay audible ringing at some Desksets. Select the **Audible Ring Delay** from the drop-down list. Users can also set this delay at their Desksets. Setting the Delay to zero disables this feature.
12. You can enter up to six digits to create a WebUI and Voicemail pass code for this extension.
13. Click Apply to save any changes or click Cancel to return to the previous screen without saving the changes.

Extension Directory

Extension Directories (referred to as a Personal list on the Deskset) are only available at the extensions for which they were created. They can be created by the administrator or by a Deskset user.

To manage the Extension Directory:

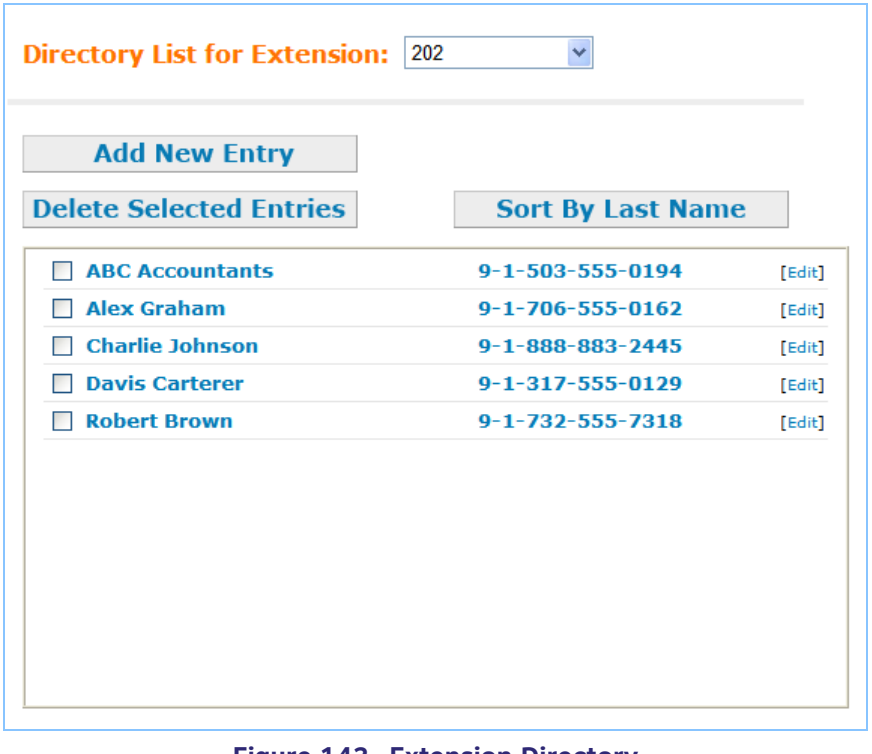


Figure 143. Extension Directory

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **Extension Settings**, then **Extension Directory** in the Navigation Menu at left. The screen shown in Figure 143 appears. The default extension displays in the dialog box.
3. Select the desired extension number from the drop-down list.

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

To manage the Extension Directory: (Continued)

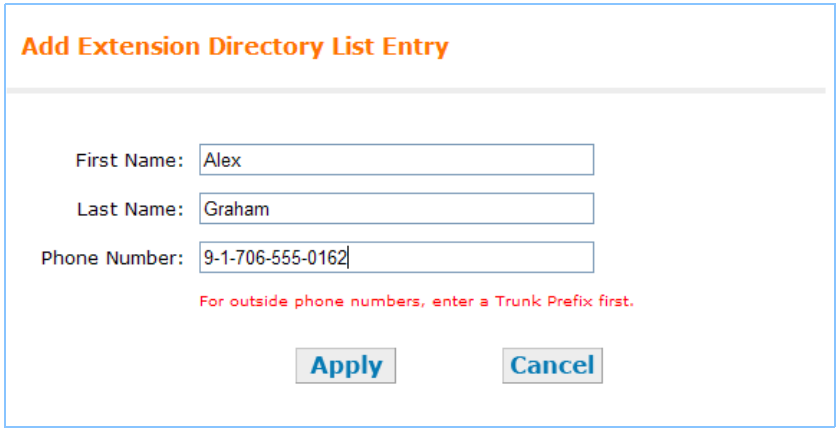


Figure 144. Add Extension Directory List Entry

- To add a new entry, click Add New Entry. The screen shown in Figure 144 appears.

  a. Complete the form with the information indicated.

  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**.

  b. Click Apply to save the entry. The **Extension Directory** screen appears with the entry added as shown in *Figure 143 on page 150*.

  OR

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

To manage the Extension Directory: (Continued)

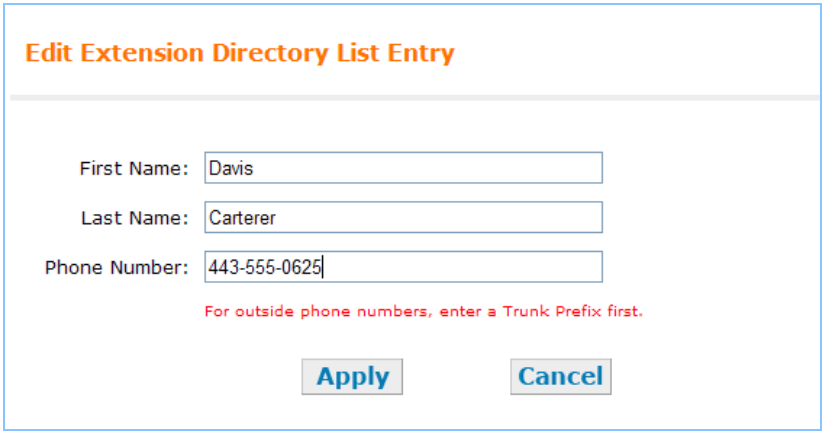


Figure 145. Edit Extension Directory List Entry

- To edit an entry, click [Edit] as shown on the right side of *Figure 143 on page 150*. The screen shown in Figure 145 appears with the fields populated with the entry to be edited.

  Click Apply to save the entry. The **Extension Directory** screen appears with the entry added as shown in *Figure 143 on page 150*.

  OR

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

- To sort entries by last name, click Sort By Last Name. The list updates and the button changes to Sort By First Name. The button toggles between first and last name directory sort.

- To delete **Extension Directory** entries:

  a. Mark the entries to delete by selecting the check box to the left of each entry as shown in *Figure 143 on page 150.*

  b. Click Delete Selected Entries. All of the selected entries are removed.

Quick-Dial Keys

Quick-Dial entries are only available at the extensions for which they were created. They can be created by the administrator or by a Deskset user.

To create or edit Quick-Dial entries:

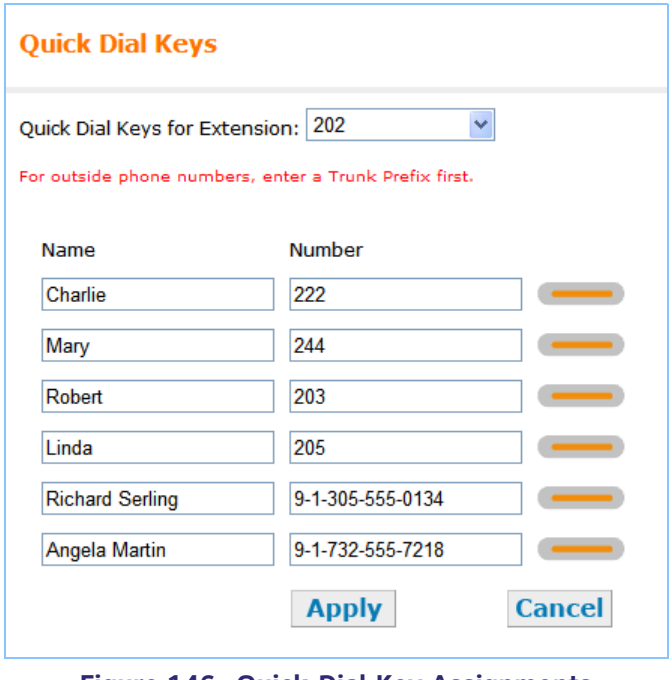


Figure 146. Quick-Dial Key Assignments

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **Extension Settings**, then **Quick Dial Keys** in the Navigation Menu at left. The screen shown in Figure 146 appears. The default extension displays in the dialog box.

   Select the desired extension number from the drop-down list.
3. Enter a name and number for every Quick-Dial entry you want to create. Any hyphens in phone numbers will be ignored.

   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**.

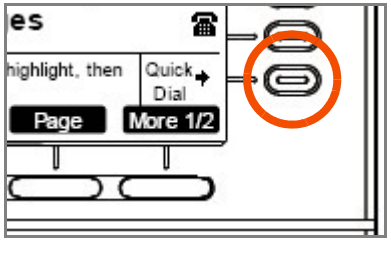


Figure 147. Location of Quick-Dial Key

4. Click Apply to save the entries or click Cancel to refresh the screen without saving the changes.
5. To verify that the entries have been created, on the Deskset, press the key to the right of Quick Dial, as shown in Figure 147, to display the Quick-Dial entries.

Voicemail Distribution

Personal Voicemail Distribution Lists are available to each extension. Each user can create up to ten Voicemail Distribution Lists for use when leaving new or forwarding old Voicemail messages. These lists allow users to forward Voicemail messages to multiple extensions that have been pre-defined in a Distribution List. Users can also record and send new voice messages to these lists. This feature is disabled by default. If enabled, there will be an additional step every time the user plays Voicemail messages.

To enable and disable Voicemail Distribution Lists:

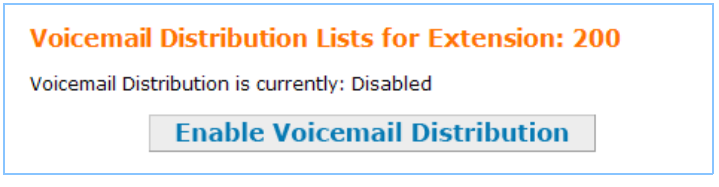


Figure 148. Enable Voicemail Distribution

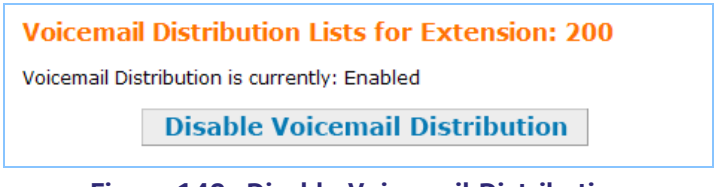


Figure 149. Disable Voicemail Distribution

1. Log in as a user. Enter an extension number and the user's password, if needed.
2. Click **Voicemail Distribution** in the Navigation Menu at left. The screen shown in Figure 148 or Figure 149 appears.
3. Click Enable Voicemail Distribution to enable or Disable Voicemail Distribution to disable Voicemail Distribution.

To view the Voicemail Distribution Lists:

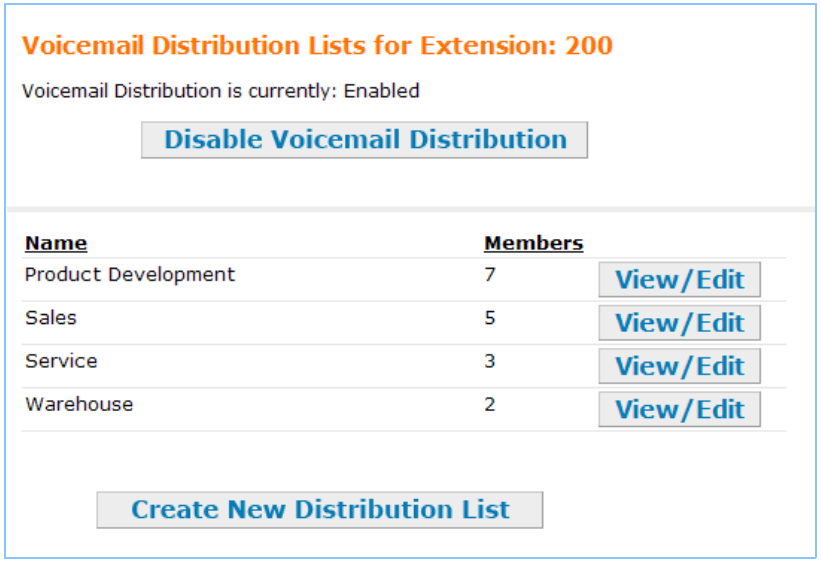


Figure 150. Voicemail Distribution Lists

1. Log in as a user. Enter an extension number and the user's password, if needed.
2. Click **Voicemail Distribution** in the Navigation Menu at left to access the screen to display the screen shown in Figure 150.

   A list of the existing Voicemail Distribution Lists appears.

To create a Voicemail Distribution List:

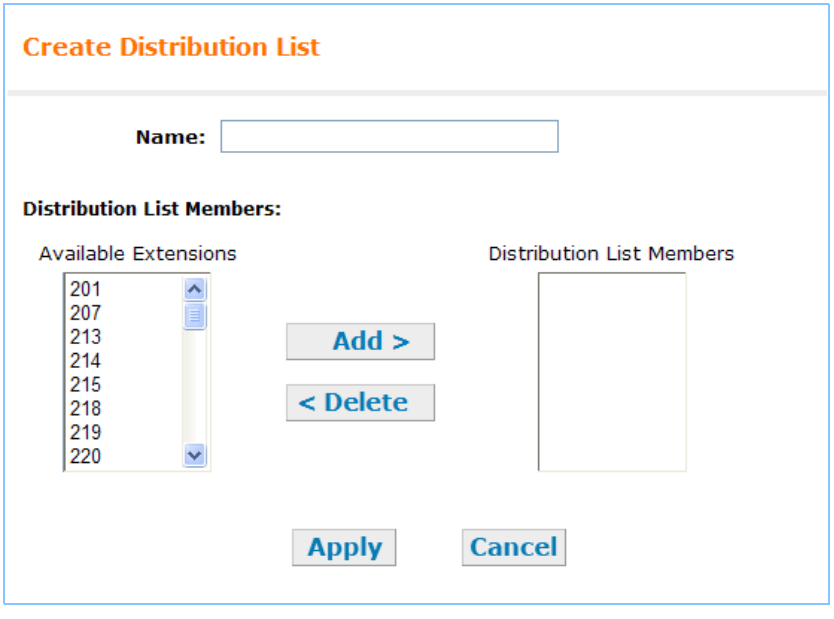


Figure 151. Create Distribution List

1. Log in as a user. Enter an extension number and the user's password, if needed.
2. Click **Voicemail Distribution** in the Navigation Menu at left to access the screen to display the screen shown in *Figure 150 on page 155*.
3. Click Create New Distribution List. The screen shown in Figure 151 appears.
4. Enter the Distribution List **Name**.
5. Assign **Distribution List Members**.

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

   OR

   Select one or more extensions to remove from this list from the **Distribution List Members** list and click < Delete.
6. Click Apply to save these settings when you are done or click Cancel to return to the previous screen without saving the changes.

To edit or delete a Voicemail Distribution List:

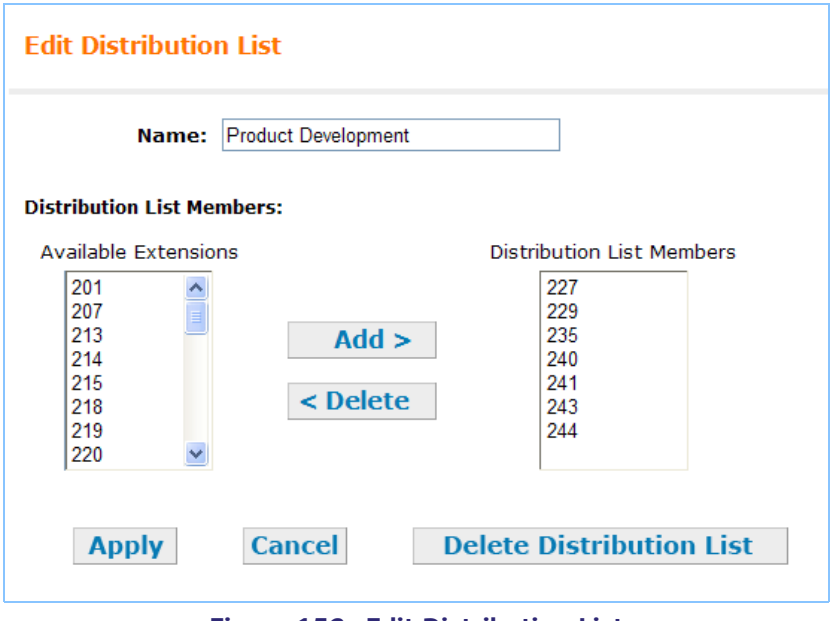


Figure 152. Edit Distribution List

1. Log in as a user. Enter an extension number and the user's password, if needed.
2. Click **Voicemail Distribution** in the Navigation Menu at left to access the screen to display the screen shown in *Figure 150 on page 155*.
3. Click View/Edit. The screen shown in Figure 152 appears.
4. Edit the Distribution List **Name** as needed.
5. Assign **Distribution List Members**.

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

   OR

   Select one or more extensions to remove from this list from the **Distribution List Members** list and click < Delete.
6. Optional: Click Delete Distribution List to delete this Distribution List.
7. Click Apply to save these settings or click Cancel to return to the previous screen without saving the changes.

[ATA] ATA Settings

Use the WebUI to configure ATA settings.

- *"[ATA] FXS Ports" on page 159*
- *"[ATA] Analog Telephone Overview" on page 161*

Once an ATA is connected to the Synapse network (with software version 1.5.xx or greater), the WebUI is updated to show all ATA-related menus and configuration items within menus. If the ATA is deleted (using the WebUI's **Modify Device** screen), all these ATA-related menus and configuration items disappear. However, the device list continues to show a count of ATAs.

[ATA] FXS Ports

Use the **ATA Settings** screen to configure the two ATA FXS ports.

To configure the two ATA FXS ports:

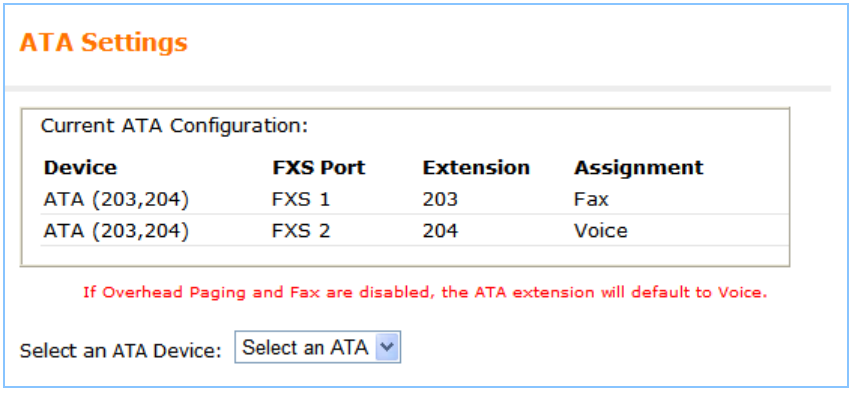


Figure 153. ATA Settings, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **ATA Settings** in the Navigation Menu at left. The screen shown in Figure 153 appears.
3. Select an ATA device from the drop-down list.

   The rest of the **ATA Settings** screen displays, as shown in *Figure 154 on page 160*.

To configure the two ATA FXS ports: (Continued)

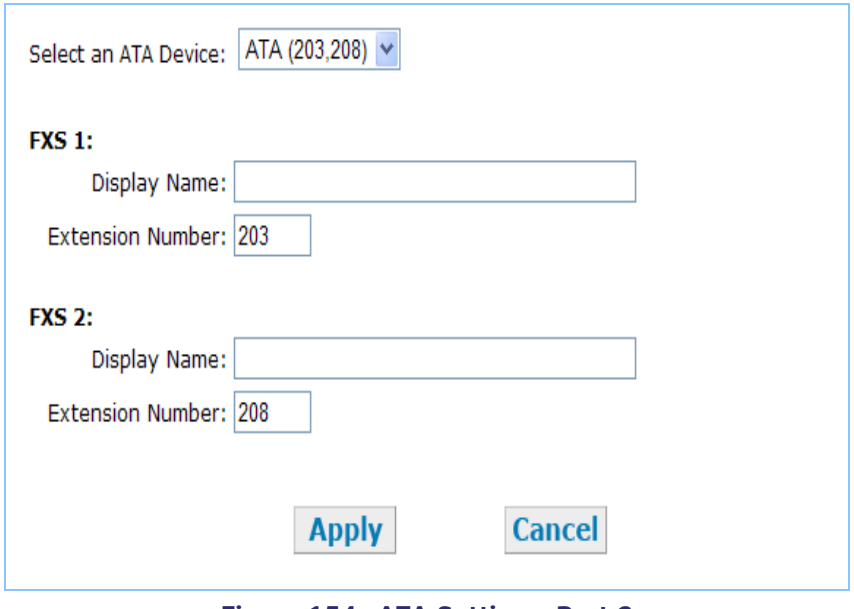


Figure 154. ATA Settings, Part 2

4. For each FXS port shown in Figure 154:
   - 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**.
   - Assign a Direct Inward Dialing number for this extension using the **Select DID** drop-down list. Select **<Unassigned>** to release a previously assigned DID number.
   - Select whether the **Outgoing Caller ID** will be the **DID** number or the **System Pilot Number**.
5. When you are done, click Apply to save these settings.

   OR

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

[ATA] Analog Telephone Overview

The FXS ports can provide plain old telephone service (POTS) support for up to two analog phones. Even though ATA extensions do not appear in the Deskset extension list, these extensions can be directly dialed. A connected analog phone can pick up incoming calls and make outgoing calls. Caller ID should work on analog sets that support it.

Advanced system features such as Hold, Call Forward, and Transfer are not supported on analog phones.

[T1] T1 Settings

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

The T1 Settings consist of:

- *"[T1] Configure T1 Settings" on page 163*
- *"[T1] T1 Diagnostics" on page 166*

[T1] Configure T1 Settings

You can modify the settings of your T1 connection.

To configure the T1 settings:

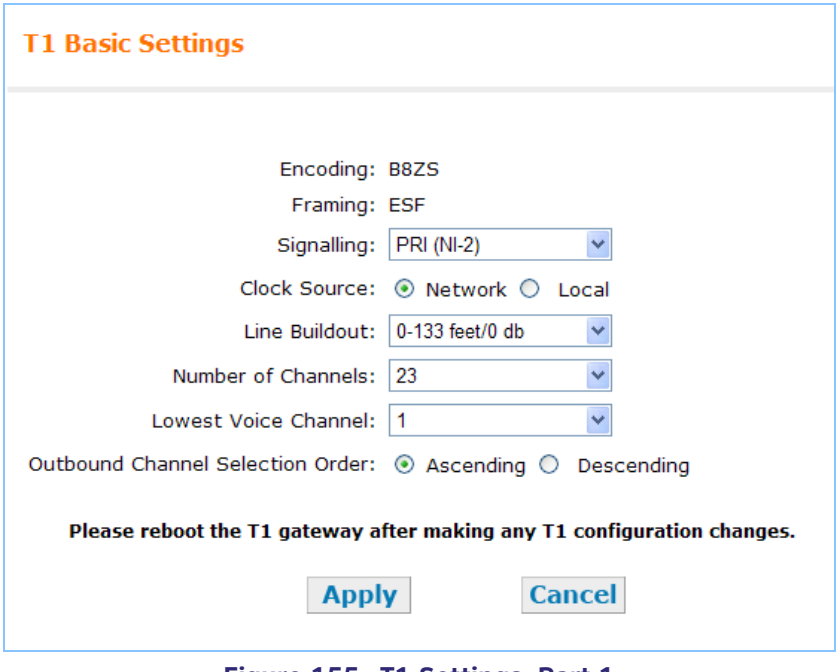


Figure 155. T1 Settings, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **T1 Settings** in the Navigation Menu at left. The screen shown in Figure 155 appears.

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

   The system assumes that your TI circuit uses **ESF** (Extended Super Frame), used in conjunction with B8ZS, for signaling and to control line **Framing**.
3. Select the **Signaling** protocol from the drop-down 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.

To configure the T1 settings: (Continued)

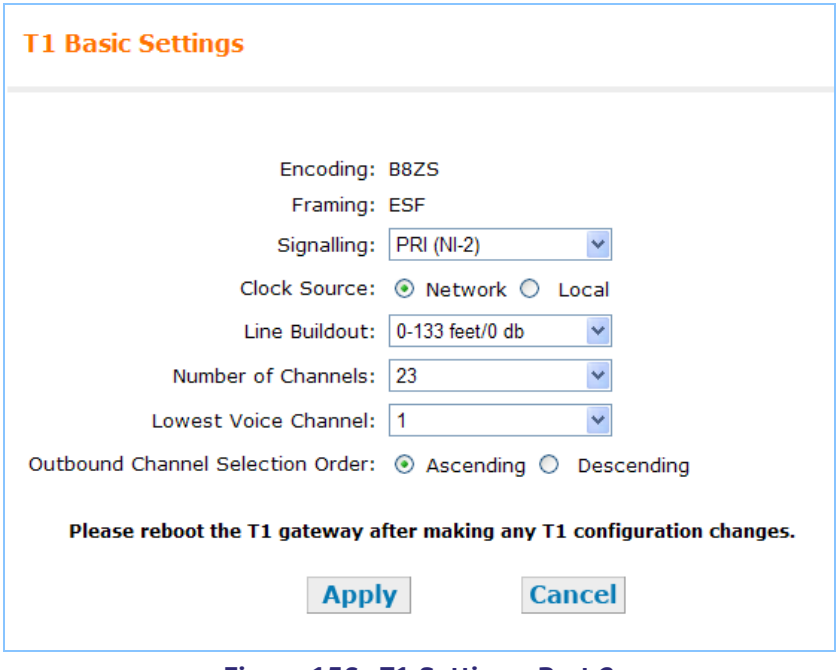


Figure 156. T1 Settings, Part 2

4. 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).
5. Select the **Line Buildout** value from the drop-down 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.

To configure the T1 settings: (Continued)

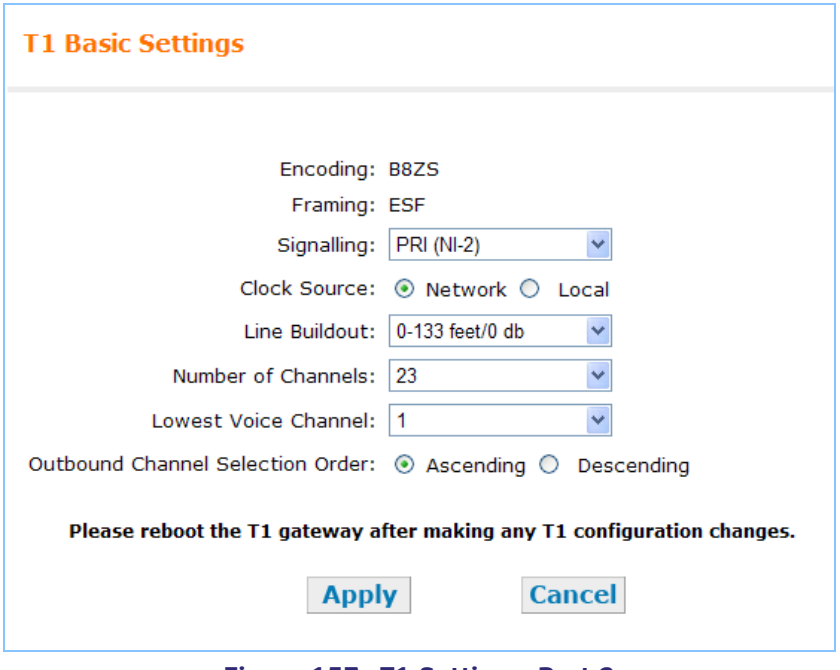


Figure 157. T1 Settings, Part 3

6. Select the **Number of Channels**. The SA 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.
7. Select the **Lowest Voice Channel** in cases where some channels are reserved for data transfer or if there are limited slots available.
8. Select the **Outbound Channel Selection Order**, either **Ascending** or **Descending**.
9. Click Apply to save any changes or click Cancel to return to the previous screen without saving the changes.
10. Restart the T1 Gateway. Restarting the T1 Gateway hangs up any active calls that are using the T1 Gateway.
    - Press **RESET** on the T1 Gateway front panel for less than 5 seconds.

      OR

    - Disconnect and reconnect T1 Gateway AC power.

[T1] T1 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:

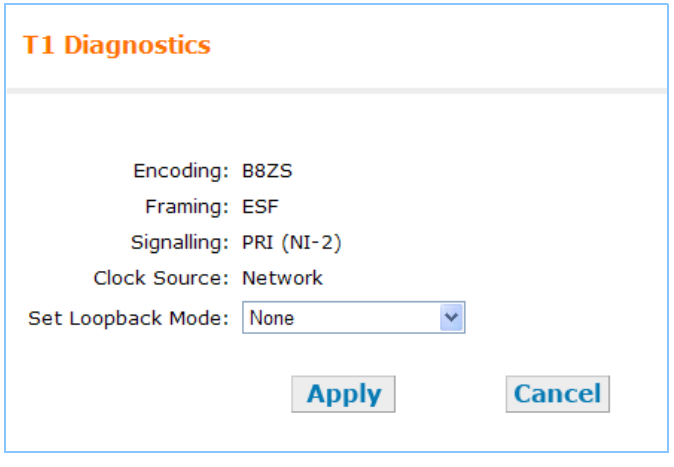


Figure 158. T1 Diagnostics, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **System Settings**, then **T1 Diagnostics** in the Navigation Menu at left. The screen shown in Figure 158 appears.

   The current T1 configuration is shown.
3. Optional: Put the T1 in loopback test mode by selecting from the **Set Loopback Mode** drop-down 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.

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

Device Management

Use the **Device Management** screen to delete devices from the system and to change Deskset extension numbers. If you unplug a Deskset from the system, such as when an employee leaves, the extension remains in the system database until you use the **Device Management** screen to delete the device. All local settings and personal information (Call Logs, Voicemail, etc.) remain stored in the Deskset. If you unplug a Gateway or ATA from the system, perhaps to replace it, delete the old Gateway or ATA before installing the new Gateway or ATA if you want the new line numbers to begin with Line 1.

Device Management consist of:

- *"Deleting Devices" on page 168*
- *"Change an Extension Number" on page 171*
- *"Back Up and Restore Settings" on page 172*
- *"Updating Devices" on page 181*
- *"Device Log" on page 186*

Deleting Devices

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** screen to delete the device.
- It is necessary to disconnect the Deskset from the network before deleting an extension. If the Deskset is not disconnected, an error message appears and you are not be able to delete it.
- 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** switch on the Deskset for more than 5 seconds to return all settings to factory defaults. See *"Deskset Reset" on page 59*. 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 146* to assign the DID number to the extension.
- Deleted extensions disappear from defined Ring Groups and Paging Zones.
- If the Auto Attendant 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.

Considerations when deleting a Gateway or an ATA

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 and ATA settings and PSTN line numbers are stored in all devices, so deleting devices does not erase these settings.

[T1] Deleting a T1 Gateway

Once a T1 Gateway is deleted from the system, all T1-related menus and configuration items disappear, including the **T1 Settings**, **T1 Diagnostics**, **DID Configuration**, and the **DID Assignment** from the web screens. The DID and Outgoing Caller ID options on the **Extension Basic Settings** and **ATA Settings** screens also disappear.

Deleting the T1 Gateway does not delete DID ranges. When a new T1 Gateway is added, any existing DID ranges re-appear on the DID WebUI screens but you will need to re-enable automatic **DID Assignment**. If an extension is no longer eligible for DID assignment, that DID number is released.

[ATA] Deleting an ATA

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

If any Desksets have set their Call Forward or Call Forward–No Answer targets set to an FXS extension, they are removed and the setting 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".

Delete a Device

You can delete any device in the system. Disconnect the device before deleting it from the system.

To delete an extension, Gateway, or ATA:

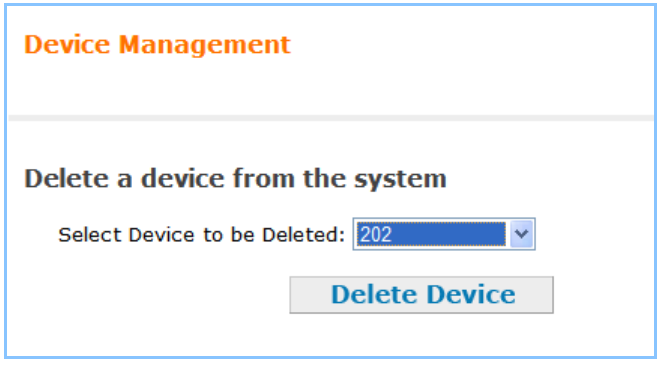


Figure 159. Delete Device

1. Disconnect (unplug) the device to be deleted.
2. Log in as administrator. See *"Log in as Administrator" on page 68*.
3. Click **Device Management**, then **Modify Device** in the Navigation Menu at left. The screen shown in Figure 159 appears.
4. 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:

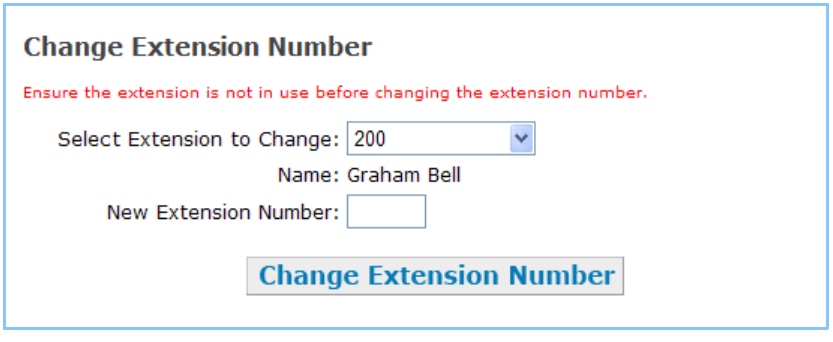


Figure 160. Change Extension Number

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **Device Management**, then **Modify Device** in the Navigation Menu at left. The screen shown in Figure 160 appears.
3. Enter the **New Extension Number**, and 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.

NOTE

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, 2009 would be named **backup_ds_208_2009–10–26_1629.cfg**.

The backup file for system that was created at 4:35 PM on October 26, 2009 would be named **backup_system_208_2009–10–26_1635.cfg**.

If you are using Safari®, the backup file will be saved as a .tar file instead of a .cfg 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, and User Password.

NOTE Cordless Registration and your extension number will NOT be backed up.

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

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

To back up the Extension Settings:

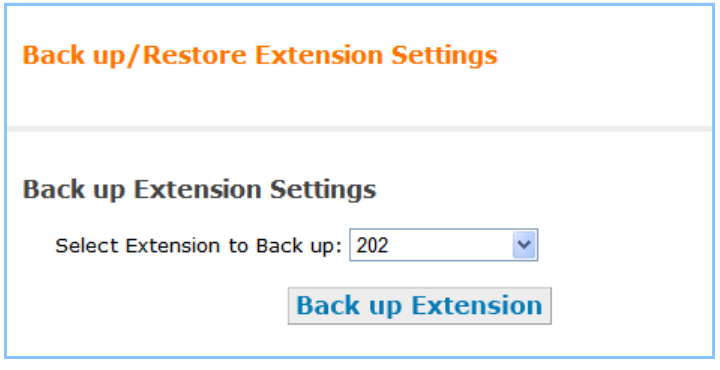


Figure 161. Back Up/Restore Extension Settings, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **Device Management**, then **Back up/Restore**, then **Extension Settings** in the Navigation Menu at left. The screen shown in Figure 161 appears.
3. Select the extension to back up from the drop-down list.
4. Click Back up Extension.

NOTE

If the desired extension does not appear in the drop-down list, then you may need to reintroduce that extension. See *"Reintroducing a Deskset Into the System" on page 193*.

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

To restore the Extension Settings:

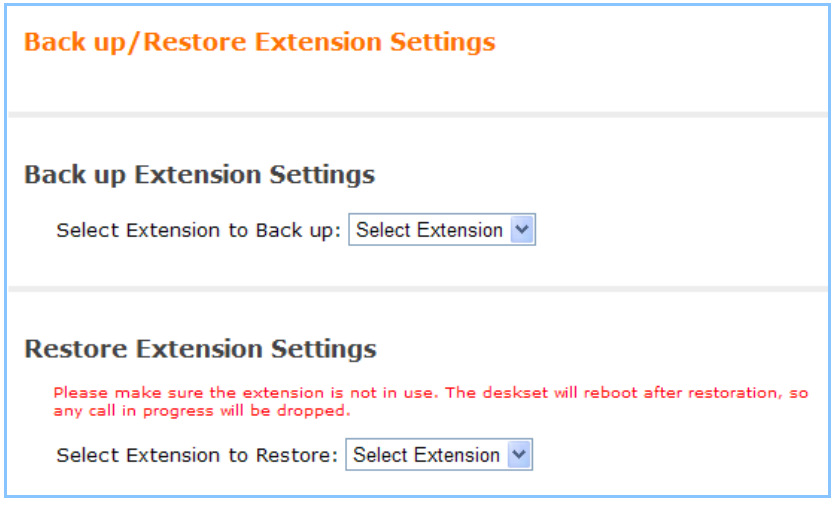


Figure 162. Back Up/Restore Extension Settings, Part 2

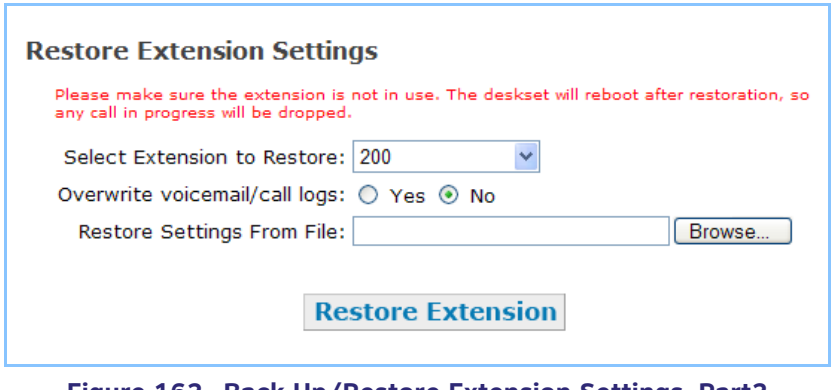


Figure 163. Back Up/Restore Extension Settings, Part3

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **Device Management**, then **Back up/ Restore**, then **Extension Settings** in the Navigation Menu at left. The screen shown in Figure 162 appears.

CAUTION *If you are restoring Deskset settings, ensure that there are no calls in progress or they will be dropped.*

3. Choose the extension from the **Select Extension to Restore** drop-down list.
4. The screen displays the options shown in Figure 163.
5. Select whether you want to overwrite Voicemail and Call Logs.
6. Enter the file name or click Browse... and select a file.

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

To restore the Extension Settings: (Continued)	
	7. Click **Restore Extension**. Deskset settings are restored and the Deskset restarts. You are then logged out of the WebUI. **NOTE** If a PC is installed in series with the Deskset, restarting the Deskset causes the PC's connection to the network to be briefly lost.

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:

- Auto Attendant tree structure
- Auto Attendant user prompts
- Auto Attendant schedule
- Assigned Operator set
- Timer for Forwarded and Transferred Outside Calls
- System Time settings
- Number of digits in extensions
- Ring Group definitions
- Paging Zones
- Hold Announcement
- System Directory
- Trunk Reservations
- Trunk Routing
- Trunk Labels (Naming)
- Extension and Trunk Prefixes.

The following items are not backed up:

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

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

- Automatically assigned 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 screen.

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** screen.

[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:

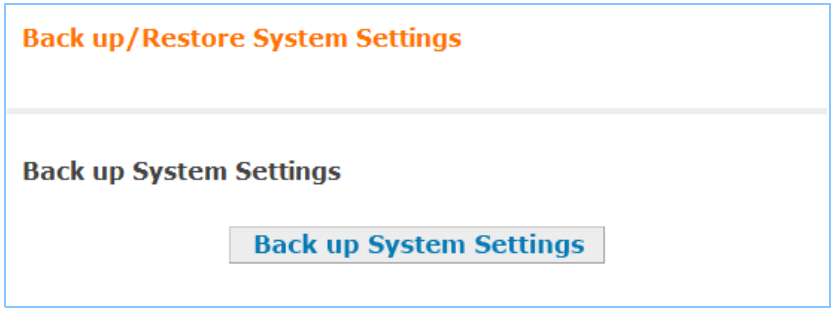


Figure 164. Back Up/Restore System Settings, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **Device Management**, then **Back up/ Restore**, then **System Settings** in the Navigation Menu at left. The screen shown in Figure 164 appears.
3. 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:

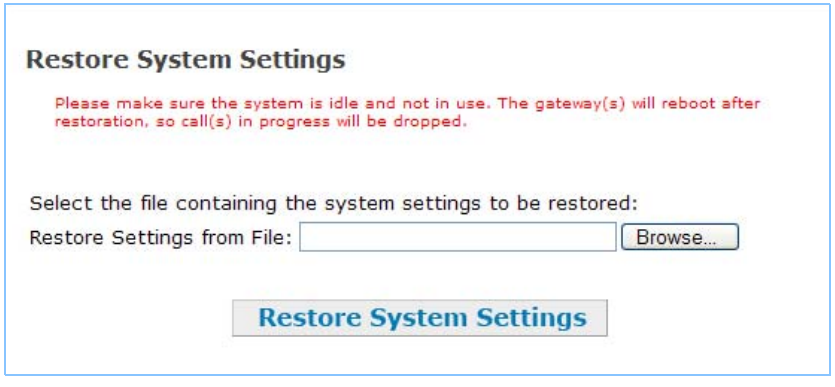


Figure 165. Back Up/Restore System Settings, Part 2

1. Log in as administrator. See *"Log in as Administrator" on page 68*.

   If practical, unplug the PSTN and T1 telephone lines from each Gateway while restoration is in progress to ensure you do not receive any incoming calls.

   If you have more than one Gateway, and you log into one of the Gateways, you do not need to unplug all of the other outside lines from the other Gateways, just the one that you are logged onto.

2. Click **Device Management**, then **Back up/Restore**, then **System Settings** in the Navigation Menu at left. The **Back up/Restore System Settings** screen shown in Figure 165 appears.

3. Enter the name for the restore file or click Browse..., as shown in Figure 165, and select a system file.

   Make sure you select the right 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 out of the WebUI.

Updating Devices

New software versions improve system functionality. All Gateways, the optional ATA, and all Desksets 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 Internet access is not available, or you need to manually initiate updates, see *"To manually update a device to the latest software version: (Continued)" on page 185*.

NOTE

Sometimes devices with different versions of software cannot see 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 into the WebUI, only the devices with compatible code versions appear in the device lists. For this reason, wait until all other devices are updated before updating the software version of the device whose IP address was used for logging into the WebUI. As a device is updated, it restarts with the new software version so it may disappear from the device list.

CAUTION

Although unlikely, some types of software upgrades could interfere with 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 172.

The device restarts after a software upgrade. Ensure that there are no calls in progress or they will be dropped.

NOTE

If a PC is installed in series with the Deskset, restarting the Deskset causes the PC's connection to the network to be briefly lost.

If you are updating devices individually, update the device whose IP address you used for logging into the WebUI after updating all other devices.

To automatically update all devices to the latest software version:

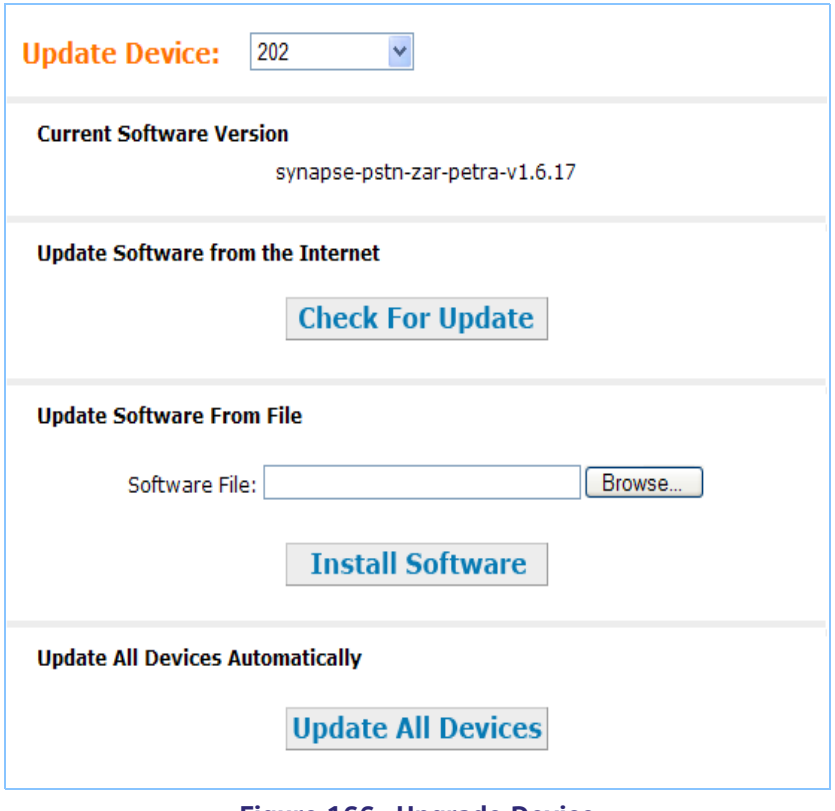


Figure 166. Upgrade Device

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **Device Management**, then **Update Device** in the Navigation Menu at left. The screen shown in Figure 166 appears.
3. At the bottom of the screen, press 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.

NOTE

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.

To automatically update all devices to the latest software version:

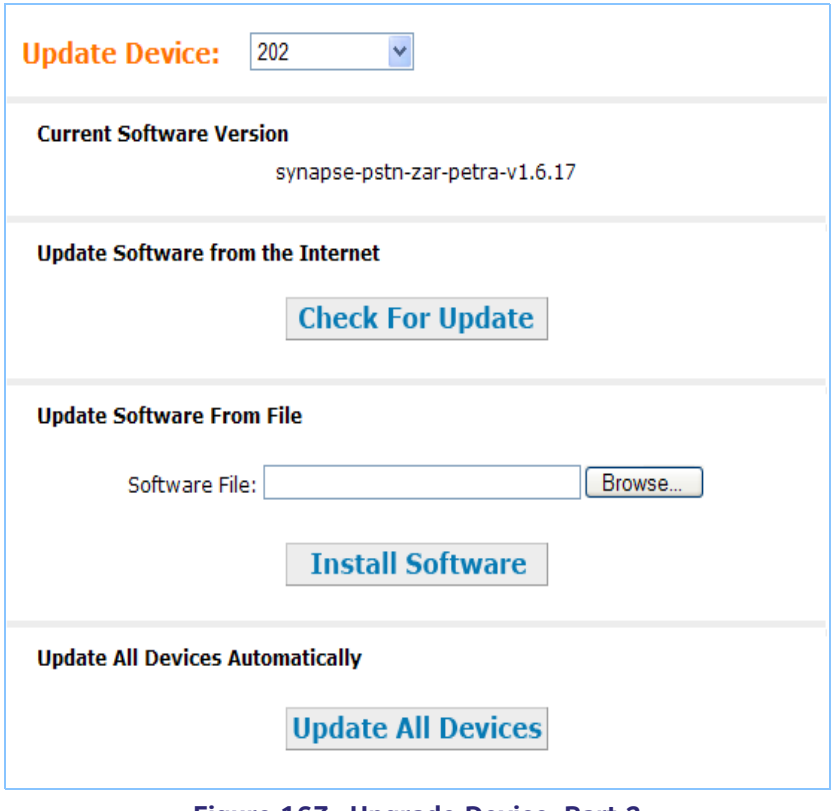


Figure 167. Upgrade Device, Part 2

NOTE

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.

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 automatic process does not work, you can manually upgrade a Deskset, Gateway, or ATA individually. 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.

Update the device whose IP address you used for logging into the WebUI after updating all other devices. Some versions of Synapse software codes are incompatible, so that when you use one device's IP address for logging into the WebUI, only the devices with compatible code versions appear in the device lists. For this reason, wait until all other devices are updated before updating the software version of the device whose IP address was used for logging into the WebUI.

To manually update a device to the latest software version:

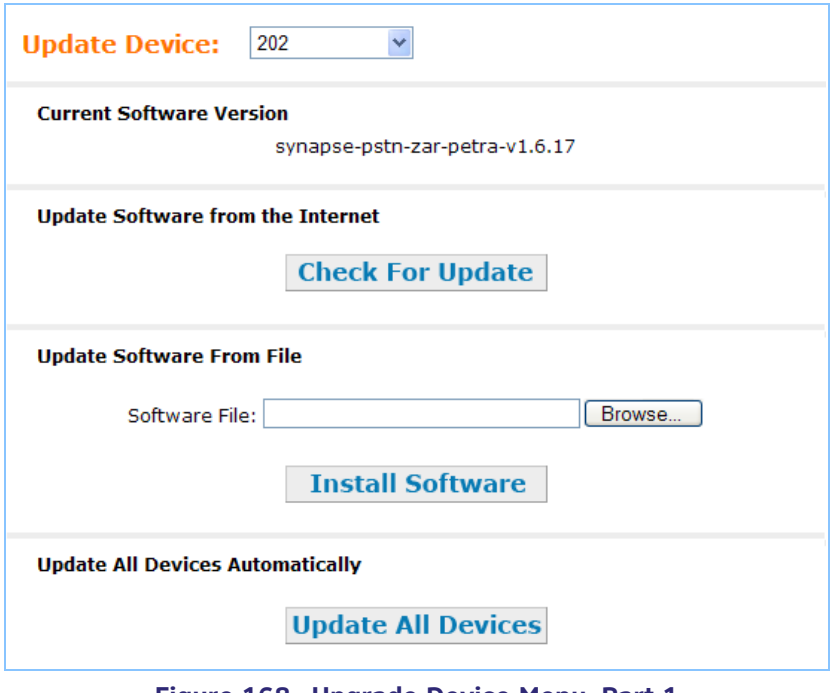


Figure 168. Upgrade Device Menu, Part 1

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **Device Management**, then **Update Device** in the Navigation Menu at left. The screen shown in Figure 168 appears.
3. Select a Gateway, ATA, or Deskset to upgrade from the **Update Device** drop-down list.

   The Current Software Version for that device appears.

NOTE You can only upgrade one device at a time. Only the selected device is updated.

To manually update a device to the latest software version: (Continued)

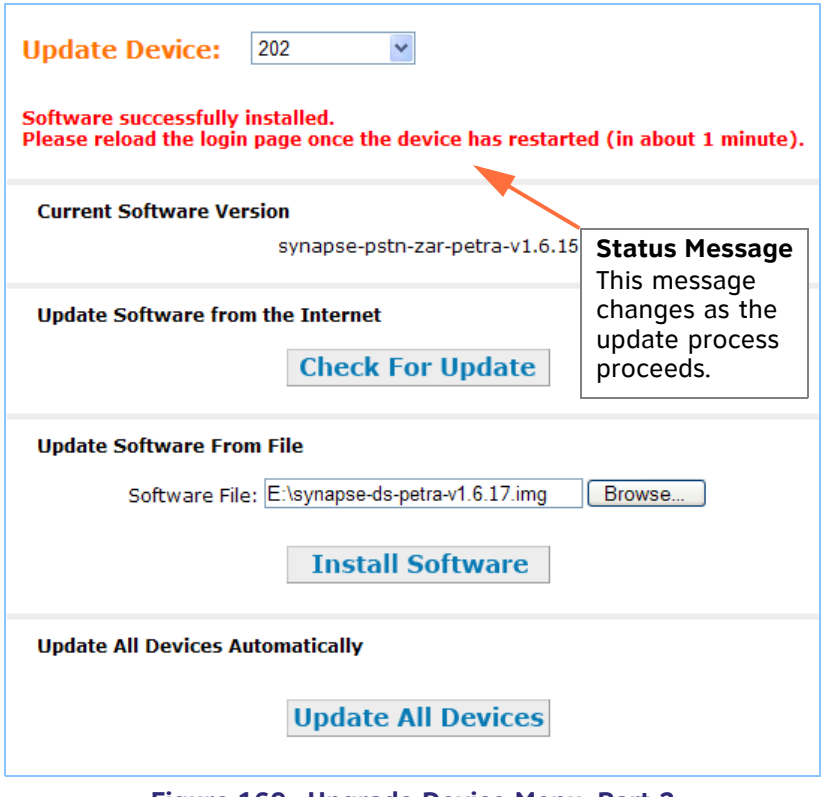


Figure 169. Upgrade Device Menu, Part 2

4. Click Check For Update.

   If there is an update available on the Internet, the message shown in Figure 169 appears. Click Install Update. The specified device restarts.

   OR

   In the **Update Software From File** section of the screen, enter a file name or click Browse... to select a previously acquired upgrade file. Once selected, click Install Software. The specified device restarts.

5. After the device restarts, check the software version number at the device to confirm that the upgrade was successful.

   - On the Deskset: **MENU** –> **Deskset Information** –> **P Firmware Ver**.
   - On the Gateway or ATA: **Main Menu** –> **Device Information** –> **Software**.

NOTE

If the device is sluggish or unresponsive during the upgrade process, refer to *"A Synapse device becomes sluggish or unresponsive during or immediately after software upgrade." on page 204*.

As a device is updated, it restarts with the new software version so it may disappear from the device list if its software version is incompatible with the device whose IP address was used for logging into 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. You are not able to read the file.

To generate the Device Log:

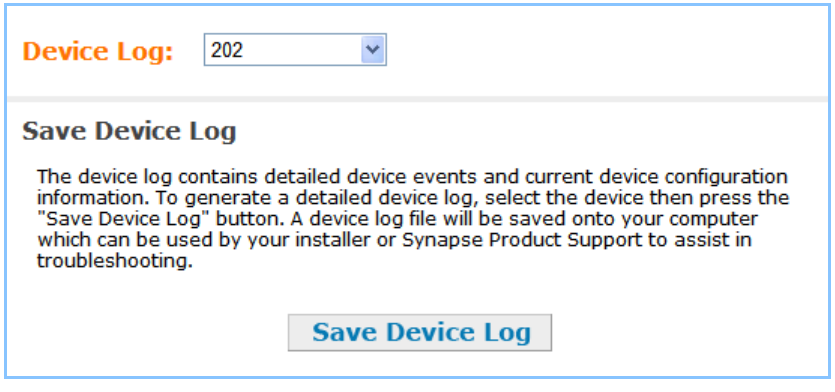


Figure 170. Device Log

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **Device Management**, then **Device Log** in the Navigation Menu at left. The screen shown in Figure 170 appears.
3. Select the desired device from the drop-down list and click Save Device Log.
4. It takes a minute for the file to generate. A pop–up box then asks you where to save the file on your computer.
5. After the download is complete you should provide the file to the installer or customer service.

NOTE

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**.

Help

To display the Help menu:

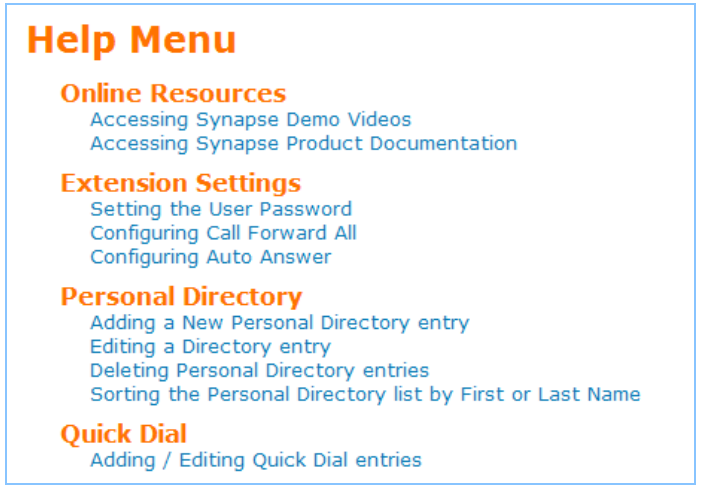


Figure 171. Help Menu

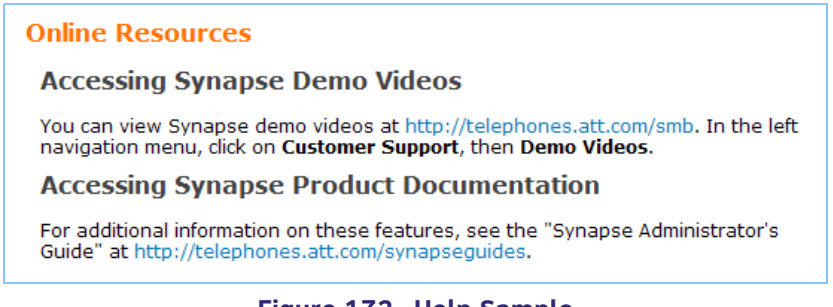


Figure 172. Help Sample

1. Log in as administrator. See *"Log in as Administrator" on page 68*.
2. Click **Help** in the Navigation Menu at left. The screen shown in Figure 171 appears.
3. Select the desired topic. The subject screen for that topic displays, as shown in Figure 172.

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. You need the MAC address of each device to register them.

- For Desksets, at the Desksets, press **MENU**, then press **Deskset Information**. Look at the fourth line, as shown in Figure 173.
- For Gateways and ATAs, at the devices, press **SELECT**, and **DOWN** (to get to Network Status), and then **DOWN** until you get to MAC address, as shown in Figure 174.

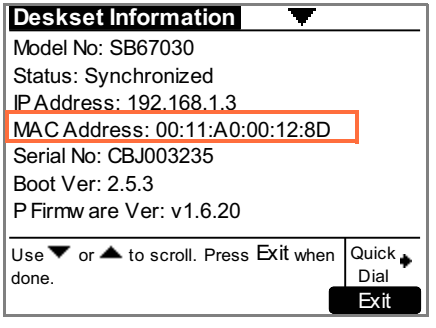


Figure 173. Deskset Information

To register your Synapse system:

1. Open a new browser tab and navigate to the product registration web site **http://smbtelephones.att.com/smbui/registration/index.cfm**.
2. Complete the form. To enter the Gateway, ATA, and Deskset MAC addresses, copy the information from the **System Information** screen and paste it into the System Registration form. See *"System Basic Settings" on page 76*.
3. When the form is complete, click Register Product.

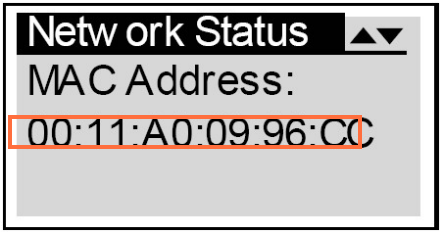


Figure 174. MAC Address

CHAPTER
4
TROUBLESHOOTING

If you have difficulty operating your system, try the following suggestions in this section:

- *"Common Troubleshooting Procedures" on page 190*
- *"General Troubleshooting" on page 199*
- *"Gateway Troubleshooting" on page 211*
- *"Deskset Troubleshooting" on page 219*
- *"[Handset] SB67040 Cordless Handset" on page 233*
- *"[Headset] TL7600 Cordless Headset" on page 240*
- *"[ATA] SB67050 ATA Troubleshooting" on page 245.*

NOTE 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

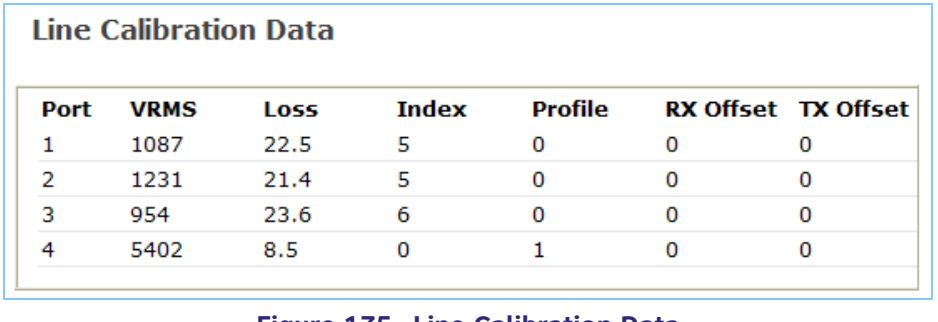
Follow these procedures to resolve common issues.

[PSTN] Resolving Audio Echoes

The SB67010 PSTN Gateway uses automatic telephone line calibration to ensure optimal audio performance on outside calls. If excessive echo occurs on outside calls consistently, observe the Gateway line calibration data to understand any telephone line issues. Occasional echoes may be caused by the other person's phone.

To resolve audio echo issues:

1. Log in as administrator. Click **Device Management**, then **Device Log** in the Navigation Menu at left.
2. Select the PSTN Gateway from the drop-down list. Line Calibration Data appears as shown in Figure 175.
3. Check the loss numbers within the Line Calibration Data box for each telephone line on each Gateway. (A loss number above 10 indicates good audio performance.)



Line Calibration Data

Port	VRMS	Loss	Index	Profile	RX Offset	TX Offset
1	1087	22.5	5	0	0	0
2	1231	21.4	5	0	0	0
3	954	23.6	6	0	0	0
4	5402	8.5	0	1	0	0

Figure 175. Line Calibration Data

To resolve audio echo issues: (Continued)

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. Unplug that telephone line at the Gateway.

   b. After the line LED turns red, plug the line back in to recalibrate.

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. Temporarily 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. Unplug the telephone line connections from the Gateway.

   c. After the Gateway Line-Status LEDs turn red, plug the telephone lines into the Gateway again to recalibrate.

   d. If there is a significant increase in the loss number and improved audio performance on those lines after disconnecting a parallel device, consult your telephone service provider to either investigate the problem or to install separate lines for those parallel devices.

Resolving General Audio Issues

Check the following if you hear static, sudden silences, gaps in speech, echoes, distorted speech, or garbled speech.

To resolve general audio issues:

You may be experiencing network problems.

- Your LAN administrator should ensure the following minimum guidelines 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.

Reintroducing a Deskset Into 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 reintroduce 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 reintroduce a Deskset into the system:

1. 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. See *"Back Up and Restore Settings" on page 172*.
   a. Log in as administrator. Click **Device Management**, then **Back up/Restore**, and then **Extension Settings** in the Navigation Menu at left.
   b. Select the extension from the **New Extension Number** drop-down 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.

NOTE If the desired extension number is not in the drop-down list, choose **Select Extension** from the drop-down menu. The WebUI defaults to backing up the extension whose IP address was used for logging into the WebUI.

To reintroduce a Deskset into the system: (Continued)

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 switch, located on the underside of the Deskset, as shown in Figure 176. 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 will rejoin the system. The Deskset will be given the lowest available extension number, which may be different than its previously assigned extension number.

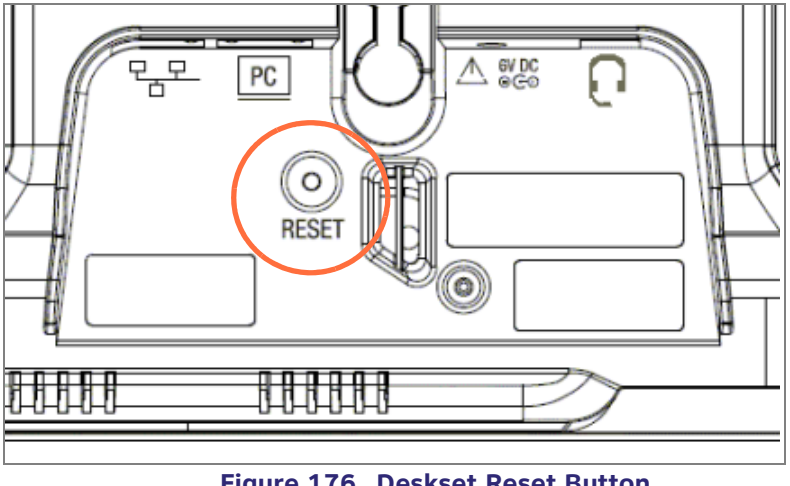


Figure 176. Deskset Reset Button

To reintroduce a Deskset into the system: (Continued)

4. If you backed up the Deskset settings in Step 2, restore your settings.
   a. Log onto the WebUI as the Administrator at the PC where you stored the backup file.
   b. Click **Device Management**, then click **Back up/Restore**.
   c. Under **Back up Deskset Settings**, select the Deskset's newly assigned extension number from the drop-down list. See *"Back Up and Restore Settings" on page 172*.
   d. Select the backup file.
   e. Click **Restore Extension**.
5. Synapse Desksets with static IP addresses need to have new addresses assigned if the Deskset IP addresses are to be used for logging into the WebUI. At the Deskset, press **MENU** –> **3** –> **3** –> **2** to set the **IP address**.

Reintroducing a Gateway or ATA Into the System

If there are no more than five Gateways in the system (four PSTN Gateways and 1 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 reintroduce 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 reintroduce a Gateway or ATA into the system:

1. 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 reintroducing a Gateway and this is the only Gateway.

   NOTE If you are reintroducing a Gateway or ATA, and there are other Gateways that are synchronized, this step is not necessary.

   a. Log in 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 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 back up, 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 Ethernet port located on the front of the Gateway.

To reintroduce a Gateway or ATA into the system: (Continued)

4. Complete a factory reset to restore factory values. Insert a pen or the end of a paper clip into the reset switch (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 reintroducing the only system Gateway, restore your settings.
   a. Log in 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 back up file.
   d. Click **Restore System Settings**.

Power Failure Recovery Procedure

To recover after a power failure:

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.

Once power has resumed after a power failure, 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 **Sync Failed** or **Synchronizing...** for more than 10 minutes, refer to *"Reintroducing a Deskset Into the System" on page 193* and *"Reintroducing a Gateway or ATA Into the System" on page 196* for recovery methods from these states. Log in as administrator using the IP address of a synchronized device. Click **System Settings/System Information** and click **Detailed Site Information** to check system status. The table will show you which devices are currently connected to the system.

General Troubleshooting

Symptom	Probable Cause	Corrective Action	General Troubleshooting
Unable to access the WebUI Log–in page from my computer.	The computer is not connected to the same subnet (network) as the Deskset, and the subnets are not set up to communicate.	■ Verify the IP address. You must correctly enter the IP address of your Deskset into your Internet browser's address bar. At the Deskset, press **MENU** –> **4** to see the **IP address** displayed in the third line of the information. ■ Ensure that there is an Ethernet cable attached to Network port on the Deskset and to the LAN. If a PC at the same workstation is sharing the LAN connection, attach an Ethernet cable to your computer's Ethernet port and to the PC port on the back of the Deskset. ■ Confirm that your computer and your Deskset are on the same subnet so that they can talk to each other. Check that the first three sections of each IP address are the same. If they are not, they may not be connected to the same subnet. Contact the installer; the subnets may not be set up to communicate.	
	The local address, rather than the network IP address, was used in the address line of the browser.	■ Use the network IP address assigned through DHCP or manually in the address bar of the browser.	
WebUI reverts to Log–in page after clicking a navigation link.	The browser is not checking for newer version of pages.	■ Ensure that your Internet browser is working normally. It may not be automatically caching pages. For example, in Internet Explorer 6, click **Tools** –> **Internet Options**. Then under **Temporary Internet files**, click **Settings**. Under **Check for newer versions of stored pages**, select **Automatically**.	

Symptom	Probable Cause	Corrective Action	General Troubleshooting
Changes made to System Configuration from WebUI are not saved.	More than one person is using the WebUI to change System Configuration at the same time.	■ Make sure only one person logs on as the administrator at a time.	
	Apply must be pressed on each screen to confirm the changes.	■ Press Apply on each screen to confirm the changes.	
Changes I make to the T1 Settings WebUI screen do not change the system.	Pressing Apply alone may not perform the needed reset of the T1 Gateway.	■ After you make changes to the T1 Settings WebUI screen and press Apply, press the T1 Gateway **RESET** button for less than five seconds or remove and restore AC power to the T1 Gateway. CAUTION *Pressing the* **RESET** *switch for more than five seconds will erase all data and settings.*	
An extension number was not changed correctly.	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 number that was already being used.	■ Change the extension number again. Make sure no one is using that extension while you are changing its settings. ■ Make sure that new extension number is not already being used.	

Symptom	Probable Cause	Corrective Action	General Troubleshooting
Outside caller cannot find my extension in the Auto Attendant Directory.	The user for that Deskset has not recorded a Personal Name.	■ Record a name at the Deskset. Press **MENU** –> **User Settings** –> **Name Recording** to record a Personal Name to be played to callers.	
	A first and last name have not been entered into the Extension List.	■ To enter a name, see *"Extension Basic Settings" on page 146*.	
	The user may not be waiting long enough for the search.	■ Tell callers that after spelling the name, they must press the pound (#) sign to start the search.	
You hear static, sudden silences, gaps in speech, or garbled speech.	You may be experiencing network problems.	■ Your LAN administrator should ensure the following minimum guidelines are met: • A switched network topology is recommended (using standard 10/100 Ethernet switches that carry traffic at a nominal rate of 100 Mbit/s). • The office network infrastructure should use Cat5 wiring. ■ Do not connect a network server PC to the PC port on the Deskset. ■ Make sure the network cable is solidly plugged in. If you tug on the cable, the plug should remain inserted.	
Calls are dropped.	Restoring the Deskset settings while that extension is in use will cause all calls to be dropped.	■ Avoid updating software or restoring the Deskset settings when a user is at the workstation.	

Symptom	Probable Cause	Corrective Action	General Troubleshooting
A call is forwarded or transferred to an outside telephone number and the call is disconnected.	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.	■ To set the timer, see *"To view or modify the System Basic Settings:" on page 77* and select the maximum call from the drop-down list (15 to 120 minutes).	
Prompt created for Auto Attendant menu or Hold Announcement is not saved.	You must hang up the extension before saving the recording.	■ After recording a prompt for an Auto Attendant menu or for the Hold Announcement, hang up the extension before pressing **Save Recording** in the WebUI.	
I cannot record a Hold Announcement or an Auto Attendant prompt.	Calls to the extension you want to use may be immediately forwarded.	■ Choose an extension that is not set up to automatically forward calls.	
Internet connection or access to the local network on my computer does not work after installing the Deskset.	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.	

Symptom	Probable Cause	Corrective Action	General Troubleshooting
You hear echoes, distorted speech, or static.	At least one of the PSTN lines has DSL, which is not properly filtered.	■ 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 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 any PSTN Gateway.	
	There is a non–Synapse telephone device plugged into one of the telephone wall jacks.	■ Remove any parallel systems from the outside phone line (connected through a splitter, for example) such as an analog phone, fax machine, or alarm system.	
	The PSTN Gateway did not recognize a new PSTN line being plugged in, so line calibration — which allows the Gateway to adjust its performance depending on the phone lines' characteristics — did not occur.	■ Confirm an Ethernet cable is plugged into the Deskset port marked  . ■ Ensure that the line LED is solid red before plugging in the PSTN line. ■ When unplugging the line, wait two full seconds for the LED to turn red before plugging it back in.	
My PC is slower now that I have connected it to the LAN through the Deskset.	A computer connected through the Deskset will be limited to 100 Mbits/s.	■ Use separate Ethernet connections for the Deskset and the computer so that the computer can take advantage of the network's greater bandwidth.	

Symptom	Probable Cause	Corrective Action	General Troubleshooting
My PC, which is connected to the LAN through the Deskset, briefly loses its network connection.	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 software upgrade) the connection to the LAN is temporarily lost.	■ 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. ■ If the PC is connected to the Deskset, and if the PC is connected to an Uninterruptible Power Supply (UPS), plug the Deskset into a UPS. ■ Use separate Ethernet connections for the Deskset and the computer.	
A Synapse device does not connect with other Synapse devices.	The device has previous data and settings that are now inconsistent with current system settings.	■ 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. ■ 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.	
A Synapse device becomes sluggish or unresponsive during or immediately after software upgrade.	Cannot connect to AT&T server or the device encountered unexpected problem.	■ Disconnect the power to the device, wait a few minutes, then reconnect the power and try the upgrade process again.	

Symptom	Probable Cause	Corrective Action	General Troubleshooting
A Synapse device displays "Host Not Found" after a user attempts a software upgrade.	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.	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**.	
A Synapse device is sluggish, unresponsive, or behaving unusually.	The device encountered an unexpected problem.	■ Reset the device. Press the **RESET** button for less than five seconds or remove and restore AC power. CAUTION *Pressing the* **RESET** *switch for more than five seconds will erase all data and settings.*	

Symptom	Probable Cause	Corrective Action	General Troubleshooting
The WebUI is unresponsive.	The device encountered an unexpected problem.	1. Close the unresponsive web browser, reopen the browser, and log back in as administrator. 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 back in.	
The system clock displays incorrect time	The system lacks Internet access for current time data.	1. As administrator, log into the WebUI 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. The click Apply.	
The **Outgoing Caller ID** option does not appear on the **Extension Basic Settings** screen of the administrator WebUI.	A DID number has not been assigned.	■ Assign a DID number to the extension. On the WebUI, click **Extension Settings**, then **Basic Settings**, and then select a DID number from the **Select DID** drop-down list.	
"*Extension unavailable*" was heard when calling a DID number.	The SA changed an analog phone or Fax FXS extension to an OHP extension without releasing the DID number.	■ Release the DID number. See *"To manually assign Direct Inward Dial numbers:" on page 105*.	

Symptom	Probable Cause	Corrective Action	General Troubleshooting
A Synapse device upgrade failed, the WebUI displays "Login to target device failed", and the WebUI and device screens display the old software version.	The software version of the device you are currently logged into is no longer compatible with the software version of other devices within the network.	1. As administrator, log into the WebUI 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**. 2. Select a device from the **Update Device** drop-down list. Do not select the device whose IP address you are using. 3. Click Install Update. The selected device updates its software and reboots. 4. After the device reboots, check the software version number on the device to confirm that the upgrade was successful. ■ On the Deskset, press **MENU** –> **Deskset Information** –> **P Firmware Ver**. ■ On the Gateway or ATA, press the SELECT key to access the **Main Menu**. Then select **Device Information**, then **Software Version**. 5. After updating all other devices, upgrade the device whose IP address you are using.	

Symptom	Probable Cause	Corrective Action	General Troubleshooting
The WebUI displays "Login to target device failed."	The software version of the device you are currently logged into is no longer compatible with the software version of other devices within the network.	1. As administrator, log into the WebUI using the IP address of the device that caused the problem. Click **Device Management**, then **Update Device** in the WebUI Navigation Menu at left. 2. Click Install Update. The selected device updates its software and reboots. 3. After the device reboots, check the software version number on the device to confirm that the upgrade was successful. ■ On the Deskset, press **MENU** –> **Deskset Information** –> **P Firmware Ver**. ■ On the Gateway or ATA, press the SELECT key to access the **Main Menu**. Then select **Device Information**, then **Software Version**.	
	The device to be updated is unplugged.	■ A device 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, refer to *"Reintroducing a Deskset Into the System" on page 193* or *"Reintroducing a Gateway or ATA Into the System" on page 196*.	

Symptom	Probable Cause	Corrective Action	General Troubleshooting
Some devices did not update after using Update All Devices.	Did not allow enough time for software to update due to a slow Internet connection.	■ Wait 30 minutes, then check whether additional devices have been updated. If devices are still 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), retry Update All Devices. 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. ■ 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).	
During device upgrade one of the following messages appears: "UNKNOWN ERROR Current image version" or "UNKNOWN ERROR".	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).	

Symptom	Probable Cause	Corrective Action	General Troubleshooting
Calls directed to the operator are misdirected.	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 168*.	
The Auto Attendant does not send calls to the correct extension.	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 Auto Attendant settings for that set were deleted.	■ If you remove a Deskset from the system, any Auto Attendant menu assignment to that extension revert to **None**. See *"Deleting Devices" on page 168*. ■ Review your Auto Attendant settings. Log in as administrator and click **System Settings**, then **Auto Attendant**, then **General Settings**.	
Outside callers cannot directly dial extensions after the Auto Attendant answers.	If any of the dial key values for Auto Attendant menu choices match the first digit of any extensions, callers will activate that menu choice, rather than completing dialing that extension when Direct Dialing is enabled.	■ Make sure that no extension prefixes match Auto Attendant menu choices.	

Gateway Troubleshooting

Symptom	Probable Cause	Corrective Action	Gateway Troubleshooting
Gateway does not work at all.	There is no power to the device.	■ Ensure the AC plug is plugged into an electrical outlet not powered by a wall switch. ■ Verify that the AC power outlet has power, such as 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 marked ⊙⊖⊕ on the front of the Gateway.	
Gateway screen displays **Network Down**.	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 Gateway and that the other end is plugged into your office LAN. ■ Confirm that the Ethernet port light next to the Ethernet port on the Gateway 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.	

Symptom	Probable Cause	Corrective Action	Gateway Troubleshooting
Gateway screen displays **Synch Failed**.	The Gateway was disconnected, then reconnected after configuration changes were made to the system.	■ Refer to *"Reintroducing a Gateway or ATA Into the System" on page 196*.	
	The Gateway 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 switch (located on the front of the unit) for more than five seconds. See *"Reintroducing a Gateway or ATA Into the System" on page 196*.	
	The maximum number of four PSTN Gateways and one T1 Gateway for the site has been reached.	■ A Gateway must be removed from the network and deleted from the system before another Gateway can be added.	
Gateway screen displays **Joining Site...** for more than one minute.	The Gateway is failing to synchronize with a Deskset configured for a different system configuration.	■ Always disconnect the LAN cable from Desksets before restoring factory defaults (by pressing the **RESET** button more than five seconds).	

Symptom	Probable Cause	Corrective Action	Gateway Troubleshooting
Deskset cannot make or receive phone calls and the Gateway screen displays **Synchronizing...**.	The Gateway and the Deskset are on different subnets.	■ The Gateway may display **Synchronizing...** for a few seconds. This is normal and does not indicate a problem. ■ If this Gateway is the first device on the network, **Synchronizing...** displays continuously until another device is connected to the network. ■ If you need to use static IP addresses, ensure that all system devices and any PCs from which you access the WebUI have static IP addresses that are on the same subnet.	
	The Deskset is the only device on the subnet.	■ Power cycle the Deskset by unplugging the power cord and plugging it back in. ■ If power cycling does not work, back up your Deskset and reset to factory defaults by using a paper clip to press and hold the reset switch (located on the underside of the unit) for more than five seconds. Restore your settings after restart. See *"Back Up and Restore Settings" on page 172*.	
A Gateway is not active immediately after a power interruption.	The Gateway needs time to restore service.	■ Allow at least 30 seconds for the Gateway to boot up again after a power failure.	
On a PSTN Gateway, Bypass jack does not work during power failure.	The PSTN line is not in the correct jack.	■ Make sure there is a PSTN line plugged into Line 4. ■ Make sure an analog phone is plugged into the bypass jack (using a modular line cord).	

Symptom	Probable Cause	Corrective Action	Gateway Troubleshooting
On a PSTN Gateway, Line-Status LEDs do not flash red when the telephone line cords are plugged into the Gateway after power is switched on.	Line calibration allows the PSTN Gateway to adjust its performance depending on the phone lines' characteristics. The Gateway may not have performed calibration.	■ Make sure an Ethernet cable is plugged into the port marked LAN. ■ Unplug the PSTN telephone line and wait two full seconds for the Gateway line LED to turn red before plugging it back in.	
I changed an extension number, but the DID number did not change.	DID numbers do not change when extension numbers are changed.	■ Manually change the DID number. See *"To manually assign Direct Inward Dial numbers:" on page 105*.	
My T1 trunk appears to be locked up.	Incoming or outgoing calls using the T1 trunk are attempted before the SYN/ACT LED is **GREEN**.	■ Press the **RESET** button on the front panel of the T1 Gateway for less than 5 seconds. ■ Wait for the SYNC LED to turn **GREEN** before making or receiving any T1 calls or receiving calls on the T1 Gateway.	
I cannot make or receive phone calls and the T1 Gateway RAI/LOF/LOS LED is YELLOW (yellow).	The Yellow Alarm is a Remote Alarm Indication. Telephone equipment outside of your Synapse system is sending an alarm that signals that it is receiving unreliable signals.	1. Verify that your T1 cable is connected to the equipment. 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.	

Symptom	Probable Cause	Corrective Action	Gateway Troubleshooting
I cannot make or receive phone calls and the T1 Gateway RAI/LOF/LOS LED is **RED**.	The Red Alarm indicates Loss of Frame. A signal is present, but its pattern cannot be interpreted. There is an error in the signal from the service provider.	1. Verify that your T1 cable is connected to the equipment. 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 RAI/LOF/LOS LED is flashing **RED**.	The Flashing Red alarm indicates Loss of Signal There is loss of valid signal from the service provider.	1. Verify that your T1 cable is connected to the equipment. 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**.	The Blue Alarm is an Alarm Indication Signal. The T1 circuit is operating correctly, but the service provider is not sending proper data.	■ Contact your T1 service provider.	
I cannot make or receive phone calls and the T1 Gateway LOOPBK LED is **GREEN** or flashing **GREEN**.	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. a. Log in as administrator, click **T1 Settings**, then **T1 Diagnostics**. b. Change the T1 in loopback test mode by selecting from the **Set Loopback Mode** drop-down list. c. Select **none** and then Apply to stop the test.	

Symptom	Probable Cause	Corrective Action	Gateway Troubleshooting
I cannot make or receive phone calls and the T1 Gateway LOOPBK LED is **RED**.	The T1 Gateway is not synchronized.	■ Check the Ethernet Connection to your Synapse T1 Gateway.	
I cannot make or receive phone calls and the T1 Gateway SYN/ACT LED is **OFF** and RAI/LOF/LOS LED is **RED**.	The T1 service is not synchronized.	■ Check the correct T1 cable is used and that it is properly connected to the T1 Gateway.	
I cannot make or receive phone calls but the T1 Gateway SYN/ACT LED is **Green**.	There are no T1 channels available to make the call.	■ Check the **Trunk Reservation Configuration** to make sure that there are still some T1 channels or PSTN lines available. Make sure that **Number of Voice Channels** and **Lowest Voice Channel** have been configured correctly.	
Incoming Direct Inward Dialing calls fail, or the caller hears, "*Invalid extension.*"	There may be a DID settings error or the Deskset is not connected to the system.	■ Verify that the Deskset is connected to the system and has power. ■ Verify that the DID has been assigned to the correct extension. On the administrator WebUI, click **Extension Settings**, then **Basic Settings**. Verify the **Select Extension** number and select the DID number from the **Select DID** drop-down list.	
I cannot find the specific DID number for assignment on the **DID Assignments** screen or the **Fax Configuration** screen.	There may be a DID range error or the DID has been used.	■ The DID is not within the DID ranges configured or the DID has been already assigned to another Deskset. Check the DID ranges configuration in the Admin WebUI. Click **System Settings**, then **Direct Inward Dial**, and verify the **Current DID Ranges**.	

Symptom	Probable Cause	Corrective Action	Gateway Troubleshooting
Even though I have a Trunk reservation, there is no outside line available for dialing calls.	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 PTSN Trunk reservation is not being honored.	An incoming call may be using that line. Parking calls and forwarding calls on a reserved trunk does not free up the trunk.	■ Set up Trunk Routing to reserve the incoming path to the 'special' extension. On the administrator WebUI, click **System Settings**, then **Trunk Routing**. ■ Forwarded call must end before the reserved trunk is available.	
I cannot make an outgoing call on a system with reserved trunks.	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. The SA can either remove the reservations from some trunks or arrange for additional analog telephone lines or T1 channels.	
Calls to the Auto Attendant are not directed to the selected extension.	Direct Dial is not enabled	■ Enable Direct Dial. On the administrator WebUI, click **System Settings**, then **Direct Inward Dial**, and verify the **Current DID Ranges**. Then click Apply	
	The first digit of the extension matches an Auto Attendant Menu item.	■ Ensure that the first digits of the extension numbers do not match the Auto Attendant menu choices. Change the Auto Attendant menu choices or the first digits of the extensions so they do not match.	
I cannot retrieve parked calls.	The first digit of an extension number matches the first digit of parked calls.	■ Correct your dial plan. Do not have extension numbers whose first digits match the park extension prefix. On the administrator WebUI, click **System Settings**, then **Dial Plan Settings.**	

Symptom	Probable Cause	Corrective Action	Gateway Troubleshooting
I cannot dial an outside number. I reach an extension instead	The extension prefix matches the first digit of the outside phone number you tried to dial, and you don't have to dial a digit before dialing outside phone numbers.	■ Change the **PSTN Trunk Prefix** to something other than **none**. On the administrator WebUI, click **System Settings**, then **Dial Plan Settings**. ■ If you want to maintain the ability to dial outside phone numbers without a preceding digit, change the extension prefix to avoid matching the first digits of commonly called outside phone numbers. On the administrator WebUI, click **Extension Settings**, then **Basic Settings**. Select a new extension number in the **Change Extension Number to** box.	
Voicemail is not received at the called extension.	Target extension Voicemail is full.	■ Deletes messages.	
	Extension is unplugged.	■ Plug in the extension.	
	Distribution List error.	■ Verify the Distribution List. Log in as an individual user on the WebUI, click **Voicemail Distribution.**	
Round Robin extensions do not ring in the correct order.	The system time is not properly configured.	■ All devices' time settings need to be synchronized. Either set the **System Time/Date Options** to automatic (if the Internet is available) or to manual. On the administrator WebUI, click **System Information**, then **Basic Settings**. Set the **System Time/Date Options**.	
Incoming DID calls do not reach my extension.	Outside caller dialed the caller ID number that came with a fax or an outgoing voice call was made on the fax line. Outside calls placed to the DID fax number go directly to the fax machine.	■ Ensure that fax line uses the Pilot Number for outgoing CID. On the administrator WebUI, click **System Settings**, then **Direct Inward Dial**, and set the **Outgoing Caller ID for all Extension** to **System Pilot Number (global setting)**. Then click Apply	

Deskset Troubleshooting

For more information about the corrective actions recommended in this troubleshooting section, see the Synapse User's Guide at **www.telephones.att.com/synapseguides**.

Symptom	Probable Cause	Corrective Action	Deskset Troubleshooting
My Deskset does not work at all.	There is no power to the device.	■ Ensure the AC plug is plugged into an electrical outlet not powered by a wall switch. ■ Verify that the AC power outlet has power, such as 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 DC 5.1V jack on the bottom of the Deskset labeled ⊙⊂⊕.	
Deskset screen displays **Network Down**.	The Ethernet cable is unplugged.	■ Ensure that one end of the Ethernet cable is plugged into the Ethernet port beneath your Deskset labeled  . ■ Check that the other end is plugged into your office LAN. ■ Confirm that the Ethernet port light next to the Ethernet port on the bottom of the Deskset turns green. If it does not, unplug the cable and plug it in again. ■ If the Deskset still does not synchronize, there may be a problem with the office network. Reset or restart the router/server.	
My PC is slower now that I have connected it to the LAN through the Deskset.	A computer connected through the Deskset will be limited to 100 Mbits/s.	■ Use separate Ethernet connections for the Deskset and the computer so that the computer can take advantage of the network's greater bandwidth.	

Symptom	Probable Cause	Corrective Action	Deskset Troubleshooting
Deskset screen displays **Synch Failed**.	The Deskset was disconnected, then reconnected after configuration changes were made to the system.	■ Refer to *"Reintroducing a Deskset Into the System" on page 193*.	
	The Deskset has returned to the system after being deleted from the system.	■ Refer to *"Reintroducing a Deskset Into the System" on page 193*.	
	The Deskset was configured on another network.	■ To save your local settings, back up the Deskset. See *"Back Up and Restore Settings" on page 172*. Then reset the Deskset to factory defaults: insert a pen or paper clip into the reset hole and press for at least five seconds. Restore your settings after restarting.	
	The same Deskset extension number already exists.	■ Reset the Deskset to factory defaults without the network cable connected.	
	A Deskset from another system was connected to the current system.	■ Reset the Deskset to factory defaults without the network cable connected.	
Other Desksets do not appear in the extension list.	The Deskset is not connected to the same subnet as the other Desksets.	■ Verify that the first two sections of the IP address (the portion before the second "dot") match the IP addresses of the other Desksets or that the subnets are set up to communicate with each other. Press **MENU** and then **4** at a Deskset to find the IP address. ■ If the other Desksets have been assigned static IP addresses, you may have to assign your Deskset a static IP address to match the other Desksets.	

Symptom	Probable Cause	Corrective Action	Deskset Troubleshooting
Deskset cannot make or receive phone calls and the Deskset screen displays **Synchronizing...**.	The Deskset is the only device on the subnet, or is on a different subnet than any Gateways.	■ The Deskset may temporarily display **Synchronizing...** for a few seconds. This is normal and does not indicate a problem. ■ If this Deskset is the first device on the network, **Synchronizing...** displays continuously until another device is connected to the network. ■ Confirm that the first three octets of the Deskset IP address match the IP addresses of other system devices. ■ Power cycle the Deskset by unplugging the power cord and plugging it back in. ■ If power cycling does not work, back up your Deskset and reset to factory defaults by using a paper clip to press and hold the reset switch (located on the underside of the unit) for more than five seconds. Restore your settings after restart. (See *"Back Up and Restore Settings" on page 172*.)	
	The Deskset may have an incompatible software version.	■ Log into the WebUI using the IP address of the Deskset. Update the software. See *"Updating Devices" on page 181*	
Deskset cannot make or receive phone calls	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.	

Symptom	Probable Cause	Corrective Action	Deskset Troubleshooting
Unable to make outside calls.	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. ■ Ensure that a Gateway is connected to the network and that it resides on the same subnet as the Deskset.	
I cannot make international long distance calls.	If no trunk prefix (digit entered before dialing outside calls) is set, phone numbers, including international or country codes, that start with 0 (zero) will go to the Synapse system operator.	■ Set the **PSTN Trunk Prefix** to something other than **none**. On the administrator WebUI, click **Dial Plan Settings**, and then select a digit from the **PSTN Trunk Prefix** from the drop-down list.	
I cannot access phone company services like 411.	If the **PSTN Trunk Prefix** is set to **none** and any x11 extensions already exist (such as 411, or 611), then the extensions takes precedence. In other words, dialing 411 calls extension 411, not the 411 directory service. 911 cannot be assigned as an extension number.	■ Change the extension number. See *"Extension Basic Settings" on page 146* ■ 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**.	

Symptom	Probable Cause	Corrective Action	Deskset Troubleshooting
My Deskset does not receive incoming calls.	Incoming call notifications have been suppressed or are unable to reach the Deskset.	■ 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. ■ Verify that Do Not Disturb is off. Make sure that **DND** is not in the top right corner of the Deskset display. Turn this feature off by using the Deskset Idle screen soft keys. ■ Verify that Call Forward All is off. Make sure that FWD ON is not in the top right corner of the Deskset display. Turn this feature off by using the Deskset Idle screen soft keys. ■ Verify that the Audible Ring Delay is not set too long. See "Sounds" in the Synapse User's Guide at **www.telephones.att.com/synapseguides** ■ 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 that you are not part of.	
On outside calls, I hear an excessive echo at the Deskset.	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 resolve audio echo issues:" on page 190*.	
My Deskset is not active immediately after a power interruption.	The system needs time to restore service.	■ Allow at least one minute for the system to boot up again after a power failure.	

Symptom	Probable Cause	Corrective Action	Deskset Troubleshooting
I do not hear a ring when calls arrive.	The ringer volume is too low or a ring delay is set.	■ Press the **VOL+** key to increase ringer volume. ■ Verify that the Audible Ring Delay is off. Press **MENU** then **1**, and then **2** at a Deskset to adjust the ring delay.	
I receive only caller ID numbers, not caller ID names.	Your T1 telephone service provider may use DMS-100 or 5ESS signalling protocols, which do not support caller ID name delivery.	■ Talk to the service provider about obtaining PRI-NI2 signaling.	
Call does not Auto Answer.	The Deskset is set to Call Forward All.	■ Deactivate Call Forward All on the user's Deskset. On the idle screen, press CallFwd.	
	The Deskset is in DND mode.	■ Deactivate DND on the user's Deskset. On the idle screen, press DND.	
	Your Auto Answer delay is greater than your Call-Forward – No Answer delay.	■ Adjust the user's auto answer delay. Press **MENU** -> **User Settings** > **Auto Answer**.	
	Ring Group calls cannot be automatically answered.	■ If your location has a T1 Gateway and DID numbers, ask your SA to provide you a DID phone number and ask people whose calls you want auto answered to dial your DID number.	

Symptom	Probable Cause	Corrective Action	Deskset Troubleshooting
My PC, which is connected to the LAN through the Deskset, briefly loses its network connection.	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 software upgrade) the connection to the LAN will be temporarily lost.	■ If the PC is connected to the Deskset, and if the PC is connected to an Uninterruptible Power Supply (UPS), plug the Deskset into the UPS. ■ Use separate Ethernet connections for the Deskset and the computer.	
Deskset does not receive Voicemail.	Calls are not being directed to Voicemail, or the Voicemail memory is full.	■ Verify that Call Forward All is off or is targeted to Voicemail. • Press CallFwd to turn this feature off. FWD ON will not be in the top right corner of the Deskset display. • To set the Call Forward All target, Login as a user to the WebUI. On the **Basic Settings** screen, set the **Target Type** to **Voicemail**. Then click Apply. ■ Check the Call Forward – No Answer setting (in the Admin Settings on the Deskset). Calls may be forwarding to another phone number instead of Voicemail. ■ Check your available Voicemail memory. You may need to delete some messages to create space.	
Number of new messages or all messages does not match on Cordless Handset and Deskset.	Cordless Handsets registered to Desksets that have access to Group Mailboxes do not recognize the messages in the Group Mailboxes.	■ The optional Cordless Handsets do not have access to Group Mailboxes. Therefore, Group Mailbox messages do not accrue on the Handset.	

Symptom	Probable Cause	Corrective Action	Deskset Troubleshooting
My Deskset does not automatically forward a call to another extension.	The Call Forward All settings are incorrect.	■ Check that Call Forward All is on (FWD ON should appear in the top right corner of the screen while in Idle mode). ■ Ensure that a valid extension number has been entered as a destination extension. It is not necessary to enter a **9** or whatever digit, if any, that must be dialed first for an outside call. ■ Confirm that the Call Forward All **Target** is set to ◀ Ext ▶.	
Calls are dropped.	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.	■ Contact your system administrator. If changes were made to your extension while you were on a call, that call is dropped.	
	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.	

Symptom	Probable Cause	Corrective Action	Deskset Troubleshooting
Deskset does not automatically forward a call to an outside phone number.	Forwarding to outside phone number has been disabled or Call Forward All settings are incorrect.	■ Check that forwarding to an outside phone number has been enabled. See *"Call Forward–NA to an Outside Phone Number" on page 50*. ■ Check that Call Forward All is on. FWD ON should appear in the top right corner of the screen while in Idle mode. Press CallFwd to turn this feature on. ■ Ensure that a valid outside number has been entered as a destination number. Entering a **9** (or whatever digit, if any, that must be dialed first for an outside call) before the number is not necessary. ■ Confirm that Call Forward All **Target** is set to ◀Phone#▶.	
I am unable to manually forward a call to Voicemail.	Calls forwarded to a Ring Group cannot be forwarded to Voicemail by a Deskset user.	■ The system administrator can designate a Deskset as a forwarding destination if the 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 135*.	
I am unable to transfer call to extension.	The extension is unavailable.	■ Check if the destination extension is disconnected from the network. ■ Ensure that the extension exists. ■ All the destination extension's lines may be busy. ■ If the party you have on hold hangs up, call back and start the transfer process again.	

Symptom	Probable Cause	Corrective Action	Deskset Troubleshooting
I am unable to transfer call to outside phone number.	Transferring to an outside phone number has been disabled, or no lines are available.	■ Check that transferring to an outside phone number has been enabled. See *"Call Forward–NA to an Outside Phone Number" on page 50*. ■ Ensure that the Gateway is connected to the network. ■ All phone lines may be in use. If so, try again later.	
Caller ID is not working. The display shows ◀Phone#▶ and a digit for the name, and the same digit for the phone number.	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.	
DDNs (Directory Dial Numbers) do not dial out properly from the Call Log.	This system does not support DDN.	■ DDNs in the Call Log are treated like all other caller ID phone numbers.	
I am unable to record a prompt.	The selected Deskset is set up to forward all calls.	■ Select a different Deskset to record the greeting. ■ Disable the call forwarding on the selected Deskset.	
There is no DistrList key so I cannot forward messages to Distribution list.	DistrList key is not present unless the Distribution List feature is enabled and the extension user created at least one Distribution List.	■ Log on as a user to the WebUI and enable Distribution Lists and create one or more Distribution Lists.	

Symptom	Probable Cause	Corrective Action	Deskset Troubleshooting
Incomplete Voicemail messages.	Recording interrupted by time–out or full memory.	■ If a caller leaves a very long message, part of it may be lost when the Deskset disconnects the call after two minutes. ■ If the caller pauses for longer than six seconds, the Deskset stops recording and disconnects the call. ■ If the Deskset's memory becomes full during a message, the Deskset stops recording and disconnects the call. ■ If the caller's voice is very soft, the Deskset may stop recording and disconnect the call.	
The system does not respond to remote Voicemail commands.	The system cannot detect Dual-Tone Multi-Frequency (DTMF) tones, which are the signals sent when the caller presses dial-pad keys.	■ Confirm you have entered star, star (**) before entering your remote access code (user password). If you have no password, press star, star (**), then pound (#). ■ Confirm you are calling from a touch–tone phone. When you dial a number, you should hear tones. If you hear clicks, the phone is not a touch–tone telephone and cannot activate the answering system. ■ The answering system might not detect the star, star (**) while your announcement is playing. Try waiting until the announcement is over before entering the code. ■ There may be interference on the phone line you are using. Press the dial-pad keys firmly.	

Symptom	Probable Cause	Corrective Action	Deskset Troubleshooting
My Deskset soft keys have changed.	The highlight bar has moved to another line on the screen.	■ The soft keys reflect the call state and Deskset functions. They change depending on which line is highlighted. For example, there may be a held call, an active call, or an incoming call on the screen. To view the soft keys for that call, move the highlight bar by pressing the △ or ▽ Navigation key.	
I am unable to add an entry to Quick-Dial list.	The Quick-Dial list is full — a maximum of six entries are allowed.	■ You can edit Quick-Dial entries on the Deskset or the WebUI. You cannot delete Quick-Dial entries. If you wish to replace an entry, edit the entry and replace the details. See *"Quick-Dial Keys" on page 153*.	
A caller hears, "*That key is not recognized.*" or "*The key you have pressed is not recognized*".	The caller pressed an invalid key when interacting with the Auto Attendant.	■ Confirm that your Auto Attendant main menu presents the correct options for the Auto Attendant flow you have created.	
A caller hears, "*Invalid extension.*" while interfacing with the Auto Attendant.	The caller entered an extension number that does not exist in your system.	■ Provide callers with the right 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 unplugged since the Auto Attendant was set up.	

Symptom	Probable Cause	Corrective Action	Deskset Troubleshooting
A caller hears, "*Extension Unavailable*" when calling a DID number.	The SA changed an analog phone or fax FXS extension to an OHP extension without releasing the DID number.	■ On the administrator WebUI, click **Extension Settings**, then **Basic Settings**. Verify the **Select Extension** number and select **Unassigned** from the **Select DID** drop-down list. Then click Apply	
Incoming calls do not come in.	Caller dialed a DID fax number.	■ 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.	
You are told to restore Deskset factory defaults.	The Deskset needs to be reset.	■ Reset the Deskset. Insert a pen or paper clip into the reset hole and press for more than five seconds.	
The menu does not work.	There may be no power or the Deskset may need to be reset.	■ If the screen is blank, verify that power is applied. ■ Reset the Deskset. Insert a pen or paper clip into the reset hole and press for more than five seconds.	
I am unable to locate the Cordless Handset from the Deskset.	The Cordless Handset's battery is dead or the Cordless Handset is out of range or not registered.	■ Charge the Cordless Handset battery. ■ If LocateHS does not appear on the Deskset Idle screen, then the Cordless Handset is not registered. Register the Handset at the Deskset. Press **MENU** –> **User Settings** –> **Cordless Settings** –> **Handset** –> **Register**.	
	You deregistered the Cordless Handset on the Handset, but the Deskset still indicates it is registered.	■ Deregister the Cordless Handset on the Deskset. On the Deskset, press **MENU** –> **User Settings** –> **Cordless Settings**. If the Handset is registered, the screen indicates **1. Handset (Registered)**. Press **SELECT** to deregister the Handset.	

Symptom	Probable Cause	Corrective Action	Deskset Troubleshooting
The screen displays **Synch Failed**.	The Deskset synch failed when trying to connect to the system.	■ Reset the Deskset. Insert a pen or paper clip into the reset hole and press for more than five seconds.	
Direct Dial no longer works.	You updated your Extension Prefix, and that digit was already being used as an Auto Attendant menu option.	■ If you assign Direct Inward Dial numbers with the first digit of any extension 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. Select a different DID number.	

[Handset] SB67040 Cordless Handset

For more information about the corrective actions recommended in this troubleshooting section, see the Synapse User's Guide at **www.telephones.att.com/synapseguides**.

Symptom	Probable Cause	Corrective Action Cordless Handset
Handset does not work at all (LCD is black).	There is no power to the device.	■ Confirm the battery is installed and charged correctly. ■ Place the Handset into the accessory charger. Ensure the charger is securely plugged into an outlet not controlled by a wall switch. The Charge LED on the accessory charger should light and the Handset display should indicate that the Handset is charging. ■ Verify that the charger's AC power outlet has power, such as plugging in some other AC device. If nothing works, contact an electrician or use another power outlet. ■ If the battery is completely depleted, it can take up to 10 minutes to charge the battery before the low battery icon displays on screen.
Extension number does not match the Deskset.	The Handset has been registered to another Deskset.	1. Check the Deskset to see if a Handset has been registered. If so, deregister it. On the Deskset, press **MENU** –> **User Settings** –> **Cordless Settings** –> **Handset** –> **DeReg**. 2. Deregister your Handset. On the Handset, press **OPTIONS** –> **Settings** –> **Deregister**. 3. Start the registration process again. Register the Handset at the Deskset. Press **MENU** –> **User Settings** –> **Cordless Settings** –> **Handset** –> **Register**.

Symptom	Probable Cause	Corrective Action Cordless Handset
Unable to create new Directory or Quick-Dial entry.	This feature is not supported on the Handset.	■ Although you can access the Directory or Quick Dial on the Handset, creating, deleting, or editing entries can only be done on the Deskset or WebUI.
Handset registration is not working.	The Handset and the Deskset are not communicating with each other.	■ Confirm you have placed the Handset in the charger and check that the screen on the Handset turns on before you press the Register soft key on the Deskset. ■ If registration does not start, try lifting the Handset out of the charger for a few seconds before placing it back. ■ The Handset may indicate that it is registered but the Deskset indicates that it is not registered. • Deregister the Handset at the Handset. Press **OPTIONS** -> **Settings** –> **Deregister**. • Register the Handset at the Deskset. Press **MENU** –> **User Settings** –> **Cordless Settings** –> **Handset** –> **Register**.
Unable to make outside calls.	The Handset cannot communicate with the Deskset.	■ First, ensure that the Deskset can make outside calls. If it cannot, consult *"Deskset Troubleshooting" on page 219*. ■ Confirm that your Handset is registered to your Deskset. On the Handset, press **OPTIONS** –> **Settings** –> **Product ID** and check that the bottom line reads **Registered: YES**. ■ You might be out of range of the Deskset; try moving closer. If you see the Idle screen, then the Handset is successfully communicating with the Deskset.

Symptom	Probable Cause	Corrective Action Cordless Handset
Handset does not receive incoming calls.	The incoming call notifications have been suppressed.	■ Ensure that the Deskset can receive incoming calls. If it cannot, consult *"Deskset Troubleshooting" on page 219*. ■ Verify that Do Not Disturb is off. Make sure that DND ON is not in the top right corner of the Handset display. Turn this feature off by using the Deskset Idle screen soft keys. ■ Verify that Call Forward All is off. Make sure that FWD ON is not in the top right corner of the Handset display. Turn this feature off by using the Deskset Idle screen soft keys.
	Incoming call notifications do not reach the Handset.	■ Confirm that your Handset is registered to the Deskset. At the Deskset, press **MENU** –> **User Settings** –> **Cordless Settings**. If the Handset is registered, the screen displays **1. Handset (Registered)**. ■ At the Handset, verify that the Handset is registered. Press **OPTIONS** –> **Settings** –> **Product ID** and check that the screen displays **Registered: YES**. ■ Verify that the extension numbers are the same on both the Deskset and Handset Idle appears. If they do not match, the Handset is registered to another Deskset. ■ You might be out of range of the Deskset; move closer. ■ If the Handset does not ring for an incoming call, press ◂ **Volume** ▸ on the side of the Handset to increase ringer volume.

Symptom	Probable Cause	Corrective Action — Cordless Handset
Unable to locate Handset using LocateHS on the Deskset.	The Handset is not registered.	■ If the LocateHS soft key does not appear on the Deskset, then the Handset is not registered. On the Deskset, press **MENU** –> **User Settings** –> **Cordless Settings** –> **Handset** –> **Register**.
	The Handset battery is dead or the Handset is out of range.	■ Move the Handset closer to the Deskset. ■ Place the Handset into the charger.
Handset shows screen telling me to register it, but Deskset screen says that the Cordless Handset is registered.	Sometimes, when you deregister a Cordless Handset from the Deskset, the Deskset does not reflect the Cordless Handset's new, unregistered status.	■ At the Deskset, press **MENU** –> **User Settings** –> **Cordless Settings** –> **Handset** and deregister the handset. ■ Reregister the handset. On the Deskset, press **MENU** –> **User Settings** –> **Cordless Settings** –> **Handset** –> **Register**.
Handset displays **Deskset in Use** when trying to place a call.	Either the Deskset or its registered Handset can be on a call, but not both.	■ Hang up the call at the Deskset. ■ Move the current call to the Handset: • Press **PHONE/FLASH** on the Handset. The Handset asks if you wish to switch the current active call from the Deskset to the Handset. • Press SWITCH on the Handset to move the call to the Handset.

Symptom	Probable Cause	Corrective Action Cordless Handset
Handset continuously displays **Searching for Deskset...**.	The Handset is out of range or not registered.	■ Verify that the Deskset is powered and fully functional. If the Deskset has no AC power, the Handset will not work. ■ The Handset may be out of range of the Deskset; move closer. ■ The Handset may have been deregistered when the Deskset was upgraded or reset. Deregister the Handset at the Handset; then, at the Deskset, register the Handset again: • On the Handset, press **OPTIONS** -> **Settings** –> **Deregister**. • On the Deskset, press **MENU** –> **User Settings** -> **Cordless Settings** –> **Handset** –> **Register**.
Caller ID is not working.	Your organization does not subscribe to this 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 company 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, make sure you have a DSL filter plugged in between each DSL line and the wall jack.

Symptom	Probable Cause	Corrective Action Cordless Handset
Calls dropped.	Restoring Deskset settings while that extension is in use causes all calls to be dropped.	■ Update software and restore Deskset settings only in Idle mode with no calls pending.
	Cordless Handset lost link with the Deskset.	■ Verify that your Cordless Handset battery is charged and that it is within range of the Deskset. ■ Update software and restore Deskset settings only in Idle mode with no calls pending.
	The network is down.	■ Verify that your office network is active and that your Deskset has power. ■ 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 telephone line was disconnected while on an outside call.	■ Ask the system administrator to check that the PSTN Gateway telephone lines are connected.
Unable to find a way to turn on Do Not Disturb or Call Forward All.	These functions can only be enabled on the Deskset.	■ To activate Do Not Disturb (DND) or Call Forward All, press DND or CallFwd on the Deskset while in Idle mode.

Symptom	Probable Cause	Corrective Action Cordless Handset
Poor audio quality. Speech is cutting out.	The Handset is almost out of range or is experiencing interference.	■ You may be close to being out of range. Try moving closer to the Deskset. ■ Other electronic products can cause interference with your Handset. Try installing the Deskset far away from devices such as televisions, microwaves, or other cordless devices, including other Handsets. ■ If the problem persists, check audio quality on the Deskset. If the Deskset audio quality is poor, refer to *"Deskset Troubleshooting" on page 219* or *"General Troubleshooting" on page 199* for solutions.
My Handset does not receive a company-wide page.	This feature is not supported on the Handset.	■ The Handset can send a page but not receive one. The page is transmitted to all Desksets in the network.

[Headset] TL7600 Cordless Headset

For more information about the corrective actions recommended in this troubleshooting section, see the Synapse User's Guide at **www.telephones.att.com/synapseguides**.

Symptom	Probable Cause	Corrective Action Cordless Headset
The TL7600 Headset is not responding.	The Headset has lost connection to Deskset.	1. Disconnect the Cordless Headset battery. 2. Wait three minutes. 3. Install the battery again and place the Cordless Headset into the charger. 4. Wait for the **ON/OFF** light on the Headset to display a blue light, indicating that the Headset was able to reestablish its connection with the Deskset. Allow up to one minute for this to take place.
The light on the TL7600 Headset flashes orange and blue; the Headset does not work.	The Headset is not registered.	■ Register the Headset at the SB67030 Deskset. Press **MENU** -> **User Settings** –> **Cordless Settings** –> **Headset** –> **Register**. ■ Once the Headset is registered, the Headset light is blue when the Headset is placed in the charger.

Symptom	Probable Cause	Corrective Action Cordless Headset
The TL7600 Headset does not work at all.	The Headset is not getting power from its battery.	■ Verify that the battery is installed and charged correctly. ■ Place the Headset into the accessory charger. Ensure the charger is securely plugged into an outlet not controlled by a wall switch. The Headset LED will light to indicate that the Headset is charging. ■ If the battery is completely depleted, it can take up to 10 minutes to charge the battery enough for the Headset to work even briefly. In this case, the **ON/OFF** LED will remain off and you will not be able to use the device. After 10 minutes of charging, remove the Headset from the charger and press **ON/OFF** on the Headset or **HEADSET** on the Deskset to turn on the Headset. ■ Replace the Headset battery.
The TL7600 Headset registration is not working.	The Headset and the Deskset are not communicating with each other.	■ Confirm that you have placed the Headset in the charger before you press Register on the Deskset. ■ If registration does not start, try lifting the Headset out of the charger for a few seconds before placing it back.

Symptom	Probable Cause	Corrective Action Cordless Headset
Poor audio quality. Speech is cutting out.	The Headset is almost out of range or is experiencing interference.	■ You may be close to being out of range. Try moving closer to the Deskset. ■ Other electronic products can cause interference with your Headset. Try installing the Deskset far away from devices such as televisions, microwaves, or other cordless devices. ■ If the problem persists, check audio quality on the Deskset. If the Deskset audio quality is poor, refer to *"[PSTN] Resolving Audio Echoes" on page 190* for solutions.
HEADSET key on Deskset does not work.	Headset is in the charger or powered down.	■ Confirm that the Headset is out of its charger before you press **HEADSET**. ■ Confirm that the Headset has sufficient power. If the Headset does not respond and the blue light does not blink, the battery may have no charge. Place the Headset in the charger for at least six hours.
MUTE key on the Deskset does not mute the Headset.	**MUTE** keys on Deskset and Headset operate separately.	■ Only the **MUTE** key on the Headset mutes calls. The **MUTE** key on the Deskset does not work with the Headset.
The TL7600 Headset has no dial tone.	Headset cannot communicate with Deskset.	■ You may be out of range of the Deskset; move closer. ■ Verify that the Deskset can make outside calls. If it cannot, then consult *"Deskset Troubleshooting" on page 219*. ■ At the Deskset, confirm that your Headset is registered to the Deskset. Press **MENU** –> **User Settings** –> **Cordless Settings**. If the Headset is registered, the screen displays **2. Headset (Registered)**.

Symptom	Probable Cause	Corrective Action Cordless Headset
Batteries do not hold a charge.	Bad battery or bad battery connection.	■ Make sure that the Headset battery is installed and securely plugged into the connector. ■ Charge the battery for at least six hours. For optimum daily performance, return the Cordless Headset to the charger when not in use. ■ You may need a new battery. ■ Your Headset might be malfunctioning.
The SB67030 Deskset shows no indication that the Headset is on a call.	The Headset is registered to another Deskset. If others are using Headsets in your vicinity, someone may have accidentally registered your Headset to their Deskset.	■ If nearby people have Headsets, they may have accidentally registered your Headset to one of their Desksets. a. Verify that a Headset is registered to your Deskset. Press **MENU** –> **User Settings** –> **Cordless Settings**. If the Headset is registered, the screen displays **2. Headset (Registered)**. b. If a Headset is registered, it may not be yours. Deregister your Headset from the Deskset, and ask all users in the vicinity to deregister their Headsets. At a Deskset, press **MENU** -> **User Settings** –> **Cordless Settings** –> **Headset** –> **DeReg**. c. Start the registration process again, but with one user at a time registering a Headset. At a Deskset, press **MENU** -> **User Settings** –> **Cordless Settings** –> **Headset** –> **Register**.

Symptom	Probable Cause	Corrective Action Cordless Headset
A buzzing sound on my TL7600 Headset.	Noise interference.	■ Move the Headset at least 12 inches away from the Deskset. ■ Other electronic products can cause interference with your Cordless Headset. Try installing your Headset as far away from these types of electronic devices as possible: television sets, microwaves, or other cordless telephones.
Unable to deregister TL7600 Headset.	The Deskset is unavailable (powered off, out of range, or removed from the system).	■ Deregister the Headset at the Headset. Press: **VOL+** –> **MUTE** –> **VOL–** –> **MUTE** –> **VOL+** –> **VOL–** –> **MUTE**.
	You cannot identify or locate the Deskset the Headset is registered to.	■ If the Headset is registered to an unknown Deskset which has AC power, you must carry the Headset out of range of the Deskset and perform the Deregistration sequence described above. You will know when the Headset is out of range when you press **ON/OFF** and you hear three beeps and no dial tone.

[ATA] SB67050 ATA Troubleshooting

For more information about the corrective actions recommended in this troubleshooting section, see the Synapse User's Guide at **www.telephones.att.com/synapseguides**.

[ATA] General Troubleshooting

Symptom	Probable Cause	Corrective Action ATA General Troubleshooting
ATA does not work at all. The Power LED is off.	There is no power to the device.	■ Ensure the AC plug is plugged into an electrical outlet not powered by a wall switch. ■ 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. ■ Verify that the DC plug is a 12V 1500mA adapter and plugged into the power jack marked DC 12V ⊙⊖⊕ on the front of the ATA.
ATA screen displays **Network Down**.	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.

Symptom	Probable Cause	Corrective Action	ATA General Troubleshooting
ATA screen displays **Synch Failed**.	The ATA was disconnected, then reconnected after configuration changes were made to the system.	■ Refer to *"Reintroducing a Gateway or ATA Into the System" on page 196*.	
	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 switch (located on the front of the unit) for more than five seconds. See *"Reintroducing a Gateway or ATA Into the System" on page 196*.	
ATA is not active immediately after a power interruption.	The ATA needs time to restore service.	■ Allow at least 30 seconds for the ATA to boot up again after a power failure.	

[ATA] Music on Hold (MoH)

Symptom	Probable Cause	Corrective Action ATA MoH
Music on Hold (MoH) is not playing and the AUX IN LED (right of the ATA LCD screen) is OFF.	MoH is disabled.	■ In the WebUI: Click **System Settings**, then **Hold Settings**, set **Select Port** to be **ATA: AUX IN** and 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.	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.	Hold Announcement is enabled.	■ The Hold Announcement is a feature that repeats a recorded audio clip at regular intervals during MoH. See *"Hold Settings and [ATA] Music on Hold (MoH)" on page 118*.
My audio player jack is not the same size as the supplied audio cable.	Your audio device does not have a 3.5mm audio out jack.	■ Use a different audio cable with ends to fit your audio device and the 3.5mm AUX IN jack on the ATA. CAUTION *Do not exceed the ATA AUX IN input specifications. See "Appendix A: Technical Specifications" on page 268. Grossly exceeding these specifications can damage the ATA.*

Symptom	Probable Cause	Corrective Action ATA MoH
MoH is not playing and If the AUX IN LED (right of the ATA LCD screen) is GREEN.	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. ■ Some forms of music do not play well over a telephone line. ■ Verify that the audio source meets the electrical specifications for ATA AUX IN. See *"Appendix A: Technical Specifications" on page 268*. ■ Verify that Hold Announcement is not playing a silent message. See *"Hold Settings and [ATA] Music on Hold (MoH)" on page 118* to play the recorded hold announcement.

Symptom	Probable Cause	Corrective Action ATA MoH
MoH audio is too quiet, fluctuating, or dropping out.	The volume on the audio source is too low or too high. If the volume is too high, overdriving the 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" on page 268*. ■ 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. ■ Please note that some types of music sound better then others when played across a telephone line. For example, classical music with extreme volume fluctuations may not sound very good when used as MoH.
	Use of audio source outputs whose levels are not adjustable, such as RCA "Line Out" may result in unacceptable background music levels and should not be used.	■ Use an audio source with output volume control. CAUTION *Speaker outputs should not be used as the MoH audio source as they can exceed the ATA AUX IN input specifications. See "Appendix A: Technical Specifications" on page 268. Grossly exceeding these specifications can damage the ATA.*

[ATA] Overhead Paging (OHP)

Symptom	Probable Cause	Corrective Action ATA OHP
Overhead paging (OHP) is not working.	You don't know whether your OHP is single- or multi-zone and whether it needs an FXS or an Audio-Out connection.	■ There are three possible configurations for OHP: • Single-zone paging connected to the AUX OUT jack. • Single-zone paging connected to one of the two FXS ports. • Multi-zone paging connected to one of the two FXS ports. ■ Select the appropriate configuration for your specific paging equipment. For more information about the different configurations, see *"[ATA] Overhead Paging Overview" on page 122.* ■ 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.

Symptom	Probable Cause	Corrective Action ATA OHP
Overhead paging (OHP) is not working. *(Continued)*	The OHP may not be properly installed.	■ For OHP equipment connected to an FXS port, verify WebUI configuration: a. Connect a corded phone to the FXS port configured for paging and verify that the phone rings when it is paged. b. If the phone does not ring, there is a problem with the WebUI configuration or the installation at the ATA. c. If the phone rings, the configuration allows communication with the OHP. Verify your paging equipment. Does it have power? Is it turned on? Refer to your paging equipment documentation if there are still problems.
I cannot add a multi-zone paging zone to other paging zones.	Multi-zone paging does not allow a combination of OHP equipment and Desksets within one paging zone.	■ Page multi-zone OHP zones separately from extensions.
Unable to make phone calls on the extension configured for the FXS OHP jack.	System limitation.	■ Once an FXS is configured for OHP, it cannot be used for audio calls, nor will it receive voice calls.

Symptom	Probable Cause	Corrective Action	ATA OHP
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 LCD screen) is **OFF**.	The OHP is not configured in the WebUI for use on AUX OUT.	■ Verify the Single-Zone on AUX OUT WebUI configuration: a. As administrator, log into the WebUI and click **System Settings**, then **Overhead Paging**. b. Verify that **Paging** is **Enabled**. If not, select **Enable**. c. Verify that the **Paging System Type** is set to **Single Zone**. d. Verify that **Select Paging Port** is set to **AUX OUT** and that your OHP system is physically plugged into the AUX OUT jack. e. Click Apply	

Symptom	Probable Cause	Corrective Action ATA OHP
Single-zone OHP on AUX OUT is not working and the AUX OUT LED (right of the ATA LCD screen) is **OFF**. *(Continued)*	The OHP is not a member of a Paging Zone.	■ Verify that the OHP equipment is part of the paging zone that you are trying to page. See *"Paging Zones" on page 131*.
Single-zone OHP on AUX OUT is not working and AUX OUT LED (right of the ATA LCD screen) is solid **RED**.	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. See *"[ATA] Overhead Paging Overview" on page 122* for background and for configuration instructions.
Single-zone OHP on AUX OUT is not working and the AUX OUT LED (right of the ATA LCD screen) is solid **GREEN** and the WebUI is configured for paging through the AUX OUT jack.	The ATA has detected a cable connected to the AUX OUT jack. There may be a problem with your paging equipment or its configuration.	■ Refer to your OHP product documentation for installation and configuration instructions. ■ 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. ■ 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 LCD screen) is flashing **GREEN**.	Paging is active (a user on the system is paging the OHP system). There may be a problem with the paging equipment or its setup.	■ 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 installer.

Symptom	Probable Cause	Corrective Action	ATA OHP
In single-zone paging, paging starts on Desksets before the paging starts on the OHP system.	Paging delay is too short.	1. As administrator, log into the WebUI and click **System Settings**, then **Overhead Paging**. 2. Verify that the **Paging Delay** is set to an appropriate delay to work with your OHP system. Then click Apply.	

Symptom	Probable Cause	Corrective Action	ATA OHP
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.	The OHP may not be properly installed.	■ Test basic OHP functionality. 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 your paging equipment: □ Does it have power? Is it turned on? □ Refer to your paging equipment documentation if there are still problems.	

Symptom	Probable Cause	Corrective Action ATA OHP
Single-zone OHP on FXS is not working. (*Continued*)	There may be a problem with the paging equipment or its setup.	■ 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 installer.
	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. See *"[ATA] Overhead Paging Overview" on page 122* for background and for configuration instructions. ■ Verify the Single-Zone on FXS WebUI configuration: a. As administrator, log into the WebUI. b. Click **System Settings** –> **Overhead Paging**. c. Verify that **Paging** is set to **Enable**. d. Verify that the **Paging System Type** is set to **Single Zone**. e. Verify that **Select Paging Port** is set to **FXS 1** or **FXS 2** and that your OHP system is physically plugged into the FXS port with the same number. f. Click Apply.
	There may be a problem with the paging zone setup.	■ Verify that the paging zone you are paging includes **Overhead Page**.

Symptom	Probable Cause	Corrective Action ATA OHP
Single-zone OHP on FXS is not working and the FXS LED (right of the ATA LCD screen) for the FXS port that is used for the OHP equipment is solid **GREEN**.	A device other than an OHP (such as a fax machine) is connected to the FXS port and has gone off hook.	■ Ensure that the OHP is connected to the correct ATA port. ■ Refer to your OHP product documentation for installation and configuration instructions. ■ 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 LCD screen) for the FXS port that is used for the OHP equipment is **OFF**.	No signal is detected.	■ There is no signal when no one is paging or the FXS ports are not configured for overhead paging. ■ Verify that your paging equipment is connected to **FXS 1** or **FXS 2**. If not, plug it in, and verify your OHP equipment connections.
	The OHP is not a member of a paging zone.	■ See *"Paging Zones" on page 131*.
In single-zone paging, paging starts on Desksets before the paging starts on the OHP system.	Paging delay is too short.	1. As administrator, log into the WebUI. Click **System Settings** –> **Overhead Paging**. 2. Verify that the **Paging Delay** is set to an appropriate delay to work with your OHP system. 3. Click Apply.

Symptom	Probable Cause	Corrective Action	ATA OHP
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.	Multi-zone OHP can not be paged at the same time as Desksets.	■ To page the OHP, the user must select the **Overhead Paging** zone from the Deskset Paging Zones selection screen. Selecting any other zone will not page the OHP system, even if paging zones did include **Overhead Page** prior to changing Paging System Type to multi-zone.	

Symptom	Probable Cause	Corrective Action ATA OHP
Multi-zone OHP is not working.	Inconsistent configuration.	■ Verify the Multi-Zone WebUI configuration: a. As administrator, log into the WebUI. b. Click **System Settings** –> **Overhead Paging**. c. Verify that **Paging** is set to **Enable**. d. Verify that the **Paging System Type** is set to **Multi Zone**. e. Verify that **Select Paging Port** is set to an FXS port and that your OHP system is physically plugged into that FXS port. f. Click Apply.
	The OHP can not be paged a the same time as the Desksets.	■ Page the Desksets and OHP separately.
	There may be a problem with the paging equipment or its setup.	■ 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 installer.
	There may be a problem with the paging zone setup.	■ Verify that the paging zone you are paging is **Overhead Paging**.
	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. See *"[ATA] Overhead Paging Overview" on page 122* for background and for configuration instructions.

Symptom	Probable Cause	Corrective Action ATA OHP
Multi-zone OHP is not working and the FXS LED (right of the ATA LCD screen) for the FXS port that is used for the OHP equipment is **OFF**.	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 *"Verify the Multi-Zone WebUI configuration:" on page 259*.
Multi-zone OHP is not working and the FXS LED (right of the ATA LCD screen) for the FXS port that is used for the OHP equipment is solid **GREEN**.	A device other than an OHP (such as a fax machine) is connected to the FXS port and has gone off hook.	■ Refer to your OHP product documentation for installation and configuration instructions. ■ Verify the WebUI configuration. See *"Verify the Multi-Zone WebUI configuration:" on page 259*.
Multi-zone OHP is not working and the FXS LED (right of the ATA LCD screen) for the FXS port that is used for the OHP equipment is flashing **GREEN**.	Someone has initiated a page, but the OHP equipment has not yet acknowledged the page request.	■ Verify the connection between the FXS port and your OHP system. See *"[ATA] Overhead Paging Overview" on page 122* for background and for configuration instructions. ■ Verify your paging equipment configuration. Check to see if the OHP system has settings that need to be adjusted to work with Synapse.

[ATA] Fax Configuration

Symptom	Probable Cause	Corrective Action ATA Fax Configuration
While using T.38 mode, unable to receive faxes or having persistent fax transmission failures.	Incompatible Fax Mode setting.	1. As administrator, log into the WebUI, and click **System Settings**, then **Fax Configuration**. 2. Set **Fax Mode** to **G.711**. Then click Apply.
While using T.38 mode, fax usually works with occasional failures.	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.	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. a. As administrator, log into the WebUI and click **System Settings**, then **Fax Configuration**. b. Set **Fax Mode** to **T.38**. Then click Apply.

Symptom	Probable Cause	Corrective Action	ATA Fax Configuration
The fax is not working and the FXS 1 or FXS 2 LED (right of the ATA LCD screen) that corresponds to the jack you are using for connecting the fax machine is **OFF** when the fax is attempting to send or receive a fax.	The Gateway and the fax are not communicating.	■ Verify the connection between the FXS port and your fax machine. See *"[ATA] Fax Overview" on page 107* for background and for configuration instructions. ■ Verify the fax configuration on the WebUI: a. As administrator, log into the WebUI, and click **System Settings**, then **Fax Configuration**. b. Verify that **Fax** is set to **Enable**. c. Verify that **Fax Mode** is set to the appropriate setting. see *"[ATA] Fax Overview" on page 107*. d. Verify that **Fax Destination** is set to the appropriate ATA FXS port and that the fax machine is physically connected to that jack. e. Verify that **Fax Line** is set to the correct Gateway line. Verify that the physical outside line on which incoming faxes are received is connected to the chosen **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. f. Click Apply. g. Make sure the fax machine has power and is turned on.	

Symptom	Probable Cause	Corrective Action	ATA Fax Configuration
The fax is not working and the FXS LED (right of the ATA LCD screen) that corresponds to the jack you are using for connecting the fax machine is solid **GREEN**.	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 FXS LED (right of the ATA LCD screen) that corresponds to the jack you are using for connecting the fax machine is flashing **GREEN**.	The ring voltage is present and your FXS configuration is likely wrong.	■ Toggle the fax mode setting: a. As administrator, log into the WebUI, click **System Settings**, then **Fax Configuration**. b. Toggle the **Fax Mode** setting. Then click Apply.	
The fax machine is connected to the telephone line through the Synapse system and the FXS LED indications appear correct, yet outgoing faxes fail.	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.	Fax line not configured properly.	1. As administrator, log into the WebUI, click **System Settings**, then **Fax Configuration**. 2. Verify that **Fax Line** is set to the correct line. Verify that the physical outside line on which incoming faxes are received is connected to the chosen **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. 3. Click Apply.	

Symptom	Probable Cause	Corrective Action	ATA Fax Configuration
Unable to make phone calls on the telephone that is part of my fax machine.	System limitation.	■ Once an FXS is configured for fax, its 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.	

[ATA] Analog Phone

Symptom	Probable Cause	Corrective Action	ATA Analog Phone
Analog phone connected to FXS port does not work as expected.	The WebUI configuration is incorrect.	■ Verify that your telephone is connected to FXS 1 or FXS 2. If not, plug it in, or change the analog telephone configuration in the WebUI. Verify that your phone is connected to the correct FXS port and that phone is powered on. a. As administrator, log into the WebUI, and click **ATA Settings**. b. Verify that the desired FXS port has a **Voice** assignment. If not, try connecting the analog telephone to the other FXS port or disable the other assignment. **Voice** is the default setting when no other assignments are enabled: If the desired FXS port is assigned to **Fax**: i. Click **System Settings**, then **Fax Configuration**. ii. Set **Fax** to **Disable**. iii. Click Apply. If the desired FXS port is configured for **Overhead Paging**: i. Click **System Settings**, then **Overhead Paging**. ii. Set **Paging** to **Disable**. iii. Click Apply.	

Symptom	Probable Cause	Corrective Action	ATA Analog Phone
Analog phone connected to FXS port does not work as expected. *(Continued)*	Analog phone is working with Synapse, but does not have Deskset capabilities.	■ Consider the analog phone limitations: • To make outgoing calls on an analog phone connected to the FXS port on the ATA, the outside phone number must be preceded by **9** or whatever digit, if any, that must be dialed first for an outside call (same as on a Deskset). • 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. See *"[ATA] Analog Telephone Overview" on page 161* for a complete list of features.	

[ATA] Group Mailbox

Symptom	Probable Cause	Corrective Action ATA Group Mailbox
Group Mailbox does not work.	Needs an ATA to be available.	■ Group mailboxes reside on the ATA. The ATA must be connected.  See the Synapse Installation Guide at **www.telephones.att.com/synapseguides**.
Group Mailbox is full even though it has not reached quota.	The sum of the quotas for individual Group Mailboxes may exceed 60 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.	■ The ATA allows for a total of 60 minutes of recording time for all Group Mailboxes. It is up to the system administrator to assign quotas for individual Group Mailboxes. Note that the sum of the quotas for individual Group Mailboxes may exceed 60 minutes. • To free additional recording time for a Group Mailbox, delete messages on any of the Group Mailboxes. • To prevent this problem from occurring again, reduce quotas to add up to 60 minutes or less, and make sure that all Group Mailboxes have quotas enabled. • Note that personal messages reside on the specific desksets and do therefore not impact Group Mailboxes recording time.
Unable to find a message on using anymore.	Group Mailboxes are accessed by multiple users.	■ Group Mailboxes are accessed by multiple users. Messages can be marked as old or deleted by other users.
The number of new messages changed spontaneously.	Group Mailboxes are accessed by multiple users.	■ Group Mailboxes are accessed by multiple users. Messages can be marked as old or deleted by other users.

Appendix A: Technical Specifications

Table 6 lists the technical specifications for the SB67010 PSTN Gateway, SB67060 T1 Gateway, SB67050 ATA, SB67030 Deskset, and SB67040 Cordless Handset.

Table 6. Technical Specifications

Feature	Specification
Frequency control	Crystal controlled PLL synthesizer
Transmit Frequency	Deskset, Cordless Handset, Cordless Headset: 1921.536–1928.448 MHz
Nominal Effective Range	Maximum power allowed by FCC (Federal Communications Commission) and IC (Industry Canada). Actual operating range might vary according to environmental conditions at the time of use.
Voice Channels	Deskset, Cordless Handset, Cordless Headset: 5
Size	Cordless Handset: 6.9" x 1.8" x 1.4" (HxWxD)
	Deskset: 8.2" x 8.9" x 6.5" (HxWxD)
	Gateways and ATA: 1.8" x 13.5" x 7.9" (HxWxD)
Weight	PSTN Gateway: 88.18 oz. (2500g) (including adapter)
	T1 Gateway: 63.5 oz (1800g) (including adapter)
	ATA: 63.5 oz (1800g) (including adapter)
	Deskset: 59.96 oz. (1700g) (including adapter)
	Cordless Handset: 7.05 oz. (200g) (including battery)

Table 6. Technical Specifications (Continued)

Feature	Specification
Power Requirements	PSTN Gateway: 5.1V DC @ 1700mA T1 Gateway and ATA: 12V @ 18 Watts Deskset: 5.1V DC @ 1700mA Cordless Handset, Cordless Headset chargers: 6V DC @ 200mA Cordless Handset: 2.4V 550mA Ni–MH battery Cordless Headset: 3.7V 240mAH battery
RJ–45 Ethernet Network Jack	(10Base–T/100Base–Tx) with auto MDI/MDIX switching
PSTN Gateway Telephone Jacks	1–4 and BYPASS (FXO ports) use traditional 2–conductor wiring
[T1] T1 Jack	RJ48C jack as shown below and in Figure 177. Pin1: Pair R, RX-Ring Signal Pin2: Pair T, RX-Tip Signal Pin4: Pair R1, TX-Ring Signal Pin5: Pair T1, TX-Tip Signal
Gateway BYPASS	26mA loop current; REN 5; 100m max loop length
LAN Cable	Cat.-5 standard cable, except the T1 Gateway, which uses a standard Cat.-6 LAN cable

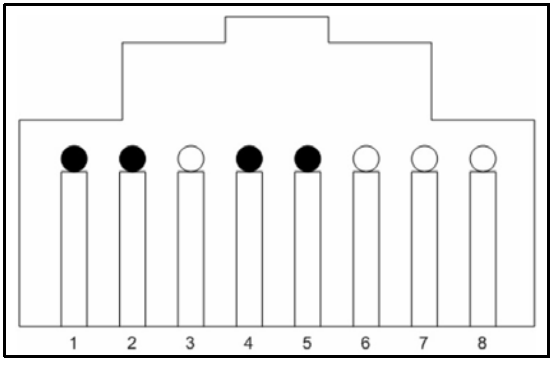


Figure 177. T1 Cable RJ48C Connector and Pin Numbers (End View)

Table 6. Technical Specifications (Continued)

Feature	Specification
[T1] T1 Port	RJ48C standard T1 interface
	The T1 Gateway provides ITU G.168 compliant hardware-based echo cancellation.
[ATA] FXS	26mA loop current; REN 5; 100m max loop length
[ATA] AUX In	3.5 mm Tip (Signal), Ring (NC) Sleeve (Ground) (TRS) jack
	Frequency range 300 to 3.4K Hz
	Input level -15dBm nominal
	Impedance greater than or equal to 10K ohms input
	AC coupling
[ATA] AUX Out	3.5 mm Tip (Signal), Ring (NC) Sleeve (Ground) (TRS) jack
	Frequency range 300 to 3.4 KHz
	Output level -15dBm nominal
	Output impedance less than or equal to 8 ohms
	AC coupling
Deskset Headset	Traditional corded handset jack type with 2–conductor wiring

Appendix B: Default Settings

Table 7 through Table 10 lists the default settings for the Synapse system, SB67030 Deskset, SB67040 Cordless Handset, and SB67050 ATA.

Table 7. System Default Settings

Parameter	Selection	Default
Admin Password	4 through 6 digits	12345
Administrator Login Name	16 characters max	Admin
Auto Attendant Day Start	12-hour clock	8:00AM
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 Main Day, Night, and Lunch Menu	Default Menu, User Created Menu	Default Menu
Auto Attendant Night Start	12-hour clock	5:00PM
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	200 through 299 (or 2000 through 2999 if 4-digit extensions is selected)	Nothing
Call Forward-No Answer Seconds Before Forwarding	5 though 45	15
Call Forward-No Answer Target Type	Voicemail, Extension	Voicemail
Call Forward-No Answer Telephone Number	32 Digits Maximum	Nothing
Delete Extension	All extensions	Nothing

Table 7. System Default Settings (Continued)

Parameter	Selection	Default
Directory First and Last Name Fields	20 Digits Maximum	Nothing
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
Number of Digits in Extension Numbers	3 or 4	3
Operator Extension	All extensions	200 (2000 if 4-digit extensions is selected)
Ring Group No Answer Target Extension	All extensions	0
Ring Group Seconds Before Forward	1 through 60 Seconds	15
System Time/Date Option	NTP Server, Custom Server, Manual	NTP Server
Timer for Forwarded and Transferred Outside Calls	15 through 120 (in 5 second increments)	30
User Password	6 digits maximum	Nothing

Table 8. 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 9. [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 10. [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" displays
Fax Line	Line 1, 2, 3, 4, T1 DID numbers	None. "Select a Fax Line" displays
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" displays
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" displays
Overhead Paging System Type	Single Zone, Multi Zone	Single Zone

Appendix C: 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.

Appendix D: Important Safety Instructions

CAUTION *This symbol alerts you to important operating or servicing instructions in this 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.
- If the product exhibits a distinct change in performance.

Appendix E: Limited Warranty

The AT&T brand is used under license. 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**.

1. What does this Limited Warranty cover?

The manufacturer of this AT&T–branded product warrants to the holder of a valid proof of purchase ("CONSUMER" or "you") that the product and all accessories provided in the sales package ("PRODUCT") are free from defects in material and workmanship, pursuant to the following terms and conditions, when installed and used normally and in accordance with the PRODUCT operating instructions. This Limited Warranty extends only to the CONSUMER for products purchased and used in the United States of America and Canada.

2. What will be done if the PRODUCT is not free from defects in materials and workmanship during the Limited Warranty period ("materially defective PRODUCT")?

During the Limited Warranty period, the manufacturer's authorized service representative will repair or replace at the manufacturer's option, without charge, a materially defective PRODUCT. If the manufacturer repairs the PRODUCT, they may use new or refurbished replacement parts. If the manufacturer chooses to replace the PRODUCT, they may replace it with a new or refurbished PRODUCT of the same or similar design. The manufacturer will retain the defective parts, modules, or equipment. Repair or replacement of the PRODUCT, at the manufacturer's option, is your exclusive remedy. The manufacturer will return the repaired or replacement PRODUCT to you in working condition. You should expect the repair or replacement to take approximately 30 days.

3. How long is the Limited Warranty period?

The Limited Warranty period for the PRODUCT extends for ONE (1) YEAR from the date of purchase. If the manufacturer repairs or replaces a materially defective PRODUCT under the terms of this Limited Warranty, this Limited Warranty also applies to the repaired or replacement PRODUCT for a period of either (a) 90 days from the date the repaired or replacement PRODUCT is shipped to you, or (b) the time remaining on the original one–year Limited Warranty, whichever is longer.

4. What is not covered by this limited warranty?

This limited warranty does not cover:

- PRODUCT that has been subjected to misuse, accident, shipping or other physical damage, improper installation, abnormal operation or handling, neglect, fire, water or other liquid intrusion; or
- PRODUCT that has been damaged due to repair, alteration or modification by anyone other than an authorized service representative of the manufacturer; or
- PRODUCT to the extent that the problem experienced is caused by signal conditions, network reliability or cable or antenna systems; or
- PRODUCT to the extent that the problem is caused by use with non–AT&T accessories; or
- PRODUCT whose warranty/quality stickers, PRODUCT serial number plates or electronic serial numbers have been removed, altered or rendered illegible; or
- PRODUCT purchased, used, serviced or shipped for repair from the United States of America or Canada, or used for commercial or institutional purposes (including but not limited to products used for rental purposes); or
- PRODUCT returned without a valid proof of purchase (see item 6 on next page); or
- Charges for installation or setup, adjustment of customer controls, and installation or repair.

5. How do you get warranty service?

To obtain warranty service, 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**.

NOTE Before calling for service, please review the user manual. A check of the PRODUCT's controls and features may save you a service call. Except as provided by applicable law, you assume the risk of loss or damage during transit and transportation and are responsible for delivery or handling charges incurred in the transport of the PRODUCT(s) to the service location.

The manufacturer will return any repaired or replaced PRODUCT under this limited warranty. Transportation, delivery or handling charges are prepaid. The manufacturer assumes no risk for damage or loss of the PRODUCT in transit. If the PRODUCT failure is not covered by this limited warranty, or proof of purchase does not meet the terms of this limited warranty, the manufacturer will notify you and will request that you authorize the cost of repair prior to any further repair activity. You must pay for the cost of repair and return shipping costs for the repair of products that are not covered by this limited warranty.

6. What must you return with the PRODUCT to get warranty service?

You must:

- Return the entire original package and contents, including the PRODUCT, to the service location along with a description of the malfunction or difficulty; and
- Include a "valid proof of purchase" (sales receipt) identifying the PRODUCT purchased (PRODUCT model) and the date of purchase or receipt; and
- Provide your name, complete and correct mailing address, and telephone number.

7. Other limitations

This warranty is the complete and exclusive agreement between you and the manufacturer of this AT&T-branded PRODUCT. It supersedes all other written or oral communications related to this PRODUCT. The manufacturer provides no other warranties for this PRODUCT. The warranty exclusively describes all of the manufacturer's responsibilities regarding the PRODUCT. There are no other express warranties. No one is authorized to make modifications to this limited warranty and you should not rely on any such modification.

State/Provincial Law Rights: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state or province to province.

Limitations: Implied warranties, including those of fitness for a particular purpose and merchantability (an unwritten warranty that the PRODUCT is fit for ordinary use), are limited to one year from date of purchase. Some states/provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. In no event shall the manufacturer be liable for any indirect, special, incidental, consequential, or similar damages (including, but not limited to, lost profits or revenue, inability to use the PRODUCT or other associated equipment, the cost of substitute equipment, and claims by third parties) resulting from the use of this PRODUCT. Some states/provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Please retain your original sales receipt as proof of purchase.

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 (☎): A screen icon that indicates that there is 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 the this jack.

Call Appearance: The five icons on the right side of the Deskset display and the keys and LEDs associated with those icons. The 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 Deck: When there is more than one active call on an optional Cordless Handset, each screen in the Call Deck represents and provides access to active and held calls, and calls that are being dialed or predialed. Display each screen by pressing the △ or ▽ Navigation key in Idle mode.

Call Forward All: Automatically forward calls before they ring. All calls are immediately forwarded to the specified destination.

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 a 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 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 ON): 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

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 ON): 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 jack 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

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

using: 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 the Deskset; **PHONE** and **1** on the Handset; and **SELECT** and **CANCEL** on the 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 system 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

navigation link: A phrase on a computer screen that, when clicked, produces a different screen

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 Cordless Handset

Park list: The list of unretrieved 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 "Extension 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

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

scroll: Causes the screen display to move up, down, or across the screen

single-zone paging: Paging to a single set of overhead loudspeakers. All speakers transmit the same announcement simultaneously.

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.

station: Another term for extension

subnet (subnetwork): Typically a LAN served by one router

subscriber: A user who can access messages in a using

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

unhold: Removes a call from hold status

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.