

Deploying Avaya IP Office[™] Platform Voicemail Pro (Windows)

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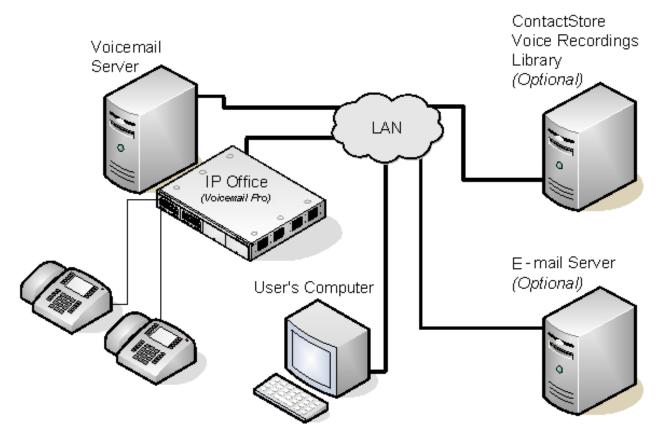
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Chapter 1: Voicemail Pro

Voicemail Pro

The diagram illustrates a Voicemail Pro system with some of the setup options.

This manual covers the installation of a Windows base Voicemail Pro server with IP Office. The installation of Linux based servers is covered separately in the manuals for deploying a Unified Communications Module, Application Server or Server Edition system.



IP Office Control Unit The IP Office <u>Voicemail Pro licenses</u> on page 10 are entered into the configuration of the IP Office system. The licenses are required to activate Voicemail Pro features. You can run an unlicensed Voicemail Pro service for demonstration and testing for a duration of two hours only. License keys are

issued against and validated against the unique serial number of the feature key dongle used by the IP Office.

Voicemail Pro Server

The Voicemail Pro service is installed on a server computer. This becomes the computer where messages and other data are stored for the mailboxes and services provided by Voicemail Pro. The server can be a Windows or Linux based server.

There are a number of scenarios where multiple Voicemail Pro servers can be supported. For example, to provide a backup Voicemail Pro server or to support multiple IP Office systems in a network. See <u>Centralized Voicemail Pro Server</u> on page 113.

Voicemail Pro Client

The Voicemail Pro Client is used to administer the Voicemail Pro service. The client is a Windows application that you can install on another computer to allow remote administration of the server. Only one client can connect to the server at any time.

The version of a Voicemail Pro client used with a Voicemail Pro server should match. If the Voicemail Pro client is used to load a call flow from an earlier version of Voicemail Pro server, you will be warned that if you edit the call flow you will not be able to save it back to the original server. If the client is used to load a call flow from a later version of Voicemail Pro server it will stop the action and prompt that the call flow cannot be loaded.

Telephone Extension

For internal extensions, the Voicemail Pro server provides message waiting indication. This is done automatically for the telephone user's own mailbox. However, the user can also be configured to receive message waiting indication for other mailboxes.

User's Computer

In addition to accessing mailbox voicemail messages through the telephone, there is a range of methods for accessing messages from a user's computer. This can be by web browser, IMAP e-mail account, Exchange server e-mail account, and various other options. The IP Office one-X Portal for IP Office application can also be used.

E-mail Server

Using an e-mail server, Voicemail Pro can provide a number of services. This includes the ability to send message alerts or message copies. For Exchange e-mail servers, with the forward to e-mail option, the Exchange server can be used as the message store with users accessing their messages using Exchange clients such as Microsoft Outlook, Outlook Web Access, and so on.

ContactStore Server

In addition to taking voicemail messages, the Voicemail Pro can be used for automatic and manual call recordings. These recordings are stored in the Voicemail Pro server mailboxes. ContactStore for IP Office is an additional licensed application to which recordings can be transferred for long term storage. ContactStore supports archiving to DVD, access by web browser, and searching based on call details.

Installation of ContactStore for IP Office is covered in its own separate installation manual. For proper functioning, install and test Voicemail Probefore installing ContactStore for IP Office.

Supported languages

By default, the prompts installed match the installer language selection plus English. If other languages are required, they need to be selected by doing a custom installation. The installable Voicemail Pro prompts are listed in the table below. The availability of a language in voicemail does not necessarily indicate support for IP Office in a country that uses that language.

Language	WAV folder	Fallback selection	TTS Windows
Brazilian Portuguese	ptb	> pt > en.	J
Chinese (Cantonese)	zzh	> en > enu.	V
Chinese (Mandarin)	ch	> en > enu.	J
Danish	da	> en.	y
Dutch	nl	> en.	J
English UK	en	> en.	V
English US	enu	> en.	J
Finnish	fi	> en.	V
French	fr	> frc > en.	J
French Canadian	frc	> fr > enu > en.	V
German	de	> en.	J
Greek	el	> en.	V
Hungarian	hu	> en.	×
Italian	it	> en.	V
Japanese	jp	> en.	×
Korean	ko	> en.	V
Latin Spanish	eso	> es > enu > en.	J
Mediterranean	heb	> en.	×
Norwegian	no	> en.	J
Polish	pl	> en.	V
Portuguese	pt	> ptb > en.	J
Russian	ru	> en.	V
Spanish	es	> eso > en.	J
Spanish (Colombia)	eso	> es > enu > en.	V
Swedish	sv	> en.	J
Turkish	trk	> en.	×

When the IP Office routes a call to the Voicemail Pro server, it indicates the locale for which matching prompts should be provided, if available. Within the IP Office configuration, a locale is always set for the system. However, differing locales can be set for each user, incoming call route, and short codes in addition to the default system locale.

The locale sent to the Voicemail Pro server by the IP Office is determined as follows:

Locale source	Usage
Short Code Locale	The short code locale, if set, is used if the call is routed to voicemail using the short code.
System Locale	If no user or incoming call route locale is set, system locale is used, unless overridden by a short code locale.
Incoming Call Route Locale	The incoming call route locale, if set, is used if the caller is external.
User Locale	The user locale, if set, is used if the caller is internal.

If the prompts matching the IP Office locale are not available, the Voicemail Pro server will provide prompts from a fallback language, if available. The above table of languages lists the order of fallback selection.

If required, the language provided by a voicemail call flow can be changed using a Select System Prompt Language action.

TTY Teletype Prompts

TTY (Teletype (Textphone)) is included in the list of installable languages. TTY is a text-based system that is used to provide services to users with impaired hearing.

Voicemail Pro licenses

The **Help > About** screen in the voicemail client can be used to check which IP Office the Voicemail Pro server is working and the licenses it has received from that IP Office.

The license keys are entered into the IP Office configuration using the IP Office Manager. If the Voicemail Pro server is installed without licenses, it will run for 2 hours and then shut down.

For IP Office Release 6 and higher, support for Voicemail Pro is enabled by the addition of a *Preferred Edition* license.

Preferred Edition (Voicemail Pro)

This license enables support for Voicemail Pro as the IP Office voicemail server with four voicemail ports. A Voicemail Pro server with the *Preferred Edition* license provides the services listed below. Additional licenses can be added for additional voicemail features, these are detailed separately. The *Preferred Edition* license was previously called Voicemail Pro (4 ports).

Server Edition

On IP Office Server Edition, the *Server Edition* license provides all the Voicemail Pro features that are provided by the *Preferred Edition* license on IP500 V2.

Additional Voicemail Pro Messaging Ports

The required license for Voicemail Pro server support [Preferred Edition (Voicemail Pro)] also enables four voicemail ports. This license can be used to add additional voicemail ports up to the maximum capacity of the IP Office system (IP500 V2 = 40, IP Office Server Edition = 250). This license was previously called Additional Voicemail Pro (ports).

VMPro Recordings Administrators

To support ContactStore in a small community network (SCN), all the IP Offices in the SCN require either their own *Advanced Edition* license or the *VMPro Recordings Administrators* license.

VMPro Networked Messaging

Enables the VPNM (Voicemail Pro Networked Messaging) functionality within Voicemail Pro. Enabling VPNM is required for message exchange with remote Voicemail Pro systems and Avaya Interchange systems.

VMPro TTS (Generic)

This legacy license enables use of text-to-speech facilities using third-party TTS software with Voicemail Pro. One license per simultaneous instance of TTS usage. The IP Office *Advanced Edition* license also enables eight ports of generic TTS.

VMPro TTS (ScanSoft)

This legacy license enables use of text-to-speech facilities using Avaya-supplied TTS software with Voicemail Pro running on a Windows server. One license per simultaneous instance of TTS usage.

Legacy licenses

The following legacy licenses are still supported by IP Office Release 6 and higher.

UMS Web Services: This legacy license is used to enable UMS voicemail services support for users set to the **Basic User** profile. Other users are enabled for UMS through their licensed user profile.

Number of simultaneous users

All connections between the Voicemail Pro server and IP Office are through LAN using data channels. The maximum number of data channels that can be used for Windows voicemail server operation at any moment are shown below.

IP Office	Maximum for Voicemail Pro
IP500 V2	40

The actual number of simultaneous users is determined by the licenses for Voicemail Pro added to the IP Office configuration. Note that some specific functions can have voicemail channels reserved for their use or can have channel restrictions.

Chapter 2: Installation

Server installation

This section covers the installation of the Voicemail Pro server on a Windows server computer. Voicemail Pro can be installed with the IP Office IP500 V2 systems other than those being used as Server Edition expansion units:

Mixing Linux and Windows servers

In scenarios where multiple Voicemail Pro servers are used, a mix of Windows-based servers and Linux-based servers (IP Office Application Server and/or UCM module) can be used.

Related links

Centralized Voicemail Pro overview on page 87

General installation requirements

Here is a list of general requirements for all types of voicemail installation.

- A client computer with IP Office Manager and Microsoft .NET Framework versions 2.0 installed on it. If .NET 2.0 is not detected, you will be prompted to install it before the Voicemail Pro installation proceeds.
- A license for Voicemail Pro and any additional voicemail ports is required. If Voicemail Pro Server is installed without a license it will run for two hours and then shut down.
- Licenses for any other Voicemail Pro components being installed, see <u>Voicemail Prolicenses</u> on page 10.
- Latest version of the IP Office Applications DVD along with the latest fixes and patches. To get the latest version of a required software, visit http://support.avaya.com.

Tip:

- Before you begin to install Voicemail Pro, check that the computer that you are using can connect to the IP Office unit and that you can load and save a configuration file using IP Office Manager.
- Switch off any computer and hard disk sleep, power down, suspend, hibernation modes.

 Install the Voicemail Pro software using an account with full administrator rights on the computer. The service subsequently runs under that account. If you prefer, create a separate account for this purpose and configure it such that the account password does not expire.

Computer specifications

The Voicemail Pro application requires various licenses entered into the IP Office configuration to control the features it offers and the number of simultaneous connections. For more information, see Number of simultaneous users on page 11.

The Voicemail Pro software can be installed as separate Voicemail Pro client and server parts. You can perform remote administration of the Voicemail Pro server from a computer with just the Voicemail Pro client installed. A copy of the client is automatically installed locally with the Voicemail Pro server.

Source		
DVD	IP Office Application DVD (Disk 1)	
Languages	See Supported Languages on page 9.	
IP500 V2	✓ IP Office Preferred Edition.	
License	✓ See below.	

The Voicemail Pro server part of the software consists of several components in addition to the core server software, these are:

- Campaigns: The Voicemail Pro can be configured to run a campaign. This consists of a series of questions for which the Voicemail Pro records the callers answer or key presses. With International Time Zone (ITZ) support, the Voicemail Pro records the IP Office time and not the Voicemail Pro local time. The resulting recordings can then be played back by users. Users can use the web aspect of campaigns to perform this playback and processing of campaign recordings via their web browser. This requires IIS web server to be run on the same computer as the Voicemail Pro software. If not already installed, the Voicemail Pro installer enables and configures IIS on the server.
- UMS Web Voicemail: Users can use UMS to access their voicemail mailbox using either an IMAP compatible e-mail program or through their web browser. This requires IIS web server to be run on the same computer as the Voicemail Pro software. If not already installed, the Voicemail Pro installer with enable and configure IIS on the server. It also installs PHP if not detected as already present.
- Text to Speech (TTS): Through adding additional licenses, the Voicemail Pro is able to use
 the TTS functions of Windows to speak text and numbers to callers in addition to recording
 prompts. This is intended mainly for scenarios where the Voicemail Pro is obtaining text and
 number values from a customer database.

Installation on Windows server operating systems

On many Windows server computers, while the Windows Audio components are present by default they are not always enabled. If this is the case the playback of voice prompts may be

'choppy' and the TTS (if installed) will not work. However, enabling Windows Audio does not require the server computer to have a sound card installed.

- 1. Verify that you have full administrator rights for the computer.
- 2. Click Start > Administrative Tools > Services.
- 3. If the status of the **Windows Audio** service is not **Started**, start the service and set the **Startup Type** to **Automatic**.

Note:

- 1. Do not use the **Large Fonts** setting, as it may cause options on some screens to become inaccessible.
- 2. For a good connection speed, use a 100 Mbps network card.
- 3. Free disk space requirements are also subject to the message storage required. For more information, see <u>Disk space requirements</u> on page 17

Basic Voicemail Pro

Minimum hardware requirements		
RAM	256MB	
Hard Disk Free Space	2GB	
	ℜ Note:	
	Add 0.5MB per minute of a space as per your required	message and prompt storage ments.
Processor	Pentium P4 1.4GHz	P4 1.4GHz
	Celeron Any 1.7GHz	Any 1.7GHz
	AMD	Any 1.4GHz

Operating System Support		
Server OS	Service	
Windows 2008 R2 Server	√	
Windows 2012/2012 R2 Server	✓	
Windows 2016 Server	J	
Client OS		
Windows 7	J	
Windows 8.1	✓	
Windows 10	<i>J</i>	

Voicemail Pro plus UMS Web Voicemail and/or Campaigns

Minimum hardware requirements	
RAM	512MB

Table continues...

Minimum hardware requirements		
Hard disk free space	2GB	
Processor	Pentium	P4 2.8GHz
	Celeron	Not tested.
	AMD	Athlon XP 3000+, Athlon 64

The following table provides a list of the operating systems that are supported for the server.

Server OS	Service
Windows 2008 R2 Server	√
Windows 2012/2012 R2 Server	J
Windows 2016 Server	J

- Both Web Campaigns and UMS Web Voicemail require the IIS web server on the Voicemail Pro server computer to be enabled. This requires IIS web server to be run on the same computer as the Voicemail Pro software. If not already installed, the Voicemail Pro installer enables and configures IIS on the server. It already installed, it must have the following IIS components enabled:
 - CGI
 - ASP .Net
 - IIS 6 Metabase Compatibility
- UMS requires PHP to be installed on the server. The Voicemail Pro installer installs PHP if it is not detected as already present.
- On Windows 2012, you also need to install ASP.NET 3.5.
- UMS Web Voicemail installs PHP if not detected as already installed.

Voicemail Pro plus IVR and/or TTS

Minimum hardware requirements: Basic Voicemail Pro			
RAM	512MB		
Hard disk free space	20GB		
	Pentium	P4 2.8GHz	
Processor	Celeron Not tested.		
	AMD	Athlon XP 3000+, Athlon 64	

The following table provides a list of the operating systems that are supported for the server.

Server OS	Service
Windows 2008 R2 Server	J
Windows 2012/2012 R2 Server	J
Windows 2016 Server	J

If the database being queried is located on the Voicemail Pro server, the query speed of the database will be affected by the amount of memory available. You must take into account the memory requirements of the database being queried.

Pre-requisites: For systems running Windows 2012, install .NET Framework 3.5 Features.

Ports

The Voicemail Pro service uses the following ports:

Port Number	Туре	Description	
25	TCP	Used to listen for SMTP connections.	
37	UDP	Used to receive time requests (RFC 868).	
69	UDP	Used to interchange the status, configuration, and program data.	
80	TCP	Used to service HTTP requests (Web Voicemail, mobility clients, one-X Portal for IP Office) for Voicemail Pro server running on Windows.	
143	TCP	Used to service IMAP4 requests.	
514	UDP	Used as the default port to write syslogs to a syslog server.	
993	TCP	Used to service IMAP4 requests over SSL.	
	UDP	Used to receive requests from IP Office PBX.	
50791	TCP	Used to receive requests from one-X Portal for IP Office and to receive connections from the Voicemail Pro Client application.	
50792	TCP	Used to communicate with the MAPI Proxy service.	
8000	TCP	Used to service HTTP requests (Web Voicemail, mobility clients, one-X Portal for IP Office) for Voicemail Pro server running on Linux.	

Note:

Voicemail can use additional ports for connection to services such as a third-party database or Microsoft Exchange.

A Caution:

• Do not install Voicemail Pro server on a computer that runs the Domain Name System (DNS) Server service. Doing so may prevent the Voicemail Pro service from obtaining the ports that the Voicemail Pro service requires to function correctly.

 Do not install Voicemail Pro on a computer that runs an Exchange server. Doing so may create conflicts between the Voicemail Pro servers SMTP settings and those of the Exchange server.

Network requirements

- The computer should be configured and tested for TCP/IP networking.
- The Voicemail Pro server computer must be connected to the IP Office Control Unit directly or through a LAN switch.
- If directly connected, changing the settings of the computer network card to match the IP Office control unit can resolve some issues. This should be done according to the computer or network card manufacturer's instructions. The options for IP Office LAN ports are:
- All IP Office LAN ports are 10Mbps/100Mbps auto sensing.

If not directly connected, using any of the above settings must be supported and matched by the intervening network equipment.

- The computer must have a static IP address.
- If the IP Office is acting as a DHCP server, it defaults to using 192.168.42.2 to 192.168.42.201 for DHCP clients. This leaves 192.168.42.202 to 192.168.42.254 for devices that require fixed IP addresses.

Disk space requirements

The following disk space requirements are only approximations:

- At least 2GB of free disk space is required on the operating system drive (by default c:), regardless of to which drive Voicemail Pro is actually installed.
- A compact Voicemail Pro installation requires 130MB.
- A typical installation requires approximately 255MB.
- A custom installation requires up to 2GB of disk space.
- However, prompts and recorded messages consume an additional 0.5MB of disk space per minute. For a busy environment you can expect to require at least 1000 minutes of message recording space, that is 0.5GB.
- If you are installing the client only, you can expect to require at least 170MB.

Web server operation

If a Web browser access is required, the Microsoft IIS Web Server must be installed on the server computer *before* Voicemail Pro is installed:

 Microsoft web server products run as services and require Voicemail Pro to also run as a service. Internet Information Server 5.0 or higher is required.

SFTP server requirements

To be able to use some of the features of Voicemail Pro server (for example, the remote backup operation, VRLA, and so on), you must install and configure an SFTP server. You can choose to install any of the commercial or free SFTP server applications. However, ensure the following for the SFTP server to work with the Voicemail Pro server:

- Configure port 22 to accept incoming connections to the SFTP server.
- Create a separate user account on the SFTP server for use with the Voicemail Pro server.
- If the SFTP server application requires you to set permissions for the user account, set the Read, Write, and Delete file permissions and the List, Create, and Delete folder permissions for the user account.

SFTP configuration requirements for VRLA feature on Linux-based server

For the VRLA feature to work on a Linux-based Voicemail Pro server, you must:

- Install the SFTP server on the computer that runs the ContactStore application.
- Set the Home directory of the user account such that the VRL directory (specified by the value of the registry entry HKEY_LOCAL_MACHINE > SOFTWARE > Network Alchemy > Voicemail > Directories > VRLDir on a 32-bit system and HKEY_LOCAL_MACHINE > SOFTWARE > Wow6432Node > Network Alchemy > Voicemail > Directories > VRLDir on a 64-bit system) lies inside the SFTP directory structure.

For example, if you set $C: \asdf \xyz$ as the VRL directory, then set either $C: \asdf \xyz$ or $C: \asdf$ as the Home directory of the SFTP user account.

Testing and troubleshooting the SFTP connection Procedure

- 1. Log in to the command line interface as the root user on the Voicemail Pro server.
- 2. Enter Sftp <username>@sftpIP, where <username> is the username of the SFTP user account.
- 3. Enter the password of the SFTP user account.

The SFTP connection should get established.

- 4. If the SFTP connection is not established, then:
 - a. On the computer that runs the SFTP server, check if any other application is using port 22 for an SFTP connection. If yes, stop the application.
 - b. Clear all the entries in /root/.ssh/known_hosts that are associated with the IP address of the SFTP server.

Server/Client installation

The Voicemail Pro installation software for Windows offers a number of different types of installation. The key types are client only, compact, typical and custom. These differ in the components installed as detailed in the table below.

Company Sub		Installation Type			Notes	
Component	Component		Compact	Typical	Custom	
	Voicemail Pro	J	J	J	<i>y</i>	
	Voicemail Pro Service	×	√	✓	<i>y</i>	
Voicemail Pro	Languages	*	,	•	•	Installs the prompts that best match the server computer locale plus English prompts. For an installation with additional languages use the Custom installation option.
Voicemail Pro Web Compon		×	×	~	,	Not available for installation on an XP Pro server.
Web Voicema	il (UMS)	×	×	×	,	Only available for installation on server operating systems.

Performing pre-installation checks

Procedure

1. Log on to the server computer using the user account under which you intend the Voicemail Pro server or service to run. This user account must have full administrator

- rights to the server computer. You must update the Voicemail Pro service password if the user account password is changed.
- 2. In IP Office Manager, check that the correct licenses for Voicemail Pro have been installed and show a status of **Valid**.
- 3. For installations other than client-only and compact, check that the required pre-installation processes have been completed.
 - Installing Web Campaigns on page 24
 - Voicemail E-mail on page 52
 - <u>UMS Web Services</u> on page 28
 - Web Voicemail installation on page 33
 - UMS Exchange configuration on page 42
 - Centralized Voicemail Pro on page 87
 - <u>Text To Speech (TTS) installation</u> on page 71

Related links

Voicemail Pro licenses on page 10

Checking that Windows Audio is enabled

About this task

On many Windows server computers, while the Windows Audio components are present by default they are not always enabled. If this is the case the playback of voice prompts may be "choppy" and the TTS (if installed) will not work. However, enabling Windows Audio does not require the server computer to have a sound card installed.

Procedure

- 1. Verify that you have full administrator rights for the computer.
- 2. Click Start > Administrative Tools > Services.
- 3. If the status of the Windows Audio service is not **Started**, start the service and set the **Startup Type** to **Automatic**.

Installing the Voicemail Pro software components

Procedure

- 1. Insert the IP Office Applications DVD.
- 2. Click the link for Voicemail Pro, and then double-click **setup.exe**.

The **Choose Setup Language** menu displays.

3. Select the language for the installation process. Click **OK**.

This language is used for the installation process and does not affect the language prompts that are installed.

The **Preparing Installation** menu displays.

- 4. Voicemail Pro requires Microsoft .NET 2.0 Framework. If this is not detected, you are prompted to install it. Click **Yes** to install Microsoft .NET 2.0 Framework.
- 5. If the Modify, repair or remove the program window displays, follow the upgrade process.
- 6. From the Welcome window, click Next.

The **Customer Information** menu displays.

- 7. Use the default names or enter a user and company name. These settings do not affect the Voicemail Pro installation.
- 8. Select the option Anyone who uses this computer (all users).
- 9. Click Next.
- 10. From the Choose Destination Location menu, click Next.

For ease of maintenance, use the default folder location if possible.

11. Click Next.

The Messaging Components menu displays.

- 12. Choose one of the following options:
 - Voicemail Pro (Full)
 - Voicemail Pro Client Only
- 13. Click Next.

Voicemail Pro (Full)	Go to the setup type step on page 21.	
Voicemail Pro Client -	The Setup Status menu displays. This shows you the progress of the	
Only	file installation. Go to the <u>restart step</u> on page 22.	

14. From the **Setup Type** menu, select one of the following options and click **Next**.

Compact	The Service Account Name window displays. This window is used to select the account under which the Voicemail Pro services will be run following installation.
Typical	The Service Account Name window displays.
Custom	The Select Features menu displays. Select the components required for the installation and click Next .

- 15. From the Service Account Name window, enter the user name and password used by the account. Alternatively, click **Browse** and select a name from the list of available computer or network accounts.
- 16. Click Next.

The account name and password are validated. If the validation fails, the system prompts you to create a new account that matches the details entered.

17. From the Select Program Folder menu, click Next.

By default, the program folder for the Voicemail Pro client is set to IP Office. For ease of maintenance, use this option unless there is a specific reason to use a different folder.

The **Start Copying Files** menu displays. It shows a summary of the components that are about to be installed.

18. Check that this list is as expected. If for any reason the details are not what you expect, click **Back** and make the required changes. When you are satisfied that the details are correct, click **Next** to start copying the files.

The **Setup Status** menu is displayed. This shows you the progress of the file installation. For a client-only installation, the software installation process is now complete.

Note:

You may get the prompt to reset IIS. If so, click **Yes** to reset IIS. If you click **No**, some of the functionalities may not be available until you restart IIS.

- 19. After the **InstallShield Wizard Complete** menu displays, depending on the operating system and the components installed, you may be prompted to restart the computer. If so, select **Yes**, **I want to restart my computer now**.
- 20. Click Finish.
- 21. If the computer restarts, log in to continue the installation process.

The installation process continues by requesting a number of configuration settings used by the voicemail server services. This is used to enter the account that the Voicemail Proserver should use for e-mail functions.

- 22. Enter the name of the e-mail account, or click **Browse** to select an account. Click **Next**.
 - The IP Office Voicemail Pro SMTP E-mail Settings window opens.
- 23. In the **Mail Server** box, type the name of the SMTP mail server or use the name that is proposed.
 - This should be the fully-qualified domain name.
- 24. In the **Port Number** box, type the number of the receiving port on the SMTP mail server.

 The default is 25.
- 25. To enforce server authentication, check the **Server Requires Authentication** box.

This is optional. If you check this box, you also need to provide the required **Account Name** and **Password**. You can also choose whether or not to set the **Use Challenge Response Authentication** option.

26. Click Finish.

The e-mail settings are validated. An error message is displayed if the system fails to connect to an SMTP server. Click **OK** to acknowledge the message.

- 27. If doing a custom installation to install a specific Voicemail Pro feature, refer to the appropriate section for details of any actions that need to be performed after the installation of the Voicemail Pro server software.
 - Web Campaigns Installation on page 24
 - Voicemail E-mail Installation on page 52
 - UMS Web Voicemail on page 28
 - Web Voicemail Installation on page 33
 - UMS Exchange configuration on page 42
 - <u>Centralized Voicemail Pro</u> on page 87
 - Installing Text to Speech Features on page 71

Result

You have now finished installing the Voicemail Pro server and client software.

Checking the client to server connection

About this task

Following installation of the server and client, you should check operation by using the client to connect to the server.

Procedure

1. Click Start > Programs > IP Office > Voicemail Pro.

The Voicemail Pro Client starts and the main window opens.

- 2. In the navigation panel, click **Voicemail Pro Administrators**.
- From the Administrator account, double-click on the account.

You can also right-click and select **Modify**.

- 4. Change the **Password** and **Confirm Password** to a new value than the default (Administrator).
- ^{5.} Initialize the server call flow by clicking the <page-header> Save and Make Live icon.
- 6. Select Yes.

The file root.vmp is created on the server. This is the compiled non-editable version of the call flow that is used by the server.

7. Test the voicemail operation.

Test that the system is running by dialing *17 from any extension. You should hear the mailbox announcement.

Next steps

You can now start configuring the operation of the voicemail server. For example, changing the system preferences.

Modifying the installed components

Procedure

- 1. Open the Windows Control Panel.
- 2. Click Programs > Programs and Features.
- 3. In the list of installed programs, select IP Office Voicemail Pro and click Change.

The installation wizard for IP Office Voicemail Pro opens up.

4. Select **Modify** and click **Next**.

The **Select Features** menu displays.

5. Select the check boxes for all the features in the list that you want to install.

If you clear the check box for a feature that is already installed, the installation wizard uninstalls the feature.

6. Click Next.

The Service Account Name window displays.

Installing Web campaigns

About this task

The Web campaigns component of Voicemail Pro requires IIS to be installed and running on the server computer.

Procedure

1. Check that IIS is installed and running on the server computer.

Windows Server 2008 R2 IIS does not support legacy IIS applications such as campaigns by default. To fix this, you can install IIS from the Windows installation disk and select **Legacy IIS support** during the installation.

- 2. Check that the server computer can be browsed from the other computers on the customer network.
- 3. If the Voicemail Pro server software has not yet been installed, run the Voicemail Pro software installation and select **Voicemail Pro (Full)**.
- 4. Select either **Typical** or **Custom**.
- 5. If you selected **Custom**, select **Voicemail Pro Campaign Web Component** in the list of components.

6. If the Voicemail Pro server software is already installed, modify the installed components and select **Voicemail Pro Campaign Web Component** in the list of components.

Configuring the Windows 2008 server for web campaigns

About this task

The following configuration changes are required for IIS version 7 after installation of the Voicemail Pro Web campaigns component.

Procedure

- 1. Click Start > Administrative Tools > Internet Information Services (IIS) Manager.
- 2. In the **Connections** pane, click the server node in the tree.

The server Home page displays.

- 3. In Features View, double-click Handler Mappings.
- 4. Click Edit Feature Permissions.
- 5. Check the **Scripts** and **Execute** check boxes.
- Click OK.
- 7. In the **Connections** pane, expand the server node in the tree.
- 8. Expand the **Sites** node, then expand the **Default Web Site** node, and select **Campaign**. The Campaign Home page is displayed.
- 9. In Features View, double-click Authentication.
- 10. Click ASP .NET Impersonation.
- 11. In the **Actions** pane, click **Disable**.

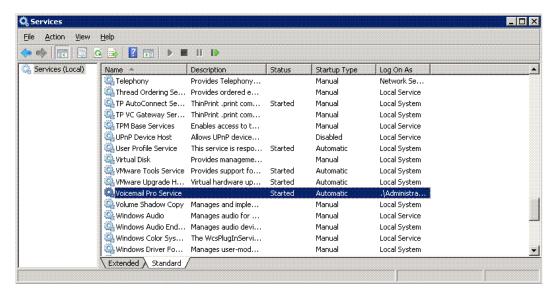
Starting Voicemail Pro Services manually

About this task

If you have installed Voicemail Pro successfully and rebooted the server computer, then the voicemail service starts automatically. However, you can restart the service manually, if required.

Procedure

1. Click Start > Administrative Tools > Services.



The **Voicemail Pro Service** should be visible. Its **Status** should be **Started** and the **Startup Type** should be set to **Automatic**. Other services may be present depending on the installed Voicemail Pro features. The **Voicemail Pro Service** is the main Voicemail Pro service. This is the only service that needs to be stopped and restarted. It stops and restarts the other services that it uses.

Close Services.

Setting the Voicemail Pro Service or computer to restart automatically

About this task

The following action is optional. If a fault causes the Voicemail Pro service to stop, the fault should be investigated and fixed. However, setting the options to restart the services or the computer automatically will minimize the disruption to the Voicemail Pro users.

Procedure

- 1. Click Start > Administrative Tools > Services.
- 2. Right-click Voicemail Pro Service and select Properties.
- 3. Select the **Recovery** tab.
- 4. Select the items in the drop-down lists to specify the action that the computer must take in case of failures.

Using a batch file to start services

About this task

In some instances, certain computers might not respond quickly enough to start all of the Avaya services in the correct order. In this circumstance, you should create a batch file that delays the start of these services until the computer is fully running.

Avaya IP Office Services can be started successfully at system start-up using a scheduled task that initiates the batch file below. This batch file ensures that the services will start successfully and in the correct order.

Procedure

- 1. Set all Avaya services listed below to Manual start. Do not include Key Server.
- 2. Create the batch file below and save it to %SYSTEMROOT%.

Only include lines for the services that are installed.

```
@echo off
rem Wait 60 seconds before execute.
timeout /t 60
net start Voicemail Pro Service
```

3. Create a scheduled task to start the batch file at system start-up.

Upgrading a Windows Voicemail Pro Server

Before you begin

Voicemail Pro supports upgrades from only the two previous versions of Voicemail Pro. To upgrade from earlier versions of Voicemail Pro, you must first upgrade your setup to one of the two previous versions.

About this task

Use this procedure to upgrade to Voicemail Pro from one of the two previous versions:

Procedure

1. Insert the IP Office Applications DVD. Click on the link for Voicemail Pro and then double-click on setup.exe.

The system displays a prompt to select the installation language.

2. Select the installation language, and click **OK**.

The system displays the IP Office Voicemail Pro <Installed Release> is current installed. Would you like to do a major upgrade to IP Office Voicemail Pro 9.0? message.

Click Yes.

The system displays the Select Features dialog box.

- 4. Select the items that you want to install.
- 5. **(Optional)** If you want to uninstall an item that is already installed, clear the check box corresponding to item in the list.
- Click Next.

The system displays the Select account name dialog box.

7. Click Next.

After validating the account details, the system displays the Start Copying Files dialog box.

8. Click **Next** to start the upgrade.

The system displays the Setup Status dialog box, which displays the progress of the upgrade.

9. After the installation is complete, click **Finish**.

The system displays the E-mail settings dialog box.

10. Enter your e-mail account details and click Next.

The system displays the SMTP E-mail settings dialog box.

11. Enter your SMTP E-mail details and click **Finish**.

Note:

If an error occurs, the system also displays the **SMTP Error** on page 108.

The system validates the SMTP settings that you enter and displays the Do you wish to start the service now? message.

12. Click Yes.

The installation of the Voicemail Pro 9.0 is complete.

Next steps

Dial *17 from any extension to test the system. The system should play the mailbox announcement.



After upgrade, the general system preference **Client/Server Connection Timeout (mins)** is reset to the default value 5.

UMS Web Services

Voicemail Pro supports user mailboxes and hunt group mailboxes to be accessed using the additional methods listed below.

IMAP e-mail client support

This method supports mailbox access using any e-mail client that supports IMAP, for example Outlook and Lotus Notes. The Voicemail Pro server computer acts as the IMAP server.

Web voicemail access

This method supports mailbox access using a web browser. Messages can be played back to an IP Office telephone extension or through the computer if the browser is audio enabled. Web Voicemail requires the Voicemail Pro server to also run IIS and PHP.

UMS Exchange configuration

A user or group can be configured to have their voicemail messages forwarded to the inbox of an Exchange server e-mail account. Telephone, including Visual Voice, mailbox access is redirected to that e-mail inbox as the store for voicemail messages. Alternatively, the user can access their voicemail messages using Outlook or any other mechanisms supported by the Exchange server.

Use of these options requires the user to be licensed, either using an appropriate IP Office user profile license or the legacy UMS Web Services license.

Feature	Web Voicemail	IMAP Client	Exchange 2010/2013/2016
Playback via computer.	y	J	√
Playback via User Extension.	>	×	x <u>*</u>
Save message Wav to computer.	×	J	>
Forward messages to other voicemail mailbox.	>	×	×
Forward messages to other e-mail mailbox.	×	J	>
Undelete manually deleted messages.	>	√	>
Mark message as unread.	7	7	· ·
Change voicemail password.	>	×	×

Show message types	Web Voicemail	IMAP client	Exchange 2010/2013/2016
- New (Unread).	√	J	√
- Old (read).	V	V	V
- Saved.	J	J	×

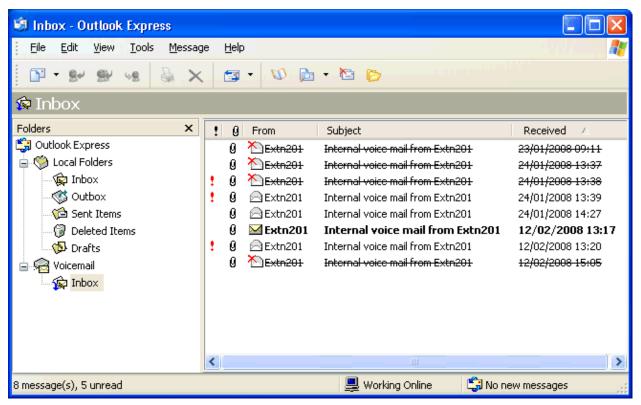
Table continues...

Show message types	Web Voicemail	IMAP client	Exchange 2010/2013/2016
- Priority.	V	V	V
- Private.	X 1	×	y
- Deleted.	V	V	y

IMAP installation

Voicemail Pro supports mailbox synchronization with e-mail clients that can support IMAP (Internet Message Access Protocol) accounts. Examples are Outlook, Outlook Express and Lotus Notes.

Once configured, the IMAP folder and the mailbox are synchronized whenever the IMAP folder is opened. The method of indication of the different message types will depend on the e-mail client being used and is not controlled by the Voicemail Pro.



The number of mailboxes that can be configured for IMAP and/or web access is controlled by licenses.

The Voicemail Pro IMAP server installation

The IMAP server is installed as a part of the Voicemail Pro service installation. It uses the IP address of the Voicemail Pro server computer and runs on the standard IMAP port 143. To prevent

Private messages are not indicated, however the web voicemail does not support the forwarding of private messages.

any conflicts with the Voicemail Pro IMAP server, do not run any other IMAP server on the same computer.

IP Office for Web Services

Licensing IP Office for Web Services

UMS web services can be licensed in a number of ways by licenses added to the IP Office configuration:

User licensing:

User licensing is done as follows.

- Users whose **Profile** is set to **Teleworker User** or **Power User** can be licensed using the **Teleworker Profile** or **Power User Profile** licenses.
- User's whose Profile is set to Basic User can be licensed using the legacy UMS Web Services licenses.

Hunt group licensing:

Hunt groups are licensed by UMS Web Services licenses.

Licensing hunt groups

Procedure

- 1. Start IP Office Manager.
- 2. Receive the configuration from the IP Office associated with the Voicemail Proserver.
- 3. In the **Licenses** section, add the required licenses.
- 4. Merge the configuration back to the IP Office and then receive the configuration again.
- 5. In the **Licenses** section, check that the **License Status** of the licenses is now shown as **Valid**.
- 6. Start the Voicemail Pro client.
- 7. Select **Help > About**.

The screen lists the **Web Services** as **Started** and shows the number of UMS licenses.

Configuring users for UMS

Procedure

- 1. Start IP Office Manager.
- 2. Receive the configuration from the IP Office system hosting the user.
- 3. Select **User** and then select the required user.
- 4. Set their Profile to either Teleworker or Power User.
- 5. Select the Voicemail tab.
- 6. Enable UMS Web Services and click OK.
- 7. Merge the configuration back to the IP Office.

Configuring hunt groups for UMS

About this task

Access to hunt group mailboxes using UMS is supported for Voicemail Pro 5.0+.

Procedure

- 1. Start IP Office Manager.
- 2. Receive the configuration from the IP Office system hosting the hunt group.
- 3. Select the hunt group.
- 4. Select the Voicemail tab.
- 5. Enable UMS Web Services and click OK.
- 6. Merge the configuration back to the IP Office.

User e-mail account configuration

The exact method of configuration of an IMAP account depends on the IMAP client being used by the user. For example, it may be required to enable some field with dummy data in order for the email client to accept the account even though those settings are not used by the Voicemail Pro IMAP server.

The general details that are required are:

IMAP account setting	IP Office value
Incoming server	Voicemail Pro server IP address or domain name address.
Account Name	User name or extension number.
Password	User voicemail code.

Configuring a user e-mail account in Outlook

Procedure

- 1. Select **Tools** > **Options**.
- Select Mail Setup > E-mail Accounts.
- 3. Select Add a new e-mail account.
- 4. Select **IMAP** as the server type.
- 5. In **Server Information for Incoming mail server** and **Outgoing mail server**, enter the IP address or domain name address of the Voicemail Pro server computer.
- In Logon Information, enter the user's extension number and voicemail code as the User Name and Password.
- 7. Click Next.

Configuring a user e-mail account in Outlook Express

Procedure

- 1. Select Tools > Accounts.
- 2. Select Add > Mail.
- 3. Enter a descriptive name such as Voicemail and click Next.
- 4. Enter an e-mail address.

This e-mail address value is not used, but a value must be entered to move to the next screen.

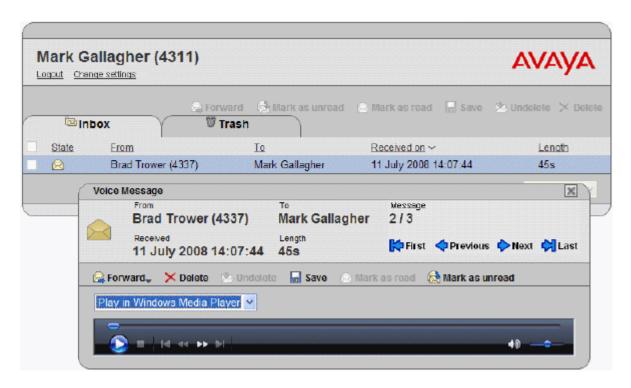
- 5. Click Next.
- 6. Set My incoming mail server is a to IMAP.
- 7. In the **Incoming server** field, enter the IP address or domain name address of the Voicemail Pro server computer.
- 8. Enter a value in the **Outgoing mail server** field.

This mail server value is not used, but a value must be entered to move to the next screen.

- 9. Click Next.
- 10. For **Account Name**, enter the user's extension number or name in the IP Office configuration.
- 11. For Password, enter the user's Voicemail Code.
- 12. Click Next and then Finish.

Web Voicemail installation

Voicemail Pro 4.2+ supports Web access to user mailboxes. Users are then able to play their messages, mark them as saved or deleted, or forward messages to another mailbox. Playback is through an IP Office extension or through the audio facilities of the computer.



Web Voicemail installation requirements

The Web Voicemail component is selectable as part of a custom Voicemail Pro installation. Note the prerequisites below before doing the Web Voicemail installation.

IIS Web Server Must be installed on the voicemail server computer before the Voicemail Pro Web Voicemail component is installed.

PHP

Web Voicemail uses PHP. If an existing PHP is not detected, the Voicemail Pro installation installs its own PHP

Licenses

The use of Web Voicemail and the number of users who can be configured to access it are controlled by the UMS Web Services license entered in the IP Office configuration.

UMS web services licensing

UMS web services can be licensed in a number of ways by licenses added to the IP Office configuration:

User Licensing: User licensing is done as follows.

- Users whose **Profile** is set to **Teleworker User** or **Power User** can be licensed using the **Teleworker Profile** or **Power User Profile** licenses.
- User's whose Profile is set to Basic User can be licensed using the legacy UMS Web Services licenses.

Hunt Group Licensing:

• Hunt groups are licensed by UMS Web Services licenses.

Computer name\URL

The computer name is used as part of its URL on the network. Set the name to something that appropriately indicates its purpose and that can be used as part of the URL for the Web server within the customer's domain.

Remove IMS

Voicemail Pro UMS is not supported on systems that are using Voicemail Pro IMS. IMS must be removed before UMS can be selected for installation.

User and browser requirements

For users to access Web Voicemail, they require a Web browser that meets the following requirements.

Javascriptenabled Web browser

Web Voicemail is tested against the following browsers. Other browser can also work if they support JavaScript and CSS.

- Internet Explorer V8.0 or higher
- Mozilla Firefox V3.0 or higher.
- Opera V10.0 or higher.

Computer playback

Using browser access, you can playback messages either via an IP Office extension or through the web browser. Avaya test browser playback using the following Windows media players.

- · Windows Media Player 10.
- Windows Media Player 11.
- Quick Time 7.4.
- VLC 0.8.

User name and password

Once enabled for UMS Web Services in the IP Office configuration, to log on using Web Voicemail, the user needs to know their **Name** and **Voicemail Code** as set in the IP Office configuration. Note that this is the **Name** and not the **Full Name**..

Installing Voicemail Pro Software with Web Voicemail Component

About this task

The Web Voicemail component is installed as part of a Custom Voicemail Pro installation.

Procedure

1. Verify that IIS is installed and running on the Voicemail Pro server computer. Check that it can be browsed from user computers.

While the server can be browsed by IP address, the URL used by users is based on the server's computer name within the customer domain. Check that the Web server can be browsed from user computers using the server's computer name as part of the URL.

- 2. Insert the IP Office Applications DVD.
- 3. Click on the link for **Voicemail Pro**, and then double-click on **setup.exe**.

The Choose Setup Language window opens.

- 4. When asked for the type of Voicemail Pro install to perform, select Voicemail Pro (Full).
- 5. On the next screen, select Custom.
- 6. In the list of components, scroll down and select **Web Voicemail**.
 - Do not change any of the other selections unless you understand the requirements for those components.
- 7. Follow the remainder of the installation process and reboot the Voicemail Pro server when required.

IP Office for Web Services

Licensing IP Office for Web Services

UMS web services can be licensed in a number of ways by licenses added to the IP Office configuration:

User licensing:

User licensing is done as follows.

- Users whose **Profile** is set to **Teleworker User** or **Power User** can be licensed using the **Teleworker Profile** or **Power User Profile** licenses.
- User's whose Profile is set to Basic User can be licensed using the legacy UMS Web Services licenses.

Hunt group licensing:

Hunt groups are licensed by UMS Web Services licenses.

Licensing hunt groups

Procedure

- 1. Start IP Office Manager.
- 2. Receive the configuration from the IP Office associated with the Voicemail Proserver.
- 3. In the **Licenses** section, add the required licenses.
- 4. Merge the configuration back to the IP Office and then receive the configuration again.
- 5. In the Licenses section, check that the License Status of the licenses is now shown as Valid.
- 6. Start the Voicemail Pro client.
- 7. Select **Help > About**.

The screen lists the **Web Services** as **Started** and shows the number of UMS licenses.

Configuring users for UMS

Procedure

Start IP Office Manager.

- 2. Receive the configuration from the IP Office system hosting the user.
- 3. Select **User** and then select the required user.
- 4. Set their Profile to either Teleworker or Power User.
- Select the Voicemail tab.
- 6. Enable UMS Web Services and click OK.
- 7. Merge the configuration back to the IP Office.

Configuring hunt groups for UMS

About this task

Access to hunt group mailboxes using UMS is supported for Voicemail Pro 5.0+.

Procedure

- 1. Start IP Office Manager.
- 2. Receive the configuration from the IP Office system hosting the hunt group.
- 3. Select the hunt group.
- 4. Select the Voicemail tab.
- Enable UMS Web Services and click OK.
- 6. Merge the configuration back to the IP Office.

Enabling Web Voicemail

About this task

If the Exchange server and Voicemail Pro are installed on the same computer, the security settings of the Exchange server override the Voicemail Pro settings. So, if you access Web Voicemail with default settings, you may receive this error message, HTTP Error 403.4 - Forbidden.

Note:

If the Exchange server and Voicemail Pro are not installed on the same computer, you do not need to enable Web Voicemail explicitly.

Follow the below procedure to enable Web Voicemail:

- 1. Click Start > Administrative Tools > Internet Information Services (IIS) Manager.
- 2. In the Connections pane, expand the Sites node and click Default Web Site in the tree.
- 3. In Features View, double-click SSL Settings.
- 4. Clear the Require SSL check box.
- 5. Restart the IIS service.

Enabling browser access to Web Voicemail and ContactStore

About this task

It is possible to run ContactStore and UMS Web Voicemail on the same server computer. However some additional steps are required after the installation to enable browser access to both applications.

Procedure

- 1. Install UMS Web Voicemail.
- Install ContactStore.
- 3. Reboot the server.
- 4. Within services, stop the ContactStore service.
- 5. Using a Web browser, access a voicemail mailbox using UMS Web Voicemail.
- 6. Restart the ContactStore service.

Result

Both applications are now accessible using the Web browser.

Checking playback control

About this task

UMS message playback through the Web browser is tested and supported with Windows Media Player. Other audio playback controls may work, but they have not been tested.

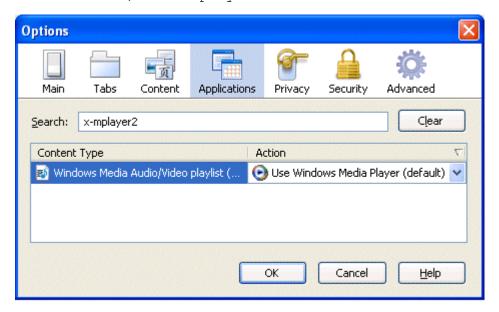
Depending on your Web browser, use one of the following procedures to check that the audio playback is associated with the Windows Media Player.

Firefox

Procedure

Select Tools > Options > Applications or Tools > Options > Content > File Types >
 Manage.

2. In the search box, enter x-mplayer2.

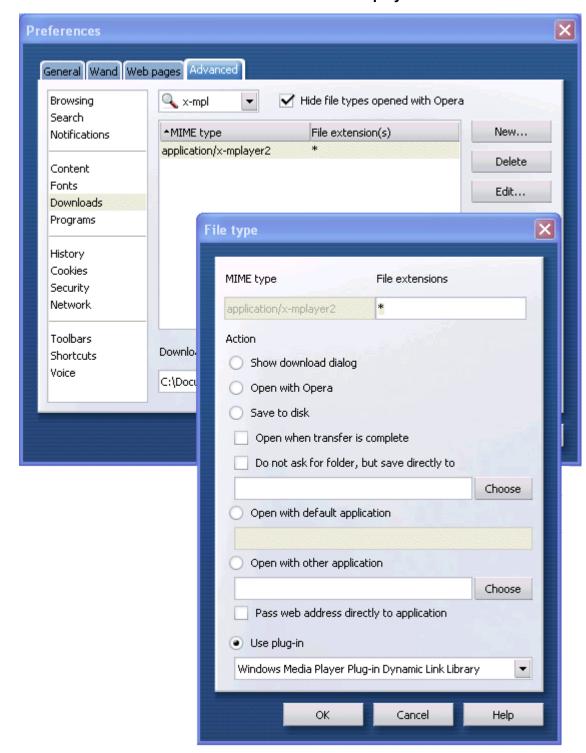


3. Check that **Action** is set to **Use Windows Media Player** or **Use Windows Media Player** plug-in **Dynamic Link Library**.

Opera

Procedure

1. Select Tools > Preferences.



2. Select **Downloads** and use the search box to find **x-mplayer2**.

3. Check that the setting is set to **Use plug-in** and **Windows Media Player Plug-In Dynamic Link Library**.

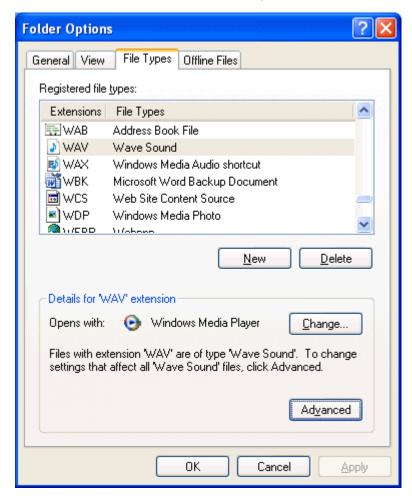
Internet Explorer

About this task

Internet Explorer uses the application associated with the wav file type for Windows.

Procedure

- 1. Select My Computer.
- 2. Select Tools > Folder Options.
- 3. Select File Types.
- 4. Locate and select the WAV extension type.



5. Check that the details show Windows Media Player as the selected application for this file type.

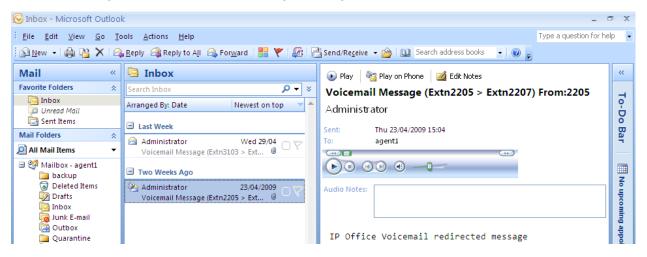
UMS Exchange configuration

A UMS user or group can be configured to have their voicemail messages forwarded to the inbox of an Exchange server e-mail account. They can then access their voicemail messages using Outlook and playback those messages on their computer. Alternatively any other mechanisms supported by Exchange Server Unified Messaging can be used. Access to the messages from an IP Office telephone is still supported, including Visual Voice.

Voicemail messages in an Exchange inbox are not visible to UMS IMAP and UMS Web Voicemail, however Exchange provides its own methods to use IMAP and Web browsing with Exchange mailboxes.

Note:

When using an Exchange server as the message store for a user's voicemail messages, the Voicemail Pro server will deliver messages to the Exchange server on completion of the recording. However, the presentation to Outlook and back to the Voicemail Pro server for message waiting indication (MWI) and access via telephone is delayed by Exchange server processing. The delay is typically 1 or 2 minutes. The same delay also applies to changes in the message status that affect message waiting indication.



The following are the prerequisites for UMS Exchange:

Exchange Server

- The Exchange server must be configured with the Unified Messaging Server Role selected.
- A Dial Plan must be created on the Exchange server. This can be a blank dial plan but it must exist.
- Within the Exchange server settings for each mailbox, select Enable Unified Messaging.

Voicemail Pro

 The Voicemail Pro server must be configured for MAPI-based voicemail email.

- The supported MAPI applications are Exchange server and Microsoft Outlook.
- **IP Office** The user or hunt group must be licensed and enabled for UMS Web Services.
 - The user or hunt group's Voicemail E-mail mode must be set to Forward.

Related links

Configuring Exchange Server for Unified Messaging on page 43 MAPI setup on page 55

Configuring Exchange Server for Unified Messaging

About this task

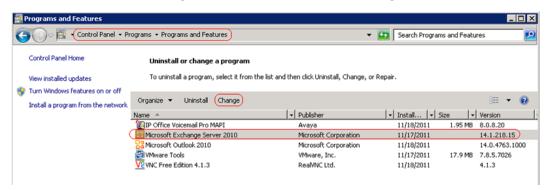
The following procedures provide a simple overview of the minimum steps required to configure Exchange Server for Unified Messaging. For details, refer to the Microsoft documentation.

Configuring Exchange Server 2010 for Unified Messaging Server Role About this task

To support UMS Exchange Server 2010 operation, configure the Exchange Sever to include Unified Messaging Server Role.

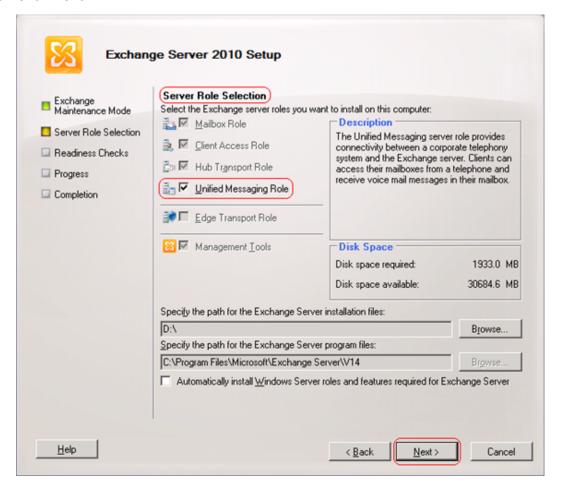
Procedure

- 1. In the Windows **Control Panel**, select **Program and Features**.
- Select Microsoft Exchange Server 2010, and click Change.



The wizard for changing Exchange Server setup is started.

3. Click Next.



- 4. In the **Server Role Selection** list, check that **Unified Messaging Server Role** is one of the selected roles.
- 5. Click **Next** through the wizard, and then click **Finish**.

Next steps

Configure mailboxes on Exchange Server 2010.

Related links

#unique_57

#unique 58

Configuring mailboxes on Exchange Server 2010 on page 44

Configuring mailboxes on Exchange Server 2010

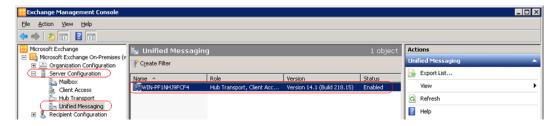
Before you begin

Configure Exchange Server 2010 for Unified Messaging Server Role.

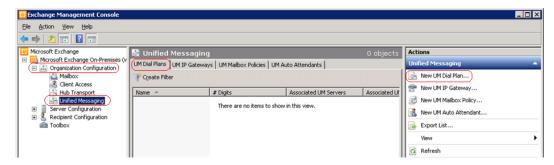
Procedure

- 1. Select Start > All Programs > Microsoft Exchange Server 2010 > Exchange Server Management Console.
- 2. Expand the Server Configuration list.

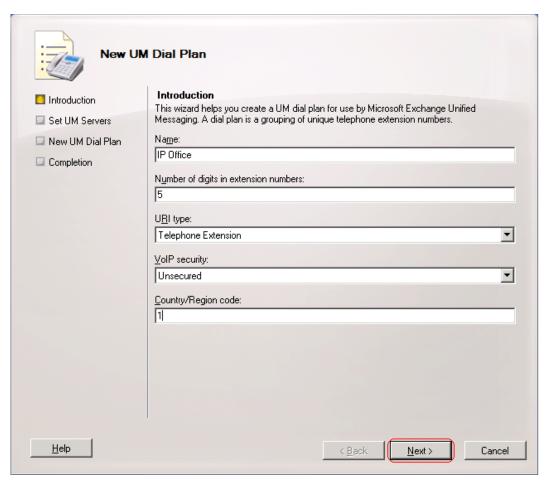
The **Unified Messaging** role is included in the list.



- 3. Create a Unified Messaging dial plan.
 - a. Expand the Organization Configuration and select Unified Messaging.

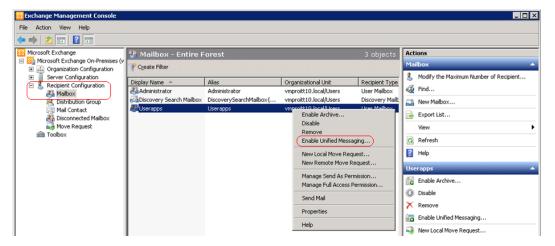


b. Select the **UM Dial Plans** tab, and in the **Actions** list, select **New UM Dial Plan**. The **New UM Dial Plan** wizard starts.

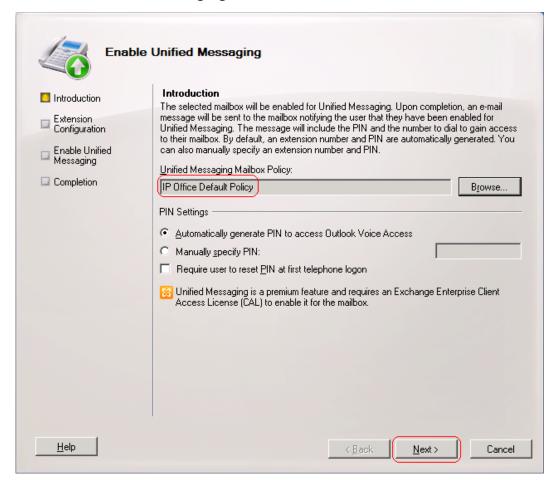


- c. Create a plan similar to the one shown above. The number of digits is not important but must be matched later in the process. The simplest option is to set it to match the length of your IP Office extension.
- d. Click Next.
- e. On the **Set UM Servers** screen, click **Add** to select the UM server that you want to add to the UM dial plan.
- f. Click Next.
- g. Click New, and then click Finish.
- 4. Select the mailboxes that you want the Unified Server role to be available on.
 - a. Expand the Recipient Configuration section, and select Mailbox.

b. Right-click the configuration settings used for general mailbox users, and select **Enable Unified Messaging**.

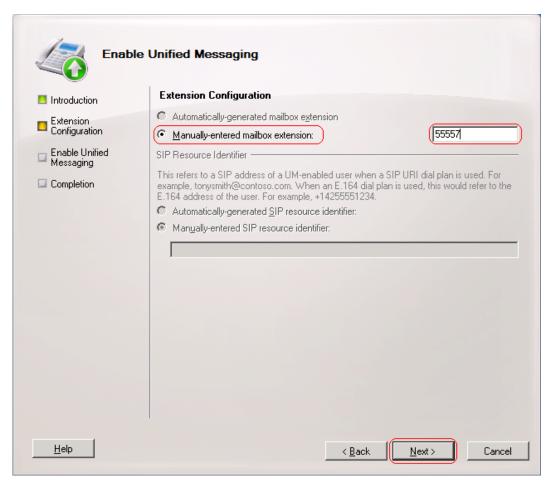


The **Enable Unified Messaging** wizard for the mailbox starts.



c. For the **Unified Messaging Mailbox Policy**, click **Browse** and select the dial plan created earlier.

d. Select Automatically generate PIN to access Outlook Voice Access, and click Next.



- e. Select Manually entered mailbox extension.
- f. Enter a number that matches the number of digits specified in the UM Dial Plan created earlier.

The actual number entered does not need to match an IP Office extension.

- g. Click Next.
- h. Select **Enable**, and then click **Finish**.

Related links

#unique 57

<u>Configuring Exchange Server 2010 for Unified Messaging Server Role</u> on page 43 #unique_58

Configuring registry settings

About this task

By default, UMS Exchange supports only up to 166 users. In order to support more number of users, proceed as follows:

Procedure

- 1. On the computer hosting the Exchange server, open **Registry Editor**.
- 2. Under HKEY_LOCAL_MACHINE/SYSTEM/CurrentControlSet/Services/ MSExchangeIS/ParametersSystem, add a new key MaxObjsPerMapiSession.
- 3. Under the new key, create a new **DWORD Value** <code>objtMessageView</code>, and set the value to thrice the number of required users.
 - For example, to support 500 users, set the value to 1500.
- 4. Restart the *Microsoft Exchange Information Store* service.

Assigning permission to users for MAPI

Assigning Send As permissions

About this task

Use this procedure to assign security permissions to the user under whose account MAPI service is to be executed.

- 1. Log on to the Active Directory server using an account that has Domain Administrator privileges.
- 2. Click Start > Administrative Tools > Active Directory Users and Computers.
- 3. On the View menu, click Advanced Features.
- 4. In the left pane of the **Active Directory Users and Computers** dialog box, right-click the domain, and select **Properties**.
- 5. In the **Properties** dialog box, select the **Security** tab.
- 6. Click Advanced.
- 7. In the Advanced Security Settings dialog box, click Add.
- In the Select Users, Computers, Service Account, or Group dialog box, add the user account.
- 9. Click OK.
- 10. In the Apply to field, select Descendant User objects.

- 11. In the **Permissions** box, select **Send As** permissions.
- 12. Click **OK** to close the **Permission Entry** dialog box.
- 13. Click **OK** to close the **Advanced Security Settings** dialog box.
- 14. Click **OK** to close the **Properties** dialog box.
- 15. To prevent the **Send As** permissions from being removed, proceed as follows:

The system periodically applies a security descriptor to the following groups, which removes the **Send As** permissions from these groups.

- Administrators
- Domain Administrators

The following steps prevent the removal of the **Send As** permissions.

- a. Click Start > Run.
- b. Enter cmd. and click OK.

Note:

You must be a member of the domain administrator group.

c. In the command window, enter the following command.

dsacls "cn=adminsdholder,cn=system,dc=<xxx>,dc=<yyy>" /G "\<MM Security Group>:CA; Send As"

w here.

- dc=<xxx>, dc=<yyy> is the fully-qualified name of the customer domain (for example, dc=Avaya, dc=com)
- <MAPI> is the name of the service permissions group

It takes at least an hour for the security permissions to replicate the user account.

Assigning permissions on Exchange Server 2010

About this task

If user account is on Exchange 2010 server, proceed as follows to assign additional permissions to the user account:

- 1. Verify that the user to be added is a member of the Exchange recipient Administrator
- 2. Log on to the Active Directory server using an account that has privileges to assign permissions to accounts, such as administrator.
- 3. Click Start > Administrative Tools > Active Directory Sites and Services.
- 4. In the left pane, select Active Directory Sites and Services.

- 5. On the View menu, click Show Services Node.
- 6. In the left pane, expand **Services**, expand **Microsoft Exchange**, and then locate the appropriate Exchange Organization.
- 7. Right-click the Exchange Organization, and select **Properties**.
- 8. In the **Properties** dialog box, click the **Security** tab. If the **Security** tab is not visible, add the **ShowSecurityPage** registry key.
- 9. Click Add.
- 10. In the **Select Users, Computers, Service Accounts, or Groups** dialog box, add the user account.
- 11. Click **OK**.
- 12. Under **Permissions for the group**, select **Read**, and click **Apply**.
- 13. Click Advanced.
- 14. On the **Permissions** tab of the **Advanced Security Settings** dialog box, select the check box at the bottom of the dialog box. This applies the permissions inherited from the parent to this object and its child objects.
- 15. Click Add and add the user account.
- 16. Click **OK**.
- 17. In the Apply to field, select This object and all descendant objects.
- 18. Verify that the following box is *not* selected: **Apply these permissions to objects and/or containers within this container only**.
- 19. In the **Permissions** field, select the required permissions.
 - List contents
 - Read all properties
 - · Write all properties
 - Read permissions
 - · Create all child objects
 - Administer information store
 - Create named properties in the information store
 - Receive As
 - Send As
 - · View information store status
- 20. If displayed, also select the following permissions:
 - Read
 - Execute

21. Click **OK**.

Voicemail Email

Voicemail E-mail features of the Voicemail Pro server provide a number of e-mail functions.

Forward a message to e-mail: If the Voicemail Pro server is set to IP Office mailbox mode, mailbox users are able to manually forward an voicemail message to their e-mail.

Automatic new voicemail messages: For all mailbox modes, users can use voicemail e-mail to automatically have a message sent to their e-mail whenever they receive a new voicemail message. The e-mail can be a simple alert or it can include a copy of the voicemail as an attachment.

eMail action: With customized call flows, an eMail action can be used to send a caller's recorded voicemail message to a specified e-mail address.

UMS Exchange: In conjunction with Exchange server and Microsoft Outlook, users are able to use their Outlook inbox as their mailbox for voicemail messages. If the Exchange server is 2010 and the mailbox is configured for Unified Messaging, the users will also have the ability to play the message within Outlook, if using Microsoft Outlook 2010.

Voicemail E-mail features require the Voicemail Pro server to be configured for access to either an SMTP e-mail server or to a MAPI e-mail server via a MAPI enabled e-mail client program on the Voicemail Pro server computer.

SMTP Installation: This is an e-mail standard supported by most e-mail servers. It is the default e-mail mode for the Voicemail Pro server.

MAPI Installation: MAPI requires a MAPI compliant e-mail client program to be installed on the Voicemail Pro server. The supported MAPI client is Outlook. It also requires the Voicemail Pro service to be run using a user account that is able to send e-mails via that MAPI client. The exact method of integration between the Voicemail Pro server and the MAPI e-mail client depends on whether the Voicemail Pro server is part of a work group or a domain. This guide contains examples for both approaches.

The MAPI process described in this guide is based on Microsoft Windows 2000 Professional with Microsoft Outlook 2000 and Microsoft Outlook Express 5.5. Steps may differ depending on the version of Windows and e-mail client used.

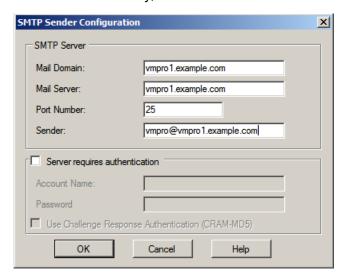
Note:

- MAPI is not shipped with the Exchange server as standard. However, it can be installed separately. For details, see http://support.microsoft.com/kb/945835.
- Microsoft does not support installing Exchange Server components and Microsoft
 Outlook on the same computer. For details, see http://support.microsoft.com/kb/266418.

Configuring the server SMTP e-mail settings

Procedure

- 1. Open the Voicemail Pro Client application.
- 2. Click Preferences, and select General.
- 3. Click the Email tab.
- 4. On the **MAPI** sub tab, verify that the **Enable MAPI** check box is not selected.
- 5. Click the SMTP Sender sub tab.
- 6. Select the **Logging** check box to enable SMTP logging by the server.
- 7. Specify the list of SMTP servers to which the Voicemail Pro server sends messages.
 - To add a server entry, click ♣.



- To edit a server entry, click 🖦
- To delete a server entry, click X.
- 8. Click OK.
- 9. Click Save and Make Live.

SMTP Sender field descriptions

Name	Description
Logging	Enables SMTP logging.
Servers	Used to enter details of the SMTP server or servers to which the Voicemail Pro server send its messages.

SMTP Sender Configuration field descriptions

Name	Description	
Mail Domain	The usage depends on whether the mail domain is the first server entry in the list or a subsequent entry.	
	For more information, see <u>About using mail domains</u> on page 54.	
Server	Specifies the IP address or fully-qualified domain name of the SMTP server to which messages are sent.	
	Voicemail Pro supports SMTP communication over both - SSL/TLS and plain text.	
	For the first server entry in the list — Where messaging between Voicemail Pro servers is being used (central, backup and or distributed servers), the first entry is used and will match the domain set above.	
	For subsequent entries — The address of the e-mail server that handles e-mails for recipients other than another Voicemail Pro server on the network.	
Port Number	This is the port number on the SMTP server to which the messages are sent. Port number for an external SMTP server can be different depending on whether you want to send the messages in secure mode or non-secure mode.	
Sender (Identifier)	Note that some servers will only accept e-mails from a specific sender or sender domain. If left blank, the Voicemail Pro server will insert a sender using either the e-mail address set for the voicemail mailbox user if set or otherwise using the best matching name it can resolve from the IP Office.	
Server Requires Authentication	This check box indicates whether the connection to send SMTP messages to the mail server requires authentication with that server. The authentication is typically the name and password of a mailbox account configured on that server.	
Account Name	Sets the name to use for authentication.	
Password	Sets the password to use for authentication.	
User Challenge Response Authentication (Cram MD5)	If this check box is selected, the name and password are sent using Cram MD5.	

About using mail domains

First entries in a list

This is the default outgoing e-mail settings. It also sets the mail destination domain on which the Voicemail Pro server filters incoming messages (see below) and so is repeated on the **SMTP Receiver** tab.

For messaging between Voicemail Pro servers, the first entry in the SMTP Sender list must be the one configured and used. Each server uses the SMTP server service on the same server computer as the voicemail service. For example a Windows based servers uses the SMTP e-mail

provided by the IIS on the same server. The voicemail service also uses the domain set to filter incoming SMTP mails received by the SMTP server. For this to work, the domain entered should be the fully qualified name of the server on which the Voicemail Pro server is running, for example vmprol.example.com. Any incoming messages where the recipient mail domain is not exactly the same as the specified domain are ignored. The recipient can either by vmsyncmaster, vmsyncslave or the name or extension of a mailbox on the Voicemail Pro server, for example Extn201@vmprocentral.example.com or 201@vmprocentral.example.com.

Subsequent entries

The domain specifies that these settings should be used for e-mails sent to the matching domain. The entry must be a fully qualified name resolvable by DNS or an IP address.

MAPI setup

Installing Voicemail Pro for MAPI in a domain

About this task

Before you begin to install the Voicemail Pro software, you must do the following procedures.

Related links

MAPI setup on page 55

Creating a voicemail domain account on page 55

Configuring Outlook for Voicemail Email on page 56

Installing the Voicemail Pro software on page 57

Adding a port to the Windows firewall on page 57

Switching Voicemail Pro to MAPI on page 58

Creating a voicemail domain account

Procedure

1. Make sure that the computer running the Voicemail server is a member of the domain.

To join the domain, you need access to a log account that has administrative permissions on the domain as well as on the server computer. Contact your domain administrator to get access to such an account.

- 2. On the Exchange server, create an account called **Voicemail** on the domain and an associated mailbox.
- 3. Provide a secure password.
- 4. Check the User Cannot Change Password and Password Never Expires boxes.
- Log on to the voicemail server computer using a domain administrator account.
- 6. Click Start > Administrative Tools > Computer Management.
- 7. In the left pane, expand Local Users and Groups, and click Groups.
- 8. Double-click **Administrators**, and click **Add**.

- 9. Click **Locations** and select the domain name in the list.
- 10. In the Enter the object names to select field, type Voicemail and click Check Names.
- 11. Select **Voicemail** in the list and click **OK** followed by **OK**.

Next steps

Configuring Outlook for voicemail e-mail on page 56

Configuring Outlook for Voicemail Email

About this task

To configure Outlook on your system, perform the following steps:

- 1. On the desktop, right-click the Outlook icon and select **Properties**.
- 2. On the **General** tab, select **Add**.
- 3. Select Microsoft Exchange Server.
- 4. Click Next.
- 5. In the **Server** field, enter the name of the Exchange server.
- 6. In the Mailbox field, enter Voicemail.
- 7. Click Next.
- 8. When you are asked if you travel with this computer, select **No**.
- 9. Click Next.
- 10. Click Finish.
- 11. Highlight the MS Exchange Settings and click Properties.
- 12. Highlight Microsoft Exchange Server and click Properties.
- 13. Click Check name.
- 14. If the name is resolved, select **Apply**.
- 15. Click **OK**, **OK**, and **Close** to shut the mail settings.
- 16. Do not continue until the name has been resolved correctly with the Exchange server. If the name is not resolved, check the account details with the Exchange Administrator.
- 17. Open **Outlook** and select **Yes** to register Outlook as the default e-mail application.
- 18. Select **Tools** > **Options**.
- 19. Click the **Preferences** tab.
- 20. Click Email Options.
- 21. Uncheck Save copies of messages in Sent Items folder.

You might want this option selected during initial setup to aid troubleshooting. However, due to the size of wav file message attachments, you should uncheck this field after installation testing is completed.

- 22. Log on to the computer running the Voicemail Pro Server using the voicemail account.
- 23. From Outlook, send a message directly to an extension user.

If this message is received correctly, you can continue installing the Voicemail Pro software.

Next steps

Installing the Voicemail Pro software on page 57

Installing the Voicemail Pro software

About this task

To install Voicemail Pro software, perform the following steps:

Procedure

- 1. Log off and log on using the Voicemail account and password.
- 2. Install the required Voicemail Pro software.
- 3. When the system prompts for a user name and password for the Voicemail Pro service, enter the Voicemail account details.
- 4. Restart the server and log on using the Voicemail account.
- 5. When SMTP e-mail details are requested, enter no values and ignore the error message following the SMTP check.
- 6. Start the Voicemail Pro service.
- 7. Check that the basic voicemail services start and operate correctly.

Related links

Starting Voicemail Pro Services manually on page 25

Adding a port to the Windows firewall

About this task

Voicemail Pro installed on Linux uses MAPI service as a proxy to the Microsoft Exchange server. Voicemail Pro will send commands to the MAPI service, which in turn will send the corresponding MAPI commands to the Exchange server. The responses from the Exchange server are relayed back to the Voicemail Pro server using the MAPI service.

For the client servers to communicate with the Voicemail Pro server, add the port that the MAPI service uses to the Windows firewall.

- 1. Open the Windows Control Panel.
- 2. Open System and Security > Windows Firewall.

- 3. Click Advanced settings.
- 4. Click **Inbound Rules** in the left pane.
- 5. Click **New Rule** in the right pane.

The New Inbound Rule Wizard opens.

- 6. Select Port and click Next.
- 7. Select **TCP** and enter the port number that the MAPI service uses in the **Specific local ports** field.
- 8. Click Next.
- 9. Select Allow the connection and click Next.
- 10. Check the **Domain**, **Private**, and **Public** check boxes.
- 11. Click Next.
- 12. Enter a name for the rule and click Finish.
- 13. Click **Outbound Rules** in the left pane and repeat <u>step 5</u> on page 58 to <u>step 12</u> on page 58.

Next steps

Switching Voicemail Pro to MAPI on page 58

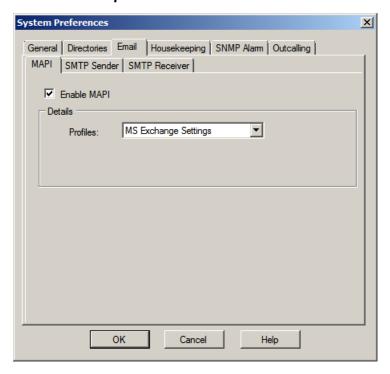
Switching Voicemail Pro to MAPI

About this task

By default, the Voicemail Pro server is configured for SMTP e-mail mode. However, if MAPI settings are entered it will switch to MAPI mode. Some options are not available if you are working offline. You must be working online to use this feature.

- 1. Start the Voicemail Pro client.
- 2. Click ** Preferences, and select General.
- 3. Click the Email tab.
- 4. Click the MAPI sub tab.
- 5. Select the **Enable MAPI** check box to switch the Voicemail Pro server to use MAPI for its e-mail options rather than SMTP..
- 6. In the **Profile** field, choose a MAPI e-mail account that is already configured and is able to send e-mails from the MAPI client on the voicemail server.
- 7. Click OK.
- 8. Click Save and Make Live.

MAPI field descriptions



Name	Description
Enable MAPI	Select this check box if you want the Voicemail Pro server to use MAPI for the e-mail options rather than SMTP.
Profiles	Use this field to select the MAPI e-mail account that you want the Voicemail Pro server to use to provide visibility to the e-mail account mailboxes for which it requires access. You must create the profiles on the MAPI e-mail client on the server computer, and configure the profiles such that the Windows account running the Voicemail Pro service can use them.

Installing Voicemail Pro for MAPI in a workgroup

About this task

The user name and password created are requested as part of the installation of the Voicemail Pro service. Install the Microsoft Outlook software on the computer before configuring it.

By default, Voicemail Pro is set to use SMTP for emails. You need to change this to MAPI.

You also need to set the SMTP e-mail account settings on the Voicemail Pro so that they match those of the customer's email server.

Related links

MAPI setup on page 55

Creating a voicemail user account on page 60

Configuring Outlook Express for internet mail on page 60

Configuring Outlook for internet mail on page 61

<u>Configuring Outlook for the Exchange server</u> on page 63
<u>Installing the Voicemail Pro software</u> on page 57
<u>Switching Voicemail Pro to MAPI</u> on page 58
Changing the SMTP e-mail account settings on page 65

Creating a voicemail user account

About this task

For an example, this procedure uses the name of the created user account as "Voicemail".

Procedure

- 1. Log on to the server computer using an administrator account.
- 2. Open the Windows Control Panel.
- 3. Click User Accounts > Add or remove user accounts.
- 4 Click Create a new account
- 5. Enter Voicemail as the new account name and select **Administrator** as the account type.
- Click Create Account.

The new account, Voicemail, is created and added to the list of user accounts.

7. Click **Voicemail** and create a secure password for the account.

Next steps

Continue with one of the following procedures as appropriate to the installed MAPI client and method for sending e-mail.

- Configuring Outlook Express for internet mail on page 60
- Configuring Outlook for internet mail on page 61
- Configuring Outlook for the Exchange Server on page 63

Configuring Outlook Express for internet mail

Procedure

- 1. Click the **Outlook Express** icon to start the Configuration wizard.
- 2. In the Display name box, enter Voicemail.
- 3. Click Next.
- Select I already have an e-mail address that I'd like to use and enter the e-mail address.

For example, voicemail@example.com

- Click Next.
- Enter the name or address of the Incoming mail server and the outgoing mail server.

Note:

If you enter the name, configure the IP address of the DNS Server in the voicemail computer.

- 7. Click Next.
- 8. Enter the e-mail account name and password.

For example, Voicemail

- 9. Select Remember password.
- 10. Click Next.
- 11. Click **Finish** to complete the wizard.
- 12. Open Outlook Express and select **Tools** > **Options**.
- 13. Click the **General** tab.
- 14. Uncheck Send and Receive messages at Start up.
- 15. Uncheck Check for new messages every.
- 16. Select the **Send** tab.
- 17. Uncheck Save copy of sent messages in the 'Sent Items' folder.
- 18. Check **Send messages immediately**.
- 19. Under Mail Sending Format select Plain Text.
- 20. Click **OK**.
- Log on to the server computer using the account that will be used for the Voicemail Proserver.
- 22. From Outlook or Outlook Express, send a message direct to an extension user.
- 23. If this message is received correctly, continue with installing the Voicemail Pro software.

Next steps

Installing the Voicemail Pro software on page 57

Configuring Outlook for internet mail

About this task

For the installation of Outlook to work correctly, follow the following setup process. You can configure Outlook in two ways. If you use the wizard prior to completing the steps below, Outlook sends incorrect messages.

- 1. Right-click the Outlook icon on the desktop and select **Properties**.
- 2. Select Add.
- 3. Select Internet E-mail and click OK.

- 4. For Mail Account, enter Voicemail.
- 5. For User Information, enter Voicemail as the name.
- 6. For the **E-mail address**, enter your address.

For example, voicemail@example.com

- 7. Select the Servers tab.
- 8. Enter the name or IP address of the **Outgoing mail server** and **Incoming mail server**.
- 9. Enter the account name and password.

For example, Voicemail.

You can leave the **Incoming Mail Server** details blank as Outlook does not need to check for mail.

- 10. Select Remember password.
- 11. Select the **Connection** tab.
- 12. Select Connect using my local area network (LAN) and click Next.
- 13. Click **OK**.
- 14. Click Next.
- 15. Accept the default path for file creation.
- 16. Select Next, then Finish, and then Close.
- 17. Open Outlook.
- 18. On the E-mail Service Option screen, select Internet Only.
- 19. Click Next.
- 20. Select **Yes** to register Outlook as the default e-mail application.
- Select Tools > Options.
- 22. Click the Preferences tab.
- 23. Click E-mail Options.
- 24. Uncheck Save copies of messages in Sent Items folder.

You might want this option selected during initial setup and troubleshooting. Due to the size of wav file message attachments, it is advisable to uncheck it after installation is complete.

- 25. Log on to the server computer using the account used for the Voicemail Pro server.
- 26. From Outlook or Outlook Express, send a message directly to an extension user.
- 27. If this message is received correctly, continue with installing the Voicemail Pro software.

Next steps

<u>Installing the Voicemail Pro software</u> on page 57

Configuring Outlook for the Exchange server

About this task

This option can be selected if Outlook is to be configured to connect to the Exchange server, using a valid user name and password, while the Voicemail computer remains a member of a work group.

Procedure

1. Create a new mailbox on the Exchange server, and assign it the same password as has been configured on the voicemail computer.

For example, Voicemail

- 2. Clear **User must Change password at Next Logon** and select **Password Never Expires**.
- 3. On the voicemail computer, logon with the Voicemail account.
- 4. Right-click the Outlook icon on the desktop and select **Properties**.
- 5. Select Add.
- 6. Highlight Microsoft Exchange Server and click OK.
- 7. Type in the Exchange server name and enter Voicemail in the Mailbox field.
- 8. Highlight the MS Exchange Settings.
- 9. Click Properties.
- 10. Highlight Microsoft Exchange Server.
- 11. Click **Properties**.
- 12. Click Check name.
- 13. If the name is resolved, select **Apply**.
- 14. Click **OK**, **OK** and **Close** to shut the mail settings.
- 15. Do not continue until the name has been resolved correctly with the Exchange server. If the name is not resolved, check the account details with the Exchange administrator.
- 16. Open Outlook and select **Yes** to register Outlook as the default e-mail application.
- 17. Select **Tools** > **Options**.
- 18. Click the **Preferences** tab.
- 19. Click E-mail Options.
- 20. Uncheck Save copies of messages in Sent Items folder.

You might want this option selected during initial setup and troubleshooting. Due to the size of wav file message attachments, it is advisable to uncheck it after installation is complete.

- 21. Log on to the server computer using the account used for the Voicemail Pro server.
- 22. From Outlook or Outlook Express, send a message directly to an extension user.

23. If this message is received correctly, continue with installing the Voicemail Pro software.

Next steps

Installing the Voicemail Pro software on page 57

Installing the Voicemail Pro software

About this task

To install Voicemail Pro software, perform the following steps:

Procedure

- 1. Log off and log on using the Voicemail account and password.
- 2. Install the required Voicemail Pro software.
- 3. When the system prompts for a user name and password for the Voicemail Pro service, enter the Voicemail account details.
- 4. Restart the server and log on using the Voicemail account.
- 5. When SMTP e-mail details are requested, enter no values and ignore the error message following the SMTP check.
- 6. Start the Voicemail Pro service.
- 7. Check that the basic voicemail services start and operate correctly.

Related links

Starting Voicemail Pro Services manually on page 25

Switching Voicemail Pro to MAPI

About this task

By default, the Voicemail Pro server is configured for SMTP e-mail mode. However, if MAPI settings are entered it will switch to MAPI mode. Some options are not available if you are working offline. You must be working online to use this feature.

- 1. Start the Voicemail Pro client.
- 2. Click Preferences, and select General.
- 3. Click the Email tab.
- 4. Click the MAPI sub tab.
- 5. Select the **Enable MAPI** check box to switch the Voicemail Pro server to use MAPI for its e-mail options rather than SMTP..
- 6. In the **Profile** field, choose a MAPI e-mail account that is already configured and is able to send e-mails from the MAPI client on the voicemail server.
- 7. Click OK.

8. Click Save and Make Live.

Changing the SMTP e-mail account settings Procedure

- 1. Open the Windows Control Panel.
- 2. Select IP Office Voicemail Pro.
- 3. Select the SMTP Email Settings tab.



4. Enter the settings to match the customer's e-mail server and the e-mail account configured on that server for the Voicemail Pro service.

5. Click the **Email Settings** tab.



- 6. Enter the e-mail address for the account setup on the customer's e-mail server for the Voicemail Pro service.
- 7. Click **Check** to test the connection to the specified e-mail account.
- 8. Click OK.

Voicemail Email operation

User and group configuration

The e-mail address for each user and hunt group is set through the IP Office configuration.

The following fields on the Voicemail tab are set for a user and group configuration.

- Voicemail Email
- Voicemail Email radio buttons

Voicemail Email usage

Use of voicemail e-mail requires the Voicemail Pro server to have been configured to use either a local MAPI e-mail client or an SMTP e-mail server account. See Voicemail Email on page 52.

Use of voicemail e-mail for sending (automatic or manual) e-mail messages with wav files attached requires discretion, as a one-minute message creates a wav file of 1MB size.

If voicemail e-mail is turned off, users can change their voicemail e-mail mode using Visual Voice. If the voicemail server is set to IP Office mode, a user can also change their voicemail e-mail

mode through the telephone prompts. The ability to change the voicemail e-mail mode can also be provided in a call flow using a **Personal Options Menu** action or a **Generic** action.

If the voicemail server is set to IP Office mode, users can manually forward a message to e-mail.

About copying e-mails

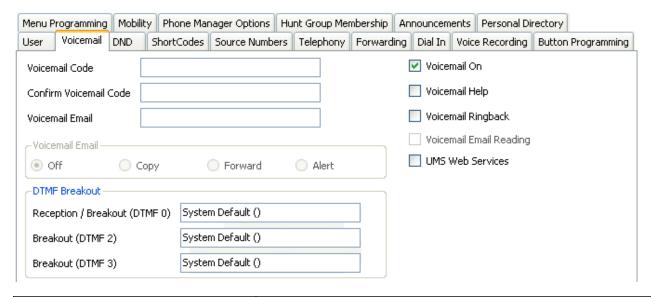
When e-mails are copied, there is no mailbox synchronization between the e-mail and voicemail mailboxes. For example, reading and deletion of the e-mail message does not affect the message in the voicemail mailbox or the message waiting indication provided for that new message.

About forwarding e-mails

When e-mail is set to forwarding, each time a new voicemail message is received in the voicemail mailbox, that message is attached to an e-mail and sent to the e-mail address. No copy of the voicemail message is retained in the voicemail mailbox and there is no message waiting indication. There is no mailbox synchronization between the e-mail and voicemail mailboxes. Users can also select this mode by dialing *01 from their extension.

Voicemail Pro 5.0+ supports voicemail e-mail to an Exchange server e-mail account. For users and groups also enabled for UMS Web Services, this significantly changes their mailbox operation. The Exchange server inbox is used as their voicemail message store and features such as message waiting indication are set by new messages in that location rather than the voicemail mailbox on the voicemail server. Telephone access to voicemail messages, including Visual Voice access, is redirected to the Exchange server mailbox.

Voicemail field descriptions



Name	Description
Voicemail Code and Confirm Voicemail Code	Sets or changes the user's mailbox passcode.

Table continues...

Name	Description
	If the voicemail server is set to Intuity Emulation mode, mailbox users are asked to set a voicemail code the first time that they access the mailbox.
Voicemail Email	Sets the user or group e-mail address used by the voicemail server for voicemail e-mail operation. When an address is entered, additional Voicemail Email controls display that are used to configure the type of voicemail e-mail service that should be provided.
	Default = Blank (No voicemail e-mail features).
Voicemail Help	For voicemail systems running IP Office mailbox mode, this option controls whether users retrieving messages are automatically given an additional prompt "For help at any time press 8."
	If switched off, users can still press 8 for help. For voicemail systems running in Intuity emulation mode, this option has no effect. On those systems the default access greeting always includes the prompt "For help at any time, press *4" (*H in the US locale).
Voicemail Ringback	When on, if the user has a new message, the voicemail server can call the user's extension whenever the extension changes from off-hook to on-hook. The voicemail server will not ring the extension more than once every 30 seconds.
	Default = Off.
Voicemail On	When on, the mailbox is used by the IP Office to answer the user's unanswered calls or calls when the user's extension returns busy. Note that selecting off does not disable use of the user's mailbox. Messages can still be forward to their mailbox and recordings can be placed in it. The mailbox can also still be accessed to collect messages.
	Default = On.
Voicemail Email Reading	Enabled for TTS e-mail reading.
Broadcast	Voicemail messages left for the hunt group are forwarded to the mailboxes of the individual group members. The original message in the hunt group mailbox is deleted after being broadcast.
UMS Web Services	If selected, the user is able to use UMS to access their mailbox. Using the UMS options, messages can be accessed via a Web browser, an IMAP compatible e-mail application, or an Exchange server e-mail account. This function is subject to licenses.
	For more information, see <u>UMS Web Services</u> on page 28.
	For hunt groups, the hunt group mailbox is accessed using UMS using a Web browser or an IMAP-compatible e-mail

Voicemail Email radio buttons

If an e-mail address is entered for the user or group, additional options are selectable. These control the mode of automatic voicemail e-mail operation provided by the voicemail server whenever the voicemail mailbox receives a new voicemail message. Default = Off.

Name	Description
Off	If off, none of the options are used for automatic voicemail e-mail. Users can also select this mode by dialing *03 from their extension.
Сору	If this mode is selected, each time a new voicemail message is received in the voicemail mailbox, a copy of the message is attached to an e-mail and sent to the e-mail address.
Forward	If this mode is selected, each time a new voicemail message is received in the voicemail mailbox, that message is attached to an e-mail and sent to the e-mail address.
Alert	If this mode is selected, each time a new voicemail message is received in the voicemail mailbox, a simple e-mail message is sent to the e-mail address. This is an e-mail message announcing details of the voicemail message but with no copy of the voicemail message attached. Users can also select this mode by dialing *02 from their extension.

DTMF Breakout fields

Name	Description
Reception / Breakout (DTMF 0)	The number to which a caller is transferred if they press 0 while listening to the mailbox greeting rather than leaving a message (* 0 on embedded voicemail).
Breakout (DTMF 2)	The number to which a caller is transferred if they press 2 while listening to the mailbox greeting rather than leaving a message (* 2 on embedded voicemail). For pre-5.0 systems this option is not support for Voicemail Pro running in IP Office mailbox mode.
Breakout (DTMF 3)	The number to which a caller is transferred if they press 3 while listening to the mailbox greeting rather than leaving a message (* 3 on embedded voicemail). For pre-5.0 systems this option is not support for Voicemail Pro running in IP Office mailbox mode.

How voicemail e-mail messages look

Messages sent by a user or group's voicemail e-mail settings contain the following sections:

То	The user or group e-mail address.
From	The name and address setting of the e-mail client
	account.

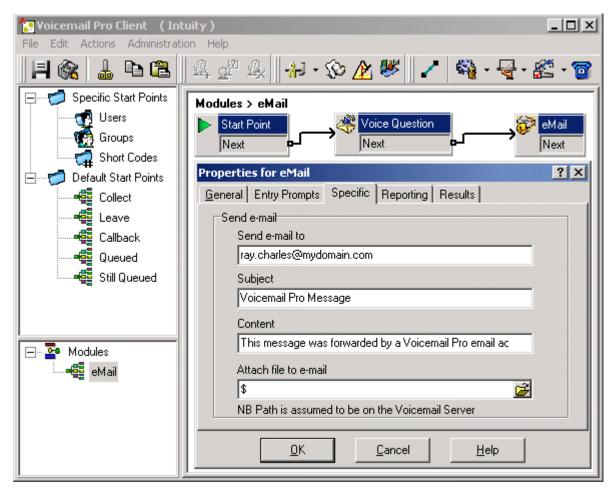
Table continues...

Subject	Voicemail message that consists of calling number > user name and From:calling number.
Body	If the user or group's voicemail e-mail mode is set to Copy or Forward, the message body contains the IP Office Voicemail redirected message.
Attachment	When using Copy or Forward mode, the message is attached as a way file.

Messages sent through a Voicemail Pro eMail action are configurable, see <u>The Voicemail Pro eMail Action on page 70.</u>

The Voicemail Pro eMail action

The eMail action in Voicemail Pro can be used to send messages through e-mail in response to caller actions in the voicemail call flow. The action can also attach a way file.



In the example above, the eMail action follows a **Voice Question** action. The \$ in the eMail action's **Attach file to e-mail** field instructs it to use the file recorded by the preceding **Voice Question** action.

The same method can be used with a **Leave Mail** action. Note however that the **Leave Mail** action must be set to a valid target mailbox which will then have a copy of the message.

Alternatively, the **eMail** action can attach a prerecorded wav file by specifying the file name. That named file can be created by an **Edit Play List** action.

Text To Speech (TTS) installation

The Voicemail Pro server uses Text To Speech (TTS) in the following ways:

- Speak text in call flows using the § Speak Text action. The text can include variables passed from other actions including database actions.
- When installed in parallel with Voicemail Email, TTS can be used to provide e-mail reading to selected mailbox users.
- TTS can be used by the Voicemail Pro client user to record prompts used by call flow actions.

Related links

<u>Voicemail Email</u> on page 52 <u>Setting up Text To Speech to read e-mail</u> on page 73

Windows TTS licensing

Voicemail Pro TTS requires the server computer to have a Microsoft SAPI 5 compatible TTS engine installed and a valid license entry.

E-mail Reading

Users who want to use this feature must have their user profile configured as either Mobile User or Power User using Mobile User Profile or Power User Profile licenses. In addition, IP Office with a Windows-based Voicemail Pro server must have a VMPro TTS (Generic) or a VMPro TTS (ScanSoft) license and IP Office with a Windows-based Voicemail Pro server must have a VMPro TTS Professional license for e-mail reading to work.

Speak Text Actions / Prompt Recording

The license for this operation depends on whether you are using the Avayasupplied ScanSoft TTS speech engine or a third-party generic TTS speech engine (including the TTS speech engines included in Microsoft operating systems).

- Generic TTS The use of up to eight simultaneous generic TTS ports is enabled by the Advanced Edition license. Alternatively separate VMPro TTS (Generic) licenses can be added.
- Avaya ScanSoft TTS The use of the Avaya-supplied ScanSoft TTS engine is licensed by the addition of VMPro TTS (ScanSoft) licenses to the IP Office configuration.

Generic TTS licensing

If you add both generic TTS and ScanSoft TTS licenses, the system will use both of the TTS engines for calls on a first-come-first-serve basis. You will not be able to control the use of TTS engine for particular calls. Therefore, license only one type of TTS engine within a system.

Languages

For Voicemail Pro 5.0 or higher on Windows, the TTS engine supports the same set of languages as Voicemail Pro speech prompts except for Hungarian.

For Voicemail Pro 8.0 or higher on Linux, the TTS engine supports the same set of languages as Voicemail Pro speech prompts except for Hungarian, Korean, and Chinese (Cantonese). For these unsupported languages, there will be no alternate languages selected. If any of the three unsupported languages is configured in Voicemail Pro 8.0 or higher, then TTS will not play anything.

If more than one TTS language is installed, use the **Select System Prompt Language** action to switch TTS to a different language from the selected default.

Checking that Windows Audio is enabled

About this task

On many Windows server computers, while the Windows Audio components are present by default they are not always enabled. If this is the case the playback of voice prompts may be "choppy" and the TTS (if installed) will not work. However, enabling Windows Audio does not require the server computer to have a sound card installed.

Procedure

- 1. Verify that you have full administrator rights for the computer.
- 2. Click Start > Administrative Tools > Services.
- 3. If the status of the Windows Audio service is not **Started**, start the service and set the **Startup Type** to **Automatic**.

Installing Generic Text To Speech

- 1. Install and test Voicemail Pro as normal.
- 2. Using IP Office Manager, add the Advanced Edition or VMPro TTS (Generic) license into the IP Office configuration.

- 3. Send the new configuration to the IP Office system.
- 4. Reload the IP Office configuration into IP Office Manager and check that the status of the license has changed to **Valid**.
- 5. The Voicemail Pro installation includes the default Microsoft TTS engines (Microsoft Sam, Mike, Mary, and Simplified Chinese) as standard. If another third-party SAPI 5 compatible TTS engine is going to be used, install that software.
- 6. If the system is licensed for generic TTS, Voicemail Pro automatically discovers any SAPI 5 installed engine. If there is no third-party engine, then the Microsoft third-party engine is used.

Installing Avaya Text To Speech

About this task

The Avaya TTS engine for Voicemail Pro is supplied on media disks (x2) separate from the Voicemail Pro software installation media. By default, TTS engine installation also includes installation of the English US and English UK language packs.

Procedure

- 1. Install and test Voicemail Pro as normal.
- 2. Using IP Office Manager, add the VMPro TTS (ScanSoft) license into the IP Office configuration.
- 3. Send the new configuration to the IP Office system.
- 4. Reload the IP Office configuration into IP Office Manager and check that the status of the license has changed to **Valid**.
- 5. Insert the first Avaya TTS DVD.
 - The installation auto-starts.
- 6. Follow the prompts and install the required languages.
- 7. If the system is licensed for Avaya TTS, the ScanSoft engine is automatically used.

Setting up Text To Speech to read e-mail

Before you begin

- The Voicemail Pro server must have been installed and configured to support Voicemail Email.
- E-mail reading can only be enabled for IP Office users whose Profile setting is set to Mobile User or Power User. IP Office must have a VMPro TTS (Generic) or a VMPro TTS (ScanSoft) license for e-mail reading to work with a Windows-based Voicemail Pro server and a VMPro TTS Professional license for e-mail reading to work with a Linux-based Voicemail Pro server.

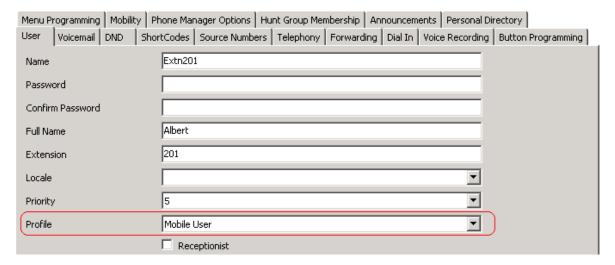
- This feature is supported only for Intuity mode. Users hear their new voicemail messages and then the number of "Messages with text". Before each e-mail is spoken, details of who it is from, when the message was sent, and the size are given. These details assist you in deciding to skip large or non-urgent e-mails.
- E-mail reading cannot be used for e-mails in HTML format. If HTML messages are received, all of the code will be read out as a message.

About this task

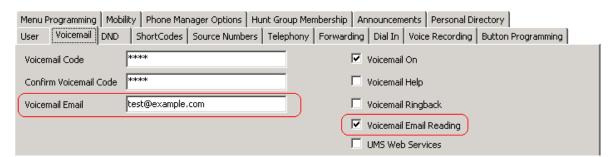
In conjunction with MAPI e-mail clients and Exchange server, TTS can be used to read new e-mails in a user's e-mail inbox when they access their voicemail mailbox.

Procedure

- 1. Within the IP Office configuration, display the settings for the user.
- 2. On the User tab, set the user's Profile to either Mobile User or Power User.



- 3. On the Voicemail tab, enter the user's e-mail address in the Voicemail Email field.
- Enable the Voicemail Email Reading field.



Troubleshooting

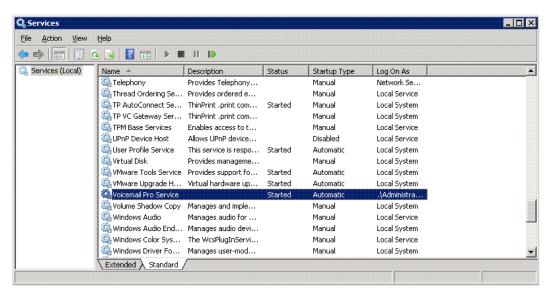
Starting Voicemail Pro Services manually

About this task

If you have installed Voicemail Pro successfully and rebooted the server computer, then the voicemail service starts automatically. However, you can restart the service manually, if required.

Procedure

1. Click Start > Administrative Tools > Services.



The **Voicemail Pro Service** should be visible. Its **Status** should be **Started** and the **Startup Type** should be set to **Automatic**. Other services may be present depending on the installed Voicemail Pro features. The **Voicemail Pro Service** is the main Voicemail Pro service. This is the only service that needs to be stopped and restarted. It stops and restarts the other services that it uses.

Close Services.

Setting the Voicemail Pro Service or computer to restart automatically

About this task

The following action is optional. If a fault causes the Voicemail Pro service to stop, the fault should be investigated and fixed. However, setting the options to restart the services or the computer automatically will minimize the disruption to the Voicemail Pro users.

Procedure

- 1. Click Start > Administrative Tools > Services.
- 2. Right-click **Voicemail Pro Service** and select **Properties**.
- 3. Select the **Recovery** tab.
- 4. Select the items in the drop-down lists to specify the action that the computer must take in case of failures.

Using a batch file to start services

About this task

In some instances, certain computers might not respond quickly enough to start all of the Avaya services in the correct order. In this circumstance, you should create a batch file that delays the start of these services until the computer is fully running.

Avaya IP Office Services can be started successfully at system start-up using a scheduled task that initiates the batch file below. This batch file ensures that the services will start successfully and in the correct order.

Procedure

- 1. Set all Avaya services listed below to Manual start. Do not include Key Server.
- 2. Create the batch file below and save it to %SYSTEMROOT%.

Only include lines for the services that are installed.

```
@echo off
rem Wait 60 seconds before execute.
timeout /t 60
net start Voicemail Pro Service
```

3. Create a scheduled task to start the batch file at system start-up.

Service Log On Failure

About this task

The voicemail service will not start if the account specified during its installation does not have the right to log on as a service. This process details how to apply that right to an existing account on the server.

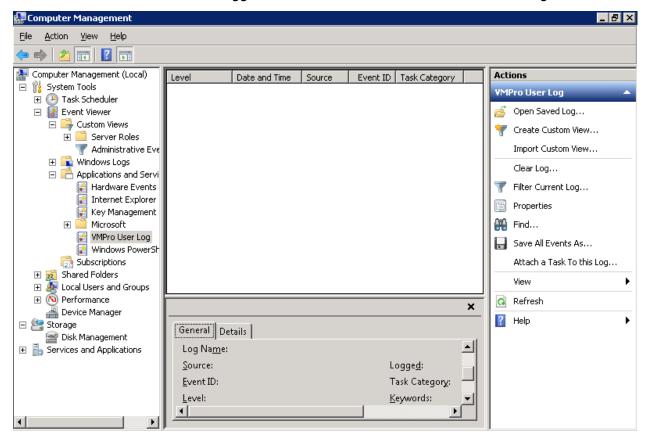
Procedure

- 1. Open Local Security Policy.
- 2. In the console tree, double-click Local Policies.
- 3. click User Rights Assignments.
- 4. In the details pane, double-click **Log on as a service**.

5. Click **Add User or Group** and add the appropriate account to the list of accounts that possess the **Log on as a service** right.

Voicemail Pro User Log

User authentication failures are logged in the event viewer, under VMPro User Log.



The following details are logged:

- UserID
- Tool name
- IP address of the client trying to log in

Viewing log details

Procedure

- 1. Click Start > Administrative Tools > Computer Management.
- In the left pane, expand System Tools > Event Viewer > Applications and Services Logs.

3. Click **VMPro User Log** in the tree to view the details.

About DbgView

Many applications, including Voicemail Pro, output activity messages that are viewable in Debug View (DbgView). This application can be downloaded at http://marketingtools.avaya.com/knowledgebase/tools/debug.

Installing Debug View

Procedure

- 1. Download the DbgView zip file.
 - http://marketingtools.avaya.com/knowledgebase/tools/debug
- 2. Unpack the files into a folder such as c:\debug on the server computer.
- 3. Run DbgView.exe.

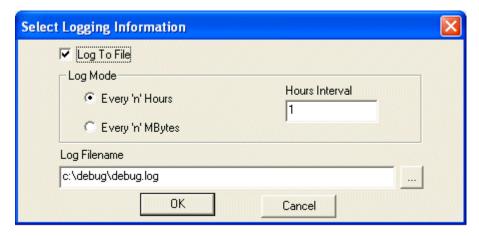
Events are shown in the DbgView window. These can be logged to a file if required. The level of detail shown can be filtered to show more or less activity.

Using Debug View for logging

Procedure

1. Run DbgView.exe.

2. Select File > Log Preferences.



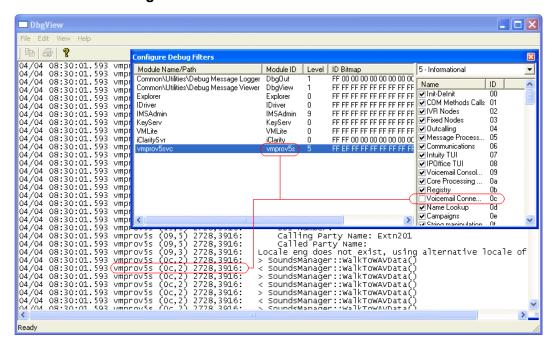
3. Set the logging details that are required and click **OK**.

The debug log files can be opened in programs such as WordPad.

While DbgView is running, the viewable trace is also copied to the specified file.

Using Debug View for filtering Procedure

1. Select View > Debug Filters.



- 2. Select the module for which you want to increase or decrease reporting.
- 3. In the right hand panel, adjust the level of reporting.
- 4. Close the Configure Debug Filters window.

The voicemail console

The voicemail console mode (that is running as the voicemail service in **Interact with desktop** mode) is no longer used. Running services in this mode is not supported by Microsoft on Vista or Server 2008.

Instead, use the debug viewer to view voicemail server activity as it occurs.

Chapter 3: Using the Voicemail Pro client

About this task

The Voicemail Pro client is used to administer the Voicemail Pro server. This section covers the basic operation of the Voicemail Pro client to connect to a Voicemail Pro server. For details on administration using the Voicemail Pro client, see *Avaya IP Office Administering Voicemail Pro* (15-601063).

For a Windows-based server, the client can be installed on the same server and used locally to administer the server. The client can also be installed separately on another Windows computer and then used to remotely administer the server.

Logging in to the Voicemail Pro server

About this task

If you start the Voicemail Pro client on the same computer as the Voicemail Pro server, the system automatically loads the settings to manage the server. You will have full access to all the servers settings, and you do not need to login with an administrator account name and password.

To connect to a remoteVoicemail Pro server, you need to login using the name and password of an administrator account already configured on that server. The default account name is Administrator and the password is Administrator. After logging in with this account, you should change the password from that default value.

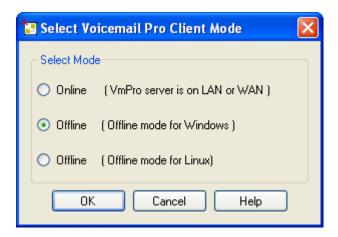
Starting the Voicemail Pro client

Procedure

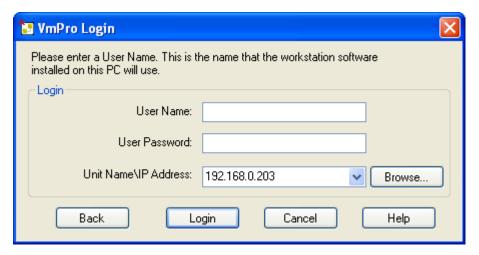
From the Start menu, select Programs > IP Office > Voicemail Pro Client.

The Voicemail Pro Client window opens.

If the client has been started before, it starts in the same mode as it used previously. If it fails to do that, or if this is the first time that the client has been started, the **Select Mode** menu displays.

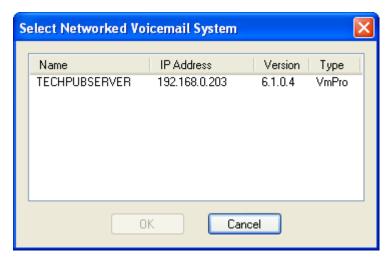


- 2. Select either of the **Offline** modes to import and export voicemail call flow and module files without being connected to any Voicemail Pro server.
- 3. To connect to a Voicemail Pro server, select **Online**.



- 4. Enter the name and password for an administrator account on the Voicemail Pro server.
 - These fields are not required if accessing a Voicemail Pro server on the same computer as the client.
 - The default account name is Administrator and the password is Administrator. After logging in with this account, you should change the password from the default values.
 - If three consecutive login attempts fail for an administrator account name, the account is locked for an hour.
- 5. In the **Unit Name\IP Address** field, enter the DNS name or IP address of the Voicemail Pro server.

Alternatively, click **Browse** to search the local network for a server and select a server from the results.



Note:

As Voicemail Pro client cannot find Voicemail Pro server running on Unified Communications Module, you cannot use **Browse** to connect to Voicemail Pro server installed on Unified Communications Module.

If connected to a remote server, the Confirm Callflow Download window displays. If you select **Download**, any existing call flow that you have loaded in the client is overwritten. For more details, see <u>Call flows</u> on page 84.



- 6. To log in automatically to the selected Voicemail Pro server when you launch Voicemail Pro client next time, select the **Remember Me** check box.
- 7. If this is the first time that the Voicemail Pro server has been logged into, you should first change the default remote access account.
 - If you logged in remotely using the default account, select File > Change Password.
 - If you logged in locally, select Voicemail Pro Administrators in the navigation panel.

Call flows

When you connect to a server across a LAN or WAN to view or modify the call flow on the server, a check is made to see if the call flow that is stored locally on the client is the same. The call flow on the server might be different to the call flow on the client because:

- The local call flow is older than the version on the server, for example if the call flow on the server has been modified by another Client connection.
- The local call flow is newer than the version on the server, for example if the call flow on the server has been worked on while the local Client was being used in offline mode.
- The local call flow is from a different server, for example if you are connecting to a different server to the one from which the call flow was previously downloaded.

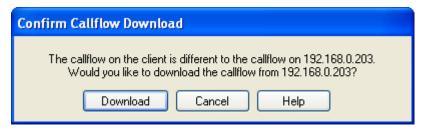
If the call flow is the same, no data will need to be copied from the server to the client. If the call flow is different you can chose to download the call flow from the server or to use the local call flow.

You can upload the local call flow to the server using the **Save** or **Save and Make Live** options from the **File** menu.

Related links

Saving changes and making them live on page 85

Confirm Callflow Download field descriptions



Button	Description
Download	Downloads the call flow from the server.
Cancel	Exits the window.

Continue offline message

Only one Voicemail Pro client can be connected to a Voicemail Pro server at any time. To prevent an idle client session from blocking the server, a **Client/Server Connection Timeout (mins)** setting is used to disconnect the idle client session. By default, the timeout is set to 5 minutes.

If your Voicemail Pro client session has timed out, the Voicemail Pro client prompts you whether to re-establish the session or close. You are then able to continue working in offline mode or to close the client.

Saving changes and making them live

About this task

The call flow settings shown and edited using the Voicemail Pro client are stored in a database file, Vmdata.mdb, on the Voicemail Pro server. However, when edited, the changes are not automatically applied to the operation of the Voicemail Pro server. Instead, the database file must be converted to a separate file, Root.vmp, that being the file that is used by the Voicemail Pro server for its current operation.

Saving the configuration and making it live

Procedure

Choose Save & Make Live to save the settings as the Root.vmp file used by the Voicemail Pro server.

If you are working remotely in **Offline** mode, you are prompted to select whether to save your changes to the local database or to the remote server.

Saving the configuration to a file without making it live

About this task

Call flow settings can be saved to a .vmp file and then included in the operation of another voicemail system.

Procedure

- 1. Choose **Save** as to save the database as a .vmp file with the name that you specify.
- 2. Copy the file to other systems, as needed.

Logging out

About this task

It can be useful to connect to a system to download the current system configuration and then disconnect and make changes offline. You can then test configuration changes offline before applying them to a live system.

- Logging out is not the same as closing down with the **Exit** option. See <u>Closing the Voicemail</u> <u>Pro client</u> on page 86.
- If the client and server are installed on the same computer, the **Log Out** option is not available.

Procedure

From the File menu, select Log Out.

You are logged out of the Voicemail Pro server and placed in offline mode. You can either make configuration changes offline and then log back in when you are ready, or log on to a different server to work.

Related links

Logging in to the Voicemail Pro server on page 81

Closing the Voicemail Pro client

About this task

When you have finished working, you can close down the Voicemail Pro Client.

Procedure

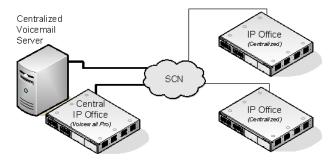
- 1. From the File menu, select Exit.
 - If you have not made any changes, the Voicemail Pro Client closes and you are returned to the desktop.
 - If you have made any changes, you are prompted whether to save the changes.
- 2. Select one of the following options.
 - If you do not want to save the changes, click No.
 - No changes are saved.
 - If you want to save the changes, click Yes.
 - The changes are saved but not made live.
- 3. If you want to make the changes live, click Save & make Live.

Chapter 4: Centralized Voicemail Pro overview

A Small Community Network (SCN) consists of several IP Office telephone systems. These are connected using H323 Lines where the Supplementary Services settings of the lines has been set to IP Office SCN. For details, see *Avaya IP Office Manager* (15-601011).

Within a Small Community Network, several options for providing voicemail are described in this topic.

Centralized voicemail

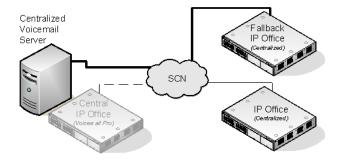


Centralized Voicemail Pro uses a single Voicemail Pro server to provide voicemail services for all IP Office s in the Small Community Network. Except for use of ContactStore, only the central IP Office hosting the Voicemail Pro server requires licensing for Voicemail Pro operation and features.

Licenses: The central IP Office is licensed as normal for Voicemail Pro operation and the voicemail features required. The other IP Office s only require licenses for UMS and or for ContactStore if required.

For more information, see Centralized voicemail on page 89.

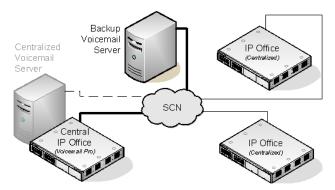
Centralized voicemail with fallback IP Office



Control of the Voicemail Pro server can be taken over by another IP Office if the central IP Office becomes unavailable. Available with IP Office Release 5.0+ with Voicemail Pro 5.0+.

Licenses: The fallback IP Office that takes over control of the Voicemail Pro requires licenses for Voicemail Pro operation and the features required during fallback.

Centralized voicemail with a backup Voicemail Pro server



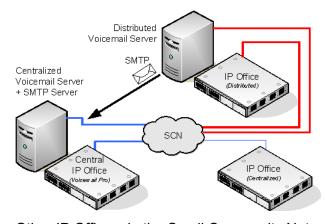
The central IP Office hosting the Voicemail Pro server can be configured with the IP address of a backup Voicemail Pro server. During normal operation, call flows and other settings on the backup server are kept synchronized with those of the primary Voicemail Pro server. If the primary Voicemail Pro server becomes unavailable to the network, voicemail services are provided by the backup Voicemail Pro server.

- Available with IP Office Release 6.0+ with Voicemail Pro 6.0+.
- SMTP SSL/TLS communication is used to exchange information between the servers. If the servers fail to connect using SSL/TLS over SMTP, then plain text communication is used.

Licenses: The existing licenses are used.

For more information, see Centralized voicemail with a backup voicemail server on page 92.

Centralized voicemail with distributed Voicemail Pro servers



Other IP Office's in the Small Community Network can host their own Voicemail Pro server. That server is then used for the IP Office's voicemail functions except message storage.

- Available with IP Office Release 6.0+ with Voicemail Pro 6.0+.
- SMTP SSL/TLS communication is used to exchange information between the servers. If the servers fail to connect using SSL/TLS over SMTP, then plain text communication is used.

• The distributed Voicemail Pro server provides all voicemail services except voicemail collection for its associated IP Office.

Licenses: Each IP Office using a distributed Voicemail Pro server must have licenses for Voicemail Pro operation and the voicemail features required.

For more information, see Centralized voicemail with distributed voicemail servers on page 95.

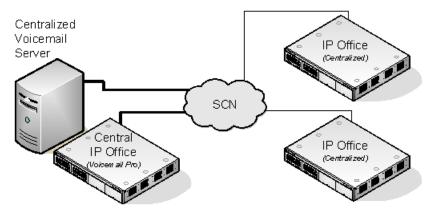
In all the cases above, the central Voicemail Pro server remains the store for messages and recordings (except for Exchange UMS users). The central Voicemail Pro server does message waiting indication and is the Voicemail Pro server used for message collection. Only when the central server is temporarily unavailable will the backup or any distributed server do message storage and collection. In those scenarios, when the central server is restored, messages collected by the backup or distributed servers are forwarded to the central server.

Combinations of the solutions above can be deployed. For example, you can use a backup server and fallback IP Office control.

For more information, see <u>Combined options</u> on page 99.

Centralized voicemail

Within a Small Community Network, a single Voicemail Pro server can be used to provide voicemail features for all the IP Offices in the SCN.



One IP Office is configured for operation with the Voicemail Pro server as normal, including the license for voicemail operation and the features required. This IP Office is then regarded as the central IP Office for voicemail.

Within the other IP Office systems, the voicemail settings are configured to indicate that they get their voicemail services from the central IP Office. These IP Offices do not need licenses for voicemail (except for ContactStore and or UMS if required).

With the International Time Zone functionality available on the central Voicemail Pro server, the users of the IP offices located in different time zones across the globe receive messages in their voicemail system with their respective time stamp. In the sample scenario, the three IP Offices located in different time zones connect to each other. Two of the IP Offices are located in different

geographical locations and are connected to the central IP Office. The Voicemail Pro server connects to the central IP Office. In this setup, the system stores the voicemail messages on the centralized Voicemail Pro. Each IP Office is set up to use Simple Network Time Protocol (SNTP).

In the centralized Voicemail Pro setup, the time source of the IP Office network must be SNTP (Simple Network Time Protocol).

Simple Network Time Protocol (SNTP) is an Internet standard protocol (built on top of TCP/IP) that provides accurate synchronization to the millisecond of computer clock times in a network of computers. It synchronizes all the IP Office s in an SCN configuration.

Summary of IP Office settings

Once the IP Office SCN has been setup, the following settings are used in the IP Office systems to provide voicemail operation for all the IP Office s.

IP Office settings	Central IP Office	Other IP Office s
Voicemail type	Voicemail Pro	Centralized voicemail
Voicemail IP address	Set to the Voicemail Pro server computer's IP address.	Not used.
Voicemail destination	Not used.	Set to the Outgoing Group ID of the H323 Line to the central IP Office.
Licenses	This system needs licenses for all the Voicemail Pro features required.	The other IP Office s only require licenses for UMS and or for ContactStore if required.

When accessing a Voicemail Pro server that is acting as centralized Voicemail Pro server, the Voicemail Pro displays **Centralized Voicemail** in the title bar.

Related links

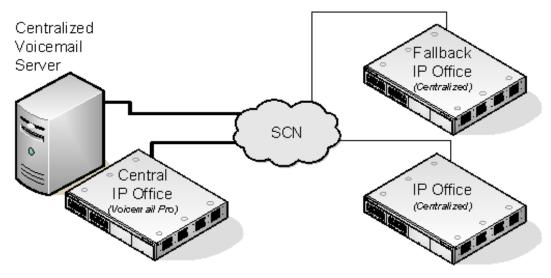
Voicemail Pro licenses on page 10

Fallback IP Office control

IP Office Release 5.0+ supports a number of fallback features for Small Community Networks. In conjunction with Voicemail Pro 5.0+, fallback can include one of the IP Office s assuming control of the Voicemail Pro server should the central IP Office become unavailable on the network.

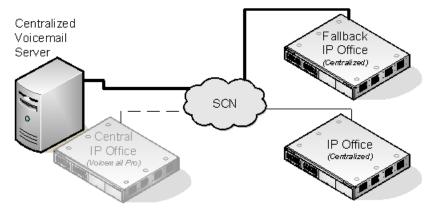
Normal operation

During normal operation, voicemail services for the Small Community Network are provided by the central IP Office communicating with the Voicemail Pro server.



Fallback control operation

If the central IP Office becomes unavailable to the network, control of voicemail services for the Small Community Network is taken over by the fallback IP Office.



Caution:

During the transition of voicemail control, access to voicemail may be unavailable for several minutes. Existing voicemail calls are disconnected and new calls are routed as if voicemail is unavailable. The same applies when the central IP Office is restored.

Setup and requirements for voicemail fallback

Within the configuration of the central IP Office hosting the Voicemail Pro server, on the H323 Line to the fallback IP Office:

- The Supplementary Services setting should be changed from IP Office SCN to IP Office -SCN Fallback.
- The option Backs up my Voicemail should then be selected from the SCN Backup

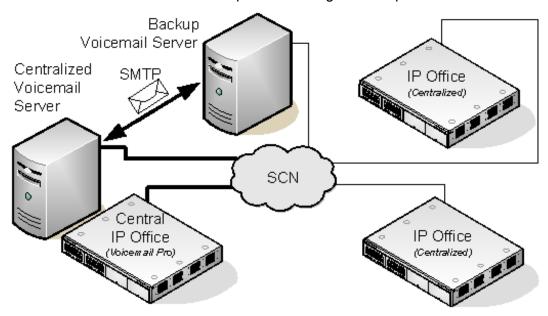
The fallback IP Office is configured for centralized voicemail as normal. However its configuration must also include licenses for the Voicemail Pro support and the voicemail features required during fallback.

Backup voicemail server operation

For IP Office Release 6.0 or later, the central IP Office hosting the Voicemail Pro server can be configured with the IP address of a backup Voicemail Pro server. If the central Voicemail Pro server becomes unavailable to the network, the backup server will be used to provide voicemail services. This option requires the Voicemail Pro servers to be running Voicemail Pro Release 6.0 or later.

During normal operation

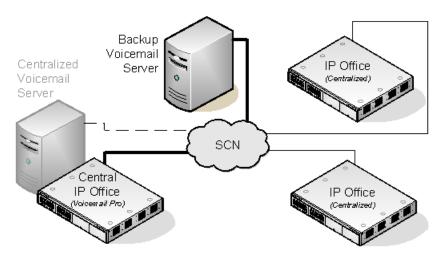
Centralized voicemail with a backup server during normal operation.



- Voicemail services and message storage for the IP Offices is provided by the central Voicemail Pro server.
- Call flows, greetings, recorded names, and configuration settings on the backup Voicemail Pro server are synchronized with those on the central Voicemail Pro server. The configuration settings that are synchronized include the registry settings, user variables, SMTP mappings, and alarms. However, the directory locations, settings specific to Voicemail Pro client, Voicemail Pro IIS port settings, Campaign settings, Service SID of the Voicemail Pro service, and backup configuration settings are not synchronized.
- Messages are synchronized, but the central Voicemail Pro server remains the message store.
- The central and backup servers are synchronized regularly at defined intervals using SMTP SSL/TLS communication between the servers. If the servers fail to connect using SSL/TLS over SMTP, then plain text communication is used.

During backup operation

Centralized voicemail with a backup server during backup operation.



If the central Voicemail Pro server become unavailable to the network:

- The backup Voicemail Pro server provides voicemail services to the IP Offices.
- New messages are stored on the backup server.

After backup operation

When the central server is restored to the network:

- Call flows, greetings, recorded names, and configuration settings on the central server are synchronized with those on the backup server.
- The central server sends a signal to the backup server to indicate that it is ready to resume control as the active Voicemail Pro server.
- Depending on the mode of failback operation configured, the system administrator or the backup server initiates failback operation to reinstate the central server as the active Voicemail Pro server.
 - Manual Failback
 - Graceful Failback
 - Automatic Failback

Note:

For details on configuring failback operation on backup server, see the "Configuring Failback Operation on Backup Server" section in Avaya IP Office Administering Voicemail Pro (15-601063).

- Any new calls that arrive when failback operation is in progress are lost.
- If the backup server becomes unavailable to the network before failback operation, the central sever resumes control as the active Voicemail Pro server.
- Call flows defined on the central server are synchronized with the backup server.
- Call flows defined on the central server cannot be modified on the backup server.
- Call flows cannot be defined on the backup server.
- Call flows defined on a distributed server are not synchronized to the central or backup servers.

Related links

Backup server configuration on page 94
Manual failback on page 94
Graceful failback on page 95
Automatic failback on page 95

Backup server configuration

- 1. The Voicemail Pro server software is installed as normal on the backup server computer. The voicemail server is not specifically configured as being a backup server.
- 2. The central IP Office hosting the primary voicemail server is configured with the IP addresses of both the primary voicemail server and the backup voicemail server.



3. The other IP Office s are configured for centralized or distributed voicemail as normal.

Manual failback

The following is the sequence of events for the manual failback operation of the backup server:

- 1. The backup server functions as the active Voicemail Pro server until the system administrator shuts down the backup server.
- 2. The system administrator chooses one of the following options to shutdown the backup server:
 - If no voicemail calls are active on the backup server, shutdown the backup server immediately.
 - If some voicemail calls are active on the backup server, suspend the backup server operation to prevent any new voicemail calls. Then, shutdown the backup server immediately after all the active voicemail calls on the backup server come to an end.
 - If some voicemail calls are active on the backup server, suspend the backup server operation to prevent any new voicemail calls. Then, shutdown the backup server immediately after the number of active voicemail calls on the backup server reduces significantly.
- 3. When the backup server shuts down, the central server resumes control as the active Voicemail Pro server.

Related links

Graceful failback on page 95

Graceful failback

The following is the sequence of events for the graceful failback operation of the backup server:

- 1. The backup server functions as the active Voicemail Pro server while voicemail calls are active on the backup server.
- 2. The backup server hands over the control to the central server immediately after all the active voicemail calls on the backup server come to an end.

Related links

Manual failback on page 94

Automatic failback on page 95

Automatic failback

The following is the sequence of events for the automatic failback operation of the backup server:

- 1. The backup server enters the suspend mode to prevent any new voicemail calls and starts a countdown timer for the failback operation timeout.
- 2. The backup server functions as the active Voicemail Pro server until any one of the following events:
 - All active voicemail calls on the backup server come to an end.
 - Timeout period for failback operation is elapsed.
- 3. The backup server hands over the control to the central Voicemail Pro server immediately after any one of the aforementioned events.



If the failback operation timeout is set to 0, the hand over of the control is immediate.

Related links

Manual failback on page 94 Graceful failback on page 95

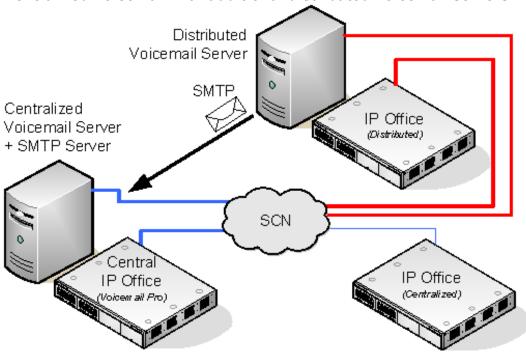
Distributed voicemail servers

For IP Office Release 6.0 and higher, remote IP Office s in the Small Community Network can be associated with another Voicemail Pro server in addition to the centralized Voicemail Pro server. The additional distributed server then provides all voicemail services (except message storage

and collection) for that IP Office. This requires the remote IP Office to have licenses for voicemail operation and the features it requires.

While the distributed server does message recording, it forwards all messages to the central Voicemail Pro server. The messages are transferred between systems using an IIS SMTP e-mail services. For mailbox users, message waiting indication and message collection is still done using the central Voicemail Pro server. With the support of International Time Zone (ITZ) functionality, the users of the IP Office s located across the globe receive messages in their voicemail system with their respective local time stamp.

Centralized voicemail with additional distributed voicemail servers



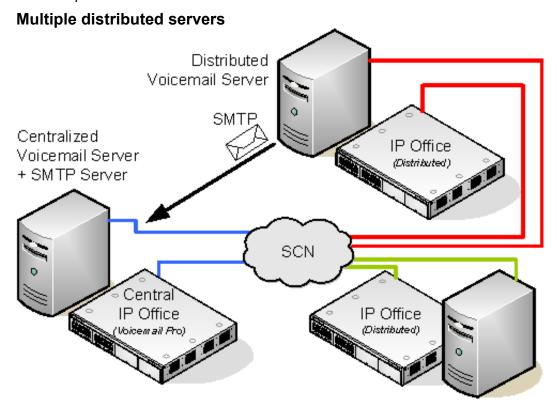
In this scenario, the three IP Office s located in different time zones connect to each other. Two of the IP Office s are located in different geographical locations and are connected to the Central IP Office. The Central IP Office connects to a central Voicemail Pro server and the other IP Office s connect to the Distributed Voicemail Pro server, an additional voicemail server added to the Small Community Network. Each IP Office is set up to use Simple Network Time Protocol (SNTP), the time source of the IP Office Network.

Simple Network Time Protocol (SNTP) is an Internet standard protocol (built on top of TCP/IP) that provides accurate synchronization to the millisecond of computer clock times in a network of computers. It synchronizes all the IP Office s in an SCN configuration.

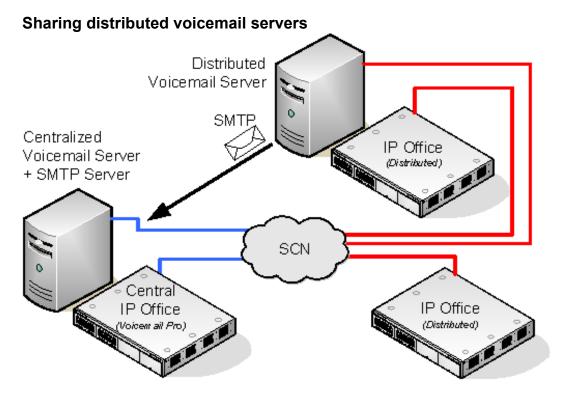
- Other IP Office s continue to use centralized voicemail as normal.
- An IP Office that is using a distributed Voicemail Pro server cannot also be used as the fallback IP Office for the central Voicemail Pro server.
- SMTP SSL/TLS communication is used to exchange information between the servers. If the servers fail to connect using SSL/TLS over SMTP, then plain text communication is used.

Note:

In the distributed Voicemail Pro set up, ITZ functions similar to the centralized Voicemail Pro set up.



Additional distributed Voicemail Pro servers can be added as required by the individual IP Office sites in the Small Community Network.



The same distributed Voicemail Pro server can be shared by several IP Office s. The services it provided to each depends on the licenses that each has.

Summary of IP Office configuration settings for distributed voicemail servers

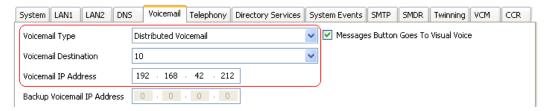
IP Office settings	Central IP Office	Other IP Office s	IP Office with distributed server
Voicemail type	Voicemail Pro	Centralized voicemail	Distributed voicemail
Voicemail IP address	Set to the central Voicemail Pro server computer's IP address.	Not used.	Set to the distributed Voicemail Pro server computer's IP address.
Voicemail destination	Not used.	Set to the Outgoing Group ID of the H323 Line to the central IP Office.	Set to the Outgoing Group ID of the H323 Line to the central IP Office.
Licenses	This system needs licenses for Voicemail Pro and all voicemail features required.	The other IP Office s only require licenses for UMS and or for ContactStore if required.	This system needs licenses for Voicemail Pro and all voicemail features required.

Related links

Voicemail Pro licenses on page 10

Distributed voicemail server configuration

- 1. The centralized voicemail server for the SCN and its central IP Office are configured as normal.
- 2. The Voicemail Pro server software is installed as normal any distributed voicemail server computer. The distributed voicemail server is not specifically configured as being a distributed server.
- 3. Each IP Office hosting a distributed voicemail server is configured with the **Voicemail Type** set to **Distributed Voicemail**.



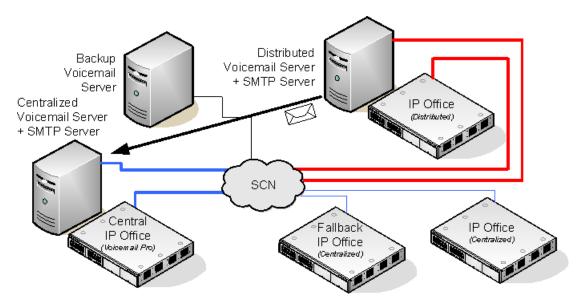
- The **Voicemail Destination** is set the **Outgoing Group ID** of the H323 trunk to the central IP Office hosting the centralized voicemail server.
- The Voicemail IP Address is set to the IP address of the computer running the distributed voicemail server for the IP Office.

Note:

If you are using Voicemail Pro in a distributed environment, a distributed server delivers a recorded message to the central Voicemail Pro server on completion of the recording. However, the presentation to the Voicemail Pro server for message waiting indication (MWI) and access via telephone might be delayed because of the internal processing of the message and the network latency. The delay might be up to 2 minutes in high traffic situations.

Combined options

The various centralized voicemail options (standard, fallback, backup and distributed) can be used within the same Small Community Network.



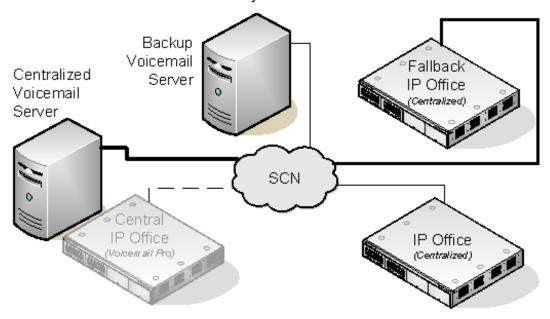
- An IP Office using a distributed voicemail cannot be used as the fallback IP Office for the central IP Office.
- A distributed Voicemail Pro server cannot also be used as the backup Voicemail Pro server.

Example: Combined fallback control and backup server operation

In this example, the fallback IP Office control and backup voicemail server operation are combined.

Central IP Office unavailable

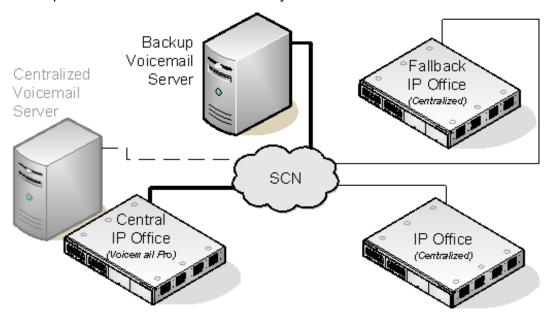
Central Voicemail server controlled by fallback IP Office



If the central IP Office becomes unavailable on the network, the fallback IP Office takes over control of voicemail services using the centralized Voicemail Pro server.

Central voicemail unavailable

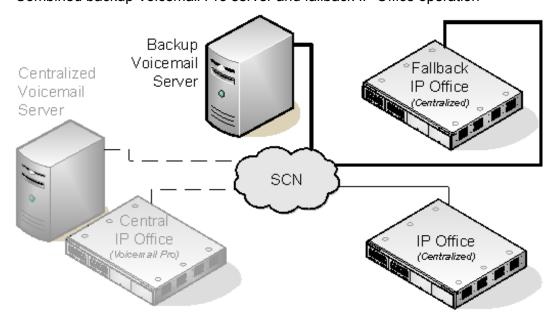
Backup Voicemail Pro server controlled by central IP Office



If the central Voicemail Pro server becomes unavailable on the network, the central IP Office switches to using the backup Voicemail Pro server.

Central IP Office and central Voicemail Pro server unavailable

Combined backup Voicemail Pro server and fallback IP Office operation



If both the central IP Office and the central Voicemail Pro server become unavailable to the network, voicemail services will switch to the backup Voicemail Pro server under control of the fallback IP Office.

Installation notes

Configuring SMTP

About this task

Both the distributed voicemail and backup voicemail scenarios use the same mechanism for the information exchange between the servers. That mechanism uses the SMTP SSL/TLS communication between the Voicemail Pro servers. If the servers fail to connect using SSL/TLS over SMTP, then plain text communication is used. Note that this means that a server with Microsoft Exchange installed (such as an SBS server) cannot be used because Exchange replaces the SMTP service.

The following procedure applies to both scenarios unless specifically stated as otherwise.

Procedure

1. Install and enable IIS.

All the Voicemail Pro servers (central, distributed and backup) require IIS to be installed and enabled on the server before installation of the Voicemail Pro server software.

- a. Start the Internet Information Services manager.
- b. Right-click on **Default SMTP Virtual Server** and select **Properties**.
- c. Select the **Messages** tab.
- d. Deselect the **Limit Message Size** and **Limit number of messages per connection** options.
- 2. Configure each Voicemail Pro server for SMTP e-mail via IIS.

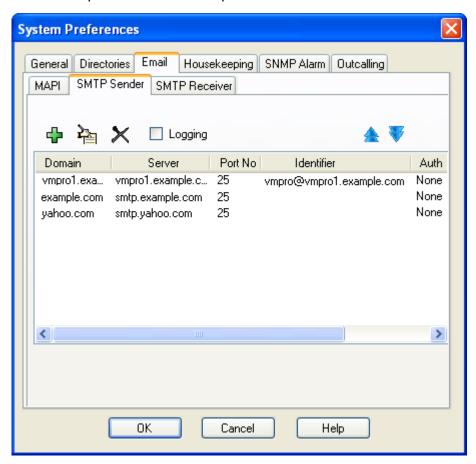
Following installation of the Voicemail Pro server software, it should be configured for SMTP e-mail operation. By default, the Voicemail Pro server installs defaulted to SMTP e-mail operation. However this should be checked.

- a. Start the Voicemail Pro Client.
- b. Click Preferences and select General.
- c. Click the Email tab.
- d. Verify that the MAPI settings are not enabled.
- e. Select the SMTP Sender sub tab.

The first entry in the list must be configured for SMTP between the Voicemail Pro servers.

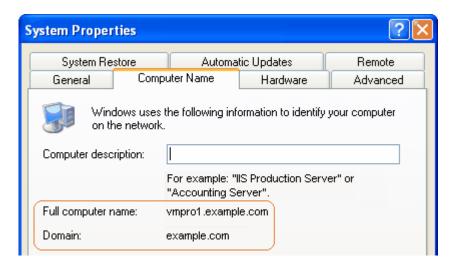
f. Set the **Domain** and **Server** to the fully qualified domain name of the Voicemail Pro server.

For a Windows-based Voicemail Pro server, these e-mails are received on port 25 by IIS and are placed in its mail drop folder.

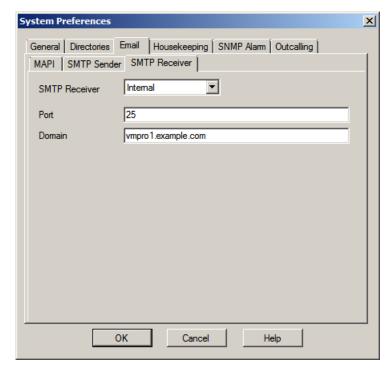


g. To obtain the name, right-click My Computer and select Properties.

The **Computer Name** tab shows the information that should be used as **Full computer name**. The name must be used. IP addresses are not used.



h. Select the SMTP Receiver sub tab.



- i. Set the **SMTP Receiver** as **External** and set the **Drop Folder** address to be the IIS mail drop folder (usually C:\Inetpub\mailroot\Drop).
- j. Click OK.
- 3. Click Save & Make Live.
- 4. Verify that Port 25 is not blocked.

Many firewalls block access to port 25 by default. Check that the firewall software on the server is configured to include VMProV5Svc.exe as an exception.

- 5. **(Optional)** Set DNS host routing by locating the C:\Windows\System32\drivers\etc\hosts file and open it in a text editor such as WordPad.
 - SMTP operation uses fully qualified domain names that need to be resolved to IP addresses by the network's DNS server. For name resolution, the hosts files on each server can be used. Note however that if this method is used, any changes to IP addresses of servers needs to be reflected in the file update.
- 6. Add IP address and fully qualified domain name entries for each of the other Voicemail Pro servers.

Voicemail Pro Configuration

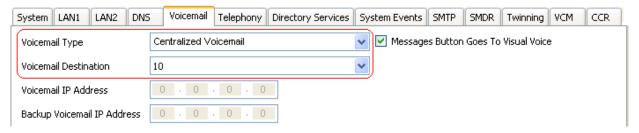
In all scenarios, each Voicemail Pro server should use the same basic configuration settings. For example, the same voicemail mode (Intuity or IP Office) and the same housekeeping settings.

IP Office configuration

Centralized voicemail server operation configuration

The centralized Voicemail Pro server for the SCN and its central IP Office are configured as normal.

Each IP Office not hosting a distributed Voicemail Pro server is configured with the **Voicemail Type** set to **Centralized Voicemail**.



The **Voicemail Destination** is set the **Outgoing Group ID** of the H323 trunk to the central IP Office hosting the centralized Voicemail Pro server.

Distributed voicemail server operation configuration

- 1. The centralized voicemail server for the SCN and its central IP Office are configured as normal.
- The Voicemail Pro server software is installed as normal any distributed voicemail server computer. The distributed voicemail server is not specifically configured as being a distributed server.
- 3. Each IP Office hosting a distributed voicemail server is configured with the **Voicemail Type** set to **Distributed Voicemail**.



- The Voicemail Destination is set the Outgoing Group ID of the H323 trunk to the central IP Office hosting the centralized voicemail server.
- The Voicemail IP Address is set to the IP address of the computer running the distributed voicemail server for the IP Office.

Backup server operation configuration

- 1. The Voicemail Pro server software is installed as normal on the backup server computer. The voicemail server is not specifically configured as being a backup server.
- 2. The central IP Office hosting the primary voicemail server is configured with the IP addresses of both the primary voicemail server and the backup voicemail server.



3. The other IP Office s are configured for centralized or distributed voicemail as normal.

Server connection tests

You can use the following tests to check the connection to the central server. Always use the fully-qualified domain name of each server.

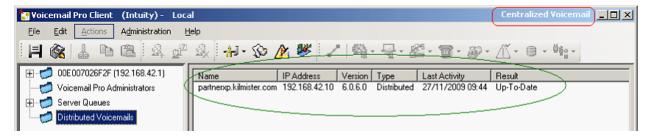
Ping test: Makes a ping from the server to the central server. For example, ping vmprol.example.com. You should see a series of four successful replies from the sever.

Telnet test: Makes a telnet test from the server to the central server. For example, telnet vmprol.example.com 25. You should receive a response from the e-mail server within IIS. Enter guit to close the telnet connection.

To check the connection from the central server, you can repeat the ping and telnet tests. This time from the central server to the backup or distributed server.

Voicemail Pro client status

When connected to a Voicemail Pro server using the Voicemail Pro client, the client title bar displays the role of that Voicemail Pro server; **Centralized Voicemail**, **Backup Voicemail** or **Distributed Voicemail**.



When connected to the backup Voicemail Pro server, if it is the active server, the title changes from **Backup Voicemail** to **Backup Voicemail** (Live).

When connected to the centralized Voicemail Pro server, the **Distributed Voicemails** folder can be selected to display details of the distributed servers and the state of the connection with each. The **Result** is either:

- In Progress The servers are synchronizing information via SMTP.
- **Up-To-Date** The servers are synchronized.

Appendix A: SMTP logging

SMTP error logging is enabled to generate a log of SMTP activity.

For a Windows-based Voicemail Pro installation, the activity is logged in a file in C:\Program Files\Avaya\IP Office\Voicemail Pro\VM\logs. The file name includes a date stamp for the day on which it is generated.

Appendix B: Verifying the host key of the SFTP server

About this task

If you are trying to connect to a SFTP server for the first time, the connection may fail with an error message about the authenticity of the host. The behavior is a feature of the SSH protocol and is designed to protect you from a spoofing attack. To proceed, verify the host key of the SFTP server.

Procedure

- 1. Log in to the computer that runs the Voicemail Pro service using the same Windows account that is used to start the service.
- 2. Open the WinSCP application.
- 3. Click New.
- 4. Enter the required details in the **Host name** and **User name** fields.
- 5. Click Login.

A message is displayed that includes the host key of the SFTP server.

- 6. If you trust the displayed host key, click **Yes** to save the host key in the cache. Otherwise, get the host key from your system administrator, and match it with the displayed host key before you click **Yes**.
- 7. Enter the password to verify the connectivity to the remote SFTP server.

Appendix C: Installing Voicemail Pro as an ACM Gateway

About this task

Complete the steps in this section to install Voicemail Pro as an ACM Gateway. There is only one type of installation for the Voicemail Pro ACM Gateway. Therefore, you are not offered the choice of custom, compact or typical during the installation process.

Procedure

- 1. Insert the IP Office Applications DVD.
- 2. Click Voicemail Pro, and then double-click setup.exe.

The Choose Setup Language window opens.

3. Select the installation language.

This language is used for the installation and for the default language prompts.

4. Click OK.

Installation preparation begins.

- 5. Voicemail Pro requires Microsoft .NET 2.0 Framework. If this version is not detected, you are prompted to install it. Click **Yes** to install Microsoft .NET 2.0 Framework and follow the instructions on the screen.
- 6. If the Modify, repair or remove the program window displays, follow the upgrade process.
- 7. In the Welcome window, click **Next**.
- 8. In the Customer Information window, type a user name and the company name, or use the default names that are proposed.

These settings do not affect Voicemail Pro when it is installed.

9. In the same window, choose the option that determines who should be able to use Voicemail Pro when it has been installed.

If you prefer, choose the **Anyone who uses this computer (all users)** option.

10. In the Customer Information window, click **Next**.

- 11. In the Choose Destination Location window, choose one of the following options:
 - Click Browse and locate the folder where the Voicemail Pro files are to be installed.
 - Click Next to use the proposed folder.
- 12. In the Messaging Components window, select **ACM Gateway**.
- 13. Click Next.

The Service Account Name window opens. Details of the default administrator account may already be filled in.

- 14. Choose one of the following options:
 - Type the User Name and Password for the user account under which the Voicemail Proservice should run.

This should be the voicemail account created previously on the domain and Exchange server.

- Click Browse and select from the list of available computer or network accounts.
- Click Next to use the proposed account details.

The Select Program Folder window opens.

- 15. By default, the program folders are created in a folder called **IP Office**. You can specify a different folder or select one from the list of existing folders.
 - To specify a different folder, type the folder name in the **Program Folders** box.
 - To use an existing folder, highlight a name in the list of existing folders.
- 16. Click Next.

The account details that you entered are verified.

17. If you entered a user name that does not exist, the system prompts you to create a new computer user account with the specified name and password. Click **Yes**.

The Select Program Folder window opens.

- 18. Select the program folder where you would like the icons for the Voicemail Pro components to be added. By default, the program icons are added to IP Office.
- 19. Click Next.

The Start Copying Files window opens. Before any copying starts, you are presented with a summary of the settings that you have chosen so far.

- 20. Review the settings to make sure that they are what you expect.
 - If for any reason the details are not what you expect, click **Back** and make the required changes.
 - When you are satisfied that the details are correct, click **Next** to start copying the files.

The Setup Status window opens to keep you informed while the installation takes place.

21. When the installation is complete, you are prompted to restart the computer. Choose **Yes I** want to restart my computer now.

- 22. Click Finish to restart the computer.
- 23. When the computer restarts, log back in.

The IP Office Voicemail Pro - ACM Gateway Settings window opens.

- 24. In the **Mail Server** box, type the name of the mail server to use.
- 25. Choose one of the following options.
 - Message Networking/Interchange to use Interchange
 - Modular Messaging to use Modular Messaging
- 26. Click Next.

The IP Office Voicemail Pro SMTP Email Settings window opens

27. In the **Mail Server** box, type the name of the SMTP mail server.

This should be the fully-qualified domain name.

- 28. In the **Port Number** box, type the number of the receiving port on the SMTP mail server.

 The default is 25.
- 29. In the **Mail Drop box**, type the name of the destination folder for outgoing e-mails on the SMTP Server

Alternatively, click the **Browse** button and select the folder to use.

30. **(Optional)** To enforce server authentication, check the **Server Requires Authentication** box.

If you check this option, you also need to enter the account name and password. You can also choose whether or not to set the **Use Challenge Response Authentication** option.

31. Click Finish.

The e-mail settings are validated.

- 32. You see one of the following results:
 - If everything has been installed correctly and the license requirements are met, you are prompted to start the Voicemail service.
 - If the system fails to connect to the SMTP server, an error message displays. You might need to start the Voicemail service manually.
- 33. Click **OK** to acknowledge the message.

Result

You have now finished installing the Voicemail Pro ACM Gateway software.

Glossary

Centralized Voicemail Pro Server

Centralized Voicemail Pro uses a single Voicemail Pro server to provide voicemail services for all IP Office s in the Small Community Network. Except for use of ContactStore, only the central IP Office hosting the Voicemail Pro server requires licensing for Voicemail Pro operation and features.

Distributed Voicemail Pro Server

For IP Office Release 6.0 and higher, remote IP Office s in the Small Community Network can be associated with another Voicemail Pro server in addition to the centralized Voicemail Pro server. The additional distributed server then provides all voicemail services (except message storage and collection) for that IP Office. This requires the remote IP Office to have licenses for voicemail operation and the features it requires.

MAPI

Message Application Programming Interface (MAPI) is a Microsoft Windows system architecture that supports adding messaging functionality into applications. MAPI-enabled e-mail applications can share e-mails and also work together to distribute the mail.

Simple Network Time Protocol (SNTP)

Simple Network Time Protocol (SNTP) is an Internet standard protocol (built on top of TCP/IP) that provides accurate synchronization to the millisecond of computer clock times in a network of computers. It synchronizes all the IP Office s in an SCN configuration.

Voice Recording Library (VRL)

Using the Voice Recording Library (VRL) operation, Voicemail Pro can transfer specific users' automatic and/or manually recorded calls to a third-party application. Users can select VRL as the destination for calls recorded via a Leave Mail action in a call flow.

Currently, this mode of operation is only supported with the Contact Store for IP Office application from Witness Systems. This application provides tools to sort, search and playback recordings. It also supports the archiving of recordings to DVD.

Voicemail Private Networked Messaging (VPNM)

Voicemail Private Networked Messaging (VPNM) is a set of preferences available only if you have selected VPNM during installation and is licensed within the IP Office configuration. It is used to add a list of the remote VPNM servers and mailbox users on those servers.

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