

**SOFTWARE RELEASE NOTICE**

**AVST**  
**CallXpress®**

**Version 7.50**

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### Edition Note

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## Introducing CallXpress Version 7.50

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It is our pleasure to introduce version 7.50 of CallXpress. This new release is designed to work in close coordination with our speech-based Seneca™ messaging software, creating systems that combine the hands-free convenience of Seneca with the powerful unified communication support and advanced features of CallXpress.

This document introduces you to the new features and capabilities available in CallXpress version 7.50. The details of how it works can be found in the full set of documentation available through the following sources:

- ◆ **Printed books.** Administration and installation guides describing the basic system, and sample copies of the CallXpress Telephone Quick Reference (a brief user guide), are provided in printed form with every copy of CallXpress.
- ◆ **CallXpress Documentation Library CD.** Also provided with every copy of CallXpress, this documentation CD includes the following classes of documents: integration technical notes covering the process of integrating the telephony server to one or more Private Branch Exchange (PBX) systems; spare parts documents describing installation of any special hardware purchased; online books and quick references for advanced applications such as Fax Networking or Unified Messaging; and online copies of the printed books.
- ◆ **Help.** An index and table of contents to Help is available from the Help menu of each CallXpress administrative utility. Use context-sensitive Help for specific information about windows, dialog boxes and controls.

For more specific information about the documentation resources available to you, see “For More Information” on page 30.

## **New Features at a Glance**

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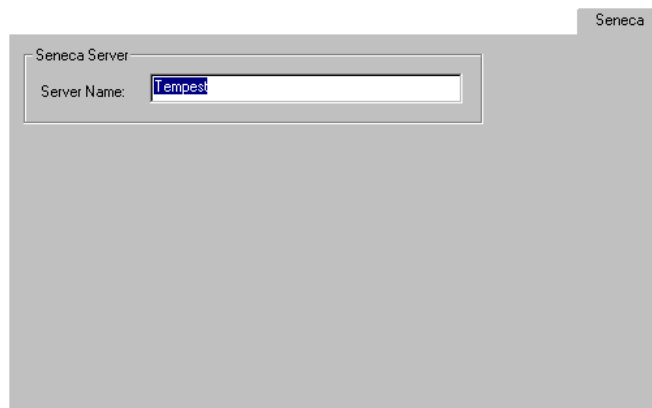
This section provides an overview of new features included in version 7.50 of the CallXpress software. Topics covered in this section include the following:

- ◆ New integrated CallXpress and Seneca message processing
- ◆ New Active Directory Snap-In for CallXpress and Seneca
- ◆ New Class of Service mailbox
- ◆ New Centigram TUI emulation
- ◆ Emulation for the Octel Aria TUI in the standard North American Female English prompt set
- ◆ Simple Mail Transfer Protocol (SMTP) -based message notification and delivery
- ◆ Improvements to read and unread message classification
- ◆ Return of original messages with replies
- ◆ New and updated telephone system integrations

## New Integrated CallXpress and Seneca Message Processing

The most significant and far-reaching change to CallXpress version 7.50 is the integrated message processing ability that it shares with Seneca version 4.50. When CallXpress and Seneca are integrated, a subscriber can call in to either server and hear the same set of messages. This message set, including all of the messages that the subscriber has received through CallXpress, Seneca, and the subscriber's email server, also appear in the subscriber's inbox if CallXpress Unified Messaging is installed. The resulting degree of coordination allows administrators to build combined applications that offer the best combination of CallXpress and Seneca features for their subscribers' needs.

To support integration with Seneca, version 7.50 includes a new Seneca tab in the Configuration utility (Figure 1). Typing the name of the Seneca server in the Server Name box on this tab, and configuring the corresponding CallXpress tab in the Options property sheet within Seneca Admin, establishes the integration.



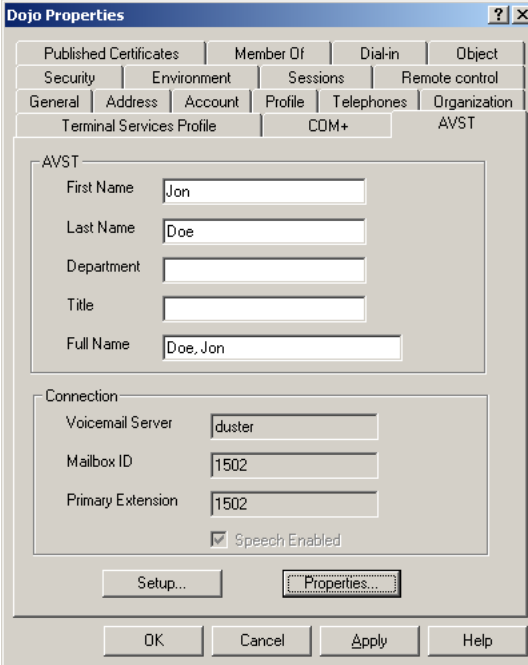
**Figure 1. New Seneca tab, Configuration utility**

## New Active Directory Snap-In for CallXpress and Seneca

The central administration point for CallXpress and Seneca subscriber accounts is a new snap-in component for the Active Directory® Users and Computers console. The snap-in adds an AVST tab to the property sheet for each CallXpress subscriber listed within Active Directory, as shown in Figure 2.

### **IMPORTANT**

It is not necessary to install or use the snap-in to maintain subscriber configurations on an integrated CallXpress and Seneca system. However, if the snap-in is not installed, the administrators must assume responsibility for keeping subscriber settings identical on both servers. For this reason, AVST strongly recommends using the snap-in.



The screenshot shows the 'Dojo Properties' dialog box with the 'AVST' tab selected. The dialog has a tabbed interface with the following tabs: Published Certificates, Member Of, Dial-in, Object, Security, Environment, Sessions, Remote control, General, Address, Account, Profile, Telephones, Organization, Terminal Services Profile, COM+, and AVST. The AVST tab contains the following fields and controls:

- AVST section:
  - First Name: Jon
  - Last Name: Doe
  - Department: (empty)
  - Title: (empty)
  - Full Name: Doe, Jon
- Connection section:
  - VoiceMail Server: duster
  - Mailbox ID: 1502
  - Primary Extension: 1502
  - Speech Enabled
- Buttons: Setup..., Properties...
- Bottom buttons: OK, Cancel, Apply, Help

**Figure 2. New AVST tab for Microsoft Management Console**

An administrator can use the Setup button on the AVST tab to associate a person's existing CallXpress subscriber mailbox and Seneca subscriber account through an Active Directory user listing. After the person's two subscriber accounts have been associated, Active Directory provides a single point of administration for both. If either account has not yet been created, the administrator can create it through the AVST tab as shown in the following table.

<i>If the subscriber has ...</i>	<i>And...</i>	<i>The administrator can ...</i>
A CallXpress subscriber mailbox	No Seneca account	Create a new Seneca account from the information in the CallXpress subscriber mailbox
No CallXpress subscriber mailbox	A Seneca account	Create a new CallXpress subscriber mailbox and associate it with the Seneca account
No CallXpress subscriber mailbox	No Seneca account	Create a CallXpress subscriber mailbox, then create a new Seneca account from the information in that mailbox

## NOTE

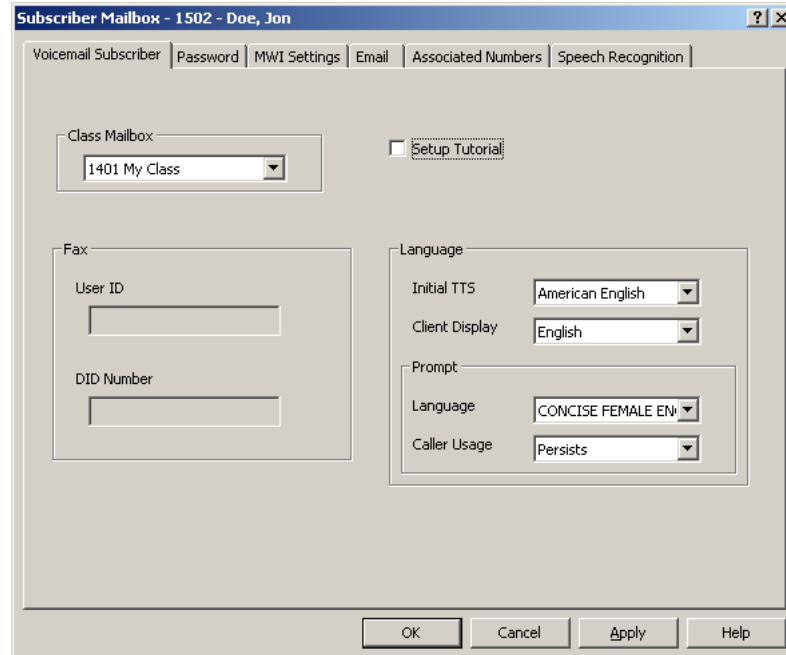
If the subscriber already has both accounts, the ID number, name, and primary extension number must be the same for both before you can associate them.

After a CallXpress mailbox and a Seneca account are associated, the administrator can then use the AVST tab to edit both of them together. Clicking the Properties button opens a property sheet with the following six tabs:

- ◆ **On the Voicemail Subscriber tab**, the administrator sets the subscriber's default prompt and TTS languages, as well as the fax user ID and DID settings for the subscriber's CallXpress mailbox. This tab also displays the CallXpress class of service that the administrator assigned to the subscriber while creating or associating the subscriber's CallXpress mailbox.
- ◆ **On the Speech Recognition tab**, the administrator can update the subscriber's Seneca class of service and speech aliases (referred to in Seneca Admin as *name recognitions*) as needed. For a subscriber who does not yet have a Seneca user account, the administrator can create one by clicking **Enable for Speech**; the adjacent Speech Enabled check box confirms that the account has been created.

- ◆ **On the Password tab**, the administrator can either assign the subscriber a specific password or reset the subscriber's password to the default value defined on the CallXpress platform. Also, if necessary, the administrator can apply or remove a security lockout that prevents the subscriber from logging on.
- ◆ **On the MWI Settings tab**, the administrator can verify the current state of the subscriber's message-waiting indicator (MWI) and change it if necessary.
- ◆ **On the Email tab**, the administrator associates the subscriber with a CallXpress email server profile, specifies the subscriber's login ID and name, and configures partial message enumeration if the subscriber needs it. Also, for full unified messaging support, the administrator sets external message storage here.
- ◆ **On the Associated Numbers tab**, the administrator specifies the subscriber's CallXpress primary extension, and the Seneca virtual extension if desired. In addition, the administrator can configure up to four CallXpress alternate extensions and up to four Seneca subscriber location numbers here.

Figure 3 shows the AVST subscriber property sheet with the Voicemail Subscriber tab selected.



**Figure 3. New AVST subscriber property sheet, showing Voicemail Subscriber tab**

Administrators can also use the Setup button and its associated wizard to perform the following tasks on an associated CallXpress subscriber mailbox and Seneca user account:

- ◆ Assign a new primary extension
- ◆ Assign a new mailbox and account ID number
- ◆ Delete both accounts, leaving the Active Directory user listing in place
- ◆ Disassociate both accounts, leaving them in place

## New Class of Service Mailbox

In response to many requests from customers, and to support the new Active Directory Snap-In, CallXpress version 7.50 introduces the ability to define classes of service for groups of subscribers. In each class of service, administrators can perform the following tasks:

- ◆ Create default settings for any new subscriber mailboxes assigned to the class
- ◆ Modify the default settings without affecting existing subscribers in the class
- ◆ Configure new subscriber mailboxes automatically by assigning a class of service when each mailbox is created
- ◆ Apply mailbox changes simultaneously to all subscribers, or selected subscribers, in the class

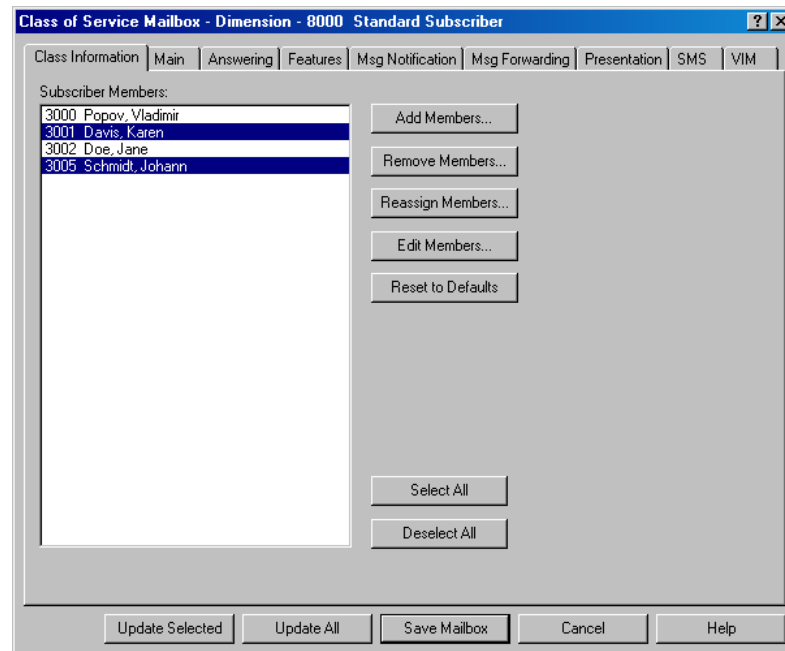
### **NOTE**

After you upgrade your CallXpress platform to version 7.50, you must assign each of your administrator accounts permission to modify classes of service. To help you maintain the security of your system, CallXpress Setup does not assign this permission to existing accounts automatically.

The new Class of Service mailbox bears a strong resemblance to the existing Subscriber mailbox and provides control over most subscriber settings. An additional Class Information tab, shown in Figure 4, lists the subscribers who currently belong to the class and allows an administrator to add or remove subscribers. Also, after making changes to the settings in the class, the administrator can use the controls on this tab to apply those changes only to selected class members or to all class members.

## NOTE

The administrator can continue to open and edit individual subscriber mailboxes after adding them to a class of service. Class membership can be used to restore predefined settings to a mailbox, but it does not limit the administrator's ability to configure that mailbox.



**Figure 4. New Class of Service mailbox, showing Class Information tab**

In addition to adding subscribers to a class of service, administrators can also assign a class of service to an individual subscriber. In the new Class Mailbox Assignment control on the Main tab of the Subscriber mailbox, shown in Figure 5, an administrator can select a defined class of service to assign to the subscriber.

## NOTE

The Class Mailbox Assignment control does not apply any of the settings in the class of service to the subscriber. The administrator must use the Class Information tab in the Class of Service mailbox to apply those settings.

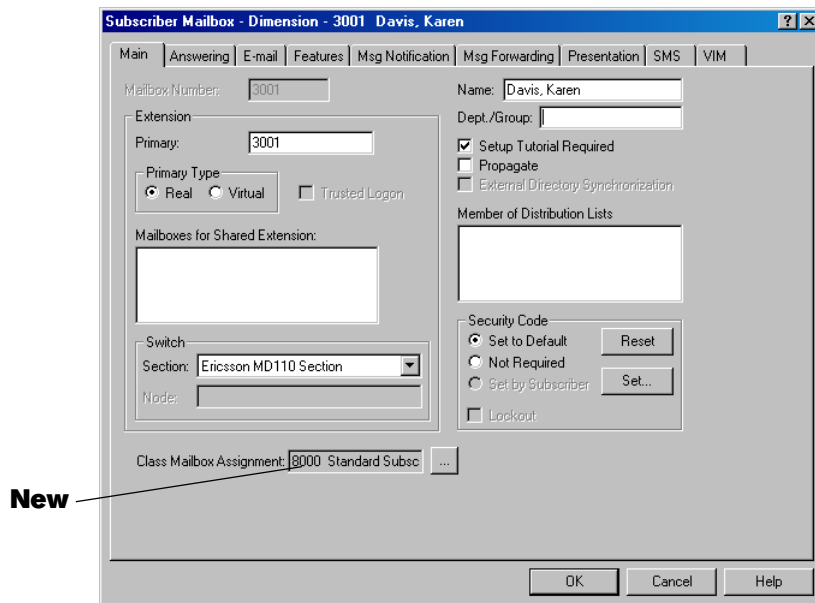


Figure 5. Main tab, Subscriber mailbox, showing new Class Mailbox Assignment control

## New Centigram TUI Emulation

CallXpress version 7.50 includes a new option in the TUI Type list on the Presentation tab in the Subscriber and Class of Service mailboxes. When this option is selected, subscribers hear an emulation of the Centigram telephone user interface (TUI) when they perform the following tasks:

- ◆ Using the main subscriber menu
- ◆ Reviewing incoming messages
- ◆ Sending new voice and fax messages
- ◆ Forwarding existing voice and fax messages

With their most commonly used commands still available to them, existing Centigram users can migrate to a CallXpress server comfortably, with very little effort. For those users who want or need reference information, however, an online user reference and navigation map are available on the CallXpress Documentation Library CD and in the \Docs folder on the CallXpress Telephony Server CD.

This feature requires installation of the standard North American Female English or Concise North American Female English prompt set.

## Emulation for the Octel Aria TUI in the Standard North American Female English Prompt Set

The CallXpress Emulation for the Octel Aria TUI, introduced with version 6.50, has been available with the Concise North American Female English prompt set since its initial release. With version 7.50, this TUI option is also available with the standard North American Female English prompt set. This allows administrators to activate the CallXpress Emulation for the Octel Aria TUI immediately after installing CallXpress in its default configuration.

In addition, the prompts that support this emulation have been revised to reflect the wording differences between the standard and concise prompt sets. Subscribers who use the concise prompt set hear slightly briefer versions of menu options and other prompts than subscribers who use the standard prompt set, even if the CallXpress Emulation for the Octel Aria TUI is selected in their mailboxes.

## SMTP-Based Message Notification and Delivery

Version 7.50 adds the ability to use any email server that supports Simple Mail Transfer Protocol (SMTP) for text-message notification of incoming voice and fax messages. When this feature is active, CallXpress sends out notification strings as the subject lines of standard email messages, for display in the subscriber's email inbox. Also, optionally, the body of each notification message can include a copy of the original incoming voice or fax message.

To configure this feature for a specific SMTP server, a CallXpress administrator must define that server as an SMS provider in the System Configuration dialog box within the Administration utility. This gives CallXpress the ability to support SMTP-based mobile telephones, pagers, and other SMS-compatible devices. However, the feature does not require SMS support and can easily be used with any SMTP-based email account.

For example, one potential use would be to forward copies of a subscriber's urgent incoming voice and fax messages to the subscriber's home email account after hours. No SMS-compatible devices or services are required to configure a subscriber for notification of this kind; all the administrator needs to do is define the subscriber's home email server as an SMS provider, then assign that provider, type in the subscriber's home email address, and select **Send Message Attachment** on the SMS tab in the subscriber mailbox.

Figures 6 and 7 show the settings that have been added to the SMS Provider dialog box and the SMS tab in the Subscriber mailbox to support this new feature.

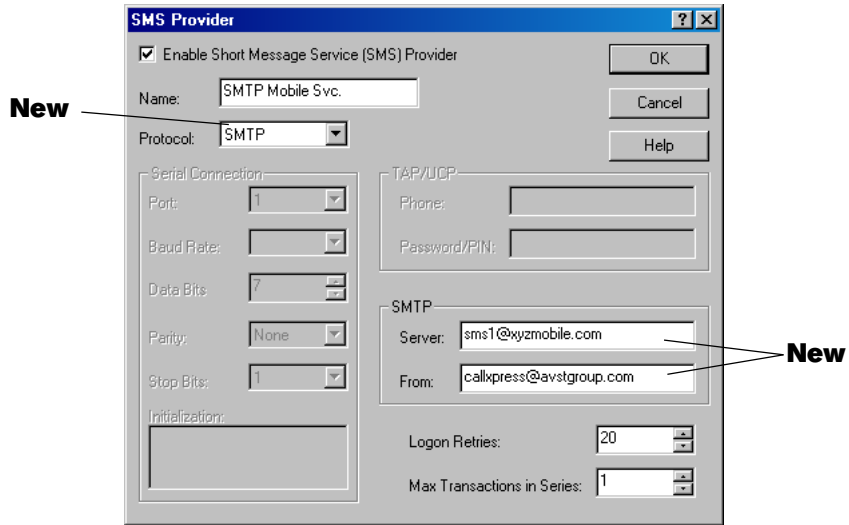


Figure 6. SMS Provider dialog box, showing new Protocol list and new SMTP settings

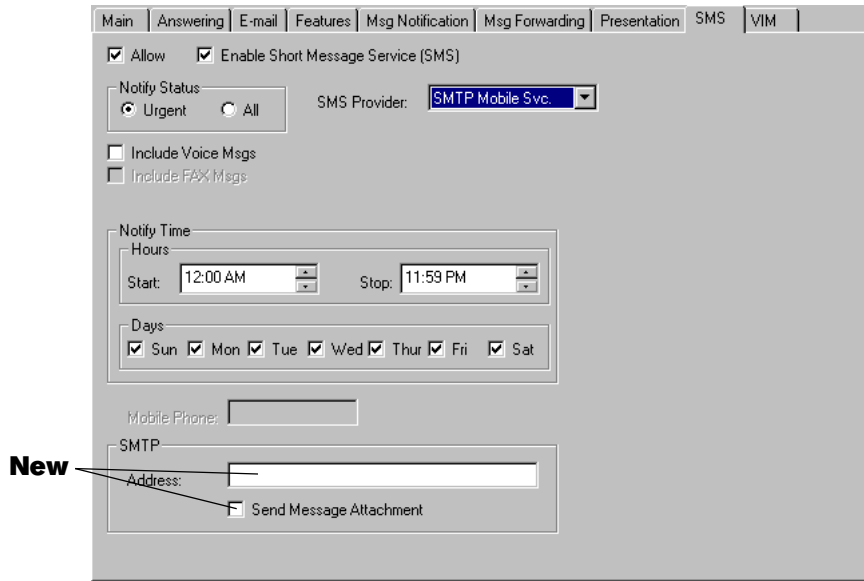


Figure 7. SMS tab, Subscriber mailbox, showing new SMTP Address and Send Voice Attachment boxes

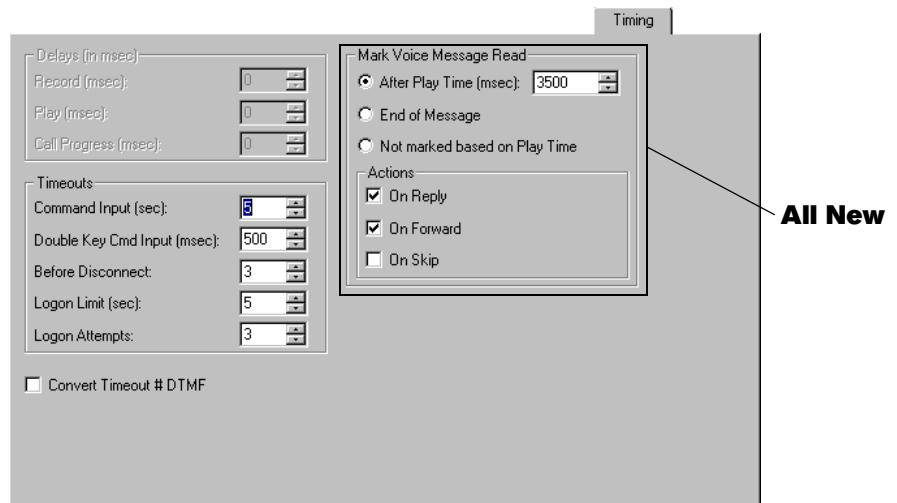
## Improvements to Read and Unread Voice Message Classification

CallXpress version 7.00 gave subscribers the ability to retrieve and manage messages based on whether or not they had read those messages. To provide improved support for the practices of different organizations, version 7.50 includes a new group of configuration settings to refine the distinction between read and unread voice messages.

Previously, CallXpress considered a voice message read either as soon as the subscriber opened the message or only after message playback was complete. In the new release, an administrator can set CallXpress to mark a voice message read when the subscriber takes any of the following actions:

- ◆ Playing back the message for a specified number of milliseconds, or playing it back completely
- ◆ Replying to the message
- ◆ Forwarding the message
- ◆ Skipping the message during playback over the telephone

The new settings that govern when CallXpress marks voice messages read are located on the Timing tab in the System Configuration dialog box of the CallXpress Administration utility, as shown in Figure 8.

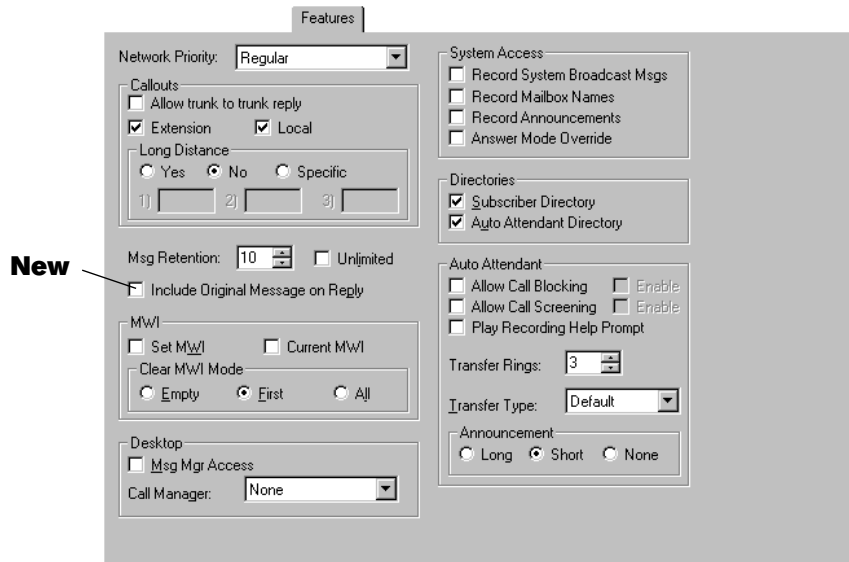


**Figure 8. System Configuration Timing tab, showing new Mark Voice Message Read settings**

## Return of Original Messages with Replies

In version 7.50, subscribers can have their mailboxes configured so that their replies to incoming messages include copies of the original messages. This feature reminds the senders of the original messages of the subject of the reply, reducing the possibility for confusion.

Figure 9 shows the new Include Original Message on Reply check box, which has been added to the Subscriber and Class of Service mailboxes to activate and deactivate the new feature.



**Figure 9. Features tab, Subscriber mailbox, showing new Include Original Message on Reply check box**

## Updated Telephone System Integrations

CallXpress version 7.50 includes several updated telephone system integrations. Table 1 provides a complete list of the outband integrations that CallXpress currently supports, and specifically indicates the integrations that have been updated for this release.

**Table 1. CallXpress version 7.50 outband integrations**

<b>Manufacturer</b>	<b>Integration</b>
Avaya (Lucent)	INDeX DPNSS Definity using D/42 or D/82 linecard Definity E1 QSIG
Ascom	Ascotel bcs64
Cisco	SMDI serial CallManager SCCP
Ericsson	MD110 E1 CAS TCP/IP MD110 E1 CAS MD110 E1 DPNSS MD110 VM TCP/IP MD110 VM MD110/EETS IP <b>Coming soon!</b>
Fujitsu	9600 with SMDI serial
ITT	System 3100 serial
Mitel	3300 ICP (IP)* <b>New!</b> SX-2000 DPNSS SX 50/200/2000 MISU SX-200/2000 using D/42 or D/82 linecard
NEC	7400 IMX/ICS E1 CAS with MCI NEAX 2000/2400 with MCI
Nortel Networks	Business Communications Manager using D/42 or D/82 linecard <b>New!</b> Norstar using D/42 or D/82 linecard Norstar NTDIU Meridian 1 DPNSS Meridian 1 NTDIU Meridian 1 using D/42 or D/82 linecard
Plessey	iSX serial
Siemens/Rolm	Rolm 9751 Version 9005 using D/42 or D/82 linecard (for North America only) Hicom 300E using D/42 or D/82 linecard (for North America only) Hicom 300E E1 QSIG HiPath 4000 using D/42 or D/82 linecard HiPath 4000 E1 QSIG Realitis/iSDX DPNSS

\* This integration may not be supported under some operating systems.

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## Computer Platform Requirements

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This section describes the computer hardware and software configurations necessary to run CallXpress and provides compatibility information for Automated Agent, Captaris RightFax, and NetConnect Digital Networking installations.

### Minimum CallXpress Platform Requirements

You must dedicate a platform to the operation of CallXpress, its client utilities, and its maintenance programs. This computer platform must satisfy the following minimum requirements:



#### **IMPORTANT**

The following list represents the basic minimum hardware and software required for version 7.50 of CallXpress. The hardware requirements for your implementation of CallXpress may be greater, depending on the features purchased for it, the type of integration installed with it, the amount of use it is expected to receive, and the hardware or software upgrades it is expected to need in the future. Contact AVST for specific hardware requirements based on your implementation.

- ◆ 20 gigabyte (GB) hard disk drive with a 8-GB drive C partition (this configuration supports 1,500 subscribers)
- ◆ 1.0 GHz Intel® Pentium III™ or better microprocessor (refer to Table 5)

- ◆ Sufficient full-length PCI or PCI-X expansion slots to support all required linecards, DSP cards, and digital interface cards. 5-volt cards require 5-volt PCI slots, while “universal” cards may be installed in 5-volt PCI, 3.3-volt PCI, or PCI-X slots. See Table 2 for the properties of the recommended cards.
- ◆ Appropriate RAM based on Table 5 later in this section
- ◆ Microsoft Windows 2000 Server with Service Pack 4 or Windows Server 2003 (for Advanced Messaging systems with 16 voice ports or fewer, Windows XP Professional with Service Pack 1a and Microsoft hot fix Q329623, or Windows 2000 Professional with Service Pack 4, may also be used)
- ◆ Color VGA-compliant graphics adapter and monitor
- ◆ CD or DVD drive
- ◆ Network interface card
- ◆ Remote connectivity through TCP/IP (preferred), or a Windows 2000-compliant external modem and dedicated RS-232 serial (COM) port, to support remote administration
- ◆ Appropriately configured feature and license certificate files
- ◆ At least one USB port
- ◆ If integrating using an outband RS-232 integration, at least one dedicated COM port and serial cable to communicate with the telephone system
- ◆ If Short Message Service (SMS) support is installed, a dedicated modem to contact the SMS provider or the subscribers’ GSM-based mobile telephones (in addition to the modem used for remote administration); contact your SMS provider for their modem requirements and refer to the *SMS Online Book* for additional information. (Note that SMTP-based message notification and delivery, which is configured as an SMS provider, does not require such a modem; instead, it uses the network interface card and TCP/IP connectivity specified earlier in this list)
- ◆ If Voice Intercept Messaging (VIM) is installed on the platform, a dedicated COM port or TCP/IP network interface to communicate with the Dynamic Network Administration (D.N.A.) Server

- ◆ If integrating with a circuit-based switch, at least one SCSA-compliant (SCbus) voice linecard, as listed in Table 2 and Table 3; no physical voice linecards are required with an IP telephony integration

**Table 2. Recommended<sup>†</sup> voice linecards for CallXpress 750**

Linecard or Digital Interface Card	PCI Slot Requirements
Aculab E1/T1 Network Interface Card <sup>‡</sup>	Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI-X slots)
Diallogic D/4PCI-U	Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI-X slots)
Diallogic D/41JCT-LS	Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI-X slots)
Diallogic D/41JCT-LS Euro	Universal (compatible with 5-volt PCI, 3.3-volt PCI and PCI-X slots)
Diallogic D/42JCT-U	Universal (compatible with 5-volt PCI, 3.3-volt PCI and PCI-X slots)
Diallogic D/82JCT-U	5-volt PCI
Diallogic D/82JCT-U-PCI-UNIV	Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI-X slots)
Diallogic D/120JCT-LS	5-volt PCI
Diallogic D/120JCT-LS-U	Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI-X slots)
Diallogic D/120JCT-LS Euro	Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI-X slots)
Diallogic D/160JCT-U	Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI-X slots)
Diallogic D/240JCT-T1-U <sup>**</sup>	Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI-X slots)
Diallogic D/320JCT-U	Universal (compatible with 5-volt PCI, 3.3-volt PCI, and PCI-X slots)

\* AVST does not support mixing the Diallogic linecards in Table 2 with the Diallogic cards listed in Table 3.

† These cards all support the GSM 6.10 audio format and are therefore usable in IBM Lotus Domino Unified Communications Services environments.

‡ The D/160JCT-U and D/320JCT-U linecards must be installed in conjunction with an Aculab Digital Network Access Card.

\*\* This card should **never** be installed in the same platform with a Diallogic D/240SC-T1 linecard. If it is, one or the other of the two cards will not function correctly.

**Table 3. Other cards supported**

Linecards	Slot Requirements
Diallogic D/4PCI*	5-volt PCI
Diallogic D/41EPCI	5-volt PCI
Diallogic D/41ESC	ISA
Diallogic D/80SC†	ISA
Diallogic D/160SC†	ISA
Diallogic D/320SC†	ISA
Diallogic D160SC-LS	ISA
Diallogic D/240SC-T1‡	ISA
Diallogic D/80PCI†	5-volt PCI
Diallogic D/320PCI†	5-volt PCI
Diallogic D/240PCI-T1	5-volt PCI

\* The Diallogic D/4PCI card cannot be used in the same CallXpress telephony server platform with any other Diallogic linecard and limits the CallXpress server to a maximum of 16 voice ports.

† Diallogic D/80SC, D/80PCI, D/160SC, D/320SC, and D/320PCI cards may be used as resource cards for an Aculab E1 Digital Network Access card.

‡ This card should **never** be installed in the same platform with a Diallogic D/240JCT-T1-U linecard. If it is, one or the other of the two cards will not function correctly.

- ◆ To support fax features, Captaris RightFax 8.7, 8.5 SP4, or 8.02 with appropriate service packs (and hot fixes) to support a telephony gateway with CallXpress

- ◆ If connecting with a Captaris RightFax server, one or more Brooktrout analog fax cards, as listed in Table 4

**Table 4. Approved Brooktrout fax cards**

TR114 ISA Analog Fax Cards	TR114 PCI Analog Fax Cards
TR114+I2L analog fax card	TR114+P2C analog fax card*
TR114+I2C analog fax card	TR114+P2L analog fax card*
TR114+I2D analog fax card	TR114+P4C analog fax card*
TR114+I4L analog fax card	TR114+P4D analog fax card*
TR114+I4C analog fax card	TR114+P4L analog fax card*
TR114+I4D analog fax card	TR114+uP1L analog fax card <sup>†</sup>
	TR114+uP2D analog fax card

\* Supported in both the 5-volt and universal PCI versions. Brooktrout identifies the universal PCI version of a fax card by adding a lowercase u at the beginning of a card's model code; for example, the universal PCI version of the TR114+P2L card would be the TR114+uP2L.

<sup>†</sup> For use only in the European nations that support the CTR-21 standard.

### **IMPORTANT**

Additional hardware or software may be required to use advanced applications of CallXpress. Refer to the appropriate online book for any additional requirements to use these applications.

The processor and RAM requirements for CallXpress varies with the options and ports it must support. Tables 5 and 6 display the capacity of version 7.50 to support various combinations of features, users, and ports.

### **IMPORTANT**

If you are considering upgrading from a CallXpress version between 6.00 and 6.10, examine Tables 5 and 6 closely to ensure that your server meets the platform requirements for the upgrade.

**Table 5. CallXpress version 7.50 feature and integration capacity by number of voice ports installed**

	16 or Fewer Voice Ports	17–24 Voice Ports	25–48 Voice Ports	49–64 Voice Ports	65–96 Voice Ports	97–144 Voice Ports
Onboard fax ports (see Notes 1 and 2)	up to 4	0	0	0	0	0
Text-to-speech channels	up to 4	up to 4	up to 8	up to 8	up to 8	up to 8
TUI-based Email Access	Yes	Yes	Yes*	Yes*	Yes*	Yes*
Unified Messaging/ Unified Communications	Yes	Yes	Yes*	Yes*	Yes*	Yes*
<b>Integrations:</b>						
Inband (single)	Yes	Yes	Yes	Yes	Yes*	Yes*
Serial outband (including NTDIU-based integrations—see Note 3; single)	Yes	Yes	Yes	Yes	Yes*	Yes*
Dialogic D/82–based (single)	Yes	Yes	Yes	Yes	Yes	No
T1-based (single)	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
E1-based (single)	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*
Ericsson MD110/EETS IP (single; see Note 5)	Yes	Yes	Yes	Yes	No	No
Other IP-based (single; see Note 5)	Yes	Yes	Yes	No	No	No
Multiple-switch	Yes*	Yes*	Yes*	Yes*	Yes*	No
Processor group (defined below)	A	A	B	C	C	D
RAM in MB	512	512	512	512	1024	2048

\* Before you order this configuration, contact AVST Sales Engineering to discuss the specific requirements of your system.

### Processor Groups

- A. 1.0 GHz Pentium III or better
- B. 2.8 GHz Pentium 4 or better
- C. Dual 1.0 GHz Pentium III or better
- D. Dual 3.06 GHz Xeon or better

**Table 6. CallXpress version 7.50 feature capacity by number of sites, ports, or users supported**

Feature	NetConnect Location	Capacity*
NetConnect digital networking	CallXpress platform	Up to 24 ports (see Notes 5 and 8)
	Separate NetConnect platform	More than 24 ports
Mailbox propagation between networked CallXpress servers	CallXpress platform	Up to 3 sites or 5,000 users system-wide
	Separate NetConnect platform	Up to 30 sites or 15,000 users system-wide
Global User Administration	N/A	Up to 12 sites or 15,000 users system-wide
Automated Agent (see Note 9)	N/A	Up to 24 ports on the telephony server platform; up to 96 ports on a remote platform
Desktop Call Manager (see Note 10)	N/A	Up to 100 users
Message-waiting indicator (MWI) support for Microsoft Exchange	N/A	Up to 1,000 CallXpress users <sup>†</sup> (see Note 7)
MWI support for Lotus Notes and IBM Lotus Domino Unified Communications	N/A	Up to 5,000 CallXpress users <sup>†</sup> (see Note 7)

\* If you need more capacity in any of these features, contact AVST Sales Engineering to discuss a solution to meet your requirements.

† These capacities assume that one CallXpress server is integrated with each messaging server (Microsoft Exchange or Lotus Domino) in the system. For the user capacities of systems involving disparate numbers of CallXpress servers and messaging servers, contact AVST Sales Engineering.

**Additional Notes Regarding Tables 5 and 6**

1. To use onboard fax ports, the CallXpress server must be integrated with a Captaris RightFax fax server, which can be located on the same platform. Captaris RightFax is a third-party server application available through AVST.
2. The CallXpress telephony server platform may **not** host the Captaris RightFax server-side document conversion (also known as Server-Side Application support or SSA) or optical character recognition (OCR) features.
3. Each NTDIU-based or MISU-based integration defined on the CallXpress server is limited to 64 ports; adding port capacity requires that a second integration of the same type be defined. For more information, see the Integration Technical Note for the integration you intend to install.
4. All orders or inquiries involving co-located CallXpress servers (where *co-location* is defined as the installation of two or more CallXpress servers in the same physical location, serving a homogeneous group of users, typically to support high volumes of traffic) must be submitted through AVST Sales Engineering.
5. If NetConnect digital networking is installed on a CallXpress server platform that also supports an IP-based telephone system integration, the processor installed in the platform must meet the specifications of processor group B in Table 5.
6. For mission-critical CallXpress applications, AVST strongly recommends the use of an uninterruptible power supply (UPS), redundant hot-swappable platform power supply modules, redundant hot-swappable fans with washable air filters, and a RAID 1 disk drive array with hot spare.

7. Among systems using CallXpress ports to clear and set message-waiting indicators (MWIs), MWI response time can vary widely depending on the number of indicators being changed at a time and the number of ports that are available and designated for changing MWIs. A CallXpress messaging application that subjects the system to high levels of burst MWI activity (an application that includes an all-company distribution list, for example) may need additional CallXpress MWI port capacity to satisfy customer requirements for MWI response. If the CallXpress application being planned involves a large number of Unified Messaging subscribers, if large distribution lists are frequently used, or if the customer has specific requirements for MWI response time, contact AVST Sales Engineering for assistance in configuring the system.
8. The capacity that Table 6 shows for NetConnect digital networking assumes a traffic level of 100 system-wide messages per day at an average message length of 45 seconds.
9. CPU and memory requirements of Automated Agent scripts vary widely based on the requirements of the application. Therefore, some applications may require a faster CPU or more memory than listed in this table. Examples of applications that can exceed the requirements in this table include:
  - ◆ Database-intensive applications
  - ◆ I/O-intensive applications such as an application that reads or writes large text files
  - ◆ Computationally intensive applications, such as an application that searches or sorts large in-memory tables or does a large number of iterations for a calculation
10. AVST no longer offers support for Desktop Call Manager on new CallXpress systems. However, if your organization has a Desktop Call Manager application in place, you can continue to use it with CallXpress version 7.50 by obtaining and installing the appropriate software patch from AVST Technical Support.

## Minimum Automated Agent Developer Platform Requirements

The Automated Agent developer platform is a platform dedicated to the development of Automated Agent IVR applications. Automated Agent developer platforms require the hardware and software components shown in Table 7.

### **IMPORTANT**

The following list represents the minimum hardware required to develop Automated Agent IVR scripts. The hardware you require to develop Automated Agent IVR scripts may be greater. Contact AVST for specific hardware requirements.

**Table 7. Automated Agent developer platform requirements**

<b>Platform Requirements</b>	<b>Windows 2000 Professional</b>	<b>Windows Server 2003/ Windows 2000 Server</b>
Processor group	1.0 GHz Pentium III or better	1.0 GHz Pentium III or better
RAM	256 MB	512 MB
Hard disk space	8 GB with 650 MB free	20 GB with 1 GB free

- ◆ Appropriately configured feature key diskette when installed on the same platform as CallXpress (note, however, that this is recommended only for script development platforms, not for CallXpress platforms in normal service)
- ◆ Microsoft Windows Server 2003, Windows 2000 Server with Service Pack 4, or Windows 2000 Professional with Service Pack 4
- ◆ Microsoft Visual Basic<sup>®</sup> 6.0 Enterprise or Developer Edition with Service Pack 3 or later
- ◆ Color VGA-compliant display adapter and monitor
- ◆ CD or DVD drive
- ◆ Sound card and microphone that support recording and playback of .wav files

- ◆ Sound editing software

The Windows Sound Recorder provides basic sound editing functionality. However, an editor with the ability to trim silence at the beginning and end of a phrase and to do other audio manipulations is recommended. Such an editor may be included with the software bundled with the computer's sound card. Refer to the "Recording Prompts" section of the *Automated Agent Getting Started Online Book* for more information.

- ◆ To run scripts in production mode, where you use telephone lines to call into or out of the system, you must install one or more SCSA-compliant (SCbus) voice linecards; refer to Table 2 and Table 3 earlier in this section for a listing of approved cards

## Minimum Automated Agent Remote Platform Requirements

The Automated Agent remote platform is a computer platform dedicated to the execution of Automated Agent IVR scripts and connected to the CallXpress server through a LAN. Automated Agent remote platforms require the following hardware and software components:



### **IMPORTANT**

The following list represents the minimum hardware required to run Automated Agent IVR scripts on a remote platform. The processor and memory requirements for a specific remote Automated Agent platform depend on the size, complexity, and number of scripts the platform runs; the developer of each script is responsible for determining that script's requirements.

- ◆ Microsoft Windows 2000 Server or Professional with Service Pack 4
- ◆ Color VGA-compliant display adapter and monitor
- ◆ Windows-compatible LAN adapter card

## Minimum NetConnect Digital Networking Platform Requirements

When running on a computer other than the CallXpress server platform, the NetConnect Digital Networking server must meet the requirements shown in Table 8.

### **IMPORTANT**

The following list represents the minimum hardware requirements for the NetConnect Digital Networking server to function. The hardware requirements for your implementation of NetConnect Digital Networking may be greater. Contact AVST for specific hardware requirements based on your implementation.

**Table 8. NetConnect system requirements**

<b>Platform Requirements</b>	<b>Windows 2000 Professional</b>	<b>Windows Server 2003/ Windows 2000 Server</b>
Processor group	1.0 GHz Pentium III or better	1.0 GHz Pentium III or better
RAM	256 MB	512 MB
Hard disk space	4 GB with minimum 1 GB free	10 GB with minimum 2 GB free

- ◆ Color VGA-compliant display adapter and monitor
- ◆ CD or DVD drive
- ◆ Windows-compatible Ethernet LAN adapter card with the TCP/IP protocol installed and configured
- ◆ Microsoft Windows Server 2003, Windows 2000 Server with Service Pack 4, or Windows 2000 Professional with Service Pack 4

## Additional Considerations for IBM Lotus Domino Unified Communications

If you plan to install CallXpress 7.50 for use with IBM Lotus Domino Unified Communications, you must observe the following considerations:

- ◆ You must create a messaging server profile to allow CallXpress to communicate with the Notes/Domino server designated for IBM Lotus Domino Unified Communications. You can create this profile by selecting the Domino UC server type from the Server Profile dialog box, which you can reach from the E-Mail tab of the CallXpress Administration utility.
- ◆ The CallXpress server must contain only Dialogic voice linecards that support the GSM 6.10 audio codec, which is the codec used when a subscriber records a voice message within Lotus Notes. Refer to Table 2, earlier in this document, for a list of compatible linecards.
- ◆ Because IBM Lotus Domino Unified Communications uses GSM 6.10 as the standard format for all voice messages, a telephone system that is capable of handling voice data in GSM 6.10 format is required to support it. As a result, systems with IP-based telephone systems such as Cisco CallManager do not support IBM Lotus Domino Unified Communications directly. To support message playback through the TUI on such systems, you must select the **Convert GSM to Msg Format on TUI Playback** check box in the System Configuration dialog box within the CallXpress Administration utility.

## For More Information

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The following resources are available to assist you with CallXpress 7.50:

### Documentation Resources

Every copy of CallXpress version 7.50 includes a Documentation Library CD-ROM containing all AVST technical documents that pertain to this release, in Adobe Acrobat (.pdf) format. The following documents are also supplied in printed form:

- ◆ *CallXpress Telephone Quick Reference and Pocket Guide*
- ◆ *CallXpress Software Release Notice*
- ◆ *Installing CallXpress*
- ◆ *Administering CallXpress*
- ◆ (optional) Software Release Notice for the CallXpress Unified Messaging Desktop Suite

The following documents on the CallXpress Documentation Library CD-ROM may also be of help in assembling or configuring your CallXpress server:

- ◆ (optional) Appropriate spare parts document for your linecards, if any
- ◆ (optional) Integration Technical Note for your outband integration, if any

Documentation for Advanced Messaging and Unified Messaging applications is also available on the CD. The series includes the following references:

- ◆ *Active Directory Snap-In*  
(Docs\Online Books\ADSnapIn\_olb.pdf)
- ◆ *Analog Networking*  
(Docs\Online Books\AnNet\_olb.pdf)

- ◆ *Application Design Worksheets*  
(Docs\Online Books\Application Design Worksheets.pdf)
- ◆ *Automated Agent Getting Started*  
(Docs\Online Books\Aant\_olb.pdf)
- ◆ *Digital Networking*  
(Docs\Online Books\DigNet\_olb.pdf)
- ◆ *Fax Messaging*  
(Docs\Online Books\Faxmsg\_olb.pdf)
- ◆ *Faxtext*  
(Docs\Online Books\Ftxtxt\_olb.pdf)
- ◆ *Managing an Enterprise System*  
(Docs\Online Books\EntSys\_OLB.pdf)
- ◆ *Short Message Service (SMS)*  
(Docs\Online Books\Sms\_olb.pdf)
- ◆ *Short Message Service (SMS) Quick Reference Card*  
(Docs\Online Books\Sms\_qrc.pdf)
- ◆ *Simple Network Management Protocol (SNMP)*  
(Docs\Online Books\Snmp\_olb.pdf)
- ◆ *Voice Intercept Messaging (VIM)*  
(Docs\Online Books\Vim\_olb.pdf)
- ◆ *Voice Intercept Messaging (VIM) Quick Reference Card*  
(Docs\Online Books\Vim\_qrc.pdf)
- ◆ *Migrating OS/2-Based Systems*  
(Docs\Online Books\OS2Migrate\_olb.pdf)
- ◆ *Migrating Windows-Based Systems*  
(Docs\Online Books\NTMigrate\_olb.pdf)
- ◆ *AVST Online User Reference: Using the Centigram TUI*  
(Docs\Online User Reference\Index.html)

## Other Resources

- ◆ To order printed documents, contact your AVST account representative.
- ◆ For pre-sales technical support, call AVST Sales Engineering at (425) 945-3590.

