

**UNIVERGE® UM8000**  
**System Installation Guide**  
**Server Documentation**

For version 11.9 and above

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# Preface

This installation guide provides complete instructions for installing and setting up a UNIVERGE® UM8000 messaging system.

## References

Included on the system installation media is a catalog of technical documentation. If you are installing any advanced applications, such as Networking and Fax Server applications, you should refer to the appropriate technical documentation for application and installation information.

The technical documentation is produced in the Adobe Acrobat PDF format and requires the Adobe Acrobat Reader program to view it. You can download the program from [www.adobe.com](http://www.adobe.com).

The documentation set for this product includes the following documents and online resources:

- **User Guide.** Available as a PDF only. Contains instructions for subscribers about accessing the messaging system and checking and sending messages.
- **Quick Reference Card.** Contains shortcuts and quick instructions telling subscribers how to access and use the messaging system.
- **Documentation Updates.** See the reseller website [www.necntac.com](http://www.necntac.com) for documentation updates.
- **Online Help.** Online help is available to provide immediate assistance while using the Web Administration Console (WAC) and Mailbox Manager. Whenever you are using the WAC or Mailbox Manager, click the **Help** icon or **Help** to see context-sensitive help for the current page.

You must have pop-up windows enabled on your browser to access some features of the help. See your browser help for information about enabling pop-up windows.

## Local Online Help Files

If you want to install the UM8000 system's help files on your local computer, follow these steps:

- 1 Download the self-extracting file from the NTAC download site (Solution ID S4F2NAJ) from [www.necntac.com/](http://www.necntac.com/). This will download all help web pages and PDFs.
- 2 Double click on the file. It will automatically extract the files to: **C:\UM8000 OnLine Admin**.
- 3 To open the On-line Help, go to the **C:\UM8000 OnLine Admin** directory, and double-click **wwhelp.htm**. This will open a web browser with the help content.
- 4 Allow the blocked ActiveX content to run, if prompted.

**NOTE** It may be helpful to make a shortcut of this by right clicking on **wwhelp.htm** and choosing **Send to Desktop**.

## Third-Party Documentation

Compliance information for third-party electronic devices is provided in the third-party manufacturer documentation supplied with the UM8000 system.

Do not use third-party documentation to install, upgrade or manage the voice messaging system. Use only the UM8000 documentation to install, upgrade, or manage the voice messaging system.

## Document Conventions

The following conventions are used in this document:

- **Key Names.** Names of keys on the keyboard are shown in a box.

Example: **Enter**

When two keys must be pressed simultaneously, they are joined by a + sign.

Example: **Alt** + **Tab**

- **Reference to Document.** *Italics* fonts can also signify the titles of other documents.

Example: Refer to *System Installation Guide*.

- **UI Element Names.** Names of UI elements such as dialog windows, screens, menu items, tabs, buttons, icons, etc. are shown in bold.

Example: On the **Startup** screen, click the **Start** icon.

- **User Input.** Information required to be typed or spoken is shown in italics.

Example: Type the password *voicemail*.

- **Warning, Caution, Important, and Notes.** Text for the contents that require attention are shown as follows:

**WARNING** A warning paragraph advises you of circumstances that can result in the loss of data, harm to the system server platform, or personal harm.

**CAUTION** Failure to follow these recommendations can result in unauthorized access to the system and consequent loss of data.

**IMPORTANT** An important paragraph gives decision-making information or informs you of the order in which tasks need to be completed.

**NOTE** A note gives additional information, provides an explanation, or indicates an exception to the information in the preceding text.

# Glossary

Table 1. Glossary

Term	Description
Messaging System	A system that provides the flexibility to access voice messages by phone or e-mail by managing all types of communications in one place with a universal mailbox.
Web Administration Console (WAC)	Used for the full configuration of the messaging system such as starting/stopping the system, backing up/restoring data, managing subscribers, and configuring system, hospitality, e-mail, language, switch settings, etc.
Maintenance Menu	The Maintenance Menu is a user interface that minimizes the need to type lengthy commands at the command line prompt and is used to specify network configuration settings, set the messaging system software date, time, time zone, and general tone detection.
WinSCP	A SFTP (SSH File Transfer Protocol) and SCP (Secure Copy) client for Windows that uses SSH (Secure Shell). The main function of WinSCP is to provide safe copying/transferring of files between local and remote computers in a secure environment.
PuTTY	A telnet and secure shell client for secure shell terminal access. You can use this utility to directly access the Maintenance Menu, command line interface of the messaging system.
Text-to-Speech	A program that accepts strings of computer text and generates synthetic speech to read the text aloud.

# Read Before Proceeding

## System Settings for Notification and Fax

For any notification and sending Fax to follow the trunk dial access codes, the following setting must be added to System/Switch/Switch Information/Integration Options:

**OTL=x** (where  $x$  = the number of digits in the system extension numbers + 1).

# Introduction

UM8000 is a complete, self-contained voice messaging system consisting of a single plug-in blade that is installed directly into the SV8100/SV8300 telephone system.

The voice blade includes hardware support for up to 16 voice ports and four fax ports. The voice blade also includes a compact flash disk (CF) that stores the voice messaging software and all voice recordings. All software required to run the UM8000 system is pre-installed, including the Linux® operating system and the UM8000 voice messaging system.

**NOTE** System ports cannot be set to fax-only.

## Supported Phone Systems

The UM8000 system is designed specifically for use with the SV8100/9100 and SV8300/9300 telephone system manufactured by NEC.

The SV8100/SV8300 is enabled for the following UM8000 licenses at default:

- 0 Ports Voice Mail.
- 5 Seats Unified Messaging.
- 3 Languages.

In addition, the following language prompt sets are loaded at default:

- US English
- French (Canadian)
- Spanish (Latin America)

# Web Administration Console (WAC)

## Overview

The voice messaging system Web Administration Console (WAC) is a web-based application that enables access to the voice messaging system.

The Web Administration Console is accessed using the voice messaging system or a networked computer.

**CAUTION** The time and date on the phone system and support PC must match in order to log into Web Administration Console.

## Supported Internet Browsers

Because the WAC is a web-based application, an internet browser is required to access the WAC.

The supported web browsers include:

- Firefox 24.4 or above
- Google Chrome 21.0 or above
- Internet Explorer 10 or above

## Configure Internet Explorer

The following procedure configures Internet Explorer to work with the Web Administration Console. Refer to the browser documentation to configure other Internet browsers.

### To configure Internet Explorer:

- 1 Start Internet Explorer, and go to **Tools > Internet Options**.
- 2 Click the **Security** tab.
- 3 Select the **Local intranet** icon, then click **Sites**.
- 4 When the **Local intranet** dialog box appears, click **Advanced**.
- 5 In the **Add this website to the zone** text box, type: *http://<server name>* where *<server name>* is the IP Address of the voice messaging server.
- 6 Click **Add**. Verify that *http://<server name>* appears in the **Websites** list box.
- 7 Click **Close**.
- 8 Click **OK** to close the **Local intranet** dialog box.
- 9 On the **Internet Options** dialog box, click **Custom Level**.

- 10 The **Security Settings** dialog box appears.
- 11 In the **Security Settings** dialog box, verify the settings for the following ActiveX controls and plug-ins:

Table 2. ActiveX Controls and Plug-ins

ActiveX controls and plug-ins		Setting
Automatic prompting for ActiveX controls		Enable
Binary and script behaviors		Enable
Download signed ActiveX control		Prompt
Download unsigned ActiveX controls		Enable Initialize and script ActiveX controls not marked as safe Enable Run ActiveX controls and plug-ins
ActiveX controls and plug-ins		Setting
Automatic prompting for ActiveX controls		Enable
Binary and script behaviors		Enable

- 12 Click **OK**. A warning alert message appears.
- 13 On the warning alert message, click **Yes** to confirm the security changes.
- 14 Click **OK** to close the **Internet Options** dialog box.

## Sign-In/Out of the Web Administration Console (WAC)

**IMPORTANT** The time and date on the phone system and support PC must match in order to log into Web Administration Console.

### To sign-in to the WAC:

- 1 Open your web browser and type:

*http://servername/admin*

where *server name* is the name or IP Address of the messaging system server.

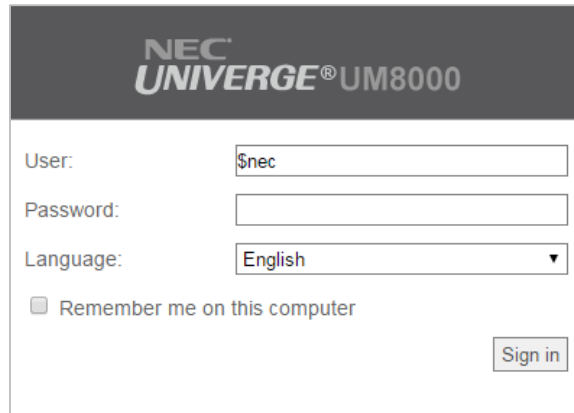
The IP address for the voice mail is assigned in chassis programming 10-55-xx.

#### NOTES

1. This setting may be different for your switch. Refer to the switch documentation for details.
2. The default IP address is set to 172.16.1.xxx, where xxx varies depending on the slot in which the CD-VM00 is installed. Slot 1 is 100, slot 2 is 101, slot 5 is 104, and so on.

- 2 Sign-in to the Web Administration Console (WAC) with the administrator credentials.

**NOTE** The default **User** value is `$nec` with no password.

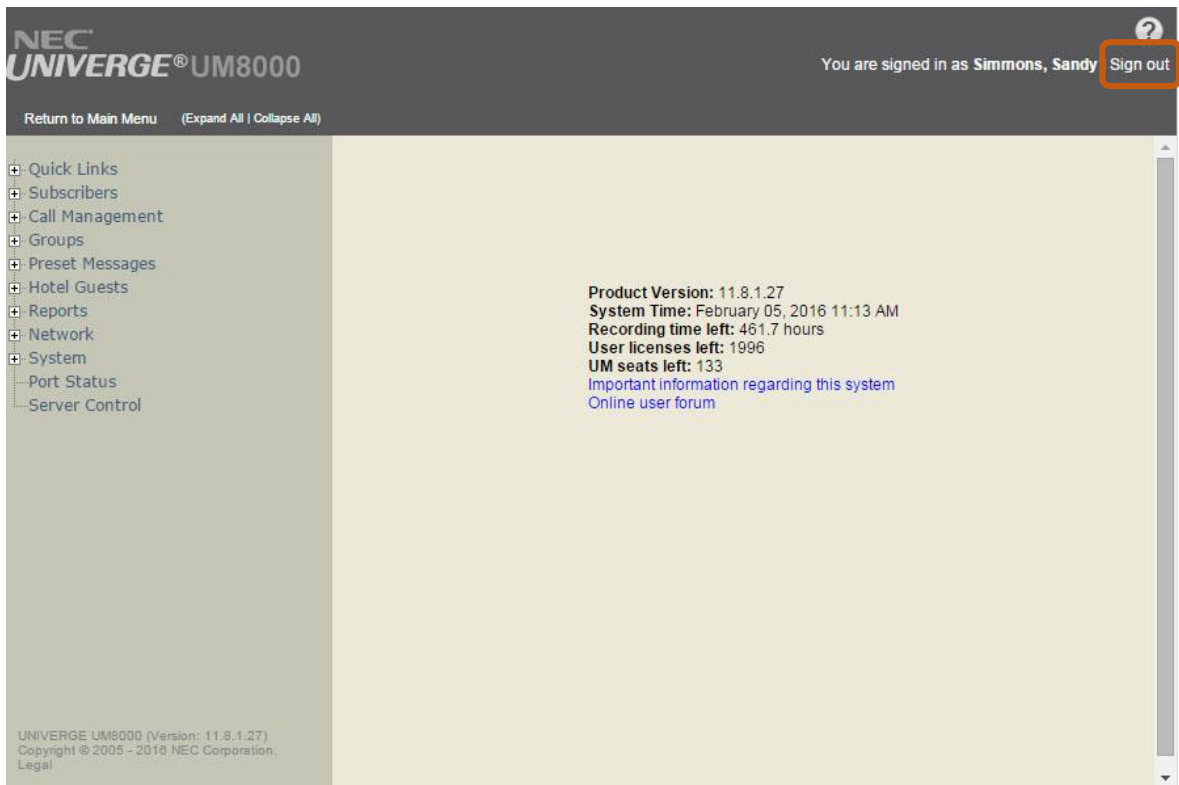


The login form for NEC UNIVERGE UM8000. It features a dark header with the product name. Below, there are input fields for 'User' (pre-filled with '\$nec'), 'Password', and a 'Language' dropdown menu (set to 'English'). A checkbox for 'Remember me on this computer' is present, along with a 'Sign in' button.

- 3 Click **Sign in**. You are logged into the Web Administration Console (WAC).

## To sign-out of the WAC:

- 1 In the **Title Bar**, click **Sign out**.



# Start the UM8000 Messaging System for the First Time

Before starting the UM8000 messaging system for the first time, make sure your system meets the required settings and has the proper license agreements. To access settings options and license agreements, connect to the Web Administration Console (WAC) using an internet browser.

If the license agreements are not accepted, the application cannot start.

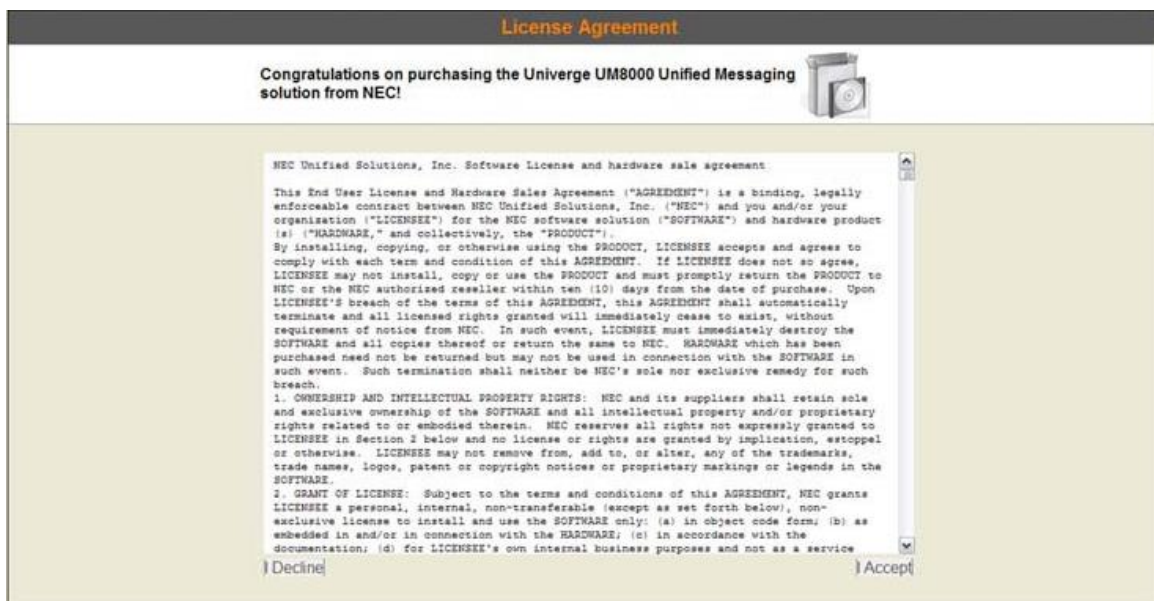
**NOTE** If the voice mail database is defaulted, this procedure must be repeated.

## To start the UM8000 messaging system for the first time:

- 1 Sign-in to the Web Administration Console (WAC) with the administrator credentials.

**NOTE** The default **User** value is `$nec` with no password.

- 2 On the **License Agreement** page that explains about the third party software license terms and conditions, click **I Accept**.




- 3 On the **Switch Information** page, choose the phone system in the **Switch** dropdown list where the voicemail is to be installed. And then click **Save**.



- 4 On the **Switch Extensions** page, click **Edit All** to set the extension numbers that are assigned to the voicemail in program 11-02-01.

**NOTE** If you experience difficulty configuring the settings for your switch, refer to the switch documentation for details.


Switch Extensions								
Congratulations on purchasing the Univerge UM8000 Unified Messaging solution from NEC!								
Port	Status*	Open line ID	Schedule	Language	Options	Rings to answer	Extension	Action
1	(Ans)	OPEN	1	Default	None	1		<a href="#">Edit</a>
2	(Ans)	OPEN	1	Default	None	1		<a href="#">Edit</a>
3	(Ans)	OPEN	1	Default	None	1		<a href="#">Edit</a>
4	(A/D)	OPEN	1	Default	None	1		<a href="#">Edit</a>
5	(Ans)	OPEN	1	Default	None	1		<a href="#">Edit</a>
6	(Ans)	OPEN	1	Default	None	1		<a href="#">Edit</a>

- 5 On the edit page, type the extension number for each voicemail port, and then click **Save**.

1	(Ans)	OPEN	1	Default	<input type="checkbox"/> FC <input type="checkbox"/> NIL	1	121	<a href="#">Cancel</a>
2	(Ans)	OPEN	1	Default	<input type="checkbox"/> FC <input type="checkbox"/> NIL	1	122	<a href="#">Cancel</a>
3	(Ans)	OPEN	1	Default	<input type="checkbox"/> FC <input type="checkbox"/> NIL	1	123	<a href="#">Cancel</a>
4	(A/D)	OPEN	1	Default	<input type="checkbox"/> FC <input type="checkbox"/> NIL	1	124	<a href="#">Cancel</a>
5	(Ans)	OPEN	1	Default	<input type="checkbox"/> FC <input type="checkbox"/> NIL	1	125	<a href="#">Cancel</a>
6	(Ans)	OPEN	1	Default	<input type="checkbox"/> FC <input type="checkbox"/> NIL	1	126	<a href="#">Cancel</a>
7	(Ans)	OPEN	1	Default	<input type="checkbox"/> FC <input type="checkbox"/> NIL	1	127	<a href="#">Cancel</a>
8	(A/D)	OPEN	1	Default	<input type="checkbox"/> FC <input type="checkbox"/> NIL	1	128	<a href="#">Cancel</a>

**NOTE** To register the equipment at this time, enter the registration information on the **Product Registration Form** page. The voicemail must have access to the internet for the registration to be successful. You can also choose not to register at this time or to be reminded in seven days.


- 6 You are now logged into the WAC, but the application has not yet started.



You are signed in as **Simmons, Sandy** | Sign out

[Return to Main Menu](#)
[\(Expand All | Collapse All\)](#)

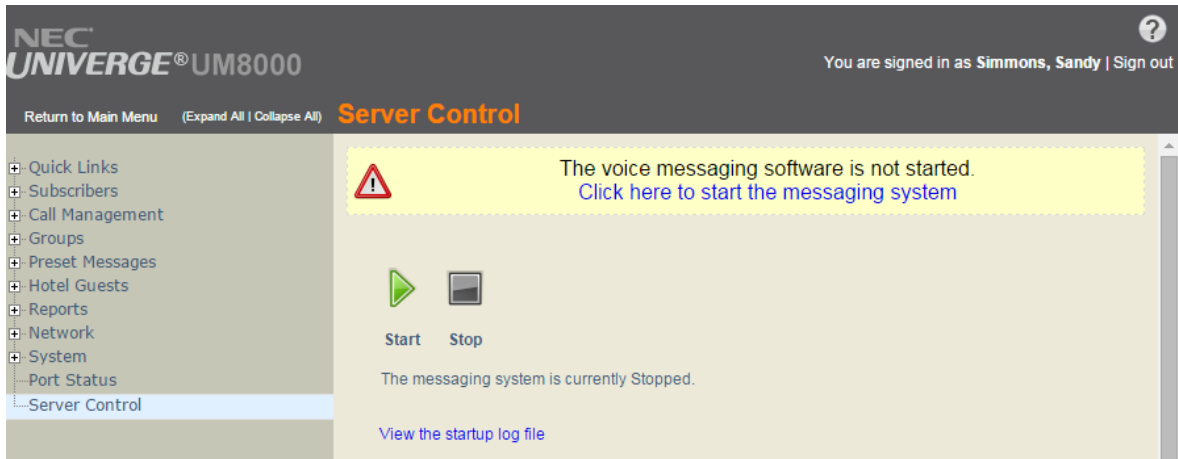
- Quick Links
- Subscribers
- Call Management
- Groups
- Preset Messages
- Hotel Guests
- Reports
- Network
- System
  - Port Status
  - Server Control



The voice messaging software is not started.  
[Click here to start the messaging system](#)

**Product Version:** 11.8.1.27  
**System Time:** February 05, 2016 11:13 AM  
**Recording time left:** 461.7 hours  
**User licenses left:** 1996  
**UM seats left:** 133  
[Important information regarding this system](#)  
[Online user forum](#)

- 7 To start the messaging system, click **Server Control** in the Navigation pane, and then click the **Start** icon.



## Web Administration Console Layout

The Web Administration Console is divided mainly into three sections.

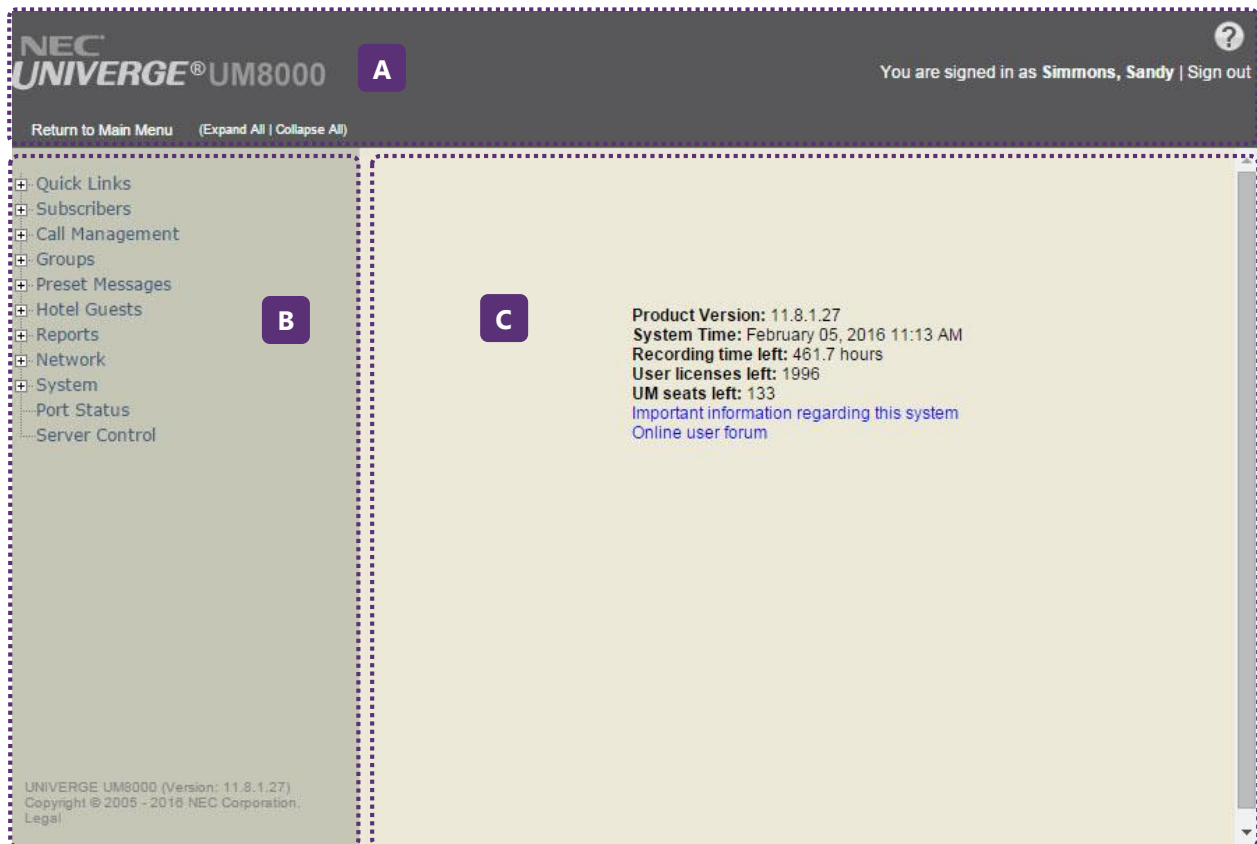


Figure 1. Web Administration Console Layout

## A Title Bar

The **Title Bar** is a fixed area at the top of the WAC that contains the application name, options for performing general tasks, and the name of the user who is currently logged in.

### Title Bar Items

- **Return to Main Menu.** Returns to the main page of the WAC.
- **(Expand All | Collapse All).** Expands or collapses all menus and their sub-menus in the Navigation Pane.
- **Help.** Opens a help for the page you are viewing.
- **User Information.** Displays the name of the subscriber who has signed into the WAC.
- **Sign out.** Signs out of the WAC and returns to the Sign-in page.

### Title Bar Icons

When clicking a menu item in the **Navigation Pane**, there will be a set of icons that appear at the top right corner of the **Title Bar**, which allows to perform certain tasks applicable for each page.



Figure 2. WAC Title Bar Icons

**NOTE** Depending on which menu item's content is being displayed on the page, a different set of icons will be displayed.



For example:







On a subscriber page, all icons will be displayed.

On the **Usage Reports** page, only the  **Run** and  **Help** icons will be displayed.

On the **Switch Information** page, only the  **Save** and  **Help** icons will be displayed.

Table 3. Title Bar Icons in Web Administration Console

Icon	Name	Description
	Save	Save any changes made to the page. <b>NOTE</b> The <b>Save</b> icon becomes active when you make edits to the page you are viewing.
	Find	Search for items of the type you are currently viewing. <b>NOTE</b> This <b>Find</b> icon appears only the pages that have searchable items.

	Add	Add items of the type you are currently viewing.
	Delete	Delete items of the type you are currently viewing.
	Previous	Go to the previous record.
<b>NOTE</b> This <b>Previous</b> and <b>Next</b> icons become active when there are any previous or next items available that you can move to.		
	Next	Go to the next record.
	Help	Open the WAC help.
	Run	Click to run a report or other WAC application.

## B Navigation Pane

The **Navigation Pane** at the left side of the WAC contains menu items that you can click to view or edit. The contents of each menu item are displayed in the Page at the right side of the WAC.

Each menu item in the Navigation pane might contain one or more pages. These menu items can be expanded or collapsed. Some menu items also have sub-menu items denoted by a plus (+) sign.

To view a page, click a menu item. If a menu item has a + sign, clicking the item will expand and display all sub-menu items.

### Navigation Pane Menu Items

Table 4. Web Administration Console Menu Items

Menu Item	Description
<b>Quick Links</b>	Quick links to frequently accessed pages. <ul style="list-style-type: none"> <li>• <b>Subscribers.</b> Links to subscriber profile page.</li> <li>• <b>Port Status.</b> Displays port status page.</li> <li>• <b>Server Control.</b> Displays server control page.</li> </ul>
<b>Subscribers</b>	Use these pages to configure settings for individual subscribers and guests, and to create subscriber templates. Settings include notification schedules, passwords, account permissions, phone greetings, call processing, and transfer options.
<b>Call Management</b>	Use these pages to specify how UM8000 answers, routes, transfers, and records calls. Settings include call handling settings for the operator, opening greeting, any routing applications and menus, languages, and voice detect applications.

<b>Groups</b>	Use these pages to configure or create message groups.
<b>Preset Messages</b>	Use these pages to configure scheduled messages.
<b>Hotel Guests</b>	<p>Use these pages to configure settings for hotel guests. Settings include greetings, passwords, wake-up calls, call handling, and message waiting information</p> <p><b>NOTE</b> The hotel guest pages are only available if the optional hospitality package is installed.</p>
<b>Reports</b>	Use these pages to generate reports of subscriber-based or system- based information, including message activity, message groups, phone sign-ins, disk storage, administration access, port usage, software information, and fax activity.
<b>Network</b>	<p>Use these pages to add and view locations within a voice messaging network.</p> <p><b>NOTE</b> The network pages are only available if the optional networking package is installed.</p>
<b>System</b>	Use these pages to set general information about the voice messaging system, such as site contact information, message storage and playback settings, system prompts, schedules, port settings, and phone system integration.
<b>Port Status</b>	Use this page to view the current activity and status of each port or incoming phone line. The port status information appears in a new window.
<b>Server Control</b>	Use this page to start or stop the voice messaging software.

## Page

The **Page** at the right side of the WAC displays fields and data appropriate for each menu item. The **Page** is the main area where you would actually perform tasks (e.g. starting/stopping the server, managing subscribers, configuring the system to work with your phone, etc.). Thus, the contents for each menu item will be different.

However, you can always click the **Return to Main Menu** link in the **Title Bar** to return to the main page of the WAC and view general status information of your messaging system and some notices and warning if applicable.

## Main Page Notices

If there are any warnings or notices available that you should be aware of, they will be displayed at the top of the **Page**. Some warnings or notices include current status of your system, expiration of the software assurance, system update information, etc.

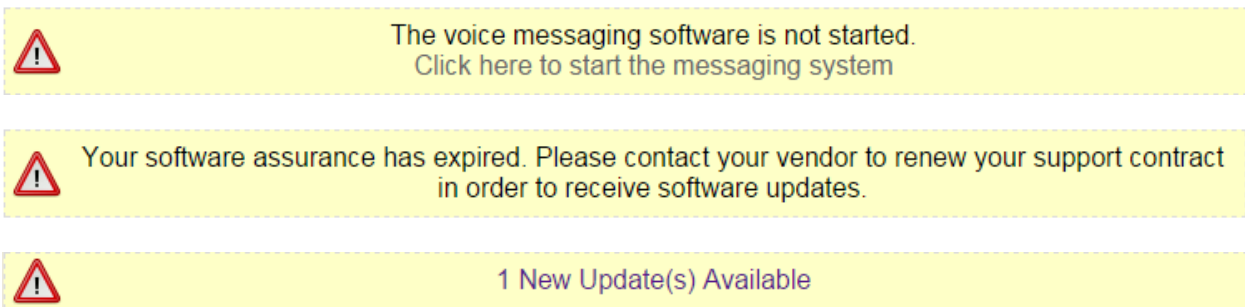


Figure 3. WAC Main Page Notices

## Main Page Items

When you sign-in to the WAC, you will see the following items on the main page.

- **Product Version.** Displays the current version the messaging system.
- **System Time.** Displays the current time of the messaging system.
- **Recording time left.** Displays the number of hours available to store more recordings.
- **User licenses left.** Displays the number of user licenses left for the subscribers.
- **UM seats left.** Displays the number of Unified Messaging licenses left for the subscribers.
- **Important Information.** Click this link to read additional information about the administrator tool.
- **Online User Forum.** Click the link to join or participate the online user forum to view the latest notices about the product, read blogs, and share your thoughts and feedback regarding the system.

# System Components

Read this chapter before starting the installation. This chapter provides preliminary information and guidelines that help you during the installation.

## System Components

The components listed are included as part of the voice messaging system. Gather the information, tools, and hardware listed in this chapter before starting the system configuration.

## NEC-Supplied Components

Verify that all the following components were shipped with the system. If any of these items is missing, contact your sales representative.

- UM8000 Blade
- UM8000 CF Drive
- UM8000 Visual Messaging Applications

The Visual Messaging applications enabling subscribers to use desktop workstations to access and manage voice messages in various ways are available for download from the NEC support site.

Everything needed to support Visual Messaging on the server is pre-installed on the voice messaging system. However, the Visual Messaging applications must be installed on each client workstation.

For information about installing and configuring Visual Messaging, see System Installation Guide.

- **Remote Maintenance Software and Voice Messaging System Applications**

Must be installed on a remote computer to support remote maintenance.

- **Internal or External USB DVD-ROM Drive**

Required to read the DVD text-to-speech and language packs.

## User-Supplied Components

In addition to the above components, you also need some or all the following user-supplied items.

- **Network Cable**
  - A standard CAT-5 network cable for LAN connections.
  - A crossover network cable for a direction connection to another computer.

- **Monitor** (optional)

Connecting a monitor directly to the CD-VM00, enables you to observe the boot process.

- **USB Keyboard**, compatible with Linux (optional)

Connecting a keyboard and monitor directly to the UM8000 blade enables you to interact with the switch, log on and off, and configure the UM8000 blade.

- **Antistatic Wrist Strap**

Use an antistatic wrist strap when handling the UM8000 blade.

**WARNING** Failure to use an antistatic wrist strap can cause damage to the CD-VM00, the phone system, or both.

- **Network Connection**

## Site Requirements

Ensure that the phone system is located in a site that meets the following requirements:

- The site is cool, dry and free of dust.
- The phone system remains immobile while in operation.
- The phone system cooling vents are not obstructed in any way.

## Site Recommendations

The following recommendations help protect the phone system and UM8000 from potential damage and unauthorized access:

- Use a surge suppressor or an uninterruptible power supply (UPS) to protect the phone system and UM8000 against sudden variations in electrical power.
- Do not move the phone system while the power is on.
- Do not remove the UM8000 blade from the phone system while the voice messaging system is running. Refer to [Starting and Stopping Voice Messaging Software System](#) section.
- Control access to the room where the phone system and UM8000 are installed. Do not install these systems in an area where unauthorized persons might have access to them.
- Failure to follow these recommendations can result in damage or unauthorized access to the system and loss of data.

## Setting Up the System Overview

The following summary includes the major steps required to install a new UM8000 system. Detailed procedures are provided in the following chapters.

- 1 Verify that the installation and site requirements are met. Refer to the [Site Requirements](#) section for more details.

- 2 Install the voice blade.

**NOTE** This step is required only if you are replacing an existing voice blade. Refer to *Hardware chapter* for more details.

- 3 Establish the connection to the phone system.
- 4 Set up the phone system. Refer to the [Configuring TCP/IP](#) and [Configure Internet Explorer](#) sections.
- 5 Set up the UM8000 software. Refer to the [Setting Up the UM8000 Software](#) section.
- 6 Set up remote maintenance. Refer to the [Remote Maintenance](#) section.
- 7 Set up optional features:
  - For more information on E-mail integration, refer to [E-mail Integration](#) section.
  - For more information about installing and configuring Visual Messaging, refer to *System Installation Guide*.
- 8 Optionally:
  - Upgrade version.
  - Migrate OS/2 system.

Backup the voice messaging data. For more information, refer to the [Backing up and Restoring UM8000](#) section.
- 9 Reset the default administrator user name and password. For more information, refer to the *Configuring UM8000* chapter.

# Starting and Stopping Voice Messaging Software System

Stop and start the voice messaging software using the Web Administration Console.

Some procedures require stopping the voice messaging software. Other procedures require stopping and restarting the voice messaging software to apply configuration changes. Whatever the reason, use the following procedure to stop or start the voice messaging software.

## To start or stop the voice messaging software using the Web Administration Console:

- 1 Log on to the Web Administration Console.
- 2 Click **Server Control**.
- 3 Click the **Stop** icon to stop the voice messaging software, or the **Start** icon to start the voice messaging software.

**NOTE** The voice messaging software might take a few minutes to shut down completely.

# Hardware

## CD-VM00 Blade (Voicemail and Server)

The CD-VM00 blade is a complete, self-contained unit that plugs directly into the UM8000 telephone system. This blade is a PC platform that contains data storage for voice recording and application software supporting a maximum of 16 ports. Only one CD-VM00 can be installed per SV8100. However, eight may be installed for SV8300.

The board includes a compact flash disk that provides storage for the voice messaging software, messages, and recordings.

Software required to run the voice messaging system is pre-installed on the disk.

## Functions

A digital signal processor/voice processing section handles the following functions:

- DTMF detection.
- DTMF generation.
- General tone detection.
- FAX CNG tone detection.
- PCM compression for audio recording/playback.
- Automatic Gain Control (AGC).
- Two USB ports for USB keyboard support, database backup and software upgrades.
- One 15-pin VGA connector for VHA monitor support.

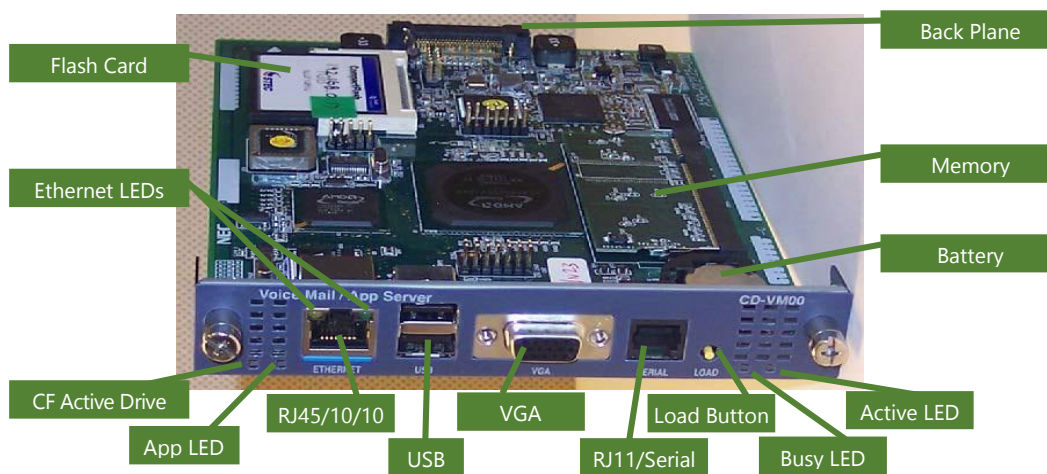


Figure 4. CD-VM00 Blade - Top View

# Installation

**CAUTION** When installing the blade, observe the following precautions to avoid static electricity damage to hardware or exposure to hazardous voltages.

The CD-VM00 unit makes extensive use of CMOS technology and is very susceptible to static. Handle with extreme care to avoid static discharge.

Handle the drive and blade carefully to prevent damage. Do not drop the drive or apply pressure to it.

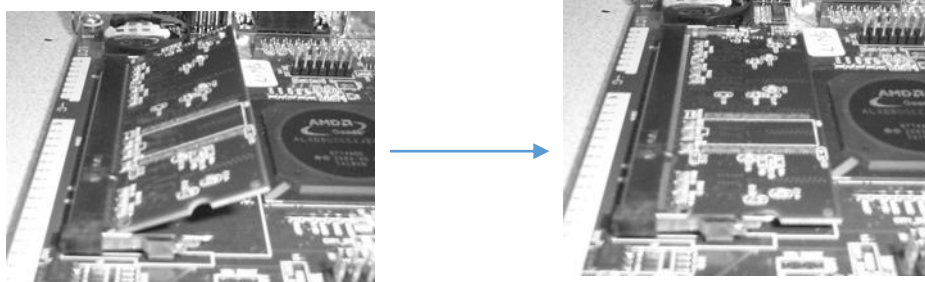
DO NOT install a USB mouse. This is not supported and can cause unexpected behavior.

## To install the CD-VM00:

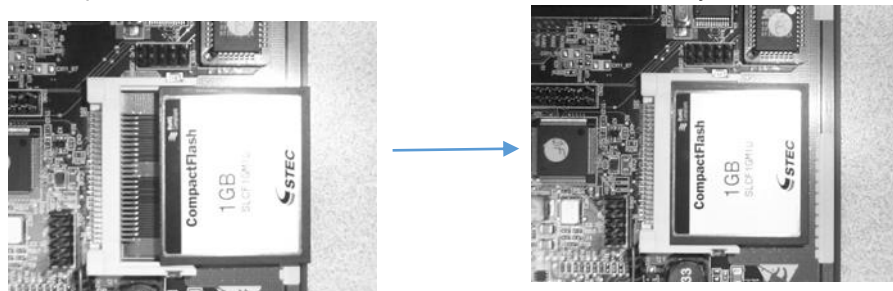
- 1 Wear a grounding strap while handling the CD-VM00 and DSP. Lay the components on a flat work surface.
- 2 Mount the CR-2032 battery with the + side up in the BATT slot on the CD-VM00.



- 3 To install the SO-DIMM memory on the CD-VM00 blade, insert the end with the brass connectors into the CN14 1 slot. Then, push the other end down until both sides lock into place.



- 4 Install the Compact Flash drive into slot CN7. Ensure the drive is fully seated in the slot.



## Load Push Button Switch

The Load push-button switch on the CD-VM00 Blade provides the following function:

**CAUTION** Do not press the load button while the voice messaging system is running. This can corrupt the database. In addition, it should not be pressed while the system is re- booting. Pressing the load button while the system is rebooting resets the database to default. Do not press the load button more than once unless you intend to reset the system to default.

## Reset CD-VM00 (APSU) to Default

To reset the CD-VM00, perform the following operation:

- 1 While the voice mail is running, hold the **Load** button for more than three seconds.  
This will reset the database and all voicemail to default.

## LED Indications

The following table describes the LED indicators.

Table 5. LED Indications

LED ID	Color(s)	Description	Indications
<b>Active</b>	Green	Off	
		On	
		Slow Flash	
		Fast Flash	
<b>Busy</b>	Red	Off	Power off or idle
		On	Reset.
		Flash	Indicates how many ports on the VM card are currently in use.  Faster flash rates indicate heavier use.
<b>Application</b>	Red/Green	Off	Power off.

		Solid Red/Green (Yellow)	Reset.
		Flashing Green	OS is running, application not started.
		Solid Green	Application running.
		Solid Red	Application problem.
<b>Compact Flash Card Activity</b>	Red	On	Indicates read/write activity on the Compact Flash card - controlled by the IDE controller.

## Connectors

The following sections go into detail on each of the user interfaces.

### RS-232 Interface

An RS-232 interface is provided as a debug port to the CPU. The AMD Geode companion chip (CS5536) provides a serial port interface. The CS5536 is connected to an Intersil-Harris HIN202ECBN (or equivalent) RS-232 transceiver providing a DTE interface (COM1) with the following signals: TD, RD, DSR, DTR and GND.

The CD-VM00 uses the same 6-pin modular jack as the DSX system. A standard telephone line cord is used as the RS-232 cable. A DB9 to 6-pin modular adapter is used on the device end of the cable. See Figure 16. CD-VM00 DB9 to 6-Pin Modular RS-232 Adapter.

The pin connections of RS-232 signal pairs are symmetrical around the center line of the 6-pin modular connector. This signal layout permits the construction of a null serial cable by simply reversing one of the modular connectors on the serial cable line cord.

The cable used for a PC type DTE connection is a standard line cord shown in

Figure 6. CD-VM00 RS-232 Serial Cable (DTE).

6-pin		Cable		6-pin
1	—		—	6
2	—	Black	—	5
3	—	Red	—	4
4	—	Green	—	3
5	—	Yellow	—	2
6	—		—	1

Figure 6. CD-VM00 RS-232 Serial Cable (DTE)

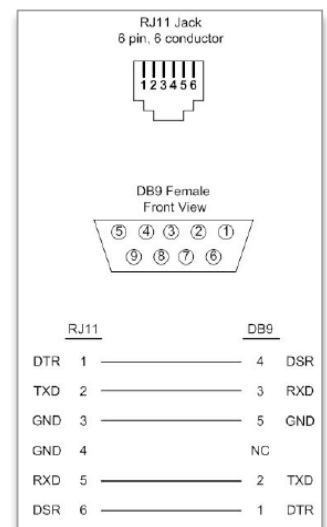


Figure 5. CD-VM00 DB9 to 6-Pin Modular RS-232 Adapter

The connection for a DCE device uses the swapped line cord shown in *Figure 18. CD-VM00 RS-232 Serial Cable (DCE)*.

6-pin		Cable		6-pin
1	—		—	1
2	—	Black	—	2
3	—	Red	—	3
4	—	Green	—	4
5	—	Yellow	—	5
6	—		—	6

Figure 7. CD-VM00 RS-232 Serial Code (DCE)

## USB Interface

The CD-VM00 provides two USB interfaces. The connections to the USB interface are through a dual Type-A plug connector. Some possible USB devices are the following:

- USB Keyboard
- USB Memory Device

Per the USB spec, each USB device must start up in a low power mode drawing one unit (100mA) of current. The device may then request more power, up to 5 unit loads. For the APSU application, current draw of greater than one unit load per device shall not be allowed. To limit the current draw on the 5V received from the backplane, a dual power switch, TI TPS2046A or equivalent, shall be used to allow power enable control to the USB ports and to protect against short circuit events. If it becomes necessary to connect a high power USB device to the APSU, an externally powered USB hub could be inserted between the APSU and the high power device.

## VGA Display Interface

The APSU card provides a VGA display interface through a standard DB-15 connector. The AMD LX-800 Processor interfaces directly to the VGA connector. The VESA standard pin-out shall be used. Per the VESA standard, 5V is required to be supplied to the connector in order to support the DDC I2C communication channel to the monitor only when the monitor is in sleep mode. When the monitor is not in sleep mode, 5V is provided by the monitor power source.

On the APSU, 5V shall be provided to the VGA connector in a manner where it can be removed from the connector via component depopulation to reduce current draw on the 5V power supply should this feature not be needed.

## 10 BASE-T/100 BASE-TX Ethernet Interface

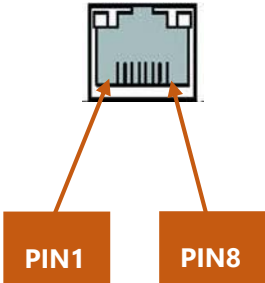
The APSU card provides a 10/100 Ethernet interface through an RJ-45 connector. Some possible uses for the Ethernet port are the following:

- Unified Messaging (Email)

- Software Update
- Application Configuration
- Network Attached Storage (NAS)

The Via VT6107 Ethernet controller shall be used. It interfaces to the CPU over a 33 MHz PCI bus and connects directly to an Ethernet RJ-45 connector with built-in magnetic and LEDs. The RJ-45 connector pin-out is shown in Table 8. Ethernet Connector Pin-Out.

Table 6. Ethernet Connector Pin-Out

View	Pin No.	Signal	Note
PIN1 – PIN8	1	Tx+	10BASE-T/100BASE-TX port (RJ-45 connector)
	2	Tx-	
	3	Rx+	
	4	NC	
	5	NC	
	6	Rx-	
	7	NC	
	8	NC	

# Setting Up Integration (SV8100/SV9100)

This chapter describes setup and programming for integrating the SV9100 telephone system and the voice messaging system.

## Setting Up Integration

- Extensions must be installed and set up for each voice messaging port.
- Hunt groups, trunk routing, and call overflow must be programmed so that the proper calls are routed to the voice messaging system.
- Test the voice messaging system extensions for the integration. Confirm that the voice messaging extensions are configured properly to integrate with the voice server.
- Learn the telephone system tones, if necessary. Use the Global Tone Detect utility to configure the voice server to recognize the system tones.

## Configuring Integration

Additional voice messaging system features are set up on the Administration Console screens:

- Easy Message Access
- Identified Subscriber Messaging
- Trunk Mapping for Transaction Boxes

## Programming

### Basic Configuration

Table 7. Basic Configuration for Programs

Program/ Item No.	Description	Required
10-09-01	DTMF and Dial Tone Circuit Setup.	
11-07-01	Department Group Pilot Numbers choose Department Group and define Pilot Number.	X
11-12-42	Service Code Setup (for Service Access), Flash on Trunk Lines This code is used for Centrex Transfer using Digital	

voice mail ports. If this code starts with # then 45-01-05 must be set to 0 (Off).

14-01-22	Basic Trunk Data Setup – Caller ID to Voice Mail.	
14-02-10	Analog Trunk Data Setup – Caller ID.	
15-02-08	Pre-select/One Touch.	
15-02-26	Multiline Telephone Basic Data Setup, MSG Key Operation Mode.	
15-03-01	Single Line Telephone Basic Data Setup - SLT Signaling Type set all Voice Mail ports to 0 (DP).	X
15-03-03	Single Line Telephone Basic Data Setup - Terminal Type set all Voice Mail ports to Special.	X
15-03-09	Single Line Telephone Basic Data Setup -Caller ID Function for External Module.	
15-07-01	Programmable Function Keys.	
16-01-01	Department Name.	
16-01-04	Hunting Mode.	
16-01-10	Enhanced Hunt Type.	
16-02-01	<p>Department Group Assignment for Extensions put all Voice Mail ports in Group Number used in 11-07-01 and assign priorities.</p> <p><b>NOTE</b> When setting up hunt group priorities the VM ports must be assigned as port 1 = priority 1, port 2 = priority 2 and so on. Failure to do this will cause the VM to answer but no audio will be heard.</p>	X
20-02-09	System Options for Multiline Telephones - Disconnect Supervision.	
20-08-05	Dial Preview, if screening a message using the Live Monitor feature and the user dials any digit the screening will stop if this is enabled for that phones class of service.	
20-09-07	Call Queuing, turn off or on an extension ability to have calls queued if a call rings the extension when it is busy.	

20-13-06	Automatic Off-Hook Signaling (Automatic Override), allows a busy extension to manually (0) or automatically (1) receive off-hook signals.	
45-01-01	Voice Mail Integration Options, Voice Mail Department Group Number assign Group Number used in 11-07-01.	X
45-01-02	Voice Mail Integration Options, Voice Mail Master Name.	
45-01-05	Voice Mail Integration Options, Message Wait When using Centrex Transfer from a voice mail port, then the following items must be considered:  (1) If the Feature Access Code starts with #, then set PRG 45-01-05 to 0.  (2) When assigning the dial string in voice mail, one or more Pauses may be needed depending on what Telco needs.	
45-01-06	Voice Mail Integration Options, Record Alert Tone Interval Time.	
45-02-01	Send DTMF tone or 6KD message, should be set 1.	X
45-02-03	Send 51A Message, should be set 1.	X

## Class of Service

It is recommended the voicemail extensions be put in Station Class of Service No. 1.

## Assigning Trunks as Automated Attendant Trunks

Table 8. Trunk Assignment for Programs

Program/ Item No.	Description	Required
22-01-04	System Options for Incoming Calls - DIL No Answer Recall Time.	
22-02-01	Incoming Call Trunk Setup.	
22-04-01	Incoming Extension Ring Group Assignment.	
22-07-01	DIL Assignment.	
22-08-01	DIL/IRG No Answer Destination.	

24-02-02	System Options for Transfer - MOH or Ringback on Transferred Calls.
24-02-03	System Options for Transfer - Delayed Call Forwarding Time.
80-03-01	DTMF Tone Receiver Setup.
80-04-01	Call Progress Tone Detector Setup.
22-01-04	System Options for Incoming Calls - DIL No Answer Recall Time.

# Setting Up Integration (SV8300/SV9300)

This chapter describes setup and programming for integrating the SV8300 telephone system and the voice messaging system.

## Setting Up Integration

Several tasks are required to integrate UM8000 with the phone system. Use the phone system programming interface (either a CAT phone or a SV8300 PCPro) to enter the phone system programming commands below. Before setting up the integration, the UM8000 needs to be defined with *CM 05>AABB>70*.

Follow all procedures in this section in the order presented.

## Assigning Extension Numbers to Voice Messaging Ports

Assign extension numbers to the voice messaging ports. The UM8000 blade occupies ports AABB01 to AABB08 for an 8-port system, and ports AABB01 to AABB16 for a 16-port system.

<b>Command Code:</b>	1000
<b>First Data:</b>	AABBXX
	Where AA = Chassis
	BB = Slot
	XX= Port
<b>Second Data:</b>	Fx-xxx
	Where F specifies a digital extension and
	<x-xxx> is the voice messaging port extension number.

**NOTE** Repeat this command for each port on the UM blade.

## Enabling Digital Voice Messaging Support

- 1 Enable AAInfo for incoming calls.

<b>Command Code:</b>	08
<b>First Data:</b>	702
<b>Second Data:</b>	0

- 2 Enable CCIS for incoming calls.

**Command Code:** 08

**First Data:** 703

**Second Data:** 0

- 3 Enable AAInfo for transferred calls.

**Command Code:** 08

**First Data:** 704

**Second Data:** 0

- 4 Enable CCIS for MWI.

**Command Code:** 08

**First Data:** 706

**Second Data:** 0

- 5 Link VMS soft key feature and expand AAINFO.

**Command Code:** 08

**First Data:** 710

**Second Data:** 0

## Assigning Voice Messaging Ports as Digital Voice Messaging Ports

Designate all voice messaging ports as digital voice messaging ports.

**Command Code:** 1324

**First Data:** x-xxx

Where <x-xxx> is the voice messaging port extension number.

**Second Data:** 0

**NOTE** Repeat this command for each port on the UM8000 blade.

## Setting Up the UCD Hunt Group

- 1 Create a phantom extension number that will be the UCD pilot (master) number.

**Command Code:** 11

**First Data:** xxxx

Where <xxxx> is a virtual port number.

**Second Data:** x-xxx

Where <x-xxx> is the UCD pilot extension

- 2 Link the UCD pilot number to the first digital voice messaging extension.

**Command Code:** 170

**First Data:** x-xxx

Where <x-xxx> is the UCD pilot extension number.

**Second Data:** x-xxx

Where <x-xxx> is the first digital voice messaging extension number.

- 3 Link the first digital voice messaging extension number to the second digital voice messaging extension number, the second to the third, and so on.

**Command Code:** 170

**First Data:** x-xxx

Where <x-xxx> is the first digital voice messaging extension number.

**Second Data:** x-xxx

Where <x-xxx> is the second digital voice messaging extension number.

**NOTE** Repeat this command, chaining each voice messaging extension to the next voice messaging extension. When you reach the last voice messaging extension number, link it back to the UCD pilot extension number created in Step 1 in [Section Setting Up the UCD Hunt Group](#).

- 4 Assign the phantom extension number to the UCD pilot (master) number.

**Command Code:** 171

**First Data:** x-xxx

Where <x-xxx> is the UCD pilot extension number.

**Second Data:** 1

- 5 Assign all UCD numbers to UCD group number 00.

**Command Code:** 172

**First Data:** x-xxx

Where <x-xxx> is the extension number.

**Second Data:** 00

**NOTE** Repeat this command for each voice messaging extension number and for the UCD pilot (master) number.

- 6 Make busy the UCD pilot extension number.

**Command Code:** E50

**First Data:** x-xxx

Where <x-xxx> is the UCD pilot extension number.

**Second Data:** 0

- 7 Assign the UCD pilot (master) number to the tenant number.

**Command Code:** 5115

**First Data:** 01

**Second Data:** x-xxx

Where <x-xxx> is the UCD pilot extension number.

## Enabling the Automated Attendant

To use the voice messaging system as an automated attendant, program the phone system to send external calls to the UCD pilot (master) extension.

## Setting Up Call Forward on Busy or Ring-No-Answer

To forward calls to the messaging system on busy or ring-no-answer, program the individual extensions to forward calls to the UCD pilot (master) extension.

**NOTE** To avoid creating a call forwarding conflict between the phone system and the messaging system, see the [Supported Phone Systems](#) section.

## Enabling Busy Greetings

- 1 Log on to the Web Administration Console, then go to **Subscribers > Subscriber Template > Greetings**.
- 2 Select **Enable busy greeting**.
- 3 Click **Save**.

## Enabling Easy Message Access

Easy message access, also called direct message retrieval, is a feature that lets subscribers sign in quickly to the messaging system when dialing from their own extension. With this feature enabled, a subscriber who dials the messaging system is immediately asked to enter a security code without having to enter a personal ID.

Easy message access is enabled by default for all subscribers.

However, this feature can be enhanced by configuring a line key on each subscriber's phone that can be pressed to dial the messaging system automatically. To do this, program the phone system to allocate a key on each subscriber's phone to dial the UCD pilot number.

## Disabling Easy Message Access

- 1 Log on to the Web Administration Console, then go to **System > Switch > Switch Information**.
- 2 In the **Integration** options field, type *EMA=0*.
- 3 Click **Save**.

## Enabling Automatic Subscriber-to-Subscriber Messaging in Secured Mode

By default, automatic subscriber-to-subscriber messaging is enabled in unsecured mode for all subscribers. To enable this feature in secured mode, do this procedure.

- 1 Log on to the Web Administration Console, then go to **System > Switch > Switch Information**.
- 2 In the **Integration** options field, enter *ISM=2*.
- 3 Click **Save**.

## Setting Up Message Waiting Indication

By default, message waiting indication is enabled for all subscribers. Use the following procedure to verify MWI settings.

- 1 Log on to the Web Administration Console, then go to **System > Switch > MWI**.
- 2 Confirm that the **On (activation) code** and **Off (deactivation) code** fields contain an X.
- 3 Click **Save**.

## Setting Up Automatic Number Identification (ANI)

To use ANI, you must activate the MF receiver built-in to the SV8300 CPU. Refer to the phone system documentation for details on setting up ANI.

**NOTE** Setting up ANI overrides the Gather phone number call screening option, which asks callers to manually enter their phone number before routing the call.

The phone system is now configured for basic digital integration.

## Setting Up the IP Address Information for the UM8000

- 1 Set the IP address for the UM8000.

<b>Command Code:</b>	EE1
<b>First Data:</b>	AABB Where AA = Unit, BB = Slot
<b>Second Data:</b>	XXX.XXX.XXX.XXX Where X specifies the IP address.

- 2 Set the Subnet Mask for the UM8000.

**Command Code:** EE2

**First Data:** AABB

Where AA = Unit, BB = Slot

**Second Data:** YYY.YYY.YYY.YYY

Where Y specifies the Subnet Mask.

- 3 Set the Default Gateway for the UM8000.

**Command Code:** EE3

**First Data:** AABB

Where AA = Unit, BB = Slot

**Second Data:** ZZZ.ZZZ.ZZZ.ZZZ

Where Z specifies the Default Gateway.

## Setting the UM8000 License that are Loaded in the SV8300

- 1 Set up the licensed amount of UM8000 FAX ports.

**Command Code:** EE0

**First Data:** AABB044

Where AA = Unit, BB = Slot, 044 = FAX ports

**Second Data:** 000 - 999

Amount of FAX ports license loaded in the SV8300 to enable in the UM8000.

**NOTE** System ports cannot be set to fax-only.

- 2 Set the licensed amount of UM8000 View Apps (View Mail/View FAX) Clients.

**Command Code:** EE0

**First Data:** AABB046

Where AA = Unit, BB = Slot, 046 = View Apps Clients

**Second Data:** 000 - 999

Amount of View Apps Client license loaded in the SV8300 to enable in the UM8000.

- 3 Set the licensed amount of UM8000 Multi-Language.

**Command Code:** EE0

**First Data:** AABB047

Where AA = Unit, BB = Slot, 047 = Multi-Language

**Second Data:** 000 - 999

Amount of Language license loaded in the SV8300 to enable in the UM8000.

**4** Set the licensed amount of UM8000 Hospitality Languages.

**Command Code:** EE0

**First Data:** AABB048

Where AA = Unit, BB = Slot, 048 = Hospitality Languages

**Second Data:** 000 - 999

Amount of Hospitality Languages license loaded in the SV8300 to enable in the UM8000.

**5** Set the licensed amount of UM8000 TTS Languages.

**Command Code:** EE0

**First Data:** AABB049

Where AA= Unit, BB= Slot 049 = TTS Languages

**Second Data:** 000 - 999

Amount of TTS Languages license loaded in the SV8300 to enable in the UM8000.

To verify the licenses available on the SV8300, use the following:

*F88>.....used/available*

*F88>043:UMS PORT :0004/0004-*

*F88>044:UMS FAX PORT :0004/0004-*

*F88>045:UMS TTS PORT :0000/0000-*

*F88>046:UMS CLIENT :0040/0040-*

*F88>047:UMS LANGUAGE :0003/0003-*

*F88>048:UMS HOSPI LANG :0000/0000-*

*F88>049:UMS TTS LANG :0000/0000-*

*044-049 can be defined with the EE0 command.*

*043 is automatically set when the extensions are configured on the board.*

## Setting Up Soft Keys

Use the phone system programming interface (either a CAT phone or a SV8300 PCPro) to enter the phone system programming commands.

### Enabling Soft Key Call Screening

Enable soft key call screening system-wide.

<b>Command Code:</b>	08
<b>First Data:</b>	715
<b>Second Data:</b>	0

### Enabling the Voice Messaging Ports for Soft Keys

Enable all voice messaging ports for soft keys.

<b>Command Code:</b>	1337
<b>First Data:</b>	x-xxx
	Where x-xxx is the voice messaging port extension number.
<b>Second Data:</b>	0

**NOTE** Repeat this command for each voice messaging extension on the UM8000 blade.

## Setting Up Live Record

A subscriber can record phone conversations using their phone or using ViewMail.

- To record conversations using ViewMail, a barge-in code and executive override must be configured on the phone system, and call forward busy must be disabled on each phone extension recording from ViewMail. A barge-in code is a key sequence that the phone system dials to activate executive override (or silent monitor) to begin the recording. See the phone system documentation for more information.
- To record conversations using a phone, the phone system and the subscriber's extension must be configured properly. The procedures to do this are described later in this chapter.

While recording, a periodic beep is required by many local laws. To record from ViewMail, program the phone system to provide the periodic beep. To record from the phone set, configure the voice messaging system to provide the beep. The default is 15 seconds. Entering 0 (zero) disables the beep. For instructions on how to set up the live record beep on the voice messaging system, see the System Management Help.

**CAUTION** The use of monitoring, recording or listening devices to eavesdrop, monitor, retrieve or record phone conversations or other sound activities, whether or not contemporaneous with transmission, may be illegal in certain circumstances under federal or state laws. Legal advice should be sought prior to implementing any practice that monitors or records any

phone conversation. Some federal and state laws require some form of notification to all parties to a phone conversation, such as using a beep tone or other notification methods or requiring the consent of all parties to the phone conversation, prior to monitoring or recording the phone conversation. Some of these laws incorporate strict penalties.

## Non-Exclusive Hold (Station A places a call on hold and station B retrieves the held call)

The following three tables show station operation, VM operation and created message files when Non-Exclusive Hold is performed.

Table 9. Call Hold-1: Station A Automatic Live Record

	Station operation	VM operation	Created message file
1	Station A (automatic) answers an incoming call.	Conversation and recording are started.	Message file 1
2	Station A (automatic) places the call on hold.	Recording is paused	Message file 1
3	Station A (automatic) retrieves the held call.	Conversation and recording are restarted.	Message file 1 [Continuous Live Record]

Table 10. Call Hold-1: Station A Manual Live Record

	Station operation	VM operation	Created message file
1	Station A answers an incoming call	Conversation is started.	
2	Station A presses the Record key.	Recording is started.	Message file 1
3	Station A places the call on hold.	Recording is paused.	Message file 1

Table 11. Call Hold-1: Station A Manual Live-Record

	Station operation	VM operation	Created message file
4	Station A retrieves the held call.	Conversation and recording are restarted.	Message file 1 [Continuous Live Record]

Table 12. Call Hold-1: Station A: Manual Live Record ... Answering a recall

	Station operation	VM operation	Created message file
1	Station A answers an incoming call.	Conversation is started.	
2	Station A presses the Record key.	Recording is started.	Message file 1
3	Station A places the call on hold.	Recording is paused.	Message file 1
4	Station A answers the recall.	Conversation and recording are restarted.	Message file 1 [Continuous Live Record]

## Non-Exclusive Hold (Station A places a call on hold and station B retrieves the held call)

The following four tables show station operation, VM operation and created message files when Non-Exclusive Hold is performed.

Table 13. Call Hold-2: Station A Automatic Live Record, Station B Automatic Live Record

	Station operation	VM operation	Created message file
1	Station A (automatic) answers an incoming call.	Conversation and recording are started.	Message file 1
2	Station A (automatic) places the call on hold.	Recording is paused	Message file 1
3	Station B (automatic) retrieves the held call.	Conversation and recording are restarted.	Message file 1 [Continuous Live Record]

Table 14. Call Hold-2: Station A Automatic Live Record, Station B Manual Live Record

	Station operation	VM operation	Created message file
1	Station A (automatic) answers an incoming call.	Conversation and recording are started.	Message file 1
2	Station A (automatic) places the call on hold.	Recording is paused.	Message file 1
3	Station B retrieves the held call.	Conversation is started and recording is stopped.	Message file 1 ends.

4	Station B presses the Record key.	Recording is started.	Message file 2 [Another file]
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Table 15. Call Hold-2: Station A Manual Live Record, Station B Automatic Live Record

	Station operation	VM operation	Created Message File
1	Station A answers an incoming call.	Conversation is started.	
2	Station A presses the Record key.	Recording is started.	Message file 1
3	Station A places the call on hold.	Recording is paused.	Message file 1
4	Station B (automatic) retrieves the recall.	Conversation and recording are restarted.	Message file 1 [Continuous Live Record]

Table 16. Call Hold-2: Station A Manual Live Record, Station B Manual Live Record

	Station operation	VM operation	Created message file
1	Station A answers an incoming call.	Conversation is started.	
2	Station A presses the Record key.	Recording is started.	Message file 1
3	Station A places the call on hold.	Recording is paused.	Message file 1
4	Station B retrieves the held call.	Conversation is started and recording is stopped.	Message file 1 ends.
5	Station B presses the Record key.	Recording is started.	Message file 2 [Another file]

## Call Transfer – All Calls (Station A makes a hook-flash and dials station B to transfer a call)

The following six tables show station operation, VM operation and created message files when Call Transfer-All Calls is performed.

Table 17. Call Transfer: Station A Automatic Live Record, Station B Automatic Live Record

	Station operation	VM operation	Created message file
1	Station A (automatic) answers an incoming call.	Conversation and recording are started.	Message file 1
2	Station A (automatic) makes a hook-flash and dials station B number.	Recording is paused.	Message file 1
3	Call is terminated to station B (automatic)	Recording is paused.	Message file 1
4	Station B (automatic) answers.	Conversation and recording are re- started.	Message file 1 [Continuous Live Record]

Table 18. Call: Station A Automatic Live Record, Station B Manual Live Record

	Station operation	VM operation	Created message file
1	Station A (automatic) answers an incoming call.	Conversation and recording are started.	Message file 1
2	Station A (automatic) makes a hook-flash and dials station B number.	Recording is paused.	Message file 1
3	Call is terminated to station B.	Recording is paused.	Message file 1
4	Station B answers.	Conversation is started and the recording is stopped.	Message file 1 ends.
5	Station B presses the Record key.	Recording is started.	Message file 2 [Another file]

Table 19. Call Transfer - All Calls: Station A Manual Live Record, Station B Automatic Live Record

	Station operation	VM operation	Created message file
1	Station A answers an incoming call.	Conversation is started	-
2	Station A presses the Record key.	Recording is started.	Message file 1
3	Station A makes a hook-flash and dials station B number.	Recording is paused.	Message file 1

4	The call is terminated to station B (automatic).	Recording is paused.	Message file 1 ends.
5	Station B (automatic) answers.	Conversation and recording are restarted.	Message file 1 [Continuous Live Record]

Table 20. Call Transfer - All Calls: Station A Manual Live Record, Station B Manual Live Record

	Station operation	VM operation	Created message file
1	Station A answers an incoming call.	Conversation is started	
2	Station A presses the Record key.	Recording is started.	Message file 1
3	Station A makes a hook-flash and dials station B number.	Recording is paused.	Message file 1
4	The call is terminated to station B.	Recording is paused.	Message file 1 ends.
5	Station B answers.	Conversation is started and recording is stopped.	Message file 1 ends.

Table 21. Call Transfer failed: Station A Automatic Live Record, Station B: No Answer

	Station operation	VM operation	Created message file
1	Station A (automatic) answers an incoming call.	Conversation and recording are started.	Message file 1
2	Station A (automatic) makes a hook-flash and dials station B number.	Recording is paused.	Message file 1
3	Station A (automatic) makes a hook-flash, or answers the recall.	Conversation and recording are restarted.	Message file 1 [Continuous Live Record]

Table 22. Call Transfer failed: Station A Manual Live Record, Station B: No Answer

	Station operation	VM operation	Created message file
1	Station A answers an incoming call.	Conversation is started.	
2	Station A presses the Record key.	Recording is started.	Message file 1

3	Station A makes a hook-flash and dials station B number.	Recording is paused.	Message file 1
4	Station A makes a hook-flash, or Station A answers the call.	Conversation and recording are re- started	Message file 1 [Continuous live record]

**NOTE** The PBX must provide the necessary signaling for all of the described capabilities to work properly. Continuous Live Record requires SV8300 R6 or later. Desktop client Live Recording via Barge-in is not supported.

Under the following conditions, Continuous Live Record is not provided (cannot be provided).

- The caller is a station.
- The transfer destination is a trunk (tandem connection).
- When transfer destination answers the held call or transferred call, it cannot seize a CFT trunk or IP-PAD.
- The Record End Key is pressed before Call Hold/Call Transfer to stop the recording.
- Destination of Call Hold/Call Transfer is not set Automatic Live Recording. (Even if it promptly operates Live Record by hand, this won't be changed).

\* In these cases, recording is stopped as usual, and Continuous Live Record is not provided.

## Configuring Live Record on the Phone System

- 1 Enable the live record beep.

**Command Code:** 08

**First Data:** 109

**Second Data:** 0

- 2 Enable automatic live record system-wide, optional.

**Command Code:** 08

**First Data:** 141

**Second Data:** 0

Where 0 enables automatic live record for system-wide  
and 1 disables automatic live record system-wide.

**NOTE** Automatic live record is supported only with release transfers.

- 3 Enable automatic live record for trunk calls, optional.

**Command Code:** 3522

**First Data:** xx

Where <xx> is the trunk route number.

**Second Data:** 0

Where 0 enables automatic live record for system-wide  
And 1 disables automatic live record system-wide.

- 4 Enable continuous live record system wide, optional (PBX Rev 6 or greater).

**Command Code:** 08

**First Data:** 1023

**Second Data:** 0

Where 0 enables Continuous live record system wide  
and 1 disables it

- 5 Enable automatic live record for ISDN trunks, optional.

**Command Code:** 7613

**First Data:** xxx

Where <xxx> is the digit conversion block number.

## Configuring Live Record on a Subscriber's Extension

Perform this procedure for each subscriber extension that will use live record.

- 1 Enable message waiting service for the extension.

**Command Code:** 1303

**First Data:** x-xxx

Where <x-xxx> is the subscriber's extension number.

**Second Data:** 0

- 2 Set the Prime Line for the extension.

**Command Code:** 93

**First Data:** x-xxx

Where <x-xxx> is the subscriber's extension number.

**Second Data:** x-xxx

Where <x-xxx> is the subscriber's extension number.

- 3 Assign live record line key functions.

**Command Code:** 9000

**First Data:** x-xxx, yyy

Where <x-xxx> is the subscriber's extension number  
and <yyy> is the line key.

**Second Data:** F1091

Where F1091 = Record.

- 4 Enable automatic live record for the extension, if the subscriber wants it.

**Command Code:** 1323

**First Data:** x-xxx

Where <x-xxx> is the subscriber's extension number.

**Second Data:** 0

Where 0 enables automatic live record for the extension  
and 1 disables automatic live record for the extension.

## Configuring Live Record on UM8000

By default, live record is disabled for subscribers in the default subscriber template and the maximum recording time for live record is 300 seconds, or five minutes. Use the following procedure to change the default settings.

### To configure live record:

- 1 Log on to the Web administration console, then go to **Subscribers > Subscriber Template > Live Record**.
- 2 Select Enable live record.
- 3 In the **Maximum record time** field, specify the recording time in seconds.
- 4 Click **Save**.
- 5 If necessary, enable live record for any previously existing subscribers. The template change only affects new subscribers added to the messaging system.

**NOTE** If **Save Live Record** in inbox is not checked, the Live Record will not be retained unless the user addresses the message during the call by dialing the intended recipient's voice mail number.

## Setting Up Live Monitor

Subscribers can listen to a message as it is being recorded in their mailbox by using the live monitor feature. To monitor messages using a phone, the phone system and the subscriber's extension must be configured properly. Use the phone system programming interface (either a CAT phone or a SV8300 PCPro) to enter the phone system programming commands.

## Enabling Live Monitor on the Phone System

Enable live monitor for the service restriction class.

**Command Code:** 15186

**First Data:** x-xxx  
Where <x-xxx> is the service restriction class.

**Second Data:** 0  
Where 0 enables live monitor  
and 1 disables live monitor system-wide.

## Configuring Live Monitor on a Subscriber's Extension

Perform this procedure for each subscriber extension that will use live monitor.

- 1 Set the live monitor mode for the subscriber's extension.

**Command Code:** 1226

**First Data:** x-xxx  
Where <x-xxx> is the subscriber's extension number.

**Second Data:** 0  
Where 0 = automatic mode, 1 = manual mode, and 3 = off

- 2 Enable live monitor pickup.

**Command Code:** 1227

**First Data:** x-xxx  
Where <x-xxx> is the subscriber's extension number.

**Second Data:** 3

- 3 Assign the live monitor line key function.

**Command Code:** 9000

**First Data:** x-xxx, yy  
Where <x-xxx> is the subscriber's extension number and  
<yy> is the line key.

**Second Data:** F5024

**NOTE** After programming is finished, the user at the extension must go off-hook (press the Speaker button), then press the key that was programmed for live monitor in step 3. The LED will turn red and live monitor is ready for use.

## Enabling Live Monitor on UM8000

By default, live monitor is disabled for subscribers in the subscriber template. To enable live monitor in the subscriber template, use the following procedure.

- 1 Log on to the Web administration console, then go to **Subscribers > Subscriber Template > Access Options**.
- 2 Under Administration, select **Enable Live Monitor**.
- 3 Click **Save**.
- 4 Enable live monitor for any previously existing

# Remote Maintenance

Remote maintenance enables administrators to use a remote computer to troubleshoot and maintain the voice messaging system. Remote maintenance uses the internet connection.

Internet and network access requires that the voice messaging system is connected to a network that provides internet access. The network administrator must also set up the firewall to enable remote access. To access the voice messaging system remotely, the IP address must be statically mapped to an outside IP address per IP address or a per TCP port.

## Configuring TCP/IP

This procedure assumes that a network card is installed and correctly configured on the remote computer.

### To Configure TCP/IP for the Remote Computer:

Refer to the system documentation for information about configuring the TCP/IP settings for a remote computer that is running a different operating system.

- 1 On the Windows desktop, click **Start**.
- 2 Right-click **My Network Places**, and select **Properties**. The **Network Connections** window appears.
- 3 Right-click **Local Area Connection**, then select **Properties**. The **Local Area Connection Properties** window appears.
- 4 Double-click **Internet Protocol (TCP/IP)**.
- 5 On the **General** tab:
  - a Select **Use the following IP address**.
  - b Enter *172.16.1.200* in the **IP address** field.
  - c Enter *255.255.255.0* in the **Subnet mask** field.
  - d Leave the **Default gateway** field blank.
  - e Click **OK**.
- 6 The **Internet Protocol properties** dialog box closes.
- 7 Click **OK** to close the Local Area Connection window.

# WinSCP

WinSCP is an open source program that has been tested and approved for use with the UM8000 messaging system. WinSCP is a SFTP (SSH File Transfer Protocol) and SCP (Secure Copy) client for Windows that uses SSH (Secure Shell). The main function of WinSCP is to provide safe copying/transferring of files between local and remote computers in a secure environment.

You can install the utility and remotely access the messaging system from a workstation of your choice.

Unlike the Web Administration Console (WAC), this utility will not allow for a full administration of the messaging system, but it will help you to quickly transfer files from one computer to another.

WinSCP can be downloaded from their websites and installed on a Windows-running system.

## Command Line Interface

In order to use the remote utilities to manage the messaging system, you would have to use keyboard or mouse as an input device as these utilities use the command line interface. Refer to the descriptions of the keys in the following table.

Table 23. Input Devices and Commands

Input Device	Command	Description
Mouse	N/A	Click to choose <b>Maintenance Menu</b> items and buttons. Choose items in the <b>WAC</b> . Choose items or buttons in <b>WinSCP</b> .
Keyboard	Command Prompt	Type a command with options then press the <b>Enter</b> key. For example: <code>mcedit /cps.ini</code> <b>Enter</b> This command opens the <b>cps.ini</b> file in the <b>mcedit</b> tool.
	1,2,3,...0	To choose a menu item, type the numeric equivalent of a menu item. <b>For example:</b> 0 = Log out on the <b>Maintenance Menu</b> .
	TAB	Press the <b>Tab</b> key to move through the menu items and command buttons in the <b>Maintenance Menu</b> .
	<b>↑</b> UP	Use the keyboard arrow keys to move between menu items, buttons, or options.
	<b>↓</b> DOWN	
	<b>←</b> LEFT	
	<b>→</b> RIGHT	

Function Keys	<p>Tools such as <b>mcedit</b> use function keys to execute specific actions.</p> <p>For example: <b>F10</b> exits <b>mcedit</b>; <b>F5</b> saves the file, and so on.</p>
SPACEBAR	<p>Press the <b>Spacebar</b> key to toggle check marks on and off.</p> <p>For example,</p> <p>(*) Messages</p> <p>Press the <b>Spacebar</b> key to clear the check box.</p> <p>( ) Messages</p>

## Installing WinSCP

To install WinSCP on your workstation:

- 1 Download WinSCP, and double-click the downloaded file to start the WinSCP installation.
- 2 When prompted with the **User Account Control** alert message, click **Yes**.
- 3 On the **Select Setup Language** dialog box, select the appropriate language, and then click **OK**.
- 4 On the **Welcome to WinSCP Setup Wizard** window, click **Next**.
- 5 On the **License Agreement** window, select **I accept the agreement**, and then click **Next**.
- 6 On the **Setup type** window, select one of the following options:
  - For basic setup,
    - a Select **Typical installation**, and then click **Next**.
  - For advanced setup,
    - b Select **Custom installation**, and then click **Next**.
    - c On the **Select Destination Location** window, accept the default installation folder or type/select a new folder where the program should be installed. And then click **Next**.
    - d On the **Select Components** window, select the components you wish to install. And then click **Next**.
    - e On the **Select Start Menu Folder** window, accept the default start menu folder or type/select a new folder to place the shortcuts. And then click **Next**.
    - f On the **Select Additional Tasks** window, select the tasks that should be performed while installing WinSCP. And then click **Next**.
- 7 On the **Initial user settings** window, select the user interface style you prefer, and then click **Next**.
  - **Commander interface** (Recommended Option) - Displays source computer directories in the left pane and destination computer directories in the right pane.

- **Explorer interface** - Displays directories in the left pane and files in the right pane.

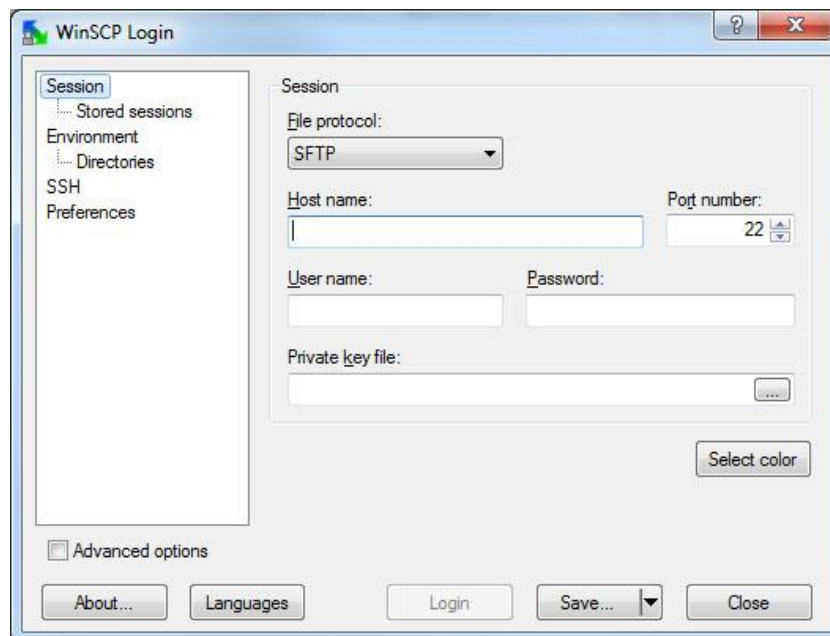
**NOTE** All WinSCP procedures described in this guide is based on the **Commander interface**.

- 8 On the **Ready to Install** window, verify that the settings are correct. And then click **Install**.
- 9 When the installation is complete, unselect **Start WinSCP now**, and then click **Finish**.

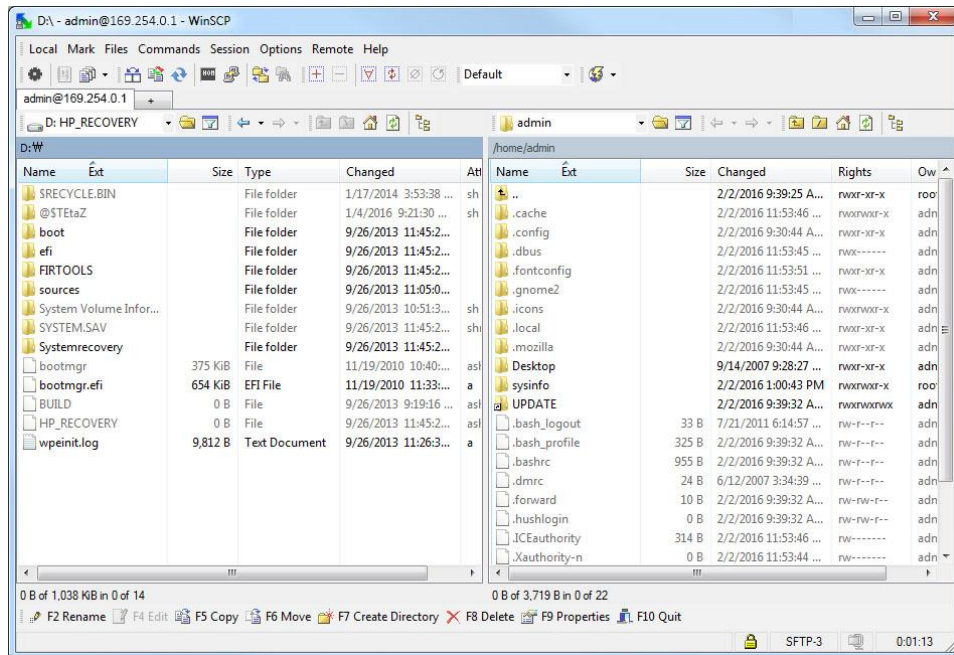
## Accessing the Messaging System Using WinSCP

To start and run WinSCP:

- 1 Go to **Start > Programs > WinSCP3 > WinSCP** or the appropriate path to open WinSCP.
- 2 On the **WinSCP Login** window, select **Session** from the left pane.



- 3 In the **Session** section, type the **Host name** (or **IP address**), **User name**, and **Password** for the system the messaging system as follows:
  - **IP Address:** The IP address for the voice mail is assigned in chassis programming 10-55-xx. This setting may be different for your switch. Refer to the switch documentation for details.  
The default address is set to 172.16.1.xxx, where xxx will vary depending upon which slot the CD-VM00 was installed. Starting with slot 1, slot 1 is 100, slot 2 is 101, slot 5 is 104, and so on.
  - **User name:** *admin*
  - **Password:** *voicemail*
- 4 Click **Save** to save the login information for future sessions, and then click **Login**.
- 5 If a security breach message appears, click **Yes**. The **WinSCP** console appears.



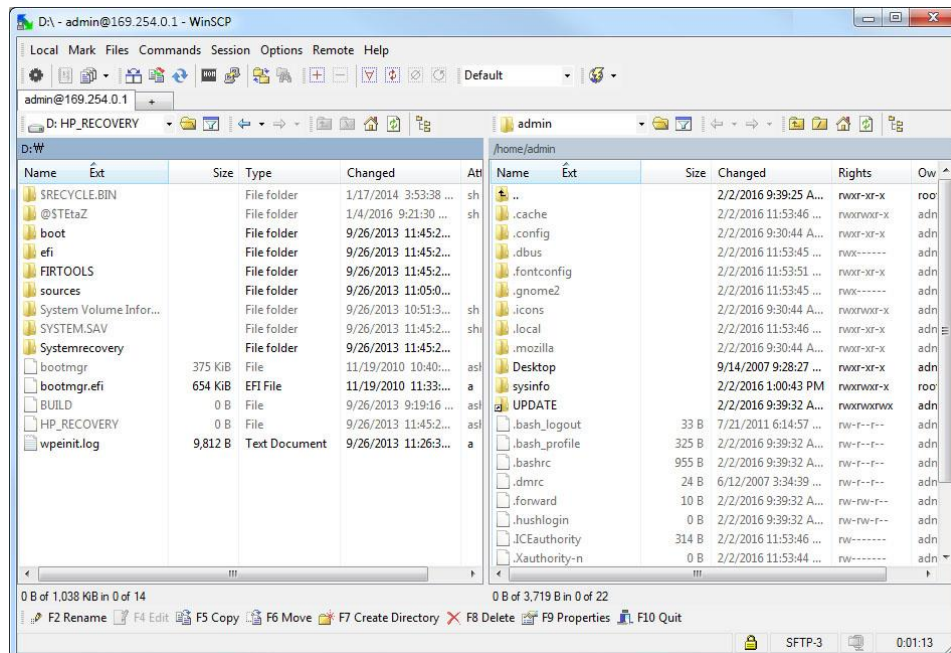
6 Browse through the folders and select the files you want to transfer.

## Transferring files using WinSCP

To transfer files using WinSCP:

1 Log in to WinSCP.

By default, the files for the remote computer are loaded on the left pane. The files for the messaging system load on the right pane.



2 To transfer files:

- From the messaging system server to the remote computer, select the file(s) on the right pane.
- To transfer files from the remote computer to the messaging system server, select the file(s) on the left pane.

3 Perform one of the following:

- Right-click on the selected file(s), and then select **Copy**.
- On the menu bar, select **Files > Copy**.
- Drag and drop the files.

**NOTE** If you chose this method, no further steps are necessary. The files are transferred immediately.

4 On the **Copy** dialog window that displays, type the path or browse to the local directory where you want to transfer the selected file(s).

5 Click **Copy**.

## PuTTY

PuTTY also is an open source program that has been tested and approved for use with the UM8000 messaging system. PuTTY is a telnet and secure shell client for secure shell terminal access. You can use this utility to directly access the **Maintenance Menu**, command line interface of the messaging system.

You can install the utility and remotely access the messaging system from a workstation of your choice.

Like WinSCP, PuTTY will not allow for a full administration of the messaging system, but it will allow you to access the Maintenance Menu and manage the messaging system.

PuTTY can be downloaded from their websites and installed on a Windows-running system. It also requires to use keyboard or mouse as an input device as it is the command line interface. Refer to the [Command Line Interface](#) section for the descriptions of the keys.

## Installing PuTTY

Follow the procedure below to install PuTTY on the voice messaging system, a client computer, or on a remote computer.

### To install PuTTY:

- 1 Download PuTTY, and double-click the downloaded file to start the PuTTY installation.
- 2 When prompted with the **User Account Control** alert message, click **Yes**.
- 3 On the **Welcome to the PuTTY Setup Wizard** window, click **Next**.
- 4 On the **Select Destination Location** window, accept the default installation folder or type/select a new folder where the program should be installed. And the click **Next**.

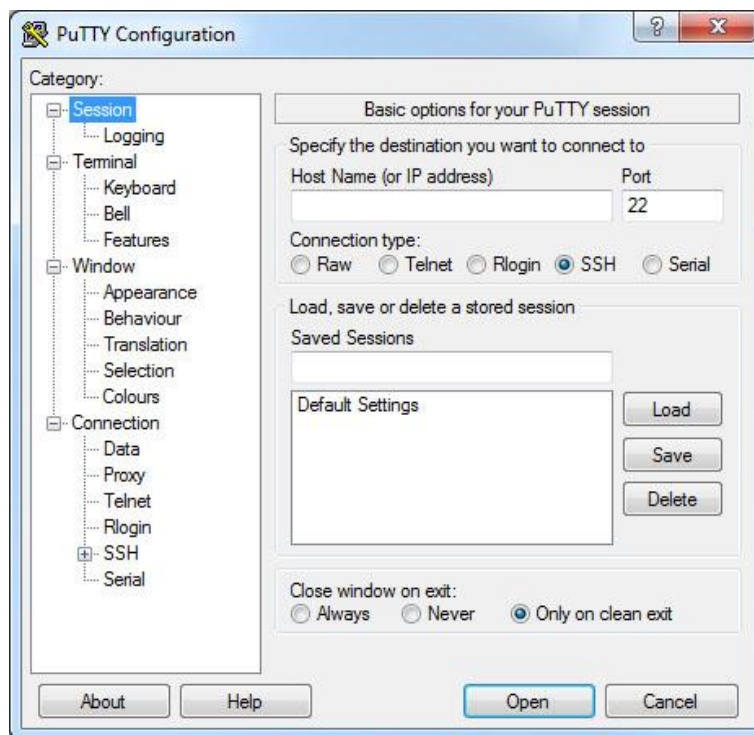
- 5 On the **Select Start Menu Folder** window, accept the default start menu folder or type/select a new folder to place the shortcuts. And then click **Next**.
- 6 On the **Select Additional Tasks** window, select that tasks that should be performed while installing PuTTY. And then click **Next**.
- 7 On the **Ready to Install** window, verify that the settings are correct. And then click **Install**.
- 8 When the installation is complete, unselect **View README.txt**, and then click **Finish**.

## Accessing the Maintenance Menu Using PuTTY

Use PuTTY for remote SSH terminal access. To run PuTTY, perform the following procedure:

### To run PuTTY to access the Maintenance Menu:

- 1 Go to **Start > Programs > PuTTY > PuTTY** or the appropriate path to open WinSCP.
- 2 On the **PuTTY Configuration** window, select **Session** from the **Category** pane.

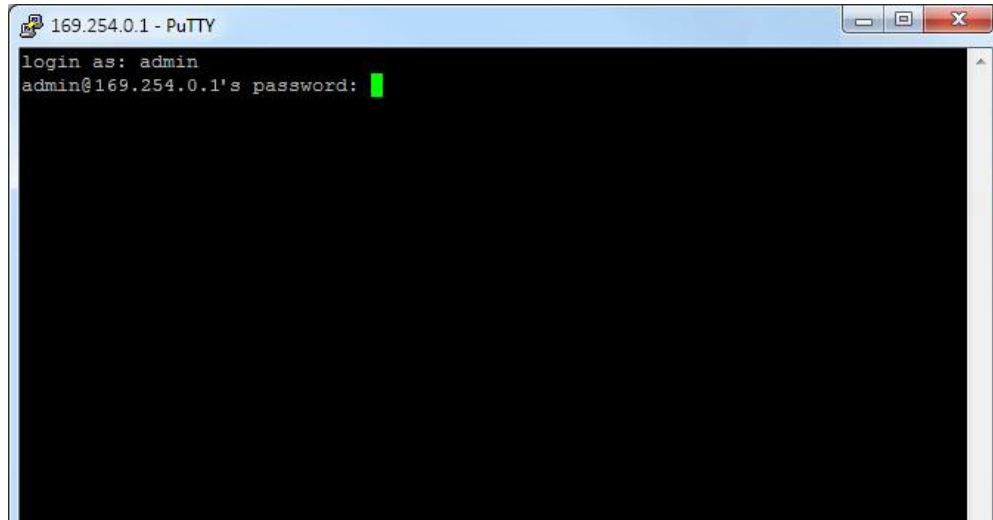


- 3 In the **Host Name (or IP address)** section, type the IP address of the messaging system. And then click **Open**.

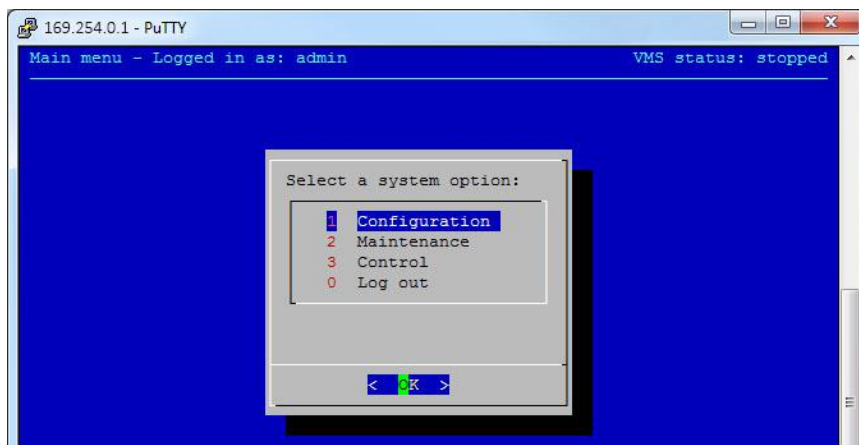
**NOTE** The IP address for the voice mail is assigned in chassis programming 10-55-xx. This setting may be different for your switch. Refer to the switch documentation for details.

The default address is set to 172.16.1.xxx, where .xxx is the slot where the CD-VM00 is installed. (Slot 1 is .100, slot 2 is .101, slot 5 is .104, and so on.)

- 4 On the **PuTTY** command prompt window, type the User name *admin* and press **Enter**.



- 5 The **Main menu** screen appears.



- 6 Select the appropriate maintenance task and configure the items as needed.

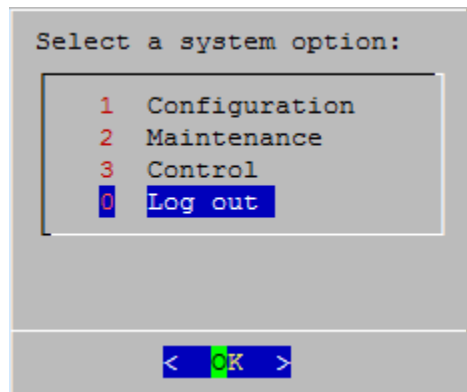
## Using PuTTY from WinSCP

### To use PuTTY from WINSCP:

- 1 In **WinSCP**, click **Commands** > **Open in PuTTY**.
- 2 When the first connection is made, the PuTTY security alert appears. Click **Yes**. The alert does not appear in the subsequent connections.
- 3 When the PuTTY window appears with a password prompt, type in the admin password *voicemail*.
- 4 When the connection is established, the **Maintenance** menu appears. To use PuTTY without WinSCP, refer to *PuTTY* section.

## Logging Out of the Maintenance Menu and PuTTY

To log out of the Maintenance Menu, click **Log out**, and then click **OK** or press **ENTER**.

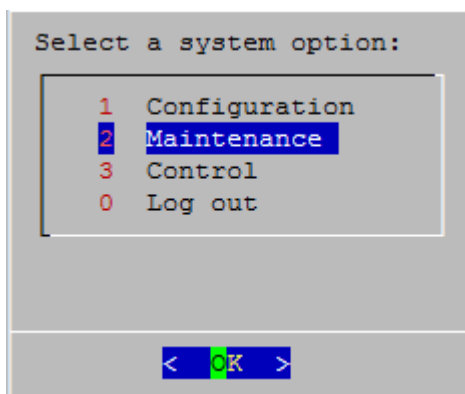


## Changing the UM8000 Administrator Password

Use this procedure to change the administrator password. The procedure assumes that you are logged on as admin or have permissions to change the admin password.

To change Administrator Password using the Maintenance Menu:

- 1 Log on the Maintenance Menu using PuTTY.
- 2 On the Maintenance Menu, select **Maintenance**, and then click **OK** or press **ENTER**.



- 3 On the next screen, select **Set admin password**, and then click **OK** or press **ENTER**.
- 4 On the **Set Password** window, type the new password, and then click **OK** or press **ENTER**.
- 5 When prompted, retype the new password. A message appears stating that the password has been changed.
- 6 Click **OK** or press **ENTER** to return to the **Maintenance** menu.

# Single Point of Entry

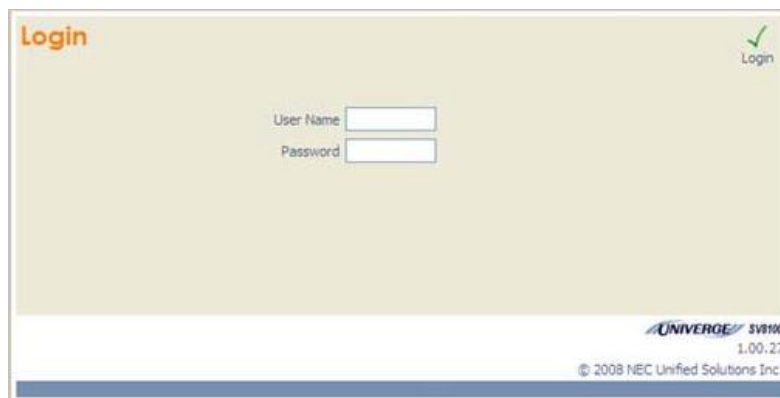
When connected to the SV8100 using WebPro or PCPro you can connect directly to the UM8000 Web Administration Console. The SV8100 knows if the UM8000 is installed and running and also knows the IP address assigned to it. Other than normal system programming for the UM8000, no configuration changes are required.

The instructions below show how to connect to the UM8000 from WebPro or PCPro after you have connected to the SV8100 system. The UM8000 must be connected to the same LAN as the SV8100 CPU.

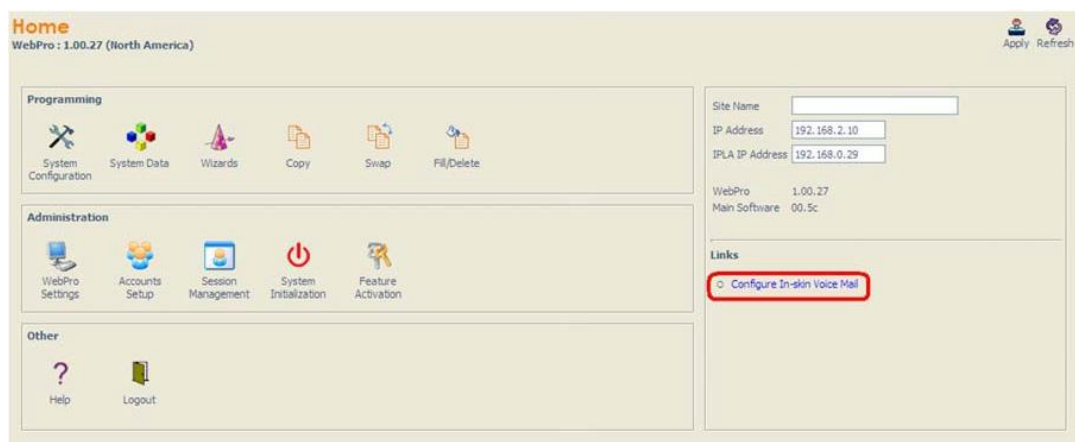
## WebPro

### To Use WebPro:

- 1 Log in to the SV8100 with user name tech and password 12345678.

The image shows the WebPro login interface. It has a light beige background. At the top left, the word "Login" is written in orange. In the center, there are two input fields: "User Name" and "Password". To the right of these fields is a green checkmark icon and the word "Login". At the bottom right, there is a logo for "UNIVERGE SV8100" and the text "1.00.27" and "© 2008 NEC Unified Solutions Inc.".

- 2 Once logged in, the main screen has a link to the "In-Skin Voice Mail", if the UM8000 is installed and working.

The image shows the WebPro Home screen. At the top left, it says "Home" and "WebPro : 1.00.27 (North America)". At the top right, there are icons for "Apply" and "Refresh". The main area is divided into three sections: "Programming", "Administration", and "Other". The "Programming" section contains icons for "System Configuration", "System Data", "Wizards", "Copy", "Swap", and "Fill/Delete". The "Administration" section contains icons for "WebPro Settings", "Accounts Setup", "Session Management", "System Initialization", and "Feature Activation". The "Other" section contains icons for "Help" and "Logout". On the right side, there is a "Site Name" field and fields for "IP Address", "IPLA IP Address", "WebPro", and "Main Software". Below these fields is a "Links" section with a link labeled "Configure In-skin Voice Mail" which is highlighted with a red rectangle.

- 3 WebPro automatically launches your default web browser and connects to the UM8000.
- 4 When prompted, accept the web browser security warning.
- 5 You are now logged into the Web Administration Console.

## PCPro

### To Use PCPro:

- 1 Start PCPro and login with user name tech and password 12345678.



Figure 8. PCPro Login

- 2 Open the site database. If the database is not available, connect to the SV8100 and download the database before continuing.
- 3 While connected to the SV8100, choose **Links/In Skin Voice Mail Server**.
- 4 PCPro automatically launches the default web browser and connects to the UM8000.
- 5 When prompted, accept the web browser security warning.
- 6 You are now logged into the Web Administration Console.

# Configuring UM8000

After the UM8000 blade is installed, the next step is to configure the voice messaging system and the SV8100/SV8300 phone system to communicate with each other.

**NOTE** The configuration the messaging system can be done after you run the first sign-in steps. If this is your first time signing in to the UM8000 messaging system, read the [Start the UM8000 Messaging System for the First Time](#) section first.

## Configure the Voice Messaging System

Configuring the voice messaging system is managed using two tools: the Maintenance Menu and the Web administration console. The Maintenance Menu is a graphical user interface that minimizes the need to enter lengthy commands at the command line prompt.

- **Maintenance Menu.** Use the Maintenance menu to specify network DNS configuration settings, change the administrator password, and for general tone detection.
- **Web Administration Console.** Use the Web administration console to set hospitality (Property management system - PMS) settings, e-mail integration settings, add/remove language packs, extension remapping, trunk remapping, update licensing information, specify switch integration information, and much more. Refer to the System Management Help for details about other functionality available in the Web administration console.

## Before Shipping the Voice Messaging System

Resellers who are assembling voice messaging systems for delivery to customers must reset the third-party licensing agreements. This enables the customers to accept the licensing for third-party software that is installed with the voice messaging system.

**CAUTION** Law requires that end-users accept the End User License Agreement for software installed on their systems.

## Resetting Third-Party Licensing Agreements

To reset the third-party licensing agreements:

- 1 Start **PuTTY**.
- 2 Log on as admin.
- 3 Type the password *voicemail*, and then press **Enter**. The Main menu appears.

- 4 Choose **2-Maintenance**, then press **Enter**. The Maintenance menu appears.
- 5 Choose **3-Command** prompt, then press **Enter**.
- 6 Type `sudo /opt/vmail/bin/prepare_system`, then press **Enter**.

The first time the client starts the Web Administration Console, the licensing agreements are displayed.

## Defaulting the UM8000 Database

To default the database:

- 1 Start PuTTY and connect to the UM8000 IP Address set in Program 10-55-01. The login prompt appears.

**NOTE** This setting may be different for your switch. See the switch documentation for details.

- 2 Type `admin`, then press **Enter**.
- 3 Type the password `voicemail`, then press **Enter**. The Main menu appears.
- 4 Choose **2 Maintenance**. The Maintenance menu appears.
- 5 Choose **3 Restore default database**.
- 6 If the voice mail application is running you will be prompted to stop it.
- 7 Choose Yes to stop the voice mail application. When finished the system will prompt you to exit and restart the voice mail application.
- 8 Choose **0 Return to previous menu**. The Main menu appears.
- 9 Choose **3 Control**. The Server Control menu appears.
- 10 Choose **1 Start Voice mail server**.
- 11 Choose **0 Return to previous menu**. The Main menu appears.
- 12 Choose **0 Log out** to log out of maintenance menu.

# Setting Up the UM8000 Software

After installing and connecting to the UM8000 blade, configure the voice blade and voice messaging software features.

## Configuring Network Setup

The following network information is required to configure the network setup.

Host name or IP address	_____
Domain name	_____
Primary DNS IP Address	_____
Secondary DNS IP Address	_____

## TCP/IP

Minimum required to provide access to Web administration console and Maintenance menu (PuTTY).

IP address	_____
Subnet mask	_____
Default gateway	_____

Use the following procedure to specify the network setup.

## Specifying the Network Setup

The IP address for the voice mail is assigned in chassis programming 10-55-xx.

**NOTE** This setting may be different for your switch. Refer to the switch documentation for details.

The default address is set to 172.16.1.xxx, where .xxx varies depending on the slot where the CD-VM00 is installed. Starting with slot 1, slot 1 is 100, slot 2 is 101, slot 5 is 104, and so on.

The DNS server IP Address, Host Name and Domain Name are all that can be configured from the **Maintenance** menu.

### To specify the setup:

- 1 Start PuTTY. The login prompt appears.
- 2 Type *admin*, then press **Enter**.
- 3 Type the password *voicemail*, then press **Enter**. The Main menu appears.

- 4 Choose 1 Configuration, then click **OK**. The **Configuration** page appears.
- 5 Choose 1 Network setup, then click **OK**. The **Network setting** page appears.
- 6 Choose 1 Host name, then click **OK**. The **Host name** page appears.
- 7 Type the Host name, then click **OK**. The **Network setting** page reappears.
- 8 Choose 2 Domain name, then click **OK**. The **Domain name** page appears.
- 9 Type the Domain name, then click **OK**. The **Network setting** page reappears.
- 10 Choose 3 Primary DNS, then click **OK**. The **Primary DNS** page appears.
- 11 Type the DNS server IP address, then click **OK**. The **Network setting** page reappears.
- 12 Choose 4 Secondary DNS, then click **OK**. The **Secondary DNS** page appears.
- 13 Type the DNS server IP address, then click **OK**. The **Network setting** page reappears.

## Setting Up UM8000 Date and Time

The UM8000 Mail automatically synchronizes its time and time zone with the phone system time on boot up. Manual adjustments on the voice mail are not needed or available.

**NOTE** The UM8000 will honor all issued date, time, and time zone updates. As such, if the application does not adhere to the schedule as expected, verify the system's schedule and time, as well as the switch's time.

If you experience any issues with the system's time zone changes during run-time, restarting or rebooting the UM8000 may resolve the issues.

## Changing Administrator Password

To change admin password, use the following procedure:

- 1 Start **PuTTY**.
- 2 Log in as admin **Enter**.
- 3 On the Main menu, choose 2-Maintenance, then press **Enter**. The **Maintenance** page appears.
- 4 On the Maintenance menu, choose 2-Set admin password, then press **Enter**. The **Set admin password** page appears.
- 5 Type the new password, then press **Enter**.
- 6 Retype the new password, and then press **Enter**. An alert message appears stating that the password has been changed.
- 7 Click **OK** or press **Enter** to return to the **Maintenance** menu.
- 8 On the **Maintenance** menu, choose 0-Return to previous menu, then press **Enter** to return to the Main menu.

## Creating a New User with System Manager Permissions

To create a new user for the voice messaging system:

- 1 Start the Web Administration Console.
- 2 Go to **Subscribers > Subscribers > Profile**. The subscriber profile page appears.
- 3 Click the **Add** icon in the task bar to create a new subscriber. The **Add Subscriber** page appears.
- 4 Make sure that the **New subscriber** radio button is checked.
- 5 Type the new subscriber information, then click **Add**.
- 6 When the **Add subscriber** page resets, close the **Add Subscriber** page.
- 7 On the **Subscriber profile** page, choose **System Manager** from the **Enable subscriber as system manager** dropdown list.
- 8 Click the **Save** icon in the task bar.
- 9 The new subscriber now has system manager permissions.

# Configuring Presence

Presence allows users to record greetings that are specific to their status, so the callers can hear meaningful information about the subscriber availability. There are two types of presence engines available in UM8000 as follows:

- NEC UC Desktop Suite
- Internal UM8000 engine

## NEC UC Desktop Suite

**NOTE** NEC UC Desktop Suite is sold separately and is only available for integrations using an SV8100.

NEC UC Desktop Suite delivers various Unified Communications capabilities such as call and presence management, to the user desktop. When integrated with UM8000, the subscriber greetings are automatically activated based on the UC Desktop presence, and users can use the TUI, Web Mailbox Manager (WMM), or Mobile Web Mailbox Manager (MWMM) to set their UM8000 and UC Desktop presence.

## Internal UM8000 Presence

The internal UM8000 presence engine allows administrators to define the available subscriber presence greetings, and allows the users to select the appropriate presence greeting from either the TUI, WMM, or MWMM.

## Configuring Presence

To configure internal presence settings:

- 1 In the Web Administration Console, navigate to **System -> Configuration > Presence Greetings**.
- 2 Select *Internal* from the **Presence Integration** drop down.
- 3 Using the **Default** drop down under **Presence Greetings**, select the greeting that will be used for the default greeting.
- 4 Associate the desired greeting in the **Presence** column with the TUI DTMF tone in the **Greeting** column.
- 5 Check any the boxes under **Presence integration options** to allow users to override Alternate greetings and Busy greetings.

**NOTE** The Internal presence engine does not support allowing users to set a date and time for a greeting to expire.

- 6 Click the **Save** icon.

## To configure UC Desktop suite presence settings:

- 1 In the Web Administration Console, go to **System > Configuration > Presence Greetings**.
- 2 From the **Presence Integration** dropdown list, choose **UC Desktop Suite** from.
- 3 From the **Default** dropdown list under **Presence Greetings**, choose the greeting that will be used for the default greeting.
- 4 Associate the desired greeting in the **Presence** column with the TUI DTMF tone in the **Greeting** column.
- 5 Check any boxes under the **Presence integration** options to allow users to override Alternate greetings and Busy greetings or to allow users to set greeting expiration dates and times.
- 6 Click the **Save** icon.

## To define the default presence setting:

- 1 Go to **Subscribers > Subscriber Template > Profile**.
- 2 Choose the default presence engine in the **Presence Integration** dropdown list.
- 3 Click the **Save** icon.

## To set an individual user's presence engine:

- 1 Go to **Subscribers > Subscribers > Profile**.
- 2 Search for the user name by clicking the **Search** icon.
- 3 Set the desired presence engine in the **Presence Integration** field.
- 4 Click the **Save** icon.

# Setting Up Visual Messaging Integration

Visual Messaging is a suite of applications that combines features of the voice messaging software, the telephone system, and a LAN. The Visual Messaging suite consists of ViewMail® and ViewMail for Microsoft® Messaging. Visual Messaging subscribers can use their desktop workstations to access and manage voice messages. To install and set up a Visual Messaging application, perform the following setup steps.

Both the voice server and individual workstations must be set up for Visual Messaging to work. This chapter explains how to configure the voice messaging system. The next chapter explains how to configure workstations.

**NOTE** All Visual Messaging Client installation files are located on the NTAC download site.

## Setup Steps

- 1 Install the voice mail in phone system.
- 2 Connect the voice mail computer to the LAN.  
See [Connecting the Voice Messaging Computer to a LAN](#) section.
- 3 Install and set up the application on the workstations.  
See the [Setting Up Visual Messaging Integration](#) section.

## Visual Messaging Hardware and Software Requirements

Refer to your operating system's documentation for minimum system requirements.

Table 24. View App Client Support Table

View App Client	Supported Operating System	Supported Client Versions	Additional Information
View Mail for Microsoft Messaging (VMM)	Windows 7 (32/64-bit) Windows 8.1 Windows 10	Outlook 2007 Outlook 2010 Outlook 2013 Outlook 2016	N/A
View Mail	Windows 7 (32/64-bit) Windows 8.1 Windows 10	N/A	N/A
View Call Plus	Windows 7 (32/64-bit) Windows 8.1 Windows 10	N/A	Supported PIMs Outlook 2007 or higher

View Fax	Windows 7 (32/64-bit) Windows 8.1 Windows 10	Outlook 2007 Outlook 2010 Outlook 2013 Outlook 2016	N/A
View Mail for Lotus Notes (VML)	Windows 7 (32/64-bit) Windows 8.1 Windows 10	Lotus Domino™ 6.0, 6.5, 7.0, 8.0, 8.5, and 9.0.1 Fix Pack 4	Supported Servers: Lotus Domino 6.0 or higher
View Mail for GroupWise (VMG)	Windows 7 (32/64-bit) Windows 8.1 Windows 10	GroupWise™ 6.5, 7.0, or 8.0.	Supported Servers: GroupWise 6.5 or higher

## Connecting the Voice Messaging Computer to a LAN

Perform the following procedures to test the LAN connection to which the voice server is to be connected and to connect the voice server to the LAN. Consult the LAN administrator for more information on testing the LAN connection. This procedure assumes you have already set up the voice messaging computer for networking.

Visual Messaging uses TCP port 1024. You need to know the TCP port to allow access through a firewall.

### To test the LAN connection:

- 1 Use a network analyzer or a workstation that you know works properly with the network.
- 2 Connect the unit to the LAN hookup with the network cable that the voice messaging computer uses.
- 3 Confirm that the network analyzer or workstation can communicate with the network through the connection.
- 4 After a successful test, disconnect the network cable from the analyzer or workstation.

### To connect the voice mail to a LAN:

- 1 Connect the network cable to the network port on the voice mail unit.

# Setting Up Visual Messaging Workstations

This chapter provides instructions for installing and setting up Visual Messaging software on desktop workstations.

## Workstation Requirements

- One of the following operating systems:
  - Microsoft Windows 7 (32 or 64-bit)
  - Microsoft Windows 8.1
  - Microsoft Windows 10
- 10 MB of free hard disk space

## Set up Steps

- 1 Set up the TCP/IP network protocol on the Visual Messaging workstations. Refer to the [Setting Up the TCP/IP Network Protocol](#) section.
- 2 Install and set up Visual Messaging on the workstations.

## Setting Up the TCP/IP Network Protocol

You must set up the protocol in any Visual Messaging application installed at a workstation. Visual Messaging workstations use TCP/IP as the communications protocol. Workstations on a LAN typically have:

- Microsoft client
- NIC drivers (software that runs the NIC)
- TCP/IP network protocols

The LAN administrator is usually responsible for LAN-related maintenance.

The following sections describe how to install and set up the TCP/IP drivers, and how to use the Visual Messaging applications remotely with wide area networks (WANs) and the internet.

To use Visual Messaging applications remotely (with TCP/IP), refer to the [To connecting remotely to the messaging system](#) section.

To set up TCP/IP on the workstation, follow the vendor instructions included with your stack, and consult the examples in the following sections.

The following sections provide instructions for setting up TCP/IP on Visual Messaging workstations. Choose the appropriate workstation operating system:

- Windows 7 in the [Setting Up TCP/IP for Windows 7, 8.1, and 10](#) section.

## Setting Up TCP/IP for Windows 7, 8.1, and 10

TCP/IP networking is installed by default when Windows 7, 8.1, or 10 is installed. However, if you wish to check to ensure that it is installed and working properly, see the [Testing the TCP/IP Setup](#) section.

## Testing the TCP/IP Setup

Use the PING software included with your TCP/IP stack to confirm that the workstation can exchange data with the voice messaging system.

**NOTE** Remember when working at a Linux command prompt that Linux is case sensitive.

## Testing TCP/IP Using the PING Utility

- 1 On the workstation, open an MS-DOS command prompt window.
- 2 Enter `ping <IP address of the voice messaging system>`, then press **Enter**.

### If set up properly:

If you see a PING software reply message containing bytes received, the TCP/IP software is set up properly.

### If set up improperly:

If the TCP/IP software is not set up properly, you get a message saying that the IP address could not be reached. There are several possible reasons for this:

- The workstation is not set up correctly. Repeat the setup procedure.
- The voice messaging system is not set up correctly. Confirm that the TCP/IP software is properly installed on the voice messaging computer.
- There is a problem with the network. Contact your LAN administrator.
- The cables may not be attached correctly and securely. Check that the cables are securely attached to the correct devices.
- You may not have restarted the computer. Close all files, shut down all applications, and restart the computer.

## Using Visual Messaging Applications with WANs and the Internet

Visual Messaging clients or workstations can use TCP/IP to run Visual Messaging applications over the Internet or a wide area network (WAN). The following conditions are required to establish a TCP/IP connection between a remote workstation and the voice messaging system:

- The remote workstation is connected to the voice messaging system through a WAN, dial-up Internet service, or dedicated Internet connection.
- The LAN administrator has configured the network to enable remote connections.

After these conditions are met, the remote workstation can access the voice messaging system.

### To connecting remotely to the messaging system:

- 1 From the remote workstation, connect to the WAN or ISP using TCP/IP as the network protocol.
- 2 After the connection between the workstation and host is established, open the desired Visual Messaging application.

# E-mail Integration

This chapter explains how to set up e-mail integration for the voice messaging system, and how to set up e-mail features for subscribers.

Subscribers can use text-to-speech technology to listen to e-mail messages by phone. E-mail message counts can be included in new message counts. All voice messages and faxes can be forwarded to e-mail inboxes.

The e-mail integration provides 24-hour access to e-mail from any touchtone phone. Standard protocols are used to access, read, and send e-mail messages on the voice messaging system. The protocols for integration include IMAP and MIME.

**NOTE** The e-mail server must support the SMTP protocol for outgoing e-mail features to work properly.

## Protocols

### E-mail Protocols

The following standard e-mail protocols ensure the successful transmission of e-mail messages:

- **IMAP.** Internet Message Access Protocol (IMAP) provides the voice messaging system access to e-mail inboxes.

The voice messaging system uses IMAP to obtain e-mail message headers and body information from a variety of e-mail servers. This information is delivered to the text-to-speech engine to convert the text to audio format for playback.

**NOTE** Text-to-Speech does not support HTML encoded messages. If HTML tags are heard during message playback, the message is skipped. HTML messages must be encoded using multipart MIME for text-to-speech to work properly.

- **MIME.** Multipurpose Internet Mail Extensions (MIME) provides the voice messaging system the capability to read e-mail message header and body information.

Multipart MIME messages enable the e-mail system to send enhanced versions of the message for messaging clients such as Lotus® Notes and Microsoft Outlook. Multipart MIME messages contain plain text messages that can be read to subscribers over the phone.

- **POP3.** Post Office Protocol and Authenticated Post Office Protocol. POP3 is a standard internet protocol used for retrieving Internet e-mail and is used by the e-mail client to communicate with SMTP mail servers. With POP3 the user name and password are sent across the network in clear text. With APOP, the password is encrypted before being transmitted over the network to the SMTP mail server.

- **SMTP.** Simple Mail Transport Protocol (SMTP) allows the voice messaging system to send outgoing e-mail messages. The system forwards voice mail and faxes to the e-mail system, receives e-mail notification of new fax/voice mail, and uses voice mail features to reply to e-mail messages. SMTP can be configured to restrict the type of messages sent such as only allowing SMTP mail to be sent to other users on the same domain.

## Subscriber E-mail Authentication Protocols

- **PLAIN.** A simple clear text password mechanism. The mechanism uses a user name and password to authenticate users.
- **NTLM.** A challenge-response authentication protocol. The server authenticates the client by sending an 8-byte random number, the challenge. The client performs an operation involving the challenge and a secret shared between client and server, e.g. a password. The client returns the 24-byte result of the computation. In fact, in NTLMv1 two computations are made using two different shared secrets and two 24-byte results are returned. The server verifies that the client has computed the correct result, and from this infers possession of the secret, and hence the identity of the client.
- **LOGIN.** The LOGIN mechanism is a non-standard mechanism, and is similar to the PLAIN mechanism except that LOGIN lacks the support for authorization identities.

## E-mail Integration Setup

The following steps are required to set up the e-mail integration.

### To setup for e-mail integration:

- 1 Configure the voice messaging system server.
- 2 Set up the information for the outgoing e-mail server connected to the voice messaging system.
- 3 Configure the e-mail server.

**WARNING** The e-mail server must be configured to properly integrate with the voice messaging system. Refer to the appropriate e-mail server documentation.

- 4 Set up subscribers.
- 5 After the e-mail server and the voice messaging system are configured, configure subscriber mailboxes to access e-mail. See NECNTAC Knowledge Base article 5451 for further information in troubleshooting steps.

## Configuring the E-mail Servers

The e-mail server must have SMTP, POP3 and IMAP enabled to use the e-mail integration.

To enable SMTP and IMAP refer to the e-mail server documentation or consult the system administrator about which settings are appropriate for the organization.

**WARNING** The e-mail server must be configured.

## Setting Up the E-mail Server Configuration

The following configurations must be set for the e-mail server.

Table 25. E-mail Servers and Protocols Configuration

E-mail Server	Required Protocols
Microsoft Exchange	IMAP, MIME, PLAIN, and LOGIN for outgoing messages
Lotus Notes Domino	IMAP, PLAIN, and LOGIN for outgoing messages
GroupWise	IMAP4, PLAIN, and LOGIN for outgoing messages, SMTP Relay - Allow message relaying

## Converting Existing Domino E-mail Files for Users

Set an Internet password for all existing users before converting any existing e-mail files. Use the following procedure to convert user e-mail files.

## Converting Existing E-mail Files

To convert exiting e-mail files:

- 1 Log on to the Domino e-mail server as root user.
- 2 On the Windows taskbar, to go **Start > Programs > Lotus Application > Lotus Domino Administration**.
- 3 Enter the Domino password. The **Domino Administrator** console appears.
- 4 Click **Console** to open the Domino server command prompt.
- 5 On the command prompt, use one of the following set of commands to convert existing e-mail:

- To convert a single user, enter the following commands:

```
tell router quit
load convert -e mail\<mailfilename>.nsf
load convert -h mail\<mailfilename>.nsf
load router
```

Where <mailfilename> is the name of the user, follow these steps for each user to be converted.

- To convert all users in a directory, enter the following commands:

```
tell router quit
load convert -e mail\*.nsf
load convert -h mail\*.nsf
load router
```

- 6 Close the Domino Administrator.
- 7 Log off the Domino server. The Domino server is now configured for the e-mail integration.

# Configuring the Voice Messaging System for E-mail Integration

The e-mail server must be configured and connected to the voice messaging system before subscribers can use the e-mail integration.

The following e-mail server information is required to establish communications with the voice messaging system server:

- The IP address or exact name of the SMTP server.
- The SMTP port number.

## Configuring the Voice Messaging System for E-mail Forwarding Integration

**NOTE** For SMTP forwarding to work, you will need to select Forward Voice Mail to E-mail under **Subscriber > Access Options** and also define the subscriber e-mail address under **Subscribers > E-Mail**.

To configure the messaging system for e-mail forwarding:

- 1 Start the Web administration console.
- 2 Under System, click **Configuration > E-mail Settings**.
- 3 In the **Outgoing e-mail server** field, enter the IP address of the outgoing e-mail server.  
If the system is set up to recognize server names, enter the server name instead of the IP address.
- 4 In the **Port** field, enter the SMTP port for the e-mail server. The default port is 25.  
If the Secure Sockets Layer (SSL) protocol is used, click the SSL check box.
- 5 In the **Authentication** field, select the authentication protocol used by the e-mail server.
- 6 Enter the user name and password.
- 7 In the **Global e-mail** field, enter the common e-mail address used for all outgoing e-mail.
- 8 In the **Display** name field, enter the common display name used for all outgoing e-mail.
- 9 Click the **Save** icon in the task bar. The voice messaging system e-mail configuration is complete.

**NOTE** Refer to NECNTAC Knowledge Base article 5451 for further information on troubleshooting.

# Configuring the Voice Messaging System for Text-to-Speech Integration

The following instructions assume that the UM8000 is licensed for at least one TTS port and the e-mail server is configured to support IMAP integration. For information on configuring the e-mail server for IMAP integration refer to the manufacturer's documentation for that application.

## To configure the messaging system for TTS:

- 1 Start the Web administration console.
- 2 Go to **Subscriber > Subscriber > E-mail**.
- 3 Under **E-mail reader (text to speech)**, choose the appropriate server type:
  - **IMAP** for e-mail servers supporting IMAP integration, this is the preferred setting.
  - **POP3** for e-mail servers requiring a POP3 login. Note this system does not support integration to POP3 accounts such as Gmail. The POP3 protocol consists of many features including login (the login is supported by the UM8000).
- 4 Under **Authentication Method**, choose the authentication method required by the e-mail server, **Plain Text** or **NTLM**.
- 5 Under **Server Name**, enter either the server IP Address or if a DNS server is available enter the server name.
- 6 Under **User Name**, enter the login name for the e-mail account to be accessed.
- 7 Under **Port**, enter the port number required by the e-mail server. The industry standard port is 143.
- 8 If SSL authentication is required by the e-mail server, check the **SSL** box.
- 9 Click the **Save** icon in the task bar.
- 10 Go to **Subscriber > Subscriber > Access Options**.
- 11 Under **E-mail**, check the **Access e-mail messages from the messaging system** box.
- 12 If desired, the voicemail can also include the number of new e-mails in the new message count. To do this, check the **Count e-mail messages in message totals** box.

### NOTES

1. The system requires a mailbox user to enter an e-mail account password the first time they log into their mailbox. This is in addition to their normal mailbox security code if enabled.
2. The voice e-mail guides the user through entering the e-mail account password when logging into their mailbox. This e-mail account password is stored until the voice mail is rebooted. The user is required to enter this e-mail account password again. If desired, the system can be configured so the user must enter the e-mail account password every time they log into their mailbox (refer to Step 13). This setting is not recommended.

- 13 Under **E-mail**, check the **Ask for e-mail password** box. This prompts the user to enter their e-mail account password every time they log into their mailbox.

**NOTE** If the e-mail server name is entered instead of an IP Address, the following settings allow the voicemail to differentiate between the e-mail server IP Address and the server name. To do this, the local LAN administrator must supply, at a minimum, the Primary DNS Server IP Address. Some sites may have a Primary and Secondary DNS server. If so, both are used.

The voice mail should be rebooted after configuring the DNS server IP Addresses.

- 14 Start **Putty** and connect to **UM8000**.
- 15 At login prompt, enter user name *admin* and password voicemail.
- 16 Choose **1 – Configuration**.
- 17 Choose **1 – Network Setup**.
- 18 Choose **3 – Primary DNS**.
- 19 Enter the Primary DNS Server IP Address and select **OK**.
- 20 Choose **4 – Secondary DNS**.
- 21 Enter the Secondary DNS Server IP Address and select **OK**.
- 22 Choose **0 – Return to Previous Menu**.
- 23 Again choose **0 – Return to Previous Menu**.
- 24 Choose **3 – Control**.
- 25 Choose **2 – Restart messaging system server**. The voice mail application shuts down and reboots the board.

## Configuring the E-mail Notification Template

To configure the messaging system for e-mail notification template:

- 1 Start the Web administration console.
- 2 Under System, click **Configuration > E-mail message template**. The e-mail message template page appears.
- 3 The default language is automatically selected in the Language field. Select a different language from the dropdown list.
- 4 Construct the notification template as needed. The tags below can be used to insert information that the voice mail system dynamically determines for each message.

<i>[senderName]</i>	<i>Sender's name</i>
<i>[senderPhone]</i>	<i>Sender's phone</i>
<i>[senderAccount]</i>	<i>Sender's account (only available if configured in subscriber transfer/ screening options)</i>
<i>[messageTimestamp]</i>	<i>Message received timestamp on the messaging system</i>
<i>[messageDuration]</i>	<i>Message length in seconds</i>
<i>[messageSize]</i>	<i>Message size in kilobytes</i>

<i>[messageFlag]</i>	<i>Message Special flags.</i> <i>Available message flags: PRIVATE and URGENT</i>
<i>[voicemailURL]</i>	<i>URL of the messaging system</i>
<i>[subscriberName]</i>	<i>Subscriber's name</i>
<i>[subscriberExtension]</i>	<i>Subscriber's extension</i>
<i>[notificationType]</i>	<i>Message notification type</i> <i>Available notification types: voice, fax, message copy, forwarded voice, forwarded fax, forwarded fax with voice, reply fax, reply voice and IM</i>

- 5 Click the **Save** icon in the task bar.
- 6 Click **Preview**. The voice messaging system e-mail configuration is complete.

## Setting Up Subscriber Mailboxes

After configuring the voice messaging system server and the e-mail server for e-mail integration, set up subscribers to access e-mail messages using the phone.

## Setting Up the Default Subscriber Template

Configure the subscriber template for access to e-mail. The subscriber template is used to pre-configure new subscriber settings. Any existing subscribers must be configured individually.

### To set up the default subscriber template:

- 1 Start the voice messaging system.
- 2 Start the Web administration console.
- 3 Go to **Subscribers > Subscriber Template > E-mail**.
- 4 In the **Server type** field, choose **IMAP** or **POP3**.
- 5 In the **Server name** field, enter the IP address for the voice messaging system.
- 6 In the **Authentication Method** dropdown list, choose **Plaintext** or **NTLM**.
- 7 If appropriate, make sure the **Use SSL** box is checked for SSL authentication.  
When the **Use SSL** box is checked, the port number 993 appears in the field.
- 8 In the **Port** field, enter *143* for IMAP; *110* for POP3; or the appropriate value for the e-mail server.

**NOTE** For the subscriber e-mail integration to work, the subscriber must have the appropriate access options. Access to e-mail messages from voice mail or fax/voice e-mail forwarding or notification. This is for text-to -speech only and has nothing to do with SMTP forwarding.

- 9 Click the **Save** icon in the task bar.

## Setting Subscriber E-mail Options:

Use the following procedure to change individual subscriber e-mail settings.

### To set subscriber e-mail access options:

- 1 Start the Web administration console.
- 2 Go to **Subscribers > Subscriber > E-Mail**.
- 3 Select a subscriber.
- 4 Use the **Next**, **Previous**, or **Find Subscriber** icons in the task bar to locate a subscriber profile. The subscriber profile is displayed.
- 5 Click **E-mail**. The subscriber's e-mail settings appear on the page.
- 6 In the **E-mail address** field, enter the subscriber's full e-mail address.

*For example: name@company.com*

**NOTE** Up to five e-mail addresses can be entered; separated by a space, semi-colon, or comma.

- 7 From the **Server type** dropdown list, choose **POP3** or **IMAP**.
- 8 In the **Authentication Method** dropdown list, choose **Plaintext** or **NTLM**.
- 9 In the **Server name** field, enter the server IP address or server name.
- 10 In the **User name** field, enter the subscriber system ID used to attempt authentication with the e-mail server.
- 11 If appropriate, make sure the **Use SSL** box is checked for SSL authentication.  
When the **Use SSL** check box is checked, the port number 993 appears in the field.
- 12 In the Port field, enter *143* for IMAP; *110* for POP3; or the appropriate value for the e-mail server.

**NOTE** For subscriber e-mail integration to work, the subscriber must have appropriate access options. Access to e-mail messages from voice mail or fax/voice e-mail forwarding or notification.

- 13 If the e-mail system uses authentication, check the **Use authentication** box, then choose the authentication type from the dropdown list.
- 14 Click the **Save** icon in the task bar.
- 15 Repeat this procedure for each existing subscriber. Use the **Next**, **Previous**, or **Find Subscriber** icons in the task bar to display the subscriber profile.

# Backing up and Restoring UM8000

## Backing Up the Voice Messaging Data

The voice messaging database can regularly be backed up using the backup and restore utilities. The backup and restore utilities are installed on the voice messaging server.

The backup and restore utilities are run from the Web Administration Console (WAC). The WAC provides a GUI driven user interface that replaces the need to enter Linux commands in a shell.

There are two types of backups:

- **Daily.** The utility backs up the selected components every morning at 2:00 a.m. The database can be saved on the voice mail or on a shared Windows network drive.
- **Manual.** The utility backs up the selected components immediately to either the voice mail drive or a shared Windows network drive.

## Backing Up and Restoring UM8000 Mail Database

Backups can be done manually or daily. They are saved with the entered file name in zip format. You can choose to save the backup on the voice mail hard drive, a USB drive or a Windows shared folder.

**CAUTION** If a USB memory stick drive will be used for backup storage, connect it before starting the backup.

Backups to the hard drive are stored on the voice mail and can be downloaded. Backups to a USB drive are stored on the USB drive. Backups to a Windows Shared Folder are not stored on the voice mail.

## Backing Up the UM8000

To back up manually:

- 1 Log into the Web Administration Console.
- 2 Go to **System > Backup and Restore > Backup**.
- 3 Under **Manual backup**, check the **Include messages in backup** box if the messages should be included in the backup.
- 4 From the **Backup Destination** dropdown list, choose the drive.
  - Choose **Hard Drive** if backing up to the Hard Drive on the support PC.
  - Choose the USB drive name if backing up to a USB drive. The drive shows up as an option with the name of the drive manufacturer. For example, it may be shown as PNY.

- Choose **Windows Shared Folder** if backing up to a Windows shared drive. If choosing a Windows Shared Folder, you will need to know the path to the share (Example: //myComputer/shareName) and the log in information (domain, user name, and password).
- 5 Enter the file name to be used for this backup.
  - 6 Enter any comments needed for this backup.
  - 7 Click the **backup now** icon.
  - 8 The time it takes for the backing up the database is determined by the size of the system and number of messages that must be saved.

## To enable daily backup:

**NOTE** It is recommended that a USB drive NOT be used for daily backup.

- 1 Log into the Web Administration Console.
- 2 Go to **System > Backup and Restore > Backup**.
- 3 If the messages should be included in the backup check the box, Include messages in backup.
- 4 From the **Backup Destination** dropdown list, choose the drive.
  - Choose **Hard Drive** if backing up to the Hard Drive on the support PC.
  - Choose the USB drive name if backing up to a USB drive. The drive shows up as an option with the name of the drive manufacturer. For example, it may be shown as PNY.
  - Choose **Windows Shared Folder** if backing up to a Windows shared drive. If choosing a Windows Shared Folder, you will need to know the path to the share (Example: //myComputer/shareName) and the log in information (domain, user name, and password).

**NOTE** Also make sure that DNS is defined under Configuration > Network in the maintenance menu.

- 5 If any changes were made, click the **Save** icon in the task bar.

## To download a backup stored on the Voice Mail Drive:

- 1 Log into the Web Administration Console.
- 2 Go to **System > Backup and Restore > Restore**.
- 3 From the **Action** dropdown list, choose **Download**.
- 4 If prompted by the Internet browser, choose to allow the download.
- 5 Choose to **Save** the backup zip file.
- 6 Browse to the location where the file is to be downloaded on the support PC.
- 7 Click **Save**.

## Restoring a Database Backup to the UM8000

### To upload a stored backup to the voice mail drive:

- 1 To upload a stored backup to the voice mail drive, perform the following steps:
- 2 Log into the Web Administration Console.
- 3 Go to **System > Backup and Restore > Restore**.
- 4 Under Upload an existing backup to the messaging system, click on **Browse**.
- 5 Browse to the location where file is to be stored on the support PC.
- 6 Click **Upload File**.

### To restore a previous backup:

- 1 Log in to the Web Administration Console.
- 2 Go to **Server Control**.
- 3 If started, choose to stop the server.
- 4 Go to **System > Backup and Restore > Restore**.
- 5 From the **Action** dropdown list, choose **Restore this backup**.
- 6 If the backup has messages, confirm you want the messages restored with the database.
- 7 Go to **Server Control**.
- 8 Choose to start the server.

### To delete a stored database backup:

- 1 Log into the Web Administration Console.
- 2 Go to **System > Backup and Restore > Restore**.
- 3 From the **Action** dropdown list, choose **Delete**.
- 4 Confirm you want to delete the backup file.

### To view notes for a stored database backup:

- 1 Log into the Web Administration Console.
- 2 Go to **System > Backup and Restore > Restore**.
- 3 From the **Action** dropdown list, choose **View backup note**.
- 4 The note shows as a pop up window.
- 5 After reading the note, click **OK** to close the window

# Database Migration

## Migrating from OS/2

### About Migration

UM8000 supports migration from previous products. This chapter describes the steps required to migrate data from OS/2 and Linux based voice messaging systems to the UM8000 Mail.

Migration of most existing data from OS/2 voice messaging system to a new UM8000 system is possible. The data includes the system configuration settings, subscriber accounts, groups, transaction boxes, interview boxes, voice names and greetings, and messages.

**NOTE** Customized prompts cannot be migrated.

On the UM8000 system, verify that the prompt set configuration is identical to the prompt set configuration of the OS/2 based voice mail system. Otherwise, language settings might not migrate properly.

### Backing Up Data Locally

After the backup is complete, compress the files in the proper format to migrate to UM8000. This requires transferring a compression utility to the OS/2 voice messaging system blade.

### Compressing the OS/2 Backup Data

The following procedure uses CoSession to compress the data, but FTP to transfer the compression utility if the OS/2 FTP server is already configured.

#### To compress the OS/2 voice messaging system backup data:

- 1 Using the **CoSession** client, connect to the OS/2 voice messaging system.
- 2 Open a command prompt window on the OS/2 system.
- 3 Change to the E drive. Type `E: Enter`.
- 4 Type `cd\`, then press **OK**.
- 5 Type `mkdir archive Enter`.
- 6 Type `move PKOS2250.EXE \archive Enter`.
- 7 Type `cd archive Enter`.
- 8 Type `PKOS2250.EXE Enter`.

- 9 The program extracts the **PKZIP.EXE** utility to the **E:\archive** directory.
- 10 Type `cd \backup` **Enter**.
- 11 To compress the backup file, type `\archive\pkzip /add /dir=current E:\backup.zip` **Enter**  
Where backup.zip is the name of the compress file.
- 12 This completes the local backup and compression process.

## Transferring Backup Files

After completing a local backup and compressing the backup files, transfer the files from the OS/2 voice messaging system to another computer for temporary storage.

There are two methods for transferring the files:

- **FTP connection.** The UM8000 system is set up for networking.
- **CoSession.** The OS/2 voice messaging system is connected to a remote computer using a direct-connect null modem cable.

## Using FTP to Transfer Files

An FTP connection requires a network connection to a Windows computer. Set up the OS/2 voice messaging FTP server before transferring the files.

### To set Up the OS/2 FTP server:

- 1 Use CoSession to connect to the OS/2 voice messaging system.
- 2 At the OS/2 command prompt, type `c:` **Enter**.
- 3 Type `cd \mptn\etc` **Enter**.
- 4 Open a text editor. Type `e TRUSERS` **Enter**.

**NOTE** The file name must be **TRUSERS** without a file extension.

This command creates a new file, **TRUSERS** and opens the text editor.

- 5 Enter the following lines into the file:  
*user support voice*  
*rd e:\*  
*wr e:\*
- 6 Save the file and exit the text editor.
- 7 Start the **OS/2 FTP** server.
- 8 Type `c:\tcpip\bin\ftpd` **Enter**.

## To transfer the backup file using the FTP server:

- 1 At the Windows computer, open a command prompt window and type `ftp <IP address>` **Enter** ;  
where *<IP address>* is the IP address of the OS/2 voice messaging system.
- 2 When prompted for the user name, type `support` **Enter** .
- 3 When asked for the password, type `voice` **Enter** .
- 4 Type `lcd <directory name> t` **Enter** ;

where *<directory name>* is the destination directory on the Windows computer where the compressed backup file will be stored.

- 5 Type `binary` **Enter** . This sets the file transfer mode to binary.

**NOTE** The file transfer mode must be set to binary or the migration will fail.

- 6 Type `get <filename>` **Enter** ;

where *<filename>* is the name of the compressed backup file, for example `backup.zip`. If the file transfer is successful, you should see the following message: **File send OK.**

**NOTE** File names are case-sensitive when using FTP. If you see the Failed to open file error message, enter `dir` **Enter** to view the correct file name.

- 7 To exit the FTP client, type `quit` **Enter** .

## Migrating the Backup Data

After the OS/2 backup data has been transferred to the UM8000 system, start the migration.

### To migrate the OS/2 data to the UM8000 database:

- 1 Log into the Web Administration Console.
- 2 Go to **System > Backup and Restore > Restore.**
- 3 Use the browse icon to find the database to migrate on the support PC, which can include mapped network drives.
- 4 Choose **upload.**  
After uploading the database, it appears in the local backup list.
- 5 From the dropdown list for the uploaded database, choose **Restore.**
- 6 When prompted, confirm to restore this database.
- 7 When the migration completes, you will receive a message.
- 8 Go to **Server Control.**
- 9 Stop the voice messaging system.
- 10 After the application stops, choose to start the voice messaging system.

## Setting Up OS/2 NetBIOS Backup for Migration

Network protocols must be installed to back up an OS/2 voice messaging system using a NetBIOS over TCP/IP.

A NetBIOS over TCP/IP configuration is required for an OS/2 voice messaging system network backup. Activation or upgrade codes are not required for network backups.

Make sure that the following installation information is available before starting the NetBIOS backup for migration:

Subnet mask	_____
Router Domain name Server name	_____
OS/2 voice messaging system	_____
TCP/IP address	_____

## Configuring NetBIOS over TCP/IP

### To install network protocols for a NetBIOS backup:

- 1 Log on to the OS/2 voice messaging system. The **Banner** page appears.
- 2 Press **ESC** on the **Banner** page and follow the system prompts.
- 3 Start the **OS/2** command prompt.
- 4 On the **OS/2** command prompt, type f: **Enter**.
- 5 Type cd\ **Enter**.
- 6 Type setup **Enter**.
- 7 Type y to proceed with the voice messaging system set up utility.
- 8 On the **Choose Setup Type** menu, type 2 to select **Configure System**, then **Enter**.
- 9 Press **OK** to confirm that the voice messaging system is installed on drive E:.
- 10 Press **OK** to confirm that the voice messaging system is installed in the E:\VMAIL\ directory.
- 11 The **Setup** menu displays the features and options available on the system. Review the available options, then **Enter**. The **Update Configuration** menu appears.
- 12 Click **Configure Network Protocols** (for Network Backup/ Restore) **Enter**.
- 13 Make sure that all other options are cleared, then **Enter**.
- 14 From the **Select Network Protocols to Install/Configure** menu, type 2 (TCP/IP) and 3 (NetBIOS over TCP/IP), then **Enter**.  
The **TCP/IP Setup** menu appears.
- 15 Type 1 **Enter**.

- 16 Type the correct value for the **TCP/IP Address** field, then **Enter**.
- 17 Type 2 **Enter**.
- 18 Type the correct value for the **Subnet Mask** field, then **Enter**.
- 19 Type 3 **Enter**.
- 20 Type the correct value for the **Default Router** field, then **Enter**.
- 21 Type 4 then **Enter**.
- 22 Type the correct value for the **Domain** field, then **Enter**.
- 23 Type 5 then **Enter**.
- 24 Type the correct value for the **Name Server** field, then **Enter**. The **NetBIOS over TCP/IP Setup** menu appears.
- 25 Type 1 then **Enter**.
- 26 In the **Workstation Name** field, enter the Windows logon name of the voice messaging system, then **Enter**.
- 27 Type 2 then **Enter**.
- 28 In the **NT Domain Name** field, enter the Windows domain name of the voice messaging system, then **Enter**.

**NOTE** If there is no Windows domain, type the Windows workgroup name instead.

- 29 Type 3 then **Enter**.
- 30 In the **Workstation Description** field, type the description for the voice messaging system, then **Enter**.
- 31 Review the entries to confirm that they are correct, then **Enter** to continue.  
Setup configures the network protocols according to the information provided.
- 32 When the configuration is complete, the **Setup Complete** menu appears. Press **Enter** to exit the setup utility.
- 33 Shut down the OS/2 voice messaging system blade by moving the **Shutdown Switch** to **UP**.
- 34 After the system has fully shut down, move the **Shutdown Switch** back to **DOWN**, then click the **Reset** button to restart the system.

## Setting Up an OS/2 Voice Messaging System to Log On to a Network

To enable OS/2 voice messaging system to log on to a Windows network with NetBIOS over TCP/IP, perform the following procedure:

### To log on to a Windows Network:

- 1 Add a Windows user ID and password with network access rights.

- 2 Specify the IP address of the network Primary Domain Controller (PDC).
- 3 Log on to the Windows domain or workgroup from an OS/2 voice messaging system.
- 4 Map a network drive.
- 5 Set up OS/2 voice messaging system to automatically log on to the Windows network (optional).

### To Add a User with Network Access Rights:

- 1 On the voice messaging system, go to an OS/2 command prompt.
- 2 Log on as an administrator by typing:  
`logon admin /p:admin` **Enter**
- 3 Add a user with network access rights by typing:  
`net user <userid> <password> /add` **Enter**  
where <userid> and <password> are a valid user name and password on the Windows computer.

**NOTE** The userid and password must match the settings on the Windows computer.

- 4 Type logoff, then **Enter**.

### To Specify the Network Primary Domain Controller IP Address:

- 1 On the voice messaging system, go to an OS/2 command prompt.
- 2 Type `mpts`, then **Enter**. The **Multi-Protocol Transport Services** application starts.
- 3 In the **Multi-Protocol Transport Services** dialog box, click **Configure**.
- 4 In the **Configure** dialog box, click **LAN Adapters and Protocols**, then click **Configure**. The **Adapter and Protocol Configuration** dialog box appears.
- 5 In **Current Configuration**, click **IBM OS/2 NetBIOS over TCP/IP**, then click **Edit**.
- 6 Click **Broadcast list**, then click **Configure**.
- 7 Make sure the IP address listed in the broadcast list is the correct IP address of the Primary Domain Controller (PDC) for the Windows domain.  
Consult with your network administrator to determine the correct PDC IP address.
- 8 Click **OK** to apply the change.
- 9 Click **Close** to close the **Configure** dialog box.
- 10 Click **Exit** to close the **Multi-Protocol Transport Services** application.
- 11 Double-click the **Shutdown** icon on the desktop to restart OS/2.

### To log on to the Windows domain or workgroup using NetBIOS:

- 1 On the voice messaging system, go to an OS/2 command prompt.

- 2 The command options used depend on if you are logging on to a domain or a workgroup:

- **Domain**

Type `logon <userid> /p:<password> /d:<domain>` **Enter**

Where

`userid` = Windows user name

`password` = Windows password

`domain` = Windows domain name

- **Workgroup**

Type `logon <userid> /p:<password>` **Enter**

Where

`userid` = Windows user name

`password` = Windows password

## To map a Windows Network Drive:

- 1 On the voice messaging system, go to an OS/2 command prompt.
- 2 Specify a drive name for the NetBIOS share directory by typing:

`net use x: \\<server>\<share>` **Enter**

Where

`<server>` is the name of the Windows computer;

`<share>` is the name of the shared directory on the Windows computer.

## Logging On to Windows Automatically

An OS/2 voice messaging system can be configured to automatically log on to the Windows network using the following procedure:

### To automatically log on to Windows using NetBIOS:

- 1 Make a backup copy of the Startit.cmd file. Go to the **OS/2** command prompt and type:

`e c:\startit.cmd` **Enter**

- 2 Go to the beginning of the file and insert the following command lines. If you are not using a domain, insert everything except: `/d:<domain>`.

`logon <userid> /p:<password> /d:<domain>` **Enter**

`net use h: \\<server>\<share>` **Enter**

Use the correct values in place of `<userid>` and `<password>`.

`<Server>` is the Windows computer name, and `<share>` is the Windows directory share name.

- 3 Save the file, then exit the text editor.
- 4 Shut down the OS/2 voice messaging system blade by moving the shutdown switch to SHUTDOWN. After the system has fully shut down, move the shutdown switch back to RUN, then press the reset button to restart the system.

## Migrating from AD-64 Messaging Systems

### About Migration

The UNIVERGE® UM8000 messaging system supports the migration of supported products to the current release. This appendix describes the steps required to migrate data from NEAXMail® AD-64 to the current version.

**WARNING** Installations where the AD64 system has names configured First then Last will have the first and last names reversed after migration. The migration utility is designed for systems where the single AD64 name field is configured Last, First.

**WARNING** When migrating from an AD-64, ensure the system has the required disk space to complete the migration process. In most cases, the space needed is double the normal backup size.

The migrated data includes the system configuration settings, subscriber accounts, groups, transaction boxes, interview boxes, voice names and greetings, and messages.

**WARNING** Customized prompts, MWI configurations, and switch settings cannot be migrated.

**CAUTION** Verify that the default language on the UM8000 messaging system is identical to the default language on the NEAXMail® AD-64 system. If the default languages are different the language settings might not migrate properly.

When a LAN connection is set up, the backup files can be saved directly to a network location. Alternatively, create the backup files on the local hard drive, then transfer them to a network location or copy them to removable media.

Use of pcAnywhere can be used to transfer the files.

**WARNING** It is strongly recommended that you store backup files in a location other than the local hard drive. If there is a hard drive failure, both the messaging system data and the backup data might be lost if these are on the local hard drive.

### The AvBackup Utility

AvBackup is a utility provided with the NEAXMail® AD-64 system to create and restore backups.

AvBackup uses the Windows Backup/Restore utility to back up the messaging system data files. AvBackup also backs up and restores additional information that the Windows Backup/Restore utility does not back

up, such as the Windows registry information. For this reason AvBackup must be used instead of the Windows Backup/ Restore utility to back up the UM8000 system.

**WARNING** If AvBackup is not used, parts of the messaging system configuration might be lost.

Run AvBackup manually, or schedule AvBackup to run automatically on a regular basis.

## Levels of Backup

AvBackup allows three different backup levels:

- **Basic.** Includes all system configuration settings, subscriber account information, greetings, and voice names.  
A basic backup does not include subscriber messages or prompts. A basic backup recommended before making any substantial changes to mailboxes and transaction boxes.
- **Normal.** Includes all system configuration settings, subscriber account information, greetings, voice names, and all stored subscriber messages.
- **Complete.** Includes all system configuration settings, subscriber account information, greetings, voice names, and all system prompts.  
A complete backup is recommended after customizing prompts and to prepare data to be migrated to a newer messaging system.

Use the Windows Scheduled Tasks utility to run backups automatically on a regular basis. An automatic backup schedule is recommended. This ensures that recent backup is available in the event of a system failure.

## Types of Backups

Run backups in either of two modes:

- **Online Mode.** In online mode, the messaging system continues to run while the backup is in progress.
- **Offline Mode.** In offline mode, if the messaging system is running, it is shut down to perform the backup.

If running a manual backup in offline mode, specify whether or not to restart the messaging system when the backup is complete.

If scheduling an automated backup in offline mode, the messaging system automatically restarts when the backup is complete. The messaging system restarts whether or not it was running before the automated backup.

## Backup File Names

Backup files are created with a name indicating the type and date of the backup, for example Basic Offline Backup January 28 2005.bkf. If another backup of the same type is created on the same date, the previous file is overwritten.

If another backup of the same type is created on a subsequent date, a separate backup file is created.

## Overriding the File Naming Convention

You can override the file naming convention with automatically scheduled backups. Add the -o parameter at the end of the backup command. This parameter forces all backup files of the same type to be replaced by the current backup.

## Backing Up the NEAXMail® AD-64 Messaging System

Create a manual backup of the NEAXMail® AD-64 messaging system data to be migrated to the UM8000 messaging system.

### To create a manual backup:

- 1 Sign in to the messaging system server using the same rights used to install the operating system.
- 2 Start the **AvBackup** utility:
  - Double-click the **Backup** icon on the Windows desktop.
  - OR
  - Go to **Start > Run**. The **Run** dialog box appears.  
In the **Open** field, type `C:\VMail\AvBackup.exe`.  
Alternatively, click **Browse** to browse and select the **AVBackup.exe** file.
- 3 Click **OK** or press **Enter**. The **AVBackup** window appears.
- 4 In the Backup Type section, select one of the following:
  - **Online**. For an online backup.
  - **Offline**. For an offline backup.

If an offline backup is selected, select the Restart messaging system box to restart the messaging system when the backup is complete.

**CAUTION** If an offline backup is selected when the messaging system is running, AvBackup will disconnect any active calls and shut down the system before doing the backup.

- 5 In the **Backup Contents** field, select **Complete Backup** to create a backup for the migration.
- 6 The backup files are placed in the **C:\Vm Backup\** folder.
- 7 Click **Browse** to select a different destination folder.

**NOTE** The file name is automatically generated by the AVBackup utility. For example, Complete Offline Backup April 20 2009.bkf.

- 8 Click **Backup**.
- 9 In the **Confirmation** dialog box, click **OK** to begin the backup process.
- 10 The **Backup Status** dialog box appears, reporting the status of the backup process.

- 11 Click **OK** on the **AVBackup** dialog box when backup is complete.
- 12 Click **Close** on the **AVBackup** dialog box to exit the backup utility.

**NOTE** Optionally, copy the backup files from the \\Vm Backup\ folder to a network location or removable media.

## Verifying the AD-64 Back Up File Integrity

Under very rare circumstances, the backup procedure can create a corrupt or unusable backup. After creating a backup, use the following procedure to verify the backup integrity.

This procedure is mandatory when upgrading the operating system from Windows 2000 to Windows Server 2003 SP1 or Windows Server 2003 R2 or when upgrading to UM8000.

The upgrade procedure deletes all system data from the hard drive. Therefore, it is critical that the backup integrity is verified before upgrading or installing a new messaging system.

### To verify the backup file integrity:

- 1 Sign in to the messaging system server using the same rights used to install the operating system.
- 2 Open the **Windows Explorer** window.
- 3 Navigate to the folder containing the backup file: **C:\Vm Backup\** and double-click the file.  
The **Windows Backup** utility automatically starts.
- 4 In the **Windows Backup** window, click the **Restore** tab.
- 5 Go to **Tools > Create a backup file**.
- 6 In the **Backup File Name** dialog box, click **Browse**.
- 7 In the Select File To Catalog dialog box, navigate to the folder containing the backup file, select the backup file, and then click Open.
- 8 In the **Backup File Name** dialog box, click **OK**.
  - If the backup file is OK, a new media catalog for the backup file appears under **File** in the left pane.
  - If the backup is corrupt, an error message appears indicating that the backup file is unusable or that there is some other problem with the backup.  
  
Create a new backup file and repeat the backup integrity test. If the backup fails the integrity test a second time, contact Technical Support for assistance.
- 9 Close the **Windows Backup** window.
- 10 Copy the backup file to an external USB storage device or a network share that is accessible by the UM8000 messaging system.

## Migrating the AD-64 Database and Voice Messages

The new version of the messaging system is installed with a default database. Use the following procedure to restore an old database and voice messages.

The messaging system restore utility takes the AD-64 backup data file and converts it into a format that is recognized by the messaging system database.

### Using the Administration Console

To restore the AD-64 backup file to the UM8000 messaging system:

**NOTE** Make sure that all users are logged out of the messaging system.

- 1 Sign in to the messaging system server using the same rights used to install the operating system.
- 2 Sign in to the Administration Console using **\$nec**.
- 3 On the Linux taskbar, click the **Administration Console** icon.
- 4 Sign in to the Administration Console using **\$nec**.
- 5 Stop the messaging system software:
  - Click **Server Control**.
  - Click **Stop**.Wait for the messaging system to stop.
- 6 In the Navigation pane, click **System > Backup & Restore > Restore**.
- 7 If the backup file is not listed on the **Restore** page, click **Upload File** to search for the backup file.
- 8 Select **Restore this backup** from the **Action** list to restore the AD-64 database. Other options include:
  - **View Backup Note**. Select to display the backup note, then click **OK** to close the note.
  - **Delete**. Select to delete the backup file from the hard drive. Click **OK** to confirm the deletion.
  - **Download**. Select to download the backup file. Click **Save** to select a destination and save the backup file.
- 9 Click **OK** to confirm you want to restore the file. The **Restoring Backup** progress window appears.
- 10 Click **OK** once again to restore the messages. This confirmation prompt appears only if the backup file includes messages.
- 11 Restart the messaging system software.
  - In the Navigation pane click **Server Control**.
  - Click **Start** on the **System Control** page.When the messaging system has restarted, the **Start** icon is greyed out. Click **View the startup log file** to see the startup process.

# Updating UM8000

Updating the voice messaging system includes installing new languages, installing additional ports, applying patches, or installing a new version of the software.

All voice mail features are licensed through the CD-CP00-US of the SV8100. A license maybe required to add additional voice messaging software language packs or additional voice ports. The license is based on the Hardware Key of the CD-CP00-US for the system. Contact your sales representative to obtain a new license code.

## Changing Licensing Information

All licensing is stored on the CCPU. This allows for failed CD-VM00 to be replaced without having to obtain new licenses for the enabled features. Licenses are enabled using Web Pro, PC-Pro or phone programming.

The UM8000 is enabled for the following UM8000 licenses at default:

- 0 Ports Voice Mail
- 5 Seats Unified Messaging
- Three Languages

In addition, the following language prompt sets are loaded at default:

- US English
- French (Canadian)
- Spanish (Latin America)

## Adding/Removing Language Packs

The following procedures enable you to install new language packs and remove existing language packs.

**NOTE** The UM8000 solid state disk only contains prompt sets for three languages. To use additional languages, purchase additional licensing.

## Installing New Language Packs

To installing new language packs:

- 1 Start the Web Administration Console.
- 2 Go to **System > Configuration**. The **System configuration** page appears.

- 3 Click **Languages**. The installed language packs appear on the page.
- 4 The following table lists the two-letter codes used for the language files and their associated soft keys.

Table 26. Language and Language Codes

Code	Language
AU Australian English	AU Australian English
CT Cantonese	CT Cantonese
DE German	DE German
DK Danish	DK Danish
ED Madrid Spanish	ED Madrid Spanish
ES Mexican Spanish	ES Mexican Spanish
FC Canadian French	FC Canadian French
FR Parisian French	FR Parisian French
IT Italian	IT Italian
JA Japanese	JA Japanese
LA Latin American Spanish	LA Latin American Spanish
MD Mandarin Chinese	MD Mandarin Chinese
NL Dutch	NL Dutch
PI Iberian Portuguese	PI Iberian Portuguese
PT Brazilian Portuguese	PT Brazilian Portuguese
UK UK English	UK UK English

- 5 Click **Browse**. The **Choose file** dialog box appears.
- 6 In the **Choose file** dialog box, browse to the location where the language packs are installed and choose the language file.
- 7 The **Install Language** button appears on the **Languages** page.
- 8 Click **Install Language**. The **Updating...** button appears.

**NOTE** It takes a few minutes for the language pack to install.

The following message appears when the language has been installed:

*Changes to the voice messaging system have been made. This requires the voice messaging software to be restarted. Restart the voice mail software after all system changes have been completed.*

- 9 Click **Restart** to restart the voice messaging software. The **Server control** page appears.  
Both the **Start** and **Stop** buttons are shown as inactive while the server shuts down.
- 10 Re-program the phone system.

## Removing Language Packs

### To Remove Language Packs:

- 1 Start the Web Administration Console.

**NOTE** The voice messaging software must be stopped to remove language packs.

- 2 Click **Server Control**. The **Server control** page appears.
- 3 Click **Stop**. The voice messaging software shuts down.
- 4 Go to **System Configuration > Languages**. The installed language packs appear on the **Languages** page.
- 5 To remove a language, click **Remove** next to the language.
- 6 Under **Quick Links**, click **Server Control**. The **Server control** page appears.
- 7 On the **Server Control** page, click **Start** to restart the voice messaging system.

## Global Tone Detection

Use the following procedure to run the global tone detection (GTD). GTD checks the phone system or central office tones.

### To run Global tone detection:

- 1 Start PuTTY. The login prompt appears.
- 2 Log in as *admin* **Enter**.
- 3 Type the password *voicemail* **Enter**. The Main menu appears.
- 4 Stop the voice messaging software, click **3 Control**, and then click **OK**. The **System control** menu appears.
- 5 Click **1 Stop the voice messaging software**, then click **OK**. The **voice messaging system stopping** dialog box appears.
- 6 Click **1 Configuration**, then click **OK**. The **Configuration** menu appears.

- 7 Click **4-Global tone detection**, then click **OK**. The Maintenance menu closes and a command line interface appears.
- 8 Select one of the following options. **Option 1** is the default.
  - Detect PBXKSU (switch provided) tones
  - Detect central office (CO) tones.
  - Exit this application
- 9 Press **Enter**. The **GTD** application starts.

## Applying Patches, Hot Fixes, or Updated 11.6 and Later

For Version 11.6 and later, upgrades to versions other than your current base version are not available via Live Update. However, the various compatible Software Updates (SUs) for the base version are available. For version 11.6 and later, you do not need to install SUs in order. Simply choose the latest SU and apply it to your system.

**NOTE** Deleting the unused updates is recommended.



Figure 9. Patches, Hot Fixes, or Updated for 11.6 and Above

## Applying Patches, Hot Fixes, or Updated 11.5 SU2 and Earlier

For version 11.5 SU2 and earlier, the upgrade procedure is different. However, deleting the upgrade packages that are not needed is still recommended. Upgrading to a version higher than your current base version, such as 11.3 to 11.5, will not work and deleting any displayed update files is recommended.

**For UM8000 systems at version below 11.6**

- Live Update page displays all available packages with version higher than the current system version.
- Allows customers to get the latest update for the current system version, or upgrade to the latest or greatest.
- Will display some options that are not valid. Those options are marked in red bold font below and should be deleted.

**Live Update page update package list example:**  
(Assumes current System version is 11.3, and the latest and greatest is 11.6 SU2)

**List of Available updates**

<b>Update File: 11.6 SU2</b>
<b>Update File: 11.6 SU1</b>
<b>Update File: 11.5 SU2</b>
<b>Update File: 11.5 SU1</b>
<b>Update File: 11.3 SU2</b>
<b>Update File: 11.3 SU1</b>

Update options from current version – 11.3

Update files legend:

- **BOLD**: Visible in the updates list
- NOT BOLD: Not visible (released but not a valid option)
- **BOLD and RED**: Visible but not a valid option (please delete!)

Figure 10. Patches, Hot Fixes, or Updated for 11.5 SU2 and Earlier

Voice messaging system updates might include a full version upgrades or System Updates. Depending on the system version, use the Maintenance menu or the WAC Live Update page to apply updates to the voice messaging system.

Voice messaging software updates are available from NEC.

The following two types of updates might be available for your system:

- Version upgrades move your system from one feature version to another.

- Software Updates (SU) are maintenance packages delivering the latest enhancements for your current system.

SUs are numbered SU1, SU2 and so forth with the SU number matching the third digit of the version number. For example 11.5SU1 is same as 11.5.1.

Version upgrades and Software Updates are performed using overlay upgrade scripts which refresh the entire operating system and associated applications, in addition to upgrading the messaging system. The overlay upgrade scripts upgrade any supported version of the system to the latest, as documented below.

## Locating the available upgrade scripts

- For all feature versions: upgrade scripts are available via download.
- For Software Updates: upgrade scripts are available via the Live Update Service and download.

For example: An X.Y customer wanting to get to the latest version of X.Z (X.Z SU1) will apply the X.Z(SU1) script available via Live Update Service or manual download.

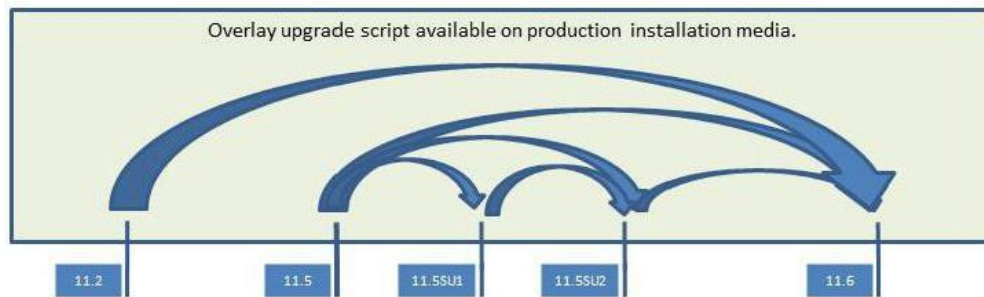


Figure 11. Overlay Upgrade Scripts on Production Installation Media

## Upgrading your system

Backup your messaging system on a network drive using the backup procedure earlier in this document.

Complete the either 11.2.X upgrade steps or the 11.3 and above upgrade steps below, depending on your system version.

### To upgrade UM8000 Version 11.2.x:

- 1 Download the upgrade file.
- 2 As **admin**, upload the upgrade file to the **/home/admin/** directory via any SCP client.
- 3 From a terminal, sign into the voice mail system as the **admin** user, which will redirect you to the maintenance menu.
- 4 Navigate to **2 Maintenance** and press **Enter**.
- 5 Navigate to **2 Command prompt** and press **Enter**.
- 6 From the command prompt, run **cd /home/admin**.
- 7 Run **unzip <upgrade filename>.zip** to extract the contents of the upgrade.

**NOTE** On the actual media, <upgrade filename>.zip looks similar to this: 14861-15738-11.6.0.31-pc.zip.

- 8 Run **sudo sh <upgrade filename>** (basename of the upgrade zip file) to apply the upgrade.
- 9 After the upgrade is complete, reboot the system to complete the upgrade.
- 10 Type *sudo shutdown -r now* to reboot.
- 11 Update your prompt sets using the Language Disc. The language disc is available for download from the support site.

## To upgrade UM8000 Version 11.3.x or higher:

- 1 Download the upgrade file.
- 2 Use Program 10-55-01 (this may be different for your switch, please see your switch documentation for details) to verify the IP address of the slot containing the installed voice mail blade.
- 3 Start an internet browser and enter the IP address followed by /admin in the URL window.  
| For example: 172.16.0.100/admin
- 4 Press **Enter**.
- 5 Accept the certificate and log into the Web Administration Console with the user name \$nec. No password is required.
- 6 Once logged in, go to **System > Live Update**.
- 7 Click **Upload Update**.
- 8 Browse to the location of the update on the support PC.
- 9 Click **Open**. The upgrade file starts uploading automatically. Depending on network speed and file size, this could take several minutes.
- 10 Check the **Install** button to run the update.
- 11 Click **Apply**.
- 12 Update your prompt sets using the Language Disc. The language disc is available for download from the support site.

## To update UM8000 version 11.3.x or higher using the Live Update Service:

**NOTE** The Live Update Service is available in version 11.3 and above. It will only apply maintenance packages.

- 1 Use Program 10-55-01 to verify the IP address of the slot containing the installed voice mail blade.

**NOTE** This setting may be different for your switch. See the switch documentation for details.

- 2 Start an internet browser and enter the IP address followed by /admin in the URL window.  
| For example: 172.16.0.100/admin

- 3 Press **Enter**.
- 4 Accept the certificate and log into the Web Administration Console with the user name **\$nec**. No password is required.
- 5 Once logged in go to **System > Live Update**.
- 6 Click on **Check for Updates**.
- 7 Check the box under the **Install** column for the update you would like to install.
- 8 Click on **Apply**.
- 9 Update your prompt sets using the Language Disc. The language disc is available for download from the support site.

# Configuring Mobile Services

## Deployment and Configuration Considerations

How a mobile phone handles voice mail files can vary depending on manufacturer and operating system version. If users are having trouble downloading and playing voicemail files, consider the following:

iOS based devices using the Safari browser will not recognize the self- signed security certificate that ships with the messaging system. For these devices to operate, you may replace the certificate that ships with the messaging system with a certificate from root authority trusted by Safari. If that is not practical, you may disable secure browsing completely via System > Configuration > General in the Administration Console. This will allow unencrypted access using the http protocol instead of https.

Whether the file will be downloaded or will be streamed to the device will depend on the device being used. iOS does not support downloading of voicemail files, but will stream them. Android devices may not stream the file, but will allow it to be downloaded.

Table 27. Deployment and Configuration for Mobile Phones

	iOS	Android
Play audio via https	Yes. Message will be streamed. End-site security certificate required.	Yes. End-site security certificate required. Message will be downloaded.
Play audio via http	Yes. Message will be streamed.	Yes. Message will be downloaded.
View faxes via https	Yes.	Yes.
View faxes via http	Yes	Yes.

# Appendix A: Installing a Replacement Web Certificate

A valid SSL certificate is required in order to use HTTPS when connecting with a web browser to the voice messaging system for the purpose of administration (WAC) or client access (WMM).

The product comes with a self-signed certificate installed by default. If the customer desire to install one that has been purchased from a trusted digital certificate authority, use the procedures in the following sections.

## Prerequisites

- 1 Have a valid voice messaging system that is version 10 or higher.
- 2 Know how to connect to the maintenance menu using an SSH (secure shell) client.
- 3 Know how to transfer a file via SCP (secure copy) protocol.

**NOTE** The product documentation covers the instructions for prerequisites 2 and 3.

## Installing a Certificate Issued by a Recognized Certificate Authority

This procedure involves three parts:

- Generating a certificate request.
- Obtain/Purchase the certificate from an official issuer (digital certificate authority).
- Install the certificate that was obtain.

Refer to the following instructions on accomplishing each of these items.

### To generate a certificate request:

- 1 Connect to the **Maintenance Menu** using an SSH client (e.g. Putty) and log on as admin.
- 2 Navigate to **Maintenance > Command prompt**, and press **Enter**.
- 3 Essentially there are two steps involved here:

- Generate a private key with the following command:

```
sudo ./bin/openssl genrsa \-des3 \-out etc/apache/server.key-new 1024
```

- Generate a certificate request with the following command:

```
sudo ./bin/openssl req \-new \-key etc/apache/server.key-new \-out  
etc/apache/server.csr
```

**NOTE** The presence of a pass-phrase on the key file will require that the pass-phrase be entered when starting the web service. If the new certificate key prompts for a pass-phrase when making the certificate request, then use the following commands to remove the pass-phase:

1. Generate file that will remove the pass-phrase from the key.

```
sudo ./bin/openssl rsa -in etc/apache/server.key-new -out  
etc/apache/server.key-nopass
```

2. Change the name of the key with the pass-phrase to **server.key-pass**.

```
sudo mv etc/apache/server.key-new etc/apache/server.key-pass
```

3. Remove the key with the pass-phrase, and change the name of the key to **server.key-new**.

```
sudo mv etc/apache/server.key-nopass etc/apache/server.key-new
```

- 4 Use SCP to copy the certificate request file (file that ends in .csr) to your desktop machine. This will be needed when ordering the digital certificate from the official issuer.

## Obtaining/Purchasing the Digital Certificate

For more detailed instructions on obtaining your web server digital certificate, visit the website of your desired digital certificate provider (i.e. Thawte, Verisign, etc.) and follow their instructions. You will need the certificate request file generated in the previous section.

Depending on the type of Certificate Authority (CA) and the certificate file(s) provided by the CA, different configuration may be needed as follows:

- **Root-CA:** Does not require any modification as long as the path and file name remain the same.
- **Intermediary CA with Single File:** Requires the modification of the **SSLCACertificateFile** line. See [Intermediary Certificate Authority with Single File](#) for the instruction.
- **Intermediary CA with Two Files:** Requires the site's certificate to use the **server.crt** file name and the file would need an **SSLCertificateChainFile** directive to point to the CA's intermediary certificate-file. See [Intermediary Certificate Authority with Two Files](#) for more details.

## Intermediary Certificate Authority with Single File

To install the intermediary digital certificate with single file:

- 1 Log in to WinSCP and follow the steps:

- a Download the **httpd-ssl.conf** file from the **/opt/vmail/etc/apache/extra** folder.

- b In the **httpd-ssl.conf** file, modify the **SSLCACertificateFile** line as follows:

```
SSLCACertificateFile "/opt/vmail/etc/apache/server.crt"
```

- c In the right pane of WinSCP, go to the **/home/admin** folder.

- d Copy the **server.crt** file you received from the provider and the **httpd-ssl.conf** file you modified in **Step b** to the **/home/admin** folder.

- e Close WinSCP.

2 Connect to the **Maintenance Menu** using an SSH client (e.g. Putty) and log on as admin.

a Navigate to **Maintenance > Command prompt**, and press **Enter**.

b Copy the **server.crt** file as follows:

```
sudo cp -i /home/admin/server.crt etc/apache
```

c Copy the **http-ssl.conf** file as follows:

```
sudo cp -i /home/admin/http-ssl.conf etc/apache/extra
```

d Replace the **server.key** with the **server.key-new** file as follows:

```
sudo mv -i etc/apache/server.key-new etc/apache/server.key
```

3 Restart the web services using the following command:

```
sudo ./bin/vmctl web restart
```

4 Type *exit* or press **CTRL** + **D** to return to the **Maintenance Menu**.

## Intermediary Certificate Authority with Two Files

This type of Certificate Authority (CA) requires the site's SSL certificate to use the **server.crt** file name, and the file would need an **SSLCertificateChainFile** directive to point to the CA's intermediary certificate-file.

The procedures for installing the SSL certificate for this type may differ by the CA you obtained the certificate from. The CA also determines the type of the directive to use and the client that connects to the server.

Therefore, consult the appropriate guide or help provided by your CA for installing the SSL certificate depends upon the CA issuing the certificate.

## Confirming that the New Certificate is Active

From a web browser navigate to **https://<your IP address>/admin**. Unlike the situation where you have a self-signed certificate, in this case you should not get a warning from the web browser. That is because the browser will validate the certificate installed on the voice messaging system as issued by a trusted authority (The browser knows which ones are the trusted authorities).

The communication at this point is via SSL using the certificate you just installed. To confirm that the key is indeed the correct one click on the little padlock located, then select **Examine certificate** or **Certificate details** depending on the web browser you use.

Verify that the details of the certificate (i.e. organization, etc) are same as when the certificate was requested and that the issuer is the company that you purchased it from.