

IP Office 8.0 Implementing Voicemail Pro

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Chapter 1. What is new in 8.0

1. What is new in 8.0

The following functionality has been added to Voicemail Pro 8.0.

• International Time Zone support

The International Time Zone (ITZ) support is now available on the central Voicemail Pro server and the distributed Voicemail Pro servers that are connected to the IP Offices located in different time zones across the globe. **Note**: When you upgrade Voicemail Pro to a newer version, the Voicemail Pro server updates the current time zone offset of the user. However, it does not update the campaign information.

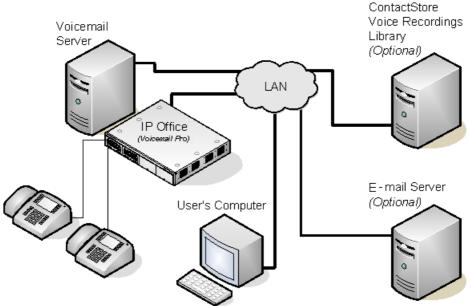
• Conference Call Center Support Removal

Voicemail Pro no longer supports Conferencing Center telephony action and, therefore, the Conferencing Center will no longer be available as an action. If a user imports or opens a call flow containing the Conferencing Center actions, the system displays a warning message that the call flow contains an unsupported action. If the user does not take any action on the call flow that contains a Conferencing Center action, Voicemail Pro will disconnect the call reaching this action. Restoring a call flow containing the Conferencing Center action and the call flow name where it was found. The log file can be found at <Installation path>\VMPro_Restore.log.

Chapter 2. Voicemail Pro

2. Voicemail Pro

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



• IP Office Control Unit

The IP Office Voicemail Pro licenses 12 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.

• Multiple Servers

There are a number of scenarios where multiple Voicemail Pro servers can be supported. For example, to provide a backup voicemail server or to support multiple IP Office systems in a network. See <u>Centralized</u> Voicemail Pro 112.

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 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 and IP Office Phone Manager applications 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 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 Pro before installing ContactStore for IP Office.

2.1 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		Fallback Selection	TTS Window s
Brazilian Portuguese	ptb	> pt > en.	
Chinese (Cantonese)	zzh	> en > enu.	v
Chinese (Mandarin)	ch	> en > enu.	v
Danish	da	> en.	1
Dutch	nl	> en.	v
English UK	en	> en.	1
English US	enu	> en.	v
Finnish	fi	> en.	~
French	fr	> frc > en.	√
French Canadian	frc	> fr > enu > en.	~
German	de	> en.	~
Greek	el	> en.	~
Hungarian	hu	> en.	×
Italian	it	> en.	v
Korean	ko	> en.	v
Latin Spanish	eso	> es > enu > en.	~
Norwegian	no	> en.	v
Polish	pl	> en.	~
Portuguese	pt	> ptb > en.	v
Russian	ru	> en.	v
Spanish	es	> eso > en.	v
Swedish	sv	> en.	v

When the IP Office routes a call to the voicemail 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 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.
	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 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.

2.2 Voicemail Pro Licenses

The **Help** | **About** screen in the voicemail client can be used to check which IP Office the voicemail 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.

• Seferred Edition (Voicemail Pro) :

This license enables support for Voicemail Pro as the IP Office's voicemail server with four voicemail ports. The voicemail 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)**.

- Mailboxes for all users and hunt groups.
- Announcements for users and hunt groups.
- Customizable call flows.
- Call recording to mailboxes.

- Campaigns.
- TTS e-mail reading for users licensed for Mobile User or Power User profiles.
- Use of **Conference Meet Me** functions on IP500 and IP500 V2 systems.

• 👟 Advanced Edition

The Advanced Edition license enables the additional features listed below. A **Preferred Edition** license is a prerequisite for the **Advanced Edition** license.

- Support for Customer Call Reporter.
- Voicemail Pro database interaction (IVR).
- Voicemail Pro call flow generic TTS (8 ports).[1]
- Voicemail Pro Visual Basic Scripting.
- Voicemail Pro call recording to ContactStore.^[2]
- 1. Provides up to 8 ports of TTS for use with Speak Text actions within call flows. Not used for user TTS e-mail reading.
- 2. In a Small Community Network using centralized voicemail, this license only enables ContactStore support for the central IP Office. Remote IP Offices in the network require their own Advanced Edition license or a VMPro Recordings Administrator license.

• Seferred Edition Additional Voicemail 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 (IP406 V2 = 20, IP412 = 30, IP500 = 40, IP500 V2 = 40). This license was previously called **Additional Voicemail Pro (ports)**.

Second ings Administrators :

To support ContactStore in a Small Community Network, IP Offices other than the central IP Office require either their own Advanced Edition license or this 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. For IP Office Release 6 this license is no longer used for user e-mail reading. The IP Office Advance Edition license also enables eight ports of generic TTS.

• 👟 VMPro TTS (ScanSoft) :

This legacy licence enables use of text to speech facilities using Avaya supplied TTS software with Voicemail Pro. One license per simultaneous instance of TTS usage. For IP Office Release 6 this license is no longer used for user e-mail reading.

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.

• 👟 VMPro Database Interface :

This legacy license enables 3rd party database support within Voicemail Pro call flows. For IP Office Release 6 and higher, this is also enabled by the **Advanced Edition** license.

• 👟 VMPro VB Script :

This legacy license enables Visual Basic Script support with Voicemail Pro. For IP Office Release 6 and higher, this is also enabled by the **Advanced Edition** license.

2.3 Number of Simultaneous Users

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

IP Office	Maximum for Voicemail Pro
IP500	40
IP500 V2	40

The actual number of simultaneous users is determined by the <u>licenses for Voicemail Pro</u> 12^{3} added to the IP Office configuration. Note that some specific functions can have <u>voicemail channels reserved</u> of their use or can have channel restrictions.

Chapter 3. Installation

3. Installation

Windows Server Installation

This section covers the installation of the Voicemail Pro server on a Windows server computer. Voicemail Pro 8.0 can be installed with the following IP Office systems running IP Office Release 8.0 software:

- IP Office 500
- IP Office 500v2

Mixing Linux and Windows Servers

In scenarios where multiple Voicemail Pro servers are used, see Centralized Voicemail Pro, a mix of Linux and Windows based servers can be used.

3.1 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.
- An IP Office Feature Key. Refer to Avaya IP Office Standard Version Installation (15-601042) for details.
- Licenses based on the serial number of the IP Office Feature Key. These should include:
 - 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 Voicemail Pro Licenses 12.
- IP Office Applications DVD.

Tips

- 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.

3.1.1 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 <u>simultaneous connections</u> (13), up to 40 on IP Office 5.0+ IP500 control units. The operation of Voicemail Pro can be customized to provide special services.

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 8.0 Application DVD (Disk 1)
Languages	See Supported Languages 11.
IP500	✓ IP Office Standard Edition ^[1] , ✓ IP Office Professional Edition.
License	✓ See below.

1. For pre-IP Office 5.0 IP500 systems, an IP500 Upgrade Standard to Professional licenses is required to support Voicemail Pro.

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 an IIS web server to be run on the same computer as the Voicemail Pro software.

• 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. UMS Web Voicemail requires the Voicemail Pro service to be installed on a server computer that has IIS already present. 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**.

Notes:

- 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 <u>disk space requirements</u> are also subject to the message storage required.

Basic Voicemail Pro

Minimum Hardware Requirements			
RAM	256MB		
Hard Disk Free 2GB* Space			
Processor:			
- Pentium	P4 1.4GHz		
- Celeron	Any 1.7GHz		
- AMD	Any 1.4GHz.		

Operating System Support					
Server OS: Service Client					
2003 Server	v	~			
2008 Server	v	~			
Client OS:					
XP Professional		~			
Vista		~			
Windows 7	J	~			

*Add 1MB per minute of message and prompt storage space as per your requirements.

Voicemail Pro plus UMS Web Voicemail and/or Campaigns

Minimum Hardware Requirements			
RAM	512MB		
Hard Disk Free Space	2GB*		
Processor:			
- Pentium	P4 2.8GHz		
- Celeron	Not tested.		
- AMD	Athlon XP 3000+, Athlon 64		

Operating System Support					
Server OS: Service Client					
2003 Server	v	1			
2008 Server	v	<i>.</i>			
Client OS:					
XP Professional	×	×			
Vista	×	×			
Windows 7	×	×			

*Add 1MB per minute of message and prompt storage space as per your requirements.

- Both Web Campaigns and UMS Web Voicemail require the IIS web server on the voicemail server computer to be enabled.
- UMS Web Voicemail will install 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*	
Processor:		
- Pentium	P4 2.8GHz	
- Celeron	Not tested.	
- AMD	Athlon XP 3000+, Athlon 64	

Operating System Support					
Server OS: Service Client					
2003 Server	v	~			
2008 Server	v	~			
Client OS:					
XP Professional	v	v			
Vista	×	×			
Windows 7	×	×			

Add 1MB per minute of message and prompt storage space as per your requirements.

*Generic TTS only. The current ScanSoft TTS provided with Voicemail Pro is not supported on Vista.

• 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 the 64-bit version of Windows Server 2008 SP1, install the KB2538242 security update.

Voicemail Pro and IP Office Customer Call Reporter

Voicemail Pro and IP Office Customer Call Reporter can be run on the same server up to a maximum of 16 Voicemail Pro ports. Supported on a Dual Core CPU of 2.4Ghz and higher. The separate requirements of Voicemail Pro and Customer Call Reporter must be met.

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).
143	TCP	Used to service IMAP4 requests.
50791	UDP	Used to receive requests from IP Office PBX.
	ТСР	Used to receive requests from one-X Portal for IP Office.
50791	ТСР	Used to receive connections from Voicemail Pro client.

Note that Voicemail may use additional ports for connection to services such as 3rd party database or Microsoft Exchange.

Note: Do not install Voicemail Pro on a computer that runs the Domain Name System (DNS) Server service, as the DNS Server service may prevent the Voicemail Pro service from obtaining the ports that it requires to function correctly. If you must install Voicemail Pro on a computer running the DNS Server service, refer to the following for the additional configuration requirements:

http://technet.microsoft.com/en-us/library/ee683907%28WS.10%29.aspx

http://support.microsoft.com/kb/956188

http://support.microsoft.com/kb/929851

3.1.2 Single Server Support

The following scenarios are supported for combining IP Office server applications onto a single Windows server computer.

In all cases, the individual requirements of each application as if installed on a separate server are still applicable. Also, depending on the application combination, additional restrictions and requirements may be applied as detailed below.

	Voicemail Pro	Customer Call Reporter	One-X Portal for IP Office	Minimum IP Office Release	Minimum Computer Specifications
1.	16 Ports	150 Agents	-	Release 5.0	As per each application.
2.	8 Ports (4 TTS)	-	50 Simultaneous users.	Release 6.0	2GHz Dual Core, 4GB RAM, Windows 2008 Server (32 or 64-bit).
3.	8 Ports (4 TTS)	30 Agents	50 Simultaneous users.	Release 6.0	2GHz Quad Core, 6GB RAM, Windows 2008 <u>64-bit</u> .
4.	16 ports (8 TTS)	50 Agents	150 Simultaneous users.	Release 6.0	CCR run in Windows 2003 on a virtual server.

 Voicemail Pro includes UMS, VB Scripting and 3rd party database operation. It also includes the installation of ContactStore if required.

• Both ContactStore and one-X Portal for IP Office use Tomcat servers as part of the application. For scenarios with both installed, the redirect port setting of the ContactStore's Tomcat server should be configured to a port other than 8080.

• When used in a virtual server configuration, Customer Call Reporter and one-X Portal each require a 2GB RAM virtual machine. Voicemail Pro and ContactStore each require a 1GB RAM virtual machine.

3.1.3 Virtual Server Support

Operation of IP Office server applications, including Voicemail Pro, is supported using the following virtual servers.

- VMWare Server.
- Microsoft Virtual Server 2005 R2.
- Microsoft Server Hyper-V.

3.1.4 Network Requirements

The computer should be configured and tested for TCP/IP networking.

The voicemail 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.

3.1.5 Disk Space Requirements

The following 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 1MB of disk space per minute.
- For a busy environment you can expect to require at least 1000 minutes of message recording space, that is 1GB.
- If you are installing the Client only, you can expect to require at least 170MB.

3.1.6 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.

3.1.7 ContactStore Operation

The current IP Office Voice Recording Library (VRL) application is Avaya IP Office ContactStore. This application and its installation are documented separately, however:

- IP Office ContactStore should be installed after Voicemail Pro has been installed and its operation verified.
- IP Office ContactStore must use a separate hard disk partition for its message archiving from that used by Voicemail Pro for current mailbox messages. Use of a separate hard disk or installation onto a separate server computer are alternatives.
- The use of ContactStore to store recordings requires additional <u>voicemail licenses</u> [12]. The IP Office hosting the Voicemail Pro server must have an **Advanced Edition** license. If in a Small Community Network, other IP Offices in the network wanting to use ContactStore must have either **Advanced Edition** licenses or **VMPro Recordings Administrators** licenses.
- Use RAID 1 or RAID 5.
- Use a DVD recorder for long-term archiving.
- A figure of 7.2MB per hour for archived recordings is given.
- The archived messages held by IP Office ContactStore are accessed via web browser using the port address 8888. This port address is not configurable and so you must verify that it does not conflict with any other web server service running on the same server computer.

3.2 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.

Component	Sub Component		Installation Type		Туре	Notes
		Client	Compa ct	Typica I	Custo m	
Voicemail Pro	Voicemail Pro Client	~	7	~	~	
	Voicemail Pro Service	×	1	~	~	
	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 Pr Component	o Campaign Web	×	×			Not available for installation on an XP Pro server.
Web Voicem	ail (UMS)	×	×	×		Only available for installation on server operating systems.

Before you begin:

- 1. Log on to the server computer using the account under which you intend the Voicemail Pro server or service to run. This account must have full administrator rights to the server computer. If you prefer, create a new user account called Voicemail and configure it such that it has full administrator rights on the computer and the account password does not expire.
- 2. In IP Office Manager, check that the correct licenses for Voicemail Pro 12 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.
 - <u>Web Campaigns Installation</u> 26
 - Voicemail E-mail Installation 50
 - UMS Web Voicemail
 - IMAP Installation 32
 - <u>Web Voicemail Installation</u> 35
 - Exchange Server Installation 4th
 - Centralized Voicemail Pro
 - Installing Text to Speech Features
 - Voicemail Private Networked Messaging (VPNM) Installation

• 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**.

- 1. Insert the IP Office Applications DVD. Click on the link for Voicemail Pro and then double-click on **setup.exe**.
- 2. The **Choose Setup Language** menu is displayed. This language is used for the installation process and does not affect the language prompts that are installed.
- 3. Select the language for the installation process. Click $\ensuremath{\textbf{OK}}$.
- 4. The **Preparing Installation** menu is displayed.
 - Voicemail Pro requires Microsoft .NET 2.0 Framework. If this is not detected, you will be prompted to install it. Click Yes to install Microsoft .NET 2.0 Framework.
 - If the Modify, repair or remove the program window is displayed, follow the upgrade process [28].
- 5. The **Welcome** window is displayed. Click **Next**.
- 6. The **Customer Information** menu is displayed.
 - Use the default names or enter a user and company name. These settings do not affect the Voicemail Pro installation.
 - Select the option Anyone who uses this computer (all users).
 - Click Next.
- 7. The **Choose Destination Location** menu is displayed. Unless specifically required, for ease of maintenance use the proposed folder location. Click **Next**.
- 8. The **Messaging Components** menu is displayed.
- 9. Select *Voicemail Pro (Full)* or *Voicemail Pro Client Only*. Click Next. If *Voicemail Pro Client Only* was selected, go to step 14^[23].
- 10. The Setup Type menu is displayed. Select Compact, Typical or Custom and click Next.
 - If the option selected was *Custom*, the **Select Features** menu is displayed. Select the components required for the installation and click **Next**.
- 11. The **Service Account Name** window is displayed. This window is used to select the account under which the Voicemail Pro services will be run following installation.
 - Enter the user name and password of the account to use. Alternatively, click **Browse** and select a name from the list of available computer or network accounts.
 - Click **Next**. The account name and password are validated. If the validation fails, the system prompts you whether to create a new account that matches the details entered.
- 12. The **Select Program Folder** menu is displayed. 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. Click **Next**.
- 13. The **Start Copying Files** menu is displayed. It shows a summary of the components that are about to be installed. 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.
- 14. 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 completed.
- 15. The InstallShield Wizard Complete menu is displayed.
- 16.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**.
- 17.Click Finish.

18. If the computer restarts, you will need to log in to continue the installation process.

- 19. The installation process continues by requesting a number of configuration settings used by the voicemail server services,
 - 1. The **IP Office Voicemail Pro E-mail Settings** window is displayed. This is used to enter the account that the voicemail pro server should use for e-mail functions. Enter the name of the e-mail account to use or click **Browse** and select an account to use. Click **Next**.
 - 2. The IP Office Voicemail Pro SMTP E-mail Settings window opens.
 - 3. 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.
 - 4. In the **Port Number** box, type the number of the receiving port on the SMTP mail server. The default is 25.
 - 5. To enforce server authentication, check the **Server Requires Authentication** box. This is optional. If you check it you also need to provide the Account Name and Password that need to be entered. You can also choose whether or not to set the Use Challenge Response Authentication option.
 - 6. 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.

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

21.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.

- <u>Web Campaigns Installation</u>
- Voicemail E-mail Installation 50
- UMS Web Voicemail 31 ↑
 - IMAP Installation 32
 - Web Voicemail Installation 35
 - Exchange Server Installation 4
- <u>Centralized Voicemail Pro</u>
- Installing Text to Speech Features 66
- Voicemail Private Networked Messaging (VPNM) Installation

Initial Configuration

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

1. Click Start | Programs | IP Office | Voicemail Pro. The Voicemail Pro Client starts and the main window opens.

2. Change the default remote administrator account details:

- a. In the navigation panel, click on **Voicemail Pro Administrators**. There should be one account called *Administrator*.
- b. Double-click on the account (or right click and select **Modify**).
- c. Change the **Password** and **Confirm Password** to a new value than the default (**Administrator**).
- 3. Initialize the server call flow:
 - a. Click the 📽 Save and Make Live icon.
 - b. 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.
 - c. Voicemail operation can now be tested from an extension by dialing ***17**.
- 4. You can now start configuring the operation of the voicemail server, for example changing the system preferences [96].

3.2.1 Modifying the Installed Components

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 is displayed.

5. Select the check boxes for all the features in the list that you want to install. **Note:** If you clear the check box for a feature that is already installed, the installation wizard will uninstall the feature.

6. Click Next.

The Service Account Name window is displayed.

7. Continue with the installation wizard following the steps from the **To install the Voicemail Pro software components** section of <u>Server/Client Installation</u>^[22].

3.2.2 Web Campaigns Installation

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

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

- Windows 2008 Server IIS does not support legacy IIS applications such as Campaigns by default. This is rectified by reinstalling IIS from the Windows installation disk and selecting **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 22 and select Voicemail Pro (Full).
- Select either *Typical* or *Custom*. If *Custom* is selected, select *Voicemail Pro Campaign Web Component* in the list of components.
- 4. 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.

Windows 2008 Server

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

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 is displayed.

3. In Features View, double-click Handler Mappings.

4. Click Edit Feature Permissions.

- 5. Check the **Scripts** and **Execute** check boxes.
- 6.Click OK.

3.2.3 The Voicemail Pro Services

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.

To check/restart the Voicemail Pro Service:

1. Click Start | Administrative Tools | Services.

<u>File Action View</u>	Help					
🗢 🔿 📅 🔄 🦉	s 🗟 🚺 🖬 🕨 🔳	II ID				
🔍 Services (Local)	Name 🔺	Description	Status	Startup Type	Log On As	
	🔍 Telephony	Provides Telephony		Manual	Network Se	
	🔍 🎑 Thread Ordering Se	Provides ordered e		Manual	Local Service	
	🔍 TP AutoConnect Se	ThinPrint .print com	Started	Manual	Local System	
	🔹 TP VC Gateway Ser	ThinPrint .print com		Manual	Local System	
	🙀 TPM Base Services	Enables access to t		Manual	Local Service	
	🔍 UPnP Device Host	Allows UPnP device		Disabled	Local Service	
	🔍 🥨 User Profile Service	This service is respo	Started	Automatic	Local System	
	🖏 Virtual Disk	Provides manageme		Manual	Local System	
	🙀 VMware Tools Service	Provides support fo	Started	Automatic	Local System	
	🔍 VMware Upgrade H	Virtual hardware up	Started	Automatic	Local System	
	Voicemail Pro Service		Started	Automatic	.\Administra	
	Volume Shadow Copy	Manages and imple		Manual	Local System	
	🔍 Windows Audio	Manages audio for		Manual	Local Service	
	Windows Audio End	Manages audio devi		Manual	Local System	
	Windows Color Sys	The WcsPlugInServi		Manual	Local Service	
	Windows Driver Fo	Manages user-mod		Manual	Local System	

- 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 will stop and restart the other services that it uses.
- 3. Close Services.

Setting the Voicemail Pro Service or Computer to Restart Automatically

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.

- 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

In some instances, certain computers might not respond quickly enough to start all of the Avaya services in the correct order. In this circumstance, it is advisable to create a batch file which 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.

- 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 which 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.

3.3 Upgrading Voicemail Pro

This section describes how to upgrade Voicemail Pro.

Note: After you upgrade, the system updates the timestamp associated with the recordings to reflect the time of the associated IP Office instead of the time of the Central Voicemail Pro server. The system does not automatically update the time stamp of Campaign recordings.

The options available are:

- Upgrading from below Voicemail Pro 3.2 [28]
- Upgrade from 3.2 or higher 29
- Upgrading from Voicemail Lite 30

3.3.1 Upgrade from below version 3.2

It is important that the settings of an existing Voicemail Pro are exported before any upgrade. Although folders that contain prompts and messages are not affected by the upgrade process, the editable version of a customer call flow is lost.

Note: When you upgrade Voicemail Pro to a newer version, the Voicemail Pro server updates the current time zone offset of the user. However, it will not update the campaign information.

To upgrade from below version 3.2 to version 4.x+:

1.Export the Database

Before removing Voicemail Pro as part of an upgrade, you must create a backup copy of the call flow database. This will contain any customizations made to the default call flow.

- 1. Start the Voicemail Pro Client.
- 2. From the **File** menu, select the option **Import or Export**.
- 3. Select the option **Export call flows** and click **Next**.
- 4. Enter a file path and file name ending in .mdb, for example C:\temp\backup.mdb. Click Next.
- 5. Click Finish to start the export then click Close to complete the export procedure.
- 6. Close the Voicemail Pro Client.

2.Back up the Registry

Any registry settings that are associated with Voicemail Pro need to be backed up.

- 1. Insert the **IP Office Applications DVD**. Click on the link for **Voicemail Pro** and then double-click on **setup.exe**. The **Choose Setup Language** window opens.
- 2. Right-click the DVD drive and select Open.
- 3. Locate the file *backupreg.bat* and double-click it to run the application.
- 4. Check that the registry settings have been backed up. The batch file should have created 3 backup files in the Windows Temp directory. Make sure that the following 3 files exist in that location:
 - VMPro.arf
 - NetAly.arf
 - IMSGateway.arf

3.Remove Voicemail Pro

Any previous versions of Voicemail Pro must be removed before you start to install the new version.

- 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 Uninstall.

4. Follow the prompts that you see on the screen during the removal process.

5. When the process has been completed, click Finish.

4.Restore the Registry

The Voicemail Pro registry settings that were backed up in $\frac{1}{28}$ need to be restored.

- 1. Insert the **IP Office Applications DVD**. Click on the link for **Voicemail Pro** and then double-click on **setup.exe**. The **Choose Setup Language** window opens.
- 2. Locate the file *restorereg.bat* and double-click it to run the application. This restores the registry settings previously associated with Voicemail Pro.

5.Install the New Software

See <u>Installing Voicemail Pro</u> 16 and then refer to the sections that relate to the type of Voicemail Pro that you intend to install.

6.Restore the Database

The copy of the call flow database that contained any customizations made to the default call flow needs to be restored.

- 1. Start Voicemail Pro.
- 2. From the File menu, select Import or Export. The Import or Export Call Flows window opens.

3. Select Import Call Flows.

- 4. Click Next.
- 5. Click the **Browse** button and locate the file that contains the backed up call flows.
- 6. Select the file and click **Open**.
- 7. In the Import or Export Call Flows window, click **Next**.
- 8. Click Finish to start importing the database.
- 9. Click **Close** to complete the import process.
- 10.Click on Save and Make Live to save the Call flows.

The new version of Voicemail Pro has been installed. Test that the system is running by dialing *17 from any extension. You should hear the mailbox announcement.

3.3.2 Upgrade from Version 3.2+

Backup the database before you upgrade.

Note: When you upgrade Voicemail Pro to a newer version, the Voicemail Pro server updates the current time zone offset of the user. However, it does not update the campaign information.

To upgrade from version 3.2 or higher:

- 1. Insert the **IP Office Applications DVD**. Click on the link for **Voicemail Pro** and then double-click on **setup.exe**. The **Choose Setup Language** window opens.
- 2. Select the installation language. The language selected is used for the installation.
- 3. Click OK. You are asked 'This setup will perform an upgrade of IP Office Voicemail Pro. Do you want to continue?'
- 4. Click Yes. The Upgrading the IP Office Voicemail Pro window opens.
- 5. Click **Next** to start the upgrade. The setup status window opens. The progress of the upgrade is indicated by a time bar.
- 6. Click Finish. The E-mail settings window opens.
- 7. Enter your e-mail account details and click **Next**. The **SMTP E-mail settings** window opens.
- 8. Enter your SMTP E-mail details and click **Finish**. The SMTP settings entered will be validated. If an error occurs, the validating configuration window opens containing the <u>SMTP Error</u> [128].
- 9. Click **Yes** when prompted whether to start the Voicemail Pro service.
- 10.The new version of Voicemail Pro has been installed. Test that the system is running by dialing *17 from any extension. You should hear the mailbox announcement.

3.3.3 Upgrade to Voicemail Pro

You can upgrade from Voicemail Lite to Voicemail Pro. The steps described here will remove Voicemail Lite but will not remove the existing mailbox messages and greetings.

Note: When you upgrade Voicemail Pro to a newer version, the Voicemail Pro server will update the current time zone offset of the user; however, it will not update the campaign information. Similar is the case with restoring registry settings.

To upgrade from Voicemail Lite to Voicemail Pro:

1.Remove Voicemail Lite

- 1. Make sure that Voicemail Lite is not running.
- 2. Open the Windows Control Panel.
- 3. Click Programs | Programs and Features.
- 4. In the list of installed programs, select **IP Office Admin Suite** and click **Change**. The Installshield Wizard for IP Office Admin Suite opens up.
- 5. Click **Next**. The **Program Maintenance** window is displayed.
- 6. Select **Modify** and click **Next**.
- 7. In the list of selected **Features**, click the option Voicemail Lite and select **This feature will not be available**. The feature Voicemail Lite will have a red cross by the name. **X** Voice Mail Lite
- Important Do not uncheck any other boxes as this will also remove those features.
- 8. Click **Next**. The Ready to Modify the Program window opens.
- 9. Click Install. The Voicemail Lite program will be removed, which may take several minutes.
- 10.Click Finish to exit the InstallShield Wizard.
- 11.Click **Close** to close the Add/Remove Programs window.

12.Remove any shortcuts to VMLite.exe from Start | Programs | Startup.

2.Install the New Software

The next step is to install the Voicemail Pro software. See <u>Installing Voicemail Pro</u> and then refer to the sections that relate to the type of Voicemail Pro that you intend to install.

3.Move the Voicemail Lite Folders

Before users begin to use Voicemail Pro, copy the Voicemail Lite folders that contain voicemail messages and mailbox greetings to Voicemail Pro.

- 4. Using Windows Explorer or My Computer, locate the folder C: \Program Files \Avaya \IP Office \Voicemail Server.
- **5.**Copy all sub-folders and files in that folder.
- 6.Paste the sub-folders and files in the folder C: \Program Files \Avaya \IP Office \Voicemail Pro \VM. Replace any existing folders.

7.Select the Mailbox Mode.

Voicemail Lite runs in IP Office mailbox mode. By default Voicemail Pro installs in Intuity mailbox mode. If required by your users, you can set Voicemail Pro back to IP Office mailbox mode.

- 1. Start the Voicemail Pro Client.
- 2. Click the Preferences 🚧 icon and select **General**.
- 3. On the General tab, change the Default Telephony Interface from Intuity to IP Office.
- 4. Click OK.

5. Click 📽 Save & Make Live.

The new version of Voicemail Pro has been installed. Test that the system is running by dialing *17 from any extension. You should hear the mailbox announcement.

3.4 UMS Web Services

Voicemail Pro 4.2+ adds support for user mailboxes to be accessed using the additional methods listed below. For Voicemail Pro 5.0+ this has been expanded to include hunt group mailboxes.

• 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 server to also run IIS and PHP.

• UMS Exchange Configuration (Voicemail Pro 5.0+)

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 2007 or any other mechanisms supported by the Exchange server. Voicemail messages in an Exchange 2007 inbox are not visible to UMS IMAP and UMS Web Voicemail, however Exchange 2007/2010 provides its own methods for IMAP and web browsing of Exchange mailboxes.

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 2003	Exchange 2007	Exchange 2010
Playback via computer.	✓	<i>.</i>	×	~	~
Playback via User Extension.	√	×	X ^[1]	X ^[1]	X ^[1]
Save message Wav to computer.	×	v	×	J	J
Forward messages to other voicemail mailbox.	~	×	×	×	×
Forward messages to other e-mail mailbox.	×	~	×	~	~
Undelete manually deleted messages.	7	~	×	~	~
Mark message as unread.	√	v	×	J	J
Change voicemail password.	√	×	×	×	×
Show Message Types	Web Voicemail	IMAP Client	Exchange 2003	Exchange 2007	Exchange 2010
- New (Unread).	~	v	×	1	~
- Old (read).	√	v	×	v	<i></i>
- Saved.	√	<i>.</i>	×	×	×
- Priority.	√	v	×	J	J
- Private.	X ^[2]	×	×	J	J
- Deleted.	√	v	×	J	J

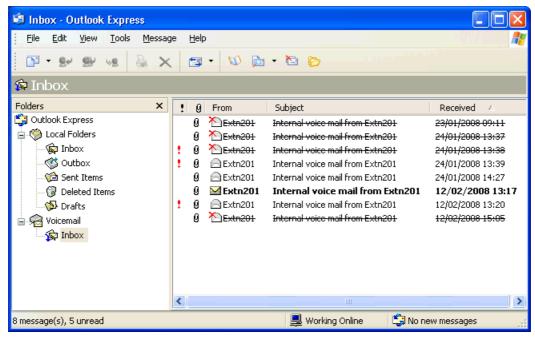
1. Exchange Unified Messaging supports the playback of messages through a range of options controlled and configured on the exchange server.

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

3.4.1 IMAP Installation

Voicemail Pro 4.2+ support 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.

Installing the Voicemail Pro IMAP Server

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

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.
- 1. Start IP Office Manager.
- 2. Receive the configuration from the IP Office associated with the Voicemail Pro server.
- 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 Status of the licenses is now shown as **Valid**.
- 6. Start the Voicemail Pro client
- 7. Select Help | About.
- 8. The screen should list the Web Services as Started and should show the number of UMS licenses.

Configure Users for UMS

- 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. Enable UMS Web Services. Click OK.
- 6. Merge the configuration back to the IP Office.

Configuring Hunt Groups for UMS

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

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

Configuring a User E-mail account

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 e-mail 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.

Example: Outlook

- 1. Select **Tools** and then **Options**.
- 2. Select Mail Setup and then click 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.
- 6. In Logon Information enter the user's extension number and voicemail code as the User Name and Password.

7. Click Next.

Example: Outlook Express

1. Select **Tools** and then **Accounts**.

- 2. Select Add and then Mail.
- 3. Enter a descriptive name such as *Voicemail* and click **Next**.
- 4. Enter an e-mail address. This is not used but a value must be entered to move to the next screen. Click **Next**.
- 5. Set My incoming mail server is a to IMAP.
- 6. In the **Incoming server** field enter the IP address or domain name address of the Voicemail Pro server computer.
- 7. Enter a value in the **Outgoing mail server** field. This is not used but a value must be entered to move to the next screen. Click **Next**.
- 8. For **Account Name** enter the user's extension number or name in the IP Office configuration.
- 9. For **Password** enter the user's Voicemail Code.

10.Click **Next** and then **Finish**.

3.4.2 Web Voicemail Installation

Voicemail Pro 4.2+ support 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.

<u></u>	nbox		Ser Sor	ward 🕀 Trash	Mark as unre	ad 🔗 M	ark as read	Save	2 Undel	ete 🗡 Del
State	Erom		IQ			Received on ~			Length	
	Brad	Trower (4337)	Ma	rk Gallagher	11	July 2008	14:07:44		45s
6	Voice Message							×		
		From Brad T	rower (4	1337)	™ Mark Gal	lagher	Message 2/3			
		Received 11 July	2008 1	4:07:44	Length 45s		😫 First	< Previous	🔷 Next	🚧 Last
		ard 🗙	Delote	🖄 Undelet		() Mark	ac roadi	🕽 Mark as un	road	

Web Voicemail Installation Requirements

The Web Voicemail component is selectable as part of a custom Voicemail Pro installation. Note the pre-requisites 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 will install 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 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:

- Javascript Enabled 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 will need 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**.

IIS Configuration Requirements for Windows Server 2003

If you are using the Windows 2003 Server operating system, Web Voicemail does not work if you do not enable the CGI Web service extension in IIS Manager before the installation of Web Voicemail. If you install ASP.NET from a Web download or as part of an application such as Visual Studio .NET, you also need to enable the ASP.NET Web service extension in IIS Manager.

Proceed as follows to enable the Web service extensions:

1. Click Start | Administrative Tools | Internet Information Services (IIS) Manager.

2. In the left pane, expand the server node and click **Web Service Extensions** in the tree.

3. In the right pane, select the Web service extension that you want to enable, and then click Allow.

Note: If you use the **Configure Your Server** wizard or the **Add or Remove Programs** dialog box to install ASP.NET, ASP.NET Web service extension is automatically enabled in IIS Manager.

Voicemail Pro Software Installation with Web Voicemail Component

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

- 1. Verify that IIS is installed and running on the voicemail 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 will be based on the server's computer name within the customer domain. Check that 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**. Click on the link for **Voicemail Pro** and then double-click on **setup.exe**. The **Choose Setup Language** window opens.
- 3. When asked for the type of Voicemail Pro install to perform, select Voicemail Pro (Full).
- 4. On the next screen select **Custom**.
- 5. 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.
- 6. Follow the remainder of the installation process and reboot the voicemail server when required.

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.

- 1. Start IP Office Manager.
- 2. Receive the configuration from the IP Office associated with the Voicemail Pro server.
- 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 Status of the licenses is now shown as **Valid**.

6. Start the Voicemail Pro client

7. Select Help | About.

8. The screen should list the **Web Services** as **Started** and should show the number of UMS licenses.

Configure Users for UMS

- 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. Enable UMS Web Services. Click OK.
- 6. Merge the configuration back to the IP Office.

Configuring Hunt Groups for UMS

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

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

Enabling Web Voicemail

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 an error message "**HTTP Error 403.4 - Forbidden**".

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.

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

UMS Web Voicemail and ContactStore

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.

- 1. Install UMS Web Voicemail.
- 2. 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.
- 7. Both application should now be accessible via web browser.

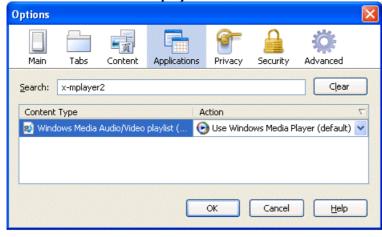
Playback Control

UMS message playback through the web browser is tested and supported with Windows Media Player. It may work with other audio playback controls also but it has not been tested.

The following methods can be used to check that the audio playback is associated with the Windows Media Player.

Firefox

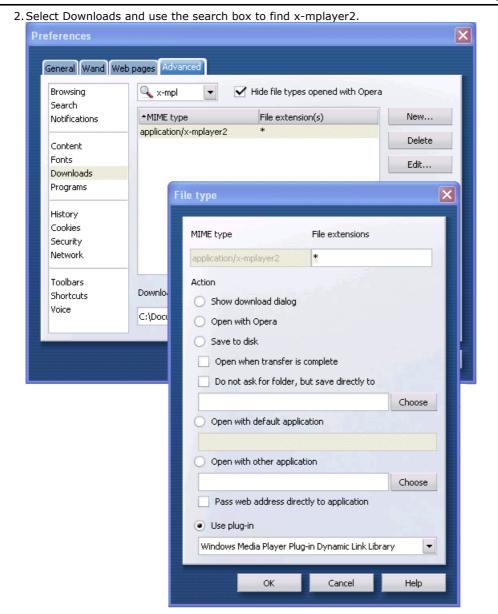
- 1. Select Tools | Options | Applications or Tools | Options | Content | File Types | Manage.
- 2. In the search box enter *x-mplayer2*.



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

Opera

1. Select Tools | Preferences.



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

Internet Explorer

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

- 2. Select My Computer.
- 3. Select Tools | Folder Options.
- 4. Select File Types.

Folder Options	
	· · · · · · · · · · · · · · · · · · ·
General View	File Types Offline Files
Registered file to	
	File Types
	Address Book File
WAV 1	Wave Sound
WAX 1	Windows Media Audio shortcut
	Microsoft Word Backup Document
🔄 🔟 WCS 🔤 1	Web Site Content Source 📃 👘
	Windows Media Photo 🛛 🚽
1.1CDD 1	
	<u>N</u> ew <u>D</u> elete
⊂ Details for W/	AV' extension
Opens with:	Windows Media Player Change
	ension "WAV" are of type "Wave Sound". To change affect all "Wave Sound" files, click Advanced.
	affect all Wave Sound' files, click Advanced.
	affect all Wave Sound' files, click Advanced.

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

3.4.3 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 2007/2010 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 2007 inbox are not visible to UMS IMAP and UMS Web Voicemail, however Exchange 2007/2010 provides its own methods for IMAP and web browsing of Exchange mailboxes.

• Note

When using an Exchange server as the message store for a user's voicemail messages, the voicemail server will deliver messages to the Exchange server on completion of the recording. However, the presentation to Outlook and back to the voicemail 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.

😡 Inbox - Microsoft Outloo	bk		X
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>G</u> o <u>I</u>	ools <u>A</u> ctions <u>H</u> elp	Type a question for hel	lp 👻
🗄 🖻 <u>N</u> ew 🔸 🎼 隆 🗙 🛛 🖻	🛓 Reply 🖂 Reply to All 🙈 For <u>w</u> ard 🏪 🚩 💯 💡	🗄 Send/Receive 👻 🔯 Search address books 💿 👻 🛞 🖕	
Mail «	🔄 Inbox	🕟 Play 📲 Play on Phone 🛛 📓 Edit Notes	~
Favorite Folders 🔅	Search Inbox 🔎 👻	Voicemail Message (Extn2205 > Extn2207) From:2205	
Unread Mail	Arranged By: Date Newest on top	Administrator	ro-Do
Mail Folders 🕆		Sent: Thu 23/04/2009 15:04	Ba
🔎 All Mail Items 🔹	Administrator Wed 29/04 Voicemail Message (Extn3103 > Ext 0	To: agent1	_
 ➡ Mailbox - agent1 ➡ backup ➡ Deleted Items ➡ Drafts ➡ Inbox ➡ Junk E-mail ➡ Outbox ➡ Quarantine 	☐ Two Weeks Ago Administrator 23/04/2009 Voicemail Message (Extn2205 > Ext ∅ □ ♥	Audio Notes:	🔳 No upcoming appo

The following are the pre-requisites 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.

(See Exchange Server 2007 Installation 4th for Exchange Server 2007 and Exchange Server 2010 Installation 4th for Exchange Server 2010.)

• Voicemail Pro

- The Voicemail Pro server must be configured for MAPI based voicemail e-mail [53].
- The supported MAPI applications are Exchange server (2003, 2007, and 2010) and Microsoft Outlook (all versions supported by the Exchange servers).

• IP Office

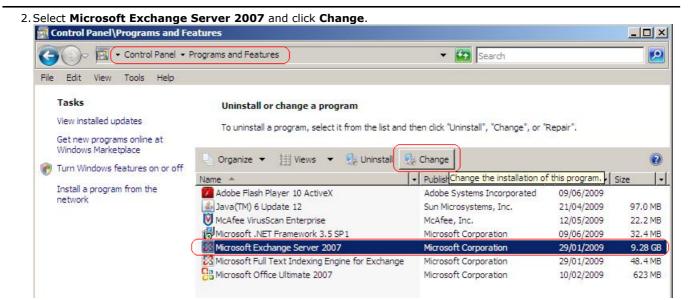
- The user or hunt group must be licensed and enabled for UMS Web Services.
- The user or hunt group's Voicemail E-mail mode must be set to Forward.

3.4.3.1 Exchange Server 2007 Configuration

This is a simple overview of the minimum steps required. For full details refer to Microsoft documentation.

To support UMS Exchange Server 2007 operation, the Exchange Sever must be configured to include the Unified Messaging Server Role.

1. In the Windows Control Panel, select Program and Features.



3. The wizard for changing Exchange Server setup is started. Click **Next**.

- Exchange	Server Role Selection			
Maintenance Mode	Select the Exchange server roles you wan	t to install on this computer:		
Server Role Selection	🔚 🕅 Mailbox Role	Description		
Readiness Checks Progress	🖹 🕅 Client Access Role	The Unified Messaging Role provides connectivity between a corporate telephon system and Exchange Server. Clients can		
Completion	Hub Transport Role Unified Messaging Server Role Unified Messaging Server Role		a telephone and	
			aibox.	
	Edge Transport Server Role			
	🚵 🗖 Active Clustered Mailbox Role			
	Passive Clustered Mailbox Role			
		Disk Space Allocation		
	Management Tools	Disk space required:	0.0 ME	
		Disk space available:	201791.1 ME	
	Specify the path for the Exchange Server i	nstallation files:	-	
	C:\Exchange		Browse	
	Specify the path for the Exchange Server i	nstallation:		
	C:\Program Files\Microsoft\Exchange Sen	ver	Browse	

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

Having enabled the Unified Messaging role on the Exchange Server, configure and enable the role for the mailboxes.

- 1. Select Start | Programs | Microsoft Exchange Server 2007 | Exchange Server Management Console.
- 2. Expand the Server Configuration list. The Unified Messaging role should be included in the list.

File Action View Help					
Þ 🐟 🛛 🖬 🚺 🖬					
Microsoft Exchange	🌆 Unified Messagi	ing	1 object	Actions	
Grganization Configuratic Server Configuration	Y Create Filter			Unified Messaging	
Mailbox	Name 🔺	Role	Version	Export List	
Client Access	The WIN-8TMISC6LAH5	Hub Transport, Client Acc	Version 8.1 (Build 240.6)	View	
Unified Messaging				Refresh	
Recipient Configuration A Mailbox				Relp	

3. Create a Unified Messaging dial plan.

 Expand the Organization 	Configuration and s	elect Unified N	lessaging.	
🔀 Exchange Management Con	sole			
File Action View Help				
🗢 🔿 🖄 📅 🚺 📅				
Microsoft Exchange	📲 Unified Messagin	g	1 object	Actions
Crganization Configuration	UM Dial Plans UM IP Gatew	ays UM Mailbox Polic	ies UM Auto Attendants	Unified Messaging
Client Access	UM Dial Plan 🔺	# Digits	Associated UM Servers	New UM Dial Plan
Hub Transport				m New UM IP Gateway
Server Configuration				🌀 New UM Mailbox Polic
Mailbox				🔝 New UM Auto Attend
Hub Transport				Export List
Unified Messaging				View 🕨
Mailbox				Q Refresh

- b. Select the UM Dial Plans tab and in the Actions list, select New UM Dial Plan.
- c. The New UM Dial Plan wizard will be started.

New UM Dial Plan	Dial Plan New UM Dial Plan This wizard helps you create a UM dial plan for use by Microsoft Exchange Unified Messaging. A dial plan is a grouping of unique telephone extension numbers. Name:
Completion	IP Office
	Number of digits in extension numbers:
	5
	URI type:
	Telephone Extension
	VoIP security:
	Unsecured
	After you create a new dial plan, the dial plan must be added to one or more UM servers before it will be used.
Help	< Back New Cancel

d. 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 number. Click **New**, and then click **Finish**.

4. You now need to select the mailboxes that the Unified Server role is available on.

a. Expand the Recipient Configuration section, and select Mailbox.

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

🔀 Exchange Management Cor	ısole					l ×
File Action View Help						
🗢 🔿 🖄 📅 🚺 🖬						
Microsoft Exchange	👫 Mailbox - ioc.	avaya.com	4 object	Ac	tions	
Grganization Configuration Server Configuration	Create Filter			Ma	ailbox	
Mailbox	Display Name 🔺	Alias	Recipient Type Details		Modify the Maximum	× 1
Hub Transport	Administrator	Administrator ccr	User Mailbox User Mailbox		Find New Mailbox	
Recipient Configuration	Userapps	umsvmpro Userapps	User Mailbox User Mailbox		Export List	
Bistribution Group			Disable Remove		View	•
Disconnected Mailbox			Move Mailbox	Q	Refresh	
💼 Toolbox			Enable Unified Messaging	?	Help	
			Manage Send As Permission Manage Full Access Permission	Us	erapps	•
		17-	Properties			
			Help		Remove Move Mailbox	

c. The wizard for the mailbox Unified Messaging settings is started.

Enable	e Unified Messaging Introduction The selected mailbox will be enabled for Unified Messaging. Upon completion, an e-mail message will be sent to the mailbox notifying the user that they have been enabled for
Introduction Extension	Unified Messaging. The message will include the PIN and the number to dial to gain access to their mailbox. By default, an extension number and PIN are automatically generated. You
Configuration	can also manually specify an extension number and PIN.
Enable Unified Messaging	Unified Messaging Mailbox Policy: IP Office Default Policy Browse
Completion	PIN Settings Automatically generate PIN to access Outlook Voice Access
	C Manually specify PIN:
	Require user to reset PIN at first telephone logon
	Unified Messaging is a premium feature and requires an Exchange Enterprise Client Access License (CAL) to enable it for the mailbox.
Help	< Back Next > Cancel

- d. For the Unified Messaging Mailbox Policy, click Browse and select a previously created dial plan.
- e. Select Automatically generate PIN to access Outlook Voice Access. Click Next.

	Extension Configuration
	C Automatically generated mailbox extension
Introduction	Manually entered mailbox extension:
Extension Configuration	SIP Resource Identifier
Enable Unified Messaging	For a SIP URI dial plan, this is the SIP address of the user (example: tony.smith@contoso.com). For an E.164 dial plan, this is the E.164 address of the user
Completion	(example: +14255550150).
	Automatically-generated SIP resource identifier:
	Manually entered SIP or E.164 address:

f. Select **Manually entered mailbox extension**. Enter a number that matches the number of digits that was specified in the UM Dial Plan created earlier. The number entered does not need to match an IP Office extension, only the length is important. Click **Next**.

g. Select Enable, and then click Finish.

3.4.3.2 Exchange Server 2010 Configuration

This is a simple overview of the minimum steps required. For full details refer to Microsoft documentation.

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

- 1. In the Windows Control Panel, select Programs | Program and Features.
- 2. Select Microsoft Exchange Server 2010 and click Change.
- 3. The wizard for changing Exchange Server setup is started. Click **Next**.

Exchange Maintenance Mode	Select the Evchance server roles you	want to install on this computer	
Maintenance Mode Server Role Selection Readiness Checks Progress Completion	Select the Exchange server roles you Mailbox Role Mailbox Role Mailbox Role Mailbox Role Mailbox Role Management Role Management Lools	Client Access Role Client Access Role Hub Transport Role Linitied Messaging Role Edge Transport Role	
	Specify the path for the Exchange Ser	ver installation files:	
	D:\ Specify the path for the Exchange Ser	ver program files:	Browse
	C:\Program Files\Microsoft\Exchange		Browse
	Automatically install <u>W</u> indows Serv	ver roles and features required for E	xchange Server

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

Having enabled the Unified Messaging role on the Exchange Server, configure and enable the role for the mailboxes.

1. Select Start | All Programs | Microsoft Exchange Server 2010 | Exchange Management Console.

2. Expand the **Server Configuration** list. The **Unified Messaging** role should be included in the list.

🔀 Exchange Management Console						_ 🗆 🗡
Eile Action View Help						
🗢 🔿 🔰 🖬 🚺 🖬						
Microsoft Exchange	🏪 Unified Messaging	9		1 object	Actions	
Microsoft Exchange On-Premises (v Microsoft Exchange On-Premises (v Microsoft Exchange On-Premises (v	V Create Filter	-			Unified Messaging	-
Server Configuration	, -	1	(Export List	
ka Mailbox	Name A	Role	Version	Status	View	<u> </u>
Client Access	WIN-PF1NHJ9FCF4	Hub Transport, Client Acc	version 14.1 (Build 218.15)	Enabled		
Hub Transport					Q Refresh	
Unified Messaging Science Configuration					🛛 Help	

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

😸 Exchange Management Console								
Elle Action Yiew Help								
🗢 🔿 🖄 🖬 🚺 🖬								
S Microsoft Exchange	🚱 Unified Messaging			0 objects	Actions			
Microsoft Exchange On-Premises (v	UM Dial Plans UM IP Gateway	rs UM Mailbox Policies UM Ar	uto Attendants		Unified Messaging			
🔮 Maibox	Y Create Filter		New UM Dial Plan					
Client Access	Name A	# Digits	Associated UM Servers	Associated Uf	🕋 New UM IP Gateway			
Unified Messaging		There are no items to show		1 Hosterator of	New UM Mailbox Policy			
Server Configuration Recipient Configuration		There are no items to show			Rew UM Auto Attendant			
a Toolbox					Export List			
					View			
					Q Refresh			

- b. Select the UM Dial Plans tab and in the Actions list, select New UM Dial Plan.
- c. The New UM Dial Plan wizard will be started.

New UK	I Dial Plan
 Introduction Set UM Servers New UM Dial Plan Completion 	Introduction This wizard helps you create a UM dial plan for use by Microsoft Exchange Unified Messaging. A dial plan is a grouping of unique telephone extension numbers. Name: IIP Office Nymber of digits in extension numbers: 5 UBI type: Telephone Extension VoIP security: Unsecured Country/Region code: 1
Help	< <u>B</u> ack Cancel

- d. 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 number. 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. Click **Next**.

- f. Click **New**, and then click **Finish**.
- 4. You now need to select the mailboxes that the Unified Server role is 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**.

😣 Exchange Management Console							
File Action View Help							
🗢 🔿 🔰 🖬 🔽 🖬							
Microsoft Exchange	👫 Mailbox - Entire F	orest		3 objects	Actions		
	Microsoft Exchange On-Premises (v						
Grganization Configuration Server Configuration					Modify the Maximum Number of Recipient		
E SRecipient Configuration	Display Name A	Alias	Organizational Unit	Recipient Type	G Find		
👪 Mailbox	Administrator	Administrator	vmproitt10.local/Users	User Mailbox			
Bistribution Group	Discovery Search Mailbox		vmproitt10.local/Users vmproitt10.local/Users	Discovery Mail:	New Mailbox		
🖳 Mail Contact 🚜 Disconnected Mailbox	Userapps	Userapps	Enable Archive	-	🛃 Export List		
Move Request			Disable		View		
a Toolbox			Remove				
			Enable Unified Messag	jing)	Refresh		
			New Local Move Requ	est	👔 Help		
			New Remote Move Re	quest	Userapps 🔺		
			Manage Send As Perm	ission			
			Manage Full Access Pe		Enable Archive		
			Send Mail		③ Disable		
			Send Mail		× Remove		
			Properties		Enable Unified Messaging		
			Help				
					😽 New Local Move Request		

c. The wizard for the mailbox Unified Messaging settings is started.

Enable	Unified Messaging
 Introduction Extension Configuration Enable Unified Messaging Completion 	Introduction The selected mailbox will be enabled for Unified Messaging. Upon completion, an e-mail message will be sent to the mailbox notifying the user that they have been enabled for Unified Messaging. The message will include the PIN and the number to dial to gain access to their mailbox. By default, an extension number and PIN are automatically generated. You can also manually specify an extension number and PIN. Unified Messaging Mailbox Policy: IP Office Default Policy Browse PIN Settings @ Automatically generate PIN to access Outlook Voice Access Manually specify PIN: Image: Comparison of the first telephone logon Image: Unified Messaging is a premium feature and requires an Exchange Enterprise Client Access License (CAL) to enable it for the mailbox.
Help	< <u>B</u> ack Cancel

d. For the Unified Messaging Mailbox Policy, click Browse and select a previously created dial plan.

Enab	le Unified Messaging
Introduction	Extension Configuration
Extension Configuration	Automatically-generated mailbox extension Manually-entered mailbox extension:
Enable Unified	SIP Resource Identifier
Completion	This refers to a SIP address of a UM-enabled user when a SIP URI dial plan is used. For example, tonysmith@contoso.com. When an E.164 dial plan is used, this would refer to th E.164 address of the user. For example, +14255551234. C Automatically-generated <u>S</u> IP resource identifier: Manually-entered SIP resource identifier:

- f. Select **Manually entered mailbox extension**. Enter a number that matches the number of digits that was specified in the UM Dial Plan created earlier. The actual number entered does not need to match an IP Office extension, only the length is important. Click **Next**.
- g. Select Enable, and then click Finish.

3.5 Voicemail Email

Voicemail E-mail features of the voicemail server provide a number of e-mail functions:

• Forward a Message to E-mail

If the voicemail 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 2007/2010 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 2007/2010.

Voicemail E-mail features requires the voicemail 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 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 server

• MAPI Installation

MAPI requires a MAPI compliant e-mail client program to be installed on the Voicemail Pro server. Supported MAPI clients are Outlook 2000, 2002, 2003, 2007. 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 server and the MAPI e-mail client depends on whether the voicemail 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 email client used.

Note:

1. Starting with Exchange Server 2007, the MAPI is not shipped with the Exchange server but can be installed separately. For details, see http://support.microsoft.com/kb/945835

2. Microsoft does not support installing Exchange Server components and Microsoft Outlook on the same computer. For details, see http://support.microsoft.com/kb/266418.

3.5.1 SMTP Setup

To configure the server SMTP e-mail settings:

1. Start the Voicemail Pro Client.

- 2. Click **Preferences** and select **General**.
- 3. Click the **Email** tab.
- 4. Verify that there are no settings on the **MAPI** sub tab.
- 5. Enter the SMTP settings on the <u>SMTP Sender</u> we sub tab. These are the settings that the voicemail server uses for sending SMTP e-mails.

• Logging

If selected, $\underline{SMTP \text{ logging}}$ by the server is enabled.

• Servers

This section is used to enter details of the SMTP server or servers to which the voicemail server send its

	messayes.
SMTP Sender Co	nfiguration 🛛 🗙
SMTP Server	
Mail Domain:	vmpro1.example.com
Mail Server:	vmpro1.example.com
Port Number:	25
Sender:	vmpro@vmpro1.example.com
Server require	s authentication
Account Name:	
Password	
🗌 Use Chall	enge Response Authentication (CRAM-MD5)
ОК	Cancel Help

To add a server, click on the 🗣. icon. To edit the server, click on the 🍋 icon. To delete a server entry, click on 🗙

• Mail Domain

This field is used differently depending on whether it is the first entry in the list or not:

• For the first server entry in the list:

This is the default outgoing e-mail settings. It also sets the mail destination domain on which the voicemail server filters incoming messages (see below) and so is repeated on the **<u>SMTP Receiver</u>** to the set of the set

Messaging Between Voicemail Servers

For messaging between voicemail 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 service is running, for example *vmpro1.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*.

• For 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.

• Server

This specifies the IP address or fully qualified domain name of the SMTP server to which messages are sent.

• For the first server entry in the list:

Where messaging between voicemail 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:

It will be the address of the e-mail server that will handle e-mails for recipients other than another voicemail server on the network.

• Port Number

This is port to which messages are sent, usually 25.

• Sender (Identifier)

Note that some servers will only accept e-mails from a specific sender or sender domain. If left blank, the voicemail server will insert a sender using either the e-mail address set for the voice 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 will typically be to the name and password of a mailbox account configured on that server.

• Account Name

Sets the name to use for authentication.

• Password

Set 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.

6.Click OK.

7. Click 🙀 Save and Make Live.

3.5.2 MAPI Setup

3.5.2.1 Domain Member

Before you start to install the Voicemail Pro software, you **must**:

- 1. <u>Create a Voicemail Domain Account</u> 53.
- 2. <u>Configure Outlook for Internet Mail</u> 59.

You are then ready to install Voicemail Pro for MAPI Voicemail E-mail as a Domain Member. This involves the following key stages:

- 1. Install the Voicemail Pro Software 55.
- 2. Install the MAPI Service.
- 3. Switch Voicemail Pro to MAPI 55.

3.5.2.1.1 Creating a Voicemail Domain Account

- 1. Make sure that the computer that is running the Voicemail server is a member of the domain. To join the domain you will need access to a log account with administrative permissions on the domain as well as the server computer, consult the domain administrator.
- 2. On the Exchange server:
 - Create an account called **Voicemail** on the domain and an associated mailbox.
 - Provide a secure password.
 - Check the User Cannot Change Password and Password Never Expires boxes.
- 3. Log on to the voicemail server computer using a domain administrator account.
- 4. Click Start | Administrative Tools | Computer Management.
- 5. In the left pane, expand **Local Users and Groups**, and click **Groups**.
- 6. Double-click Administrators, and click Add.
- 7. Click **Locations** and select the domain name in the list.
- 8. In the Enter the object names to select field, type Voicemail and click Check Names.
- 9. Select Voicemail in the list and click OK followed by OK.

3.5.2.1.2 Configuring Outlook for VoiceMail Email

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**.
 - a. Select Microsoft Exchange Server.
 - b. Click Next.
 - c. In the **Server** field, enter the name of the Exchange server.
 - d. In the **Mailbox** field, enter **Voicemail**.
 - e. Click Next.
 - f. When you are asked if you travel with this computer, select **No**.
 - g. Click Next.
 - h. Click Finish.
- 3. Highlight the $\ensuremath{\text{MS}}$ Exchange Settings and click $\ensuremath{\text{Properties}}$.
 - a. Highlight Microsoft Exchange Server and click Properties.
 - b. Click Check name.
 - c. If the name is resolved, select **Apply**.
 - d. Click $\mathbf{OK},\,\mathbf{OK},\,\text{and}\;\textbf{Close}$ to shut the mail settings.
- 4. 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.
- 5. Open **Outlook** and select **Yes** to register Outlook as the default e-mail application.
 - a. Select **Tools > Options**.
 - b. Click the **Preferences** tab.
 - c. Click E-mail Options.
 - d. 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 it after installation testing is completed.
- 6. Log on to the computer running the Voicemail Pro Server using the voicemail account.
- 7. From Outlook, send a message direct to an extension user.
- 8. If this message is received correctly, you can continue installing the Voicemail Pro software. See Installing the Voicemail Pro Software 58.

3.5.2.1.3 Installing the VoiceMail Pro Software

To install Voicemail Pro software, perform the following steps:

- 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. <u>Start the Voicemail Pro Service</u> 27.
- 7. Check that the basic voicemail services start and operate correctly.
- 3.5.2.1.4 Adding Port to Windows Firewall

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 will be relayed back to the Voicemail Pro server via 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 up.
- 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 step 5 55 to step 12 55.

3.5.2.1.5 Switching VoiceMail Pro to MAPI

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.

To select the server e-mail mode

- 1. Start the Voicemail Pro Client.
- 2. Click *** Preferences** and select **General**.
- 3. Click the **Email** tab.

4. Select the **MAPI** sub tab. Set the settings to match a MAPI account already configured and able to send e-mails from the MAPI client on the voicemail server.

MAPI

System P	reference	es	×
General	Directories	Email Housekeeping SNMP Alarm Outcalling	
MAPI	SMTP Send	der SMTP Receiver	
- F	Enable MAPI	I	
Deta	ails		
	Profiles:	MS Exchange Settings 🛛 🗸	
		OK Cancel Help	

• Enable MAPI

Selecting this option will switch the voicemail server to using MAPI for its e-mail options rather than SMTP.

• Profile

This is used to select the MAPI e-mail account the voicemail server should use to provide visibility to the e-mail account mailboxes for which it requires access. The profile must exist within the MAPI e-mail client on the server computer and must be useable by the Windows account under which the Voicemail Pro service is running.

5. Click **OK**.

6. Click 📽 Save and Make Live.

3.5.2.2 Work Group Member

Before you start to install the Voicemail Pro software, you must:

- 1. <u>Create a Voicemail User Account</u> 57).
- 2. <u>Configure Outlook Express for Internet Mail</u> 58.
- 3. Configure Outlook for Voicemail E-mail 54.
- 4. Configure Outlook for Exchange Server.

The user name and password created are requested as part of the installation of the Voicemail Pro service. The Microsoft Outlook software must be installed on your computer before you can configure it.

You are then ready to install the Voicemail Pro software. See Installing the Voicemail Pro Software 55.

By default, Voicemail Pro is set to use SMTP for e-mails. Set Voicemail Pro to use MAPI. See <u>Switching Voicemail Pro to</u> <u>MAPI</u>

You also need to set the SMTP E-mail Account settings on the Voicemail Pro so that they match those of the customer's e-mail server. See <u>Changing SMTP E-mail Account Settings</u> 62.

3.5.2.2.1 Installing VoiceMail Pro for MAPI VoiceMail Email as a Work Group Member

Before you start to install the Voicemail Pro software, you must:

- 1. Create a voicemail user account. See <u>Creating a Voicemail User Account</u> 57.
- 2. Configure Outlook Express for Internet Mail. See Configuring Outlook Express for Internet Mail
- 3. Configure Outlook for Internet mail. See <u>Configuring Outlook for Voicemail E-mail</u> 54.
- 4. Configure Outlook for Exchange server. See Configuring Outlook for Exchange Server

The user name and password created are requested as part of the installation of the Voicemail Pro service. The Microsoft Outlook software must be installed on your computer before you can configure it.

You are then ready to install the Voicemail Pro software. See Installing the Voicemail Pro Software 55.

By default, Voicemail Pro is set to use SMTP for e-mails. Set Voicemail Pro to use MAPI. See , <u>Switching Voicemail Pro to</u> <u>MAPI</u>

You also need to set the SMTP E-mail Account settings on the Voicemail Pro so that they match those of the customer's e-mail server. See <u>Changing SMTP E-mail Account Settings</u> 62.

3.5.2.2.2 Creating a Voicemail User Account

To create a Voicemail User Account

For this example the name of the created user account is Voicemail.

- 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.
- 6. 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.
- 8. Continue with one of the following as appropriate to the installed MAPI client and method for sending e-mail.

3.5.2.2.3 Configuring Outlook Express for Internet Mail

To configure Outlook Express for Internet Mail

- 1. Click the **Outlook Express** icon to start the Configuration wizard.
- 2. In the **Display name box** enter **Voicemail**.
- 3. Click Next.
- 4. Select **I already have an e-mail address that I'd like to use** and enter the address in E-mail address, eg. voicemail@example.com. Click **Next**.
- 5. 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.
- 6. Click Next.
- 7. Enter the e-mail account name and password, for example Voicemail. Select **Remember password**.
- 8. Click Next.
- 9. Click **Finish** to complete the wizard.
- 10.Open Outlook Express and select **Tools** > **Options**.

11.Click the **General** tab.

- Uncheck Send and Receive messages at Start up.
- Uncheck Check for new messages every.

12. Select the **Send** tab.

- Uncheck Save copy of sent messages in the 'Sent Items' folder.
- Check Send messages immediately.
- Under Mail Sending Format select Plain Text.

13.Click **OK**.

14.Log on to the server computer using the account that will be used for the Voicemail Pro server.

15. From Outlook or Outlook Express, send a message direct to an extension user.

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

3.5.2.2.4 Configuring Outlook for Internet Mail

For the installation of Outlook to work correctly, the following setup process must be followed. Outlook can be configured in two ways. Using the Wizard, prior to completing the steps below will cause Outlook not to send the messages correctly.

To configure Outlook for Internet Mail:

- 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 the Mail Account, enter Voicemail.
- 5. For User Information enter Voicemail as the Name and for the **E-mail address** enter your address, for example. **voicemail@example.com**.
- 6. Select the Servers tab. Enter the name or IP address of the Outgoing mail server and Incoming mail server.
- 7. The **Incoming Mail Server** details can be left blank as Outlook does not need to check for mail. Otherwise, enter the account name and password for example, *Voicemail*. Select **Remember password**.
- 8. Select the Connection tab. Select Connect using my local area network (LAN). Click Next.
- 9. Click **OK**.
- 10.Click Next.
- 11. Accept the default path for file creation.
- 12. Select Next, then Finish and then Close.
- 13.0pen Outlook.

14.On the E-mail Service Option Screen, select Internet Only.

- 15.Click Next.
- 16. 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 that will be used for the Voicemail Pro server.
- 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.

3.5.2.2.5 Configuring Outlook for Exchange Server

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.

To configure Outlook for Exchange Server:

- 1. Create a new mailbox on the Exchange server, for example **Voicemail**, and assign it the same password as has been configured on the voicemail computer.
- 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, Click Properties.
- 9. Highlight Microsoft Exchange Server. Click Properties.

10.Click Check name.

- 11. If the name is resolved, select **Apply**. Click **OK**, **OK** and **Close** to shut the Mail settings.
- 12.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.
- 13. Open **Outlook** and select **Yes** to register Outlook as the default e-mail application.
- 14.Select Tools > Options.
- 15. Choose the **Preferences** tab. Click **E-mail Options**.

16. Uncheck Save copies of messages in Sent Items folder.

- You can keep this option selected during initial setup and troubleshooting. Due to the size of the wav file message attachments, deselect it once the installation is complete.
- 17.Log on to the server computer using the account that will be used for the Voicemail Pro server.
- 18. From Outlook or Outlook Express, send a message direct to an extension user.
- 19. If this message is received correctly, continue with installing the Voicemail Pro software.

3.5.2.2.6 Installing the VoiceMail Pro Software

To install Voicemail Pro software, perform the following steps:

- 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. <u>Start the Voicemail Pro Service</u> 27.
- 7. Check that the basic voicemail services start and operate correctly.
- 3.5.2.2.7 Switching VoiceMail Pro to MAPI

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.

To select the server e-mail mode

- 1. Start the Voicemail Pro Client.
- 2. Click 🚧 Preferences and select General.
- 3. Click the **Email** tab.

4. Select the **MAPI** sub tab. Set the settings to match a MAPI account already configured and able to send e-mails from the MAPI client on the voicemail server.

MAPI

System Preferences	
	nail Housekeeping SNMP Alarm Outcalling
✓ Enable MAPI	
Profiles:	MS Exchange Settings 🗸
ОК	Cancel Help

• Enable MAPI

Selecting this option will switch the voicemail server to using MAPI for its e-mail options rather than SMTP.

• Profile

This is used to select the MAPI e-mail account the voicemail server should use to provide visibility to the e-mail account mailboxes for which it requires access. The profile must exist within the MAPI e-mail client on the server computer and must be useable by the Windows account under which the Voicemail Pro service is running.

5. Click **OK**.

6. Click 📽 Save and Make Live.

3.5.2.2.8 Changing SMTP Email Account Settings

To change SMTP E-mail Account Settings:

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

System Settings Path Sett	ings Email Settings SMTP Email Settings
SMTP Server	
Mail Server:	smtp.example.com
Port Number:	25
Mail Drop:	C:\Inetpub\mailroot\Drop
Server requires auther	ntication
Account Name:	
Password:	
🗖 Use Challenge	Response Authentication (CRAM-MD5)

- 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 **E-mail Settings** tab.

System Settings Path Settings Email Settings SMTP Email Settings

fessage Parameters The following settings are used to control whether the Voicemail message is sent as a wave file within the email message. ✓ Transmit Wave File ← Attach wave file to message ← Embed wave file in message	server	Browse
message is sent as a wave file within the email message. Transmit Wave File Attach wave file to message	lessage Parameters	
C Attach wave file to message		
	Transmit Wave File	
Embed wave file in message	C Attach wave file to message	
	Embed wave file in message	

- 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**.

3.5.3 Voicemail Email Operation

3.5.3.1 User and Group Configuration

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

Menu Prog	gramming	Mobil	ity Ph	one Man	ager Options	Hunt	Group Me	mbership	Anr	nouncem	ents	Personal Di	rectory	
User Vo	oicemail	DND	Short	Codes	Source Numbe	ers Te	elephony	Forwardi	ng	Dial In	Voice	e Recording	Button	Programming
Voicemail	Code								Ŀ	Voicer	nail O	n		
Confirm V	/oicemail (Code								Voicer	nail He	elp		
Voicemail	Email									Voicer	nail Ri	ingback		
~ Voicemai	il Email —									Voicer	nail Er	mail Reading		
Off		00	ору) Forward	\bigcirc	Alert		C	UMS V	Web S	iervices		
-DTMF Br	reakout –													
Receptio	on / Breał	wut (D	TMF 0)	System	Default ()									
Breakou	it (DTMF :	2)		System	Default ()									
Breakou	it (DTMF (3)		System	Default ()									
Hunt Group	- Voicer	nail E	allback	Oueuin	a Voice Reco	rding	Annound	ements						
Voicemail (•			Quedin		n din ig	Annound	emenes						
Confirm Vo	oicemail C	ode						🗸	Vo	icemail O	n			
Voicemail E	Email								Vo	icemail H	lelp			
Voicemail	l Email —								Br	oadcast				
💿 Off		O Co	ру	0	Forward	04	Alert		Uľ	45 Web S	5ervic	es		

- Voicemail E-mail: Default = Blank (No voicemail e-mail features)
 This field is used to set the user or group e-mail address used by the voicemail server for voicemail e-mail operation. When an address is entered, the additional Voicemail E-mail control below are selectable to configure the type of voicemail e-mail service that should be provided.
 - 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 <u>Voicemail E-mail Installation</u> [50].
 - 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.

• Voicemail E-mail Default = Off

If an e-mail address is entered for the user or group, the following options become 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.

- Users can change their voicemail e-mail mode using visual voice. If the voicemail server is set to IP Office mode, 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.
- Off

If off, none of the options below are used for automatic voicemail e-mail. Users can also select this mode by dialing ***03** from their extension.

Copy

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. 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.

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. No copy of the voicemail message is retained in the voicemail mailbox and their is no message waiting indication. As with Copy, their is no mailbox synchronization between the e-mail and voicemail mailboxes. Users can also select this mode by dialing ***01** from their extension.

• UMS Exchange

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. See <u>UMS Exchange Server Installation</u> [47] and UMS Exchange.

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.

3.5.3.2 How Voicemail Email Messages Look

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

• То

The user/group e-mail address.

• From

The name and address setting of the e-mail client account.

Subject

Voicemail Message ('calling number' > 'user name') From: 'calling number'.

• Body

If the user or group's Voicemail E-mail mode is set to Copy or Forward, the message body will contain "IP Office Voicemail redirected message".

Attachment

When using Copy or Forward mode, the message is attached as a wav file.

Messages sent through a Voicemail Pro eMail action are configurable, see The Voicemail Pro eMail Action बिने.

3.5.3.3 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 wav file.

Voicemail Pro Client (Int File Edit Actions Administrat	
	효 삶 💩 🖓 • ŷ 隆 😻 🏑 🆓 • 🗣 🌋 • 🎯
Specific Start Points Users Groups Short Codes Collect Collect Collect Collback Queued Still Queued Still Queued	Modules > eMail Start Point Next Properties for eMail General Entry Prompts Specific Reporting Results Send e-mail Send e-mail to Iray.charles@mydomain.com Subject Voicemail Pro Message Content
eMail	Content This message was forwarded by a Voicemail Pro email ac Attach file to e-mail \$ MB Path is assumed to be on the Voicemail Server <u>DK</u> <u>DK</u>

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.

3.6 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 ^C Speak Text action. The text can include variables passed from other actions including database actions.
- When installed in parallel with Voicemail E-mail 50, TTS can be used to provide email reading 67 to selected mailbox users.
- TTS can be used by the Voicemail Pro client user to record prompts used by call flow actions.

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

This feature is supported by the Voicemail Pro server's standard **Preferred Edition** license. 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.

Speak Text Actions / Prompt Recording

The license for this operation depend on whether you will be using the Avaya supplied ScanSoft TTS speech engines or a 3rd party generic TTS speech engines (including the TTS speech engines included in Microsoft operating systems).

• Generic TTS

The use of up to 8 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 engines 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 firstcome-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.

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

• 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**.

3.6.1 Installing Generic Text to Speech

To install 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. Send the new configuration to the IP Office system.
- 3. Reload the IP Office configuration into IP Office Manager and check that the status of the license has changed to **Valid**.
- 4. 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.
- 5. If the system is licensed for generic TTS, Voicemail Pro will automatically discover any SAPI 5 installed engine. If there is no third-party engine installed then the Microsoft third-party engine is used.

3.6.2 Installing Avaya Text to Speech

The Avaya TTS engine for Voicemail Pro is supplied on media disks (x2) separate from the Voicemail Pro software installation media. The default TTS engine installation also contains English US and English UK as default languages.

To install Avaya Text To Speech on Microsoft Windows:

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

3.6.3 Setting Up Text To Speech to Read Email

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.

- The Voicemail Pro server must have been installed and configure to support voicemail e-mail using a MAPI client solution
- E-mail reading can only be enabled for IP Office users whose Profile setting is set to Mobile User or Power User. That requires the IP Office to have **Mobile User Profile** or **Power User Profile** licenses.
- 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.
- 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**.

Menu Programming Mobility Phone Manager Options Hunt Group Membership Announcements Personal Directory

User	Voicemail	DND	ShortCodes	Source Numbers	Telephony	Forwarding	Dial In	Voice Recording	Button Programming
Name			Extn201						
Passwor	rd								
Confirm	Password								
Full Nam	ne		Albert						
Extensio	on		201						
Locale								•	
Priority			5					•	
Profile			Mobile U	ser				•)
			🗌 Rece	ptionist					

3. On the Voicemail tab:

User Voicemail DND ShortCodes Source Numbers Telephony Forwarding Dial In Voice Recording Button Programming
Voicemail Code ****
Confirm Voicemail Code 👫 ****
Voicemail Email test@example.com
Voicemail Email Reading
UMS Web Services

- Voicemail E-mail Enter the user's e-mail address.
- Voicemail E-mail Reading Enable this option for TTS e-mail reading.

3.7 Troubleshooting

3.7.1 Checking the Voicemail Pro Service

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.

To check/restart the Voicemail Pro Service:

1. Click Start | Administrative Tools | Services.

jie <u>A</u> ction ⊻jew	Help					
► 🔿 📰 🔄 🦉	o 🐟 🛛 🖬 🕨 🔳	II ID				
Services (Local)	Name 🔺	Description	Status	Startup Type	Log On As	
	Telephony	Provides Telephony		Manual	Network Se	
	🔹 🎧 Thread Ordering Se	Provides ordered e		Manual	Local Service	
	TP AutoConnect Se	ThinPrint .print com	Started	Manual	Local System	
	TP VC Gateway Ser	ThinPrint .print com		Manual	Local System	
	TPM Base Services	Enables access to t		Manual	Local Service	
	🔍 UPnP Device Host	Allows UPnP device		Disabled	Local Service	
	🔍 🥨 User Profile Service	This service is respo	Started	Automatic	Local System	
	🔄 🎑 Virtual Disk	Provides manageme		Manual	Local System	
	Whware Tools Service	Provides support fo	Started	Automatic	Local System	
	🔍 VMware Upgrade H	Virtual hardware up	Started	Automatic	Local System	
	Voicemail Pro Service		Started	Automatic	\Administra	
	Volume Shadow Copy	Manages and imple		Manual	Local System	
	🔍 Windows Audio	Manages audio for		Manual	Local Service	
	Windows Audio End	Manages audio devi		Manual	Local System	
	Windows Color Sys	The WcsPlugInServi		Manual	Local Service	
	Windows Driver Fo	Manages user-mod		Manual	Local System	

- 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 will stop and restart the other services that it uses.
- 3. Close Services.

Setting the Voicemail Pro Service or Computer to Restart Automatically

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.

- 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

In some instances, certain computers might not respond quickly enough to start all of the Avaya services in the correct order. In this circumstance, it is advisable to create a batch file which 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.

- 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 which 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.

3.7.2 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.

🛃 Computer Management								_ 8 ×
<u>File Action View H</u> elp								
🗢 🔿 🖄 🖬 🛛 🖬								
E Computer Management (Local)	Level	Date and Time	Source	Event ID	Task Category			ions
🗄 🕑 Task Scheduler								Pro User Log 🛛 🔺
🖃 🚺 Event Viewer							6	Open Saved Log
🖃 📑 Custom Views							9	Create Custom View
⊞							Ľ	Import Custom View
							I –	· · · · · · · · · · · · · · · · · · ·
Applications and Servi							L 1	Clear Log
📔 Hardware Events							7	Filter Current Log
📔 Internet Explorer							F	Properties
€ Key Management								Find
VMPro User Log								
Windows PowerSh								Save All Events As
🔂 Subscriptions							L 1	Attach a Task To this Log
							I –	View 🕨
	L							
A Device Manager						×	Q	Refresh
🖃 🚝 Storage	General Deta	n 1					?	Help 🕨
🔤 Disk Management		iiis					L 1	
표 🊋 Services and Applications	Log Na <u>m</u> e:						L 1	
	<u>S</u> ource:				.ogge <u>d</u> :		L 1	
	<u>E</u> vent ID:				Task Categor <u>y</u> :		L 1	
	<u>L</u> evel:				≤eywords:	-	I	
	•							
• • •								

To view the log details:

1. Click Start | Administrative Tools | Computer Management.

2. In the left pane, expand System Tools | Event Viewer | Applications and Services Logs and click VMPro User Log in the tree to view the details.

3.7.3 Tracing in Debug

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.

DbgView	
<u>File Edit View H</u> elp	
] 🖻 🚑 🦻	
03/04 15:38:33.906 vmprov5s (09, 5 03/04 15:38:33.906 vmprov5s (09, 3 03/04 15:38:33.906 vmprov5s (09, 5 03/04 15:38:33.906 vmprov5s (00, 5 03/04 15:38:33.906 vmprov5s (00, 5 03/04 15:38:33.906 vmprov5s (00, 5 03/04 15:38:33.9	2816,2872:Voicemáil Pro is licenced2816,2872:Integrated messaging is licenced2816,2872:VPIM is NOT licenced2816,2872:Voice recording library is NOT licenced2816,2872:3rd Party Database is NOT licenced2816,2872:VB Scripting is NOT licenced2816,2872:Outlook Calendar based greetings is NOT licenced2816,2872:ScanSoft TTS Support is NOT licenced
кеацу	li.

Installation

- 1. Download the zip file.
- 2. Unpack the files into a folder such as c:\debug on the server computer.

3. Run DbgView.exe.

4. 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.

Logging

1. Run DbgView.exe.

2. Select File	Log Preferences.

Select Logging Information	
 ✓ Log To File Log Mode ✓ Every 'n' Hours ✓ Every 'n' MBytes 	Hours Interval
Log Filename	
c:\debug\debug.log	
ОК	Cancel

- 3. Set the logging details are required and click **OK**.
- 4. While **DbgView** is running the viewable trace is also copied to the specified file.
- 5. The debug log files can be opened in programs such as **WordPad**.

Filtering

1. Select View | Debug Filters.

Select view Debug Filters.	
DbgView	
File Edit View Help	
Configure Debug Filters	X
04/04 08:30:01.593 vmpr 04/04 08:30:01.593 vmpr	Module ID Level ID Bitmap 5 - Informational
04/04 08:30:01.593 vmpt 04/04 08:30:01.593 vmpt 04/04 08:30:01.593 vmpt Common\Utilities\Debug Message Vie	iewer DboView 1 FF FF FF FF FF FF FF FF IName ID
04/04 08:30:01.593 vmpr Explorer	Explorer 0 FF FF FF FF FF FF FF FF Init-Delnit 00
04/04 08:30:01.593 vmpr IDriver 04/04 08:30:01.593 vmpr IMSAdmin	IMSAdmin 9 FF FF FF FF FF FF FF FF IVR Nodes 02
04/04 08:30:01.593 vmpr KeyServ 04/04 08:30:01.593 vmpr VMLite	KeyServ 0 FFFFFFFFFFFFFFFFFFF ♥ Fixed Nodes 03 VMLite 0 FFFFFFFFFFFFFFFFFF ♥ Outcalling 04
04/04 08:30:01.593 vmpr iClaritySvr	iClarity 0 FF FF 00 00 00 00 00 00 00 00 00 00 0
04/04 08:30:01.593 vmpr 04/04 08:30:01.593 vmpr	vmprov5s 5 FF EF FF FF FF FF FF FF FF ✓ Communications 06 ✓ Intuity TUI 07
04/04 08:30:01.593 vmpr 04/04 08:30:01.593 vmpr	♥ IPOtfice TUI 08 ♥ Voicemail Consol 09
04/04 08:30:01.593 vmpr	✓ vocenali consol 03 ✓ Core Processing 0a
04/04 08:30:01.593 vmpr 04/04 08:30:01.593 vmpr	✓ Registry Ob
04/04 08:30:01.593 vmpr 04/04 08:30:01.593 vmpr	Name Lookup Od
04/04 08:30:01.593 vmpr <	Campaigns 0e String manipulation 0f
04/04 08:30:01.593 vmprov5s (09,5) 2728,3916:	Calling Party Name: Extn201
04/04 08:30:01.593 vmprov5s (09,5) 2728,3916: 04/04 08:30:01.593 vmprov5s (09,3) 2728,3916:	Called Party Name: Locale eng does not exist, using alternative locale of
04/04 08:30:01.593 vmprov5s (0c,2) 2728,3916: 04/04 08:30:01.593 vmprov5s (0c,2) 2728,3916:	> SoundsManager::walkTowAVData() < SoundsManager::walkTowAVData()
04/04 08:30:01.593 vmprov5s (0c,2) 2728,3916: 04/04 08:30:01.593 vmprov5s (0c,2) 2728,3916:	> SoundsManager::walkTowAvData() < SoundsManager::walkTowAvData()
04/04 08:30:01.593 vmprov5s (Oc,2) 2728,3916:	> SoundsManager::walkTowAVData()
04/04 08:30:01.593 vmprov5s (0c,2) 2728,3916: 04/04 08:30:01 593 vmprov5s (0c 2) 2728 3916:	< SoundsManager::WalkToWAVData()
	<u> </u>
Ready	

2. Select the module for which you want to increase/decrease reporting.

3. In the right hand panel adjust the level of reporting.

4. Close the **Configure Debug Filters** window.

3.7.4 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 you should use the <u>debug viewer</u> 70 to view voicemail server activity as it occurs.

3.7.5 Assigning Permission to Users for MAPI

Use the steps in this section to assign permissions to user accounts to run the MAPI service. To assign permissions, complete the following procedures:

1. Assign Send As permissions 72.

2. Assign additional permissions 7th.

Assigning additional permissions

Procedures for assigning permissions are different for the different versions of Exchange Server. Select the procedure that applies to your environment.

- <u>Assigning permissions with Exchange 2003</u>
- <u>Assigning permissions with Exchange 2007</u>
- <u>Assigning permissions with Exchange 2010</u>

3.7.5.1 Assigning Send As Permissions

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. From the View drop-down menu, select 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.
- 8. In the Select Users, Computers, Service Account, or Group dialog box, add the user's 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.

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

- Administrators
- Domain Administrators

To prevent the **Send As** permissions from being removed:

1. Click Start > Run, type cmd, and click OK.

Note: You must be a member of the domain administrator group.

2. In the command window, enter the following:

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

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

It will take at least an hour for the security permissions to replicate to the user's account.

3.7.5.2 Assigning Permissions with Exchange 2003

If the user is on Exchange 2003 server, proceed as follows:

- 1. Modify the advanced security settings for Mailbox Store.
- 2. Edit the registry to display the Security tab.
- Note: To edit the registry, you must be a member of the domain administrator group.
- 3. Add the additional permissions to the user account.

Modifying Advanced Security Settings for Mailbox Store

1. Log on to the Active Directory server using an account that has privileges to edit permissions (such as administrator).

2. Click Start | All Programs | Microsoft Exchange | System Manager.

- 3. In the left pane of the Exchange System Manager window, expand the Servers node in the tree.
- 4. Expand the server node in the list, and then expand the **First Storage Group** node.
- 5. Right-click Mailbox Store and select Properties.
- 6. In the Security tab of the Properties dialog box, click Advanced.
- 7. Under the **Permissions** tab of the **Advanced Security Settings** window, change all the **Permission Entries** to **Allow**.
- 8. Restart the computer.

Editing the registry

If you are using Exchange System Manager or Active Directory Sites and Services, the Security tab for the Exchange organization container and a few sub-containers are not visible. To enable the Security tab at all levels within the Microsoft Exchange container, you can update the registry.

- 1. Log on as the Microsoft Exchange administrator.
- 2. Click Start > Run.
- 3. In the Run dialog box, in the Open field, type regedit.
- 4. Press Enter.
- 5. In the **Registry Editor** dialog box, locate the following key: "HKEY_CURRENT_USER\Software\Microsoft\Exchange\ExAdmin"
- 6. Right-click **ExAdmin** and select **New > DWORD Value**.
- 7. Enter the following value name: **ShowSecurityPage**.
- 8. Double-click the ShowSecurityPage value.
- 9. In the Edit DWORD Value dialog box, set the Value data to 1.
- 10. Click **OK**.

Adding permissions with Exchange 2003

Proceed as follows to add the additional permissions to the user's account:

1. Log on to the Active Directory server using an account that has privileges to assign permissions to accounts (such as administrator).

2. Click Start | Administrative Tools | Active Directory Sites and Services.

3. In the left pane, select Active Directory Sites and Services.

- 4. From the View drop-down menu, select Show Services Node.
- 5. In the left pane, expand **Services**, expand **Microsoft Exchange**, and then locate the appropriate Exchange Organization object that MAPI will connect to.
- 6. Right-click and select Properties.
- 7. In the **Properties** dialog box, click the **Security** tab.

Note: This tab is visible only if you have edited the registry (see Editing the registry [73]).

- 8. Click Add.
- 9. In the Select Users, Computers, Service Accounts, or Groups dialog box, add the user's account.

10.Click **OK**.

11. Under **Permissions**, select the permissions that you want to assign to the user's account.

- Read
- Execute
- Read permissions
- Create children
- List contents
- Read properties
- Write properties
- Administer information store
- Create named properties in the information store
- View information store status
- Receive As
- Send As

12.Click Apply.

13.Click **OK**.

- 14.Close the Active Directory Sites and Services dialog box.
- 15. Wait for the directory cache to expire.

3.7.5.3 Assigning Permissions with Exchange 2007

If user account is on Exchange 2007 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 group.
- 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. From the **View** pull-down menu, select **Show Services Node**.
- 6. In the left pane, expand **Services**, expand **Microsoft Exchange**, and then locate the appropriate Exchange Organization.
- 7. Right-click it and select **Properties**.
- In the Properties window, click the Security tab. The Security tab may not be visible in an environment with both Exchange 2003 and Exchange 2007 mail servers. To enable the Security tab, see Editing the registry (73).
- 9. Click Add.
- 10. In the Select Users, Computers, Service Accounts, or Groups window, add the user's account.
- 11. Click OK.
- 12. Under Permissions for the group, select Read and click Apply.
- 13. Click Advanced.
- 14. In the **Advanced Security Settings** window, on the **Permissions** tab, select the check box at the bottom of the window. This will apply the permissions inherited from the parent to this object and its child objects.
- 15. Click \boldsymbol{Add} and add the user's 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

For a mixed environment of Exchange 2003 and Exchange 2007 mail servers, also select the following permissions, which are only displayed for Exchange 2007 in the mixed environment:

- Read
- Execute

20. Click OK.

3.7.5.4 Assigning Permissions with Exchange 2010

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 group.
- 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. From the View pull-down menu, select Show Services Node.
- 6. In the left pane, expand **Services**, expand **Microsoft Exchange**, right-click the appropriate Exchange Organization, and select **Properties**.

7. In the **Properties** window, click the **Security** tab. The **Security** tab may not be visible in an environment with both Exchange 2003 and Exchange 2010 mail servers. To enable the Security tab, see <u>Editing the registry</u> [73].

9. In the Select Users, Computers, Service Accounts, or Groups window, add the user's account.

10. Click **OK**.

- 11. Under **Permissions for the group**, select **Read** and click **Apply**.
- 12. Click Advanced.
- 13. In the **Advanced Security Settings** window, on the **Permissions** tab, select the check box at the bottom of the window. This will apply the permissions inherited from the parent to this object and its child objects.
- 14. Click **Add** and add the user's account.
- 15. Click **OK**.
- 16. In the Apply to field, select This object and all descendant objects.
- 17. Verify that the following box is not selected: **Apply these permissions to objects and/or containers within this container only**.
- 18. 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

For a mixed environment of Exchange 2003 and Exchange 2010 mail servers, also select the following permissions, which are only displayed for Exchange 2010 in the mixed environment:

- Read
- Execute
- 19. Click OK.

^{8.} Click Add.

Chapter 4. Using the Voicemail Pro Client

4. Using the Voicemail Pro Client

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 be used to administer the server remotely.

4.1 Logging in to the Voicemail Pro Server

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

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

To Start the Voicemail Pro Client

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

2. The Voicemail Pro Client window opens.

• If the client has been started before, it will start in the same mode as it used previously. If it fails to do that or if it is the first time that the client has been started, the select mode menu is displayed.

1	Select Voicemail Pro Client Mode	×
	C Select Mode	
	Online (VmPro server is on LAN or WAN)	
	• Offline (Offline mode for Windows)	
	O Offline (Offline mode for Linux)	
	OK Cancel Help	

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

🔠 VmPro Login 🛛 🔀
Please enter a User Name. This is the name that the workstation software installed on this PC will use.
Login
User Name:
User Password:
Unit Name\IP Address: 192.168.0.203 V Browse
Back Login Cancel Help

- Enter the name and password for an administrator account on the voicemail server.
 - Note that these are not required is accessing a voicemail server on the same computer as the client.
 - The default account is **Administrator** and **Administrator**. After logging in with this account you should change the password from that default value.
 - If three consecutive login attempts fail for an administrator account name, the account is locked for an hour.

Using the Voicemail Pro Client: Logging in to the Voicemail Pro Server

In the Unit Name Alternatively click	•						esults.
Select Networked V	/oicemail System		X				
Name TECHPUBSERVER	IP Address 192.168.0.203	Version 6.1.0.4	Type VmPro				
If connected to a n Download, any ex	remote server, t						
Callflow Download	801.	lac you in					
The callflow on th	e client is different to th e to download the callfi		168.0.203?	3.			

- 3. If this is the first time that the voicemail 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.

4.2 Confirm Call Flow Download Window

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.

Confirm Callflow Download
The callflow on the client is different to the callflow on 192.168.0.203. Would you like to download the callflow from 192.168.0.203? Download Cancel Help

- Download
 - Click to download the call flow from the server.
- Cancel
 - Click this if you do not want to download the call flow from the server.

To upload the local call flow to the server, use the **Save** or **Save and Make Live** options from the **File** menu. See <u>Saving Changes and Making them Live</u> शिने.

4.3 Continue Offline Message Window

Only one Voicemail Pro client can be connected to a voicemail server at any time. To prevent an idle client session from blocking the server, a <u>Client/Server Connection Timeout (mins)</u> 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 will prompt you whether to re-establish the session or close. You are then able to continue working in offline mode or to close the client.

4.4 Saving Changes and Making them Live

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

To Save the Configuration and Make It Live

- 1. Choose **Save & Make Live** to save the settings as the **Root.vmp** file used by the voicemail server.
 - If you are working remotely in **Offline** mode, you will be prompted to select whether to save your changes to the local database or to the remote server.

To Save the Configuration to a File Without Making It Live

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

1. Choose **Save as** to save the database as a **.vmp** file with the name that you specify. You can then copy the file to other systems.

4.5 Logging Out

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 Down</u> 8.
- If the Client and Server are installed on the same computer, the **Log Out** option is not available.

To Log Out

- 1. From the File menu, select Log Out.
- 2. 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. See Logging in to the Voicemail Pro Server [78].

4.6 Closing Down

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

To Close the Voicemail Pro Client

1. From the File menu, select Exit.

- 2. 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.
- 3. 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.
- 4. If you want to make the changes live, click **Save & make Live**.

Chapter 5. IP Office Configuration

5. IP Office Configuration

The default IP Office configuration settings support almost immediate voicemail operation as soon as a voicemail server is running on the LAN. Those default settings are:

- Voicemail running on a computer accessible by the IP Office using a broadcast address of 255.255.255.255.
- Voicemail on for each user and hunt group on.
- No Voicemail Code set for any mailboxes. Until a code is entered for a mailbox, it can only be accessed from the user's own extension.
- No Voicemail E-mail or Voicemail Help operation.
- No Voicemail Reception numbers set for user mailboxes.
- Hunt group mailboxes are created and used by default but there is no default message waiting indication or method for collecting messages. A method for accessing each hunt group mailbox should be programmed.

5.1 User and Group Mailboxes

The voicemail server creates mailboxes based on the user and hunt group names that are entered in the IP Office Manager application. Whenever the Voicemail Pro is restarted or the IP Office configuration is changed, new mailboxes are created for any new names that are found.

This method of operation has the following consequences:

- **Mailboxes are based on names** For all users and groups, if their name is changed or deleted, they are no longer associated with their former mailbox and any associated Voicemail Pro start points.
- Voicemail is case sensitive

If a mailbox or start point name is entered incorrectly in IP Office Manager or Voicemail Pro, the intended operation will not occur and the call may be disconnected.

• Voicemail removes spaces at the end of mailbox names

If spaces are left at the end of a mailbox user's name in IP Office Manager, when the mailboxes are created, the space at the end of the name is dropped. When this occurs the mailbox cannot be found as there is a mismatch between the user name and directory.

5.2 System Settings

The IP Office can work with several different types of voicemail server. Therefore it is important to check that it is configured for operation with Voicemail Pro.

1. In IP Office Manager, select System.

2. Click the **Voicemail** tab.

System LAN1 LAN2		cemail Telepho	ony Directo	ry Services	System Events	SMTP	SMDR	Twinning
Voicemail Type	Voicemail Lite/	Pro		*] Messages Butto	n Goes T	o Visual V	/oice
Voicemail Destination				~				
Voicemail IP Address	255 - 255	255 255						
Voicemail Channel Re	servation							
Unreserved Channels	259							
Auto-Attendant	0 🗘 V	oice Recording	0 🛟	Mandatory	Voice Recording	0	\$	
Announcements	0 🛟 M	1ailbox Access	0					
DTMF Breakout			-					
Reception / Breakout	(DTMF 0)							
Breakout (DTMF 2)								
Breakout (DTMF 3)								

• Voicemail Type

Specifies the type of voicemail system the IP Office is configured to work with. Unless detailed otherwise, the option **Voicemail Lite/Pro** should be used with Voicemail Pro server. Additional options are displayed depending on the selected voicemail type.

• <u>Centralized Voicemail</u>

This setting is used for remote systems in a Small Community Network where the central voicemail server is being hosted by another IP Office. The **Voicemail Destination** field below is used to enter the **Outgoing Group ID** of the SCN trunk to the IP Office hosting the central voicemail server.

• **<u>Distributed Voicemail</u>** (Software level = IP Office Release 6)

This option is used in a Small Community Network for remote IP Offices that you want to be associated with their own voicemail servers in addition to the central voicemail server. The IP Office will require licenses for Voicemail Pro operation and for the voicemail features required. The **Voicemail IP Address** below is used to enter the IP address of the IP Office's voicemail server while the **Voicemail Destination** field below is still used to set location of the central voicemail server as for centralized voicemail.

- Embedded Voicemail Not used with Voicemail Pro.
- Group Voicemail Not used with Voicemail Pro.
- Remote Audix Voicemail
 Not used with Voicemail Pro.
- Voicemail Lite/Pro

This is the normal setting used for Voicemail Pro.

• Voicemail IP Address

By default the IP Office connects to the Voicemail Pro server by using the address 255.255.255.255 to broadcast for any server on the same LAN as itself. When it receives a response it will use that voicemail server. However you can set this access to a specific address. Change the default address (*255.255.255.255*) to the IP address of the computer on which the Voicemail Pro server is running. For configuration of IP Office systems using centralized Voicemail Pro in an IP Office Small Community Network (SCN), see <u>Centralized Voicemail Pro Int2</u>.

• Message Button Go To Visual Voice

Many Avaya telephones have a fixed button labeled **MESSAGES** which can be used by the telephone user to access their mailbox. If this option is selected, then on telephones able to support Visual Voice, visual voice is used when the button is pressed rather than the standard voice prompt interface.

• Voicemail Channel Reservation

For calls going to voicemail from the IP Office, the IP Office can restrict how many sessions of various types are active at the same time. See <u>Voicemail Channel Reservation</u> 93.

• **DTMF Breakout** (*IP Office 5.0*)

Previous breakout numbers for a user mailbox were set through the <u>user voicemail settings</u> (38). IP Office 5.0+ supports system defaults to be set. These are then applied to all user mailboxes unless the users own settings differ.

• Reception / Breakout (DTMF 0)

The number to which a caller is transferred if they press $\boldsymbol{0}$ while listening to the mailbox greeting rather than leaving a message (* $\boldsymbol{0}$ on embedded voicemail).

- For systems set to Intuity emulation mode, the mailbox user can also access this option when collecting their messages by dialing ***0**.
- If the mailbox has been reached through a call flow containing a **Leave Mail** action, the option provided when 0 is pressed are:
 - For IP Office mode, the call follows the **Leave Mail** action's *Failure* or *Success* results connections depending on whether the caller pressed 0 before or after the record tone.
 - For Intuity mode, pressing 0 always follows the Reception / Breakout (DTMF 0) setting.

• 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 $\boldsymbol{3}$ 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.

SIP Settings

These options are available when the IP Office configuration contains a SIP line or an H323 SCN line. The values are used when the voicemail server makes calls using a SIP trunk or to a SIP device.

- SIP Name: Default = User name. The value from this field is used when the **From** field of the SIP URI being used for a SIP call is set to **Use** Internal Data.
- SIP Display Name (Alias): Default = User name. The value from this field is used when the **Display Name** field of the SIP URI being used for a SIP call is set to **Use Internal Data**.
- Contact: Default = User name. The value from this field is used when the Contact field of the SIP URI being used for a SIP call is set to Use Internal Data.
- Anonymous: Default = Off.
 If the From field in the SIP URI is set to Use Internal Data, selecting this option inserts Anonymous into that field rather than the SIP Name set above.

3. Click **OK** to save any changes.

4. Send the configuration back to the IP Office.

5.3 User Voicemail Settings

Voicemail can be configured for each individual user in IP Office Manager.

- 1. Open IP Office Manager.
- 2. In the Navigation pane, click **User** and select the individual user.

3. Select the **Voicemail** tab.

Menu	Programming	Mobilit	y Phone Mar	nager Options	Hunt Gro	oup Mei	mbership	An	nouncem	ents	Personal Di	rectory	
User	Voicemail	DND	ShortCodes	Source Numbe	rs Tele	phony	Forward	ing	Dial In	Voic	e Recording	Button	Programming
Voice	mail Code]			Voicer	nail O	n		
Conf	irm Voicemail	Code]		C	Voice	mail H	elp		
Voice	mail Email]		[Voicer	nail R	ingback		
-Void	email Email —								Voicer	mail Ei	mail Reading		
	Off	🔵 Co	φy	Forward	() A	lert		E	UMS	Web S	iervices		
	1F Breakout –												
Rec	eption / Brea	kout (DTI	MF 0) System	m Default ()									
Bre	akout (DTMF)	2)	Syste	m Default ()									
Bre	akout (DTMF :	3)	Syste	m Default ()									

• Voicemail Code / Confirm Voicemail Code

These fields are used to set or change the user's mailbox passcode.

• 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 On Default = 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.

• Voicemail Help Default = Off

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 Default = Off

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.

• Voicemail E-mail: Default = Blank (No voicemail e-mail features)

This field is used to set the user or group e-mail address used by the voicemail server for voicemail e-mail operation. When an address is entered, the additional Voicemail E-mail control below are selectable to configure the type of voicemail e-mail service that should be provided.

- 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 <u>Voicemail E-mail Installation</u> 50.
- 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.

• Voicemail E-mail Default = Off

If an e-mail address is entered for the user or group, the following options become 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.

- Users can change their voicemail e-mail mode using visual voice. If the voicemail server is set to IP Office mode, 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.

• Off

If off, none of the options below are used for automatic voicemail e-mail. Users can also select this mode by dialing ***03** from their extension.

• Copy

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. 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.

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. No copy of the voicemail message is retained in the voicemail mailbox and their is no message waiting indication. As with Copy, their is no mailbox synchronization between the e-mail and voicemail mailboxes. Users can also select this mode by dialing ***01** from their extension.

UMS Exchange

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. See UMS Exchange Server Installation 4th and UMS Exchange.

• 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.

• UMS Web Services

If selected, the user is able to use <u>UMS</u> at 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. The use this function is subject to licenses.

DTMF Breakout

When a caller is directed to voicemail to leave a message, they can be given the option to be transferred to a different extension. The greeting message needs to be recorded telling the caller the options available. The extension numbers that they can be transferred to are entered in the fields below. For IP Office 5.0+, these system default values can be set for these numbers and are used unless a different number is set within these user settings.

• 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).

- For systems set to Intuity emulation mode, the mailbox user can also access this option when collecting their messages by dialing ***0**.
- If the mailbox has been reached through a call flow containing a **Leave Mail** action, the option provided when 0 is pressed are:
 - For IP Office mode, the call follows the **Leave Mail** action's *Failure* or *Success* results connections depending on whether the caller pressed 0 before or after the record tone.
 - For Intuity mode, pressing 0 always follows the Reception / Breakout (DTMF 0) setting.

• 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 $\mathbf{3}$ 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.

4. Click **OK** to save the voicemail changes for the user.

5. Amend any other user details, then save and merge the configuration changes.

5.4 User Source Numbers

The Source numbers can be changed for individual users in IP Office Manager. The Source Numbers tab gives a list of Dial In Source Numbers. Several of these numbers can relate to voicemail operation. The source number settings that can be used for Voicemail Pro are:

- V<Caller's ICLID> = Voicemail Trusted Source Access. Strings prefixed with a v indicate numbers from which access to the user's mailbox does not require entry of the mailbox's voicemail code.
 - When in Intuity mode users will still have to enter their voicemail code if they use the Messages button on their telephone. However, If they have a button programmed to collect voicemail they can access their mailbox without entering their voicemail code.
- H<Group Name> = Hunt Group Voicemail Indication.
 Configures the user to receive message waiting indication for new group messages. Enter H followed by the group name, for example HMain for the group Main.
- P<Telephone Number> = Voicemail Ringback Number. This entry sets the destination for callback (outbound alert) calls from voicemail. Enter P followed by the telephone number including any external dialing prefix, for example P917325559876. This facility is only available when using Voicemail Pro through which a default Callback or a user specific Callback start point has been configured. This feature is separate from voicemail ringback which alerts the user's own extension.

To add a source number:

1. Open IP Office Manager.

2. In the Navigation pane, click \blacksquare User and select the individual user.

3. View the **Source Numbers** tab.

4. Click Add.

	Source Numbers	
Source Number V210		Add Remove Edit
New Source Number	HMain	OK Cancel

- 5. Enter the number in the **Source Number** field at the bottom of the window.
- 6. Click **OK** and save the configuration file.

5.5 Hunt Group Settings

Voicemail can be configured for each hunt group on the IP Office system. This section looks at the basic voicemail settings.

Voicemail Answer Time

For IP Office 4.0+, the condition under which calls targeted to a hunt group go to voicemail has been changed to a timeout. For calls waiting to be answered, once this timeout expires the call is redirected to voicemail regardless of where it is in the hunt group.

Hunt Group	Voicemail	Fallback	Queuing	Voice Recording	Announc	ements				
Name			Main				SBCC Agent Group			
Extension			200							
Ring Mode			Collective		*	N	o Answer Time (secs)	System Del	fault (15)	•
Overflow Mo	de		Group		*	C	verflow Time (secs)	Off		*
Hold Music S	ource		No Change		*	V	oicemail Answer Time (secs)	45		\$
Agent's Stati Applies To	us on No-Al	nswer	None		*					
-User List						Cover	flow Group List			
Extension	Name					Gro	up Name			[
			E	dit Rer	nove			Add	Remove	

Hunt Group Settings

1. Open IP Office Manager.

2. In the Navigation pane, click **W** Hunt Group and select the hunt group.

3. Select the **Voicemail** tab.

Hunt Group Voic	email Fallbac	ck Queuing	Voice Reco	ording	Announcemen	its	
Voicemail Code	[
Confirm Voicemail	Code					~	Voicemail On
Voicemail Email	[Voicemail Help
Voicemail Email –	~	~		~			Broadcast
Off	🔘 Сору	O F	orward	() A	lert		UMS Web Services

• Voicemail Code / Confirm Voicemail Code

Enter a voicemail code between 1-15 digits in the **Voicemail Code** field. This is required when users retrieve voicemail messages for the hunt group remotely, for example from an extension that is not a member of the hunt group or from an external telephone.

• Voicemail E-mail: Default = Blank (No voicemail e-mail features)

This field is used to set the user or group e-mail address used by the voicemail server for voicemail e-mail operation. When an address is entered, the additional Voicemail E-mail control below are selectable to configure the type of voicemail e-mail service that should be provided.

- 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 <u>Voicemail E-mail Installation</u> [56].
- 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.
- Voicemail E-mail Default = Off

If an e-mail address is entered for the user or group, the following options become 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.

- Users can change their voicemail e-mail mode using visual voice. If the voicemail server is set to IP Office mode, 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.

• Off

If off, none of the options below are used for automatic voicemail e-mail. Users can also select this mode by dialing ***03** from their extension.

Copy

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. 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.

• 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. No copy of the voicemail message is retained in the voicemail mailbox and their is no message waiting indication. As with Copy, their is no mailbox synchronization between the e-mail and voicemail mailboxes. Users can also select this mode by dialing ***01** from their extension.

• UMS Exchange

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. See UMS Exchange Server Installation 4th and UMS Exchange.

• 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.

• Voicemail On Default = 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.

• Voicemail Help Default = Off

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).

• Broadcast

Select the option **Broadcast** if you want any voicemail messages left for the hunt group to be forwarded to the mailboxes of the individual group members. The original message in the hunt group mailbox is deleted after being broadcast.

• UMS Web Service (IP Office 5.0+)

If selected, the hunt group mailbox can be accessing using $\underline{\sf UMS}$ a web browser or an IMAP compatible e-mail application.

4. Click **OK** and save the configuration.

5.6 Voicemail Channel Reservations

By default inbound calls routed from IP Office to voicemail are able to use any available voicemail channels, up to the limit of the <u>number of licensed channels</u>^[13], regardless of how many calls of the same type are already in progress. However, if required, channels can be reserved for different types of inbound calls to the voicemail server.

Voicemail channel reservations can be made for:

- Auto Attendant
- Announcements
- Voice recording
- Mailbox access
- Mandatory voice recording

It is worth checking the voicemail channel reservations if there are problems. If insufficient voicemail channels are available:

- Internal calls to an auto attendant are queued. The call will queue until a resource becomes available.
- Announcements are not heard by the caller, but the call is routed correctly.
- Manual voice recording is activated but no recording is made. The call will continue.
- Users are placed in a queue when trying to access their mailbox access.
- A user with mandatory recording on outgoing calls (internal and external) gets a busy tone.
- A call on a line with mandatory recording set will be barred.

To change voicemail channel reservations:

- 1. Open IP Office Manager and the load the configuration.
- 2. In the Navigation pane click 🖘 **System** and select the system.
- 3. Click the Voicemail tab.

System LAN1 LAN2	DNS Voicemail Telephony	Directory Services	System Events	SMTP	SMDR	Twinning
Voicemail Type	Voicemail Lite/Pro	v] Messages Butto	n Goes T	o Visual V	/oice
Voicemail Destination		~				
Voicemail IP Address	255 - 255 - 255 - 255					
Voicemail Channel Res	ervation				_	
Unreserved Channels	259					
Auto-Attendant	0 🗘 Voice Recording 0	S Mandatory	Voice Recording	0	\$	
Announcements	0 🗘 Mailbox Access 0	•				
DTMF Breakout	-					
Reception / Breakout	(DTMF 0)					
Breakout (DTMF 2)						
Breakout (DTMF 3)						

4. Amend the channel reservations as required. By default the values are 0.

To view the utilization of voicemail channels:

1. Open the System Status Application.

- 2. Click **Resources**. The System Resources summary is displayed. The following details are displayed:
 - The number of voicemail channels available.
 - The number of channels in use.
 - Congestion information

Channel Restrictions

- The Voicemail Pro server has restrictions on the number of channels it can use for different types of outgoing calls that it can make. These limits are separate for each of the call types. When a limit is reached, further calls of that type are delayed until one of the existing calls is completed. These limitations are not controlled by Voicemail Channel Reservation settings.
 - Outcalling can use up to 5 channels at any time.
 - Conference center invitation calls can use up to 5 channels at any time.
 - Callback calls can use up to 2 channels at any time.
 - Alarm calls can use up to 2 channels at any time.

Chapter 6. System Preferences

6. System Preferences

A range of voicemail server settings can be set through the Voicemail Pro client.

To change the Voicemail Pro Preferences

1. Click the **Preferences** icon and then choose **General** or **VPNM**. Alternatively, from the **Administration** menu, select **Preferences** and then choose **General** or **VPNM**.

2. Select the System Preferences tab required.

- <u>General</u> (97) General voicemail server settings.
- Directories 98

Set the folder paths for different file locations.

- <u>Housekeeping</u> 104 Set the times for automatic deletion of different types of messages. Also set the default playback order.
- E-mail 99

Select the e-mail mode (MAPI or SMTP) used by the voicemail server for its e-mail functions and configure various settings for the selected mode.

- <u>SNMP Alarm</u> 105 Set the criteria which will cause the voicemail server to send alarms via the IP Office.
- Outcalling 106

Set the default times for outcalling operation and the frequency of outcalling retires.

• VPNM 1061

If VPNM is installed and licensed, this tab is available to set the locations of the remote VPNM servers and the mailbox users on those servers.

6.1 General

Although the default IP Office configuration settings support voicemail to start operating almost immediately, as soon as a voicemail server is running on the LAN, there are some general system preferences that you can set or change.

To set up general system preferences:

- 1. Display the main Voicemail Pro window.
- 2. From the **Administration** menu, select **Preferences** > **General**.
- Debug Level: Default = Information
 Set the level of information that the server should output for logging if required.

 Default Telephony Interface: Default = Intuity
 Select the mailbox operation mode for all mailboxes. The options are IP Office mode or Intuity emulation mode.
- Voicemail Password: *Default = Blank* A voicemail password is optional for the voicemail server is optional. If you set a password here, it must match the Voicemail Password configured within the IP Office's security settings. See <u>Identifying the Voicemail Server</u> <u>Computer</u> [86].
- Client/Server Connection Timeout (mins): Default =5 minutes. The voicemail server supports only one Voicemail Pro client to be connected at a time. This timeout logs out an inactive client, stopping it from preventing another client from connecting.
- Min. Message Length (secs): Default = 3 seconds. By default the minimum message length is 3 seconds in IP Office mailbox mode, 0 seconds in Intuity emulation mode. Use this field to set the minimum length between 0 and 10 seconds. Messages under this length are deleted immediately.
- Max. Message Length (secs): Default = 120 seconds.

This value sets the maximum length for messages. The default message length is 120 seconds. The maximum message length is 3600 seconds (60 minutes). 1 minute equals approximately 1MB of disk space.

- Max. Call\VRL Record Length (secs): *Default =3600 seconds.* This value sets the maximum recording time for recorded calls. The default and maximum length is 3600 seconds (60 minutes).
- Play Advice on Call Recording: Default = On

If selected, an advice warning is played whenever call recording is started advising the callers that their call is being recorded. This may be a legal requirement in some countries and so should not be disabled without checking first.

• System Fax Number: Default = Blank

This field can be used to set the number of the fax machine to which all incoming faxes should be directed. If a fax board is being used, this number must match the number of the extension that is connected to the fax board of the fax server computer.

- Intuity mailbox owners have the additional option to define their own personal fax number instead of the system fax number. As the system administrator, you still need to set a system fax number to enable mailbox owners to override it with their preferred personal fax number. Incoming calls are directed to Voicemail Pro and then Voicemail Pro redirects fax calls to the mailbox owner's personal fax number, if one has been set. For details, mailbox owners can refer *Avaya IP Office Intuity Mailbox Mode User Guide* (15-601130).
- If your fax system requires prefix addressing, for example the C3000 fax server, do not type a fax number in the **System Fax Number** box. Instead type the number to use as a prefix so that a fax message can be identified and forwarded to the extension number of the intended recipient. For example, if the prefix were 55, a fax message for extension 201 would have the prefix of 55 automatically added so that the complete number would become 55201.

System Fax Number

By default fax detection is not enabled when Voicemail Pro is first installed. When fax detection is enabled, any fax calls that are left in a voicemail mailbox, are redirected to this system fax number.

• Use as a Prefix

If your fax system does not use prefix addressing, leave this box unchecked. For this feature to work, you also need to set up a short code.

• Enable Fax Sub-Addressing

Most fax servers perform fax forwarding based on DTMF signaling received with the fax call. Check the **Enable Fax Sub-Addressing** box so that the DTMF signal is passed to the fax server after the call has been answered so that the fax can be forwarded to the e-mail address of the intended recipient.

3. Click OK.

4. Click 📽 Save and Make Live and select Yes.

6.2 Directories

When Voicemail Pro is installed some default folder locations are used. You can change these if required.

To set the location of Voicemail system folders:

- 1. Display the main Voicemail Pro window.
- 2. From the **Administration** menu, select **Preferences** > **General**.
- 3. Click the **Directories** tab.
 - Voicemail Server Directory The path to the folder where the voicemail server program is to be stored. This is the folder where the file *Root.vmp* is saved when the **Save & Make Live** option is used.
 - Voicemail Server Speech Directory The path to the folder where the libraries of speech prompts are to be stored.
 - **Remote Campaign Directory** The path to the folder where the campaign files are to be stored.
- 4. Click **OK**.
- 5. Click 🙀 Save and Make Live and select Yes.

6.3 Email

The **Email** tab is used to configure which e-mail mode (MAPI or SMTP) the voicemail server should use and the settings for that mode.

6.3.1 MAPI

This form is used to configure MAPI settings for use by the voicemail server.

MAPI

System P	reference	5	×
General	Directories	Email Housekeeping SNMP Alarm Outcalling	
MAPI	SMTP Send	er SMTP Receiver	_
	Enable MAPI		
Det			
	Profiles:	MS Exchange Settings 🛛 🗸	
		OK Cancel Help	

• Enable MAPI

Selecting this option will switch the voicemail server to using MAPI for its e-mail options rather than SMTP.

• Profile

This is used to select the MAPI e-mail account the voicemail server should use to provide visibility to the e-mail account mailboxes for which it requires access. The profile must exist within the MAPI e-mail client on the server computer and must be useable by the Windows account under which the Voicemail Pro service is running.

6.3.2 SMTP Sender

These settings are used to configure the SMTP server and server account that the voicemail server uses for sending e-mails using SMTP.

Multiple servers can be configured. The first entry specifies the default SMTP server used for sending e-mails if there is no other entry matching the domain specified in the e-mail destination address. Additional servers can be added when different settings are required for sending e-mails to specific domains. For example, the default can be configured for the customer's internal network exchange server with additional entries added for e-mails to external e-mail domain addresses such as yahoo.com.

Messaging Between Voicemail Servers

VPNM, distributed voicemail servers and primary/backup voicemail servers all use SMTP to exchange information and messages between the voicemail servers. When that is the case the first entry in the **SMTP Sender** list must be the one used and needs to be configured for that service with the domain and server setting both matching the IP address or fully qualified domain of the voicemail server.

In the example below, the first entry is being used for messages to other voicemail servers. Its own address is used as both the domain and server settings as an SMTP service on the same server as the voicemail service is used (eg. IIS SMTP on the Windows server). The next entry is used for other e-mails that use the customer's general e-mail domain address with the server set to the customers e-mail server. A third entry has been added to send some e-mails generated by E-mail Actions in call flows direct to an external e-mail service.

System Preferences		×
General Directories Email Hous MAPI SMTP Sender SMTP Rec	ekeeping SNMP Alarm Outcalling eiver	
Domain Server vmpro1.exa vmpro1.example.c smtp.exama smtp.example.com yahoo.com smtp.yahoo.com	Port No Identifier 25 vmpro@vmpro1.example.com 25 25	Auth None None None

• The first two entries in the example above can be combined. Voicemail server to server synchronization uses the **Domain** setting only whereas other e-mail services use the **Server** address and other setting.

ystem Prefere	nces	
General Director	Sender SMTP Receiver	
Domain	Server Port No Identifier	Auth
vmpro1.exa yahoo.com	smtp.example.com 25 vmpro@vmpro1.example.com smtp.yahoo.com 25	None None

SMTP Sender Settings

• Logging

If selected, <u>SMTP logging</u> 128 by the server is enabled.

Servers

This section is used to enter details of the SMTP server or servers to which the voicemail server send its messages.

SMTP Sender Co	nfiguration 🛛 🔀
SMTP Server	
Mail Domain:	vmpro1.example.com
Mail Server:	vmpro1.example.com
Port Number:	25
Sender:	vmpro@vmpro1.example.com
Server require	s authentication
Account Name:	
Password	
Use Chall	enge Response Authentication (CRAM-MD5)
ОК	Cancel Help

To add a server, click on the 🗣. icon. To edit the server, click on the 🏝 icon. To delete a server entry, click on 🗙

• Mail Domain

This field is used differently depending on whether it is the first entry in the list or not:

• For the first server entry in the list:

This is the default outgoing e-mail settings. It also sets the mail destination domain on which the voicemail server filters incoming messages (see below) and so is repeated on the **<u>SMTP Receiver</u>** [103] tab.

Messaging Between Voicemail Servers

For messaging between voicemail 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 service is running, for example *vmpro1.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*.

• For 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.

Server

This specifies the IP address or fully qualified domain name of the SMTP server to which messages are sent.

• For the first server entry in the list:

Where messaging between voicemail 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:

It will be the address of the e-mail server that will handle e-mails for recipients other than another voicemail server on the network.

• Port Number

This is port to which messages are sent, usually 25.

• Sender (Identifier)

Note that some servers will only accept e-mails from a specific sender or sender domain. If left blank, the voicemail server will insert a sender using either the e-mail address set for the voice 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 will typically be to the name and password of a mailbox account configured on that server.

• Account Name

Sets the name to use for authentication.

• Password

Set 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.

6.3.3 SMTP Receiver

This tab is used to set where the voicemail server checks for incoming SMTP messages. The **SMTP Receiver** setting can be set to either *Internal* or *External*.

- Internal 103
- Use this option for voicemail servers running on the IP Office Application Server server.
- External 103

Use this option when the voicemail server is on a server where is co-exists with a third-party SMTP application, for example an IIS server with SMTP enabled.

External

The **External** setting should be used when the voicemail server should check the mail drop folder on a local SMTP server for SMTP e-mail messages. For example, when there is an IIS server with SMTP enabled on the same server computer as the Voicemail Pro server.

• Distributed/Primary/Backup Voicemail

This is the option that should be used when the voicemail server is a Windows based server in a network distributed voicemail servers are being used or is a server in a primary/backup voicemail server pairing.

	×
Email Housekeeping SNMP Alarm Outcalling	
Treater ping of the final of the starting	
External	
c:/inetpub/mailroot/drop/	
vmpro1.example.com	
OK Cancel Help	
	Email Housekeeping SNMP Alarm Outcalling g SMTP Receiver External c:/inetpub/mailroot/drop/ vmpro1.example.com

• Port

This is the port on which the server receives incoming SMTP e-mails.

Domain

This is the domain destination address for which the server will accept incoming e-mails. Note that it matches the domain set by the first server entry in the <u>SMTP Sender</u> 100 tab.

Messaging Between Voicemail Servers

For messaging between voicemail 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 service is running, for example *vmpro1.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*.

6.4 Housekeeping

This tab is used to set the Voicemail Pro server settings for automatically deleting messages and for the default playback order of messages. For Voicemail Pro 6.0+ it is also used to access options for backing up and restoring voicemail messages and settings.

The voicemail servers housekeeping settings can be used to configure how long messages and recording are retained before the server will automatically delete them. The playback order for different types of messages can also be set. Note that the housekeeping deletion settings are not applicable for messages stored on the Exchange server.

- 1. From the Administration menu, select Preferences > General.
- 2. Click the **Housekeeping** tab.

System Preferences		
General Directories MAPI	Housekeeping SNMP AI	arm Outcalling
	Delete after	Playback Order
New messages	0 🗘 hours	FIFO 🔽
Old messages	30 🤤 days	LIFO 🗸
Saved messages	0 ᅌ hours	LIFO 🗸
Unopened messages	0 ᅌ hours	FIFO 🗸
New recordings	0 ᅌ hours	FIFO 🗸
Old recordings	30 💲 days	LIFO 🗸
Deleted messages	0 🛟 hours	
Data Backup		
Last Run: 15/10/	/2009.07:26:47 Type: Im	mediate
Next Run 15/10/	/2009-08:00:00 Type: Da	aily
Restore	Backup Now	Configure
ОК	<u>C</u> ancel	<u>H</u> elp

3. Delete after

Sets the time, in hours, after which messages of various types automatically deleted. A value of $\boldsymbol{0}$ disables automatic deletion. The actual deletion is performed during the next idle period during which there are no calls to or from the voicemail server.

4. Playback Order

Sets the order of playback used for different message types. The options are first in-first out (*FIFO*) and last in-first out (*LIFO*). *FIFO* is the default.

- The different message status types are:
 - New

This status is applied to messages where neither the header or the message content has been played.

• Old

This status is applied to messages where the user has played the message content but has not marked the message as saved.

Saved

This status is applied to messages that have been marked as saved by the user.

• Unopened

This status is used for messages where, in Intuity emulation mode, the user has played the message header but has not played the message content.

• New Recordings

This status is used for recordings that have not been played.

Old Recordings

This status is used for recordings that have been played.

Deleted Messages

This status is used for messages that have been marked as deleted through mailbox access.

5. Click OK.

6. Click 📽 Save and Make Live and select Yes.

6.5 SNMP Alarm

The IP Office system can be configured to send alarms. These alarms can be sent from the IP Office using SNMP, SMTP email or Syslog alarm formats. This tab is used to sets the levels at which the voicemail server will indicate to the IP Office to send an alarm.

To set up disk space and recording time alarms:

- 1. Display the main Voicemail Pro window.
- 2. From the **Administration** menu, select **Preferences** > **General**.
- 3. Click the SNMP Alarm tab.

System Preference	s				
General Directories	Email Hous	ekeeping	SNMP Alarm	Outcalling	
	eshold Unit pace left (Mb) ding Time left (mir	n)			
Alarm Thres	hold Level		Default Settir	ngs	
a value in te	alarm Threshold L erms of the unit se reshold Unit. or 60 min.				
	ОК	Cancel	н	elp	

- 4. Choose the Alarm Threshold Unit either Disk Space Left (MB) or Recording Time left (minutes).
- 5. In the **Alarm Threshold Level** box, type the number of units (minutes or MB) left at which SNMP alarms are to be triggered. The minimum is 11. This value also sets two further SNMP alarm levels which are:
 - Space OK Alarm

This alarm is triggered when the amount of available space returns to above a level set at *Alarm Threshold Level plus 30*.

• Critical Alarm

This alarm is set at 30 or, when the Alarm Threshold Level is less than 40, at *Alarm Threshold Level minus 10*. Currently the critical alarm value will decrease in accordance with the above rule. Note however that it does not increment upwards when the Alarm Threshold is increased again. To reset the critical alarm back to 30, click **Default Settings**.

- 6. To return to the default alarm settings, click **Default Settings**. The Alarm Threshold Level is reset to 60. The Space OK level is reset to 90. The Critical Alarm level is reset to 30.
- 7. Click OK.

8. Click 📽 Save and Make Live and select Yes.

6.6 Outcalling

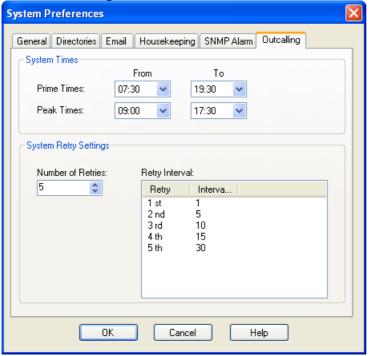
The outcalling preferences in Voicemail Pro are defaults for global operation. Mailbox owners can configure their own outcalling options from their telephone, for example, create their own time profile.

For details on configuring outcalling, refer Avaya IP Office Intuity Mailbox Mode User Guide (15-601130) and Avaya IP Office Phone Manager User Guide (15-600988).

A timeout value can also be set by a user. This is the duration for which outcalling will attempt to connect to a number before giving up.

To set the global outcalling preferences:

- 1. Display the main Voicemail Pro window.
- 2. From the Administration menu, select Preferences > General.
- 3. Click the **Outcalling** tab.



4. Select the times that outcalling is active in the **System Times** section.

- Prime Times
 - The time period that outcalling is to be active as default for the system.
- Peak Times

The busiest working hours.

- 5. Set the retry settings in the System Retry Settings section.
- 6. The **Number of Retries** can be between 0 and 10. If the message is not collected after the last retry, no notification is sent until another new message is delivered in the user's mailbox.
- 7. The **Retry Interval** for each successive retry. The interval is the length of time between each attempt to connect to the target number again. The 6th to 10th retries use the default retry interval.
- 8. Double-click a selected retry time to edit the interval between retries. The New interval number window opens where the length of time between each attempt to ring the target number can be changed. Click **OK** to save the change and return to the Outcalling window.

9. Click **OK**.

10.Click 📽 Save and Make Live and select Yes.

6.7 VPNM

This set of preferences is used to add a list of the remote VPNM servers and mailbox users on those servers.

• These features are not supported on a Linux based Voicemail Pro server.

To open the VPNM window:

- 1. Start the **Voicemail Pro Client**.
- 2. From the **Administration** menu, select **Preferences** > **VPNM**. The VPNM window opens.

Server			Prefix	
vpnm.sitea.avaya.com	I.			
Add [Delete VPNM			
sers for VPNM Server(s	J			
Isers for VPNM Server(s Server) Full Name	Local Extr	n Remote	. Num
, ,	Full Name	Local Extr 200	n Remote 200	. Num
Server	Full Name			. Num
Server	Full Name			. Num

To add a VPNM server:

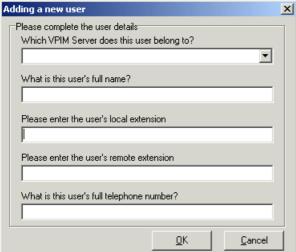
- 1. In the **VPNM Server(s)** section, click **Add**.
- 2. Enter the fully qualified domain name of the remote VPNM destination (the remote Voicemail Pro server computer or Avaya Interchange).
- 3. Enter the two digit access prefix, if these are being used.
- 4. Click **OK**.

To delete a VPNM server:

- 1. In the VPNM Server(s) section, select the server that is to be deleted.
- 2. Click Delete. When a server is deleted, all of the users associated with that server are also deleted.

To add a user to VPNM server:

1. In the Users for VPNM Server(s) section, click Add. The Adding a new user window opens.



- 2. Enter details for the user. All of these details MUST be completed before the user can be added.
 - Select the VPIM server from the listing.
 - Enter the user's full name. The user's full name is used by the local Voicemail Pro's dial by name feature.
 - Enter the user's extension. The local extension number is used as the local mailbox number and so should not conflict with any existing local number.
 - Enter the user's remote extension. The remote extension number should be the user's real extension number. Typically this and the 'local extension number' are kept the same using a unique extension number dial plan for the linked systems.
 - Enter the user's full telephone number. The full telephone number should be a dialable number that is routed to the user's extension or mailbox.
- 3. Click **OK** to save the details and return to the VPNM configuration window.

To add a group of users:

- 1. (Optional) Check the option **Enable WildCard**. When this option is selected you can use the question mark symbol (?) to represent any number.
- 2. In the Users for VPNM Server(s) section, click Add Range. The Adding a range of users window opens.

Adding a range of users		×
Arthony VIDENA Conversion de Marco		
Which VPNM Server do these	users belong to?	-
1		
Input extension range.		
Start	Number of Users	
	I	
Enter local prefix		
		_
Enter remote prefix		-1
1		
	OK Cano	el

- 3. Enter details for the users. All of these details MUST be completed before the users can be added.
 - Select the VPNM server for which you want to add the users.
 - Enter the start number of the extension range.
 - Enter the local prefix.
 - Enter remote prefix.
- 4. Click ${\bf OK}$ to save the details and return to the VPNM configuration window.

To change details of a VPNM user:

- 1. In the Users for VPNM Server(s) section, select the name of the user whose details need to be changed.
- 2. Click Modify. You can change the user's full name, the local extension number and the full telephone number.

Chapter 7. Centralized Voicemail Pro

7. Centralized Voicemail Pro

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, refer to *Avaya IP Office Manager* (15-601011).

Within a Small Community Network, the following options for providing voicemail are supported:

• <u>Centralized Voicemail</u>

Centralized Voicemail Pro uses a single Voicemail Pro server to provide voicemail services for all IP Offices in the Small Community Network. Except for use of ContactStore, only the central IP Office hosting the voicemail 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 Offices only require licenses for UMS and or for ContactStore if required.
- <u>Centralized Voicemail with Fallback IP Office</u>

Control of the voicemail server can be taken over by another IP Office if the central IP Office becomes unavailable.

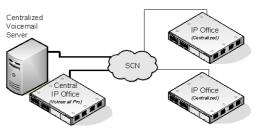
- IP Office Release 5.0+ with Voicemail Pro 5.0+.
- **Licenses:** The fallback IP Office that takes over control of the voicemail server requires licenses for Voicemail Pro operation and the features required during fallback.
- Centralized Voicemail with a Backup Voicemail Server

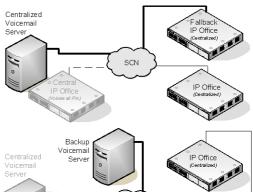
The central IP Office hosting the voicemail server can be configured with the IP address of a backup voicemail server. During normal operation, call flows and other settings on the backup server are kept synchronized with those of the primary voicemail server. If the primary voicemail server becomes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

- IP Office Release 6.0+ with Voicemail Pro 6.0+.
- IIS SMTP is used to exchange information between the servers.
- Licenses: The existing licenses are used.
- <u>Centralized Voicemail with Distributed Voicemail Servers</u> Other IP Offices 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.
 - IP Office Release 6.0+ with Voicemail Pro 6.0+.
 - IIS SMTP is used to exchange information between the servers.
 - The distributed voicemail server provides all voicemail services except voicemail collection for its associated IP Office.
 - Licenses: Each IP Office using a distributed voicemail server must have licenses for Voicemail Pro operation and the voicemail features required.

In all the cases above, the central voicemail server remains the store for messages and recordings (except for Exchange UMS users). The central voicemail server does message waiting indication and is the voicemail 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 find of the solutions above can be deployed. For example using a backup server and fallback IP Office control.

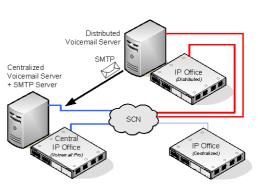




SCN

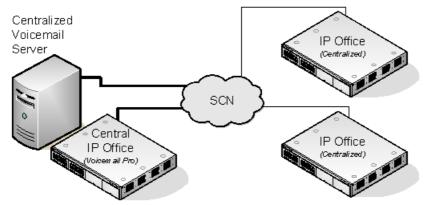
IP Office

IP Office



7.1 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 Offices in an SCN configuration.

Summary of IP Office Settings

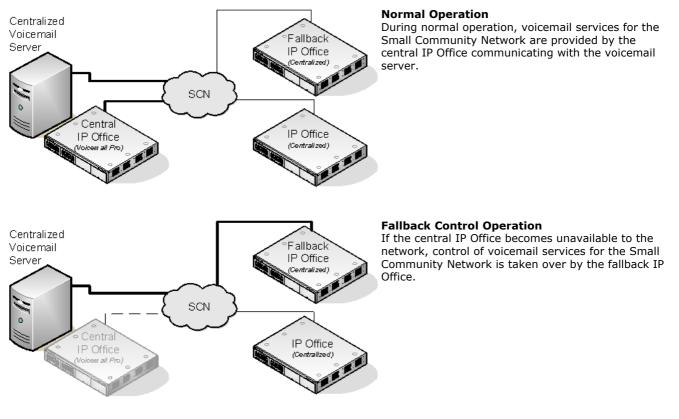
Once the IP Office SCN has been setup, the following settings are used in the IP Office systems to provide voicemail operation for all the IP Offices.

IP Office Settings	Central IP Office	Other IP Offices
Voicemail Type	Voicemail Pro	Centralized Voicemail
	Set to the voicemail 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 <u>licenses</u> [12] for all the Voicemail Pro features required.	The other IP Offices only require licenses for UMS and or for ContactStore if required.

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

7.2 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 Offices assuming control of the voicemail server should the central IP Office become unavailable on the network.



• WARNING

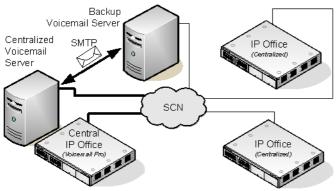
During the transition of voicemail control, access to voicemail may be unavailable for several minutes. Existing voicemail calls are disconnected and new calls are routed as if voicemail is unavailable. The same applies when the central IP Office is restored.

Setup and Requirements for Voicemail Fallback

- Within the configuration of the central IP Office hosting the voicemail 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 Options.
- 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.

7.3 Backup Voicemail Server Operation

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



Centralized voicemail with a backup server during normal operation.

Centralized Voicemail Server Centralized Server Centralized Server Centralized Server Server Centralized Centraliz

Centralized voicemail with a backup server during backup operation.

During Normal Operation:

- Voicemail services and message storage for the IP Offices is provided by the primary voicemail server.
- Call flows and other settings configured on the backup voicemail server are synchronized with those of the central voicemail server.
- Messages are synchronized but the central voicemail server remains the message store accessed for message collection.
- The synchronization is done using IIS SMTP e-mail between the servers.

During Backup Operation:

If the central voicemail server become unavailable to the network:

- The backup voicemail server provides voicemail services for the IP Offices.
- New messages are left on the backup server.

After Backup Operation

When the central server is restored to the network:

- It does not automatically resume control. However messages and changes that occurred while it was unavailable are synchronized from the backup server.
- If the backup server fails, the central sever resumes control as the active 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.

Configuring Backup Server Operation

- 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.

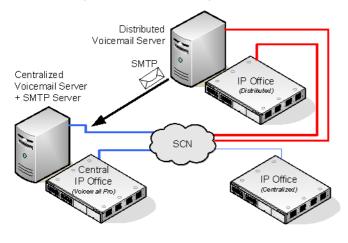
System LAN1 LAN2 I	DNS Voicemail	Telephony	Directory Services	System Events	SMTP	SMDR	Twinning	VCM	CCR
Voicemail Type Voicemail Lite/Pro				🗸 🗹 Message	s Button	Goes To	Visual Voice	Э	
Voicemail Destination				~					
Voicemail IP Address	42 20	1							
Backup Voicemail IP Addres	ss 192 - 156	42 21	1						

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

7.4 Distributed Voicemail Servers

For IP Office Release 6.0 and higher, remote IP Offices in the Small Community Network can be associated with another voicemail server in addition to the centralized voicemail 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 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 server. With the support of International Time Zone (ITZ) functionality, the users of the IP Offices 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 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 Central IP Office connects to a central Voicemail Pro server and the other IP Offices 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.

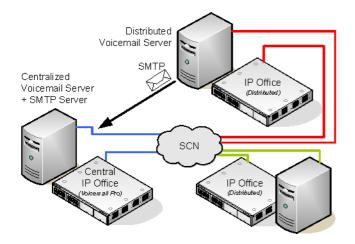
Simple Network Time Protocol (SNTP) is an Internet standard protocol (built on top of TCP/IP) that provides accurate synchronization to the millisecond of computer clock times in a network of computers. It synchronizes all the IP Offices in an SCN configuration.

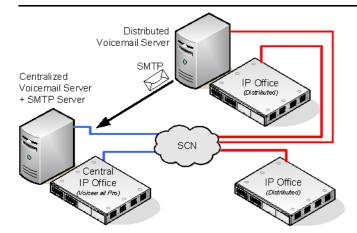
- Other IP Offices continue to use centralized voicemail as normal.
- An IP Office that is using a distributed voicemail server cannot also be used as the <u>fallback IP Office</u> [114] for the central voicemail server.
- The synchronization is done using IIS SMTP e-mail between the servers.

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

Multiple Distributed Servers

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





Sharing Distributed Voicemail Servers

The same distributed voicemail server can be shared by several IP Offices. The services it provided to each will depend on the licenses that each has.

Summary of IP Office Configuration Settings for Distributed Voicemail Severs

IP Office Settings	Central IP Office	Other IP Offices	IP Office with Distributed Server
Voicemail Type	Voicemail Pro	Centralized Voicemail	Distributed Voicemail
Voicemail IP Address	Set to the central voicemail server computer's IP address.		Set to the distributed voicemail server computer's IP address.
Voicemail Destination	Not used.	the H323 Line to the central IP	Set to the Outgoing Group ID of the H323 Line to the central IP Office.
Licenses	Voicemail Pro and all voicemail	licenses for UMS and or for	This system needs <u>licenses</u> 12 for Voicemail Pro and all voicemail features required.

Configuring Distributed Voicemail Server Operation

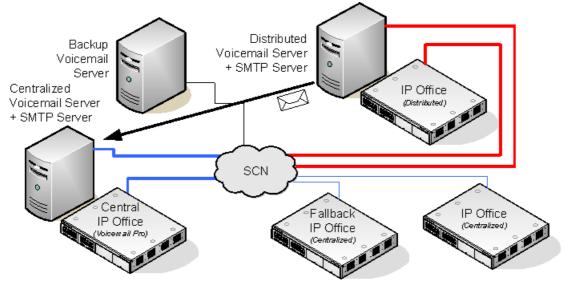
- 1. The centralized voicemail server for the SCN and its central IP Office are configured as normal.
- 2. The Voicemail Pro server software is installed as normal any distributed voicemail server computer. The distributed voicemail server is not specifically configured as being a distributed server.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

System LAN1 LAN2 DNS	; Voicemail Telepho	ny Directory Services	System Events	SMTP	SMDR	Twinning	VCM	CCR
Voicemail Type	Distributed Voicemail		Message	es Button	Goes To	Visual Voice	e	
Voicemail Destination	10		~					
Voicemail IP Address	192 - 168 - 42 -	212						
Backup Voicemail IP Address	0,0,0,	0	_					

- 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.

7.5 Combined Options

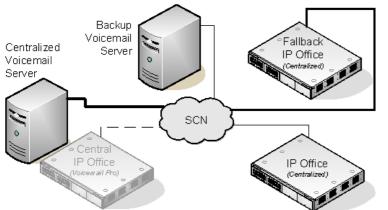
The various centralized voicemail options (standard, fallback, backup and distributed) can be used within the same Small Community Network.



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

Example: Combined Fallback Control and Backup Server Operation

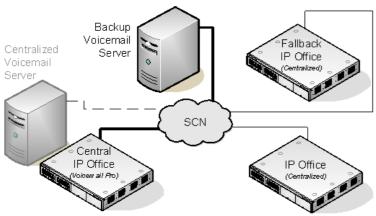
In the example below the <u>fallback IP Office control</u> and <u>backup voicemail server</u> and <u>backup voicemail</u> operation can be combined.



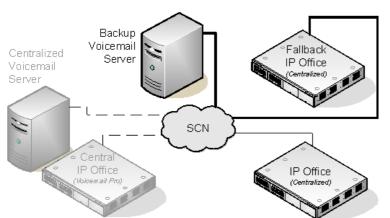
• Central IP Office Unavailable

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

Central Voicemail Server controlled by Fallback IP Office



Backup Voicemail Server controlled by Central IP Office



Combined Backup Voicemail Server and Fallback IP Office Operation

• **Central Voicemail Unavailable** If the central voicemail server becomes unavailable on the network, the central IP Office will switch to using the backup voicemail server.

• Central IP Office and Central Voicemail Server Unavailable

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

7.6 Installation Notes

SMTP Configuration

Both the distributed voicemail and backup voicemail scenarios use the same mechanism for the information exchange between the servers. That mechanism uses SMTP e-mails between the IIS on each of the voicemail servers. Note that this means a server with Microsoft Exchange installed (such as an SBS server) cannot be used as Exchange replaces the IIS SMTP service.

The following notes apply to both scenarios unless specifically stated as otherwise.

1. Install and Enable IIS

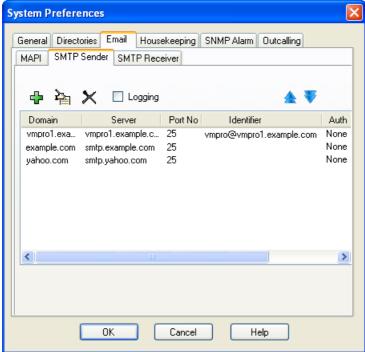
All the voicemail servers (central, distributed and backup) require IIS to be installed and enabled on the server before installation of the Voicemail Pro server software.

- 1. Start the Internet Information Services manager.
- 2. Right-click on the Default SMTP Virtual Server and select Properties.
- 3. Select the **Messages** tab. 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, its should be configured for SMTP e-mail operation as follows:

- a. By default the Voicemail Pro server installs defaulted to SMTP e-mail operation. However this should be checked.
 - 1. Start the Voicemail Pro Client. Click 🖗 Preferences and select General.
 - 2. Click the **E-mail** tab.
 - 3. Verify that the \underline{MAPI} settings are not enabled. .
 - 4. Select the **<u>SMTP Sender</u>** with sub tab. The first entry in the list must be configured for SMTP between the voicemail servers. Set the **Domain** and **Server** to the fully qualified domain name of the voicemail server.



• For a Windows based voicemail server, these e-mails will be received on port 25 by IIS and will be placed in its mail drop folder. To obtain the name, right-click on **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.

System Properties			?			
System Restore	Automa	atic Updates	Remote			
General Co	mputer Name	Hardware	Advanced			
Windows uses the following information to identify your computer on the network.						
For example: "IIS Production Server" or "Accounting Server".						
Full computer name:	vmpro1.examp	ole.com				
Domain:	example.com					

5. Select the **SMTP Receiver** 103 sub tab.

System Preferences	×
General Directories Email Housekeeping SNMP Alarm Outcalling MAPI SMTP Sender SMTP Receiver	
SMTP Receiver	
Port 25	
Domain vmpro1.example.com	
OK Cancel Help	

• For a Windows based server, set the **SMTP Receiver** as **External** and set the **Drop Folder** address to be the IIS mail drop folder (usually **C: \Inetpub \mailroot \Drop**).

• Click OK.

6. Click **礒 Save & Make Live**.

3. 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.

4. DNS Host Routing (Optional)

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 will need to be reflected in the file update. Locate the file **C**: \Windows\System32\drivers\etc\hosts and open it in a text editor such as WordPad. Add IP address and fully qualified domain name entries for each of the other voicemailservers.

Voicemail Pro Configuration

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

IP Office Configuration

Configuring Distributed Voicemail Server Operation

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

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

System	LAN1	LAN2	DNS	Voicemail	Telephony	Directory Services	System Events	SMTP	SMDR	Twinning	VCM	CCR	
Voicemail Type Centralized Voicemail						Message	es Button	Goes To	Visual Voice	e			
Voicemail Destination			10	1			*						
Voicemail IP Address				_									
Backup	Voicema	il IP Addr	ess) , 0 ,	0,0								

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

Configuring Distributed Voicemail Server Operation

- 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**.

System LAN1 LAN2 DN:	5 Voicemail Telephony	Directory Services	System Events	SMTP	SMDR	Twinning	VCM	CCR
Voicemail Type Distributed Voicemail V Messages Button Goes To Vis						Visual Voice	e	
Voicemail Destination	10		~					
Voicemail IP Address	192 168 42 2	12						
Backup Voicemail IP Address	0,0,0,	0						

- 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.

Configuring Backup Server Operation

- 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.

System LAN1 LAN2 DNS	; Voicemail Telepho	ny Directory Services	System Events	SMTP	SMDR	Twinning	VCM	CCR
Voicemail Type	Voicemail Lite/Pro		🔽 🗹 Message	es Button	Goes To	Visual Voice	э	
Voicemail Destination			~					
Voicemail IP Address	192 - 168 - 42 -	201						
Backup Voicemail IP Address	192 - 156 - 42 -	211						

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

Check the Server Connections

1. Check Connection to the Central Server

In the following tests, remember to use the fully qualified domain name of each server.

a. Ping Test

Make a ping from the server to the central server, for example **ping vmpro1.example.com**. You should see a series of 4 successful replies from the sever.

b. Telnet Test

Make a telnet test from the server to the central server, for example **telnet vmpro1.example.com 25**. You should receive a response from the e-mail server within IIS. Enter **quit** to close the telnet connection.

2. Check Connection from the Central Server

Repeat the ping and telnet tests, this time from the central server to the backup or distributed server.

Checking Status with the Voicemail Pro Client

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

📴 Voicemail Pro Client (Intuity) - Loca	al				Centralized	Yoicemail
Eile Edit Actions Administration	<u>H</u> elp					
🎕 🖻 🖻 🖄 💒	\$ *· \$ /	2 💆 🖊	<u></u>	<u>- 7 .</u>	<u></u> .	öş _ü −
O0E007026F2F (192.168.42.1) Voicemail Pro Administrators Server Queues Distributed Voicemails	Name partnerxp.kilmister.com			Last Activity 27/11/2009 09:44	Result Up-To-Date	

When connected to the backup voicemail server, if it is the active server, the title will have changed from **Backup Voicemail** to **Backup Voicemail (Live)**.

When connected to the centralized voicemail 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** will be either:

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

The servers are synchronized.

Chapter 8. Appendix

8. Appendix 8.1 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.

8.2 Installing VoiceMail Pro as an ACM Gateway

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.

To install the ACM Gateway:

- 1. Insert the **IP Office Applications** DVD. Click **Voicemail Pro**, and then double-click **setup.exe**. The **Choose Setup Language** window opens.
- 2. Select the installation language. This language is used for the installation and for the default language prompts.
- 3. Click **OK**. Installation preparation begins.
- 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.
- 5. If the **Modify, repair or remove the program** window is displayed, follow the <u>upgrade process</u> 28.
- 6. In the Welcome window, click Next. The Customer Information window opens.
- 7. 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.
- 8. 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.
- 9. In the **Customer Information** window, click **Next**. The **Choose Destination Location** window opens.
- 10. In the **Choose Destination Location** window, click **Browse** and locate the folder where the Voicemail Pro files are to be installed. Otherwise, click **Next** to use the proposed folder. The **Messaging Components** window opens.
- 11. In the Messaging Components window, select ACM Gateway.
- 12. Click **Next**. The **Service Account Name** window opens. Details of the default administrator account may already be filled in.
- 13. In the **Service Account Name** window, type the **User Name** and **Password** for the user account under which the Voicemail Pro service should run. This should be the **Voicemail** account created previously on the domain and Exchange server. Alternatively, click **Browse** and select from the list of available computer or network accounts or click **Next** to use the proposed account details. The **Select Program Folder** window opens.
- 14. 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. Alternatively, to use an existing folder, highlight a name in the list of existing folders.
- 15. Click **Next**. The account details that you entered are verified. If you entered a user name that does not exist, the system prompts you whether to create a new computer user account with the specified name and password. Click **Yes**. The **Select Program Folder** window opens.
- 16.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.
- 17. 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.
- 18. Review the settings to make sure that they are what you expect.
- 19. 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.
- 20. When the installation is complete, you are prompted to restart the computer. Choose **Yes I want to restart my computer now**.
- 21.Click **Finish** to restart the computer.
- 22. When the computer restarts, log back in. The **IP Office Voicemail Pro ACM Gateway Settings** window opens.
- 23. In the Mail Server box, type the name of the mail server to use.
- 24. Choose **Message Networking/Interchange** to use Interchange or **Modular Messaging** to use Modular Messaging.1.
- 25. Click Next. The IP Office Voicemail Pro SMTP E-mail Settings window opens.
 - In the **Mail Server** box, type the name of the SMTP mail server. This should be the fully qualified domain name.
 - In the **Port Number** box, type the number of the receiving port on the SMTP mail server. The default is 25.
 - 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.

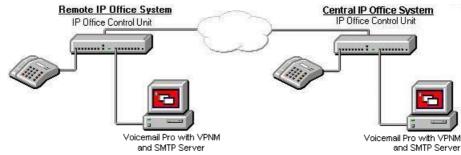
- To enforce server authentication, check the **Server Requires Authentication** box. This is optional. If you check this option you also need to enter the account name and password. You can also choose whether or not to set the **Use Challenge Response Authentication** option.
- 26. Click **Finish**. The e-mail settings are validated. 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 is displayed. You might need to start the Voicemail service manually. See <u>Starting the Voicemail Pro Service</u> [27].
- 27. Click **OK** to acknowledge the message. You have now finished installing the Voicemail Pro ACM Gateway software.

8.3 Installing Networked Messaging (VPNM)

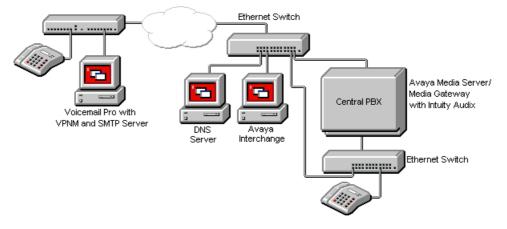
Voicemail Pro Networked Messaging (VPNM) supports users to forward voicemail to mailboxes on remote voicemail systems. This is done by adding a VPNM component to the Voicemail Pro installation.

The messages are transferred between systems using an SMTP/MIME mail format to encode both the voice part of the message and additional message details.

Here is a diagram to illustrate VPNM between two IP Office systems.



Here is a diagram of a sample VPNM configuration between an IP Office and Avaya Interchange. Depending on how your IP Network is set up, the configuration will differ slightly.



Up to 2000 mailboxes are supported per VPNM server and there is no constraint on the number of VPNM servers. However, to distinguish between dial plans you might need to allocate a dial pre-fix to each server. A maximum of 99 pre-fixes are available.

This section summarizes the steps required for installing VPNM between two IP Office systems and between an IP Office system and an Intuity Audix system through Avaya Interchange.

The instructions provided here should be read in conjunction with the other Avaya guides, for example *Avaya Interchange Adding a VPIM System to Your Network*. This is because the setup for Interchange VPIM is the same as for VPNM.

8.3.1 Requirements for VPNM

Check for the following before installing VPNM:

- A Voicemail Pro server with VPNM installed connected to each IP Office system. Each system will need a license for both Voicemail Pro and VPNM.
- All systems in the VPNM network need to be tested for their connectivity to the IP network. It is suggested that you test the following:
 - Ping the IP Addresses.
 - Ping the computer names. If in a domain, ping the fully qualified domain name.
- The Voicemail Pro Servers must have an SMTP server installed. This can be done using the SMTP component of Internet Information Service (IIS).
 - To test type "Telnet <the name of the SMTP server> 25".
 - Server names, where entered, must be fully qualified domain names.
- Voicemail Pro should not be installed on the same server as Exchange and/or the domain controller.

8.3.2 Installing VoiceMail Pro with VPNM Support

For Voicemail Pro 6.1, the VPNM components are embedded parts of the Voicemail Pro service and so automatically installed.

8.3.3 Configuring VPNM Preferences

This set of preferences is used to add a list of the remote VPNM servers and mailbox users on those servers.

• I These features are not supported on a Linux based Voicemail Pro server.

To open the VPNM window:

- 1. Start the Voicemail Pro Client.
- 2. From the Administration menu, select Preferences > VPNM. The VPNM window opens.

VPNM (via SMTP serve VPNM Server(s)	r pcsserver)			
Server		F	Prefix	
vpnm.sitea.avaya.com				
Add	elete VPNM			
Users for VPNM Server(s)				
Server	Full Name	Local Extn	Remote	Numbe
vpnm.sitea.avaya.com	Bob Jones	200	200	
•				
Add	odify <u>D</u> el	ete Add <u>F</u>	<u>R</u> ange	
🔽 Enable WildCard		<u> </u>	elp	<u>C</u> lose

To add a VPNM server:

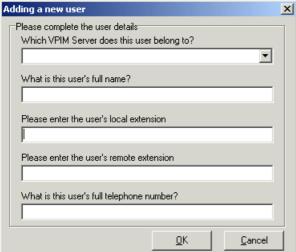
- 1. In the VPNM Server(s) section, click Add.
- 2. Enter the fully qualified domain name of the remote VPNM destination (the remote Voicemail Pro server computer or Avaya Interchange).
- 3. Enter the two digit access prefix, if these are being used.
- 4. Click **OK**.

To delete a VPNM server:

- 1. In the VPNM Server(s) section, select the server that is to be deleted.
- 2. Click Delete. When a server is deleted, all of the users associated with that server are also deleted.

To add a user to VPNM server:

1. In the Users for VPNM Server(s) section, click Add. The Adding a new user window opens.



- 2. Enter details for the user. All of these details MUST be completed before the user can be added.
 - Select the VPIM server from the listing.
 - Enter the user's full name. The user's full name is used by the local Voicemail Pro's dial by name feature.
 - Enter the user's extension. The local extension number is used as the local mailbox number and so should not conflict with any existing local number.
 - Enter the user's remote extension. The remote extension number should be the user's real extension number. Typically this and the 'local extension number' are kept the same using a unique extension number dial plan for the linked systems.
 - Enter the user's full telephone number. The full telephone number should be a dialable number that is routed to the user's extension or mailbox.
- 3. Click **OK** to save the details and return to the VPNM configuration window.

To add a group of users:

- 1. (Optional) Check the option **Enable WildCard**. When this option is selected you can use the question mark symbol (?) to represent any number.
- 2. In the Users for VPNM Server(s) section, click Add Range. The Adding a range of users window opens.

Adding a range of users		×
Arthony VIDNING Conversion of the second		
Which VPNM Server do these	users belong to?	
I		
Input extension range.		
Start	Number of Users	
	J	
Enter local prefix		
Enter remote prefix		
1		
	OK Cancel	
		1

- 3. Enter details for the users. All of these details MUST be completed before the users can be added.
 - Select the VPNM server for which you want to add the users.
 - Enter the start number of the extension range.
 - Enter the local prefix.
 - Enter remote prefix.
- 4. Click ${\bf OK}$ to save the details and return to the VPNM configuration window.

To change details of a VPNM user:

- 1. In the Users for VPNM Server(s) section, select the name of the user whose details need to be changed.
- 2. Click Modify. You can change the user's full name, the local extension number and the full telephone number.

8.3.4 Testing a VPNM Setup

It is advisable to test the VPNM setup.

To test the VPNM setup:

- 1. Dial into voicemail from one of the systems and record a message.
- 2. When selecting the target extension, enter an extension from the other system as specified in the VPNM Preferences screen.
- 3. The message should be delivered to the other systems Voicemail Pro server into C:\\Inetpub\mailroot\Drop.
- 4. The **VPNMreceiver Service** checks the Drop directory approximately every 30 seconds. When it finds a message in the Drop directory, it will send the message to the relevant extension's voicemail box on the remote system.

8.4 Glossary

8.4.1 Centralized Voicemail Pro Server

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

8.4.2 Distributed Voicemail Pro Server

For IP Office Release 6.0 and higher, remote IP Offices in the Small Community Network can be associated with another voicemail server in addition to the centralized voicemail 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.

8.4.3 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.

8.4.4 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 Offices in an SCN configuration.

8.4.5 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.

8.4.6 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.

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