

Messenger

MITEL

OnePoint Messenger™



OnePoint Messenger/SX-200 Guide

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About This Guide

Use this guide to integrate a OnePoint Messenger Telephony Server with a Mitel SX-200 PBX. If you are installing a turnkey TS800 Telephony Server, use this guide with the *OnePoint Messenger Getting Started Guide*. If you are installing OnePoint Messenger on a bare system, use this guide with the *OnePoint Messenger Installation Guide*. This integration guide replaces Chapter 4 in that guide.

This chapter contains these sections:

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How to Use This Guide

[“Task Overview”](#) on [page 20](#) in Chapter 1 lists the sequence of tasks in the installation and integration process, noting the chapter associated with the task.

OnePoint Messenger is designed to be relatively simple to implement and use. However, integrating the OnePoint Messenger Telephony Server with a Mitel PBX requires the skills of a technician with certification in the programming of an SX-200 and the installation of OnePoint Messenger. While this manual lists the critical PBX features that must be enabled and contains instructions on the use of the PBX user interface, the instructions are for LIGHTWARE 17 and may not be current for your system. See the manufacturer’s programming guide that accompanies your PBX software. In addition, this manual does not discuss the array of monitoring, programming, and troubleshooting options available to the Mitel SX-200 installer and administrator.

Book Organization

This guide provides an overview in Chapter 1, followed by chapters organized by the most appropriate sequence of activities.

- **Chapter 1** ([page 15](#)): Overview of the components, tasks, and benefits of the integration
- **Chapters 2** ([page 23](#)): Configuring the SX-200 PBX
- **Chapter 3** ([page 39](#)): Installing the TalkTo card on the Telephony Server
- **Chapter 4** ([page 47](#)): Installing MiTAI on the Telephony Server
- **Chapter 5** ([page 55](#)): Configuring the Telephony Server, with an overview of startup and shutdown procedures
- **Index**: In the electronic form of this guide, the index items are hyperlinked to the associated contents.

Chapter Organization

Each chapter in this book uses the same organization. Under the chapter title is a brief introduction to the chapter content, followed by a list of the major topic headings, as exemplified above.

Using Electronic and Printed Versions

This guide uses a format that accommodates both on-screen viewing and printing. The text is aligned to 7" by 9" borders, so that, when printed on normal letter stock, there is a lot of room for you to make notes. Use Acrobat Reader version 3.0 or better to view and print PDF versions of the document.

Links: Blue text indicates hyperlinks. The Acrobat bookmark list and thumbnails also provide hyperlinks. The Table of Contents ([page iii](#)) is hyperlinked to the chapters and sections in chapters. Each chapter contains its own hyperlinked table of contents in its introduction. References to sections, figures, and tables are hyperlinks.

Conventions Used in This Guide

This section describes the formatting conventions used in this guide to give you extra cues about the action that you are to take.

Keys, Commands, and Buttons

The commands “select”, “clear”, “click”, and “choose” all mean basically the same thing—to make a choice—but the terms are used in specific situations:

- “Choose” is used in menus, such as the Windows Start menu and program menus, to indicate menu items.
- “Click” is used for obvious buttons, up and down arrows, in edit boxes, spin controls, and for the Windows Start button.
- “Double-click” is used in any situation where pressing the mouse button twice is the most appropriate action, although other options may be available.
- “Press” is used when indicating a computer keyboard or telephone keypad key. There are brackets around the keyboard key, as in “Press [Tab].”
- “Select” is used on property pages (tabs) and dialogs, such as to indicate items in a field or group of options. “Clear” is used to deselect a check in a check box or an entry in a field.

This guide generally does not include the keyboard shortcuts for menus and commands. To use the keyboard shortcuts, you should:

- Display menus by pressing [Alt] and the underlined character displayed on the screen (for example, press [Alt+F] for the **F**ile menu).
- Choose commands by typing the underlined character displayed on the screen (for example, type **S** for the Save command).

An instruction that involves making a choice from a menu is structured: “From the **XXX** menu, choose **YYY**.” This style is also used for dialog boxes. As you become familiar with the style, you can focus on the words in bold as the critical operative phrases.

Images and Tables

Tables and inline graphics in this guide contain captions with numbers based on the chapter number. References to a figure or table from another page are linked and highlighted in blue to indicate the link. You can also find and access them from the Acrobat bookmark list.



When presenting information about buttons, such as “Click the **XXX** button to open the **YYY** dialog box,” this guide may present the but-

ton to the left of the instruction, as shown here. In that case, the graphic is not labelled.

Type in Commands and Screen Output

For statements in command syntax format, **small mono-spaced bold type like this** indicates the characters you should type. Brackets like these < > designate the variables that you are to replace with other information. For example, in the following command, you type the word **INSTALL** but replace “**drive**” and “**directory**” with the names of the drive and directory you are using:

```
<drive>\<directory>\INSTALL
```

The same font in regular weight (not boldface) presents screen output.

Lists

Numbered lists present the steps of procedures that you must follow in the order given.

Bulleted lists present options for which the order is not important.

Notes and Cautions

A “**NOTE:**” presents information that is of special importance or is relevant only to some users or in some situations.

A “**CAUTION!**” alerts you to choices with potentially problematic results.

“**WARNING!**” is more serious than a caution, alerting you to a choice that could cause a failure of the system.

Other Text Styles

Italic type is used to introduce terms and for the titles of publications.

In this guide, **boldface** type is used to emphasize tasks and key words, such as buttons, tab, and menu items, to make them easier for you to spot. For example, a task is presented with the purpose in a separate bold line, followed by the steps, with key words in bold.

Other Documentation

The focus of this guide is the installation of the TalkTo card on the OnePoint Messenger Telephony Server and the integration of the

Telephony Server with a Mitel SX-200 PBX. This guide is not intended to replace the manufacturer documentation for the PBX and TalkTo card, or, in fact, the other third-party products supporting the OnePoint Messenger unified messaging environment, such as other peripheral hardware, Show N Tel, and Microsoft software (Outlook, Windows, Exchange, and Microsoft Management Console). Appendix B of the *OnePoint Messenger Administrator Guide* provides a list of vendor contact information.

The turnkey TS-800 ships with documentation for hardware and software provided by their respective manufacturers, including the CD-ROM, computer, line cards, modem, motherboard, pcAnywhere remote management software, and SCSI adapter card.

In addition to this guide, the documentation on the OnePoint Messenger CD-ROM in Acrobat PDF format includes:

- *OnePoint Messenger Administrator Guide* (summarized below)
- *OnePoint Messenger Getting Started Guide* (for turnkey installations)
- *OnePoint Messenger Installation Guide*
- *OnePoint Messenger User Guide* (summarized below)
- PBX integration guides for:
 - Centrex switches
 - Fujitsu 9600
 - Lucent Definity G3
 - Mitel SX-200
 - Mitel SX-2000
 - NEC NEAX 2400, all versions
 - Nortel Meridian
- From Brooktrout Technology:
 - *Getting Started with Show N Tel* (installing and using software bundled with Show N Tel)
 - *Show N Tel System Administrator Guide* (using Show N Tel Manager)
- *OnePoint Messenger Quick Reference Card* (Telephone User Interface)

Contacting Technical Publications

The Mitel Technical Publications and Media Development Group maintains this document. We welcome your questions and suggestions—notes on spelling and grammatical errors, comments on readability, and suggestions for improvements. Please reference the document number that appears on the back of the cover page. Address your comments to:

`techpubs@mitel.com`

1. OnePoint Messenger/SX-200 Integration Overview

This chapter is an overview of the integration between the OnePoint Messenger™ Telephony Server and the SX-200 PBX to create a unified messaging environment. This chapter includes details on installing the line cards in the Telephony Server and setting up telephony applications on the Telephony Server. This chapter contains the following sections:

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What Is OnePoint Messenger and Unified Messaging?	15
Telephony Server	16
Benefits of the Integration	18
Call Flow Overview	18
Task Overview	20
Integration Strategy	20

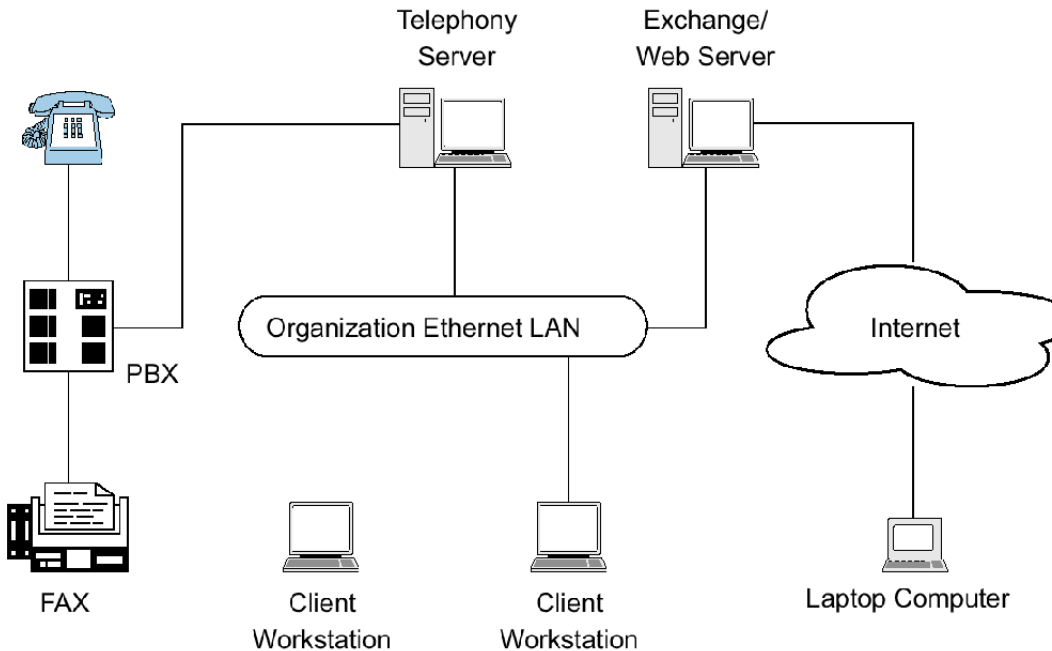
What Is OnePoint Messenger and Unified Messaging?

OnePoint Messenger is a software suite that, when combined with other hardware and software products, provides a unified messaging environment. “Unified messaging” is the storage of telephone voice messages, faxes, and e-mail in one central repository so that users can use a PC or a telephone to retrieve both e-mail and messages sent from a telephone.

OnePoint Messenger also provides a single point of user administration on the Exchange Server connected to the Telephony Server through a LAN. The Telephony Server provides a messaging conduit between the PBX and the Exchange Server, caching users’ Exchange profile information, such as telephone passwords and greetings for faster message access through a telephone.

The network diagram in [Figure 1-1](#) shows the major components that provide the unified messaging service, examples of the clients, and the relationship between the components.

Figure 1-1 Network Diagram



Telephony Server

In these guides, “Telephony Server” is used to refer to the collection of OnePoint Messenger telephony applications that reside on “the Telephony Server” (the computer running the Windows NT Server 4.0 operating system).

The OnePoint Messenger software on the Telephony Server is comprised of a group of Windows NT Server applications that, among other tasks, provide the link between the SX-200 and Microsoft Exchange.

Those telephone call routing and messaging services include:

- Controlling what happens to calls that are not answered and providing the caller the ability to leave and retrieve voice messages
- Providing digitization, transcoding, and compression of telephone messages for storage on Exchange or forwarding to VPIM

accounts, and also reverse transcoding of messages saved on Exchange back to callers and VPIM accounts

- Enabling OnePoint Messenger subscribers (“users”) to retrieve and reply to e-mail messages that are read to them using the text-to-speech (TTS) capabilities of Telephony Server
- Providing advanced fax handling features, including routing e-mail to fax machines and a Fax on Demand service; see Chapter 4 of the *OnePoint Messenger Administrator Guide* for a discussion of OnePoint Messenger fax features.

For more on the RAS (support) programs, see the *OnePoint Messenger Administrator Guide*, Chapter 1 and Chapters 5 through 9. See Chapter 5 in that guide for operational details.

Telephony Server Peripherals

The backplane of the Telephony Server contains an Ethernet LAN card for communication with Exchange and the telephony “line cards” cards that provide the connection to the switch.

When integrating with an SX-200 switch, the Telephony Server contains a TalkTo CX card and one or more Natural MicroSystems (NMS) line cards in the ISA bus (also, optionally, a Brooktrout fax card). The connection to the SX-200 PBX is through both the TalkTo and NMS cards. A digital line connects the Line port on the TalkTo card to the DNIC card on the PBX. Analog lines connect the ONS card on the PBX to four duplexed RJ-61 ports on each NMS AG-8 card.

For details on installing the TalkTo card in the TS800 turnkey Telephony Server, see Chapter 3 ([page 39](#)). See Appendix A of the *OnePoint Messenger Getting Started Guide* for recommendations on card arrangement in ISA slots (“slot map”), and IRQ and I/O base address assignment.

For an overview of installing other line cards, see Appendix B in the *OnePoint Messenger Installation Guide*, then see the manufacturer documentation.

Modem: To provide remote technical support, connect a modem to a Telephony Server serial port and to an outside telephone line, then configure the program pcAnywhere, which is included with the turnkey TS-800 system, to communicate over that modem and allow off-site support to control the Telephony Server.

Benefits of the Integration

The integration between the PBX and the Telephony Server provides these benefits:

- **Forward to Personal Greeting:** Provides the ability to play a user's personal greeting to a caller who has been forwarded to voice mail.
- **Auto Logon:** The Telephony Server can recognize a caller as a OnePoint Messenger subscriber ("user"), rather than as an outside caller, when calling directly from the user's phone. The Telephony Server greets users by name and asks for their passcodes.
- **Multiple Use Ports:** Allows use of the same port for dynamic allocation of ports for the Automated Attendant, the Message Center, including Text-to-Speech e-mail access, or fax services.
- **Direct Answer to Internal Message:** Allows a message recipient to record an answer to a message from another user without having to first dial the user's extension.
- **Message Notification:** Allows the Telephony Server to send a message waiting notification to a user through the PBX. The PBX then activates the message waiting indicator, such as a light or a stutter dial tone, on the user's extension.

Call Flow Overview

This is a basic overview of the processing sequence of calls routed from the SX-200 PBX to the Telephony Server:

1. The PBX receives a call intended for an extension managed by the PBX.
2. If the call is to a OnePoint Messenger user whose phone is busy or is not answered, the PBX redirects the call to the Telephony Server. The PBX also directs calls to the Telephony Server that are forwarded by users to voice mail, or users who make a direct call to the *Message Center* (the mailbox access pilot number) on the Telephony Server.

Other Telephony Server services can be associated with particular phone numbers, such as the Automated Attendant and the Fax on Demand service. For details, see Chapter 3 in the *OnePoint Messenger Administrator Guide*.

3. The call arrives at the Telephony Server in two streams of data:
 - The call itself goes to a port on the NMS card. The card has four physical ports, each of which handles two loop start phone lines.
 - The calling data goes to the TalkTo card. This includes the caller's phone number, called party's phone number, and the reason code why the call was sent to the Telephony Server; this is also known as *CLI*, or calling line identification.
4. The NMS card detects the call and alerts Telephony Server. At the same time, the TalkTo card passes the CLI data to Telephony Server software that uses the called number to determine whether to play a system greeting or a user's greeting. The TalkTo card's role is complete for this call.
5. Telephony Server maintains a cache of user profile information, including digitized greetings. The appropriate greeting loads from the Telephony Server onto the NMS card, which converts it to analog speech and plays it to the caller.
6. The Telephone User Interface (TUI) on the Telephony Server sends the appropriate digitized prompts to the NMS card for conversion and playing to the caller. For example, if the call is for a user, the TUI prompts the caller with the messaging options available, such as to record or re-record a voice message, or to leave a fax.
7. The caller responds with a voice message or keypad input.
8. The NMS card converts the analog input from the caller (the voice message and keyed responses to prompts) into digital strings for Telephony Server. The NMS card routes fax messages through the Brooktrout card.
9. Telephony Server packages the caller's message into a digital file and routes it to the recipient's mailbox on the Exchange Server.

Reciprocally, when users retrieve voice messages from a telephone, the NMS card converts the stored digitized voice messages back into analog voice for delivery to the user.

Task Overview

1. Install ONS and DNIC digital line cards on the SX-200 PBX, then configure the PBX to communicate with the Telephony Server. See Chapter 2 ([page 23](#)).
2. Install and configure the TalkTo card on the Telephony Server. See Chapter 3 ([page 39](#)).
3. Install and configure the NMS AG-8 cards and Brooktrout card on the Telephony Server. See the manufacturers' documentation and Appendix B in the *OnePoint Messenger Installation Guide*.
4. Install the MiTAI 7.5.3 software on the Telephony Server, then configure MiTAI for the TalkTo card and the SX-200. See Chapter 4 ([page 47](#)).
5. Install the OnePoint Messenger software on the Telephony Server. See Chapter 6 in the *OnePoint Messenger Installation Guide*.
6. Configure Show N Tel and the other Telephony Server software to communicate with the PBX. See Chapter 5 ([page 55](#)).

Integration Strategy

OnePoint Messenger provides three services that you can set up so that callers can access any one of them by dialing unique pilot numbers. They are Automated Attendant (automated receptionist), Message Center (access to mailboxes), and Fax on Demand (faxback). Typically, to be able to provide optimum access to each service, you would create a hunt group for each, the total lines of which would match the number of lines attached to the Telephony Server assigned to incoming calls. For the SX-200 integration, however, you must route calls to the Automated Attendant and Fax on Demand through the Message Center pilot. Chapter 2 ([page 23](#)) here describes creating subscriber extensions for Automated Attendant and Fax on Demand (often called phantom extensions), set up to forward all calls to the Message Center pilot.

On the Telephony Server side, you would normally be able to assign applications to certain ports that would be dedicated to providing either the Automated Attendant or Fax on Demand service. For the SX-200 integration, you must assign the *Telephony Server* telephony application to all inbound ports. The Telephony Server telephony application is a general purpose application that provides all three

dialed services (Automated Attendant, Message Center, and Fax on Demand). The correct service answers based on the pilot number that the caller dials.

Notifications and SendFax are outbound applications that require out-dial ports on the PBX.

2. Configuring the SX-200 PBX

This chapter contains required PBX settings to enable OnePoint Messenger unified messaging. This chapter contains these sections:

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Check MAI Installation and Programming	33
Examples of the Customer Data Entry (CDE) Forms	34

For details on SX-200 programming procedures, see your Mitel documentation:

- For details on data entry, refer to the *Mitel Practice, SX-200 PBX Customer Data Entry (CDE)* (91xx-yyy-210, where xx is the product designator and yyy is the software release).
- For specific information on ONS voice mail setup, see the document *SX-200 EL-ML Technical Documentation—Release 3.1*.

- On the Mitel SX-200 EL/ML LIGHTWARE 17 CD-ROM (P/N 9109-953-081-NA), refer to the section “Voice Mail on ONS Ports”.

CAUTION! Only a Mitel-certified SX-200 PBX technician should program the SX-200.

Information exchange between the Telephony Server and the SX-200 PBX is achieved through the Mitel Application Interface (MAI), of which MiTAI is a component. To accommodate the MAI link, the PBX should contain the following hardware:

- DNIC digital line circuit for the TalkTo card connection
- ONS card for analog voice mail ports on the NMS cards

Program the PBX for MAI operation. You can program only one MAI port for the PBX system.

NOTE: You can program the MAI link without removing the PBX from service.

Overview of OnePoint Messenger Requirements

From the viewpoint of programming the PBX, the OnePoint Messenger unified messaging system provides two general categories of features:

- Message Center, Automated Attendant, and Fax on Demand
- Message Waiting notifications and fax forwarding

Message Center, Automated Attendant, and Fax on Demand are grouped together, because they can use the same incoming lines and trunks. Each needs its own pilot number. Note that the SX-200 can have its own Automated Attendant; it is as an optional feature. There are several ways that you can set up support for Automated Attendant and Fax on Demand on the SX-200. The simplest way is to program dedicated extensions that are permanently rerouted to the voice mail access code.

Message waiting notifications by paging and fax forwarding each need one or more dedicated lines that can support long distance outdialing. They do not need pilot numbers.

For the OnePoint Messenger installer, make a written record of the line numbers that you enable for OnePoint Messenger, their functions (Message Center, Message Waiting Indicator, etc.) and pilot numbers.

Required Forms and Settings

Programming the MAI port consists of entering data in the Customer Data Entry forms on the PBX that are listed here:

- Form 1, System Configuration (See [page 26](#) and [Figure 2-2](#) on [page 34](#).)
- Form 2, Feature Access Codes (See [page 26](#) and [Figure 2-3](#) on [page 35](#).)
- Form 3, Class Of Service (See [page 26](#) and [Figure 2-4](#) on [page 35](#).)
- Form 4, System Options/System Timers (See [page 29](#) and [Figure 2-5](#) on [page 36](#).)
- Form 9, Desktop Device Assignments (See [page 30](#) and [Figure 2-5](#) on [page 36](#).)
- Form 11, Data Circuit Descriptors (See [page 30](#) and [Figure 2-6](#) on [page 36](#).)
- Form 12, Data Assignment (See [page 31](#) and [Figure 2-7](#) on [page 37](#).)
- Form 17, Hunt Groups (See [page 31](#) and [Figure 2-8](#) on [page 37](#).)
- Form 31, System Abbreviated Dial Entry (See [page 31](#) and [Figure 2-9](#) on [page 38](#).)
- Form 34, Direct I/O (See [page 33](#) and [Figure 2-10](#) on [page 38](#).)

The following sections list the required settings that enable the OnePoint Messenger integration.

Examples of the forms appear in the section [“Examples of the Customer Data Entry \(CDE\) Forms”](#) on [page 34](#). You can program the forms generally in numerical order, except that Mitel recommends that you program Form 12 before Form 11 so that the **“# of Data Circuits Assigned”** field in Form 11 will be automatically set correctly and be read-only.

NOTE: Make a list of the stations that you program and their function, so that you can refer to them when you enter them on the Telephony Server (see [“Configuring Show N Tel with the SX-200 PBX”](#) on [page 59](#) in Chapter 5).

Form 1, System Configuration

Use Form 1 (see [Figure 2-2, page 34](#)) to identify the location by bay, slot, and circuit of the DNIC and ONS cards in the PBX.

NOTE: While you only use one digital line card for the TalkTo connection, you may install more than one digital line card in the PBX for other purposes.

Form 2, Feature Access Codes

Use Form 2 (see [Figure 2-3, page 35](#)) to identify the access codes for the necessary features, as listed in [Table 2-1](#).

NOTE: The numbers in the Access Code field are examples only.

Table 2-1 Form 2, Required Feature Access Codes

Feature Number	Feature Name	Access Code
03	Call Forward - All Calls	*70
04	Call Forward - Internal Only	*71
05	Call Forward - External	*72
41	Send Message	*4
30	Last Number Redial	*50
245	Abbreviated Dialing Access	

Form 3, COS Definitions

Use Form 3 (see [Figure 2-4, page 35](#)) to create five classes of service:

- User sets
- ONS voice mail ports
- MiTAI link
- Message Waiting/Pager notification
- **Trunk** (optional): A Trunk COS impacts the forwarding of external calls to voice mail. Enable COS Option 208 in the trunk COS.

Not all of the COS features listed below are required, but they are compatible with the integration while providing upgradeability. Refer to *SX-200 Customer Data Entry (91xx-yyy-210-NA)* for further information. On the Mitel SX-200 EL/ML LIGHTWARE 17 CD-

ROM (P/N 9109-953-081-NA), refer to the section “Voice Mail on ONS Ports”.

[Table 2-2](#) shows the required features common to all four classes of service.

Table 2-2 Form 3, COS Features Common to the Four COS Groups

Class of Service Option Name	COS Option Number
Call Forwarding - Busy	206
Call Forwarding - Don't Answer	207
Call Forwarding - External	208
Call Forwarding - Follow Me	209
Message Waiting Setup - Lamp	232
SUPERSET Tel. - Message Program	605

For the ONS COS, in addition to selecting the features in [Table 2-2](#), also select the features in [Table 2-3](#):

Table 2-3 Form 3, Additional ONS COS Features

Class of Service Option Name	COS Option Number
Can Flash if Talking to an Incoming Trunk	212
Can Flash if Talking to an Outgoing Trunk	213
Data Security	216
Do Not Disturb	220
Call Forward Inhibit on Hold Timeout	222
Override Security	238
Line Privacy	240
Abbreviated Dialing Access	245
ONS Voice Mail Port	261
Camp-On	301
Message Register Applies	703

For the COS of the user stations, in addition to selecting the features in [Table 2-2](#), also select the features in [Table 2-4](#):

Table 2-4 Form 3, Additional User Set COS Features

Class of Service Option Name	COS Option Number
Abbreviated Dialing Access	245
Message Sending	259
Display ANI/DNIS/CLASS Information	502
Display CLASS Name	503
SS420 Optional CLASS/ANI Display	504
PBX Superset Tel. - Automatic Outgoing Line	604

For the MiTAI link COS, in addition to selecting the features in [Table 2-2](#), also select the features in [Table 2-5](#):

Table 2-5 Form 3, Additional MiTAI link/DNIC 2103 COS Features

Class of Service Option Name	COS Option Number
Call Hold and Retrieve Access	211
Can Flash if Talking to an Incoming Trunk	212
Can Flash if Talking to an Outgoing Trunk	213
Line Privacy	240
Display Prime as Forwarder	258
Camp-On	301
PBX Superset Tel. - Automatic Outgoing Line	604

For the Message Waiting/Pager Notification COS, in addition to selecting the features in [Table 2-2](#), select the features in [Table 2-6](#):

Table 2-6 Form 3, Additional MWI/Pager Notification COS Features

Class of Service Option Name	COS Option Number
Data Security	216
Do Not Disturb	220
Originate Only	235
Override Security	238
Message Sending	259

Class of Service Option Name	COS Option Number
ONS Voice Mail Port	261
Voice Mail System Speed Dial Index 0 - 255	265
Camp-On	301

NOTE: *Voice Mail System Speed Dial Index (0-255)* in [Table 2-6](#): This option applies to ONS voice mail port hunt groups. When enabled, this option identifies a set/station that is accessing voice mail through the message waiting key to retrieve messages. The user listening to messages can also use the Messaging - Call Me Back feature to reply to messages. This COS option is disabled by default. To enable, assign an index number from 0 to 255. This index number will point to an abbreviated dial entry in Form 31.

Form 4, System Options

In Form 4 (see [Figure 2-5, page 36](#) for a sample form), specify the system-wide options and timers. Set the following parameters for the SX-200/OnePoint Messenger integration:

Table 2-7 Form 4, System Options

System Options	Option Number
Message Lamp Test Enable	02
Message Waiting and Message Register Clear Print	04
Incoming to Outgoing Call Forward	21
Maximum BNIC Cards	110
Mitel Application Interface	Use 19 for SX-200 EL, 105 for ML

Disable option number **22, Last Party Clear - Dial Tone**. This will avoid having a dial tone from a premature hangup be recorded as a message.

NOTE: If you use Mitel 4000 series telephones, enable **option 112, SS4000 Series Sets**.

Form 9, Desktop Device Assignments

Use Form 9 to assign the COS that you defined in the COS form for user sets (see “[Form 3, COS Definitions](#)” on page 26”) to each extension served by OnePoint Messenger.

1. In the **Extension** field of the form, enter an extension for a user set served by OnePoint Messenger.
2. In the **COS** field for that extension, enter the number of the COS defined for user sets to be ONS-enabled.
3. In the **COR** field for that extension, accept the default of 1.

Form 11, Data Circuit Descriptors

Use Form 11 (see [Figure 2-6, page 36](#) for a sample form) to set up a data circuit descriptor for the MAI port.

NOTE: Mitel recommends that, for the OnePoint Messenger integration to the SX-200, you complete this form after Form 12. In that case, in the Descriptor field equivalent to the descriptor number that you choose for the MAI port, the number “1” will automatically appear in the Number of Data Circuits Assigned field. Add “**TalkTo/MiTAI**” in its **Comment** field.

For the new MAI port descriptor number, choose **Select Option**, then set the parameters to the values shown in the table below, or select an existing descriptor number that has parameters set as shown below.

Table 2-8 Form 11, Data Circuit Descriptor, Select Option

Parameter Name	Value
SYNC: Operating Mode	SYNCHRONOUS
SYNC: Rate Adaption Scheme	X.31
SYNC: Clock Source	SYSTEM
MAXIMUM BAUD RATE	19200
Default Baud Rate	19200
MINIMUM BAUD RATE	19200

Form 12, Data Assignment

Use Form 12 (see [Figure 2-7](#) on [page 37](#) for a sample form) to program the MAI port (MiTAI link) for the dataset.

1. In the Bay, SLT, and CCT fields, verify the bay, slot, and circuit numbers of the DNIC card, then enter **DS2103** in the **Type** field to program a Dataset 2103 dataset unit as the device type for the MAI circuit on the digital line card that you programmed in Form 1 ([page 26](#)).
2. Assign an extension number (EXT NUM field), MiTAI link class of service number (COS field, from Form 3, [page 26](#)), and class of restriction number (COR field) for the dataset.
3. Assign the Data Circuit Descriptor Number in the CDN field. The Number of Data Circuits Assigned column on Form 11 will then display a 1 next to the descriptor number that you assign here.

NOTE: The tenant number you put in the TEN field must be the same in all forms that reference the tenant number.

Form 17, Hunt Group

Use Form 17 (see [Figure 2-8](#) on [page 37](#) for a sample form) to create a circular hunt group for the extensions accessing the Telephony Server, with the message center number as the pilot number of the hunt group.

To set the Message Center pilot number:

Select **Access Code** (option 7) at the bottom of the form, then enter the pilot number to be used for the OnePoint Messenger Message Center.

NOTE: Note the pilot number for entering on the Telephony Server in the *Telsrver.ini* file and the *System Parameters* tab in Telephony Server Administrator. See the section “[Setting OnePoint System Parameters](#)” on [page 67](#) in Chapter 5 for instructions on entering the pilot number on the Telephony Server.

Form 31, System Abbreviated Dial Entry

Special codes entered in Form 31 (see [Figure 2-9](#) on [page 38](#) for a sample form) allow the PBX operation to be customized to suit the operation of a particular voice mail system. These special codes eliminate many of the dialing steps involved in the sending and retrieving

of voice mail messages. The integration of the PBX and voice mail system is based on the abbreviated dial numbers shown below.

Table 2-9 Form 31, System Abbreviated Dial Entry

Code	Description
*1	5 second pause
*3 XX	Insert manual dialed digits (XX) 2 digits expected
*6	Tone out caller extension number
*9	1 second pause
**	DTMF digit
#	DTMF digit #
0-9	DTMF digits 0 - 9

NOTE: For an explanation of the timing requirements, see Form 31 on the “SX-200 EL/ML Technical Documentation” Mitel Folio CD-ROM. On the equivalent Mitel Documentation Web page, use this path: Program Features, Voice Mail Support, Voice Mail on ONS Ports

Set up the desired call forwarding for the telephones using this voice mail feature.

- Place all ONS voice mail ports in the same hunt group in Form 17 (see [page 31](#)). Assign an access code to the group.
- For trunk calls to reach the ONS voice mail system via a forwarding system abbreviated dial number, enable System Option 21 (Incoming to Outgoing Call Forward) and COS Option 208 in the trunk COS.

For Message Forward:

1. Enter an index number for message forward in the INDEX NUMBER field of Form 31, System Abbreviated Dial Entry.
2. Enter in the DIGIT STRING field:
 - The ONS voice mail hunt group access code
 - *6

Form 34, Direct I/O

Use Form 34 (see [Figure 2-10](#) on [page 38](#) for a sample form) to enter the extension number of the MAI port. Enter the same extension number that you assigned to the Dataset 2103 dataset unit in Form 12 ([page 31](#)).

1. Enter the extension number of the MAI port.
2. Program the **Printout**, **Printout Type**, and **Guaranteed** fields as shown in [Table 2-10](#).

Table 2-10 Form 34, MAI Programming: Direct I/O

Parameter Name	Value
Ext Num	1802 (for example)
Printout	MAI
Printout Type	AUTOPRINT
Guaranteed	NO

Check MAI Installation and Programming

After installing the physical link from the PC to the PBX, check:

- DNIC line card is installed and programmed correctly
- MAI programming is correct

Show Status Command

Use the Show Status command in the SX-200 Maintenance facility to check the status of the installation and commissioning. The Show Status command displays the current call processing or maintenance state of the devices that are connected to a PBX circuit card. Determine the status of a device by its bay/slot/circuit number or extension number. An example of the display is shown in [Figure 2-1](#).

Figure 2-1 Show Status Command Display

Show Status Command display								
SOFTWARE_ID	BB	SS	CC	SC	EX/TK	SWSTAT	Receiver	Other_Party
datastrn 0	1	8	5	2	1805	TALKG	-	-

If the MAI link is up and running, the SWSTAT field shows `TALKG`. If the link is not operating, the SWSTAT field shows `IDLE`.

Examples of the Customer Data Entry (CDE) Forms

Some examples of the forms shown here are from the Mitel SX-200 EL/ML & LIGHT CD-ROM and are shown only for illustrating the layout of the forms. Those examples, which have a white background, do not necessarily show the values that should be entered to enable the connection to the Telephony Server.

Figure 2-2 shows Form 1, System Configuration, from an SX-200/OnePoint Messenger integration, with one ONS card and two digital line cards (only one is required).

Figure 2-2 Form 1, System Configuration

10:14 AM 26-OCT-99 alarm status = MAJOR

BAY	SLT	CCT	PROGRAMMED	INSTALLED	COMMENTS	
01	01	-	ONS LINE CARD	ONS LINE CARD		
01	02	-	DIGITAL LINE CARD	DIGITAL LINE CARD		
01	03	-	DIGITAL LINE CARD	DIGITAL LINE CARD		
01	04	-	LS/GS TRUNK CARD	LS/GS TRUNK CARD		
01	05	-				
01	06	-				
01	07	-				
01	08	-				
02	01	-				
02	02	-				
02	03	-				
02	04	-				
01	05	-				
1-LINE CARDS		2-TRUNK CARDS		3-UNIVERSAL	4-NODE TYPE	5-CONFIGURE
6-QUIT		7-BAY/SLT/CCT		8-	9-VERIFY DATA	0-

Figure 2-3 shows Form 2, Feature Access Codes, from an SX-200/OnePoint Messenger integration. Not all of the options are shown. See the complete list of necessary settings in “Form 2, Feature Access Codes” on page 26.

Figure 2-3 Form 2, Feature Access Codes

```

4:35 PM 26-OCT-99                                alarm status = MAJOR

```

FEATURE	FEATURE NAME	ACCESS CODE
01	Account Code Access	
02	Auto-Answer Activation	
03	Call Forwarding - All Calls	*70
04	Call Forwarding - Internal Only	*71
05	Call Forwarding - External Only	*72
06	Call Forwarding - I'm Here	
07	Call Forwarding - Cancel I'm Here	
08	Dial Call Pickup	
09	Directed Call Pickup	
10	Do Not Disturb	
11	Extension General Attendant Access	
12	Paging Access To Default Zone(s)	
01	Account Code Access	

```

1-          2-          3-          4-TOP          5-BOTTOM
6-QUIT     7-FEATURE NUM 8-          9-          0-

```

The example of a COS form shown in Figure 2-4 does not show all the features that must be enabled for the SX-200/OnePoint Messenger integration. Set up three COS groups—for user sets, voice mail ports, and the MiTAI link, as described in “Form 3, COS Definitions” on page 26.

Figure 2-4 Form 3, Class Of Service

[COS: 1] OPTION (DISPLAYING ENABLED)	STATUS	OPTION NUM	
	Attendant-Timed Recall (NO ANS) 0=disable 5-240 s	30	115	
	Attendant-Timed Recall (HOLD) 10-240 seconds	30	116	
	Attendant-Timed Recall (CAMPON) 0=disable 5-240 s	30	117	
	Attendant Call Forward No Answer Timer 10-240 s	30	118	
	Line Privacy	ENABLED	240	
	Call Forward - Don't Answer Timer 2-6 rings	3	253	
	PBX Telephone - Call Hold Recall Timer 1-10 min	1	254	
	Repeated Camp-On Beeps Timer 5-15 seconds	10	255	
	UCD Music On Hold Timer 0-50 minutes	0	256	
	Display Prime As Forwarder	ENABLED	258	
	Delay Ring Timer 2-6 rings	3	263	
	Paging Default (0-9) (0 Gives All Enabled Zones)	0	312	
	Line Privacy	ENABLED	240	
1-DISABLE	2-COPY COS	3-COS NUMBER	4-TOP	5-BOTTOM
6-QUIT	7-OPTION NUM	8-SHOW DISABLE	9-COS NAME	0-

Figure 2-5 Form 4, System Options/System Timers

System Options (Displaying ENABLED Options)				STATUS	OPTION NUM
System Identity Code				17591	101
System Type (ML,EL)				EL	102
Maximum Devices				672	103
Maximum ACD Agents				100	104
Nitel Application Interface				ENABLED	105
Automated Attendant				ENABLED	106
Lodging				ENABLED	107
Remote Software Download				ENABLED	109
Maximum BNIC Cards (2..40)				2	110
Maximum BOMS Cards (1..40)				1	111
SS4000 Series Sets				ENABLED	112
Centralized Attendant/VoiceMail				ENABLED	113
Centralized Attendant/VoiceMail				ENABLED	113
1-DISABLE	2-	3-	4-TOP	5-BOTTOM	
6-QUIT	7-OPTION NUM	8-SHOW DISABLE	9-	0-	

Figure 2-6 Form 11, Data Circuit Descriptors

3:37 PM 12-JAN-97

alarm status = NO ALARM

DESCRIPTOR	NUMBER OF DATA CIRCUITS ASSIGNED				COMMENTS
01	1				
02	0				
03	0				
04	0				
05	0				
06	0				
07	0				
08	0				
09	0				
10	0				
11	0				
12	0				
01	1				
1-	2-	3-	4-	5-	
6-QUIT	7-DESC NUMBER	8-SEL. OPTION	9-REVIEW	0-	

Figure 2-7 Form 12, Data Assignment

3:58 PM 9-JAN-97

alarm status = NO ALARM

BAY	SLT	CCT	TYPE	TEN	EXT NUM	COS	COR	CDN	DTE	AUL	HOTLINE	COMMENTS
1	08	01										
1	08	02										
1	08	03										
1	08	04										
1	08	05										
1	08	06										
1	08	07										
1	08	08										
1	08	09										
1	08	10										
1	08	11										
1	08	12										
1	08	01										
1-DATA DEV TYP			2-FIND EXT			3-FIND AUL			4-		5-RANGE	
6-QUIT			7-BAY/SLT/CCT			8-			9-		0-	

Figure 2-8 Form 17, Hunt Groups

[GRP 3:4000][CIRC][STN/SET]	EXT NUM	BAY	SLT	CCT	COMMENTS				
	4004	01	01	04	CABLE 1 CIR 1				
	4002	01	01	02					
	4003	01	01	03					
	4001	01	01	01					
	4004	01	01	04					
1-GROUP TYPE		2-TERMINAL		3-INSERT		4-OPTIONS		5-HUNT GROUP	
6-QUIT		7-ACCESS CODE		8-DELETE		9-EXT NUM		0-	

Figure 2-9 Form 31, System Abbreviated Dial Entry

8:09 PM 9-JAN-97

alarm status = NO ALARM

INDEX NUMBER	DIGIT STRING	PRIVATE	
1	2411		
█ 1	2411		
1-	2-FIND INDEX	3-	4-TOP
5-BOTTOM			
6-QUIT	7-	8-DELETE	9-PRIVATE
			0-

Figure 2-10 Form 34, Direct I/O

EXT NUM	PRINTOUT	PRINTOUT TYPE	GUARANTEED
8888	MAI	Autoprint	NO
8888	MAI	Autoprint	NO
1-	2-	3-ADD	4-TOP
5-BOTTOM			
6-QUIT	7-	8-DELETE	9-
			0-

Figure 2-10 shows Form 34 as it should be completed.

3. Installing the TalkTo Card

This chapter provides information about installing the TalkTo card in the OnePoint Messenger Telephony Server. If your Telephony Server already has the TalkTo card installed, you can skip this chapter.

For information on installing other line cards in the Telephony Server, including Mitel AFC, Natural MicroSystems (NMS), and Brooktrout fax cards, see Appendix B in the *OnePoint Messenger Installation Guide*. See Appendix A of the *OnePoint Messenger Getting Started Guide* for recommendations on card arrangement in ISA slots (“slot map”), and IRQ and I/O base address assignment.

This chapter contains these sections:

Section	Page
About the TalkTo CX Card	39
SX-200 Support for Peripherals	40
Installing the TalkTo Card	40
TalkTo CX Card Configuration	43
TalkTo CX Card Settings	43
Troubleshooting the TalkTo Card Installation	43

About the TalkTo CX Card

The **TalkTo CX card**, shown in [Figure 3-3](#), is a Mitel card that you install in an ISA slot in the Telephony Server. The TalkTo card receives the calling line identification data (CLI, or “D-channel”) from the Mitel SX-200, and passes the data through the ISA bus on the Telephony Server to the Mitel Telephony Application Interface (MiTAI). MiTAI associates the CLI with the Telephony Server port that carries the incoming call. The TalkTo card also transfers Message Waiting alerts from the Telephony Server to message recipients’ extensions through the PBX. The TalkTo card communicates with the PBX through RJ-11 twisted pair wires from the 6-lead RJ-14 jack

labelled “Line” at the top of its connecting bracket. The connection on the PBX is a port on the DNIC digital line card. The cable connection is generally through a patch panel.

SX-200 Support for Peripherals

The SX-200 supports one HCI link and a maximum of 200 monitors. The DNIC connection to a TalkTo CX card is the only connection supported on the SX-200. Fiber connectivity is not supported to the TalkTo card.

The TalkTo card does not have an MVIP connector on it and does not connect directly to the other cards on the Telephony Server.

Installing the TalkTo Card

TalkTo CX card installation consists of the following tasks in this suggested order:

1. If required by conflicts with other cards in the Telephony Server, change the TalkTo CX card IRQ (default = 15) or I/O base address (default = 0300h) and edit the System.ini file, as described below in [“Changing the IRQ” on page 44](#). See a diagram of the TalkTo card in [Figure 3-3](#) for alternative IRQ and address locations.

To check current IRQ and base addresses:

- a. From the Windows **Start** button, choose **Programs**, then **Administrative Tools, Windows NT Diagnostics**, and **Resources**
- b. Click the **IRQ** button. The **Resources** tab appears, as shown in [Figure 3-1](#).

Figure 3-1 Windows NT Diagnostics, Resources Tab, IRQ List

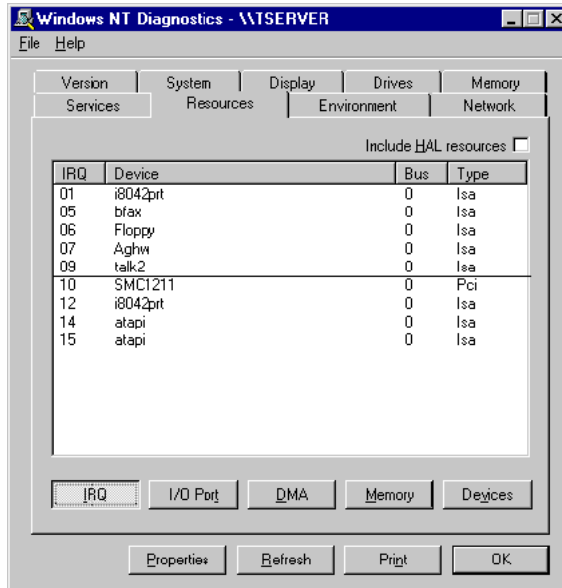


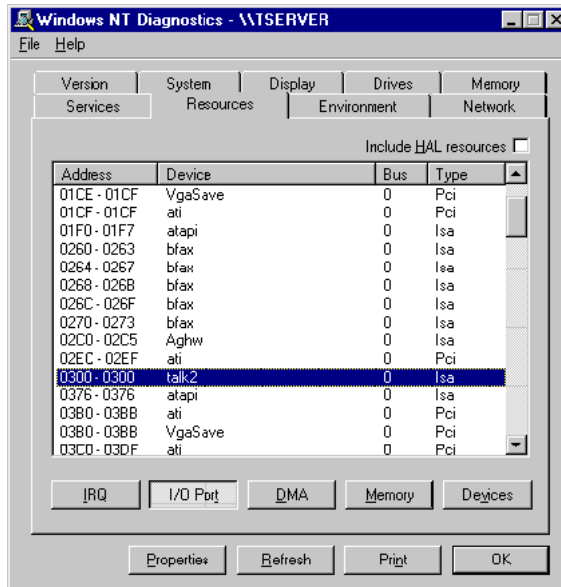
Figure 3-1 displays the IRQ table from a TS800 Telephony Server integrated with an SX-200:

- IRQ 7 (07) in the IRQ resource list is assigned to “Aghw,” the NMS AG-8 card.
- IRQ 9 is assigned to the TalkTo card.
- IRQ 15 is assigned to the ATAPI interface. Since IRQ 15 is the TalkTo card default IRQ, it would be necessary to change the TalkTo card IRQ.

NOTE: Windows NT Diagnostics sometimes does not display all settings, so, after you shut down and install the TalkTo card, it is wise to check settings in CMOS at bootup.

- c. On the **Resources** tab, click **I/O Port**. Note available I/O addresses. **Figure 3-2** shows the I/O Port list from a Telephony Server integrated with an SX-200. Since the TalkTo card default base address of 300h was not already used, the TalkTo card was assigned that address, as shown highlighted.

Figure 3-2 Windows NT Diagnostics, I/O Port List



NOTE: If you are also installing NMS line cards and Brooktrout fax cards, also note available IRQ and I/O address resources for those cards while you view the **Resources** tab. Multiple Brooktrout cards can share an IRQ, and multiple NMS cards can share another IRQ.

d. To close **Windows NT Diagnostics**, click **OK**.

2. Install the TalkTo CX card in an ISA slot in your PC. If you are using the TS800 Telephony Server, see Appendix A of the *Getting Started Guide* for recommended slot, IRQ, and I/O address assignments.

The TalkTo CX card does not have an MVIP connector, so you should install the TalkTo card in a slot at either end of the row of cards NMS and fax cards that are connected together with an MVIP cable.

Since the TalkTo card does not connect to the other cards, the ports on the NMS card must be connected through twisted pair cabling directly to the ONS card on the SX-200 PBX.

NOTE: The NMS ports use RJ-61 connections to duplex two lines each. Use a T-connector or octopus to gang two ONS ports to each NMS port. The fax card does not connect directly to the

PBX. The NMS card uses it as a resource through the MVIP cable.

3. The PBX to which the PC will be connected must be programmed, as discussed in Chapter 2 ([page 23](#)).
4. Install and configure the Mitel MiTAI software, as discussed in Chapter 4 ([page 47](#)) of this guide. Also use the MiTAI interface to note IRQ and memory conflicts.

TalkTo CX Card Configuration

Refer to the printed TalkTo CX card installation manual included with your card for detailed instructions on how to configure and install your card. Basically, the installation consists of revising the IRQ and I/O base address, if necessary.

TalkTo CX Card Settings

The TalkTo CX card is factory-configured with these settings:

- IRQ = 15 (the TalkTo factory-installed on the TS800 is set to 9)
- I/O base address = 0300h

Troubleshooting the TalkTo Card Installation

If the TalkTo CX card or another card in the Telephony Server does not respond, check your current system configuration and the NT Event Viewer. You can change either the TalkTo card settings, or you may be able to change those of another card. Make sure that the physical IRQ jumper settings on the TalkTo card correspond to the IRQ value shown in the System.ini file, as described below in [“Changing the IRQ” on page 44](#).

You can use any of the following techniques to determine your system configuration:

- **System BIOS settings:** PC motherboards allow you to configure parameters relevant to the system. Some systems will use the BIOS to configure serial (COM) and parallel (LPT) ports.
- **Jumper/Switch settings on the cards:** Some peripheral cards (such as the TalkTo CX) have jumpers that set the system parameters such as IRQ, I/O base address, RAM base address, etc. See [Figure 3-3](#). Refer to the peripheral’s user/installation guide for

details on how the parameter values relate to the jumper/switch settings of the relevant peripheral cards.

- **MSD (Microsoft Diagnostic):** Microsoft Windows includes MSD.EXE (usually located in \windows\system directory) that provides information about IRQ status, i.e., IRQs that are already in use, I/O base addresses for the COM and LPT ports (note that not all IRQs in use are necessarily shown with MSD.)

MSD.EXE is best used from DOS (not from a DOS window or DOS running full screen in Windows, but rather from DOS before starting Windows).

- **Software provided by the peripheral card manufacturer:** Some peripherals have setup/diagnostic software that reports or tests their settings.

Changing the IRQ

The possible IRQ level settings for the TalkTo CX are **3 through 7, 9 through 12, 14, and 15**. The IRQ jumper block on the TalkTo card, as shown in [Figure 3-3](#), has jumpers for each of those numbers and no others. There is a label on the card above the jumper block showing the IRQs above each pin; 15 is at the left end.

To configure the system with a new IRQ on the TalkTo card:

1. Find an unused IRQ in Windows Diagnostics, as described above in [“Installing the TalkTo Card”](#) on page 40.

NOTE: On the TS800, reserve the IRQ in the BIOS. To do this, press **F2** during system reboot to start the BIOS Setup Utility. On the **Advanced** screen, select **Resources Configuration**. If the IRQ you want to use is not already reserved, select it, then press **Enter**, then select **Reserved**.

2. Edit the **Dnic** section of the **System.ini** file in the **Windows** directory to change the entry **IRQ = 15** to the new value.
3. Save the new System.ini file.
4. Shut down the system.
5. Set the new value on the TalkTo card IRQ jumper block, as indicated in the TalkTo card installation manual. See the TalkTo card in [Figure 3-3](#), below.
6. Install the card in an ISA slot outside any MVIP card array.

7. Start Windows.
8. In MiTAI (see [“Installing MiTAI on the Telephony Server”](#) on page 47 in Chapter 4), set the IRQ to the same value.

Changing the I/O Base Address

The possible I/O base address settings are 200h, 220h, 240h, 260h, 300h, 320h, 340h, 360h.

To change the default of 0300h to another:

1. Remove the appropriate jumper(s) from the base address jumper block on the TalkTo card, as listed in [Table 3-1](#). The letters A through F appear from left to right above the address jumper block on the TalkTo card, as shown in [Figure 3-3](#).
2. In MiTAI (see [“Installing MiTAI on the Telephony Server”](#) on page 47 in Chapter 4), set the base address to the same value as you chose here.

NOTE: The card is auto-detected by the driver at initialization.

Figure 3-3 TalkTo Card Diagram

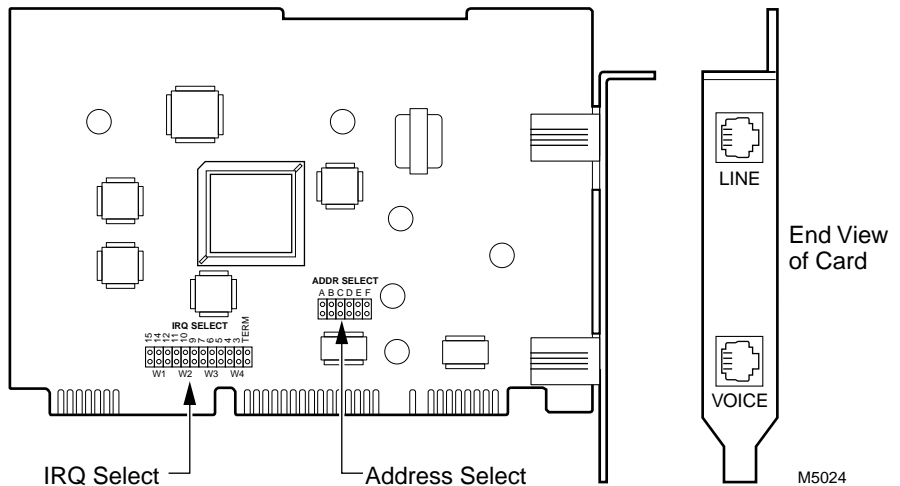


Table 3-1 Base Address Locations on the TalkTo Card

Base Address	Pins					
	A	B	C	D	E	F
200h	ON	ON	ON	ON	ON	ON
220h	ON	ON	ON	ON	ON	off
240h	ON	ON	ON	ON	off	ON
260h	ON	ON	ON	ON	off	off
300h	ON	ON	ON	off	ON	ON
320h	ON	ON	ON	off	ON	off
340h	ON	ON	ON	off	off	ON
360h	ON	ON	ON	off	off	off

4. Installing Mitel Telephony Application Interface (MiTAI)

This chapter contains instructions for installing and configuring the Mitel Telephony Application Interface 7.5.3 (MiTAI 7.5.3) software on the OnePoint Messenger Telephony Server. MiTAI helps establish communications between the Telephony Server and the SX-200 through a TalkTo card. This chapter contains the procedures for installing and configuring MiTAI on the Telephony Server for an SX-200/TalkTo integration.

Section	Page
Installing MiTAI on the Telephony Server	47
Checking the Operation of the MiTAI Link to the PBX	51
Editing the Server Hosts File	53

What You Need to Complete this Chapter

To complete the installation detailed in this chapter, you will need the following:

- The Mitel TalkTo card installed in the Telephony Server and connected to the PBX
- The PBX running and configured for OnePoint Messenger
- Mitel MiTAI 7.5.3 CD-ROM
- MiTAI license

Installing MiTAI on the Telephony Server

Installing MiTAI on the Telephony Server

1. If you are installing MiTAI 7.5.3 in a system that has a version of MiTAI installed, you must first uninstall that existing version. Use the **Uninstall MiTAI** program if there is one in the MiTAI

program group. If not, remove the program by using the **Add/Remove Programs** applet in the Windows Control Panel.

2. Insert the Mitel MiTAI Toolkit CD-ROM into the CD-ROM drive of the Telephony Server (alternatively, download the software to your hard drive from the Mitel website.) If the CD-ROM auto-run is enabled on your Telephony Server, the software installation routine will start when you insert the CD-ROM.

If auto-run is not enabled, use the Run dialog in your Windows Start menu or use Windows Explorer to locate the `\runlocal\Windows NT` directory on the CD-ROM. In this directory, invoke **Setup.exe**.

3. On the **Select the MiTAI Runtime required for your PC** dialog, click **OK** to accept the **MiTAI Local Runtime** default.

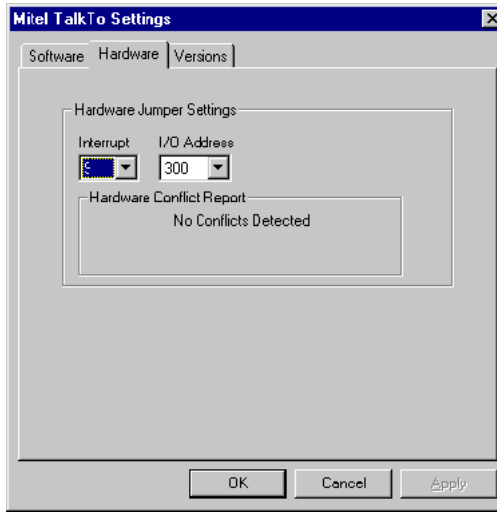
If you used Windows Explorer to launch Setup, you do not see this screen.

4. Accept the defaults for the next three screens:

- **Welcome**
- **MiTAI Runtime Software License Agreement**
- **System Information** (The screen should note that Windows NT 4.0 with Service Pack 5 is installed.)

5. On the **Initialize the MiTAI Settings** screen, click the **Default Settings** radio button, then click **Next**.
6. On the **Destination Location** screen, click **Next** to accept the default of Program Files/Mitel/MiTAI)
7. On the **Initialize Settings** screen, select [TBD], then click **Next**.
8. On the **Program Folder** screen, click **Next** to accept the default program group name of Mitel Telephony Application Interface.
9. On the **Start Copying Files** screen, click **Next**. Progress bars appear to monitor the status of the installation as the software loads.
10. If you select **TalkTo Card** on the **Initialize Settings** screen, the **MiTAI Settings** dialog shown in [Figure 4-1](#) appears.

Figure 4-1 MiTAI Settings Dialog, Hardware Tab



11. On the **Hardware** tab:

- **IRQ**—Click the **Interrupt** drop-down arrow to select the IRQ that you set on the TalkTo card, as described in [“Changing the IRQ” on page 44](#) in Chapter 3. The TalkTo default IRQ is 15. The TS-800 turnkey system uses 11.

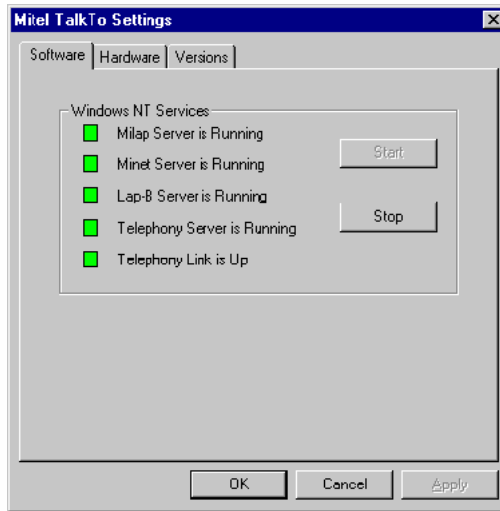
[Figure 4-1](#) shows the MiTAI default IRQ of 9, with a note in the Hardware Conflict Report area that there are no conflicts with IRQ = 9. If you change the value, note whether no conflict is reported.

- **Base Address**—Click the **I/O Address** drop-down arrow to select the I/O Address that you set on the board, as described in [“Changing the I/O Base Address” on page 45](#) in Chapter 3. The default of A300 appears in [Figure 4-1](#).

- Click **Apply**.

12. Click the **Software** tab. The tab shown in [Figure 4-2](#) appears, although this figure shows the tab after the link has successfully been started.

Figure 4-2 MiTAI Settings Dialog, Software Tab

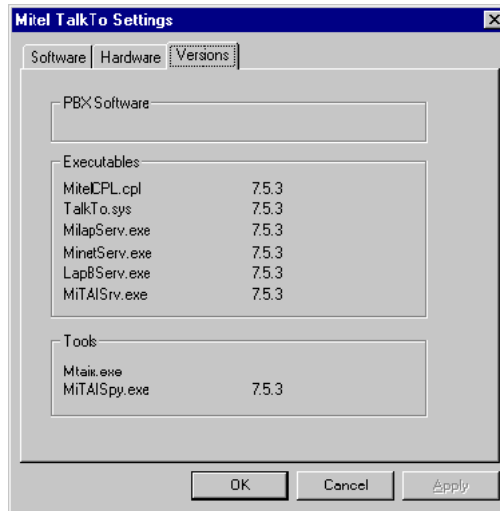


13. On the **Software** tab:

- a. Click **Start**. A progress bar activates at the bottom of the screen, and the red indicators begin to change to green, starting from the top.
- b. The bottom “Telephony Link is Up” indicator can take several minutes to turn green. When it turns green, click **OK**.
- c. If the progress bar repeats, make sure the link between the TalkTo card and the PBX is connected. If the installation sequence does not complete, click **Cancel**, remove the software, reboot, and reinstall, making sure that the connection to the PBX is secure.

The Versions tab is read-only, as shown in [Figure 4-3](#). The screen should display that all MiTAI components are at least version 7.5.3.

Figure 4-3 MiTAI Settings Dialog, Versions Tab



You can open the MiTAI Settings dialog to view or edit settings on the tabs above by double-clicking the **MiTAI** icon in the **Windows Control Panel**.

Checking the Operation of the MiTAI Link to the PBX

1. From the Windows **Start** menu, choose **Programs**, then **MiTAI Runtime**, then **MITAIX**. MITAIX appears in a DOS window with a “phoneset to monitor” prompt.
2. Type the **extension** of any valid phone in the system that has Class of Service options set for HCI monitor (see “[Form 3, COS Definitions](#)” on page 26). Press **Return**.
3. A “connect:” prompt appears if the phone is valid. At the base of the window, enter:

makecall <extension number>

Press **Enter**.
4. If the phone at the selected extension rings, the MiTAI link to the PBX is working properly.
5. Quit the DOS window.

When you start MiTAIX, the window shown in [Figure 4-4](#) appears displaying instructions on using MiTAIX.

In the example in [Figure 4-4](#), the operator entered “trunk 701” at the **Phoneset(s) to monitor** prompt.

Figure 4-4 MiTAIX Program Window 1



```
MTAIX program                               MTAIX
Welcome to MTAIX, the Interactive Test Tool for verifying the MiTAI link
to your PBX. This program will allow you to monitor and control the activity
of up to three phonesets or other devices attached to your PBX. You may enter
"help" at any time for a list of available commands.

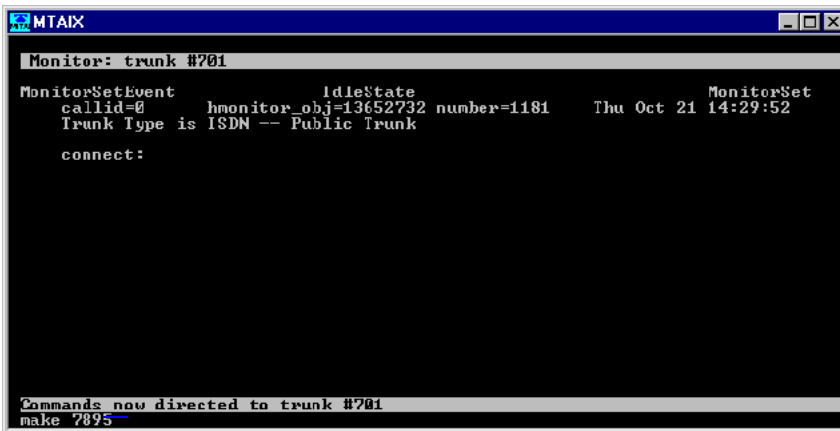
To begin, enter at least one extension number of a phoneset attached to your
PBX, or else enter a longer string indicating up to three devices. Devices
other than phonesets which may be monitored include trunks
<enter "trunk #">, ACD path members <enter "<path ext.> <member #>"> or
feature events <enter "agents">.

Phoneset(s) to monitor: trunk 701_
```

When you press **Enter** after entering an extension for “Phoneset to monitor”, the window shown in [Figure 4-5](#) appears. The data in the window confirms that the PBX acknowledged the command, recognized the number as valid, and returned status on it.

[Figure 4-5](#) shows that the operator entered “make 7895” at the base of the screen to request that the PBX ring the 7895 extension over the 701 trunk. Note that you should not enter the command next to the “connect” prompt.

Figure 4-5 MiTAIX Program Window 2

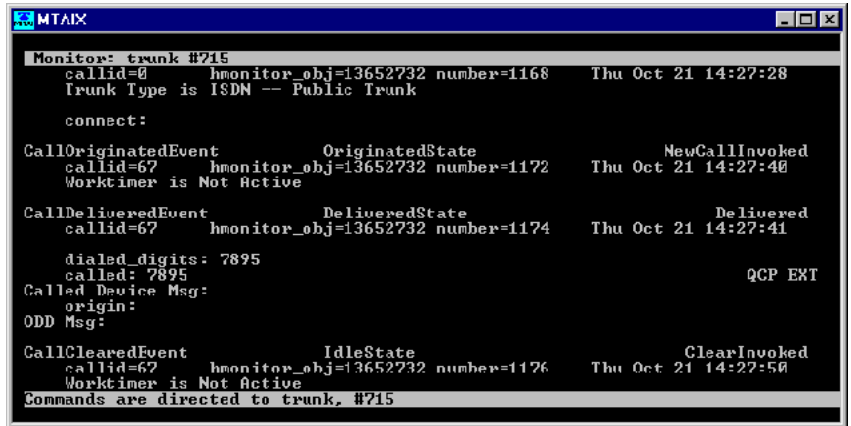


```
MTAIX
Monitor: trunk #701
MonitorSetEvent      IdleState      MonitorSet
callid=0             hmonitor_obj=13652732 number=1181   Thu Oct 21 14:29:52
Trunk Type is ISDN -- Public Trunk
connect:

Commands now directed to trunk #701
make 7895_
```

[Figure 4-6](#) shows how the data appears that is generated by a test call to an extension.

Figure 4-6 MiTAIX Program Window 3



```
MTAIX
Monitor: trunk #715
callid=0 hmonitor_obj=13652732 number=1168 Thu Oct 21 14:27:28
Trunk Type is ISDN -- Public Trunk

connect:

CallOriginatedEvent OriginatedState NewCallInvoked
callid=67 hmonitor_obj=13652732 number=1172 Thu Oct 21 14:27:40
Worktimer is Not Active

CallDeliveredEvent DeliveredState Delivered
callid=67 hmonitor_obj=13652732 number=1174 Thu Oct 21 14:27:41

dialed_digits: 7895
called: 7895 QCP EXT
Called Device Msg:
origin:
ODD Msg:

CallClearedEvent IdleState ClearInvoked
callid=67 hmonitor_obj=13652732 number=1176 Thu Oct 21 14:27:50
Worktimer is Not Active
Commands are directed to trunk, #715
```

Editing the Server Hosts File

Editing the Server Hosts file uses the same procedure as described in Chapter 4 in the *OnePoint Messenger Installation Guide*.

MiTAI Runtime, which is used to establish the link between the Telephony Server and the PBX, requires a listing in the Telephony Server Hosts file:

1. Open a text editor such as Windows **Notepad**.
2. Open the Hosts file, in `\WINNT\system32\drivers\etc`.
3. Read the instructions in the file header, then add an entry for MiTAI Runtime in the following form:

```
<IP address> <HostName> MiTAI
```

where `<IP address>` corresponds to your Telephony Server's IP address, and `<HostName>` is your Telephony Server's computer name.

4. Save the file and close Notepad.

5. Configuring OnePoint Messenger PBX Integration Software

For the SX-200 integration, use this chapter in replace of Chapter 4 in the *OnePoint Messenger Installation Guide*. This chapter covers using Show N Tel Manager to identify the SX-200 and trunks assigned to voice mail, and to apply telephony applications to ports. It also discusses using the Unified Messaging Snap-in to Microsoft Management Console for assigning pilot numbers to OnePoint Messenger services. The final section is on starting Telephony Server.

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Introduction

This chapter introduces you to the configuration of OnePoint Messenger with an SX-200 PBX. This enables you to use telephones to communicate with Exchange through the Telephony Server. Before you perform the procedures in this chapter, you must have installed and configured your line and fax cards on the Telephony Server.

Integrating the Telephony Server with the SX-200

Integrating the PBX with the Telephony Server requires the use of the Show N Tel Manager program from Brooktrout Software, installed as part of the installation of OnePoint Messenger. Show N Tel Manager interfaces the telephony services of the Telephony Server with the PBX by configuring each port on the Telephony Server line card(s) with PBX lines and protocols. Show N Tel Manager is in the Show N Tel program group on the Telephony Server.

To accomplish integration with an SX-200, perform the procedures detailed in this chapter. For details on Show N Tel Manager, see *Getting Started with Show N Tel* and *Show N Tel System Administrator Guide*, both from Brooktrout and included on the OnePoint Messenger CD-ROM as *sntgetstart.pdf* and *sntmgrguide.pdf*, respectively.

The Unified Messaging Snap-in to Microsoft Management Console (MMC) replaces Telephony Server Administrator in this version of OnePoint Messenger as the configuration interface for the Telephony Server Telephone User Interface (TUI). During installation, it is installed with a set of defaults that allow the Telephony Server to provide basic services to telephone callers after you have completed the application assignment procedures in Show N Tel. When you have successfully established communication from telephones to Exchange and communication between Exchange and desktop clients, you can tune the Telephony Server configuration using MMC. The use of MMC is detailed in Chapter 3 in the *OnePoint Messenger Administrator Guide*.

Show N Tel Telephony Applications Overview

OnePoint Messenger provides telephony services through “telephony applications” that run through Show N Tel. The applications are:

- **Active Call Handler**—Supports the Mitel Active Call CTI system for detecting phone hang-ups

- **AutoRecep**—Provides dedicated support to Automated Attendant (automated receptionist) dialed service. For details on Automated Attendant, see Chapter 3 in the *OnePoint Messenger Administrator Guide*. Automated Attendant support is also provided by Telephony Server application (see below).
- **Fax on Demand**—Provides dedicated support to Fax on Demand (faxback) dialed service. For details on Fax on Demand, see Chapters 3 and 4 in the *OnePoint Messenger Administrator Guide*. Fax on Demand support is also provided by the Telephony Server application (see below).
- **SendFax**—Supports sending faxes to remote fax machines. Used by both Fax on Demand and by users downloading e-mail to remote fax machines.
- **Message Delivery**: Message Delivery supports the QuickFax feature and Post Office Resiliency (caching telephone messages temporarily on the Telephony Server when Exchange is off-line, a feature that will be available in a future release). Assign Message Delivery to a Show N Tel line not associated with a physical port. By default, Message Delivery is assigned to SNT line 50.
- **Telephony Server**—General purpose application for mailbox access and messaging including TTS and receiving online faxes, also Automated Attendant and Fax on Demand.
- **Notification Server**—Several versions and functions, as described next.

Notification Server Configuring and Testing Overview

Notification Server is a telephony application that provides the following three services through four variations in its implementation. The three services are:

- **Message Waiting Indicator (MWI)**: If your PBX is set up to send MWI to the telephones that it manages, Notification Server can be set up to send MWI to users who receive unified messages (unified messages are telephone calls or e-mail created in a Unified Message form). Notification Server can also turn off the MWI when the user has retrieved the message.

NOTE: For more on Message Waiting notifications, see “Message Waiting” in Chapter 3 of the *OnePoint Messenger Administrator Guide*. For user information, see Chapter 3 in the *OnePoint Messenger User Guide*.

- **Paging:** If you assign permission to a user to receive notification via pager or remote telephone of the arrival of unified messages, Notification Server can be set up to send those alerts.
- **Call-Me:** Users can create combined telephone-computer mailbox sessions through a Notification Server port that is configured to support Call-Me.

The four versions of Notification Server are:

- **Notification Server (Full):** Provides the three services above
- **Notification Server (CM):** Dedicated to Call-Me
- **Notification Server (Paging):** Dedicated to paging users when they receive unified messages
- **Notification Server (MWI):** Dedicated to MWI. Notification Server (MWI) can be assigned to a *virtual port* (a Show N Tel line not associated with a physical port).

To invoke Notification Server (in summary):

1. Assign a PBX line that has a service level allowing long distance pager dialing and message delivery to the port to which you assign the Notification Server. The PBX must have the MWI feature code defined. See Feature Number 41 on [“Form 2, Feature Access Codes”](#) on page 26 of Chapter 2.
2. On the PBX, assign a special hunt group number to the line supporting Notification Server, then enter that number in the **Tel-Srvr.ini** file under **MWIPilotNumber** (see [“Editing the Telsrvr.ini file for a Mitel PBX Integration”](#) on page 69 below).
3. In the **Runtime** tab of Show N Tel Manager, assign **Notification Server (Full)**, **Notification Server (CM)**, or **Notification Server (Paging)** to Show N Tel lines that are associated with physical ports on your line card. The lines must have a service level that allows turning MWI on and off. See [“Assigning Programs to Lines”](#) on page 61 for details. Assign **Notification Server (MWI)** to virtual ports, as defined above.
4. Modify the **Phone System Definition** in Show N Tel Manager to conform with the CTI PBX data integration. See [“Modifying the Phone System Definition”](#) on page 63 for details.
5. Reboot the system.

6. To support message notification through pagers, the Telephony Server administrator must configure, in TSAAdmin (also known as the Unified Messaging Snap-in to Microsoft Management Console) the **Pager Settings** page, and set paging permissions in each **Class of Service** on the Class of Service node.

The Exchange administrator must assign paging permissions to individual users by selecting on the Unified Messaging tab of the user one of the 10 Classes of Service, and set pager options in the Fax & Paging window of the tab. For details on assigning permissions, see Chapters 2 and 3 of the *OnePoint Messenger Administrator Guide*.

CvNotify is a utility that tests whether Notification Server generates pages to a particular user when a message arrives for that user and whether a Message Waiting signal is sent to the appropriate extension when a message arrives for a particular user. See “Testing the Operation of Notification Server” in Chapter 6 of the *OnePoint Messenger Administrator Guide*.

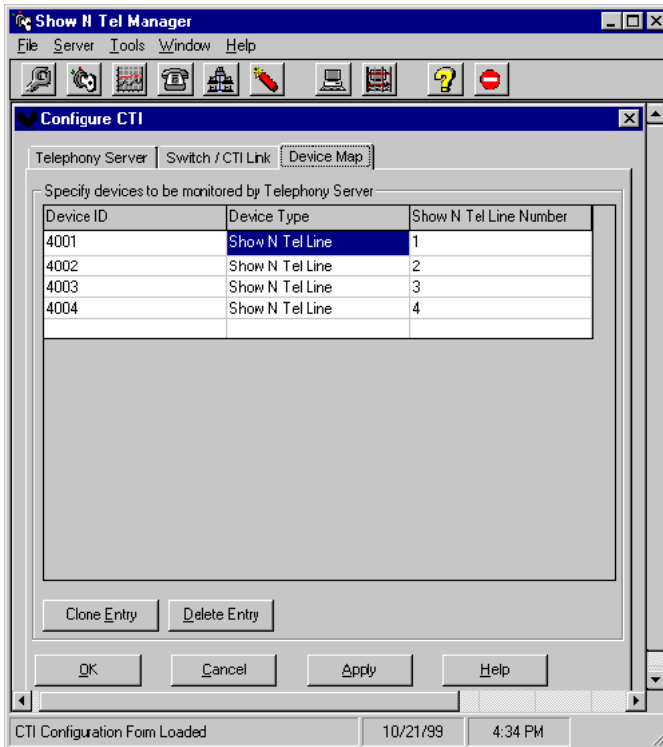
Configuring Show N Tel with the SX-200 PBX

1. Start **Show N Tel Manager** from the **Show N Tel** program group.
2. From the **Tools** menu, choose **Configure CTI**.
3. Select the **Switch/CTI Link** tab.
4. From the **Select Switch (PBX) & link type** list, choose **Mitel with MiTAI 2000 Series**.

CAUTION! For this initial release, you must select **Mitel with MiTAI 2000**. Do **not** select the Mitel with SX-200 option.

5. Set the **Use Complete Transfer** field to **False**.
6. Set the **Pause after Transfer** field to **250**.
7. Set the **Pause after Abort Transfer** field to **250**.
8. Obtain a list of the trunks and lines that are configured in your PBX. See Chapter 2 (page 55).
9. Select the **Device Map** tab, as shown in [Figure 5-1](#).

Figure 5-1 SNT Manager, Configure CTI, Device Map Tab



10. For each line you plan to run:

- a. In the **Device ID** column, select an empty row and enter the Device ID of an extension running from your PBX to the Telephony Server. Each ID should be an extension number.
- b. Click the **Device Type** column, then select **Show N Tel Line** from the drop-down list.
- c. In the **Show N Tel Line Number** column, enter the line number to which you want to map.
- d. Click **Apply** to accept your changes and close the Configure CTI window.
- e. You do not need to edit the **Telephony Server** tab.

NOTE: The **Clone Entry** button lets you quickly and easily program a range of devices. To use the **Clone Entry** button, place the cursor in a blank Device ID cell and click **Clone Entry**. When prompted, enter the beginning and ending Device ID number.

11. To verify an extension, enter it in the **Device to check** (Device ID) edit box, then click **Check Data Link**. A message box should appear verifying the link.

Assigning Programs to Lines

In this procedure, you use the **Runtime** tab, shown in [Figure 5-2](#), of Show N Tel Manager (SNT) to assign OnePoint Messenger telephony applications to individual lines. For details on the applications, see [“Show N Tel Telephony Applications Overview”](#) on page 56.

The telephony applications are automatically installed and added to the **Program Information** area of the Runtime tab. As shown in [Table 5-1](#), some applications must be assigned to physical (real) ports, while others can be assigned to virtual ports (SNT lines not linked to physical ports). Some functions can only be done by an application dedicated to that function, as noted under **Dedicated**, while other functions, noted under **Optional**, can be supported either by a dedicated application or a more general purpose application.

Table 5-1 Telephony Applications

Application	Real Port	Virtual Port	Dedicated	Optional
Telephony Server (Message Center, Fax on Demand, Text to Speech, Automated Attendant, Receive Fax)	X		X	
SendFax: Send faxes to Fax on Demand recipients and to users downloading e-mail to remote fax machines	X		X	
Fax on Demand: Receive calls from Fax on Demand callers	X			X
Message Delivery: Supports QuickFax and Post Office Resiliency (caching telephone messages temporarily on the Telephony Server when Exchange is off-line, a feature that will be available in a future release)		X	X	
Notification Server (CM): Connection for Call-Me sessions (see Chapter 3 in the <i>User Guide</i>)	X			X
Notification Server (MWI): Send message waiting indications to users' extensions		X		X
Notification Server (Page): Send MWI to pagers	X			X
Notification Server (Full): Includes CM, MWI, and Page	X		X	
Active Call Handler		X		X

You do not need to assign an application to a port to receive faxes. The Receive Fax application that is part of the general purpose Telephony Server application dynamically requests a fax resource when needed. The resource gets released when the fax reception operation is done.

To realign resources, see [“Reassigning Lines to Other Applications” on page 71](#)) and revise the port and hunt group setup on the PBX.

To assign telephony applications:

1. Run **Show N Tel Manager** from the **Show N Tel** program group.
2. From the **Tools** menu, choose **ShowNTel Setup**.
3. Select the **Runtime** tab, shown in [Figure 5-2](#).
4. In the **Program Information** area, select the telephony application you wish to assign to a line.
5. In the **Lines Information** area, select the line(s) to which you want to assign the application.
6. Click **Assign Program**.

A line is enabled as soon as you assign an application to it. An enabled line is identified by an “X” in its **Enabled** field in the **Lines Information** area.

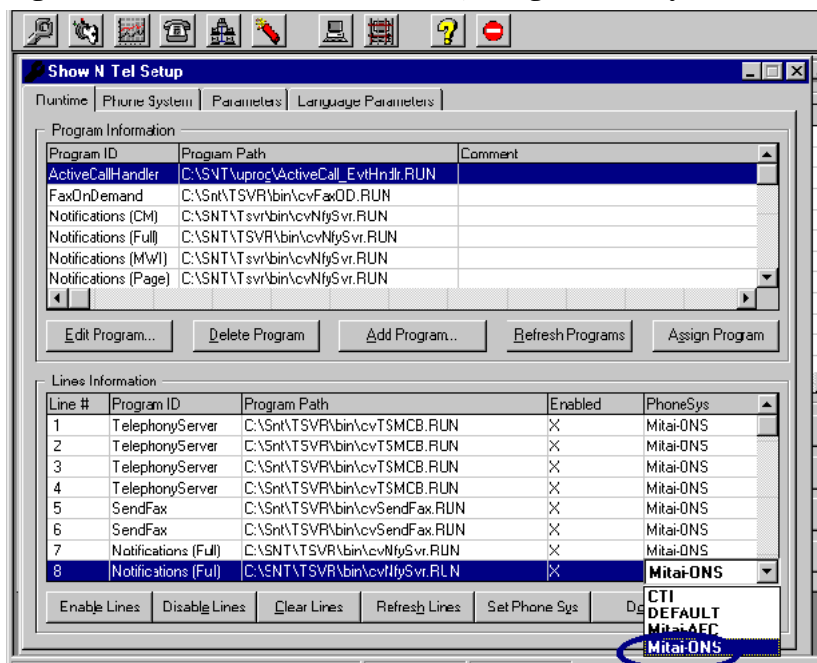
7. Repeat the steps to assign an application to each line that you have available.
8. If you have a Mitel Active Call CTI system, assign **Active Call Handler** to a line number higher than those associated with physical ports.

You can also do the same with **Notifications (MWD)**, or you can simply assign **Notifications (Full)** to a line matched with a physical port.

Assign **Message Delivery** to Show N Tel line 50. On some turn-key systems, it is assigned to line 512 or another line. Move it to line 50.

9. In the **Lines Information** area, select the **PhoneSys** field for all assigned lines, then click the top **PhoneSys** field. From the drop-down list that appears, and select **MiTAI ONS**, as shown circled in [Figure 5-2](#).

Figure 5-2 Show N Tel Runtime Tab, Assign Phone System



10. To deactivate a line, select it in the **Lines Information** area, then click **Disable Lines**. As a result, the “X” disappears from the **Enabled** field.
11. To reactivate one or more lines, select them in the **Lines Information** area, and click **Enable Lines**.
12. To remove an application assignment from a line, select the line in the **Lines Information** area, then click **Clear Lines**.

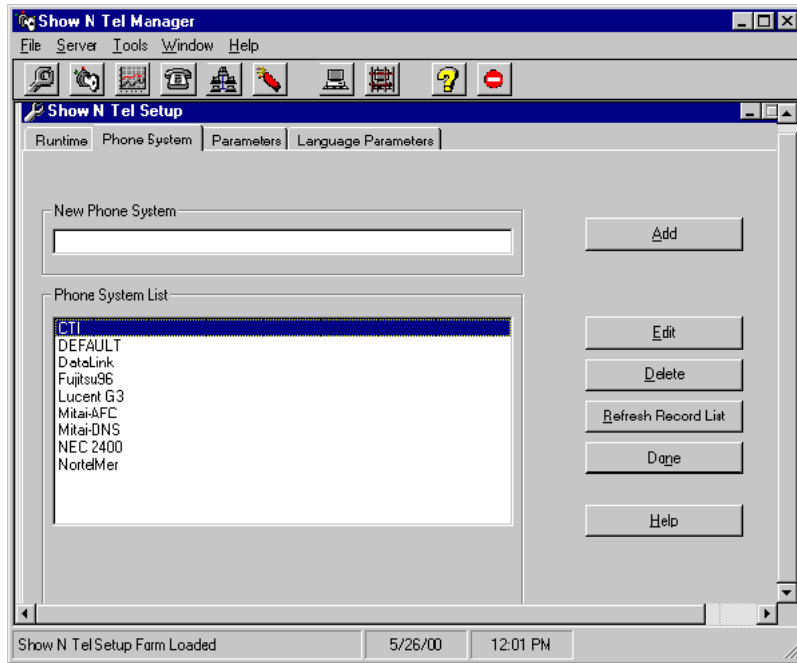
Modifying the Phone System Definition

OnePoint Messenger Notification Server supports three different ways to send data between the Telephony Server and the PBX—DTMF, CTI, and SMDI.

To edit the Phone System tab of Show N Tel Manager to use CTI for MWI on an SX-200 switch:

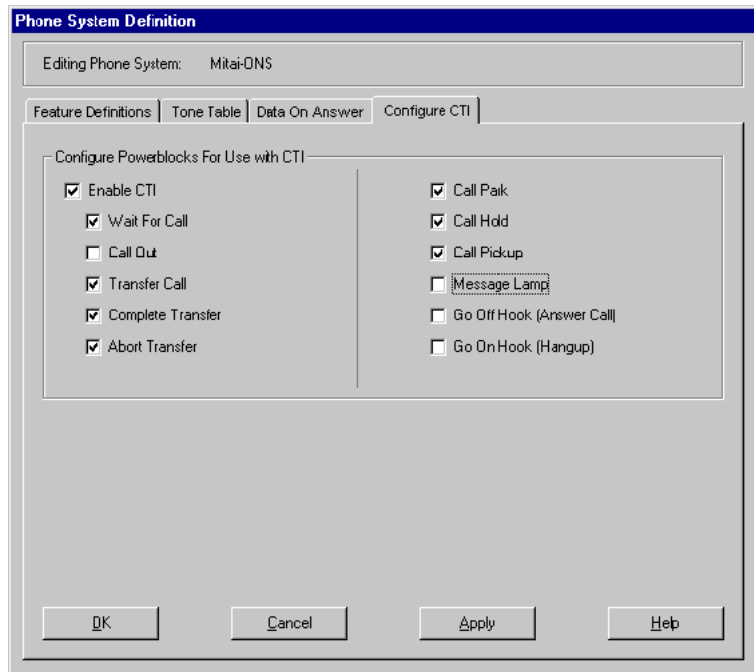
1. From the **Tools** menu of Show N Tel Manager, choose **Show N Tel Setup**.
2. Select the **Phone System** tab, as shown in [Figure 5-3](#).
3. Double-click **MiTAI-ONS**, or select it, then click **Edit**.

Figure 5-3 Show N Tel Setup, Phone System Tab



4. In the Phone System Definition window that appears, select the **Configure CTI** tab, as shown in [Figure 5-4](#).

Figure 5-4 SNT Setup, Phone Sys Definition, Configure CTI Tab



5. Set the values for the SX-200/MiTAI/TalkTo integration as shown in [Figure 5-4](#). Select **Enable CTI**, **Wait for Call**, **Transfer Call**, **Complete Transfer**, and **Abort Transfer**, **Call Park**, **Call Hold**, and **Call Pickup**.

NOTE: Do not select Message Lamp on the Configure CTI tab.

6. Click **Apply** to accept changes on the Configure CTI tab.
7. Click the **Feature Definitions** tab, as shown in [Figure 5-5](#).
8. Select the **Supported** check box for **Msg. Light On** (Message Waiting).
9. Enter ***41** in the **Sequence** field for **Msg. Light On**, and ***42** in the **Sequence** field for **Msg. Light Off**.

Figure 5-5 Show N Tel, Feature Definitions Tab

Editing Phone System: Mitai-QNS

Feature Definitions | Tone Table | Data On Answer | Configure CTI

Feature	Supported	Sequence	Feature	Supported	Sequence
Hold	<input type="checkbox"/>	%	Msg. Light On	<input checked="" type="checkbox"/>	*41
Pickup	<input type="checkbox"/>	%	Msg. Light Off	<input type="checkbox"/>	*42
Transfer	<input type="checkbox"/>		<input type="checkbox"/> Use SMDI For Message Light		
Transfer External	<input type="checkbox"/>	%	Park	<input type="checkbox"/>	
Transfer Complete	<input type="checkbox"/>		Park Pickup	<input type="checkbox"/>	
Transfer Abort	<input type="checkbox"/>	%			

Default Transfer Type:
 Blind
 Attended

Prefixes:

Internal		International	011
Local		User Defined 1	
Long Distance	1	User Defined 2	

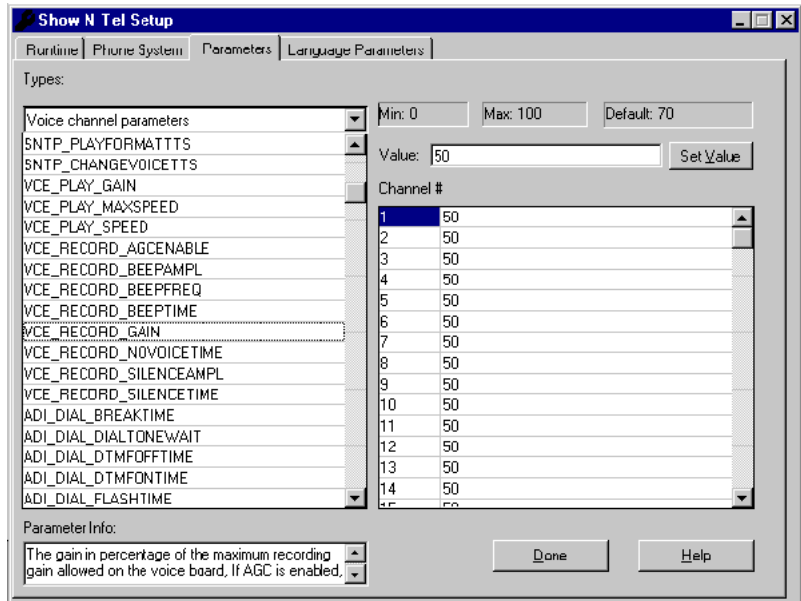
Buttons: OK, Cancel, Apply, Help

Setting Show N Tel Parameters

To set the telephone recording volume:

1. Click the Windows **Start** button, then choose **Programs, Show N Tel, Show N Tel Manager**.
2. From the **Tools** menu, choose **Show N Tel Setup**.
3. Select the **Parameters** tab, as shown below in [Figure 5-6](#).
4. From the **Types** pull-down box, select **Voice channel parameters**.
5. Set the value for **VCE_Record_Gain** to **75** for all voice ports.

Figure 5-6 Show N Tel Manager, Parameters Tab



Setting OnePoint System Parameters

OnePoint Messenger is installed with a set of default settings managed through TS Admin (the Unified Messaging Snap-in interface described in Chapter 3 of the *OnePoint Messenger Administrator Guide*). The default settings reduce the need to change them for the unified messaging system to be operational, but some must be set at each site.

The following settings are those which you need to set or you are most likely to want to revise:

- **Messaging Pilot Number**—This is the Message Center extension which users dial to access voice mail. Use the **Message Center** page of the **Applications** node to assign the pilot number that you created in Form 17 on the SX-200 (see Chapter 2, [page 31](#).)
- **Default Fax Number**—Use the **System Information** property page in the **System Configuration** node to enter a number of a default fax machine to which users can download faxes and e-mail. The Exchange administrator can change the number to another fax machine in each user's profile. Users can also change the number through the Change Personal Fax Number menu of the TUI.

- **Enable Operator**—Enter your operator’s extension number in the **Attendant Extension** field on the **Attendant Configuration** page. Users do not dial this extension; the extension is used by Telephony Server to ring the Operator when the user selects the Operator option from the TUI menu.
- **Automated Attendant**—In the **Attendant Pilot Number** field on the Automated Attendant page of the Applications node, enter the Automated Attendant extension number that you assigned on the PBX (see [“Overview of OnePoint Messenger Requirements” on page 24](#) in Chapter 2 here. On the Automated Attendant page you can also specify whether to invoke a menu or invoke the Simple Attendant, and you can set Automated Attendant greetings.
- **Attendant Mailbox** number—Use the **System Information** property page in the **System Configuration** node to assign a mailbox that collects voice messages from callers who do not enter a specific contact extension when prompted. You can use the mailbox number of the Telephony Server administrator or another mailbox. If you enter another mailbox number, you must also create the mailbox in Exchange. See Chapter 2 in the *OnePoint Messenger Administrator Guide* for details.
- **Fax on Demand**—Enter the Fax on Demand extension number in the **Fax on Demand** page of the **Applications** node.
- **TUI prompt language**—To change the default prompt language (U.S. English) used by the Telephone User Interface outside of mailboxes, use the **System Information** page. To change the default prompt language (U.S. English) used by the Telephone User Interface inside of mailboxes, use the **Mailbox Defaults** page under the **System Configuration** node.
- Select the **Dial By Name** node, then map the keypad keys for Q and Z to keys 7 and 9.

Editing Configuration Files for a Mitel PBX Integration

For integrating the Telephony Server with either a Mitel SX-200 or SX-2000 PBX, you must edit the Hosts and Telsrvr.ini files on the Telephony Server, as described next.

Editing the Server Hosts File

For a Mitel PBX integration, MiTAI is used to establish the link between the Telephony Server and the PBX. It requires an entry in the Telephony Server’s Hosts file.

To create an entry in the Hosts file for MiTAI:

1. Use a text editor such as Windows Notepad to edit the **Hosts** file, located in `\WINNT\system32\drivers\etc`.
2. Read the instructions in the file header, then add an entry for the MiTAI runtime which is similar to the following:

```
<IP address> "HostName" MiTAI
```

(where `<IP address>` corresponds to your server's address, and `"HostName"` is your server's name.)

3. Save the file.

Editing the Telsrvr.ini file for a Mitel PBX Integration

For a Mitel PBX integration, to enable Message Waiting signals to be sent from OnePoint Messenger to users' extensions and pagers, the `MWIPilotNumber` entry in the **telsrvr.ini** file must be associated with the Message Center pilot number of OnePoint Messenger, as created on the PBX.

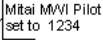
To enter the Message Center pilot number in the telsrvr.ini file:

1. Open a text editor such as Windows Notepad.
2. Use the editor to edit the **telsrvr.ini** file that is in the directory `C:\SNT\Telsrvr`.
3. Scroll through the file until you find the following entry:

```
MWIPilotNumber =
```
4. As shown in [Figure 5-7](#), enter the extension next to **MWIPilot-Number** that you entered for the **Messaging pilot number** on the SX-200 PBX (see ["Form 17, Hunt Group"](#) on page 31 in Chapter 2 for more information.)
5. Save the edited file, then close Notepad.

Figure 5-7 Telsrvr.ini

```
[Telephony]
Driver=SNTCTC.DLL
SwitchType=1
UseConsultationCall=1
UseCompleteXfer=1
UseOnHookAfterXfer=1
UseOffHookBeforeMakeCall=1
RedirectWithAnswerXfer=0
PauseAfterXfer=250
PauseAfterAbort=250
MITAIDeviceType=
MITAIService=
MITAITimeout=0
MITAILogging=
MWIPilotNumber=1234
MitaiReconnectRetries=-1
PostHungupAll=0
```



Starting and Stopping Telephony Server

1. Reboot the Telephony Server.
2. To start the Telephony Server Monitor (“TSMon”, on the Telephony Server), click the Windows **Start** button, then choose **Programs**, then **OnePoint Messenger**, then **Telephony Server Monitor**.

or

Open the OnePoint Messenger desktop icon group. Double-click **Telephony Server Monitor**.

3. In Telephony Server Monitor (TSMon), click the **Start** button. Alternatively, choose **Start** from the **File** menu (or press [Ctrl+F7].)
4. Observe that the Telephony Server services are listed in the task monitor window, and their operational mode changes from **Stopped** to **Running**.
5. To stop services, click either the **Stop** or **Stop Immediately** buttons. They each have equivalent commands in the File menu, and accelerator keys (Ctrl+F8 and Ctrl+F9, respectively). The difference between the commands is that **Stop** waits until current calls are completed. Observe that the Telephony Server services change to **Stopped** in the monitor part of the TSMon window.

Configuring OnePoint Messenger to Auto-start

OnePoint Messenger installs with Telephony Server configured for manual starting and stopping. After you have tested operation in a manual mode, you can set services to start automatically on a reboot.

1. Double-click the **OnePoint Messenger** folder located on the desktop of the Telephony Server.
2. Double-click the **Telephony Server Monitor** button.
3. From the **File** menu, choose **Set the Tserver to Start Mode Automatic**.
4. From the **File** menu, choose **Exit**.
5. Click the Windows **Start** button, then **Run**, then enter:
C:\NMS\AG\Demos\AGMSVC\AGCFG.EXE -install
6. From Windows NT Explorer, delete **NMS Start** from the startup folder. The path is:
C:\WINNT\Profiles\All Users\Start Menu\Programs\Startup\NMS Start
7. Reboot the Telephony Server.

NOTE: You should run NMS Start once for each new hardware configuration before setting the system to auto-start.

Running the Telephony Applications

If you have used Telephony Server Monitor to have Telephony Server services start automatically when the computer boots, services start without requiring the administrator to log in. If you have not set services to auto-start, use Telephony Server Monitor to start them manually.

If services are already started, you can stop and start individual telephony applications by selecting the associated Show N Tel line in the **Operate and Monitor** window of Show N Tel Manager, then use the **Start** and **Stop** commands on that interface. Do not stop Show N Tel through Operate and Monitor, because Operate and Monitor does not control all Telephony Server services.

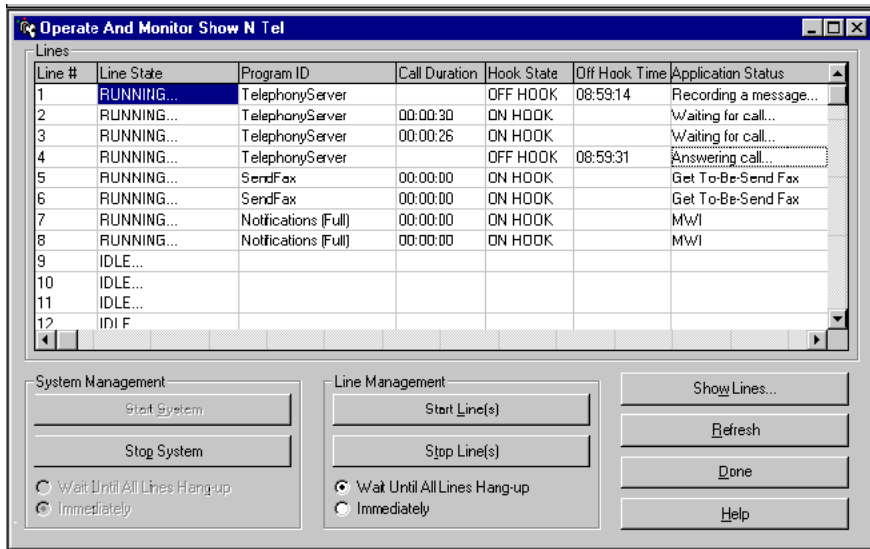
Reassigning Lines to Other Applications

You can quickly reallocate telephony application resources. For example, if you are running a faxback system and temporarily need

more lines for Fax on Demand, you can replace some Telephony Server line assignments with Fax on Demand. If you add another line card, you can easily append the new line assignments to the current assignments.

1. Start Show N Tel Manager.
2. From the **Tools** menu, choose **Operate and Monitor**. The **Operate and Monitor Show N Tel** window appears, as shown in [Figure 5-8](#).

Figure 5-8 SNT Manager, Operate and Monitor Window



3. Select the lines that you want to reassign, then click **Stop Line(s)**.
4. From the **Tools** menu, choose **ShowNTel Setup**.
5. Select the **Runtime** tab, as shown in [Figure 5-2](#).
6. Select the line(s) to reassign in the **Lines Information** area, select the application to assign in the **Program Information** area, then click **Assign Program**.
6. If your new application requires a change in the setup on the PBX of the line connecting to the associated port, make the change on PBX before restarting the line.
7. Switch back to the **Operate and Monitor Show N Tel** window.
8. Select the lines that you reassigned, then click **Start Lines**.

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