IP Office 5.0

Voicemail Pro

15-601063 Issue 21c - (16 July 2009)

Avaya Fraud Intervention
If you suspect that you are being victimized by toll fraud and you need technical assistance or support, call Technical Service Center Toll Fraud Intervention Hotline at +1-800-643-2353 for the United States and Canada. Suspected security vulnerabilities with Avaya Products should be reported to Avaya by sending mail to: securityalerts@avaya.com.
For additional support telephone numbers, see the Avaya Support web site (http://www.avaya.com/support).

Documentation information
For the most current versions of documentation, go to the Avaya Support web site (http://www.avaya.com/support) or the IP Office Knowledge Base (http://marketingtools.avaya.com/knowledgebase/).

Avaya Support
Avaya provides a telephone number for you to use to report problems or to ask questions about your contact center. The support telephone number is 1 800 628 2888 in the United States. For additional support telephone numbers, see the Avaya Web site: http://www.avaya.com/support.

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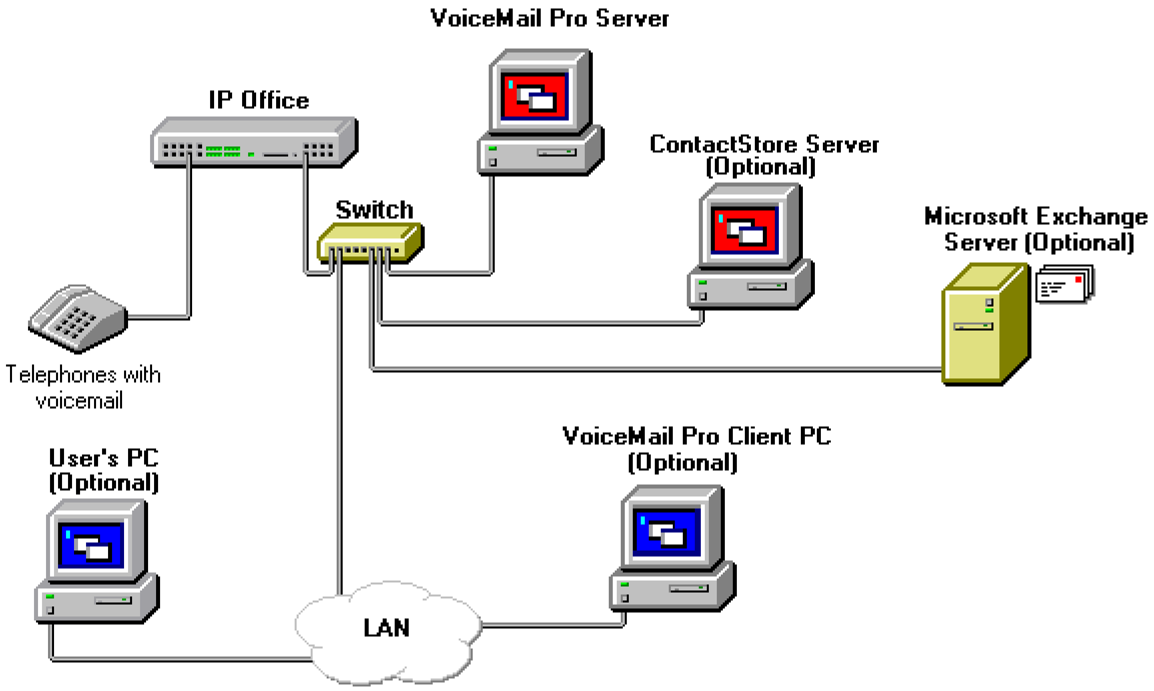
Chapter 1.
Voicemail Pro

1. Voicemail Pro

The diagram illustrates a Voicemail Pro system with some of the setup options. Full details on the installation options available are covered in the Installing Voicemail Pro 18 section.


VoiceMail Pro Server
IP Office
ContactStore Server (Optional)
Switch
Microsoft Exchange Server (Optional)
Telephones with voicemail
User's PC (Optional)
VoiceMail Pro Client PC (Optional)
LAN

- **IP Office Control Unit**
  The IP Office Voicemail Pro licenses are entered into the configuration of the IP Office system. The licenses are required to activate Voicemail Pro features. An unlicensed Voicemail Pro service will run for two hours to allow demonstration and testing. License keys are issued against and validated against the unique serial number of the feature key dongle used by the IP Office. For USB and parallel port feature key dongles, the dongle must be installed on a PC running the IP Office Feature Key Server application.

- **Voicemail Pro Server**
  The Voicemail Pro Service is installed on the Voicemail Pro server PC. This becomes the PC where messages and other data are stored for the mailboxes and services provided by Voicemail Pro.

- **Voicemail Pro Client**
  The Voicemail Pro Client is used to manage and configure the Voicemail Pro service. It can be installed on the Voicemail Pro server PC or on a separate PC. Only one client can connect to the server at any time.

- **Telephone Extension**
  For internal extensions, the voicemail server can be configure to send message waiting indication. By default this is automatically done when the extension users own mailbox contains new messages.

- **User's PC**
  The following applications can be used on a user's PC to access their messages:

  - **Phone Manager**
    IP Office Phone Manager can be used to display the number of new messages in a mailbox and to access that mailbox. The Pro version of Phone Manager can also control the playback of the individual messages once a mailbox has been accessed.

  - **Web Browser**
    If the Voicemail Pro server PC is also running Microsoft's IIS web server, users can access voicemail features.

    - **Web Campaigns**
      The web campaigns option can be used to collect spoken and key press responses to question from callers and then display those responses to internal agents.

    - **Web Voicemail**
      For Voicemail Pro 4.2+, UMS licensed users can be configured to access their own mailbox using a web browser.

  - **Email Options**
    The voicemail server can interact with email systems in a number of ways:

  - **Voicemail Email**
    The Voicemail can, using either MAPI or SMTP, indicate the delivery of a new message to the voicemail store by issuing an emailed Voicemail Alert, or attaching a copy of the Voicemail to the email. Please note these options do not support the synchronization of messages between the users email program and their voicemail mailbox. In addition to the Alert and Copy capability, the Voicemail also offers the ability to forward voicemail messages to the email store. Unless the user is a UMS licensed user and the mail store is Exchange 2007, the voicemail messagess delivered via a Forward will only be accessible via the users email Client.

  - **IMAP**
    For Voicemail Pro 4.2+, UMS licensed users will be able to access their voicemail messages, stored in the Voicemail Store, via email clients such as Outlook that support an IMAP Client. This capability includes synchronization between the voicemail messages presented via the email client and the voicemail mailbox.

  - **Exchange Integration - Unified Messaging System (UMS)**
    For Voicemail Pro 5.0+, UMS licensed users delivering voicemail messages into Exchange 2007, utilizing an Outlook 2007 email client, will have their voicemail messages presented using the Microsoft media controls, without the need to install any client side components. For UMS licensed users, using the Voicemail to email forward capability, where Exchange 2007 is the email store, the emails delivered into exchange will be accessible via the TUI and visual voice. Note: Voicemail messages forwarded onto an email store will not be accessible via the Web Services or IMAP interfaces.

- **ContactStore Server**
  The current IP Office Voice Recording Library (VRL) application is Avaya IP Office ContactStore. The application can be installed on the Voicemail Pro Server in a separate hard disk partition or on a separate server. The diagram illustrates the option of installing ContactStore on a separate server.

Voicemail Pro is supplied the IP Office User and Admin Applications DVD. Voicemail Pro ScanSoft TTS is supplied as a separate 2 DVD set.

1.1 What is New in 5.0

The following is a summary of the new features in the IP Office Voicemail Pro 5.0 release. For details of previous releases refer to the Appendix 366.

Voicemail Pro 5.0

- **ContactStore 7.8**
  The ContactStore software has been updated to version 7.8. The new version uses a different database format and supports a wider range of search options. The method of interaction with the voicemail server and IP Office has not changed. However, ContactStore 7.8 has not been tested with pre-5.0 versions of Voicemail Pro and IP Office. For full details refer to the IP Office ContactStore Installation manual.

- **Updated TTS (ScanSoft) Prompts and Software**
  The TTS (ScanSoft) software include with Voicemail Pro 5.0 has been updated. The change allows:

    - **Additional Languages**
      Additional language support for Chinese (Mandarin), Danish, Finnish, French Canadian, Greek, Hungarian, Polish, Portuguese and Swedish. The set of TTS languages now matches the recorded prompt languages provided by Voicemail Pro with the exception of Hungarian.

    - **Vista Support**
      The updated TTS drivers are supported on Vista and on 64-bit versions of supported Windows operating systems.

IP Office Configuration Changes

The following changes to the IP Office 5.0 configuration are applicable to Voicemail Pro 5.0.

- **IP500 Support**
  Voicemail Pro 5.0 no longer requires the IP Office to have an ***IP500 Upgrade Standard to Professional*** license.

- **IP500 Voicemail Pro Ports** 16
  For IP500 control units, the maximum number of licensable voicemail channels has increased to 40.

- **System Default Mailbox Breakout Numbers** 107
  Breakout numbers allow callers to select to be redirected to another destination while listening to a user's mailbox greeting. Each user mailbox can have up to 3 possible breakout numbers set, accessed by the caller dialing 0, 2 or 3. IP Office 5.0+ allows system default numbers to be set for each mailbox breakout. These system defaults are then applicable to all user mailboxes unless overridden by a user's own breakout number settings.

- **User Rights Mailbox Breakout Numbers**
  User mailbox breakout numbers can also be set through user rights.

- **Additional Breakout Number Support in IP Office Mailbox Mode**
  The additional breakout numbers 2 and 3 are now supported on Voicemail Pro systems running in IP Office mailbox mode.

- **Forward Unconditional to Voicemail** 237
  Within the IP Office configuration for a user's forwarding settings, for **Forward Unconditional** the option ***To Voicemail*** can be selected. This will override any forwarding number set and send calls immediately to voicemail when forward unconditional is enabled. This option is supported with all IP Office voicemail types including Voicemail Pro.

- **Small Community Network Fallback** 52
  Within an IP Office Small Community Network, voicemail server is associated with a central IP Office via which it provides voicemail services to all the IP Offices in the SCN. IP Office 5.0 provides a number of SCN fallback settings, including allowing the voicemail server to work with a fallback IP Office if the central IP Office is removed from the network for any reason. This feature is configured within the IP Office configurations and requires the fallback IP Office to have the appropriate licenses for the voicemail features required during fallback.

UMS Enhancements

The following additions have been made to UMS operation:

- **Hunt Group Mailbox Support** 41
  Hunt group mailboxes are now supported. A UMS Web Service option is available on the Hunt Group | Voicemail tab within the IP Office configuration. The use of this option allows access to the hunt group mailbox messages using IMAP or a web browser. This consumes UMS Web Service licenses in the same way as enabling users for UMS.

- **Web Browser Playback Enhancements** 304
  The Web Browsers message playback interface has been enhanced to allow the user to call the sender of the message, if the CLI is know, or select ‘previous’, ‘next’, ‘first’ or ‘last’ message without leaving the interface. In addition the message forward capability has been enhanced to ease the selection of destinations.

- **UMS Exchange 2007** 47
  A UMS licensed user configured to use Exchange 2007 as the Voicemail store, by setting the Voicemail to email forward option, will have their voicemail messages delivered into Exchange, and will still be able to get access to the voicemail messages via the Telephone User Interface (TUI) and Visual Voice, as well as being provided access by Exchange Compatible applications using interfaces such as Exchange Web Services, or the Exchange IMAP server. Please note, the VMPro Web Services, or the VMPro IMAP server will only present messages in the Voicemail Store, therefore in the instance where the voicemail messages have been forwarded on to another mail store, these messages will not be presented by these interfaces. Mail stores such as Exchange 2007 provide their own methods for IMAP and Web browsing which would then be the interfaces of choice.

Call Flow Actions

The following changes have been made to Voicemail Pro actions.

- **Whisper Action** 201
  Two new options are now provided by the Whisper action. The action can now be used requiring a caller recording. The transfer target is still able to accept or reject the call but will do this based on the displayed text and the prompts pre-recorded with the action when it was setup. Whisper calls can also be used with auto accept. When selected, after hearing the caller's recording and the action prompts the call is automatically connected to the transfer target.

- **Alarm Set** 214
  This action was previously restricted to setting up a single non-repeated alarm back to an internal caller's own extension. The action has now been enhanced to allow the setup of alarms to other extension and repeating alarms.

- **Clock Action** 216
  The clock action can now be used to say the time just once before moving to the next call flow action or to repeat the time until the caller presses a DTMF key or hangs up.

- **Increment and Test Counter** 226 / **Decrement and Test Counter** 225
  These two new actions have been added to the list of Condition actions. They can be used to change the value of one of the 15 new ***$COUNTER*** call variables and then branch the call flow if the new value matches a specified target value.

- **Transfer** 199 **/** **Assisted Transfer** 207
  These actions now include an option to change the caller's priority prior to the transfer.
  - For the **Transfer** action, transferring to a short code is now supported.

- **Generic Action** 165
  The **Specific** tab settings of this action have been changed to allow the entry of generic commands by the selection from a list of commands and then completion of relevant parameters. The resulting text string for the resulting generic command can still be displayed and edited if required or if a generic command not included in the parameterized command list is being used.

Call and User Defined Variables

The following changes have been made to the call and user defined variables provided by the voicemail server.

- **$COUNTER** 140
  A set of $COUNTER call variables, $COUNTER1 to $COUNTER15 have been added. The value of these can be set, incremented and decremented using Generic actions and the specific Increment and Test Counter, Decrement and Test Counter actions.

- **User Defined Variable Display** 126
  The current values of all the user defined variables can be displayed and edited through using the Voicemail Pro client. This is done by selecting **Server Queues** and then **User Variables** in the left hand navigation pane.

Voicemail Pro Client Changes

- **Minimum Message Length** 89
  Through the voicemail server's general preferences, the minimum message length saved by the voicemail server can be seen and changed. The value can be set between 0 and 10 seconds.

- **Navigation Changes** 123
  A number of changes have been made to the items that can be selected in the left hand navigation pane of the Voicemail Pro client.
  - **Users / Groups** 124
    Selecting Users or Groups in the left hand navigation pane displays details for each mailbox. Voicemail Pro 5.0 provides the following additional options when using this display.

  - **Disable Mailbox**
    By right clicking on a listed mailbox and selecting **Disable Mailbox**, the use of the mailbox can be disabled. Attempts to connect to the mailbox will receive number unobtainable indication from the voicemail server.
  - **Clear Mailbox**
    By right-clicking on the listed mailbox and selecting Clear Mailbox, all existing messages and prompts in the mailbox are deleted.
- **Server Queues** 126
  The option **Server Queues** in the navigation pane gives access to the following information.
  - **Alarms** 128
    When selected, outgoing alarms calls set using Alarm Set actions are listed in the Voicemail Pro client's right hand pane. The list can also be used to add, delete alarms and to edit alarm settings.
  - **User Variables** 126
    When selected, the current values of user defined variables are listed in the Voicemail Pro client's right hand pane. The list can be used to add, delete user defined variables and to edit the current value of those variables.
  - **Outcalls** 129
    When selected, outgoing calls being made or scheduled to be made by the voicemail server are listed in the Voicemail Pro client's right hand pane. The list can be used to delete calls.
- **Conditions Import/Export** 131
  Existing conditions can now be exported to a file and then imported into the configuration of another Voicemail Pro 5.0+ system.

1.2 Features of Voicemail Pro

Voicemail Pro provides voicemail for every telephone on the system. Messages can be retrieved from a user's own extension or from another telephone. Voice messages can also be forwarded to other voice mailboxes. Using Voicemail Pro call flows can be created that can, for example, guide a caller to the correct extension.

Listed below are some of the differences between Embedded Voicemail and Voicemail Pro. For a fuller comparison, see the product description.

Feature	Embedded Voicemail	Voicemail Pro
Integration with Phone Manager Pro.	✗	✓
Create personal greetings.	✓ 1 only	✓ 9 max
Selection of voicemail transfer numbers	✓	✓
Play a greeting continuously.	✗	✓
Forward or copy a message to Email.	✗	✓
Listen to an Email using Text To Speech.	✗	✓
Send Email Notification.	✓*	✓
Forward a voice message to another mailbox or multiple mailboxes.	✓	✓
Forward a voice message to multiple mailboxes using a Personal Distribution List.	✗	✓
Forward a voice message with a header	✓	✓
Rewind Message	✓	✓
Fast forward a message	✓	✓
Skip a message	✓	✓
Pause a message	✗	✓
Skip Message	✓	✓
Set message priority	✗	✓
Control when old messages are automatically deleted.	✗	✓
Alphanumeric data collection	✗	✓
Give callers a choice of transfer options.	✓	✓
Call recording	✗	✓
Create Campaigns	✗	✓
Receive message notification at destinations configured by the user (known as Outcalling).	✗	✓
Transfer to Fax	✓	✓
Reply to a message if CLI is available	✓	✓

*Added in IP Office 4.2.

1.3 Supported Languages

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

Language	WAV Folder	Fallback Selection	TTS 5.0
Brazilian Portuguese	ptb	> pt > en.	✓
Chinese (Cantonese)	zzh	> en > enu.	✓
Chinese (Madarin)	ch	> en > enu.	✓
Danish	da	> en.	✓
Dutch	nl	> en.	✓
English UK	en	en.	✓
English US	enu	> en.	✓
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.	✓
Korean:	ko	> en.	✓
Latin Spanish	eso	> es > enu > en.	✓
Norwegian	no	> en.	✓
Polish	pl	> en.	✓
Portuguese	pt	> ptb > en.	✓
Russian	ru	> en.	✓
Spanish	es	> eso > en.	✓
Swedish	sv	> en.	✓

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 for 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.
System Locale	If no user or incoming call route locale is set system locale is used unless overridden by a short code locale.
Incoming Call Route Locale	The incoming call route locale, if set, is used if 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 table of languages above 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** 193 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. See Support for Callers with Impaired Hearing 273.

1.4 Number of Simultaneous Users

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

Specific functions can have voicemail channels reserved 115 for their use or may have channel restrictions.

IP Office	Maximum for Voicemail Pro
Small Office Edition	10
IP406 V2	20
IP412	30
IP500	40[1]

1. 30 ports on pre-IP Office 5.0 systems.

- **Voicemail Pro Licenses** 24
  The actual number of ports available on Voicemail Pro is controlled by license keys entered through IP Office Manager.
  - The **Voicemail Pro** license enables 4 ports.
  - **Additional Voicemail Pro** licenses can be added to enable further ports up to the maximum shown in the table.
- **VoIP/VCM Channels**
  Though linked to the IP Office via a LAN connection, voicemail does not use VoIP VCM channels. The Voicemail Server is seen as a device on the IP Office's TDM telephony interface.
  - Calls to/from voicemail involving non-IP trunks and extensions do not use VCM channels.
  - Calls to/from voicemail from IP trunks and extensions do use a VCM channel.

Chapter 2.
Installing Voicemail Pro

2. Installing Voicemail Pro

Voicemail Pro 5.0 can be installed with the following IP Office systems:

- **IP406 V2.**
- **IP412.**
- **IP Office 500**

2.1 General Installation Requirements

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

- A PC 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 and if necessary (ie. for parallel and USB feature keys) a PC running the IP Office Feature Key Server application. Refer to the IP Office Installation Manual for details.
- Licenses based on the serial number of the IP Office Feature Key. This 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 2 hours and then shut down.
  - Licenses for any other Voicemail Pro components being installed, see Voicemail Pro Licenses 24.
- **IP Office Applications DVD**.

Tips

- Before you start to install Voicemail Pro it is advisable to check that the PC 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 PC and hard disk sleep, power down, suspend, hibernation modes.
- The Voicemail Pro software needs to be installed using an account with full administrator rights on the PC. The service subsequently runs under that account. We recommend that a specific account is created for this purpose and set so that its password does not expire.

2.1.1 PC Specification

The PC specifications given below are the minimum required. To avoid having to replace the server when upgrading we recommend that at least a Pentium 4 2.8GHz or higher is used wherever possible.

This application requires various licenses entered into the IP Office configuration to control the features it offers and the number of simultaneous connections 16, 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. This allows the remote administration of the Voicemail Pro server from a PC 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 5.0 Applications DVD (700472863)
Languages	See Supported Languages 15.
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. The resulting recordings can then be played back by users. The web aspect of campaigns allows user 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 PC as the Voicemail Pro software.
- **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.
- **UMS Web Voicemail**
  UMS allows users to access their voicemail mailbox using either an IMAP compatible email program or through their web browser. UMS Web Voicemail requires the Voicemail Pro service to be installed on a server PC that has IIS already present. It also installs PHP if not detected as already present.

- **Installation on Windows Server Operating Systems**
  On many Windows server PC's, 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 PC to have a sound card installed.
  1. Ensure that you have full administrator rights for the PC. This process will also require the PC to be restated.
  2. In the Windows Control Panel select **Sounds and Audio Devices**.
  3. If Windows Audio has not been enabled, select the **Enable Windows Audio** check-box.

Notes:

1. Use of the **Large Fonts** setting is not supported. Use of this option may cause options on some screens to become inaccessible.
2. A 100Mbps network card is strongly recommended.
3. Free disk space requirements 23 are also subject to the message storage required.

Basic Voicemail Pro

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

*Also allow 1MB per minute for message and prompt storage.

Operating System Support	
Server OS:	
2000 Server	✗
2003 Server	✓
2008 Server	✓
Client OS:	
2000 Professional	✗
XP Professional	✓
Vista Business/Enterprise	✓
Vista Ultimate	✓

Voicemail Pro plus UMS Web Voicemail and/or Campaigns

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

*Also allow 1MB per minute for message and prompt storage.

Operating System Support	
Server OS:	
2000 Server	✗
2003 Server	✓
2008 Server	✓
Client OS:	
2000 Professional	✗
XP Professional	✗
Vista Business/Enterprise	✗
Vista Ultimate	✗

- Both Web Campaigns and UMS Web Voicemail require the IIS web server on the voicemail server PC to be enabled.
  - 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.
- UMS Web Voicemail will install PHP is not detected as already installed.

Voicemail Pro plus IMS

Note that IMS is not supported with UMS. The installation of IMS is not covered by this documentation. For details of IMS refer to the Voicemail Pro 4.2 Installation manual.

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

*Also allow 1MB per minute for message and prompt storage.

Non OS Applications	IMS
Microsoft Exchange 2000	Yes
Microsoft Exchange 2003	Yes
Microsoft Exchange 2007	No
Microsoft Outlook 2003*	Yes
Microsoft Outlook 2007*	Yes

*Not supported in caching mode.

Operating System Support	
Server OS:	
2000 Server	✗
2003 Server	✓
2008 Server	✗
Client OS:	
2000 Professional	✗
XP Professional	✗
Vista Business/Enterprise	✗
Vista Ultimate	✗

Voicemail Pro plus IVR and or TTS

Minimum PC 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

Also allow 1MB per minute for message and prompt storage.

Operating System Support	
Server OS:	
2000 Server	✗
2003 Server	✓
2008 Server	✓
Client OS:	
2000 Professional	✗
XP Professional	✓
Vista Business/Enterprise	✓
Vista Ultimate	✓

- If the database being queried is located on the VM Pro server the query speed of the database will be affected by the amount of memory available. Please take into account the memory requirements of the database being queried.

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 17 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 meet.

Voicemail Pro and IP Office Compact Call Center (CCC)

Voicemail Pro and CCC can be run on the same server up to a maximum of 25 CCC agents and 8 Voicemail Pro ports. Supported on a Dual Core CPU of 2.4Ghz and higher. The separate requirements of Voicemail Pro and CCC must be meet.

Ports

Component	Location - %ProgramFiles%\Avaya\IP Office\	Ports
Voicemail Pro Service	Voicemail Pro\VM\vmprov5svc.exe	UDP 50791. UDP 50795. ALL 50801. ALL 8089.
VMPro Database	Voicemail Pro\VM\VMPDBSvc.exe	
VPIM Client	Voicemail Pro\VPIMClient.exe	
VMPro VPIM DBSVR	Voicemail Pro\VPIM\vpimdbsvr.exe	
VMPro VPIM Receiver	Voicemail Pro\VPIM\VPIMReceiver.exe	
VMPro VPIM Server	Voicemail Pro\VPIM\VPIMServer3.exe	
IMS Admin	Voicemail Pro\IMS\IMSAdmin.exe	
IMS Service Restart	Voicemail Pro\IMS\IMSServiceRestart.exe	
IMS Gateway Service	Voicemail Pro\IMS\UMServer.exe	TCP 445. TCP 593. UDP 445. UDP 593
IMS Voice Service	Voicemail Pro\IMS\VMServer.exe	
IMS Security	Voicemail Pro\VM\IMSSec.exe	
IMS Client for Outlook	%ProgramFiles%\Avaya\IMS Client\UMSForm.exe	TCP 445. TCP 593. UDP 445. UDP 593.

2.1.2 Network Requirements

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

We strongly recommend that the voicemail server PC is connected to the IP Office Control Unit directly or via a LAN switch.

If directly connected, changing the settings of the PC network card to match the IP Office control unit can resolve some issues. This should be done according to the PC or network card manufacturer's instructions. The options for IP Office LAN ports are:

- **IP412:** Use LAN1 and half duplex.
- **Small Office Edition, IP406 (V2) and IP500:** Full duplex.
- 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 PC should have a fixed IP address. Although PCs in a DHCP network may retain the same IP address between reboots this is **not** guaranteed.
- 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.

2.1.3 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.

2.1.4 Web Server Operation

If web browser access is required, the Microsoft IIS Web Server must be installed on the server PC **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.

2.1.5 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 PC are alternatives.
- The use of RAID 1 or RAID 5 are recommended.
- The use of a DVD recorder for long-term archiving is recommended.
- 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 it is necessary to ensure that it does not conflict with any other web server service running on the same server PC.

2.1.6 Voicemail Pro Licenses

The following License Keys can be used with Voicemail Pro. The license keys are entered into the IP Office configuration using the IP Office Manager. If the Voicemail Pro server is installed without a license, it will run for 2 hours and then shutdown.

For Voicemail Pro 4.2+, the Help | About 79 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.

Required Licenses

The following are the minimum licenses required for an IP Office system to support Voicemail Pro:

- **Voicemail Pro (4 ports)**
  This license is required to enable support for the Voicemail Pro voicemail server. It also enables 4 voicemail ports.
- **IP500 Upgrade Standard to Professional**
  On pre-IP Office 5.0 systems using an IP500 control unit, this license is required for the system to support a Voicemail Pro server.

Additional Port Licenses

The port licenses control the number of ports (simultaneously connected calls into/from the voicemail server). Note: The maximum number of ports 16 supported for voicemail operation is set by the type of IP Office control unit. Multiple port licenses can be used to achieve the number of ports required.

- **Additional Voicemail Pro (2 ports)**
  Enables 2 additional Voicemail Pro ports.
- **Additional Voicemail Pro (4 ports)**
  Enables 4 additional Voicemail Pro ports.
- **Additional Voicemail Pro (8 ports)**
  Enables 8 additional Voicemail Pro ports.
- **Additional Voicemail Pro (16 ports)**
  Enables 16 additional Voicemail Pro ports.

Voicemail Pro Feature Licenses

These licenses enable the use of specific features within Voicemail Pro.

- **VMPro VB Script**
  Enables use of VB Scripting through the VB Script action
- **VMPro Database Interface**
  Enables database integration within call flows.
- **VMPro TTS (Generic)**
  Enables use of text to speech facilities using the default Windows and third party TTS engines. One license per simultaneous instance of TTS usage.
- **VMPro TTS (ScanSoft)**
  Enables use of text to speech facilities using Avaya supplied TTS (ScanSoft) engines. One license per simultaneous instance of TTS usage.
- **Networked Messaging**
  Enables the use of Voicemail Pro Network Messaging.
- **VMPro Recording Administrators**
  Allows call recordings to be transferred to a VRL (Voice Recording Library) application. The currently supported application is ContactStore for IP Office.
    - For centralized voicemail operation, a VMPro Recording Administrators license is required in each IP Office system for which VRL support is required.
- **UMS Web Services** *(IP Office 4.2+)*
  Allows the voicemail server to run IMAP and Web Voicemail services. The number of UMS Web Services licenses set the number of users who can be configured to access either of those services. For Voicemail Pro 5.0+, hunt groups can also be configured for UMS Web Services and consume the same license.

2.1.7 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.

2.2 Server/Client Installation

The Voicemail Pro installation software 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				Notes
		Client	Compact	Typical	Custom	
Voicemail Pro	**Voicemail Pro Client**	✓	✓	✓	✓	
	Voicemail Pro Service	✗	✓	✓	✓	
	Languages	✓	✓	✓	✓	Installs the prompts that best match the server PC locale plus English prompts. For an installation with additional languages use the Custom installation option.
VPNM	**VPNM Database Receiver**	✗	✗	✗	✓	
	VPNM Server	✗	✗	✗	✓	
	VPNM Receiver	✗	✗	✗	✓	
Voicemail Pro Campaign Web Component		✗	✗	✓	✓	Not available for installation on an XP Pro server.
Integrated Messaging Service (IMS)	**IMS Client Package**	✗	✗	✗	✓	Not available for installation of Vista, 2008 and 64-bit operating systems Not available if Web Voicemail (UMS) is selected for installation. The installation of IMS is not covered by this documentation. For details of IMS refer to the Voicemail Pro 4.2 Installation manual.
	IMS Database Service	✗	✗	✗	✓	
	IMS Gateway Service	✗	✗	✗	✓	
	IMS Voice Service	✗	✗	✗	✓	
	IMS Administration Tool	✗	✗	✗	✓	
Web Voicemail (UMS)		✗	✗	✗	✓	Only available for installation on server operating systems. Not available if any IMS components are selected for installation.

Before you begin:

1. Log on to the server PC 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 PC.

2. Recommendation
   Create a new user account called Voicemail and give it full administrator rights on the PC. This will help to identify the purpose of the account. Set the account password so that it does not expire.

3. In IP Office Manager, check that the correct licenses for Voicemail Pro have been installed and show a status of Valid. For compact and typical Voicemail Pro installations, the minimum required licenses are:
   - **Voicemail Pro (4 ports)**
     This license is required to enable support for the Voicemail Pro voicemail server. It also enables 4 voicemail ports.
   - **IP500 Upgrade Standard to Professional**
     On pre-IP Office 5.0 systems using an IP500 control unit, this license is required for the system to support a Voicemail Pro server.

4. For installations other than client only and compact, check that the necessary pre-installation processes have been completed:
   - **Web Campaigns Installation** 31
   - **Voicemail Email Installation** 53
   - **UMS Web Voicemail** 37
     - **IMAP Installation** 38
     - **Web Voicemail Installation** 41
     - **Exchange 2007 Installation** 47
   - **Centralized Voicemail Pro** 51
   - **Installing Text to Speech Features** 73
   - **Voicemail Private Networked Messaging (VPNM) Installation** 391
   - **Installing Voicemail Pro TTY Prompts** 274

- **Installation on Windows Server Operating Systems**
  On many Windows server PC's, 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 PC to have a sound card installed.

  1. Ensure that you have full administrator rights for the PC. This process will also require the PC to be restated.
  2. In the Windows Control Panel select **Sounds and Audio Devices**.
  3. If Windows Audio has not been enabled, select the **Enable Windows Audio** check-box.

To install the Voicemail Pro software components:

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 **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 appears you need to follow the upgrade process 34.
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.
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** menu 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 PC or network accounts.
    - Click **Next**. The account name and password are validated. If the validation fails you whether you want 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 necessary 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 necessary, the computer will restart and you will need to log in to continue the installation process. If otherwise, the installation process continues without restarting.
19. The installation process continues by requesting a number of configuration settings used by the voicemail server services,
    1. The **IP Office Voicemail Pro Email Settings** window is displayed. This is used to enter the account that the voicemail pro server should use for email functions. Enter the name of the email account to use or click **Browse** and select an account to use. Click **Next**.
    2. The **IP Office Voicemail Pro SMTP Email 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**. An attempt is made to validate the email settings. An error message is displayed when the attempt to connect with an SMTP server fails. 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.

    - **Web Campaigns Installation** 31
    - **Voicemail Email Installation** 53
    - **UMS Web Voicemail** 37
        - **IMAP Installation** 38
        - **Web Voicemail Installation** 41
        - **Exchange 2007 Installation** 47
    - **Centralized Voicemail Pro** 51
    - **Installing Text to Speech Features** 73
    - **Voicemail Private Networked Messaging (VPNM) Installation** 391
    - **Installing Voicemail Pro TTY Prompts** 274

To Initialize the Voicemail Pro Call Flow:

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

2. Click the **Save and Make Live** icon.

3. Select **Yes**. The file ***root.vmp*** is created and made available to the Voicemail Pro server. This is the compiled non-editable version of the editable call flow.

4. Voicemail operation can now be tested from an extension by dialing ***17**.

2.2.1 Modifying the Installed Components

1. Start the Windows **Control Panel**.
2. Select **Add and Remove Programs**.
3. Select **IP Office Voicemail Pro** from the list of installed applications.
4. Click on **Change**.
5. Select **Modify** and click **Next**.
6. The **Select Features** menu is displayed. The existing installed components are indicated by a tick mark.
7. Select the additional components required for the installation.
8. Not that de-selecting a component will cause it to be uninstalled.
9. Click **Next**.
10. The process continues are a normal installation 26.

2.2.2 Web Campaigns Installation

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

1. Check that IIS is installed and running on the server PC.
    - 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 PC can be browsed from other PC's on the customer network.
3. If the Voicemail Pro server software has not yet been installed:
    - Run the Voicemail Pro software installation 26 and select ***Voicemail Pro (Full)***.
    - Select either ***Typical*** or ***Custom***. If ***Custom*** is selected, ensure that ***Voicemail Pro Campaigns Web*** is selected in the list of components.
4. If the Voicemail Pro server software is already installed:
    - Modify the installed components and ensure that ***Voicemail Pro Campaigns Web*** is selected in the list of components.

Windows 2003 Server

The following configuration changes are required for IIS version 6 after installation of the Voicemail Pro web campaigns component.

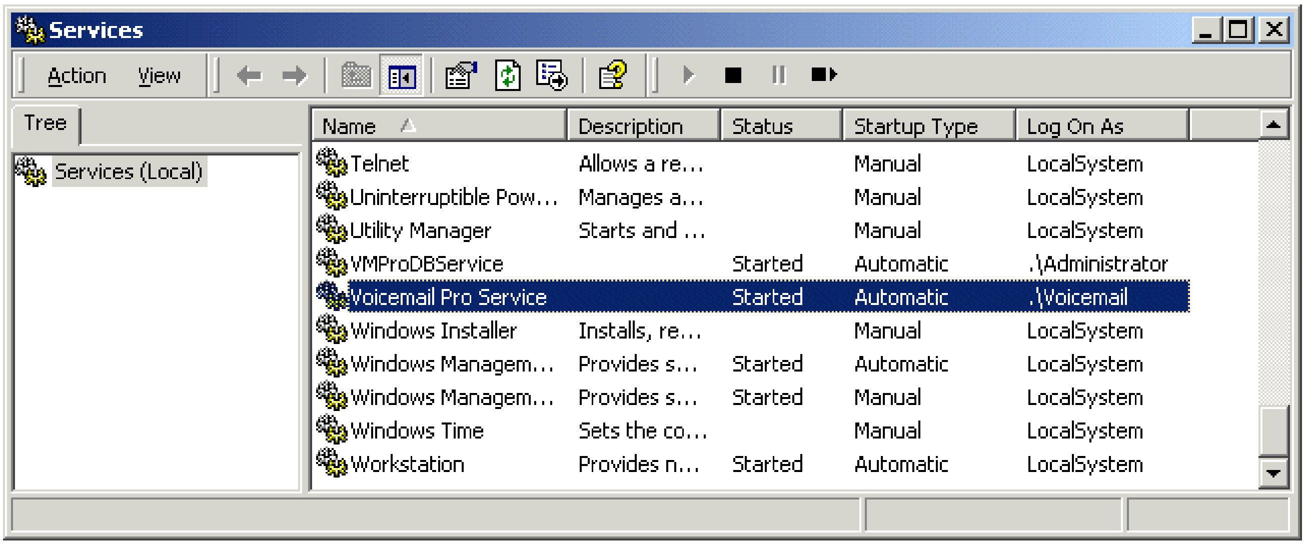
1. Open the Windows **Control Panel**.
2. Select **Administrative Tools | Computer Management**.
3. Go to **Services and Applications | IIS Manager | Web Sites | Default Web Site**.
4. Under **Web Sites**, right-click **Default Web Site** and select **Properties**.
    - Select the **Home Directory** tab.
    - Under **Application Settings** section, set the **Execute Permissions** to ***Scripts and Executables***.
    - Click **OK** twice.
5. Under **Web Sites**, go to **Web Service Extensions**.
6. Right-click and select **Add a new web service extension...**.
    - Set the following values:
        - **Extension Name:** campaigns.
        - **Required files:** Click **Add**. Select the file type as CGI exe files and browse to the **campaign.exe** file location specified during installation. This is usually ***c:\InetPub\wwwroot\scripts\campaign.exe*** or ***c:\InetPub\scripts\campaign.exe***.
        - **Set extension status** to ***Allowed***.
    - Press **OK**.

2.2.3 The Voicemail Pro Services

If Voicemail Pro has been installed successfully, if the server PC has been rebooted then the voicemail service is started automatically. However it is useful know how to check the services and to manually restart them if necessary.

To check/restart the Voicemail Pro Service:

1. Open the Windows Control Panel.
2. Select Administrative **Tools** > **Services**.



Name	Description	Status	Startup Type	Log On As
Telnet	Allows a re...		Manual	LocalSystem
Uninterruptible Pow...	Manages a...		Manual	LocalSystem
Utility Manager	Starts and ...		Manual	LocalSystem
VMProDBService		Started	Automatic	.\Administrator
Voicemail Pro Service		Started	Automatic	.\Voicemail
Windows Installer	Installs, re...		Manual	LocalSystem
Windows Managem...	Provides s...	Started	Automatic	LocalSystem
Windows Managem...	Provides s...	Started	Manual	LocalSystem
Windows Time	Sets the co...		Manual	LocalSystem
Workstation	Provides n...	Started	Automatic	LocalSystem

3. 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 Voicemail Pro options installed. The possible services are:
    - ***Voicemail Pro Service***
      This is the main Voicemail Pro service. Normally this is the only service that needs to be stopped and restarted. It will stop and restart the other services that it uses.
    - ***VMProDBService***
      This service is used for remote client connections.
    - ***IMS (Gateway)***, ***IMS (Voice)*** and ***IMS (Restart)***
      These services are used by the IMS components of Voicemail Pro if installed and licensed.
    - ***VPNM Database Server***, ***VPIM Receiver*** and ***VPNM Server***
      These services are used by the VPNM components of Voicemail Pro if installed and licensed.
4. Close **Services**.

Setting the Voicemail Services or PC to Restart Automatically

The following action is optional. If there is some fault causing the Voicemail Pro service to halt, that fault should be investigated and fixed, however having the service or PC automatically restarted if possible will minimize the disruption to the Voicemail Pro users.

1. Use the Windows control panel to select the ***Voicemail Pro Service***.
2. Right-click on the service and select **Properties**.
3. Select the **Recovery** tab.
4. Use the options presented to either restart the service and or restart the PC should the operating system detect that the Voicemail Pro service has halted.

Using a Batch File to Start Services

In some instances, certain computers might not respond quickly enough in order to start all of the Avaya services in the correct order. In this circumstance, it can be advisable to create a batch file which will delay the start of these services until the PC 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 proper 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 VMProDBService
net start Voicemail Pro Service
net start IMS(Restart)
net start IMS(Voice)
net start IMS(Gateway)
```

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

2.3 Upgrading Voicemail Pro

This section describes how to upgrade Voicemail Pro. The options available are:

- Upgrading from Voicemail Lite 36
- Upgrading from below Voicemail Pro 3.2 34
- Upgrade from 3.2 or higher 35

2.3.1 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.

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. Select **Add/Remove Programs**.
    3. Select **IP Office Voicemail Pro** and click **Add/Remove**.
    4. From the options offered, select **Remove** and click **Next**.
    5. Follow the prompts that you see on the screen during the removal process.
    6. When the process has been completed, select the option **Yes, I want to restart my computer now** and click **Finish**.
4. **Restore the Registry**
   The Voicemail Pro registry settings that were backed up in step 2 needs 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 Installing Voicemail Pro 18 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.

2.3.2 Upgrade from Version 3.2+

You can directly upgrade versions of Voicemail Pro from Voicemail Pro 3.2 upwards. However we still recommend that you follow the procedure for backing up the database before upgrading.

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 **Email settings** window opens.
7. Enter your email account details and click **Next**. The **SMTP Email settings** window opens.
8. Enter your SMTP Email details and click **Finish**. The SMTP settings entered will be validated. If an error occurs, the validating configuration window opens containing the SMTP Error 57.
9. Click **Yes** when asked if you want 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.

2.3.3 Upgrade to Voicemail Pro

You can upgrade from Voicemail Lite to Voicemail Pro. The process described here assumes that Voicemail Pro is being installed onto the same PC that previously hosted Voicemail Lite. The steps described here will remove Voicemail Lite but will not remove the existing mailbox messages and greetings.

To upgrade from Voicemail Lite to Voicemail Pro:

1. **Remove Voicemail Lite**
    1. Make sure that Voicemail Lite is not running. It might be necessary to close the Voicemail Lite server program.
    2. Open the **Windows Control Panel** and select **Add/Remove Programs**.
    3. Select **IP Office Admin Suite** and click **Change**. The Welcome to the Installshield Wizard for IP Office Admin Suite window opens.
    4. Click **Next**. The Program Maintenance window opens.
    5. Select **Modify** and click **Next**.
    6. 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.

       .

        - Important - Do not uncheck any other boxes as this will also remove those features.
    7. Click **Next**. The Ready to Modify the Program window opens.
    8. Click **Install**. The Voicemail Lite program will be removed, which may take several minutes.
    9. Click **Finish** to exit the InstallShield Wizard.
    10. Click **Close** to close the Add/Remove Programs window.
    11. 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 Installing Voicemail Pro 18 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**
   This must be done **before** users start to use Voicemail Pro. As part of the upgrade procedure you need to move the Voicemail Lite folders that contain any existing voicemail messages and mailbox greetings. This stage copies the existing Voicemail Lite messages and greetings over the newly installed Voicemail Pro set.
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.

2.4 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 Email Client Support**
  This method allows mailbox access using any email client that supports IMAP, for example Outlook and Lotus Notes. The Voicemail Pro server PC acts as the IMAP server.
- **Web Voicemail Access**
  This method alls mailbox access using a web browser. Messages can be played back to a phone or through the PC if the browser is audio enabled. Web voicemail requires the voicemail server to also run IIS and PHP.
- **UMS Exchange 2007** *(Voicemail Pro 5.0+)*
  A user or group can be configured to have their voicemail messages forwarded to the inbox of an Exchange 2007 email account. Telephone, including Visual Voice, mailbox access is redirected to that email inbox as the store for voicemail messages. Alternatively the user can access their voicemail messages using Outlook 2007 or any other mechanisms supported by Exchange 2007. Voicemail messages in an Exchange 2007 inbox are not visible to UMS IMAP and UMS Web Voicemail, however Exchange 2007 provides its own methods for IMAP and web browsing of Exchange mailboxes.

Use of UMS services requires **UMS Web Service** licenses in the IP Office configuration. The license sets the number of users and hunt groups that can be configured for UMS in the IP Office configuration.

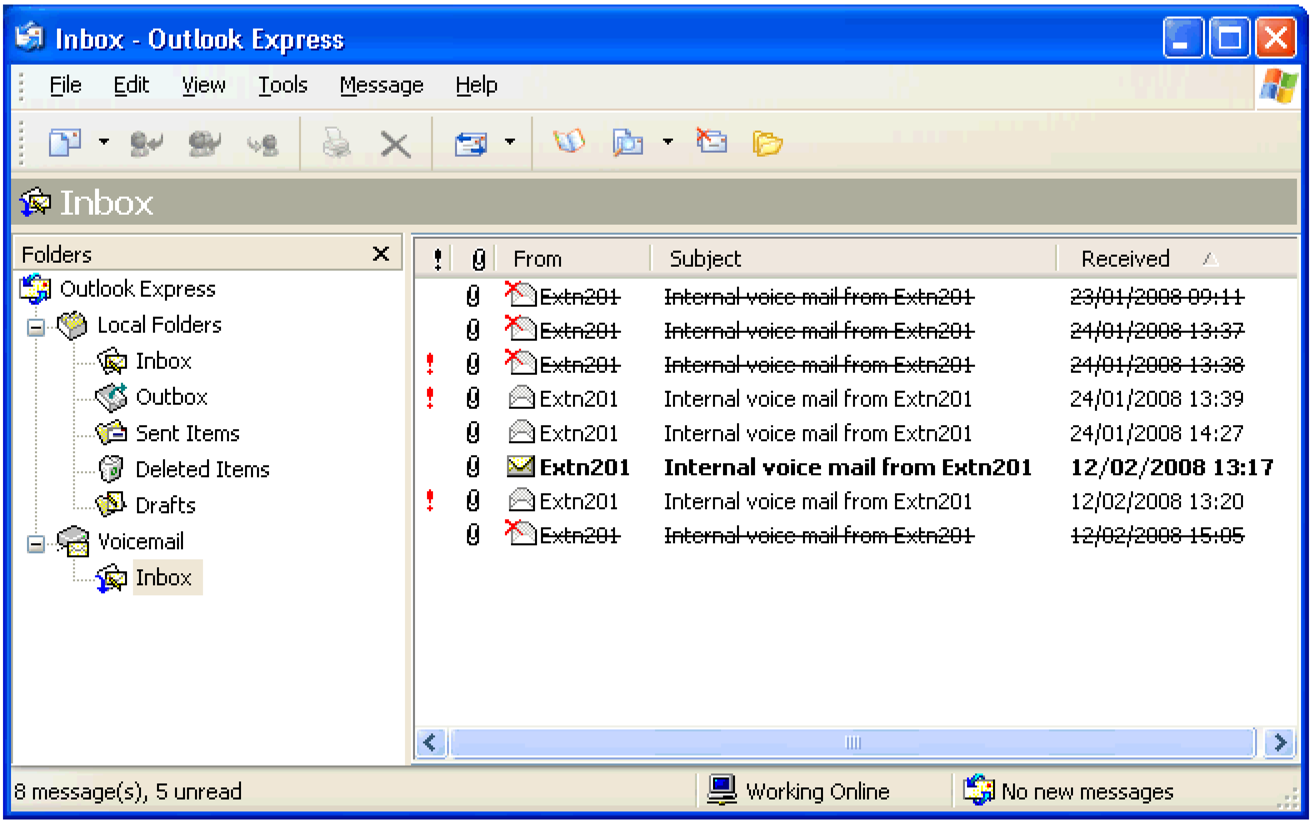
Feature	**Web Voicemail**	**IMAP Client**	**Exchange 2007**
Playback via PC.	✓	✓	✓
Playback via User Extension.	✓	✗	✗[1]
Save message Wav to PC.	✗	✓	✓
Forward messages to other voicemail mailbox.	✓	✗	✗
Forward messages to other email mailbox.	✗	✓	✓
Undelete manually deleted messages.	✓	✓	✓
Mark message as unread.	✓	✓	✓
Change voicemail password.	✓	✗	✗
Show Message Types	**Web Voicemail**	**IMAP Client**	**Exchange 2007**
- New (Unread).	✓	✓	✓
- Old (read).	✓	✓	✓
- Saved.	✓	✓	✗
- Priority.	✓	✓	✓
- Private.	✗	✗	✗
- Deleted.	✓	✓	✓

1. Exchange 2007 Unified Messaging supports the playback of messages through a range of options controlled and configured on the exchange server.

2.4.1 IMAP Installation

Voicemail Pro 4.2+ support mailbox synchronization with email 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 email client being used and is not controlled by the Voicemail Pro.



!	📎	From	Subject	Received
	📎	~~Extn201~~	~~Internal voice mail from Extn201~~	~~23/01/2008 09:11~~
	📎	~~Extn201~~	~~Internal voice mail from Extn201~~	~~24/01/2008 13:37~~
!	📎	~~Extn201~~	~~Internal voice mail from Extn201~~	~~24/01/2008 13:38~~
!	📎	Extn201	Internal voice mail from Extn201	24/01/2008 13:39
	📎	Extn201	Internal voice mail from Extn201	24/01/2008 14:27
	📎	**Extn201**	**Internal voice mail from Extn201**	**12/02/2008 13:17**
!	📎	Extn201	Internal voice mail from Extn201	12/02/2008 13:20
	📎	~~Extn201~~	~~Internal voice mail from Extn201~~	~~12/02/2008 15:05~~

8 message(s), 5 unread

Working Online

No new messages

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 standard part of the Voicemail Pro service installation. It uses the IP address of the Voicemail Pro server PC and runs on the standard IMAP port 143.

The only special consideration is to avoid having any other IMAP server running on the same PC.

Configuring the IP Office for Web Services

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 **UMS Web Services** license.
4. Merge the configuration back to the IP Office and then receive the configuration again.
5. In the **Licenses** section check that the **License Status** of the **UMS Web Services license** 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. UMS can be enabled in two ways:
   - **Through Individual User Settings:**
     - Select **User** and then select the required user.
     - Select the **Voicemail** tab.
     - Enable **UMS Web Services**. Click **OK**.
   - **Through Licenses:**
     - Select **Licenses**.
     - In the Manager navigation pane, double click on the **UMS Web Services** license.
     - The **Select Web Service Users** menu is shown.
     - Select the users for which UMS Web Services are required. Click **OK**.
4. 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 Email 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 necessary to enable some field with dummy data in order for the email client to accept the account even though those settings are not used by the Voicemail Pro IMAP server.

The general details that are required are:

IMAP Account Setting	IP Office Value
Incoming Server	Voicemail Pro server IP address or domain name address.
Account Name	User name or extension number.
Password	User voicemail code.

Example: Outlook

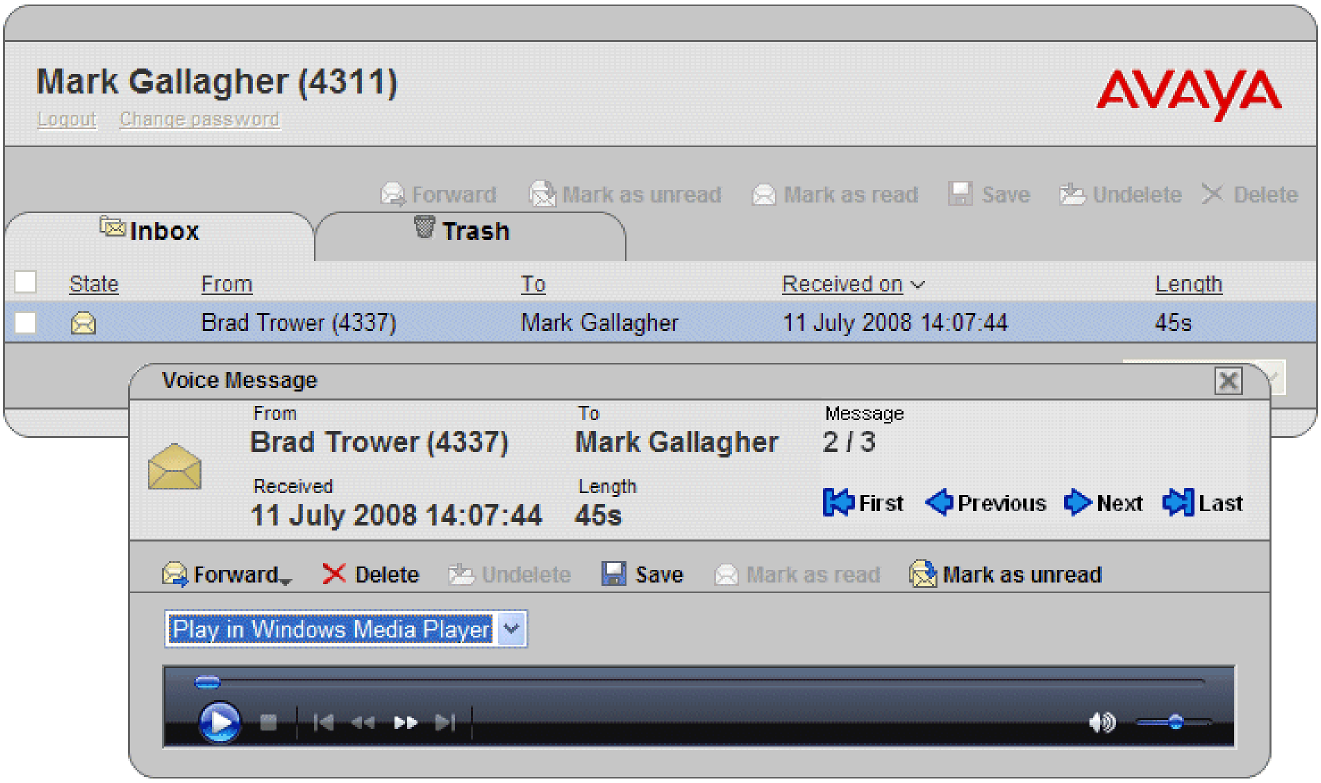
1. Select **Tools** and then **Options**.
2. Select **Mail Setup** and then click **E-mail Accounts**.
3. Select **Add a new e-mail account**.
4. Select **IMAP** as the server type.
5. In **Server Information for Incoming mail server** and **Outgoing mail server** enter the IP address or domain name address of the Voicemail Pro server PC.
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 email 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 PC.
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**.

2.4.2 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 the user's own associated extension on the IP Office system or through the audio facilities of the PC.



☐	State	From	To	Received on	Length
☐		Brad Trower (4337)	Mark Gallagher	11 July 2008 14:07:44	45s

From: Brad Trower (4337)
To: Mark Gallagher
Message: 2 / 3
Received: 11 July 2008 14:07:44
Length: 45s

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 PC 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.
- ☐ **UMS Web Services License**
  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.
- ☐ **Computer Name\URL**
  The computer name is used as part of its URL on the network. Ensure that the name is set 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 may work so long as they support JavaScript and CSS.
  - **Internet Explorer V6 SP1** or higher.
  - **Internet Explorer V7** or higher.
  - **Mozilla Firefox V2.0.0.2** or higher.
  - **Opera V9.10** or higher.
- **PC Playback**
  Browser access allows the selection of message playback 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.**

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 PC. Check that it can be browsed from user PC's.
   - 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 PC's using the server's computer name as part of the URL. If necessary change that name to accurately indicate its function.
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.
   - UMS Web Voicemail is not supported in conjunction with IMS. If one is selected for installation the other cannot be selected.
6. Follow the remainder of the installation process and allow the voicemail server to reboot when required.

Configuring the IP Office for Web Services

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 **UMS Web Services** license.
4. Merge the configuration back to the IP Office and then receive the configuration again.
5. In the **Licenses** section check that the **License Status** of the **UMS Web Services license** 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. UMS can be enabled in two ways:
   - **Through Individual User Settings:**
     - Select **User** and then select the required user.
     - Select the **Voicemail** tab.
     - Enable **UMS Web Services**. Click **OK**.
   - **Through Licenses:**
     - Select **Licenses**.
     - In the Manager navigation pane, double click on the **UMS Web Services** license.
     - The **Select Web Service Users** menu is shown.
     - Select the users for which UMS Web Services are required. Click **OK**.
4. 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.

UMS Web Voicemail and ContactStore

It is possible to run ContactStore and UMS Web Voicemail on the same server PC. However some additional steps are required following installation in order to allow 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.

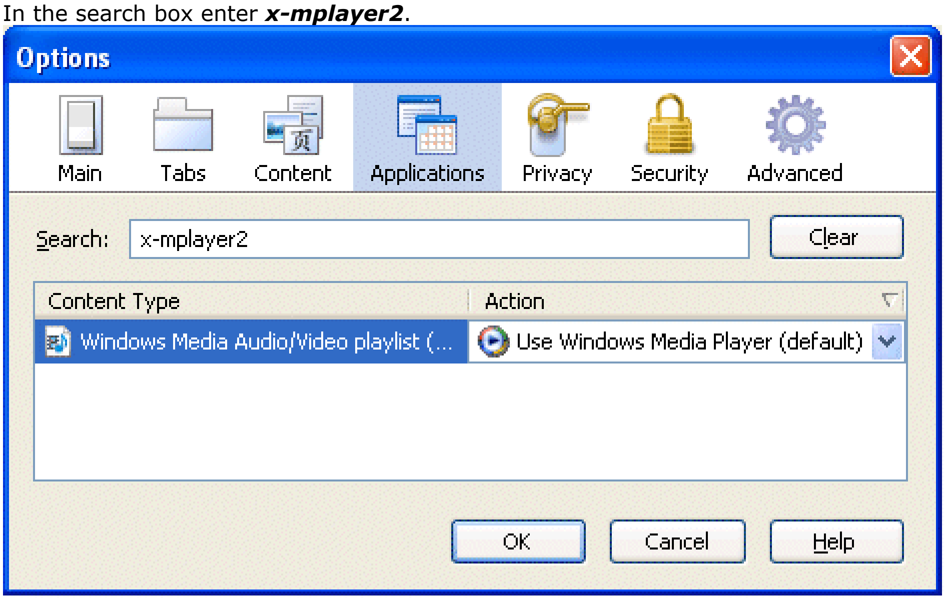
Playback Control

UMS message playback through the web browser is tested and supported with the Windows Media Player. It may work with other audio playback controls but will not have 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***.



Search: x-mplayer2

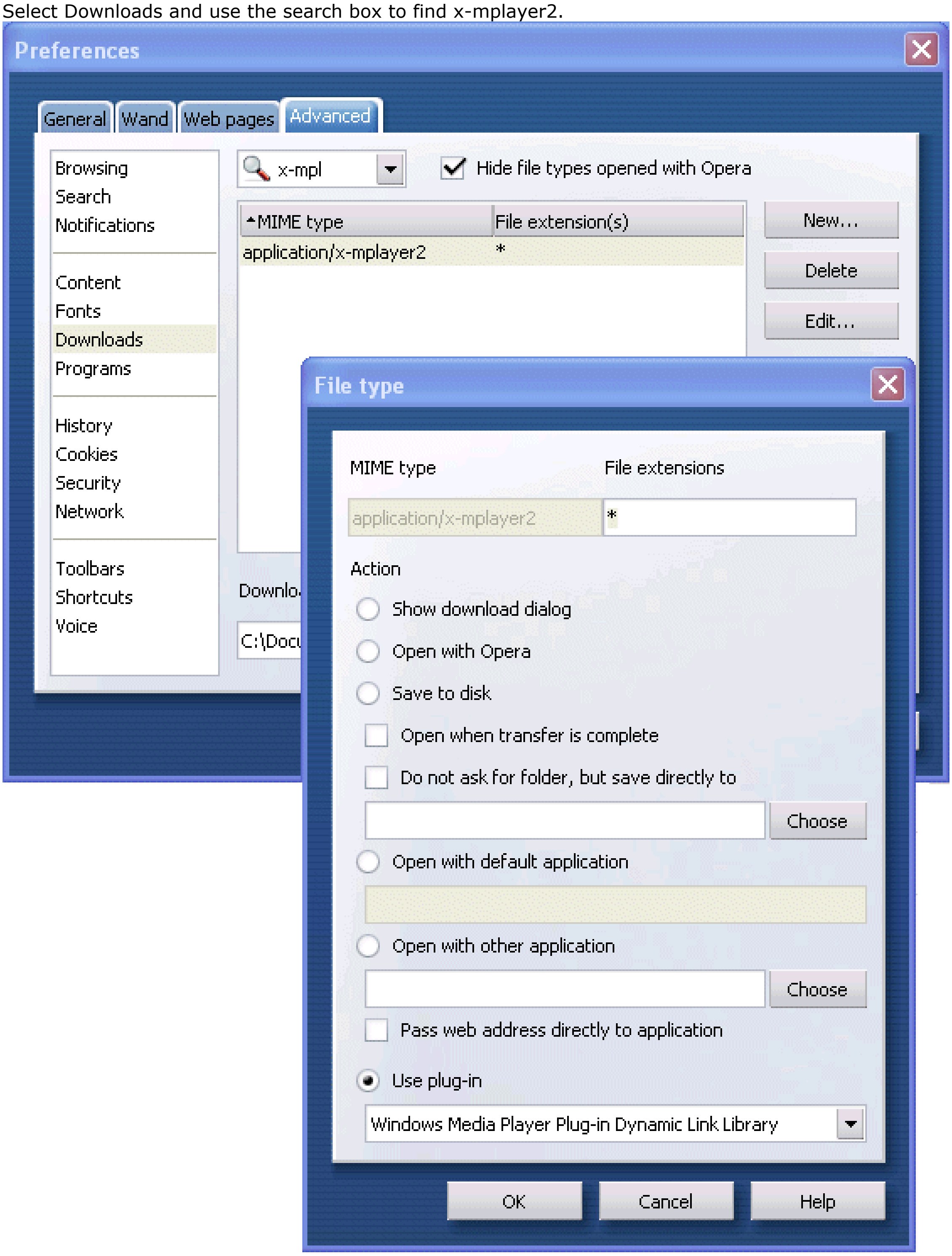
Content Type	Action
Windows Media Audio/Video playlist (...	Use Windows Media Player (default)

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.

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



x-mpl

☑ Hide file types opened with Opera

MIME type	File extension(s)
application/x-mplayer2	*

MIME type	File extensions
application/x-mplayer2	*

○ Show download dialog

○ Open with Opera

○ Save to disk

☐ Open when transfer is complete

☐ Do not ask for folder, but save directly to

○ Open with default application

○ Open with other application

☐ Pass web address directly to application

● Use plug-in

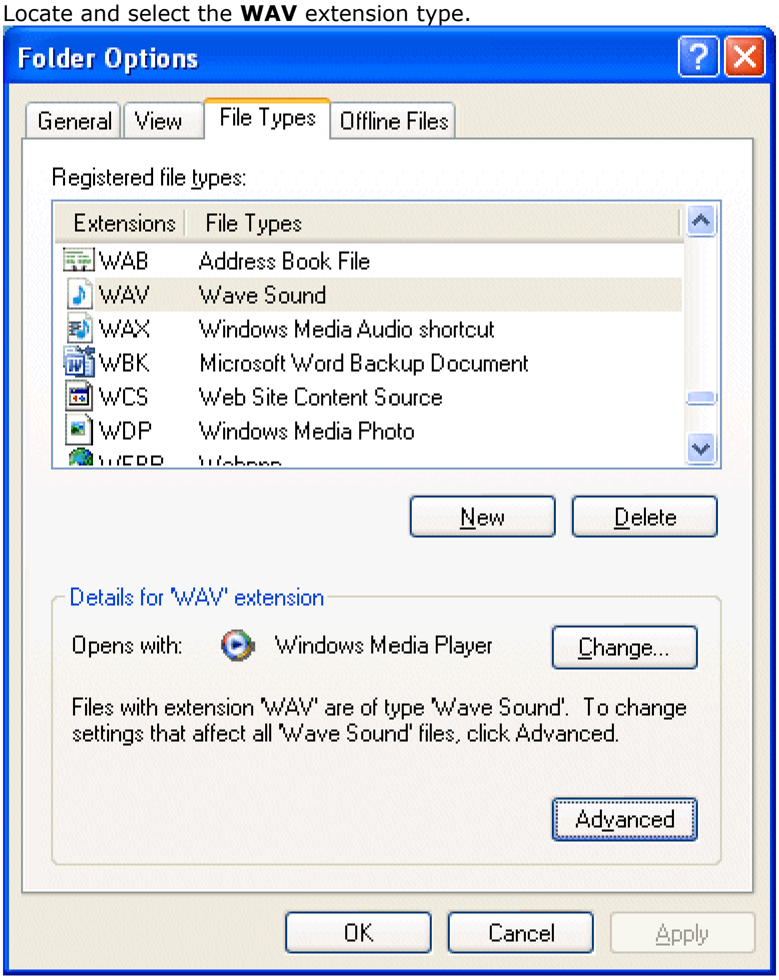
Windows Media Player Plug-in Dynamic Link Library

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**.

5. Locate and select the **WAV** extension type.



Folder Options

General | View | File Types | Offline Files

Registered file types:

Extensions	File Types
WAB	Address Book File
WAV	Wave Sound
WAX	Windows Media Audio shortcut
WBK	Microsoft Word Backup Document
WCS	Web Site Content Source
WDP	Windows Media Photo
WEBP	Webpnp

New | Delete

Details for 'WAV' extension

Opens with: Windows Media Player | Change...

Files with extension 'WAV' are of type 'Wave Sound'. To change settings that affect all 'Wave Sound' files, click Advanced.

Advanced

OK | Cancel | Apply

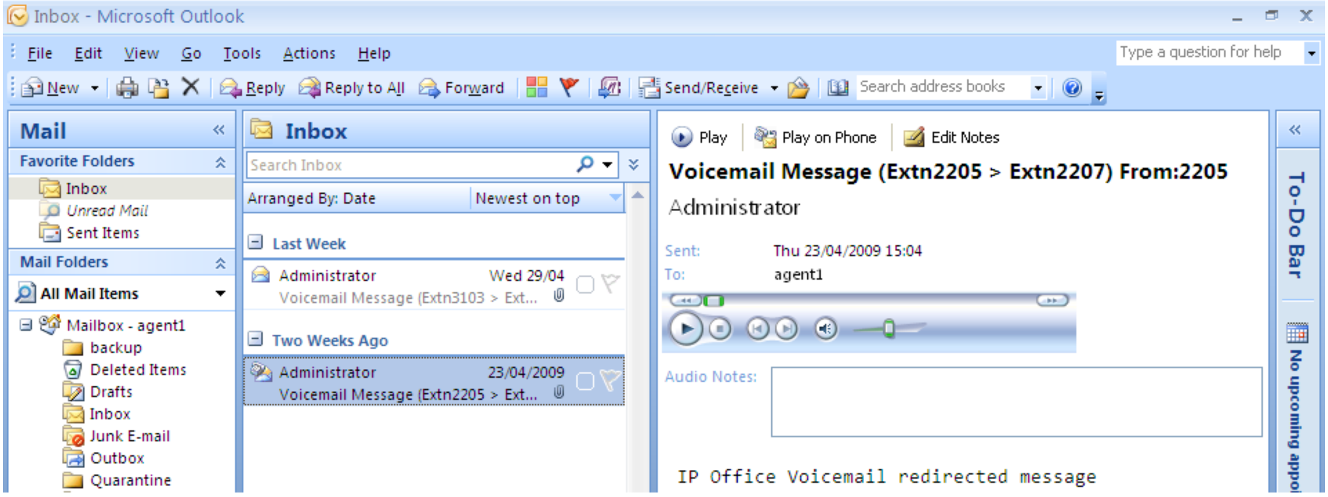
6. Check that the details show Windows Media Player as the selected application for this file type.

2.4.3 Exchange 2007 Installation

A UMS user or group can be configured to have their voicemail messages forwarded to the inbox of an Exchange 2007 email account. They can then access their voicemail messages using Outlook 2007 or any other mechanisms supported by Exchange 2007 Unified Messaging. IP Office telephone mailbox access, including Visual Voice, is redirected to the voicemail messages stored in the email inbox.

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

- **Note**
  When using an Exchange 2007 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.



Administrator Wed 29/04
Voicemail Message (Extn3103 > Ext...

Administrator 23/04/2009
Voicemail Message (Extn2205 > Ext...

Voicemail Message (Extn2205 > Extn2207) From:2205

Administrator

Sent: Thu 23/04/2009 15:04
To: agent1

IP Office Voicemail redirected message

The following are the pre-requisites for UMS Exchange 2007:

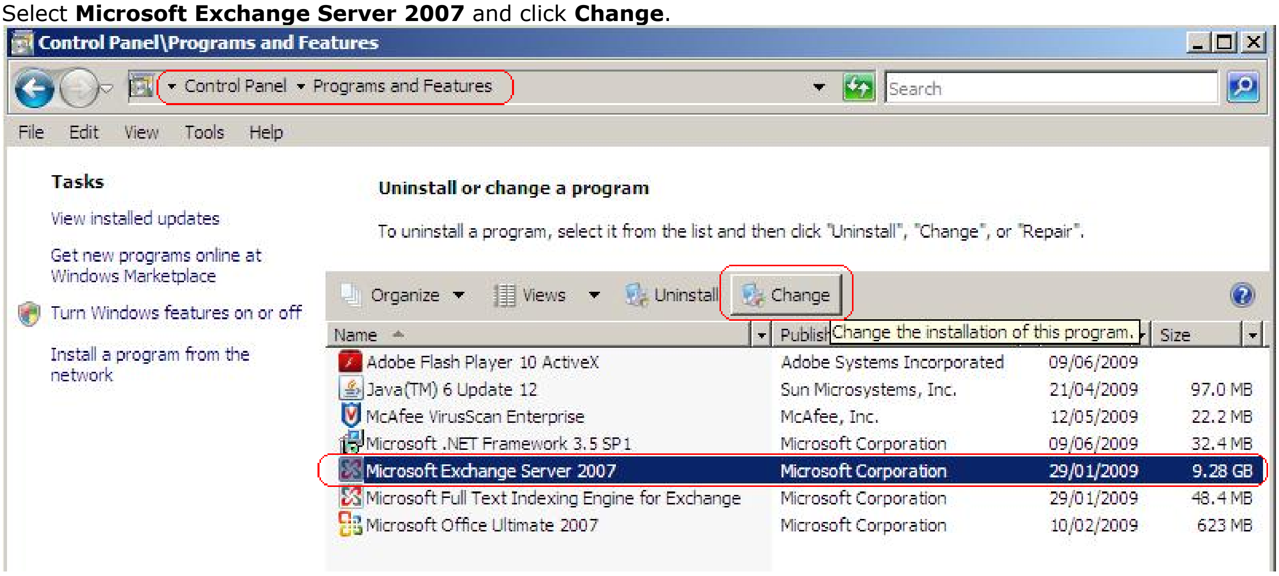
- **Exchange 2007 Server**
  - The Exchange 2007 server must be configured with the **Unified Messaging Server Rol**e selected.
  - A Dial Plan must be created on the Exchange 2007 server. This can be a blank dial plan but it must exist.
  - Within the Exchange 2007 server settings for each mailbox, select **Enable Unified Messaging**.
- **Voicemail Pro**
  - The Voicemail Pro server must be configured for MAPI based voicemail email 58.
  - The supported MAPI applications are Exchange 2007 and Outlook 2007.
- **IP Office**
  - The user or hunt group must be licensed and enabled for UMS Web Services.
  - The user or hunt group's **Voicemail Email** mode must be set to ***Forward***.

Exchange Server 2007 Unified Messaging Configuration

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

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

1. From the Windows **Control Panel**, select **Program and Features**.
2. Select **Microsoft Exchange Server 2007** and click **Change**.

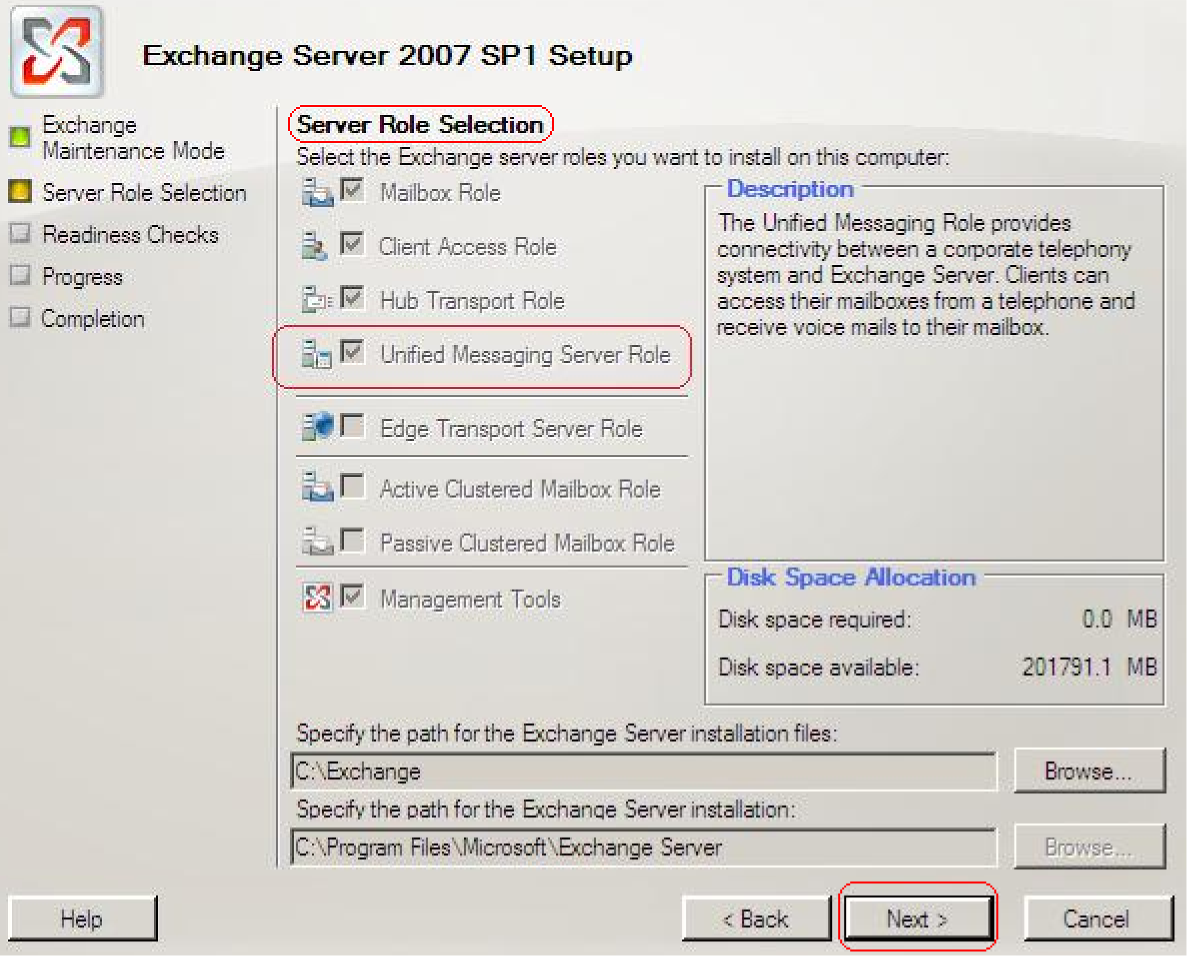

Control Panel\Programs and Features
Control Panel ▸ Programs and Features
Search
File Edit View Tools Help
Tasks
View installed updates
Get new programs online at Windows Marketplace
Turn Windows features on or off
Install a program from the network
Organize Views Uninstall Change
Change the installation of this program.

Uninstall or change a program

To uninstall a program, select it from the list and then click "Uninstall", "Change", or "Repair".

Name	Publisher		Size
Adobe Flash Player 10 ActiveX	Adobe Systems Incorporated	09/06/2009	
Java(TM) 6 Update 12	Sun Microsystems, Inc.	21/04/2009	97.0 MB
McAfee VirusScan Enterprise	McAfee, Inc.	12/05/2009	22.2 MB
Microsoft .NET Framework 3.5 SP1	Microsoft Corporation	09/06/2009	32.4 MB
Microsoft Exchange Server 2007	Microsoft Corporation	29/01/2009	9.28 GB
Microsoft Full Text Indexing Engine for Exchange	Microsoft Corporation	29/01/2009	48.4 MB
Microsoft Office Ultimate 2007	Microsoft Corporation	10/02/2009	623 MB

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



Select the Exchange server roles you want to install on this computer:

- ☑ Mailbox Role
- ☑ Client Access Role
- ☑ Hub Transport Role
- ☑ Unified Messaging Server Role
- ☐ Edge Transport Server Role
- ☐ Active Clustered Mailbox Role
- ☐ Passive Clustered Mailbox Role
- ☑ Management Tools

The Unified Messaging Role provides connectivity between a corporate telephony system and Exchange Server. Clients can access their mailboxes from a telephone and receive voice mails to their mailbox.

Disk space required: 0.0 MB

Disk space available: 201791.1 MB

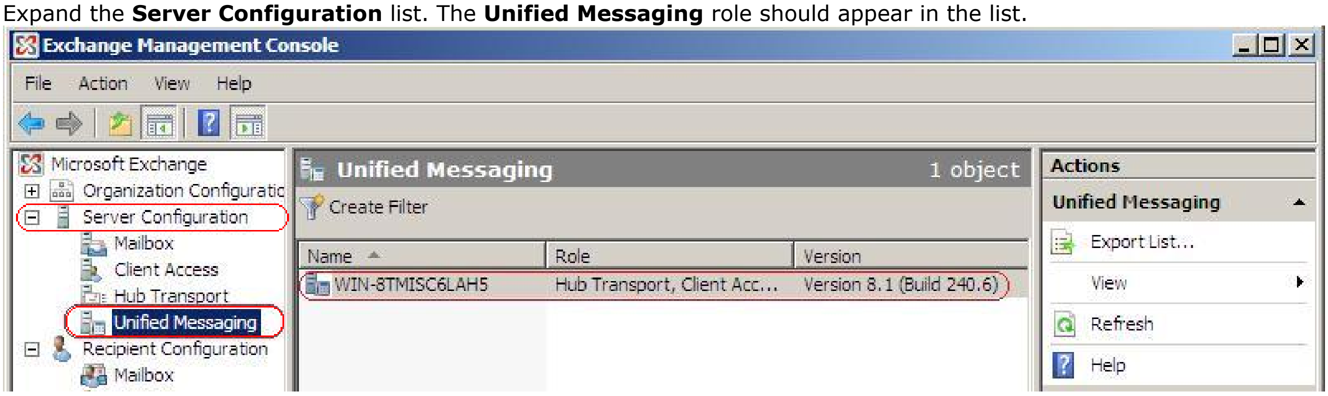
Specify the path for the Exchange Server installation files: C:\Exchange

Specify the path for the Exchange Server installation: C:\Program Files\Microsoft\Exchange Server

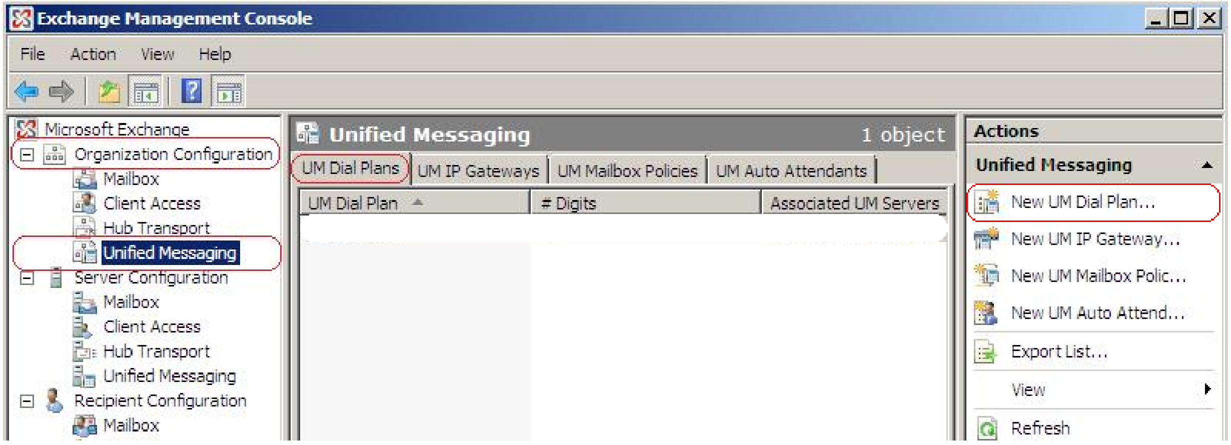
4. In the **Server Role Selection** list check that **Unified Messaging Server Role** is one of the selected roles. Click **Next** through the wizard and then **Finish**.

Having enabled the Unified Messaging role on the Exchange Server, the role can be configured and enabled for the mailboxes.

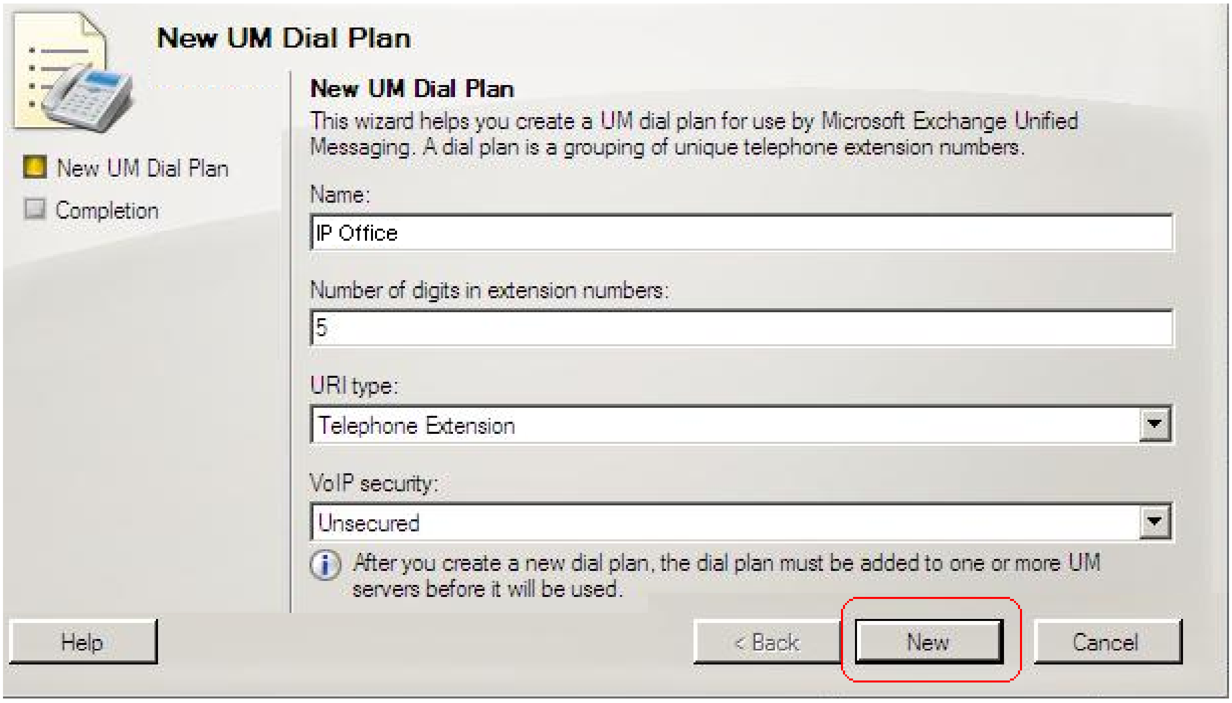
1. Select **Start | Programs | Microsoft Exchange Server 2007 | Exchange Server Management Console**.
2. Expand the **Server Configuration** list. The **Unified Messaging** role should appear in the list.



3. You need to create a Unified Messaging dial plan.
   a. Expand the **Organization Configuration** and select **Unified Messaging**.



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



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: IP Office

Number of digits in extension numbers: 5

URI type: Telephone Extension

VoIP security: Unsecured

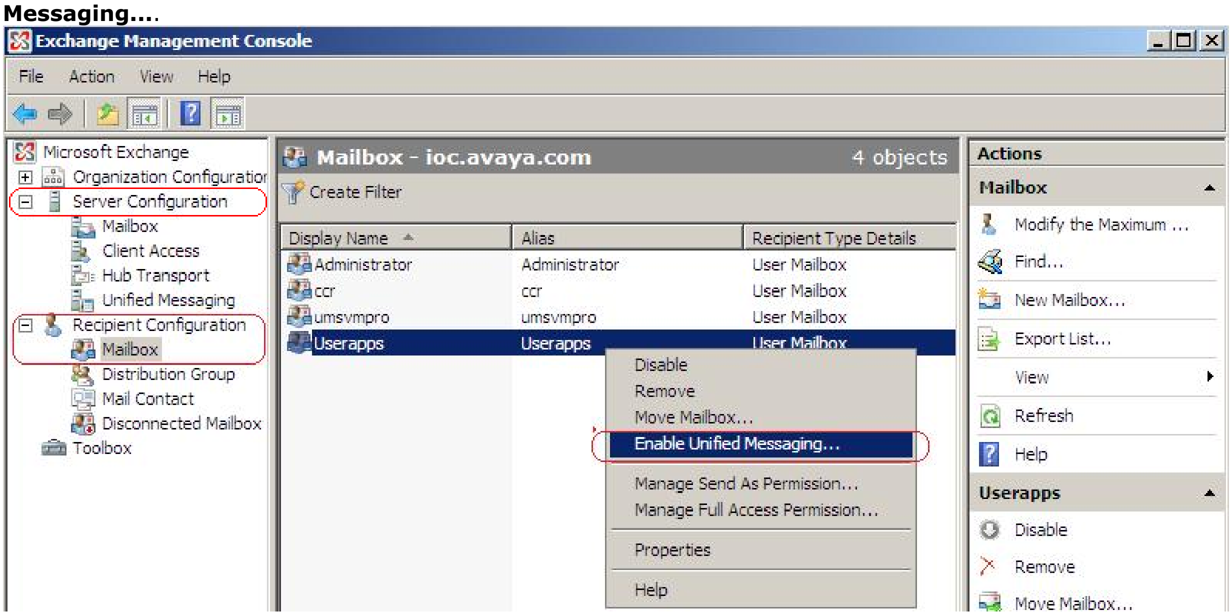
After you create a new dial plan, the dial plan must be added to one or more UM servers before it will be used.

   d. Create a plan similar to the one shown above. The digits length is not important but must be matched later in the process. The simplest option is to set it to match your IP Office extension number length. Click **New** and then **Finish**.

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

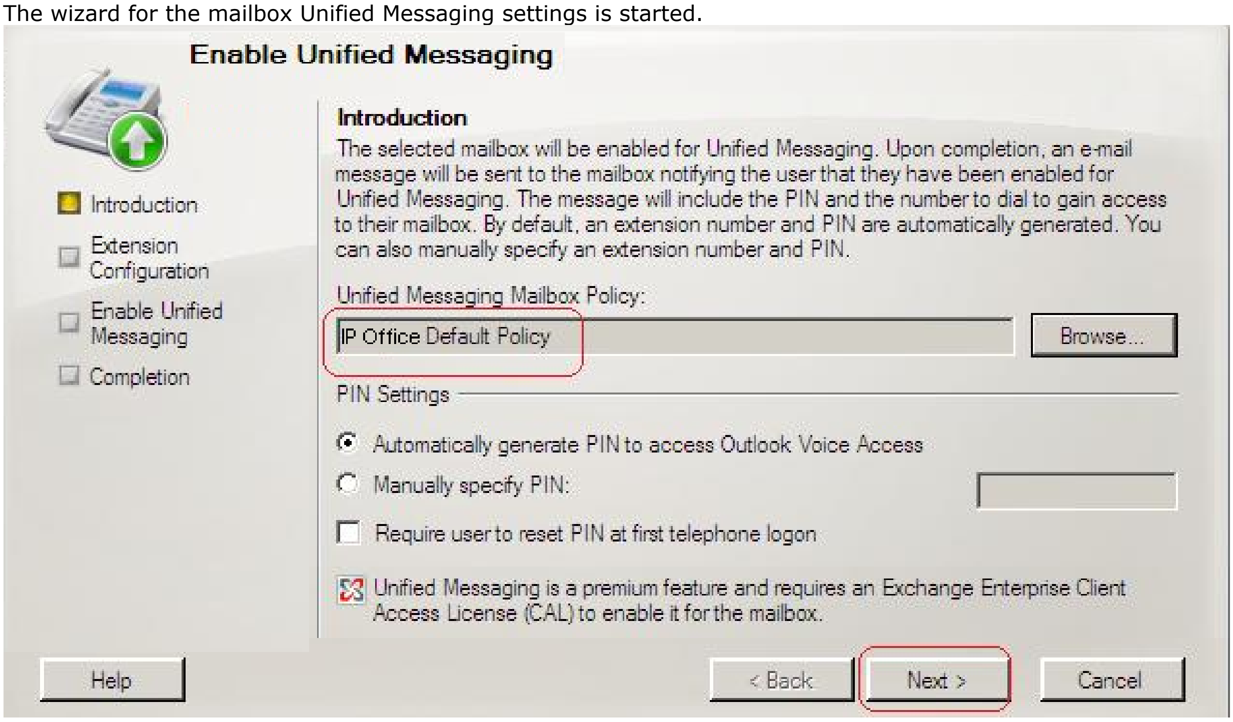
a. Expand the **Recipient Configuration** section and select **Mailbox**.

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



Display Name	Alias	Recipient Type Details
Administrator	Administrator	User Mailbox
ccr	ccr	User Mailbox
umsvmpro	umsvmpro	User Mailbox
Userapps	Userapps	User Mailbox

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



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

PIN Settings

● Automatically generate PIN to access Outlook Voice Access

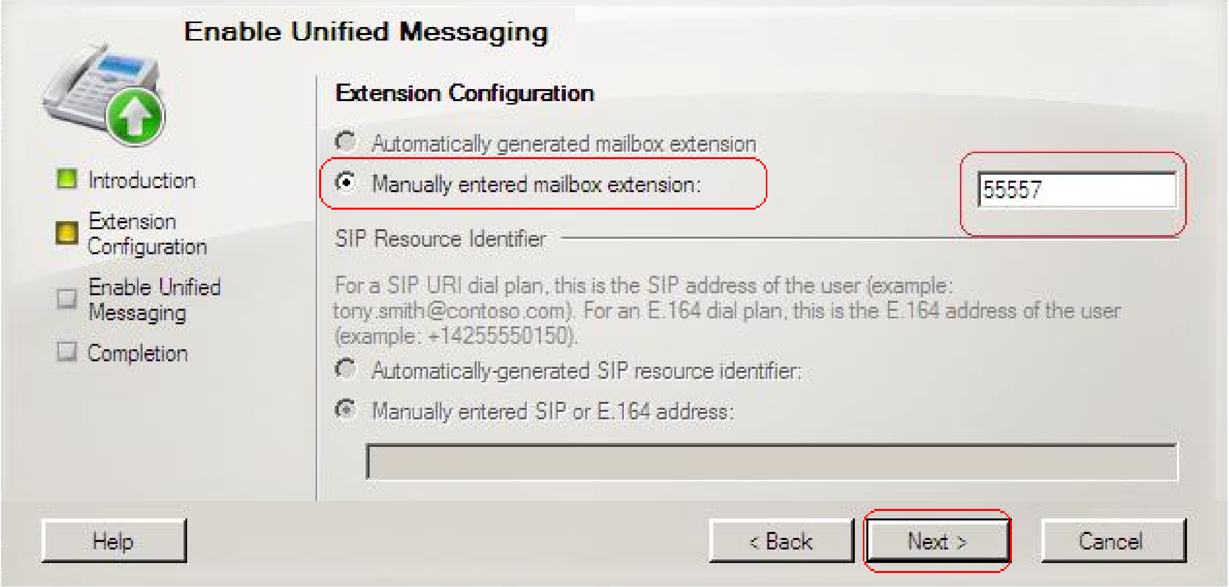
○ Manually specify PIN:

☐ 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.

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

e. Select **Automatically generate PIN to access Outlook Voice Access**. Click **Next**.



Enable Unified Messaging

Extension Configuration

○ Automatically generated mailbox extension

● Manually entered mailbox extension: 55557

SIP Resource Identifier

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 (example: +14255550150).

○ Automatically-generated SIP resource identifier:

● Manually entered SIP or E.164 address:

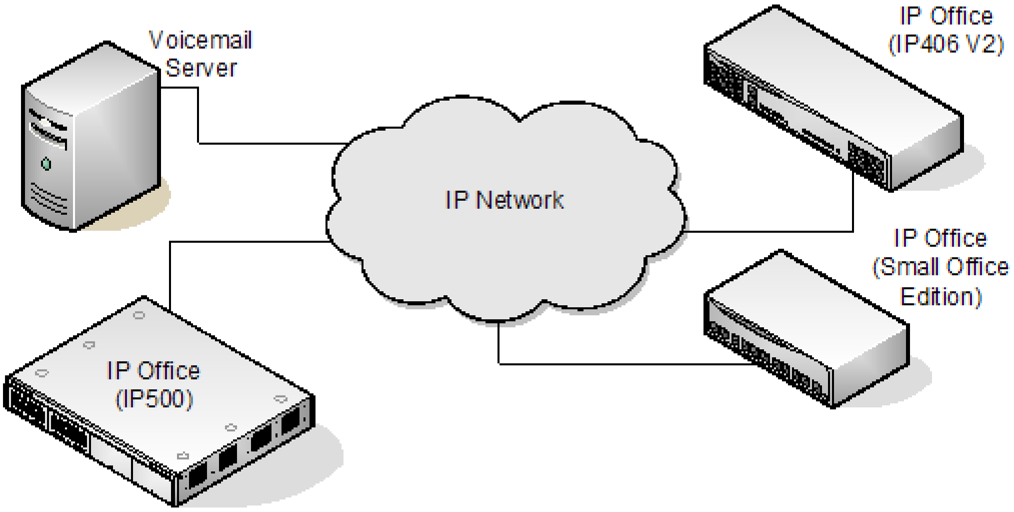
f. Select **Manually entered mailbox extension**. Enter a number that matches the digit length that was specified in the UM Dial Plan previously created. The actual number entered does not need to match an IP Office extension, only the length is important. Select **Next**.

g. Select **Enable** and then **Finish**.

2.5 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 ***SCN***. For details refer to the IP Office Manager documentation.

Within a Small Community Network, separate voicemail servers on each or some of the IP Offices is not supported. However a single Voicemail Pro server can be used to provide voicemail features for all the IP Offices in the SCN.



One IP Office is treated as the central system and the voicemail server is associated with the central system. Within the other remote IP Office systems, the voicemail settings are configured to indicate that they get their voicemail services from the central IP Office.

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	Remote IP Offices
Voicemail Type	***Voicemail Pro***	***Centralized Voicemail***
Voicemail IP Address	Set to the voicemail server PC's IP address.	*Not used.*
Voicemail Destination	*Not used.*	Set to the **Outgoing Group ID** of the H323 Line to the central IP Office.

Licenses	This system needs licenses 24 for all the Voicemail Pro features required.	These systems only require a **VMPro Recording Administrators** license is they want to use ContactStore. They do not require any other voicemail licenses.
Names	All user and group names must be unique.	
Numbers	All user and group extension numbers must be unique.	

Voicemail Fallback

IP Office 5.0+ supports a number of fallback features for Small Community Networks. In conjunction with Voicemail Pro 5.0+, that can includes one of the IP Offices acting as the fallback system to associate with the voicemail server should the central IP Office be not available to the network for a period of time.

When voicemail fallback is configured, if the central IP Office is removed from the network, within 3 minutes voicemail operation should resume via the fallback IP Office. When the central IP Office is restored, within 3 minutes voicemail operation via the central IP Office is resumed. During the period of handover between IP Offices, voicemail services are not available and any current calls to/from voicemail are lost.

To setup voicemail resilience:

- Within the configuration of the central IP Office, on the H323 Line to the fallback IP Office, the **Supplementary Services** setting is 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**.
- Within the configuration of the fallback IP Office, licenses for the voicemail features required to operate during resilience must be entered.

2.6 Voicemail Email

Voicemail Email allows the voicemail server to provide a number of email functions:

- **Forward a Message to Email**
  If the voicemail server is set to IP Office mailbox mode, mailbox users are able to manually forward an voicemail message to their email.
- **Automatic New Voicemail Messages**
  For all mailbox modes, users can use voicemail email to automatically have a message sent to their email whenever they receive a new voicemail message. The email 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** 212 action can be used to send a caller's recorded voicemail message to a specified email address.
- **UMS Exchange 2007**
  In conjunction with Exchange 2007 and Outlook 2007, users are able to use their Outlook inbox as their mailbox for voicemail messages.

Voicemail Email features requires the voicemail server to be configured for access to either an SMTP email server or to a MAPI email server via a MAPI enabled email client program on the voicemail server PC.

- **SMTP Installation** 53
  This is an email standard supported by most email servers. It is the default email mode for the voicemail server.
- **MAPI Installation**
  MAPI requires a MAPI compliant email 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 emails via that MAPI client.
    - The exact method of integration between the voicemail server and the MAPI email 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 was 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.

2.6.1 SMTP Setup

By default the Voicemail Pro server is installed defaulted to SMTP operation and the necessary details of the SMTP server account to use are requested as part of the Voicemail Pro server installation.

To install Voicemail Pro for SMTP Voicemail Email

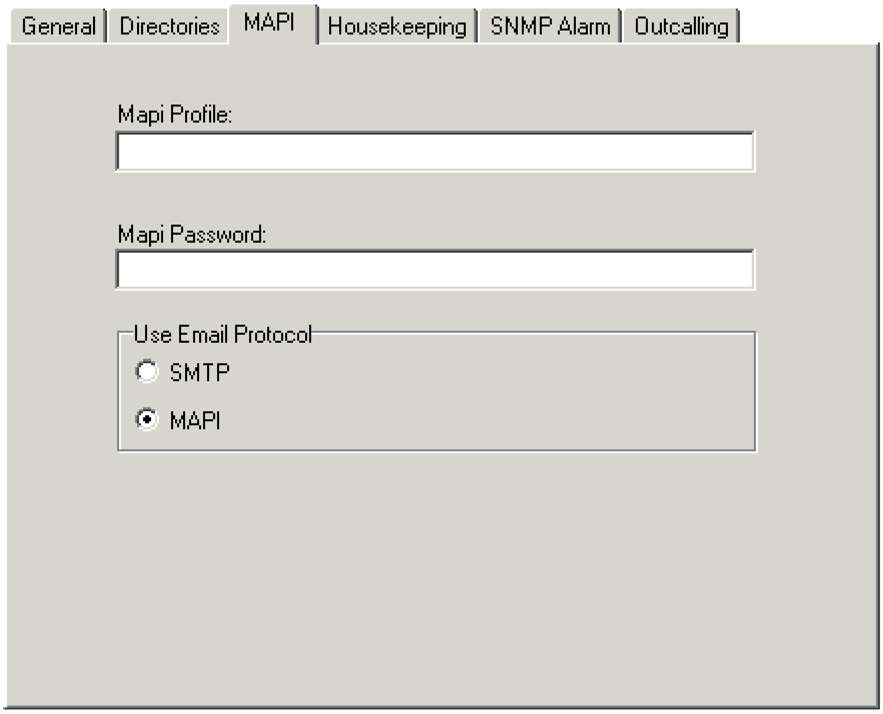
1. Obtain details of an email account that the Voicemail Pro service can use from whoever administrates the customer's email server. The details required are:
    - Email address.
    - Server SMTP address.
    - Email account user name and password.
    - Whether the email server uses CHAP.
2. Install the Voicemail Pro software 26.
3. When requested, enter the email address 102.
4. When requested, enter the Voicemail Pro SMTP 103 email account settings.
5. Configure the IP Office user and group accounts 69 with the email addresses.

2.6.1.1 Selecting SMTP Operation

By default, the Voicemail Pro server is configured for SMTP email mode. However if required it can be switched between SMTP and 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 email mode

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



Mapi Profile:

Mapi Password:

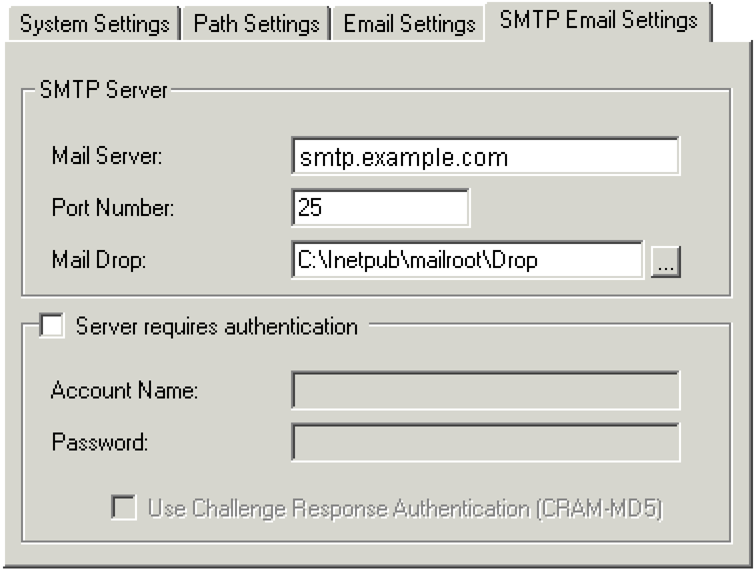
Use Email Protocol
○ SMTP
● MAPI

4. The **Use Email Protocol** settings allow you to switch Voicemail Pro between ***MAPI*** and ***SMTP***.
   - If ***MAPI*** is selected, a valid MAPI profile and password must be entered in the fields above. That MAPI profile must exist within the MAPI email client on the server PC and be useable by the account under which the Voicemail Pro service is running.
   - If ***SMTP*** is selected, the SMTP email account settings 103 must be entered.
5. Click **OK**.
6. Click **Save and Make Live**.

2.6.1.2 Changing the Server SMTP Settings

To configure the server SMTP email settings:

1. Open the Windows **Control Panel**.
2. Select **IP Office Voicemail Pro**. The IP Office Voicemail Pro window opens.
3. Click the **SMTP Email Settings** tab.



Mail Server: smtp.example.com

Port Number: 25

Mail Drop: C:\Inetpub\mailroot\Drop

☐ Server requires authentication

Account Name:

Password:

☐ Use Challenge Response Authentication (CRAM-MD5)

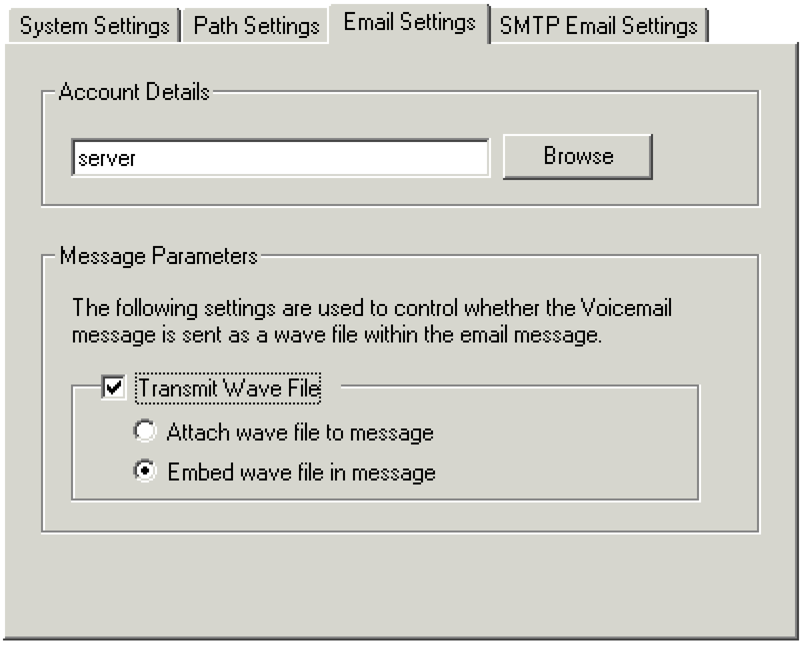
- **Mail Server**
  Enter the name of the SMTP mail server. This should be the fully qualified domain name.
- **Port Number**
  Enter the receiving port on the SMTP mail server. The default is 25.
- **Mail Drop box**,
  This field is only required for Voicemail Pro VPNM. Enter the name of the destination folder for outgoing emails on the SMTP Server. Alternatively click the browse button and select the folder to use.
- **Server requires authentication**
  If the SMTP server requires authentication select this option to enter the Account Name and Password that should be used by the voicemail server. You can also select **Use Challenge Response Authentication** if used by the SMTP server.

4. Click **Check** to validate the changes that you have made.
5. Click **OK**. You are prompted to restart the affected services so that your changes are enabled.
6. Choose **Yes**. The services that are affected by your changes are automatically stopped and restarted.

2.6.1.3 Setting the Server Email Address

To configure email settings:

1. Open the Windows Control Panel.
2. Select **IP Office Voicemail Pro**. The IP Office Voicemail Pro window opens.
3. Click the **Email Settings** tab.



server

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

- **Account Details** box,
  type the name of the MAPI email account to use for email messages.
  - For MAPI, enter the name of the MAPI email account to use for email messages. Alternatively, select **Browse** to display a list of available email accounts.
  - For SMTP, enter the email address that the voicemail server should use. This address should match the account details set on the SMTP Email Settings tab.
- **Message Parameters**
  These options are only available if you have installed and are using IMS. For IMS you can specify the way in which the .wav files of voicemail messages are to be sent in emails. Sending .wav files across a network creates a high loading on the network and networks servers. A one-minute message requires a 1MB .wav file.

4. Click **OK**.

2.6.1.4 SMTP Errors

SMTP error logging can be enabled to generate a log of SMTP activity. For a default 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.

Enabling SMTP Error Reporting:

1. Stop the Voicemail Pro service
2. Start the Registry Editor.
3. Locate the registry key. This differs depending on the version of Voicemail Pro.

   Voicemail Pro 3.2: Locate the key **HKEY_LOCAL_MACHINE\SOFTWARE\Network Alchemy\Voicemail\Directories**.

   Voicemail Pro 4.0+: Locate the key **HKEY_LOCAL_MACHINE\SOFTWARE\Avaya\Media Services\Directories**.
4. From the menu bar select **Edit**.
5. Select **New** and then **String Value**.
6. Enter **SMTPLogging**.
7. Right-click on the new registry key **SMTPLogging** and select **Modify**.
8. Set the value to **1**.
9. Close the Registry Editor.
10. Restart the Voicemail Pro service.

SMTP Error Codes

Value	Meaning
1	An exception has occurred.
3	The process has run out of memory.
4	An error has occurred due to a problem with the message body or attachments.
5	There was a problem initiating the conversation with the mail server. Ensure the setting of the Domain property is correct.
6	There was an error terminating the conversation with the SMTP mail server.
7	The "From" address was not formatted correctly or was rejected by the SMTP mail server. Some SMTP servers will only accept mail from particular addresses or domains. SMTP mail servers may also reject a from address if the server can not successfully do a reverse lookup on the from address.
8	An error was reported in response to receipt address. The SMTP server may refuse to handle mail for unknown recipients.
9	There was an error connecting to the SMTP mail server.
10	There was an error opening the file. If you have specified file attachments, ensure that they exist and that you have access to them.
11	There was an error reading a file. If you have specified file attachments, ensure that they exist and that you have access to them.
15	No mail server specified.
16	There was a problem with the connection and a socket error occurred.
17	Could not resolve host.
18	Connected but server sent back bad response.
19	Could not create thread.
20	Canceled as a result of calling the Cancel method.
21	The operation timed-out while the host was being resolved.
22	The operation timed-out while connecting.
24	ESMTP Authentication failed.
25	The selected ESMTP Authentication mode is not supported by the server.
26	ESMPT Authentication protocol error.
27	Socket Timeout error.
105	Invalid license key.

2.6.2 MAPI Setup

2.6.2.1 Domain Member

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

1. Create a Voicemail Domain Account 58.
2. Configure Outlook for Internet Mail 64.

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

1. Install the Voicemail Pro Software 60.
2. Switch Voicemail Pro to MAPI 61.

2.6.2.1.1 Creating a Voicemail Domain Account

To create a Voicemail Domain Account

1. Make sure that the PC that will be running the voicemail server is a member of the domain. To join the domain you will need the use of a log account with administrative permissions on the domain as well as the server PC, consult the domain administrator.
    - **Windows 2000**
      Right click **My Computer** and select **Properties**. Select the **Network Identification** tab.
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 PC using a domain administrator account.
4. From the Control Panel, select **Administrative Tools**.
5. Select **Computer Management** | **Local Users and Groups** | **Groups**.
6. Double-click **Administrators** and select **Add**.
7. From the **Look In** list select the domain name.
8. In the **Name** window, locate and highlight **Voicemail**. Click **Add** followed by **OK** and **OK** to close.

2.6.2.1.2 Configuring Outlook for VoiceMail Email

To configure Outlook for Voicemail Pro email

1. On the desktop, right-click the Outlook icon and select Properties.
2. On the General tab, select Add.
3. Select Microsoft Exchange Server.
4. Click Next.
5. In the Server field, enter the name of the Exchange Server.
6. In the Mailbox field, enter Voicemail.
7. Click Next.
8. When you are asked if you travel with this computer, select No.
9. Click Next.
10. Click Finish.
11. Highlight the MS Exchange Settings and click Properties.
12. Highlight Microsoft Exchange Server and click Properties.
13. Click Check name and ensure that the name is resolved.
14. If the name is resolved, select Apply.
15. Click OK, OK and Close to shut the mail settings.
16. Do not continue until the name has been resolved correctly with the Exchange Server. If the name is not resolved, check the account details with the Exchange Administrator.
17. Open Outlook and select Yes to register Outlook as the default email application.
18. Select Tools > Options.
19. Click the Preferences tab.
20. Click Email Options.
21. Uncheck Save copies of messages in Sent Items folder.
    - You might want this option selected during initial setup to aid troubleshooting. However due to the size of wav file message attachments you should uncheck it after installation testing is completed.
22. Log on to the Voicemail Pro Server PC using the voicemail account.
23. From Outlook, send a message direct to an extension user.
24. If this message is received correctly, you can continue installing the Voicemail Pro software. See Installing the Voicemail Pro Software 60.

To install the Voicemail Pro software

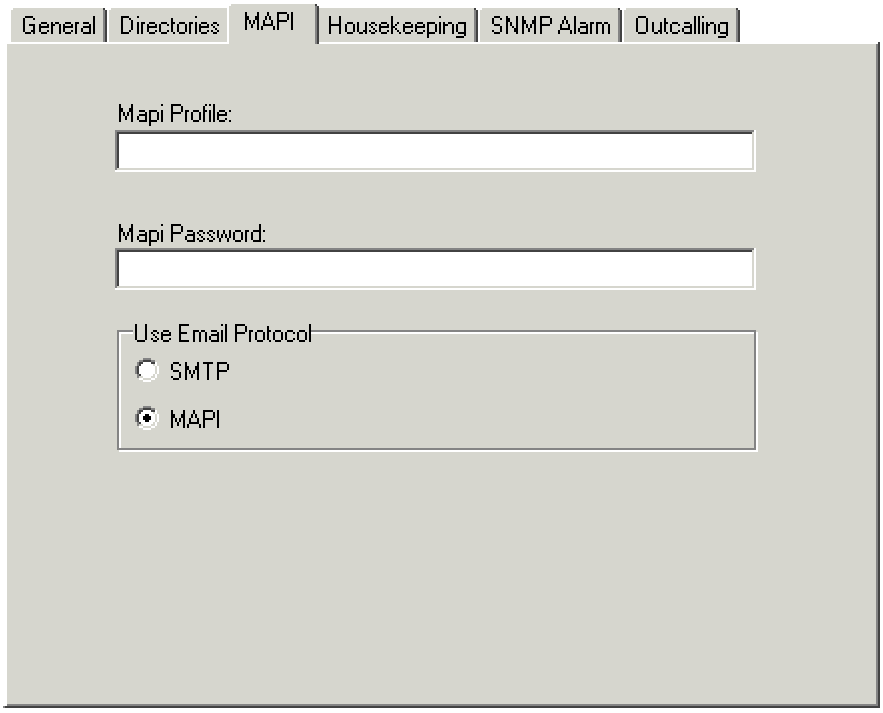
1. Log off and log back on using the Voicemail account and password.
2. Install the required Voicemail Pro software.
3. When the installation process requests a User Name and Password for the Voicemail Pro service, enter the Voicemail account details.
4. Restart the server PC when requested and log on using the Voicemail account.
5. When SMTP email details are requested, enter no values and ignore the error message following the SMTP check.
6. Start the Voicemail Pro Service 32.
7. Check that the basic voicemail services start and operate correctly.
8. Switch Voicemail Pro to MAPI 61.

2.6.2.1.4 Switching VoiceMail Pro to MAPI

By default, the Voicemail Pro server is configured for SMTP email mode. However if required it can be switched between SMTP and 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 email mode

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



Mapi Profile:

Mapi Password:

Use Email Protocol
○ SMTP
● MAPI

4. The **Use Email Protocol** settings allow you to switch Voicemail Pro between ***MAPI*** and ***SMTP***.
   - If ***MAPI*** is selected, a valid MAPI profile and password must be entered in the fields above. That MAPI profile must exist within the MAPI email client on the server PC and be useable by the account under which the Voicemail Pro service is running.
   - If ***SMTP*** is selected, the SMTP email account settings 103 must be entered.
5. Click **OK**.
6. Click **Save and Make Live**.

2.6.2.2 Work Group Member

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

1. Create a Voicemail User Account 62.
2. Configure Outlook Express for Internet Mail 63.
3. Configure Outlook for Voicemail Email 59.
4. Configure Outlook for Exchange Server 65.

The user name and password created are requested as part of the installation of the Voicemail Pro service. The process described here assumes that Outlook is installed but has not been previously used or configured.

You are then ready to install the Voicemail Pro software. See Installing the Voicemail Pro Software 60.

By default, Voicemail Pro is set to use SMTP for emails. You need to change this to MAPI. See Switching Voicemail Pro to MAPI 61.

You also need to set the SMTP Email Account settings on the Voicemail Pro so that they match those of the customer's email server. See Changing SMTP Email Account Settings 68.

2.6.2.2.1 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 Creating a Voicemail User Account 62.
2. Configure Outlook Express for Internet Mail. See Configuring Outlook Express for Internet Mail 63.
3. Configure Outlook for internet mail. See Configuring Outlook for Voicemail Email 59.
4. Configuring Outlook for exchange server. See Configuring Outlook for Exchange Server 65.

The user name and password created are requested as part of the installation of the Voicemail Pro service. The process described here assumes that Outlook is installed but has not been previously used or configured.

You are then ready to install the Voicemail Pro software. See Installing the Voicemail Pro Software 60.

By default, Voicemail Pro is set to use SMTP for emails. You need to change this to MAPI. See , Switching Voicemail Pro to MAPI 61.

You also need to set the SMTP Email Account settings on the Voicemail Pro so that they match those of the customer's email server. See Changing SMTP Email Account Settings 68.

2.6.2.2.2 Creating a Voicemail User Account

To create a Voicemail User Account

1. Log on to the server PC as the local administrator and create a new user. For this example the name of the user account created used is **Voicemail**.
2. Set a secure password.
3. Clear **User must change password** at next logon and check **Password never expires**.
4. Click **Create** and then **Close**.
5. Right-click the **New Account**, and select **Properties**.
6. Select the **Member Of** tab.
7. Click **Add**.
8. In the **Select Groups** window, highlight **Administrators** and click **Add**. Click **OK**.
9. Continue with one of the following as appropriate to the installed MAPI client and method for sending email.

2.6.2.2.3 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, you must ensure that the voicemail PC has the correct IP address of the DNS Server configured.
6. Click **Next**.
7. Enter the email 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 PC 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.

2.6.2.2.4 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 Email** and click **OK**.
4. For the Mail Account, enter ***Voicemail***.
5. For User Information enter Voicemail as the Name and for the **Email 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. Open **Outlook**.
14. On the **Email Service Option Screen**, select **Internet Only**.
15. Click **Next**.
16. Select **Yes** to register Outlook as the default email application.
17. Select **Tools > Options**.
18. Click the **Preferences** tab.
19. Click **Email 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 PC 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.

2.6.2.2.5 Configuring Outlook for Exchange Server

This option may be configured if Outlook is to be configured to connect to the Exchange Server, using a valid user name and password, while the Voicemail PC 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 PC.
2. Clear **User must Change password at Next Logon** and select **Password Never Expires**.
3. On the voicemail PC, 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 Microsoft 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** and ensure the name is resolved.
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 email application.
14. Select **Tools** > **Options**.
15. Choose the **Preferences** tab. Click **Email Options**.
16. Uncheck **Save copies of messages in Sent Items folder**.
    - You may want this option selected during initial setup and troubleshooting. Due to the size of wav file message attachments deselect it once installation is complete.
17. Log on to the server PC 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.

2.6.2.2.6 Installing the VoiceMail Pro Software

To install the Voicemail Pro software

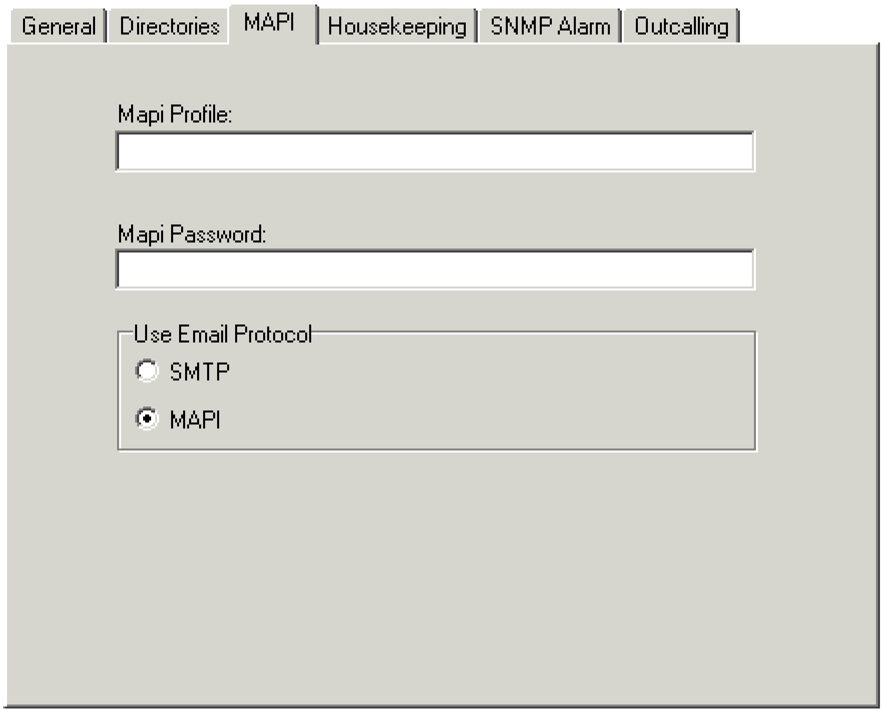
1. Log off and log back on using the Voicemail account and password.
2. Install the required Voicemail Pro software.
3. When the installation process requests a User Name and Password for the Voicemail Pro service, enter the Voicemail account details.
4. Restart the server PC when requested and log on using the Voicemail account.
5. When SMTP email details are requested, enter no values and ignore the error message following the SMTP check.
6. Start the Voicemail Pro Service 32.
7. Check that the basic voicemail services start and operate correctly.
8. Switch Voicemail Pro to MAPI 61.

2.6.2.2.7 Switching VoiceMail Pro to MAPI

By default, the Voicemail Pro server is configured for SMTP email mode. However if required it can be switched between SMTP and 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 email mode

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



Mapi Profile:

Mapi Password:

Use Email Protocol

○ SMTP

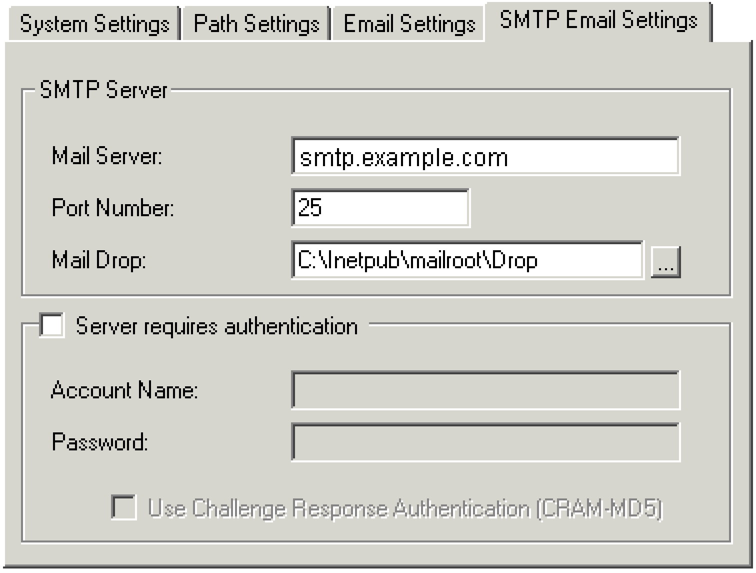
● MAPI

4. The **Use Email Protocol** settings allow you to switch Voicemail Pro between ***MAPI*** and ***SMTP***.
   - If ***MAPI*** is selected, a valid MAPI profile and password must be entered in the fields above. That MAPI profile must exist within the MAPI email client on the server PC and be useable by the account under which the Voicemail Pro service is running.
   - If ***SMTP*** is selected, the SMTP email account settings 103 must be entered.
5. Click **OK**.
6. Click **Save and Make Live**.

2.6.2.2.8 Changing SMTP Email Account Settings

To change SMTP Email Account Settings:

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



Mail Server: smtp.example.com

Port Number: 25

Mail Drop: C:\Inetpub\mailroot\Drop

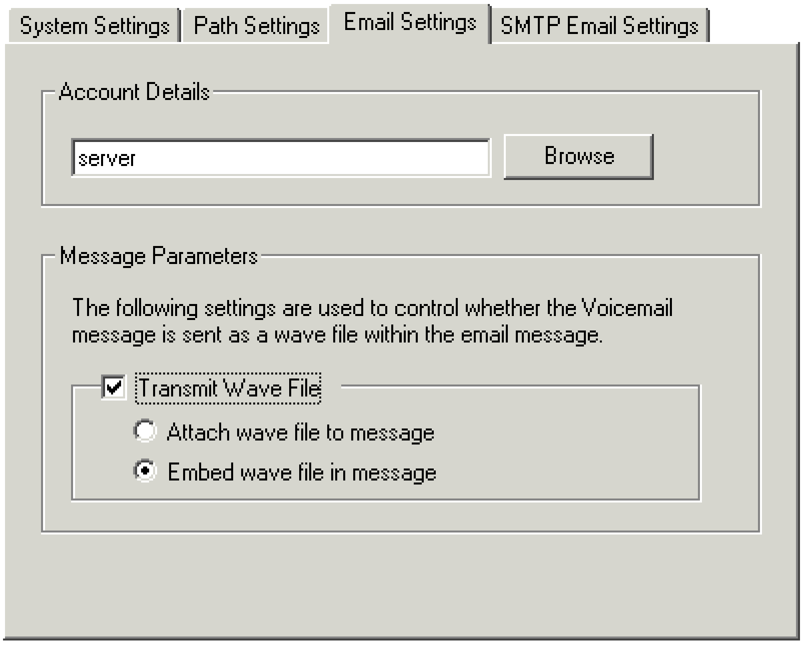
☐ Server requires authentication

Account Name:

Password:

☐ Use Challenge Response Authentication (CRAM-MD5)

4. Enter the settings to match the customer's email server and the email account configured on that server for the Voicemail Pro service.
5. Click the **Email Settings** tab.



server

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

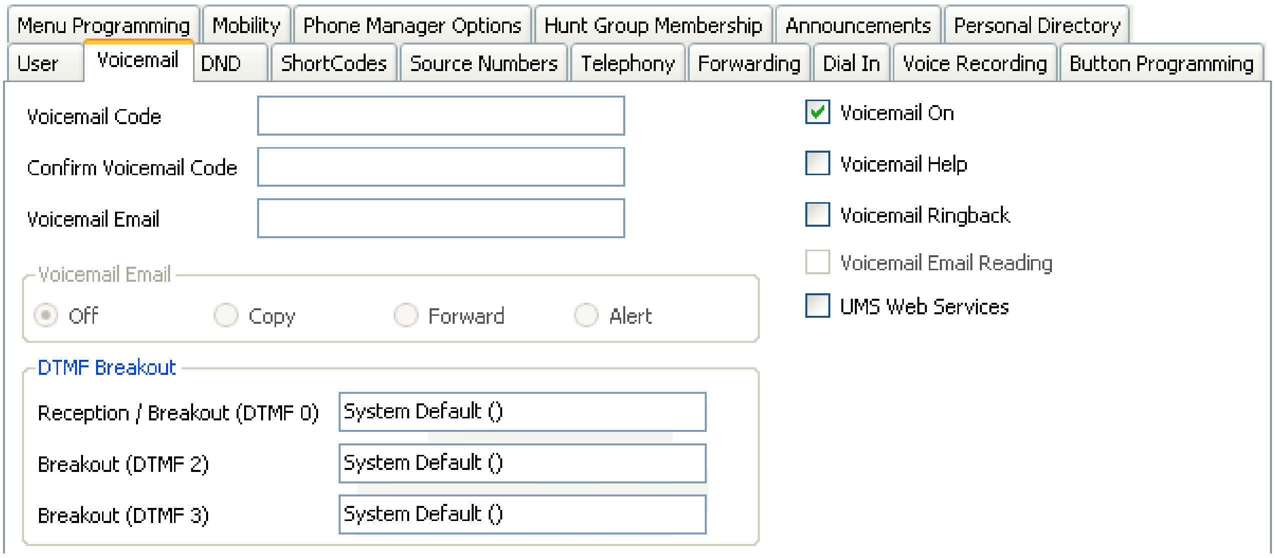
● Embed wave file in message

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

2.6.3 Voicemail Email Operation

2.6.3.1 User and Group Configuration

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



Voicemail Email: ● Off ○ Copy ○ Forward ○ Alert

DTMF Breakout

Reception / Breakout (DTMF 0): System Default ()

Breakout (DTMF 2): System Default ()

Breakout (DTMF 3): System Default ()

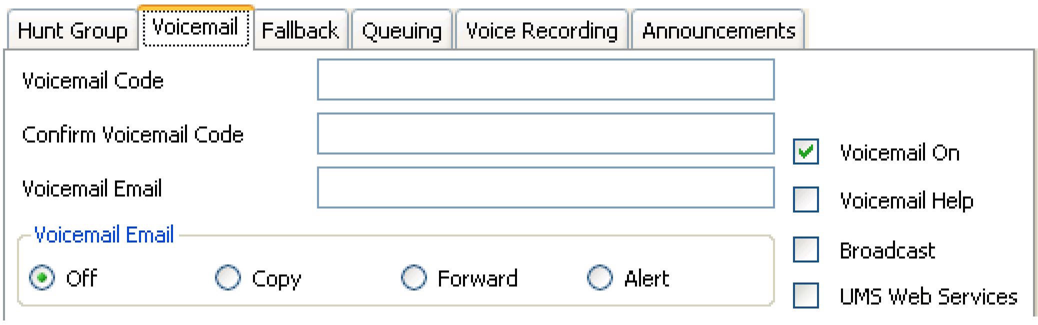
☑ Voicemail On

☐ Voicemail Help

☐ Voicemail Ringback

☐ Voicemail Email Reading

☐ UMS Web Services



Voicemail Email: ● Off ○ Copy ○ Forward ○ Alert

☑ Voicemail On

☐ Voicemail Help

☐ Broadcast

☐ UMS Web Services

- **Voicemail Email:** *Default = Blank (No voicemail email features)*
  This field is used to set the user or group email address used by the voicemail server for voicemail email operation. When an address is entered, the additional Voicemail Email control below are selectable to configure the type of voicemail email service that should be provided.

  - Use of voicemail email requires the voicemail pro server to have been configured to use either a local MAPI email client or an SMTP email server account. See Voicemail Email Installation 53.

  - The use of voicemail email for the sending (automatic or manual) of email messages with wav files attached should be considered with care. A one-minute message creates a 1MB .wav file.

- **Voicemail Email** *Default = Off*
  If an email address is entered for the user or group, the following options become selectable. These control the mode of automatic voicemail email operation provided by the voicemail server whenever the voicemail mailbox receives a new voicemail message.

    - Users can change their voicemail email mode using visual voice 302. If the voicemail server is set to IP Office mode 299, user can also change their voicemail email mode through the telephone prompts. The ability to change the voicemail email mode can also be provided in a call flow using a **Play Configuration Menu** 192 action or a **Generic** 168 action.

    - If the voicemail server is set to IP Office mode 299, users can manually forward a message to email.

  - **Off**
    If off, none of the options below are used for automatic voicemail email. 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 email and sent to the email address. There is no mailbox synchronization between the email and voicemail mailboxes. For example reading and deletion of the email 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 email and sent to the email 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 email and voicemail mailboxes. Users can also select this mode by dialing ***01** from their extension.

  - **UMS Exchange 2007**
    Voicemail Pro 5.0+ supports voicemail email to an Exchange 2007 server email 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 2007 mailbox. See UMS Exchange 2007 Installation 47 and UMS Exchange 2007 308.

- **Alert**
  If this mode is selected, each time a new voicemail message is received in the voicemail mailbox, a simple email message is sent to the email address. This is an email 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.

2.6.3.2 How Voicemail Email Messages Look

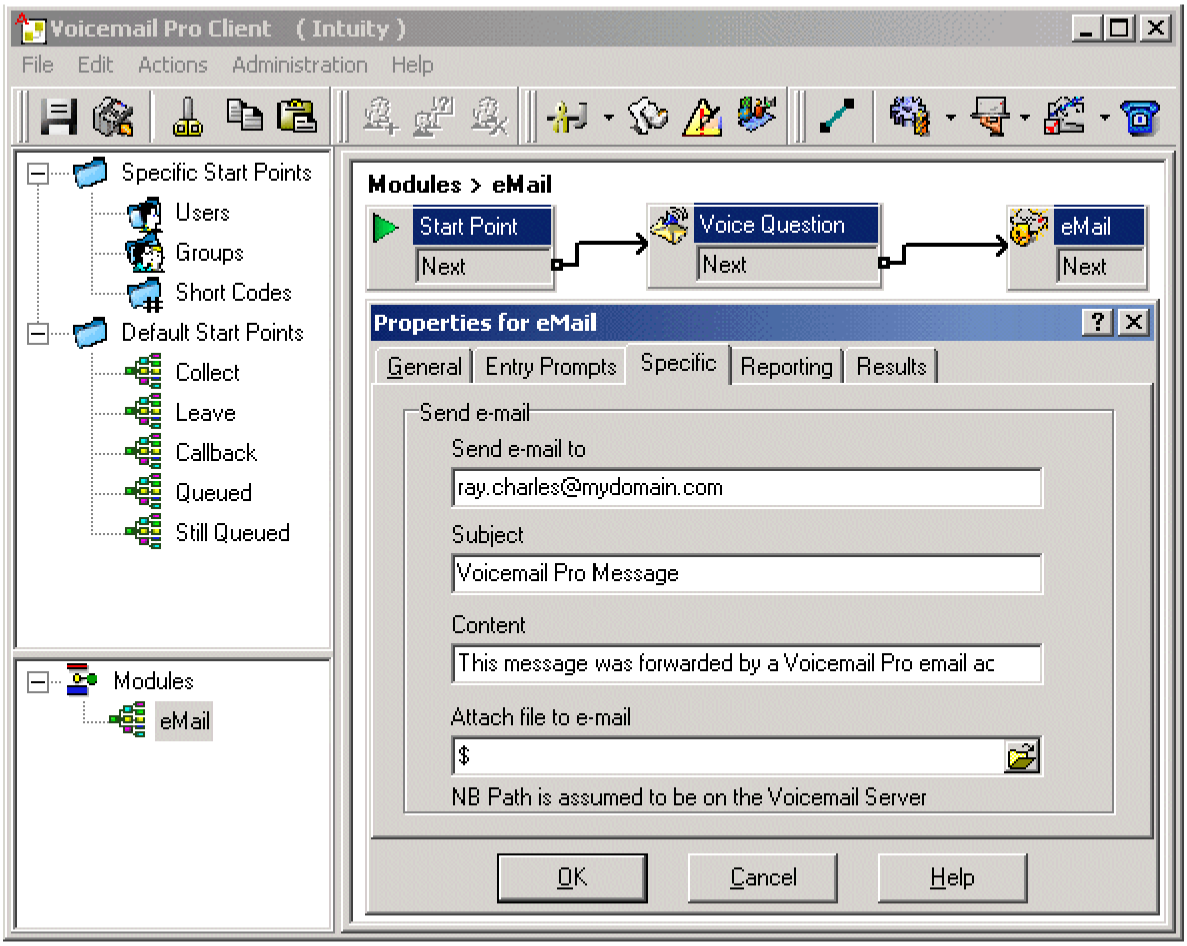
Messages sent by a user or group's voicemail email settings contain the following:

- **To**
  The user/group email address.
- **From**
  The name and address setting of the email client account.
- **Subject**
  `Voicemail Message ('calling number' > 'user name') From:'calling number'.`
- **Body**
  If the user or group's Voicemail Email 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 via a Voicemail Pro eMail action are configurable, see The Voicemail Pro eMail Action 72.

2.6.3.3 The Voicemail Pro Email Action

The **eMail** action in Voicemail Pro can be used to send messages via email in response to caller actions in the voicemail call flow. The action can also attach a wav file.



Send e-mail

Send e-mail to: ray.charles@mydomain.com

Subject: Voicemail Pro Message

Content: This message was forwarded by a Voicemail Pro email ac

Attach file to e-mail: $

NB Path is assumed to be on the Voicemail Server

In the example above, the **eMail** action follows a **Voice Question** action. The **$** in the eMail action's **Attach file to email** 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.

2.7 Text to Speech (TTS) Installation

The Voicemail Pro server is able to use the Text to Speech (TTS) feature to:

- Speak text in call flows using the **Speak Text** action. The text can include variables passed from other actions including database actions.
- Support Email Text to Speech. This requires MAPI based Voicemail Email to have been set up and tested.
- When installed in parallel with Voicemail Email, Voicemail Pro TTS can be used to provide email reading to selected mailbox users.

Licensing

Voicemail Pro TTS requires the server PC to have a Microsoft SAPI 5 compatible TTS engine installed and a valid license entry. Two IP Office licenses exist to enable Voicemail Pro support for TTS operation. These are:

- **VM Pro Generic TTS**
  This license enables the Voicemail Pro server to use either Microsoft's own SAPI 5 TTS engines or third-party SAPI 5 compatible TTS engines. The Microsoft TTS engines (Microsoft Sam, Mike, Mary and Simplified Chinese) are installed by default as part of the Microsoft Windows installation. One **VM Pro Generic TTS** license is required for each simultaneous usage.
- **VM Pro ScanSoft TTS**
  This license enables the Voicemail Pro server to use Avaya supplied TTS engines. These engines currently provide better voice quality than the Microsoft TTS engines and support a wider range of languages. They are supplied on a set of 2 DVD's separate from the Voicemail Pro software. One **VM Pro ScanSoft TTS** license is required for each simultaneous usage.

TTS licenses are enabled for a number of ports (simultaneous usages). If both Generic TTS and ScanSoft TTS licenses are enabled in Manager, both of the TTS engines will be used on a first-come first-served basis. Due to this, the TTS engine used by a particular port for a particular call cannot be guaranteed. To have one consistent engine used for all calls, Avaya only supports one type of license is use within a system.

Languages

For Voicemail Pro 5.0, the supplied ScanSoft TTS software now supports the same set of languages as Voicemail Pro speech prompts except for Hungarian. If more than one TTS language is installed, a **Select System Prompt Language** action can then be used to switch TTS to a different language from the selected default.

- **Installation on Windows Server Operating Systems**
  On many Windows server PC's, 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 PC to have a sound card installed.
  1. Ensure that you have full administrator rights for the PC. This process will also require the PC to be restated.
  2. In the Windows Control Panel select **Sounds and Audio Devices**.
  3. If Windows Audio has not been enabled, select the **Enable Windows Audio** check-box.

2.7.1 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 **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 3rd party engine installed then the Microsoft 3rd party engine is used.

2.7.2 Installing Avaya Text to Speech

The Avaya TTS engine for Voicemail Pro is supplied on separate DVD's (x2) from the Voicemail Pro software .

To install Avaya Text to Speech:

1. Install and test Voicemail Pro as normal.
2. Using IP Office Manager, add the **VM Pro 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.

2.7.3 Using the Speak Text Action

One method of employing TTS is through adding a **Speak Text** action to a call flow. The text to be spoken is entered in the action's **Specific** tab.

This text can include combinations of:

- Typed text sentences.
- Voicemail Pro Call Variables 140. For example:
  - Entering $KEY would be replaced when spoken by the last digits dialed within the call flow by the caller.
  - If using database interaction, entering $DBD[x] would be replaced by the current value of that database field.
  - Entering $CLI would speak the caller's CLI, if available, back to them.
- SAPI 5 XML 75 tags can be added to alter how the text is spoken. For example when 123 needs to be spoken as one two three rather than "one hundred and twenty-three", enter ***<spell>123</spell>***.

2.7.4 Text to Speech SAPI Controls

Windows TTS engines use Microsoft's SAPI (Speech Application Program Interface). This includes the use of XML tags in the text to change how the text is spoken. For example, in the text ***This is the <volume level="90">text</volume> to speak*** the items within < > brackets are XML tags used to change how the speech is spoken.

The following are samples of the SAPI XML controls supported by Voicemail Pro TTS. Further information on SAPI 5 can be obtained from Microsoft support websites.

- **Volume** 76
  Change the speech volume.
- **Rate** 76
  Change the speech rate.
- **Pitch** 76
  Change the speech pitch.
- **Emph** 76
  Add emphasis to words.
- **Spell** 77
  Spell out words and numbers literally.
- **Silence** 77
  Add a period of silence.
- **Partofsp** 77
  Change the usage of words.

Entering XML Tags
XML tags can be used in two ways, either *nested* or *empty*.

- **Nest Tags:** Example = *<volume level="90">text</volume>*
  Nested tags consist of:
    - An opening XML tag, in the example above <volume level="90">.
    - The text to which the opening tag command should be applied.
    - A closing XML tag. The closing tag use the same command as the opening tag, prefixed with / and no other settings. In the example above this is **</volume>**.
- **Empty Tags:** Example = <volume level="90"/>All following text
  An empty tag is not nested, its command and settings apply to all the following text. Empty tags are recognizable by the **/** before the tags closing **>**.

Example SAPI XML Tags

Volume
Controls the volume of the speech. This tag can be nested or empty.

- **Attributes:**
  - **level=**
    Supports values between 0 and 100, being percentages of the system's set volume.
- **Examples**:
  - <volume level="50"/> Speak allow following text at level 50.
  - <volume level="50"> Speak this text at level 50</volume> and this as normal.

Rate
Controls the speed at which the text is spoken. This tag can be empty or nested.

- **Attributes**
  Only one attribute may be applied within a tag.
  - **absspeed=**
    Sets the absolute speed for the speech in a range between -10 and 10 with 0 being normal speech.
  - **speed=**
    Sets a speed change that is added to the current speed.
- **Examples**:
  - <rate absspeed="5"> Speak this text at rate 5</rate> and this text as normal.
  - <rate absspeed="5"/> Speak all following text at rate 5.
  - <rate speed="-5"/> Drop the current speech speed by 5.

Pitch
Controls the pitch at which the text is spoken. This tag can be empty or nested.

- **Attributes**
  Only one attribute may be applied within a tag.
  - **absmiddle=**
    Sets the absolute pitch for the speech in a range between -10 and 10 with 0 being normal speech.
  - **middle=**
    Sets a pitch change that is added to the current speed.
- **Examples**:
  - <pitch absmiddle="5"> Speak this text at pitch 5</rate> and this text as normal.
  - <pitch absmiddle="5"/> Speak all following text at pitch 5.
  - <pitch middle="-5"/> Drop the current speech pitch by 5.

Emph
Applies emphasis to a word or section of text. This tag must be nested.

- **Attributes:**
  This tag has no attributes.
- **Example**:
  - Say <emph>boo</emph>.

Spell

Spell forces the engine to speak any nested text literally rather than applying any speech rules. This is useful for numbers where rather that than saying 3001 as three thousand and one for 3001, the speech required is three zero zero one. This tag must be nested.

- **Attributes**
  This tag has no attributes.
- **Example**:
  - The telephone number is <spell>555 3468</spell>.

Silence

Inserts a period of silence. This tag must be empty.

- **Attributes**
  - **msec=**
    Sets the duration in milliseconds.
- **Example**:
  - A short silence <silence msec="500"/> of half a second.

Partofsp

Forces the pronunciation of a word according to it usage if not correctly determined by the TTS speech engine or to override the engine. This tag must be nested.

- **Attributes:**
  - **part=**
    Takes a value from **noun**, **verb**, **modifier**, **function** or **interjection**.
- **Example:**
  - To <partofsp part="verb">record</partofsp> that <partofsp part="noun">record</partofsp> press 1.

2.7.5 Setting Up Text To Speech to Read Email

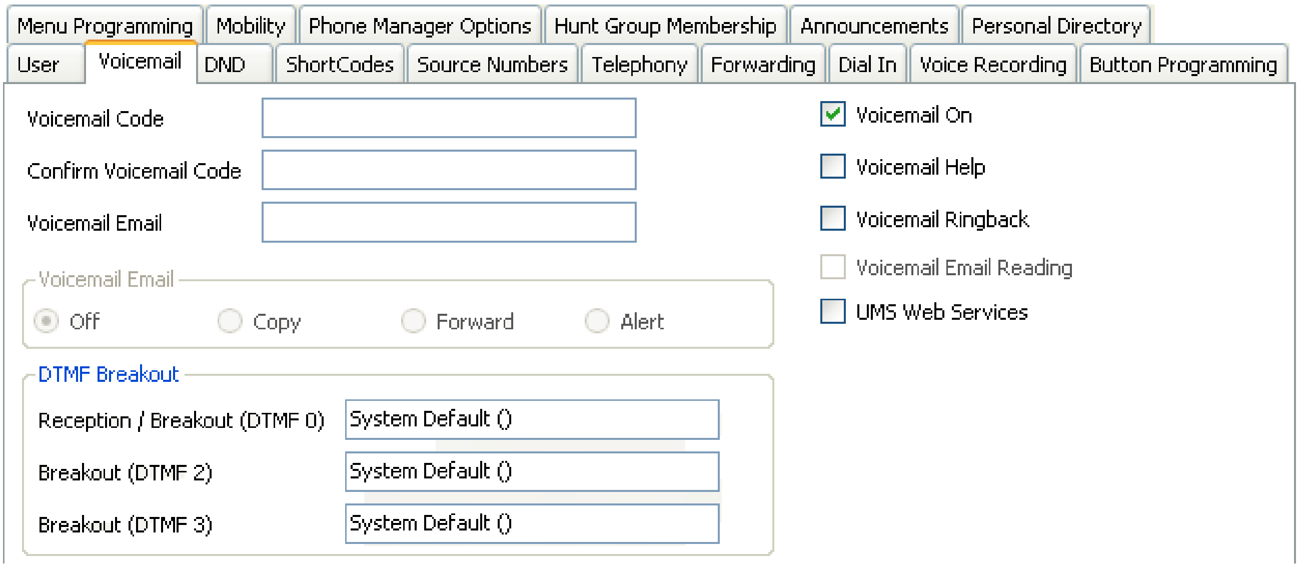
In conjunction with MAPI email clients and Exchange server, TTS can be used to read new e-mails in a user's email inbox when they access their voicemail mailbox.

This feature is supported only for Intuity mode. Users hear their new voicemail messages and then the number of "Messages with text". Before each email is spoken, details of who it is from, when the message was sent and the size are given. This allows large or non-urgent e-mails to be skipped.

- Email 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.

To set up text to speech to read email:

1. Install and test Voicemail Pro for MAPI-based Voicemail Email operation with an Exchange Server.
2. To perform email reading, the **Voicemail** account created on the Exchange server for Voicemail Email must able to access the individual users email mailboxes. This can be achieved by either:
    - On the Exchange Server, ensure that Voicemail user account is granted rights to access all user email boxes, or;
    - Within each user's Outlook:
        - Select **Tools > Options**.
        - Select **Delegates**.
        - **Add** the voicemail account as a delegate.
3. If you have not already done so, install and test TTS operation using a Speak Text action.
4. Using IP Office Manager, load the IP Office configuration and open the settings for the user.
5. Select the **Voicemail** tab.



Voicemail Code

Confirm Voicemail Code

Voicemail Email

Voicemail Email: ● Off ○ Copy ○ Forward ○ Alert

DTMF Breakout

Reception / Breakout (DTMF 0): System Default ()

Breakout (DTMF 2): System Default ()

Breakout (DTMF 3): System Default ()

☑ Voicemail On

☐ Voicemail Help

☐ Voicemail Ringback

☐ Voicemail Email Reading

☐ UMS Web Services

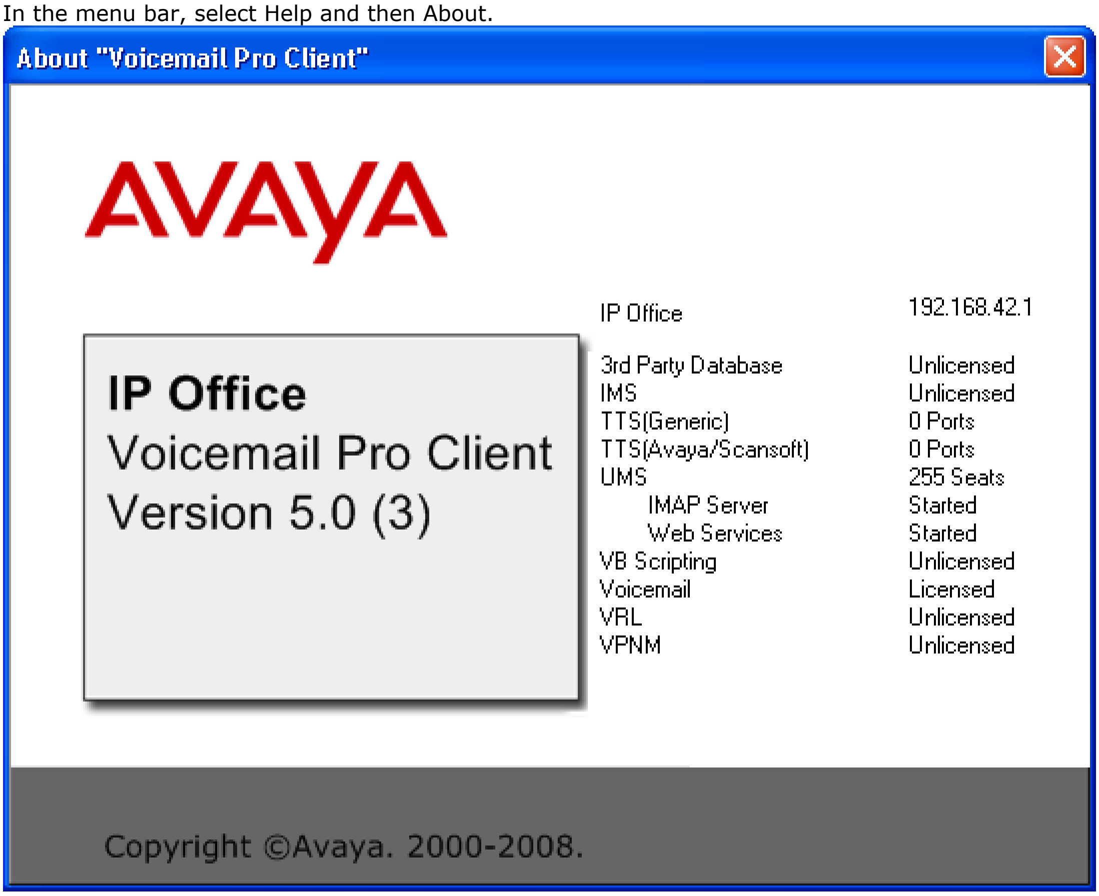
6. In **Voicemail Email**, enter the user's email address. The same address is used for both Voicemail Email and Email Reading services.
7. Select **Voicemail Email Reading**.
8. Click **OK** and merge the new configuration back to the IP Office system.
9. Send the user a test email. Then log into the user's voicemail mailbox and check whether following the voice messages a new "message with text" is announced.

2.8 Troubleshooting

2.8.1 About

For Voicemail Pro 4.2+, the about screen displays information about the IP Office to which the Voicemail Pro server is connected and the licenses it has received from that IP Office.

1. In the menu bar, select Help and then About.



IP Office
Voicemail Pro Client
Version 5.0 (3)

IP Office	192.168.42.1
3rd Party Database	Unlicensed
IMS	Unlicensed
TTS(Generic)	0 Ports
TTS(Avaya/Scansoft)	0 Ports
UMS	255 Seats
IMAP Server	Started
Web Services	Started
VB Scripting	Unlicensed
Voicemail	Licensed
VRL	Unlicensed
VPNM	Unlicensed

Copyright ©Avaya. 2000-2008.

2. The menu displays information from the voicemail server. This includes the address of the IP Office with which it is working and the licenses it has received from that IP Office.

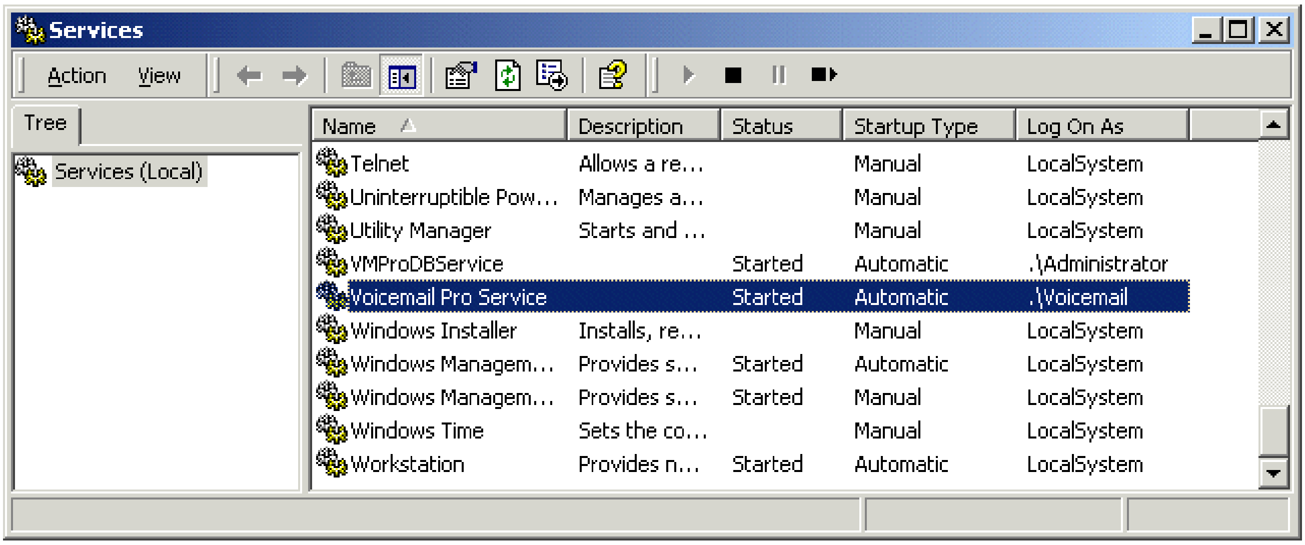
3. To close the information window click the top-right X button.

2.8.2 Checking the Voicemail Pro Service

If Voicemail Pro has been installed successfully, if the server PC has been rebooted then the voicemail service is started automatically. However it is useful know how to check the services and to manually restart them if necessary.

To check/restart the Voicemail Pro Service:

1. Open the Windows Control Panel.
2. Select Administrative **Tools** > **Services**.



Name	Description	Status	Startup Type	Log On As
Telnet	Allows a re...		Manual	LocalSystem
Uninterruptible Pow...	Manages a...		Manual	LocalSystem
Utility Manager	Starts and ...		Manual	LocalSystem
VMProDBService		Started	Automatic	.\Administrator
Voicemail Pro Service		Started	Automatic	.\Voicemail
Windows Installer	Installs, re...		Manual	LocalSystem
Windows Managem...	Provides s...	Started	Automatic	LocalSystem
Windows Managem...	Provides s...	Started	Manual	LocalSystem
Windows Time	Sets the co...		Manual	LocalSystem
Workstation	Provides n...	Started	Automatic	LocalSystem

3. 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 Voicemail Pro options installed. The possible services are:
    - ***Voicemail Pro Service***
      This is the main Voicemail Pro service. Normally this is the only service that needs to be stopped and restarted. It will stop and restart the other services that it uses.
    - ***VMProDBService***
      This service is used for remote client connections.
    - ***IMS (Gateway)***, ***IMS (Voice)*** and ***IMS (Restart)***
      These services are used by the IMS components of Voicemail Pro if installed and licensed.
    - ***VPNM Database Server***, ***VPIM Receiver*** and ***VPNM Server***
      These services are used by the VPNM components of Voicemail Pro if installed and licensed.
4. Close **Services**.

Setting the Voicemail Services or PC to Restart Automatically

The following action is optional. If there is some fault causing the Voicemail Pro service to halt, that fault should be investigated and fixed, however having the service or PC automatically restarted if possible will minimize the disruption to the Voicemail Pro users.

1. Use the Windows control panel to select the ***Voicemail Pro Service***.
2. Right-click on the service and select **Properties**.
3. Select the **Recovery** tab.
4. Use the options presented to either restart the service and or restart the PC should the operating system detect that the Voicemail Pro service has halted.

Using a Batch File to Start Services

In some instances, certain computers might not respond quickly enough in order to start all of the Avaya services in the correct order. In this circumstance, it can be advisable to create a batch file which will delay the start of these services until the PC 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 proper 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.
```

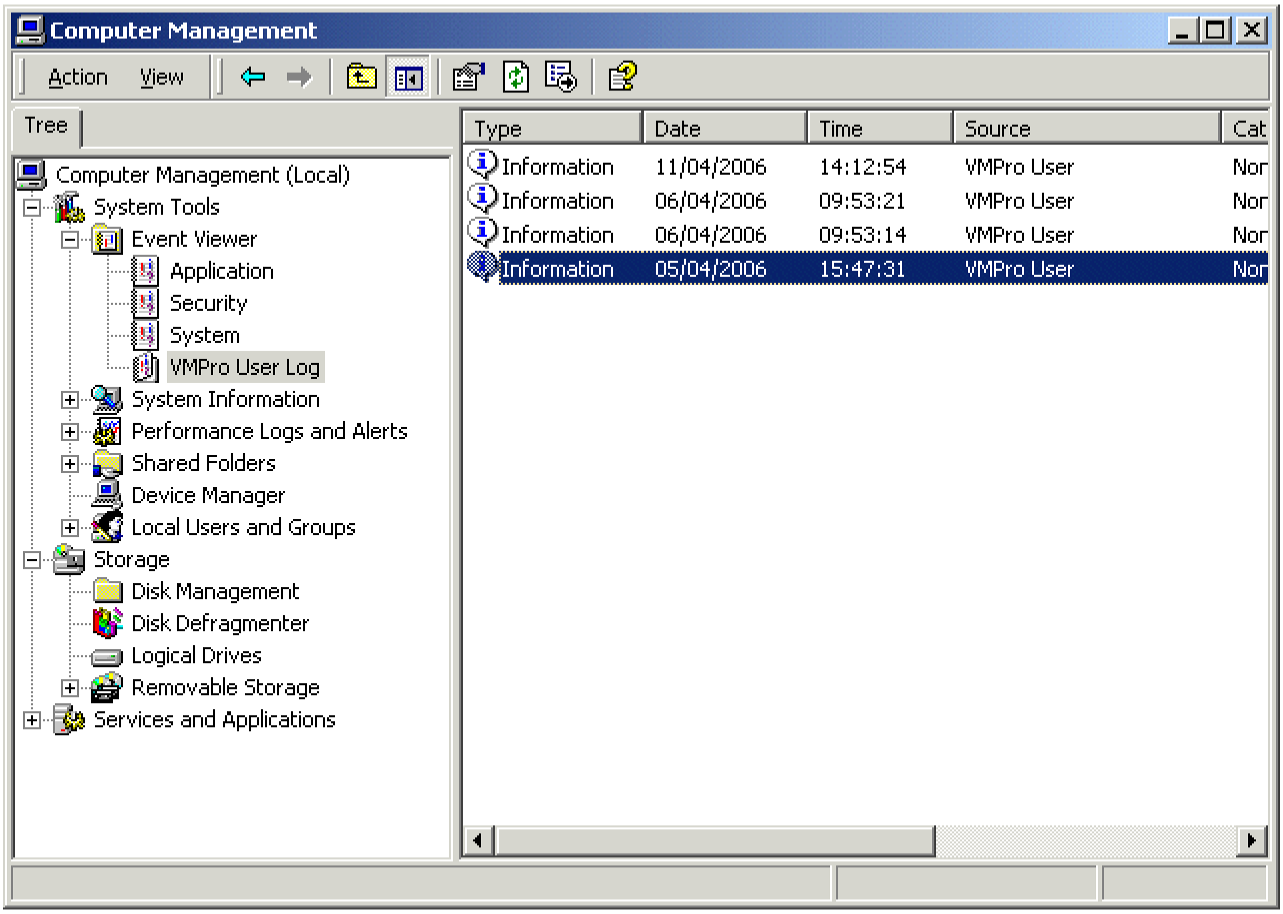
```
timeout /t 60
net start VMProDBService
net start Voicemail Pro Service
net start IMS(Restart)
net start IMS(Voice)
net start IMS(Gateway)
```

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

2.8.3 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.



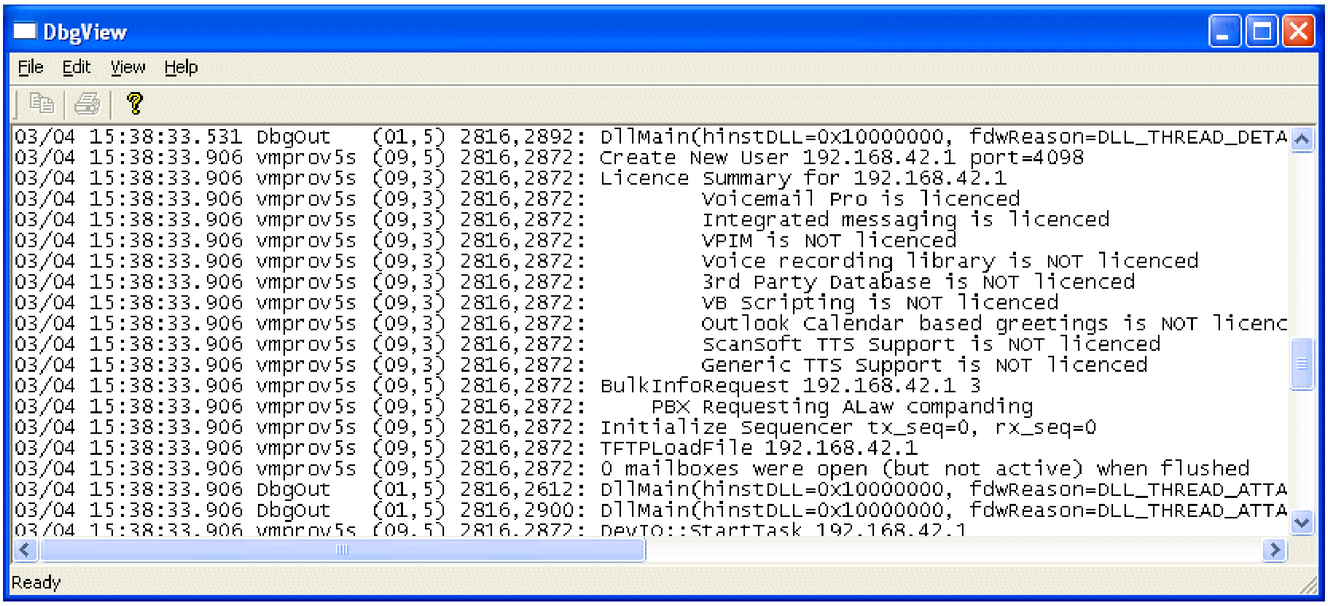
Type	Date	Time	Source	Cat
Information	11/04/2006	14:12:54	VMPro User	Nor
Information	06/04/2006	09:53:21	VMPro User	Nor
Information	06/04/2006	09:53:14	VMPro User	Nor
Information	05/04/2006	15:47:31	VMPro User	Nor

To view the log details:

1. From the **Control Panel**, select **Administrative Tools** > **Computer Management**. The Computer Management window opens.
2. In the **System Tool** directory, view the **Event Viewer**.
3. Click **VMPro User Log** to view the details.

2.8.4 Tracing in Debug

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



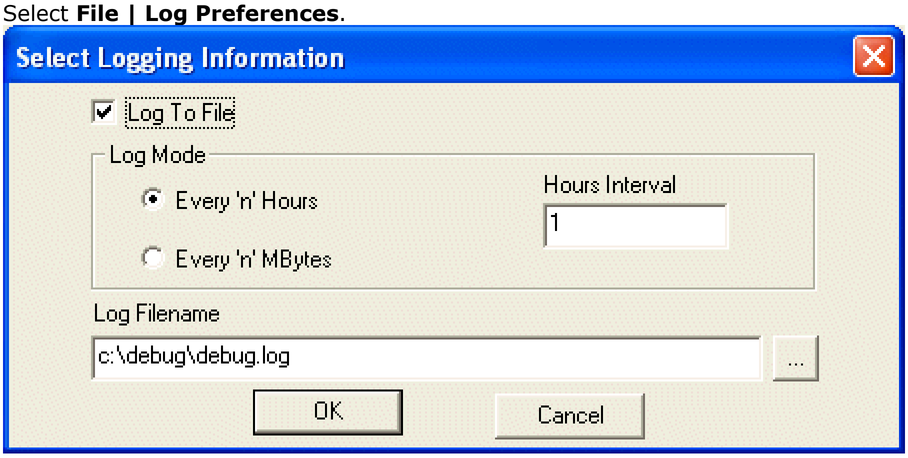
```
03/04 15:38:33.531 Dbgout   (01,5) 2816,2892: DllMain(hinstDLL=0x10000000, fdwReason=DLL_THREAD_DETA
03/04 15:38:33.906 vmprov5s (09,5) 2816,2872: Create New User 192.168.42.1 port=4098
03/04 15:38:33.906 vmprov5s (09,3) 2816,2872: Licence Summary for 192.168.42.1
03/04 15:38:33.906 vmprov5s (09,3) 2816,2872:         Voicemail Pro is licenced
03/04 15:38:33.906 vmprov5s (09,3) 2816,2872:         Integrated messaging is licenced
03/04 15:38:33.906 vmprov5s (09,3) 2816,2872:         VPIM is NOT licenced
03/04 15:38:33.906 vmprov5s (09,3) 2816,2872:         Voice recording library is NOT licenced
03/04 15:38:33.906 vmprov5s (09,3) 2816,2872:         3rd Party Database is NOT licenced
03/04 15:38:33.906 vmprov5s (09,3) 2816,2872:         VB Scripting is NOT licenced
03/04 15:38:33.906 vmprov5s (09,3) 2816,2872:         Outlook Calendar based greetings is NOT licenc
03/04 15:38:33.906 vmprov5s (09,3) 2816,2872:         ScanSoft TTS Support is NOT licenced
03/04 15:38:33.906 vmprov5s (09,3) 2816,2872:         Generic TTS Support is NOT licenced
03/04 15:38:33.906 vmprov5s (09,5) 2816,2872: BulkInfoRequest 192.168.42.1 3
03/04 15:38:33.906 vmprov5s (09,5) 2816,2872:     PBX Requesting ALaw companding
03/04 15:38:33.906 vmprov5s (09,5) 2816,2872: Initialize Sequencer tx_seq=0, rx_seq=0
03/04 15:38:33.906 vmprov5s (09,5) 2816,2872: TFTPLoadFile 192.168.42.1
03/04 15:38:33.906 vmprov5s (09,5) 2816,2872: 0 mailboxes were open (but not active) when flushed
03/04 15:38:33.906 Dbgout   (01,5) 2816,2612: DllMain(hinstDLL=0x10000000, fdwReason=DLL_THREAD_ATTA
03/04 15:38:33.906 Dbgout   (01,5) 2816,2900: DllMain(hinstDLL=0x10000000, fdwReason=DLL_THREAD_ATTA
03/04 15:38:33.906 vmprov5s (09,5) 2816,2872: DevIO::StartTask 192.168.42.1
```

Installation

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



☑ Log To File

● Every 'n' Hours

○ Every 'n' MBytes

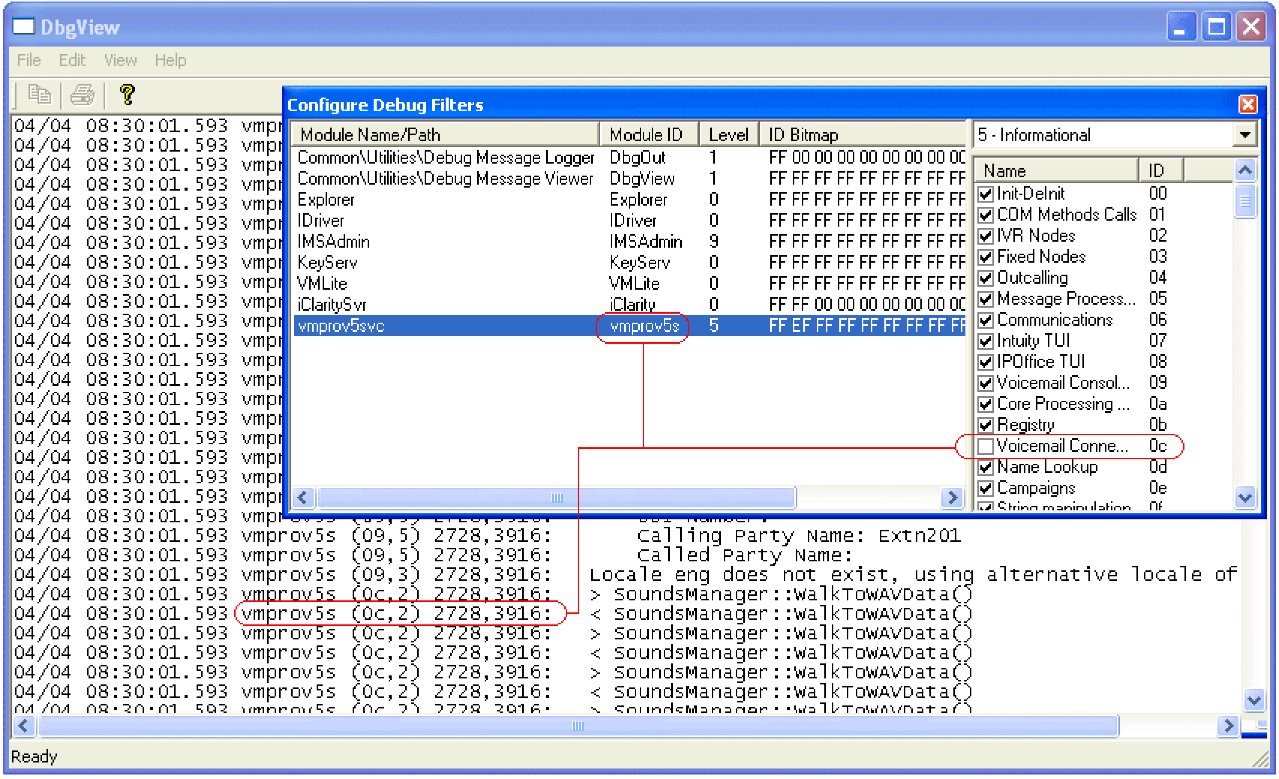
Hours Interval: 1

Log Filename: c:\debug\debug.log

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**.



Module Name/Path	Module ID	Level	ID Bitmap
Common\Utilities\Debug Message Logger	DbgOut	1	FF 00 00 00 00 00 00 00 0
Common\Utilities\Debug Message Viewer	DbgView	1	FF FF FF FF FF FF FF FF FF
Explorer	Explorer	0	FF FF FF FF FF FF FF FF FF
IDriver	IDriver	0	FF FF FF FF FF FF FF FF FF
IMSAdmin	IMSAdmin	9	FF FF FF FF FF FF FF FF FF
KeyServ	KeyServ	0	FF FF FF FF FF FF FF FF FF
VMLite	VMLite	0	FF FF FF FF FF FF FF FF FF
iClaritySvr	iClarity	0	FF FF 00 00 00 00 00 00 0
vmprov5svc	vmprov5s	5	FF EF FF FF FF FF FF FF F

5 - Informational

Name	ID
☑ Init-DeInit	00
☑ COM Methods Calls	01
☑ IVR Nodes	02
☑ Fixed Nodes	03
☑ Outcalling	04
☑ Message Process...	05
☑ Communications	06
☑ Intuity TUI	07
☑ IPOffice TUI	08
☑ Voicemail Consol...	09
☑ Core Processing ...	0a
☑ Registry	0b
☐ Voicemail Conne...	0c
☑ Name Lookup	0d
☑ 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:      Called Party Name:
04/04 08:30:01.593 vmprov5s (09,3) 2728,3916:  Locale eng does not exist, using alternative locale of
04/04 08:30:01.593 vmprov5s (0c,2) 2728,3916:  > SoundsManager::WalkToWAVData()
04/04 08:30:01.593 vmprov5s (0c,2) 2728,3916:  < SoundsManager::WalkToWAVData()
04/04 08:30:01.593 vmprov5s (0c,2) 2728,3916:  > SoundsManager::WalkToWAVData()
04/04 08:30:01.593 vmprov5s (0c,2) 2728,3916:  < SoundsManager::WalkToWAVData()
04/04 08:30:01.593 vmprov5s (0c,2) 2728,3916:  > SoundsManager::WalkToWAVData()
04/04 08:30:01.593 vmprov5s (0c,2) 2728,3916:  < SoundsManager::WalkToWAVData()
```

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.

2.8.5 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 debug viewer 83 to view voicemail server activity as it occurs.

Chapter 3.
Voicemail Pro Preferences

3. Voicemail Pro Preferences

There are two main areas through which Voicemail Pro system preferences are set and configured.

- **Voicemail Pro Client** 89
  These voicemail server settings are set using the Voicemail Pro client.
    - **General** 89
      General voicemail server settings.
    - **Directories** 91
      Set the folder paths for different file locations.
    - **Housekeeping** 93
      Set the times for automatic deletion of different types of messages. Also set the default playback order.
    - **MAPI** 92
      Select the email mode (MAPI or SMTP) used by the voicemail server for its email functions.
    - **SNMP Alarm** 94
      Set the criteria which will cause the voicemail server to send alarms via the IP Office.
    - **Outcalling** 95
      Set the default times for outcalling operation and the frequency of outcalling retires.
    - **VPNM** 96
      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.
- **Windows Control Panel** 99
  These settings are set through the Windows Control Panel on the voicemail server PC.
    - **System Settings** 100
      Used by IMS to set the logging level used by the voicemail server.
    - **Path Setting** 101
      Used by IMS to set the path to the server PC running the IMS Voice Server service.
    - **SMTP Email Settings** 103
      If SMTP is the selected email mode for the voicemail server, this tab is used to set the SMTP account details for the voicemail server.
    - **Email Settings** 102

3.1 System Preferences

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

To change the Voicemail Pro Preferences:

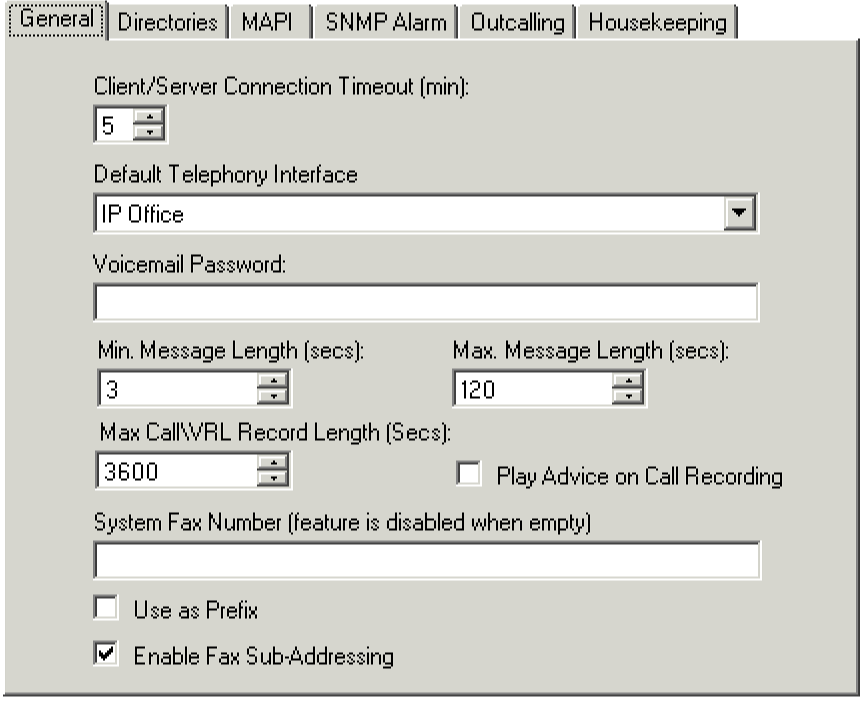
1. Click the **Preferences** icon and then choose **General** or **VPNM**. Alternatively, from the **Administration** menu, select **Preferences** and then choose **General** or **VPNM**.
2. Select the System Preferences tab required.
    - **General** 89
      General voicemail server settings.
    - **Directories** 91
      Set the folder paths for different file locations.
    - **Housekeeping** 93
      Set the times for automatic deletion of different types of messages. Also set the default playback order.
    - **MAPI** 92
      Select the email mode (MAPI or SMTP) used by the voicemail server for its email functions.
    - **SNMP Alarm** 94
      Set the criteria which will cause the voicemail server to send alarms via the IP Office.
    - **Outcalling** 95
      Set the default times for outcalling operation and the frequency of outcalling retires.
    - **VPNM** 96
      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.

3.1.1 General

Although the default IP Office configuration settings allow 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**.



Client/Server Connection Timeout (min): 5

Default Telephony Interface: IP Office

Voicemail Password:

Min. Message Length (secs): 3

Max. Message Length (secs): 120

Max Call\VRL Record Length (Secs): 3600

☐ Play Advice on Call Recording

System Fax Number (feature is disabled when empty)

☐ Use as Prefix

☑ Enable Fax Sub-Addressing

- **Client/Server Connection Timeout (mins)**
  The voicemail server only allows 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.

- **Default Telephony Interface**
  Select the mailbox operation mode for all mailboxes. The options are ***IP Office*** 299 mode or ***Intuity*** 298 emulation mode.

- **Voicemail Password**
  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 Identifying the Voicemail Server PC 107.

- **Min. Message Length (secs)** *(Voicemail Pro 5.0+)*
  By default the minimum message length is 3 seconds in IP Office mailbox mode, 0 seconds in Intuity emulation mode. This field allows the minimum length to be set between 0 and 10 seconds. Messages under this length are deleted immediately.

- **Max. Message Length (secs)**
  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)**,
  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**
  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**
  box, type the number of the general 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 PC. See Setting the Voicemail Pro System Fax Number 358.

  - 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 information mailbox owners should read the Intuity Mailbox User Guide.

  - 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 email address of the intended recipient.

3. Click **OK**.

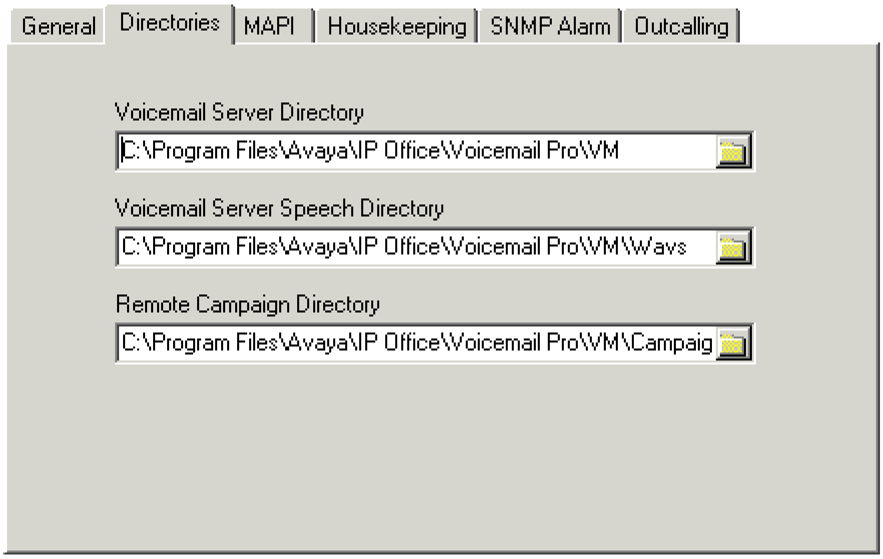
4. Click **Save and Make Live** and select **Yes**.

3.1.2 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: C:\Program Files\Avaya\IP Office\Voicemail Pro\VM

Voicemail Server Speech Directory: C:\Program Files\Avaya\IP Office\Voicemail Pro\VM\Wavs

Remote Campaign Directory: C:\Program Files\Avaya\IP Office\Voicemail Pro\VM\Campaig

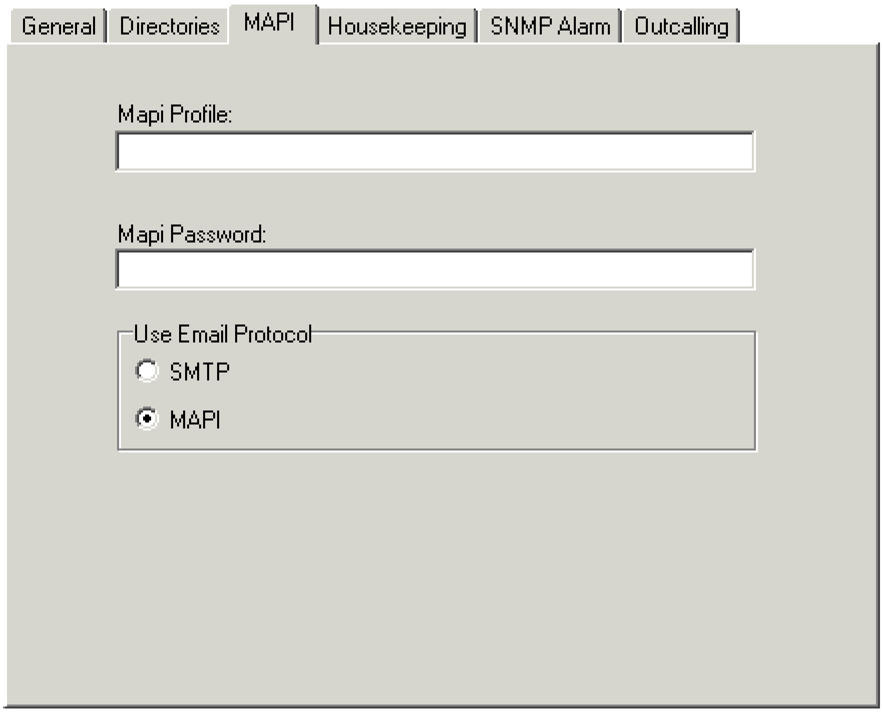
4. In the **Voicemail Server Directory** box, type the path to the folder where the voicemail server program is to be stored. This is the folder where the file ***Root.vmp*** is saved when the **Save & Make Live** option is used. Alternatively click the browse button and select a folder to use.
5. In the **Voicemail Server Speech Directory** box, type the path to the folder where the libraries of speech prompts are to be stored. Alternatively click the browse button and select a folder to use.
6. In the **Remote Campaign Directory** box, type the path to the folder where the campaign files are to be stored. Alternatively click the browse button and select a folder to use.
7. Click **OK**.
8. Click **Save and Make Live** and select **Yes**.

3.1.3 MAPI

By default, the Voicemail Pro server is configured for SMTP email mode. However if required it can be switched between SMTP and 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 email mode

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



Mapi Profile:

Mapi Password:

Use Email Protocol

○ SMTP

● MAPI

4. The **Use Email Protocol** settings allow you to switch Voicemail Pro between ***MAPI*** and ***SMTP***.
   - If ***MAPI*** is selected, a valid MAPI profile and password must be entered in the fields above. That MAPI profile must exist within the MAPI email client on the server PC and be useable by the account under which the Voicemail Pro service is running.
   - If ***SMTP*** is selected, the SMTP email account settings 103 must be entered.
5. Click **OK**.
6. Click **Save and Make Live**.

3.1.4 Housekeeping

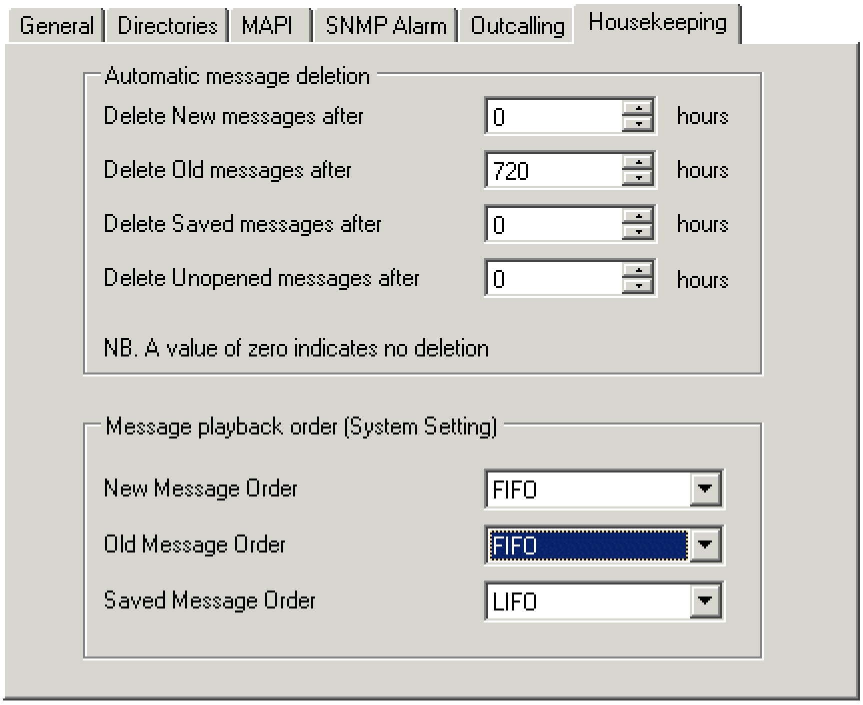
This tab is used to set the Voicemail Pro server settings for automatically deleting messages and for the default playback order of messages.

Messages are automatically deleted from the voicemail server after a set delay. This delay can be adjusted for different message type including unread messages.

The process of housekeeping is performed after any two hour idle period, that is a period with no call into or from the voicemail server.

To set housekeeping rules:

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



Automatic message deletion

Delete New messages after 0 hours

Delete Old messages after 720 hours

Delete Saved messages after 0 hours

Delete Unopened messages after 0 hours

NB. A value of zero indicates no deletion

Message playback order (System Setting)

New Message Order FIFO

Old Message Order FIFO

Saved Message Order LIFO

- 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.

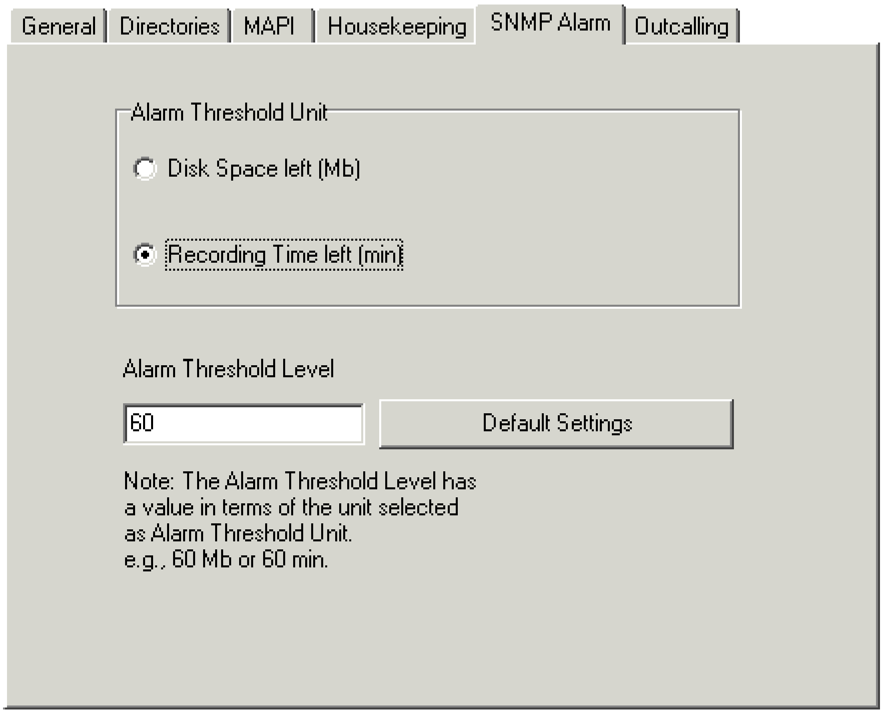
3. **Automatic message deletion**
   Sets the time, in hours, after which messages of various types automatically deleted. A value of ***0*** disables automatic deletion. The actual deletion is performed during the next idle period during which there are no calls to or from the voicemail server.
4. **Message playback order (System Setting)**
   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.
5. Click **OK**.
6. Click **Save and Make Live** and select **Yes**.

3.1.5 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.



Note: The Alarm Threshold Level has a value in terms of the unit selected as Alarm Threshold Unit. e.g., 60 Mb or 60 min.

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**.

3.1.6 Outcalling

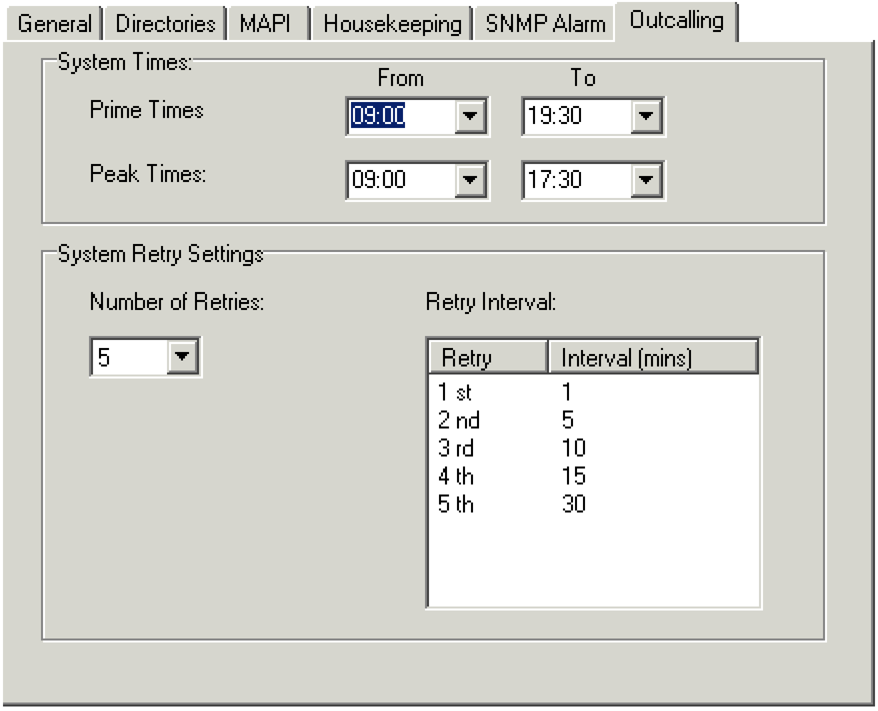
The outcalling preferences in Voicemail Pro are defaults for global operation. Mailbox owners can configure their own outcalling options from their telephone, for example, create their own time profile.

Details on how users can configure outcalling are found in the Intuity Mailbox guide and Phone Manager User Guide.

A timeout value can also be set by a user. This is how long outcalling will attempt to call 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.



	From	To
Prime Times	09:00	19:30
Peak Times:	09:00	17:30

Number of Retries: 5

Retry Interval:

Retry	Interval (mins)
1 st	1
2 nd	5
3 rd	10
4 th	15
5 th	30

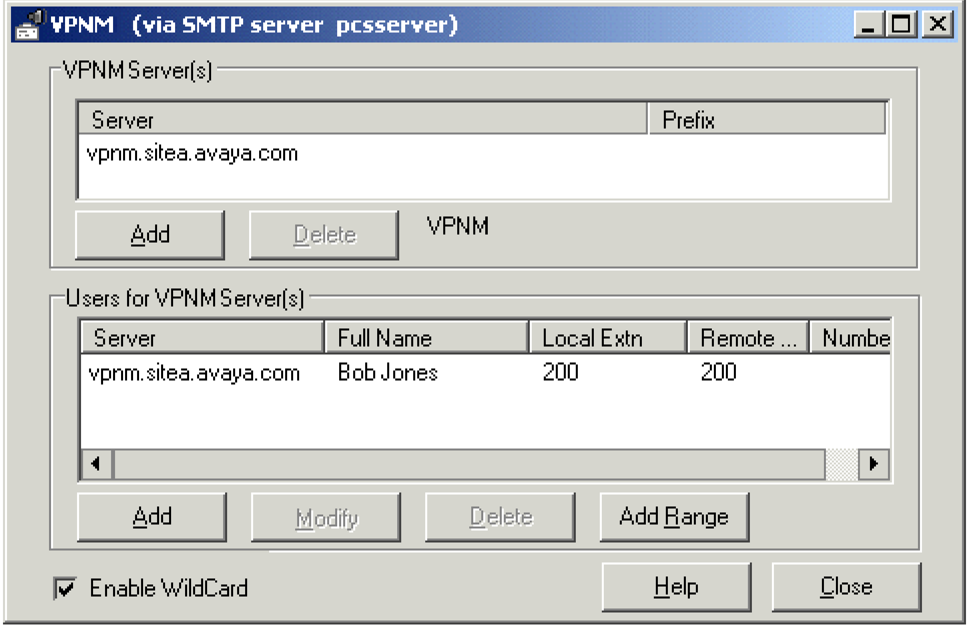
4. Select the times that outcalling is active in the **System Times** section.
    - **Prime Times**
      The time period that outcalling is to be active as default for the system.
    - **Peak Times**
      The busiest working hours.
5. Set the retry settings in the **System Retry Settings** section.
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 retry attempt. The interval is the length of time between each attempt to ring to targeted 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**.

3.1.7 VPNM

This set of preferences are only available if VPNM was selected 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.

To open the VPN 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	

Server	Full Name	Local Extn	Remote ...	Numbe
vpnm.sitea.avaya.com	Bob Jones	200	200	

☑ Enable WildCard

To add a VPNM server:

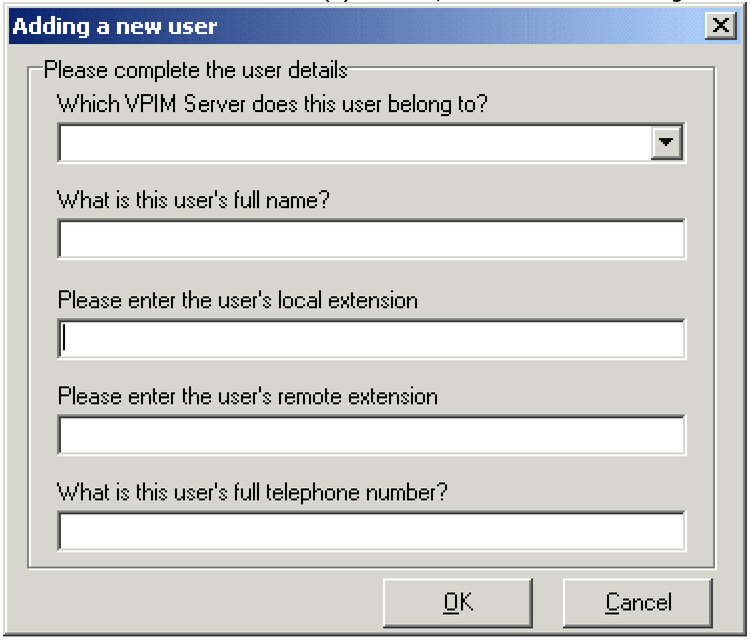
1. In the **VPNM Server(s)** section, click **Add**.
2. Enter the fully qualified domain name of the remote VPNM destination (the remote Voicemail Pro server PC or Avaya Interchange).
3. Enter the two digit access prefix, if these are being used.
4. Click **OK**.

To delete a VPNM server:

1. In the VPNM Server(s) section, select the server that you need to delete.
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:

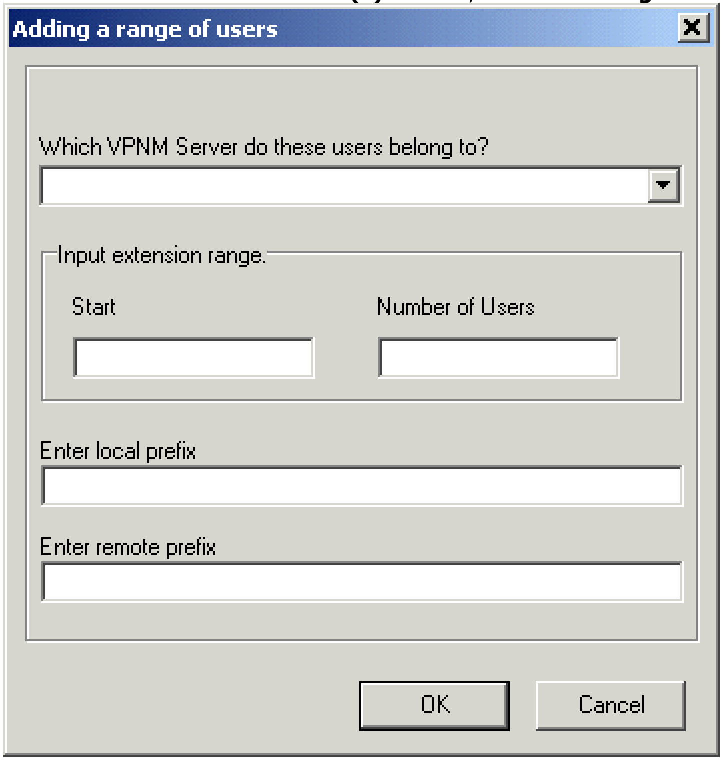
1. In the Users for VPNM Server(s) section, click Add. The Adding a new user window opens.


Adding a new user
Please complete the user details
Which VPIM Server does this user belong to?
What is this user's full name?
Please enter the user's local extension
Please enter the user's remote extension
What is this user's full telephone number?
OK
Cancel

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.



3. Enter details for the users. All of these details MUST be completed before the users can be added.
    - Select the VPNM server to which you want to add the users.
    - Enter the start number of the extension range.
    - Enter the local prefix.
    - Enter remote prefix.
4. Click **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.

3.2 Control Panel Options

To change the Voicemail Pro Server Preferences:

1. Open the Windows **Control Panel**.
2. Select **IP Office Voicemail Pro**.
3. The tabs and options within the tabs will vary according to the installed Voicemail Pro components. Possible tabs are:
   - **System Settings** 100
     Used by IMS to set the logging level used by the voicemail server.
   - **Path Setting** 101
     Used by IMS to set the path to the server PC running the IMS Voice Server service.
   - **SMTP Email Settings** 103
     If SMTP is the selected email mode for the voicemail server, this tab is used to set the SMTP account details for the voicemail server.
   - **Email Settings** 102

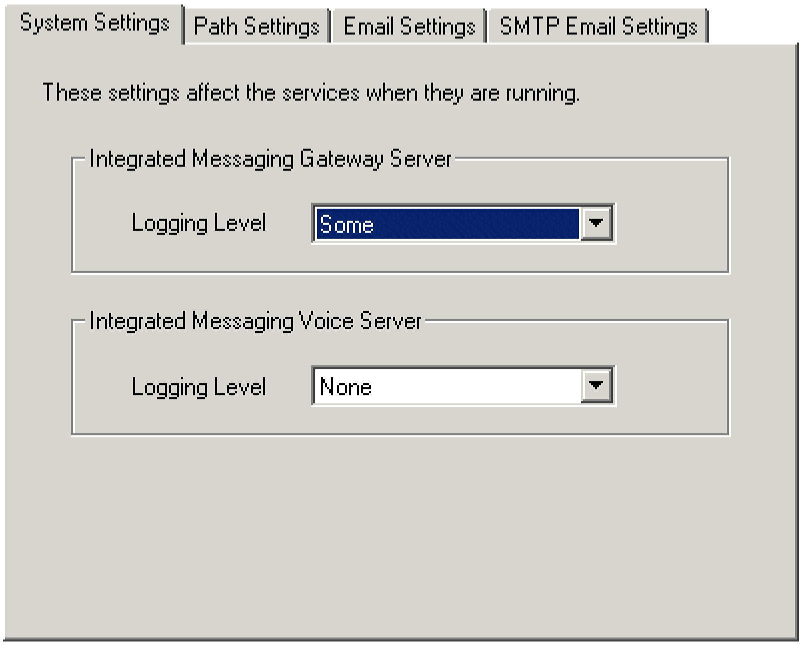
3.2.1 System Settings

If IMS is installed the **Systems Settings** tab is available. You can specify the level of service logging for the IMS Gateway Server service and the IMS Voice Server service. Four levels of logging are available, with increasing level of detail.

Typically logging is required only if IMS problems are being experienced and diagnosis is required. The information is logged in the Event Viewer application.

To specify the level of IMS service logging:

1. Open the Windows Control Panel.
2. Select **IP Office Voicemail Pro**. The IP Office Voicemail Pro window opens.
3. Click the **System Settings** tab.



These settings affect the services when they are running.

Integrated Messaging Gateway Server

Logging Level: Some

Integrated Messaging Voice Server

Logging Level: None

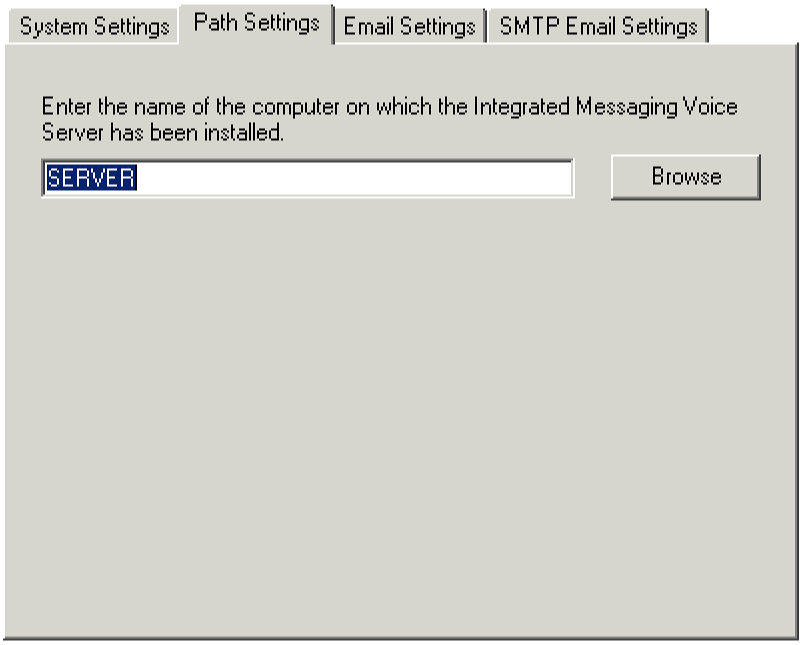
4. In the **Logging Level** boxes, select the level to use for each of the IMS services.
   - **None**
     No logging recorded.
   - **Some**
     A low level of logging recorded where only errors are logged.
   - **Most**
     A medium level of logging where errors and warnings are recorded.
   - **All**
     All errors, warnings and information are logged.
5. Click **Check** to validate the changes that you have made.
6. Click **OK**. You are prompted to restart the affected services so that your changes are enabled.
7. Choose **Yes**. The services that are affected by your changes are automatically stopped and restarted.

3.2.2 Path Settings

If IMS is installed, the **Path Settings** tab is available. You need to specify the computer name of the server PC that is hosting the IMS Voice Service. Typically, this is installed on the same server PC as the Voicemail Pro Server.

To specify the name of the host server PC for IMS:

1. Open the Windows Control Panel.
2. Select **IP Office Voicemail Pro**. The IP Office Voicemail Pro window opens.
3. Click the **Path Settings** tab.



Enter the name of the computer on which the Integrated Messaging Voice Server has been installed.

SERVER

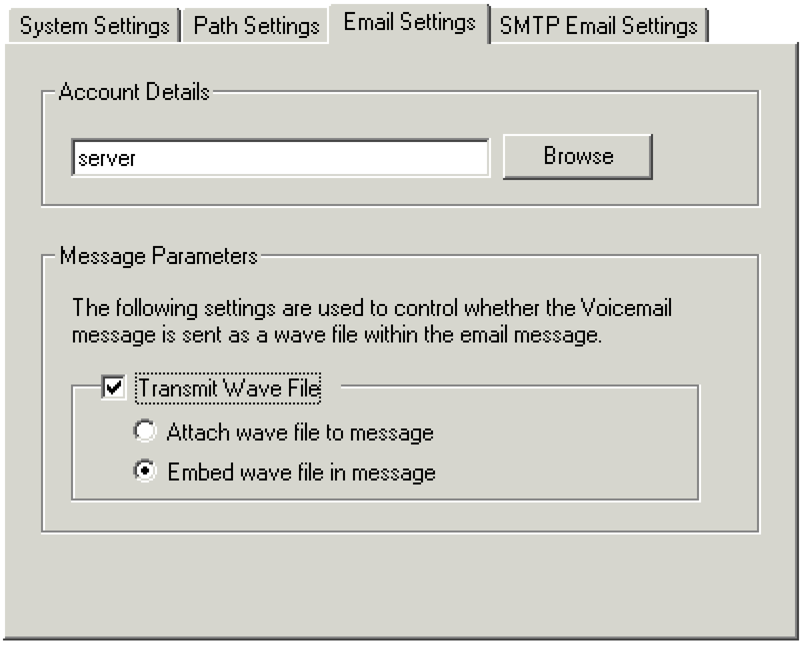
4. Type the name of the computer on which the IMS Voice Service has been installed. Alternatively, click **Browse** and select the name of the computer.
5. Click **Check** to validate the changes that you have made.
6. Click **OK**. You are prompted to restart the affected services so that your changes are enabled.
7. Choose **Yes**. The services that are affected by your changes are automatically stopped and restarted.

3.2.3 Email Settings

You can configure certain email settings such as the account to use for email and the way in which .wav files are transmitted.

To configure email settings:

1. Open the Windows Control Panel.
2. Select **IP Office Voicemail Pro**. The IP Office Voicemail Pro window opens.
3. Click the **Email Settings** tab.



server

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

- **Account Details** box,
  type the name of the MAPI email account to use for email messages.
  - For MAPI, enter the name of the MAPI email account to use for email messages. Alternatively, select **Browse** to display a list of available email accounts.
  - For SMTP, enter the email address that the voicemail server should use. This address should match the account details set on the SMTP Email Settings tab.
- **Message Parameters**
  These options are only available if you have installed and are using IMS. For IMS you can specify the way in which the .wav files of voicemail messages are to be sent in emails. Sending .wav files across a network creates a high loading on the network and networks servers. A one-minute message requires a 1MB .wav file.

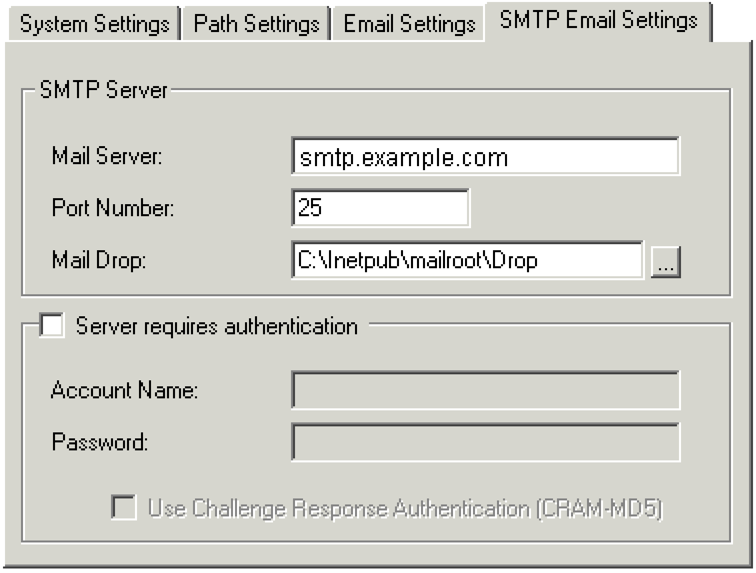
4. Click **OK**.

3.2.4 SMTP Email Settings

For SMTP email, you need to define connections to external SMTP Email Servers. You can define your connections in the SMTP Email settings tab.

To configure the server SMTP email settings:

1. Open the Windows **Control Panel**.
2. Select **IP Office Voicemail Pro**. The IP Office Voicemail Pro window opens.
3. Click the **SMTP Email Settings** tab.



Mail Server: smtp.example.com

Port Number: 25

Mail Drop: C:\Inetpub\mailroot\Drop

☐ Server requires authentication

Account Name:

Password:

☐ Use Challenge Response Authentication (CRAM-MD5)

- **Mail Server**
  Enter the name of the SMTP mail server. This should be the fully qualified domain name.
- **Port Number**
  Enter the receiving port on the SMTP mail server. The default is 25.
- **Mail Drop box**,
  This field is only required for Voicemail Pro VPNM. Enter the name of the destination folder for outgoing emails on the SMTP Server. Alternatively click the browse button and select the folder to use.
- **Server requires authentication**
  If the SMTP server requires authentication select this option to enter the Account Name and Password that should be used by the voicemail server. You can also select **Use Challenge Response Authentication** if used by the SMTP server.

4. Click **Check** to validate the changes that you have made.
5. Click **OK**. You are prompted to restart the affected services so that your changes are enabled.
6. Choose **Yes**. The services that are affected by your changes are automatically stopped and restarted.

Chapter 4.

IP Office Configuration

4. IP Office Configuration

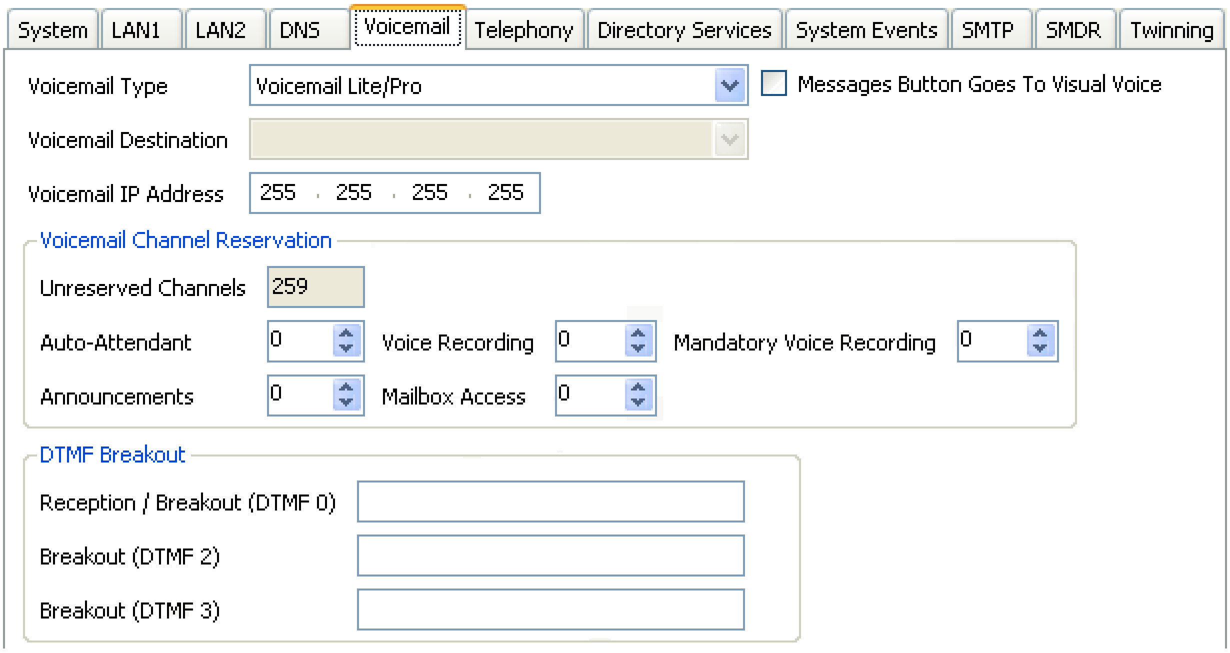
The default IP Office configuration settings allow almost immediate voicemail operation as soon as a voicemail server is running on the LAN. Those default settings are:

- Voicemail running on a PC 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 Email 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. See Hunt Group Voicemail 247.

4.1 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.



Voicemail Type: Voicemail Lite/Pro

☐ Messages Button Goes To Visual Voice

Voicemail Destination:

Voicemail IP Address: 255 . 255 . 255 . 255

Unreserved Channels: 259

Auto-Attendant: 0

Voice Recording: 0

Mandatory Voice Recording: 0

Announcements: 0

Mailbox Access: 0

Reception / Breakout (DTMF 0):

Breakout (DTMF 2):

Breakout (DTMF 3):

- **Voicemail Type**
  The default Voicemail Type is **Voicemail Pro**. Make sure that this has not been changed.
- **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 it may be necessary or desired to set this access to an exact address. Change the default address (*255.255.255.255)* to the IP address of the PC 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 Centralized Voicemail Pro 51.
- **Message Button Go To Visual Voice**
  Many Avaya phones have a fixed button labeled **MESSAGES** which can be used by the phone user to access their mailbox. If this option is selected, then on phones able to support Visual Voice 302, 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 Voicemail Channel Reservation 115.
- **DTMF Breakout** *(IP Office 5.0)*
  Previous breakout numbers for a user mailbox were set through the user voicemail settings 109. IP Office 5.0+ allows 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 ***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** 186 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 ***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.

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

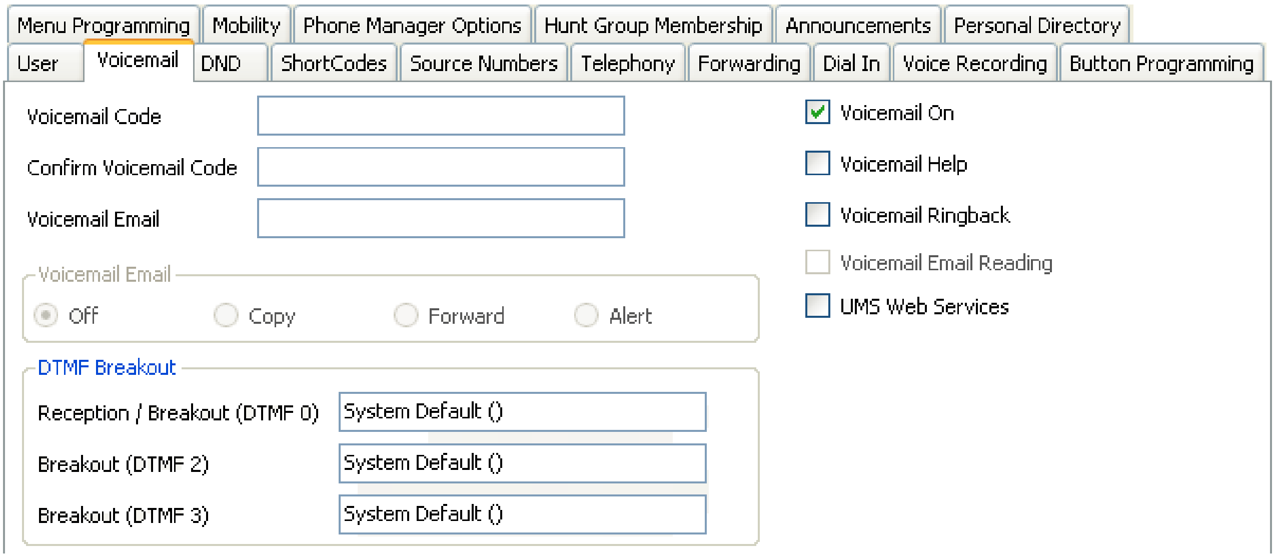
4. Send the configuration back to the IP Office.

4.2 User Voicemail Settings

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

To change voicemail configuration for an individual:

1. Open IP Office Manager.
2. In the Navigation pane, click **User** and select the individual user.
3. Select the **Voicemail** tab.



Voicemail Code
Confirm Voicemail Code
Voicemail Email

☑ Voicemail On
☐ Voicemail Help
☐ Voicemail Ringback
☐ Voicemail Email Reading
☐ UMS Web Services

Voicemail Email
● Off ○ Copy ○ Forward ○ Alert

DTMF Breakout
Reception / Breakout (DTMF 0): System Default ()
Breakout (DTMF 2): System Default ()
Breakout (DTMF 3): System 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. For other options Disabling a Mailbox 293.
- **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 Email:** *Default = Blank (No voicemail email features)*
  This field is used to set the user or group email address used by the voicemail server for voicemail email operation. When an address is entered, the additional Voicemail Email control below are selectable to configure the type of voicemail email service that should be provided.
  - Use of voicemail email requires the voicemail pro server to have been configured to use either a local MAPI email client or an SMTP email server account. See Voicemail Email Installation 53.
  - The use of voicemail email for the sending (automatic or manual) of email messages with wav files attached should be considered with care. A one-minute message creates a 1MB .wav file.
- **Voicemail Email** *Default = Off*
  If an email address is entered for the user or group, the following options become selectable. These control the mode of automatic voicemail email operation provided by the voicemail server whenever the voicemail mailbox receives a new voicemail message.
  - Users can change their voicemail email mode using visual voice 302. If the voicemail server is set to IP Office mode 299, user can also change their voicemail email mode through the telephone prompts. The ability to change the voicemail email mode can also be provided in a call flow using a **Play Configuration Menu** 192 action or a **Generic** 168 action.

        - If the voicemail server is set to IP Office mode 299, users can manually forward a message to email.

    - **Off**
      If off, none of the options below are used for automatic voicemail email. 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 email and sent to the email address. There is no mailbox synchronization between the email and voicemail mailboxes. For example reading and deletion of the email 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 email and sent to the email 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 email and voicemail mailboxes. Users can also select this mode by dialing ***01*** from their extension.

        - **UMS Exchange 2007**
          Voicemail Pro 5.0+ supports voicemail email to an Exchange 2007 server email 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 2007 mailbox. See UMS Exchange 2007 Installation 47 and UMS Exchange 2007 308.

    - **Alert**
      If this mode is selected, each time a new voicemail message is received in the voicemail mailbox, a simple email message is sent to the email address. This is an email 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 UMS 37 to access their mailbox. UMS options allow messages to be accessed via a web browser, an IMAP compatible email application or an Exchange 2007 email account.

- **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** 186 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 ***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.

Forward to Voicemail

For IP Office 5.0+, the option **To Voicemail** is available for **Forward unconditional** on the **User | Forwarding** tab within the IP Office configuration. When selected, the Forward Number set for Forward Unconditional is overridden and calls are sent direct to the user's mailbox.

The option **Forward Hunt Group** calls is also overridden if **To Voicemail** is selected.

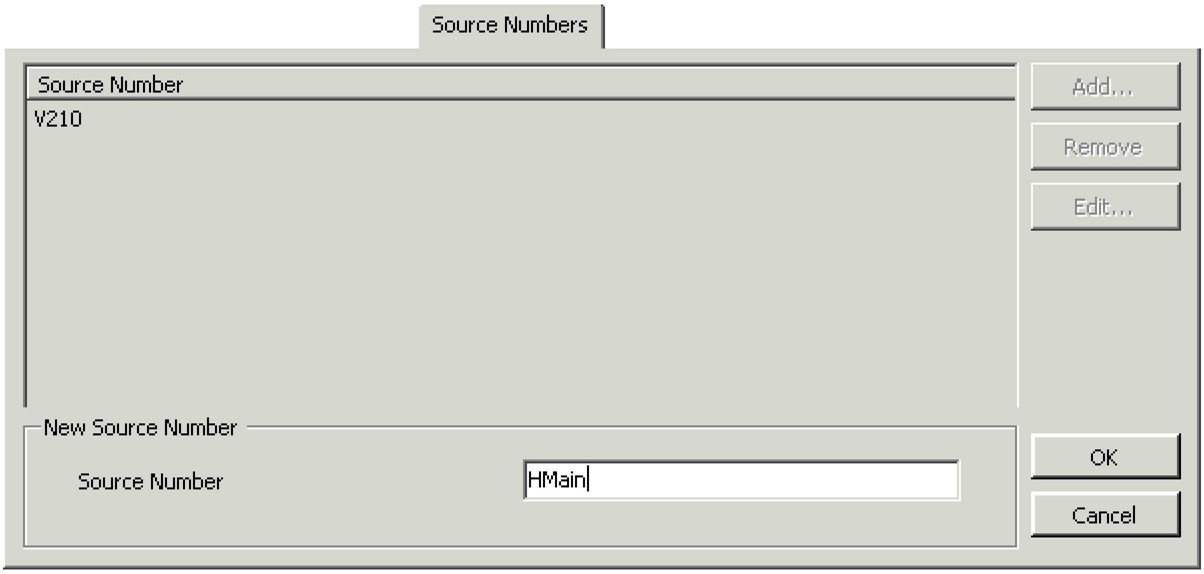
4.3 User Source Numbers

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 is allowed without requiring 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.
  Allows 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. See Hunt Group Message Waiting Indication 248.
- ***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 necessary 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 **User** and select the individual user.
3. View the **Source Numbers** tab.
4. Click **Add**.



V210

Source Number: HMain

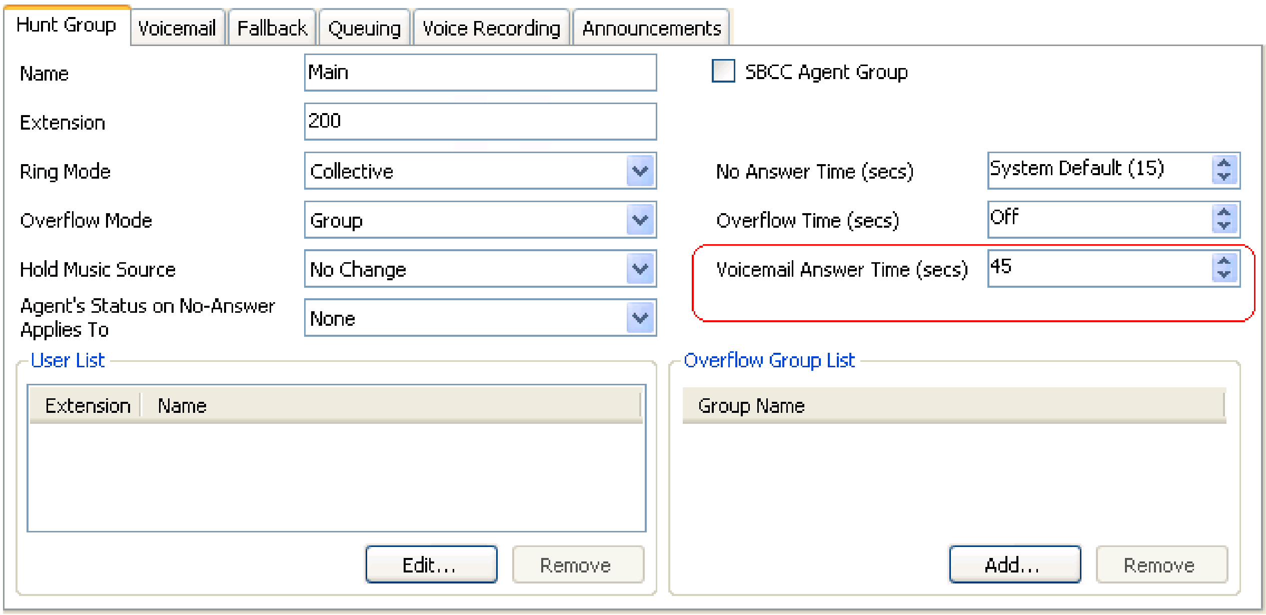
5. Enter the number in the **Source Number** field at the bottom of the window.
6. Click **OK** and save the configuration file.

4.4 Hunt Group Settings

Voicemail can be configured for each hunt group on the IP Office system. This section looks at the basic voicemail settings. For full details of other hunt group operation, see Hunt Group Voicemail 247.

Voicemail Answer Time

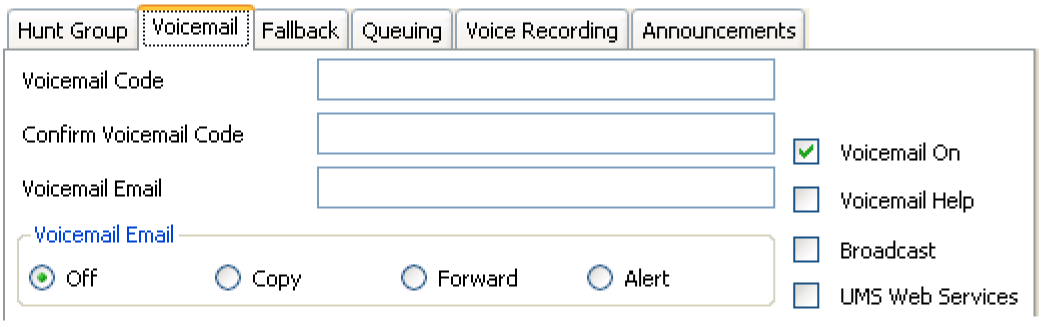
For IP Office 4.0+, the condition under which calls targeted to a hunt group go to voicemail has been changed to a timeout. For calls waiting to be answered, once this timeout expires the call is redirected to voicemail regardless of where it is in the hunt group.



Name: Main
Extension: 200
Ring Mode: Collective
Overflow Mode: Group
Hold Music Source: No Change
Agent's Status on No-Answer Applies To: None
☐ SBCC Agent Group
No Answer Time (secs): System Default (15)
Overflow Time (secs): Off
Voicemail Answer Time (secs): 45

Hunt Group Settings

1. Open IP Office Manager.
2. In the Navigation pane, click **Hunt Group** and select the hunt group.
3. Select the **Voicemail** tab.



Voicemail Code:
Confirm Voicemail Code:
Voicemail Email:
Voicemail Email
● Off ○ Copy ○ Forward ○ Alert
☑ Voicemail On
☐ Voicemail Help
☐ Broadcast
☐ 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 Email:** *Default = Blank (No voicemail email features)*
  This field is used to set the user or group email address used by the voicemail server for voicemail email operation. When an address is entered, the additional Voicemail Email control below are selectable to configure the type of voicemail email service that should be provided.
  - Use of voicemail email requires the voicemail pro server to have been configured to use either a local MAPI email client or an SMTP email server account. See Voicemail Email Installation 53.
  - The use of voicemail email for the sending (automatic or manual) of email messages with wav files attached should be considered with care. A one-minute message creates a 1MB .wav file.

- **Voicemail Email** *Default = Off*
  If an email address is entered for the user or group, the following options become selectable. These control the mode of automatic voicemail email operation provided by the voicemail server whenever the voicemail mailbox receives a new voicemail message.

    - Users can change their voicemail email mode using visual voice 302. If the voicemail server is set to IP Office mode 299, user can also change their voicemail email mode through the telephone prompts. The ability to change the voicemail email mode can also be provided in a call flow using a **Play Configuration Menu** 192 action or a **Generic** 168 action.

    - If the voicemail server is set to IP Office mode 299, users can manually forward a message to email.

  - **Off**
    If off, none of the options below are used for automatic voicemail email. 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 email and sent to the email address. There is no mailbox synchronization between the email and voicemail mailboxes. For example reading and deletion of the email 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 email and sent to the email 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 email and voicemail mailboxes. Users can also select this mode by dialing ***01** from their extension.

    - **UMS Exchange 2007**
      Voicemail Pro 5.0+ supports voicemail email to an Exchange 2007 server email 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 2007 mailbox. See UMS Exchange 2007 Installation 47 and UMS Exchange 2007 308.

  - **Alert**
    If this mode is selected, each time a new voicemail message is received in the voicemail mailbox, a simple email message is sent to the email address. This is an email 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. For other options Disabling a Mailbox 293.

- **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 UMS 37 via a web browser or an IMAP compatible email application.

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

4.5 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 number of licensed channels 16, 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:

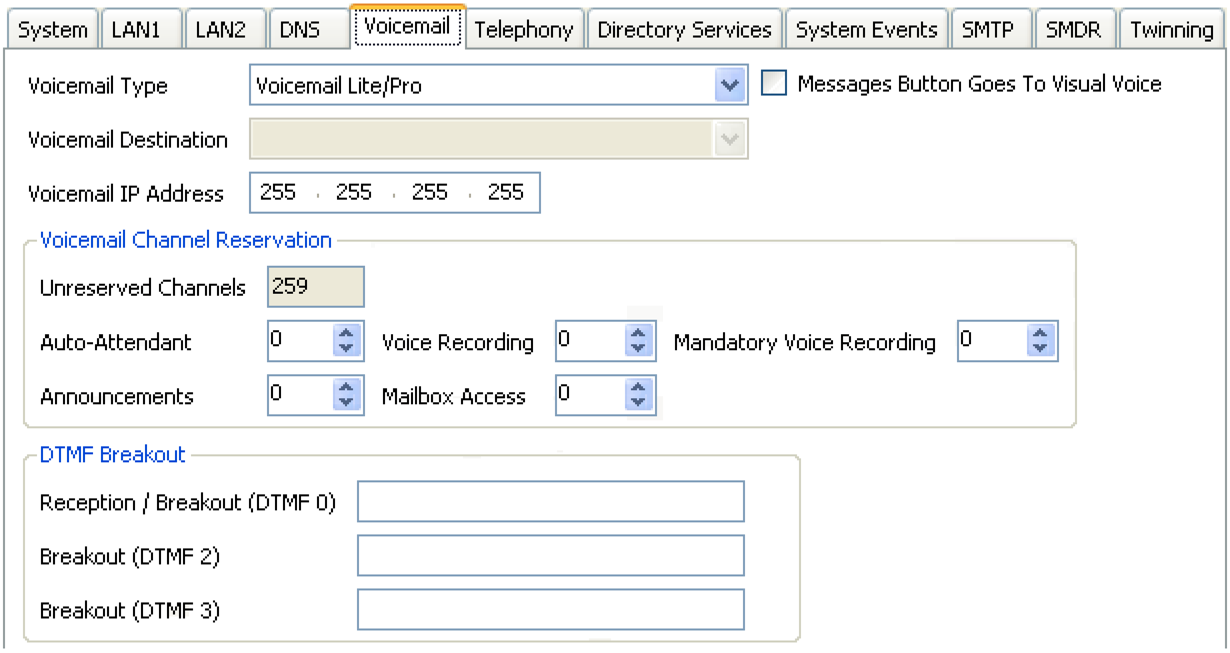
- **Auto Attendant**
- **Announcements**
- **Voice recording**
- **Mailbox access**
- **Mandatory voice recording**

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.



Voicemail Type: Voicemail Lite/Pro

☐ Messages Button Goes To Visual Voice

Voicemail Destination:

Voicemail IP Address: 255 . 255 . 255 . 255

Voicemail Channel Reservation

Unreserved Channels: 259

Auto-Attendant: 0

Voice Recording: 0

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 cal 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 115 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 5.

Using the Voicemail Pro Client

5. Using the Voicemail Pro Client

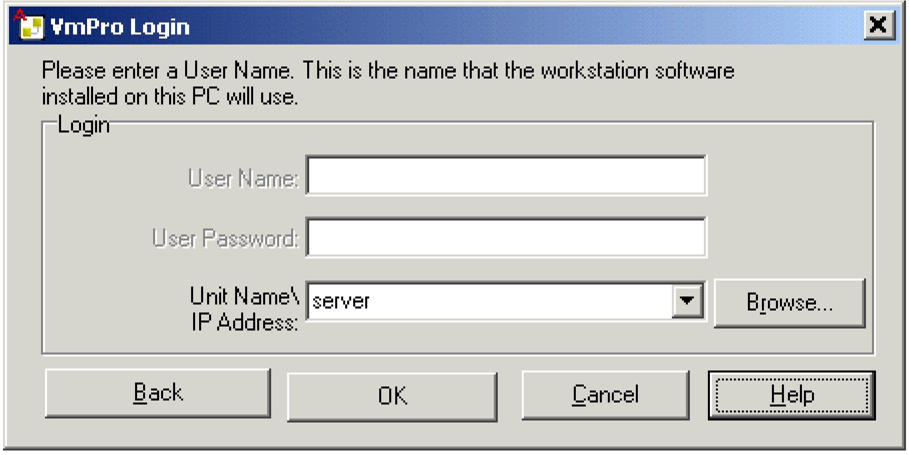
5.1 Logging in to the Voicemail Pro Server

You can run the Voicemail Pro Client in offline mode and you can also use it to connect to a Voicemail Pro Server.

To remotely connect to a Voicemail Pro Server with the Voicemail Pro Client, you will need to login using the name and password of a Voicemail Pro administrator account already configured on the Voicemail Pro server. By default, the Voicemail Pro Server does not have any user accounts defined. Therefore no remote Voicemail Pro Clients can connect.

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.
   - **Local Login**
     If the Client and Server are installed on the same machine, you do not need a user name and password to log in. The current settings and configuration of the Voicemail Pro server are automatically loaded into the Voicemail Pro client.
   - **Remote Login**
     If you are using the Voicemail Pro client to connect remotely to the Voicemail Pro server you need to login using a Voicemail Pro account already configured on the server.
     - From the **File** menu, select **Login**.



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: server

     - Enter the **User Name** and **User Password** for the account.
     - In the **Unit Name/IP Address** field, type the name or the IP address of the server you want to connect to. By default the IP address or name that was last used is already filled in. If the server is on the same network you can click Browse to select from a list of available Voicemail Pro servers.
     - Click **OK**.

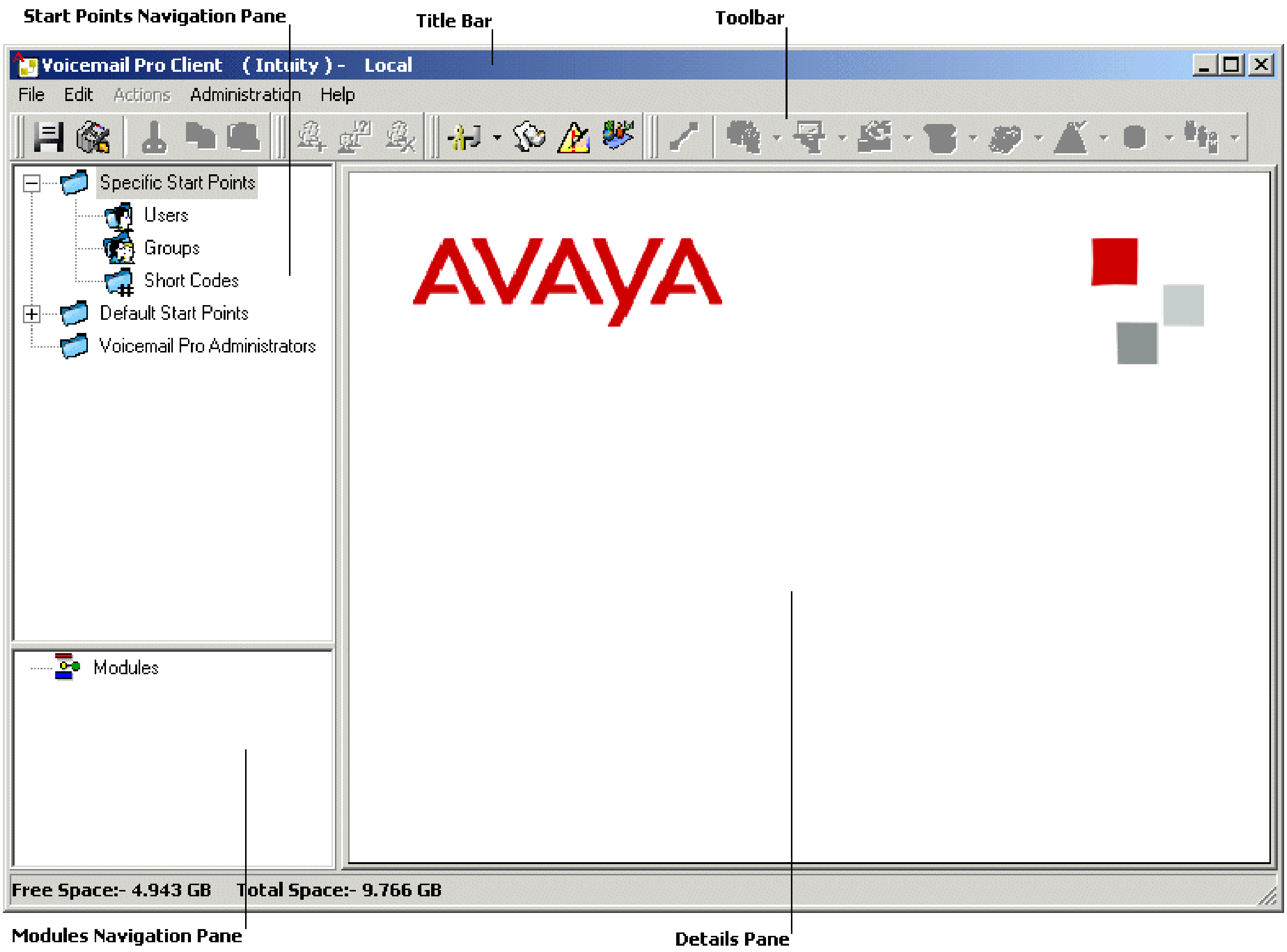
5.2 Continue Offline Message Window

Only one Voicemail Pro client can be connected to a Voicemail Pro server at any time. To avoid access to the server being blocked by a session of Voicemail Pro client that has been left connected, an idle timeout is used (the Client/Server Connection Timeout (mins) 89 setting). 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 it should attempt to re-establish the session or close. You are then able to continue working in offline mode or to close the application.

5.3 The Main Voicemail Pro Window

The Voicemail Pro Client is a Windows interface used to customize the Voicemail Pro Server.



The parts of the Voicemail Pro Client window are:

- **Title Bar** 118
  The title bar indicates the telephony interface that is being used, namely IP Office or Intuity. If you are working offline, the title bar displays *Offline*. If you are working online, the name of the connected server is displayed.
- **Toolbar** 130
  The toolbar across the top of the window provides access to the Voicemail Pro options via icons instead of the menus.
- **Start Points** 133
  The upper left Navigation pane contains an expandable/collapsible list of customizable voicemail start points.
- **Modules** 142
  The lower left Navigation pane contains a library of voicemail modules.
- **Details Pane** 123
  The details pane shows information relating to the option selected in the left-hand panel.

5.4 Saving Changes and Making them Live

Voicemail Pro settings, such as call flow details, are stored in a database file (**Vmdata.mdb**). To be used by the Voicemail Server they must be saved as a **Root.vmp** in the voicemail server folder. To find out how to set the location of this folder, see Setting the Location of Voicemail System Files 91.

To save configuration changes without making them live:

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.

To save configuration changes and make them live:

1. Choose **Save & Make Live** to save the settings in a file called **Root.vmp** in the voicemail server folder.

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

5.5 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.

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 118.

Notes

- Logging out is not the same as closing down with the Exit option. See Closing Down 120.
- If the Client and Server are installed on the same machine, the **Log Out** option is not available.

5.6 Closing Down

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

To close the Voicemail Pro Client:

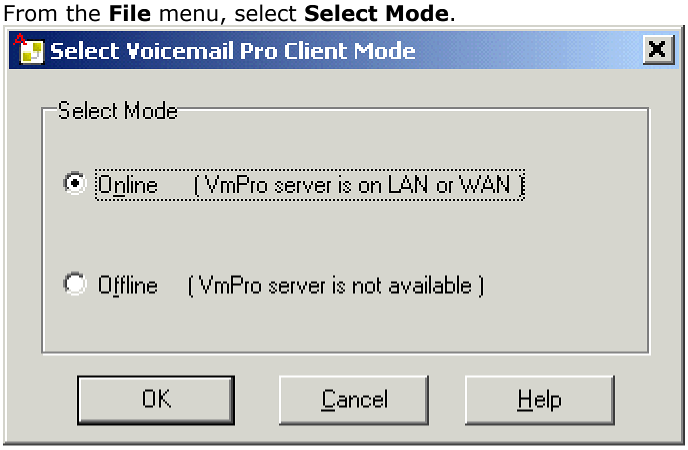
1. From the File menu, select **Exit**.
2. If you have not made any changes, the Voicemail Pro Client closes and you are returned to the desktop. If you have made changes, a message is displayed to ask whether you want to save them.
3. If you do not want to save your changes, click **No**. No changes are saved. If you want to save your changes, click **Yes**. Your changes are saved but not yet made live.
4. If you are ready to make your changes live, click **Save & make Live**.

5.7 Changing Between Offline and Online Mode

It can be useful to connect to a system to get the current system configuration and then disconnect and make changes offline. If the Voicemail Pro client and server are on the same machine, you can switch between online and offline mode without having to log out.

To switch between online and offline mode:

1. From the **File** menu, select **Select Mode**.



Select Voicemail Pro Client Mode
Select Mode
● Online (VmPro server is on LAN or WAN)
○ Offline (VmPro server is not available)
OK
Cancel
Help

2. Select **Offline** to work offline or **Online** to connect to the server and work online. If you select **Online**, the normal login process [118] continues.

5.8 Administrator Accounts

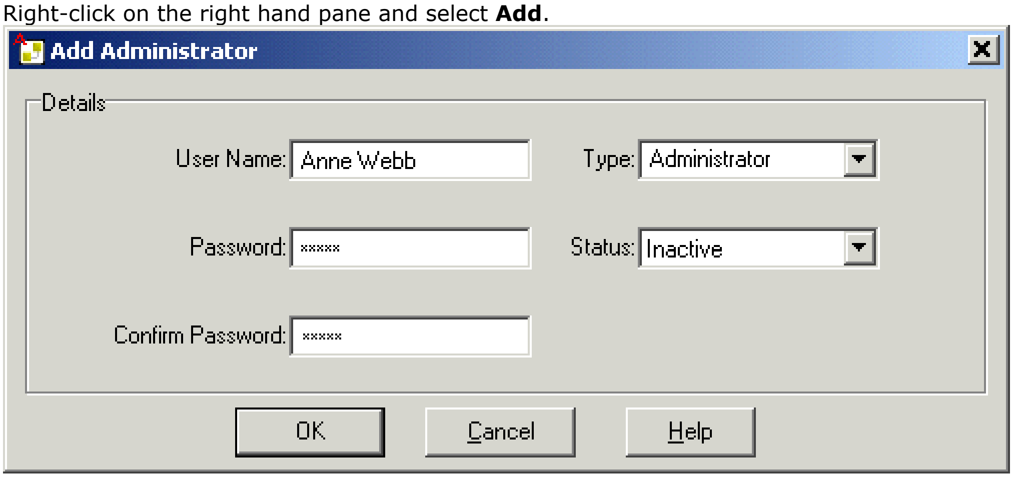
When the Voicemail Pro client is used on the same PC as the voicemail pro server it connects automatically to that locale server. No specific Voicemail Pro client user account is used.

You can also use the Voicemail Pro Client remotely from another PC. However in order for it to connect remotely to the Voicemail Pro server you will need to log in using the name and password of a Voicemail Pro client user account. By default, the Voicemail Pro server does not have any user accounts defined and so cannot be accessed remotely.

The process below is used to create a Voicemail Pro user account. There are two types of account, a standard client user and administrator users. The key difference is that administrator users are able to setup other user accounts and change user account details.

To add a Voicemail Pro Client User Account

1. In the left hand navigation pane, select **Voicemail Pro Administrators**. The name, type and status of any existing Voicemail Pro client administrators are displayed in the right hand pane.
2. Right-click on the right hand pane and select **Add**.



Add Administrator

Details

User Name: Anne Webb

Type: Administrator

Password: *****

Status: Inactive

Confirm Password: *****

3. Enter the details for the new Voicemail Pro client user:
   - **User Name**
     Enter a unique name for the Voicemail Pro client user account. The name must be at least 5 characters long and must not contain spaces or any of the following characters: \ / : * ? < > | , ;.

- **New Password** / Confirm Password
  Enter and confirm the password for the account. The password must be at least 5 characters long and must not contain spaces or any of the following characters: \ / : * ? < > | , ;.

- **Type**
  Select the type of account:

  - **Standard**
    A standard account can perform administration of call flows using the Voicemail Pro Client. A standard administrator can change their own password but cannot add, remove or modify other accounts.

  - **Administrator**
    This type of account can administer all settings including other Voicemail Pro client account settings.

- **Status**
  By default new users are created as ***Inactive***. Their status changes to ***Active*** when they connect to a Voicemail Pro server.

4. Click **OK**.

5. Click **Save and Make Live** to save the changes. The user created can now log into the Voicemail Pro Client Server, for more information, see Logging in to the Voicemail Pro Server 118.

If you are a standard user, you can change your own password when you are working in online mode. If you are working offline, the **Change Password** option is not available.

To change your password:

1. From the **File** menu, select **Change Password**.
2. In the **New Password** box, type the new password.
3. In the **Confirm Password** box, retype the new password.
4. Save the changes.

5.9 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 machine 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 back 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.

- **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.

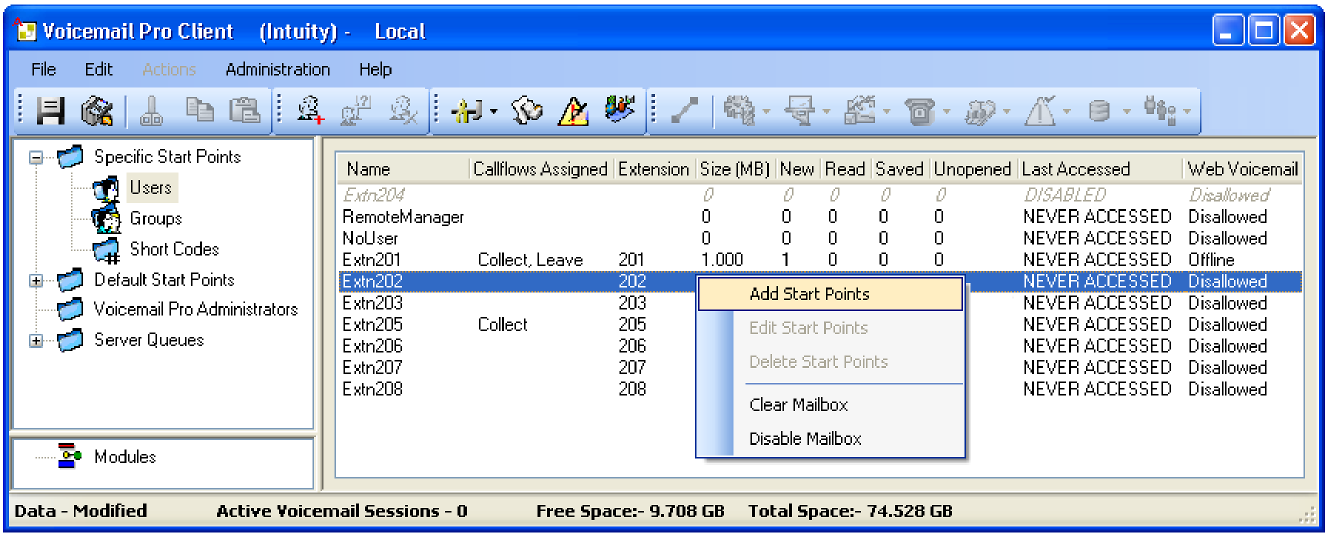
To upload the local call flow to the server, use the Save or Save and Make Live options from the File menu. See Saving Changes and Making them Live 120.

5.10 Using the Details Pane

The information displayed in the main right-hand window of the Voicemail Pro client depends on what is currently selected in the left-hand navigation windows. For instance, if **Users** is selected, details of all the user mailboxes and the messages in those mailboxes is displayed.

5.10.1 Users / Groups

When you click on **Users** or **Groups** in the left-hand navigation pane, the right-hand pane displays information about the user or group mailboxes.



Name	Callflows Assigned	Extension	Size (MB)	New	Read	Saved	Unopened	Last Accessed	Web Voicemail
Extn204			*0*	*0*	*0*	*0*	*0*	*DISABLED*	*Disallowed*
RemoteManager			0	0	0	0	0	NEVER ACCESSED	Disallowed
NoUser			0	0	0	0	0	NEVER ACCESSED	Disallowed
Extn201	Collect, Leave	201	1.000	1	0	0	0	NEVER ACCESSED	Offline
Extn202		202						NEVER ACCESSED	Disallowed
Extn203		203						NEVER ACCESSED	Disallowed
Extn205	Collect	205						NEVER ACCESSED	Disallowed
Extn206		206						NEVER ACCESSED	Disallowed
Extn207		207						NEVER ACCESSED	Disallowed
Extn208		208						NEVER ACCESSED	Disallowed

When you right-click on a mailbox a number of options are available:

- **Add Start Points / Edit Start Points / Delete Start Points**
  If the mailbox has any customized call flow start points setup, they are listed in the **Callflows Assigned** column. These options allow you to add additional start points. A list of start point types is displayed which you can then select or deselect. Selecting an option will create a matching start point for the mailbox. Deselecting an option will delete the matching start point and any content.

- **Clear Mailbox** *(Voicemail Pro 5.0+)*
  This option will reset the mailbox. All existing messages are deleted and any prompts such as the user name and greetings. The mailbox password is not reset.

- **Disable Mailbox** *(Voicemail Pro 5.0+)*
  This option will stop the mailbox from being used to receive messages. This includes the forwarding of messages to the mailbox and manual or automatic recording placing recordings into the mailbox. If selected we recommend that the **Voicemail On** setting within the IP Office configuration is also disabled, that will stop the IP Office from attempting to use the mailbox. This option does not affect any existing messages in the mailbox. Disabled mailboxes are listed as ***DISABLED*** in the **Last Accessed** column. See Disabling a Mailbox 293.

5.10.2 Voicemail Pro Administrators

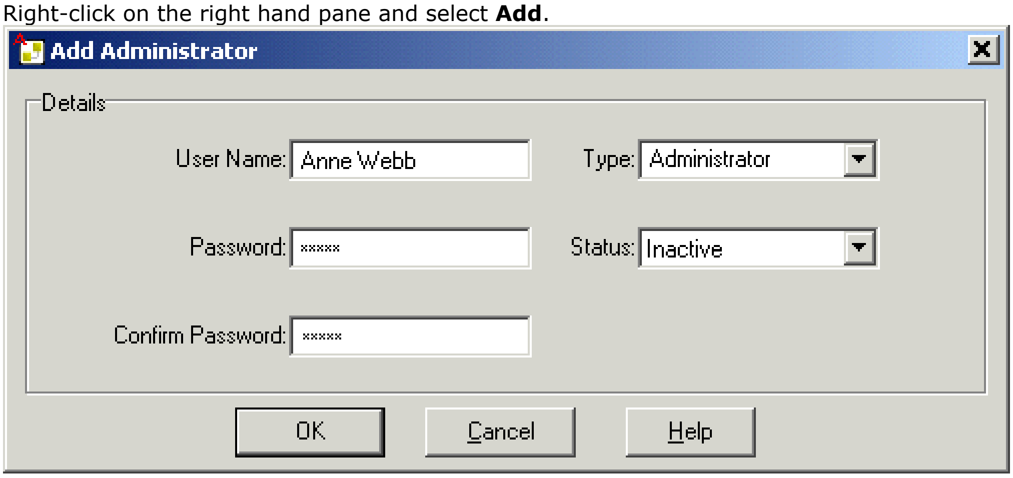
By clicking on **Voicemail Pro Administrators** in the left-hand pane, you can view all the existing accounts and their current status.

You can also use the Voicemail Pro Client remotely from another PC. However in order for it to connect remotely to the Voicemail Pro server you will need to log in using the name and password of a Voicemail Pro client user account. By default, the Voicemail Pro server does not have any user accounts defined and so cannot be accessed remotely.

The process below is used to create a Voicemail Pro user account. There are two types of account, a standard client user and administrator users. The key difference is that administrator users are able to setup other user accounts and change user account details.

To add a Voicemail Pro Client User Account

1. In the left hand navigation pane, select **Voicemail Pro Administrators**. The name, type and status of any existing Voicemail Pro client administrators are displayed in the right hand pane.
2. Right-click on the right hand pane and select **Add**.



User Name: Anne Webb
Type: Administrator
Password: *****
Status: Inactive
Confirm Password: *****

3. Enter the details for the new Voicemail Pro client user:
    - **User Name**
      Enter a unique name for the Voicemail Pro client user account. The name must be at least 5 characters long and must not contain spaces or any of the following characters: \ / : * ? < > | , ;.
    - **New Password** / Confirm Password
      Enter and confirm the password for the account. The password must be at least 5 characters long and must not contain spaces or any of the following characters: \ / : * ? < > | , ;.
    - **Type**
      Select the type of account:
        - **Standard**
          A standard account can perform administration of call flows using the Voicemail Pro Client. A standard administrator can change their own password but cannot add, remove or modify other accounts.
        - **Administrator**
          This type of account can administer all settings including other Voicemail Pro client account settings.
    - **Status**
      By default new users are created as ***Inactive***. Their status changes to ***Active*** when they connect to a Voicemail Pro server.
4. Click **OK**.
5. Click **Save and Make Live** to save the changes. The user created can now log into the Voicemail Pro Client Server, for more information, see Logging in to the Voicemail Pro Server 118.

If an administrator tries unsuccessfully to log in to the Voicemail Pro Client 3 times consecutively, their account is locked and cannot be used for an hour. As an administrator you can release a locked account by changing its **Status** back to ***Inactive***.

5.10.3 Server Queues

The following options are new in Voicemail Pro 5.0+.

5.10.3.1 User Variables

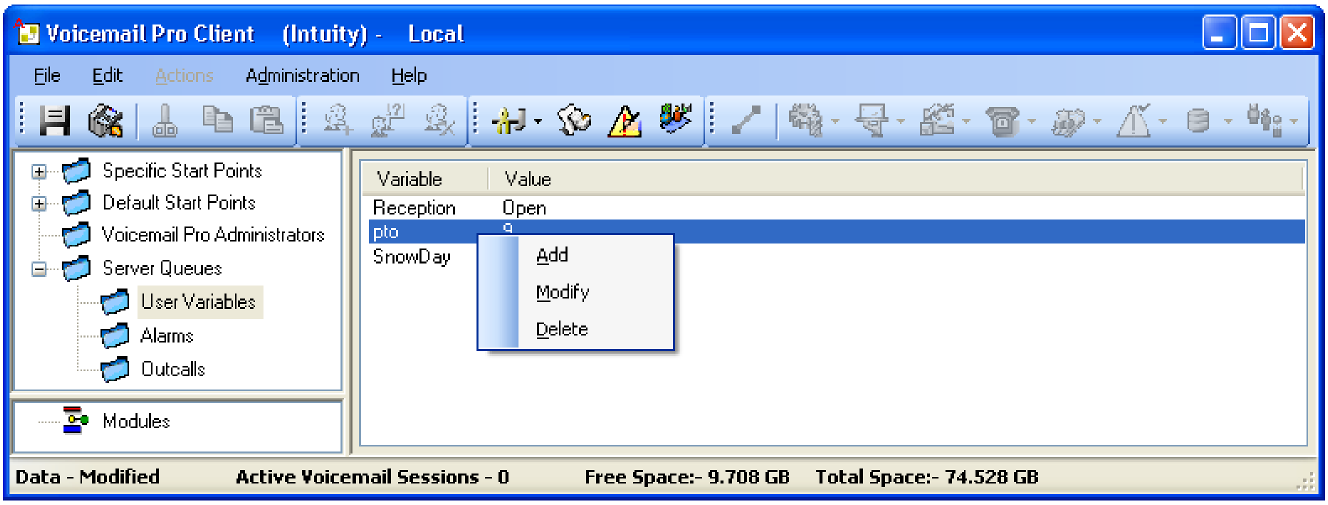
The Voicemail Pro client allows you to define user variables for the system that are then useable within any call flows. User variables differ from call variables in that they are system wide values that can be shared between all calls while call variable values differ from call to call.

Within a call flow a **Set User Variable** 221 action can be used to set or change the value of a user variable. This includes using the current value of a call variable 140 to set as the new value for the user variable.

Call flows can also be branched using a **Test User Variable** 222 action to check the current value of the variable against a required value.

The existing value of a user variable can also be obtained using the variable **$REG[**<*variable_name*>**]** in call flows.

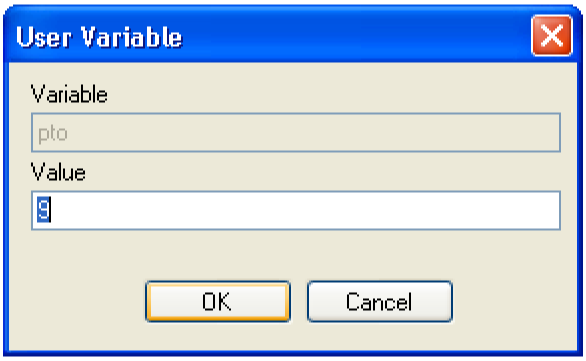
By clicking on **User Variable** in the left-hand pane, you can view all the existing user variables and their current values.



Variable	Value
Reception	Open
pto	9
SnowDay	

Data - Modified   Active Voicemail Sessions - 0   Free Space:- 9.708 GB   Total Space:- 74.528 GB

To add and delete user variables and to change the current value you can right-click on the variable and select the required option. For example select Modify to change the value.

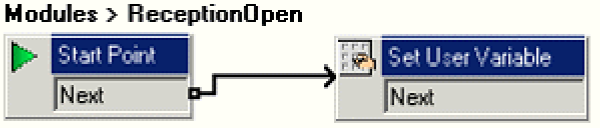


Variable: pto

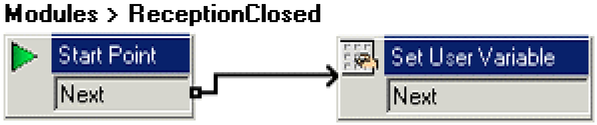
Value: 9

Example of Using User Variables

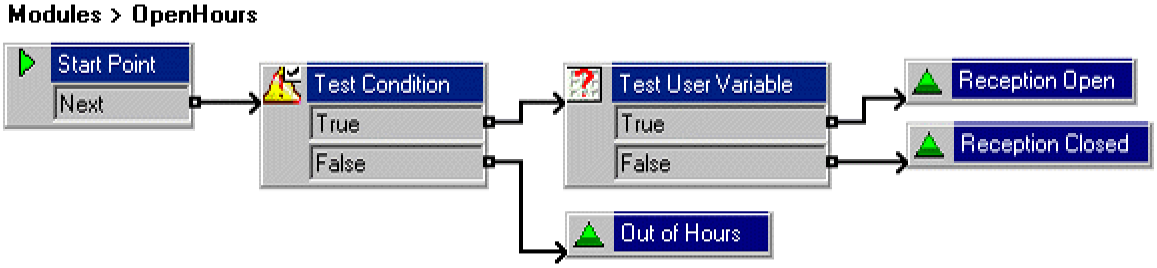
1. Add a variable called **Reception**.
2. Two start points need to be created, one for indicating when the reception is open, the other for when the reception is closed. When completed the call flows will look similar to the examples shown.
   - Create a start point called **ReceptionOpen** and connect it to a **Set User Variable** action. The Set User Variable action needs to have the user variable Reception assigned with the value Open.



   - Create a start point called **ReceptionClosed** and connect it to a **Set User Variable** action. The Set User Variable action needs to have the user variable Reception assigned with the value Closed.



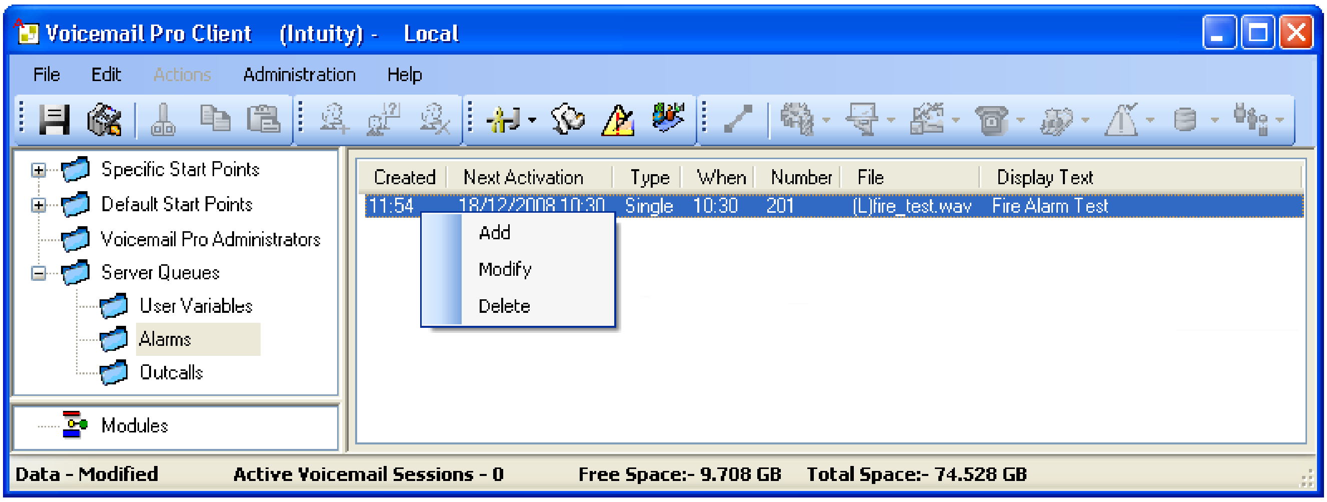
3. Create the matching short codes on the telephone system.
4. For calls using another start point, you can now use the **Test User Variable** action to test whether the value of **reception** is **open**. The action has **true** and **false** results which you can link to the appropriate following actions, for example transferring calls to the reception desk or to a mailbox.



5.10.3.2 Alarms

The Voicemail Pro client can display the alarm calls that have been configured for the Voicemail Pro to perform. These can be setup through call flows using the **Alarm Set** 214 action or directly through the Voicemail Pro client.

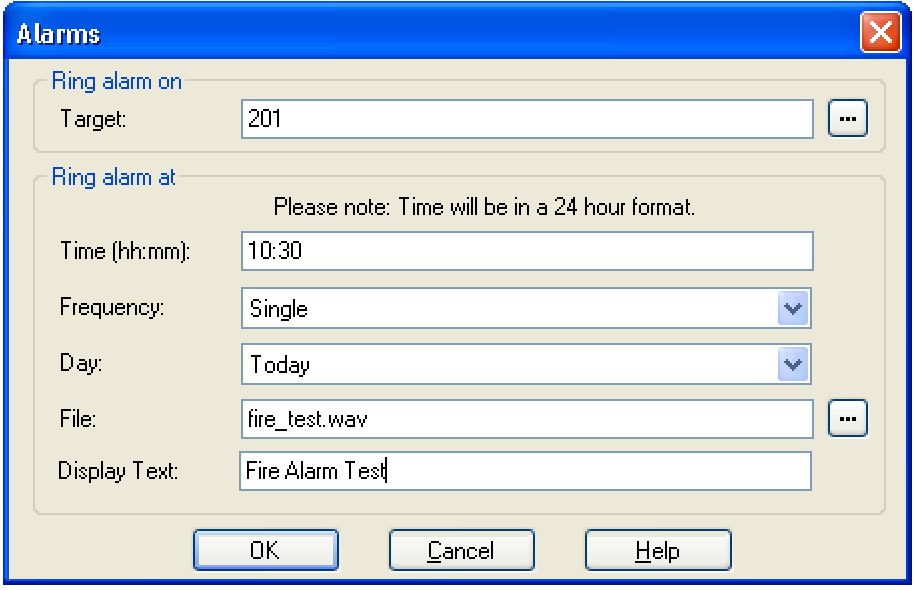
- The Voicemail Pro is limited to 2 outgoing alarm calls at the same time (subject to voicemail port availability). Any additional alarm calls are delayed until the existing alarm calls have been completed.



Created	Next Activation	Type	When	Number	File	Display Text
11:54	18/12/2008 10:30	Single	10:30	201	(L)fire_test.wav	Fire Alarm Test

Data - Modified   Active Voicemail Sessions - 0   Free Space:- 9.708 GB   Total Space:- 74.528 GB

- To delete an existing alarm, right click on it and select **Delete**.
- To add an alarm right click and select **Add**, then use the settings below.
- To modify an alarm right click on it and select **Modify**.



Target: 201

Please note: Time will be in a 24 hour format.

Time (hh:mm): 10:30

Frequency: Single

Day: Today

File: fire_test.wav

Display Text: Fire Alarm Test

- **Time (hh:mm)**
  Set the alarm time in 24-hour format (*hh:mm* or *hhmm*). A time value can be entered or a call variable 140 can be used. If left blank or an invalid time value, the call flow user is asked to enter a time the same as if **Ask Caller** was selected.
- **Frequency**
  Sets how often the alarm should occur. The options are ***Single***, ***Daily*** or ***Weekly***. A variable with value 1, 2 or 3 respectively can be used.
- **Day**
  Useable with ***Single*** and ***Weekly*** alarms. Set the day for the alarm. The option ***Today*** is also available for alarms where the **Frequency** is set as ***Single***.
- **File**
  This field is optional. If a file is specified here it is used for the alarm call. If no file is specified the default alarm message (*"This is an alarm call, please hang up"*) is used.
- **Display Text**
  By default the alarm will display *"Alarm"* on the target if it is an Avaya display phone. This field can be used to customize the text used.

5.10.3.3 Outcalls

When you click on **Outcalls** in the left hand navigation pane, details of any currently set calls are displayed in the right hand pane. These are calls being made by the voicemail server.

The types of calls that are displayed are listed below. The voicemail server may also be configured for alarm calls, those are displayed on a separate alarms page 128 on which they can also be configured. The information displayed for the calls are:

- **Type**
  The type of outgoing call.
  - **Conference**
    These are conference invite calls being made by the voicemail server on behalf of the IP Office Conferencing Center application.
  - **Callback**
    These are new message notification calls being made for mailbox users configured for remote callback 285.
  - **Outbound Alert**
    These are new message notification calls being made for mailbox users configured for outcalling 287.
- **Created**
  The time and data at which the outgoing call was configured on the voicemail server.
- **State**
  The current state of the outgoing call. The options are: Failed, IN Progress, Conference, Queued and Suspended.
- **Attempts**
  The number of times the voicemail server has attempted to place the alert call.
- **Next Attempt**
  The time and data of the next outgoing call attempt.
- **Target**
  The target number for the next call attempt.

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 cal 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 115 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.

5.11 Toolbar Icons

The Voicemail Pro screen includes the following icons. These may be grayed out according to which area of the Voicemail Pro screen is currently active.

- **Save as** 120
- **Save and Make Live** 120
- **Cut**
- **Copy**
- **Paste**
- **Add Start Point** 136
- **Edit Start Point** 136
- **Delete Start Point** 136
- **Preferences** 88
- **User Defined Variables** 138
- **Conditions Editor** 143
- **Campaigns** 346
- **Connection**
- **Basic Actions** 184
- **Mailbox Actions** 184
- **Configuration Actions** 190
- **Telephony Actions** 194
- **Miscellaneous Actions** 211
- **Condition Actions** 220
- **Database Actions** 227
- **Queue Actions** 231

5.12 Importing and Exporting

You can import or export the voicemail call flow as a ***.mdb*** database file. Exporting the configuration is a recommended step when upgrading a voicemail system 34.

You can also import and export selected modules as a **.mod** file. This allows you to develop and test modules on one system before moving them to another.

Voicemail Pro 5.0+ also allows you to import and export selected conditions as a **.con** file.

Important

- Importing and exporting does not apply to prompts. Prompts must be moved as separate items or re-recorded.
- When you import a database file the contents of the existing database are replaced.
- When you import modules or conditions, any existing module or condition with the same name is overwritten.

To export a file:

1. From the **File** menu, select **Import or Export**.
2. Select **Export Data** and click **Next**.
3. Enter the name of the file that you want to export. Add the extension ***.mdb*** for the whole database, ***.mod*** for modules or ***.con*** for conditions. Alternatively, click **Browse**, select the type of file to export.
4. Click **Open**. and click **Next**.
5. Module and condition files can contain several modules or conditions, select the ones required. Click **Next**.
6. Click **Finish**. The selected file is exported.
7. Click **Close**.

To import a file:

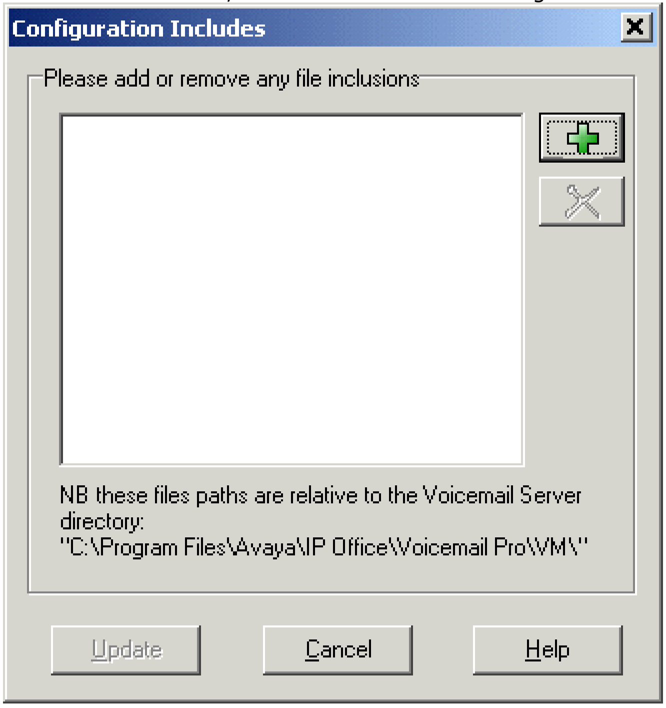
1. From the **File** menu, select **Import or Export**.
2. Select **Import Data** and click **Next**.
3. Enter the name of the file that you want to import or click **Browse** to select the file.
4. Click **Open** and click **Next**.
5. Module files can contain several modules, select the module required. Click **Next**.
6. Click **Finish**. The selected file is imported.
7. Click **Close**.
8. Click **Save & Make Live** before you close the Voicemail Pro Client to apply the imported file. The existing database is overwritten and a backup copy is saved in the folder **DB Backup**.

5.13 Including Other Files

In some special circumstances it may be necessary to include the settings of an existing **.vmp** file into the Voicemail Pro settings.

To include other files:

1. From the **File menu**, select **Includes**. The Configuration Includes window opens.



NB these files paths are relative to the Voicemail Server directory:
"C:\Program Files\Avaya\IP Office\Voicemail Pro\VM\"

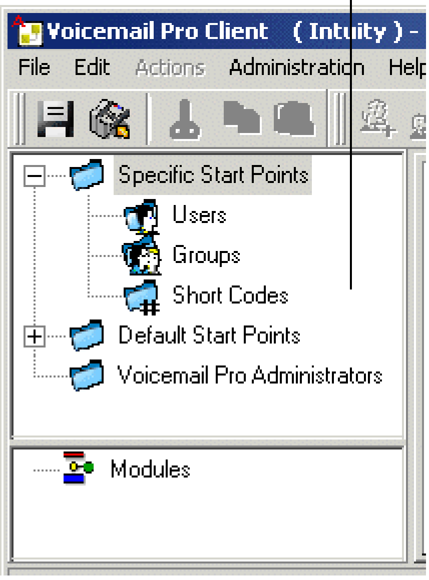
2. Click ✚, the **New Include File** opens.
3. Select a file to include.
4. Click **Open**.
5. Click **Update** to update the Voicemail Pro file settings.

Notes

- If you use included files, the Voicemail Pro database contains only a pointer to the name and location of the files and not the actual files. Therefore you should not move or rename an included file. It is strongly recommended that before you include a file, you place it in the same folder as **Root.vmp**.
- Click ✕ if you need to remove an included file. The highlighted file is removed but not deleted.

5.14 Start Points

Voicemail Pro consists of a number of start points. When the voicemail server receives a call, it looks for a matching start point and if it finds one it then provides a series of actions linked to that start point. If no match is found then it provides standard voicemail functions to the call.



Start Points Navigation Pane

The Navigation pane contains an expandable and collapsible list of start points. These can be start points for individual users, hunt groups, short codes and default start points.

- **Specific Start Points**
  This folder contains the start points for users, groups and short codes.

- **Users** 124
  This folder contains start points set up for individual users. When selected a list is shown in the details pane containing the mailbox owners names and the names of any call flows that have been assigned to the selected mailbox.
  This is a user who has one or more start points configured. It can be expanded to show the different start points.
  - **Collect -** Used when the user rings voicemail.
  - **Leave -** Used for calls to the user that are redirected to voicemail.
  - **Callback -** Used when voicemail rings a user to inform them of messages in the user's mailbox. See Setting up Voicemail Pro Callback 285.
  - **Queued & Still Queued -** Used when calls to the user are queued. See Personal Announcements 272.

- **Groups** 124
  This folder contains start points set up for hunt groups. When selected a list is shown in the details pane containing the mailbox owners names and the names of any call flows that have been assigned to the selected mailbox.
  This is a group that has one or more start points configured. It can be expanded to show the different start points.
  - **Collect -** Used when someone accesses the group's mailbox.
  - **Leave -** Used when calls to the hunt group are redirected to voicemail.
  - **Queued & Still Queued -** Used when calls to the group are queued. See Customizing a Hunt Group Call Flow 256.

- **Short Codes**
  This folder contains any start points set up for particular short codes. Short code start points require the Telephone Number entry of the matching short code in the IP Office Manager to be set up in a particular way. For example, if a Start Point for short code *88 is set up, the settings for short code *88 in the IP Office Manager application must be as follows:
    - **Short Code:** *88
    - **Telephone Number:** *88
    - **Feature:** Voicemail Node.
      The above will allow internal callers to access the start point. To allow external callers access, an Incoming Call Route should be set up with the destination *88.
    - An individual short code on the IP Office. This requires a matching special short code to be set up in Manager.
- **Default Start Points**
  Rather than set up individual start points for every user and group, you can also program actions against the default start points. These will then be used for all calls received by the Voicemail Server that don't match a specific start point. See Default Start Points 135.
- **Voicemail Pro Administrators** 125
  When the Voicemail Pro Administrators folder is selected a list is displayed in the details pane. The list contains the name, type and status of the administrators. Details can be added, amended or deleted.
- **Server Queues** 126
  These option allow you to view listing of a range settings.
    - **User Variables** 126
    - **Alarms** 128
    - **Outcalls** 129
- **Modules** 142
  Modules are reusable sets of actions. They allow you to create a sequence of actions that you can then use within any other start point's call flow. Any changes to the module will affect all the start points using that module. This simplifies the programming of actions if a number of start points use the same sequence of actions. Using modules also reduces the size of the call flow.

5.14.1 Default Start Points

The default start points can be used to create a sequence of actions that will be applied to all suitable calls unless a specific start point exists.

- **Collect**
  Used when a caller attempts to access a mailbox.
- **Leave**
  Used when a caller is redirected to voicemail.
- **Callback**
  Used when the voicemail calls a user to inform them about messages in a mailbox. See Setting up Callback 285.
- **Queued**
  Used for callers queuing for a hunt group or user. See Customizing Queue Announcements 254.
- **Still Queued**
  Used for callers queuing for a hunt group or user. See Customizing Queue Announcements 254.

When a default start point is used, the following actions can attempt to recognize who the presumed user is (the internal user calling or being called) and access the matching mailbox for that user unless the action specifies another mailbox.

- **Get Mail Action**.
- **Leave Mail Action**.
- **Play Configuration Menu**.
- **Listen Action**.
- **Record Name Action**.
- **Edit Play List Action**.

The following actions will automatically recognize who the presumed user is and then use that user's voicemail reception settings unless the action specifies another mailbox.

- **Transfer Action**.
- **Assisted Transfer Action**.
- **Whisper Action**.

5.14.2 Using Start Points

Start points can be for individual users, hunt groups, short codes or default start points. All start points can be added, edited 136, renamed 136 or deleted 136.

To add a start point for a User or Group:

1. Either click **Users** or **Groups** and then . The Adding a new window opens. Alternatively, right-click **Users** or **Groups** and select **Add**.
2. Select the name that matches the user or group on the telephone system. To add all users or groups check the option **Add all users**.
3. Select the types of start points required. The start points **Collect**, **Leave**, **Callback**, **Queued** and **Still Queued** are available for both users and groups.
4. Click **OK**.

To add a start point for a short code:

1. Click **Short Codes** and then . The Adding a new short code window opens. Alternatively, right-click **Short Codes** and select **Add**.
2. Enter the short code.
   - Short code start points require the telephone number entry of the matching short code in the IP Office Manager application to be set in a specific way. For example, if a start point for short code *88 is set up the settings for short code *88 in the manager application must be as shown below. The short code will allow internal callers to access the start point. To allow external callers access, an Incoming Call Route should be setup with the extension *88.
     - **Short code:** *88
     - **Telephone number:** *88
     - **Feature:** Voicemail Node.
3. Click **OK**.

To edit a start point:

1. In the Navigation pane of the main Voicemail Pro window, select the start point to edit and click . The Editing start point window opens. Alternatively, right-click the start point and select **Edit**.
2. Make the required changes.
3. Click **OK**.

To delete a start point:

1. In the Navigation pane, select the start point to delete and click . Alternatively, right-click the start point and then select **Delete**.
2. You are asked if you are sure that you want to delete the selected start point.
   - Click **Yes** to delete the start point.
   - Click **No** to cancel the deletion.

To rename a user, group or short code start point:

1. In the Navigation pane, right-click the user, group or short code and select **Rename**. The New start point name window opens.
2. Type the new name.
3. Click **OK**. The start point is renamed.

5.14.3 Viewing Call Flows as Text

For support calls and diagnostic purposes it can be useful to view Voicemail Pro modules and start points as text files. You can then display the contents of the text file on the screen. The file can be changed as you would change any other text file.

To view a start point or module as text:

1. Select **File menu | View as Text**. A Notepad window opens. The txt file contains information of all Conditions and Campaigns as well as all call flow details.

5.15 User Variables

The Voicemail Pro client allows you to define user variables for the system that are then useable within any call flows. User variables differ from call variables in that they are system wide values that can be shared between all calls while call variable values differ from call to call.

Within a call flow a **Set User Variable** 221 action can be used to set or change the value of a user variable. This includes using the current value of a call variable 140 to set as the new value for the user variable.

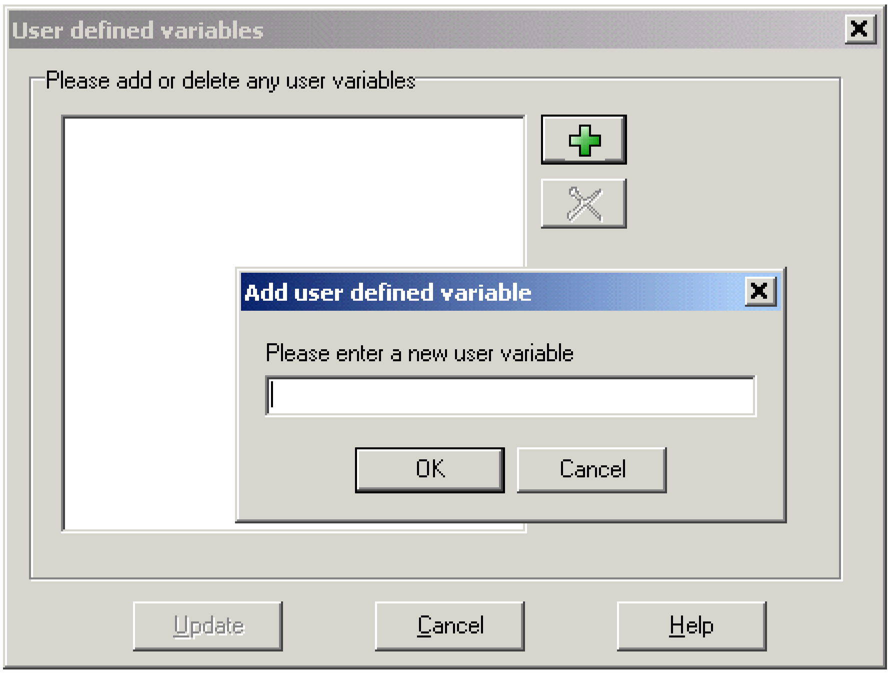
Call flows can also be branched using a **Test User Variable** 222 action to check the current value of the variable against a required value.

The existing value of a user variable can also be obtained using the variable **$REG[**<*variable_name*>**]** in call flows.

By clicking on **User Variables** 126 in the left hand navigation pane you can view all the user variables and their current values. This pane can also be used to add and modify the user variables including changing their values.

To add a user defined variable:

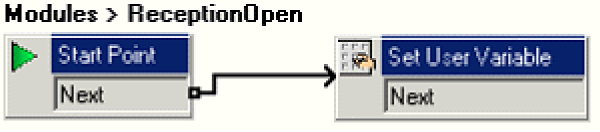
1. Click or press **F8**. The User defined variables window opens.


User defined variables
Please add or delete any user variables
Add user defined variable
Please enter a new user variable
OK
Cancel
Update
Cancel
Help

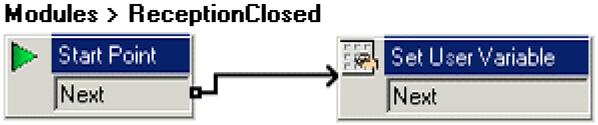
2. Click ✚. The Add user defined variable window opens.
3. Type a name for your new variable.
4. Click **OK**. The new variable is added to the list.

Example of Using User Variables

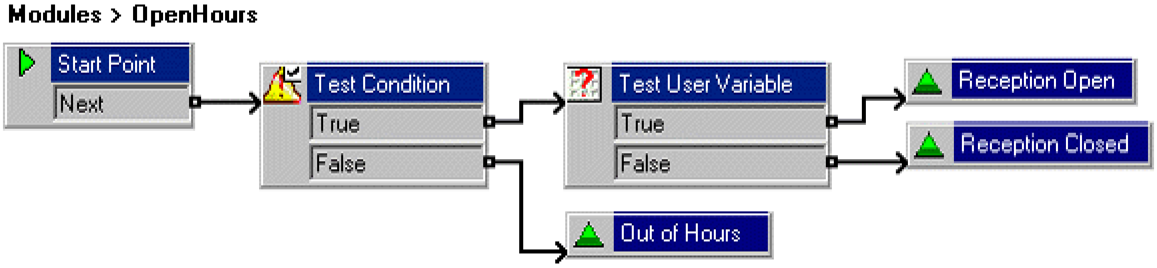
1. Add a variable called **Reception**.
2. Two start points need to be created, one for indicating when the reception is open, the other for when the reception is closed. When completed the call flows will look similar to the examples shown.
    - Create a start point called **ReceptionOpen** and connect it to a **Set User Variable** action. The Set User Variable action needs to have the user variable Reception assigned with the value Open.



    - Create a start point called **ReceptionClosed** and connect it to a **Set User Variable** action. The Set User Variable action needs to have the user variable Reception assigned with the value Closed.



3. Create the matching short codes on the telephone system.
4. For calls using another start point, you can now use the **Test User Variable** action to test whether the value of **reception** is **open**. The action has **true** and **false** results which you can link to the appropriate following actions, for example transferring calls to the reception desk or to a mailbox.



5.16 Call Variables

A number of call variables exist which can be used to perform tasks. For example, ***$NAM*** can be used to speak the user's name within an action's entry prompt. Call variables can also be checked by the compare element in a condition and then branch the call flow according to the variables value.

Unless otherwise stated, call variables are session based. This means that the variable values are specific to a particular call within Voicemail Pro and does not persist between calls, including calls transferred from the Voicemail Pro which then return. Also unless otherwise stated the values are 'read-only'.

- When accessing voicemail prompts, voicemail variables 140 can be used in both the path and filename for the prompt. For example, if prompts Greeting1.wav, Greeting2.wav etc. are recorded, an action set to play ***Greeting$KEY.wav*** would play the greeting prompt that matched the current value of $KEY.

Speaking Variables to Callers

Call variables can be used as prompts. The value of the call variable will then be spoken. This applies to all variables that are numeric values. It also applies to $NAM which will play the mailbox users recorded name prompt.

Numbers are spoken as a series of single digits. For example 123 is spoken as "one two three". To speak 123 as "one hundred and twenty-three" requires TTS to be installed and a **Speak Text** 178 action used.

Some call variables can be played as prompts, for example:

- **$NAM**
  Plays the mailbox's name prompt if one has been recorded.
- **$CLI**
  Speaks the caller's CLI.
- **$RES**
  Plays the current result if it is a .wav file.
- **$VAR**
  Plays the variable as a list of digits.

Variable Length

The length of the value stored within a variable is limited. For Voicemail Pro 4.2+ this limit has been increased from 64 characters to 512 characters.

Available Variables

Variable	Write	Description
$CID	✗	Contains the unique call ID that the IP Office assigns to all calls that it handles. The same call ID is shown in IP Office SMDR records.
$CLI	✓	Holds the CLI of the caller if available to the IP Office.
$COUNTER	✓	Voicemail Pro 5.0+ provides counter variable $COUNTER1 to $COUNTER15. These can be used in the same way as other variables. They can also be manipulated using **Generic** 165 action commands for *Set Counter* 175, *Clear Counter* 171, *Counter Decrement* 172 and *Counter Increment* 173. They can also be used with the **Decrement and Test Counter** 225 and **Increment and Test Counter** 226 actions. By default the initial value of a counter variable is 0. The formats $COUNTERx or $COUNTER[x] are both supported.
$CP	✓	The 16 variables **$CP0** to **$CP15** are used to store values (call parameters) for the duration of a call within the call flow. Values can be written into these variables using the **Generic** 165 action command **CP*x*:<*value*>** where ***x*** is 0 to 15 and **<*value*>** is the value to be stored. The formats $CPx or $CP[x] are both supported.
$DBD	✗	A set of 6 variables **$DBD[0]** to **$DBD[5]** for fields extracted from a current database record. See **Database Actions** 227. The formats $DBDx or $DBD[x] are both supported.
$DDI	✓	Holds the DDI of the call if available. *(Voicemail Pro 4.1+)*
$ETA	✗	Holds the expected time to answer in seconds for a queued caller. This time is based on the last 5 queued and answered calls for the same target in the last hour. The variable can be used to speak the value as a prompt or to test the value in a condition. Only available when using hunt group ***Queued*** and ***Still Queued*** start points.
$KEY	✓	Holds the last DTMF key series entered. For more information, see Example Call Flow 241.
$LOC	✗	Holds the locale setting for the call passed by the IP Office system. See Changing the Language of Custom Prompts 280.
$NAM	✗	Holds the name of the mailbox user (blank for short codes). If used as a prompt, the mailbox's recorded name prompt is played.
$POS	✗	Holds the position of a queued caller. Can be used to speak the position as a prompt or test the value in a condition. Only available when using ***Queued*** and ***Still Queued*** start points.
$QTIM	✗	The same as the **$ETA** above but returns the estimated time to answer rounded up to the nearest minute. This variable can be used to speak the value as a prompt or to test the value in a condition.
$REG[*name*]	✗	When used, this variable returns the current value of the named user variable.
$RES	✓	Holds the value of the result of the previous action. For example when a call flow has been branched by an action that has **True** and **False** results, on one branch the value of **$RES** is "*True*", on the other *"False"*.
$SAV	✓	Holds the last saved result. This can be entered using the following entry in a **Generic** 165 action, **Save:<value>**, for example **Save:$KEY** or **Save:1234**.
$TARGET	✓	For calls sent by the IP Office to a mailbox, this variable contains the original target of a call, ie the original target user or hunt group. *(Voicemail Pro 4.2+)*
$TimeQueued	✗	Holds the length of time, in seconds, that the call has been part of a particular hunt group queue. Only available when using ***Queued*** and ***Still Queued*** start points. *(Voicemail Pro 4.1+)*
$TimeSystem	✗	Holds the length of time, in seconds, since the call was presented to the IP Office system. Only available when using ***Queued*** and ***Still Queued*** start points. *(Voicemail Pro 4.1+)*
$UUI	✗	Available when a recording is triggered by auto-recording. Holds the user name, hunt group name or account code that triggered the auto-recording process. See Customizing Auto Recording 270.
$VAR	✓	A general variable which can hold amongst other things DTMF key sequences.

- **Write**
  This column indicates those call variables where the existing value can be changed using methods such as VBScript or generic action commands. Other call variables have a fixed value set when the call is received by the voicemail server or, for $DBD values, the value is requested by the voicemail server.

5.17 Creating Modules

Modules are reusable sets of actions. They allow you to create a sequence of actions that can be reused in another call flow.

Any changes to a module will affect all other start points that are using that module. This simplifies the programming of actions if a number of start points use the same sequence of actions. Using modules also reduces the size of a call flow.

- To create connections from a module to other actions you must use the **Module Return** action within the module, see Module Return Action 183.

To create a module

1. Click **Modules** and then . The Adding a new start point window opens. Alternatively, right-click **Modules** and select **Add**.
2. Enter a name for the module. This should not match any user or group name on the IP Office.
3. Click **OK**. You can now add actions and connections to the module in the same way as for any start point.

To add a module to a start point

1. Select the start point to which you want to add the module action and then click the right-hand panel.
2. Click and drag the module required from the Navigation pane to the Details pane.

For support calls and diagnostic purposes it can be useful to view Voicemail Pro modules and start points as text files. See Viewing Call Flows as Text 137.

5.17.1 Running a Module

Modules can be run internally using short codes or can be configured for external calls.

Run a module from a short code
You can use modules directly in conjunction with short codes. The short code must call the name of the module. This example short code will run the module called *Special* when a user dials ***97**. The service that the user receives will depend on the actions in the module.

- **Short code: For example** *97
- **Telephone Number:** "Special" *(include quotation marks)*
- **Line Group ID:** 0
- **Feature:** Voicemail Collect

Run a module for an external call
A module can be applied directly to an incoming (external) call from within the IP Office Manager application. Within the appropriate **Incoming Call Route** entry, set the **Destination** to the module name prefixed with "VM:".

For example, enter **VM:AutoAttend** to route a call to a module called **AutoAttend**. Note that the maximum entry length is 15 characters. This means that the module name is limited to 12 characters.

- If there is a hunt group on the system whose name matches the module name, calls will be routed to that group when the voicemail server is not running.

5.18 The Conditions Editor

Conditions are constructed from a set of basic elements. These elements can be combined within a single condition to create complex rules. For example, the week planner can be used to define a company's standard working hours and then combined with the calendar to define exception days such as public holidays.

Within the voicemail call flow, conditions can be checked by a test condition action and, according to whether the condition is currently true or false, callers can be routed to different actions. See Test Condition Action 220.

Condition Elements

The following different types of elements can be added to a condition.

- **Calendar** 146
  Select days from the calendar (up to 255 days) which, if the current date matches a selected day, cause the element to be 'true'.
- **Week Planner** 147
  Select days of week, and then a time period on each of those days, that should cause the element to be 'true'.
- **Condition** 148
  Select an existing condition that is then used as an element within another condition.
- **Compare** 149
  Compare one value to another using a selected criteria such as "*Is equal to*" or "*Is greater than or equal to*" and return 'true' when the criteria is meet. The values compared can be the current value of call variables 140 and or number values entered directly.

Logic Settings

Logic settings can be applied to both the whole condition and to the elements in a condition. These can alter when a condition is true or false.

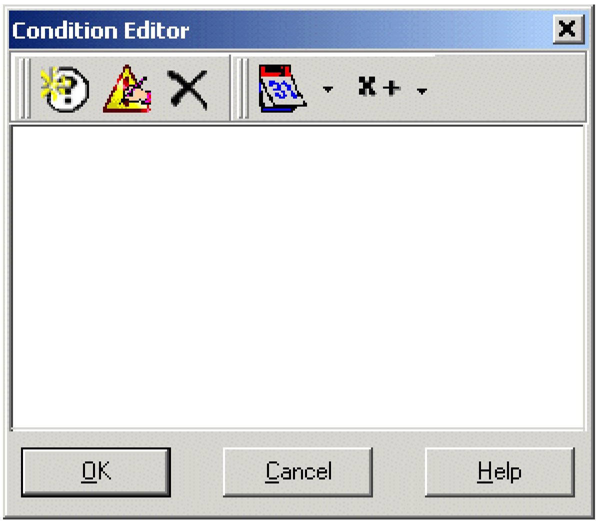
- **AND**
  The condition is true when all the elements within it are true, for example both A and B are true.
- **OR**
  The condition is true when any element within it is true, for example if the day is Monday or Tuesday.
- **NOT**
  This logic element can be used to reverse the value (e.g. return false when true) of individual elements or of the whole condition.

5.18.1 Using the Condition Editor

You can add elements 144 to existing conditions, change the logic 145 of a condition and delete 145 elements and conditions.

To start the Condition Editor:

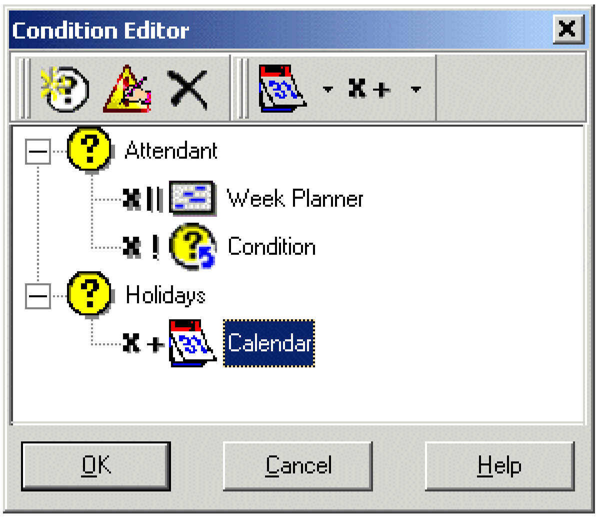
1. Click the icon. You can also open the Condition Editor by pressing **F6** or click **Administration** > **Condition Editor**.
2. When the Condition Editor is started, any existing conditions are shown. In the example there are no conditions.



To add a new condition:

1. Click the icon in the toolbar. The New Condition window opens.
2. Enter the name for the condition and then click **OK**.
3. The new condition is placed in the Condition Editor window. The condition is represented by the icon followed by the condition name.

When a condition has been created, elements can be added and altered. A condition can consist of multiple elements, including several elements of the same type. In the example there are conditions added complete with elements.



To add elements to a condition:

1. Click the **Element List** icon in the toolbar.
2. Click the type of element required.
    - **Calendar** - See Calendar 146.
    - **Week Planner** - See Week Planner 147.
    - **Compare** - See Compare 149.
    - **Condition** - See Condition 148.
3. Click ***Condition Name*** in the Condition Editor window. The element icon is added.
4. You can now edit the element's settings.

To edit elements:

1. Select the element, click **Edit** icon in the toolbar. The element's properties window opens. Alternatively, double click the element to open the properties window.
2. Make any changes.
3. Click **OK** to save the changes and close the properties window.

To change the logic setting of a condition:

1. Click **x+Logic** icon in the toolbar.
2. Select the required logic.
    - **x||** (OR)
    - **x+** (AND)
    - **x!** (NOT).
3. In the Condition Editor window, click the element to apply the logic to. The logic indicator changes.

To change the name of a condition:

1. Select the condition, click **Edit** icon in the toolbar. The Rename condition window opens.
2. Amend the condition's name.
3. Click **OK**.

To delete elements and conditions:

1. Select the condition or element to be deleted.
2. Click ✕ icon in the toolbar. The selected condition or element is deleted.

5.18.2 Calendar

Select days from the calendar (up to 255 days) which, if the current date matches the selected day, return 'true'.

Double-click a day to select or deselect the day. Selected days are shown with a green background, for example 17 .

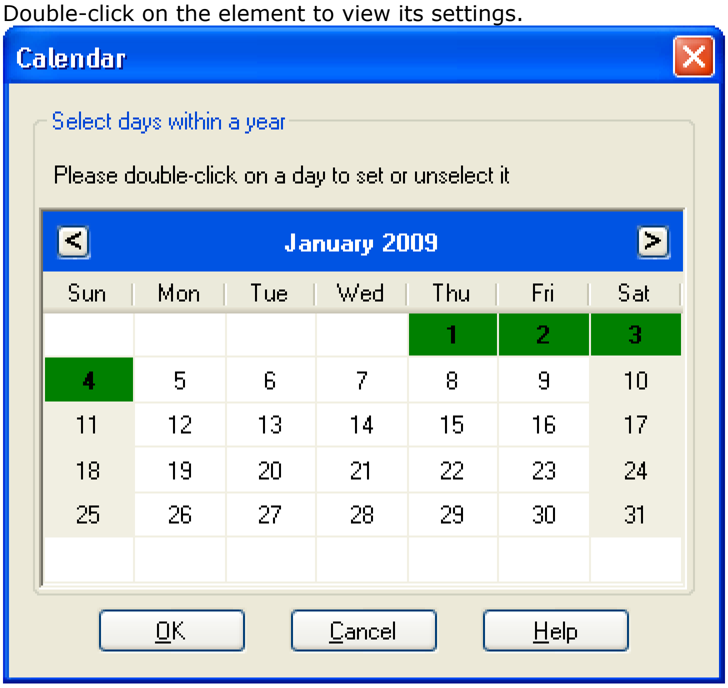
Note that a grey background 22 indicates weekend days, not whether the day is selected or not.

- **Multiple Day Logic**
  By default a logical **OR X||** is applied to this condition element. This allows the element to be true if any of the selected days is true. If a logical **AND X=** is used and more than one day is selected, the element cannot return true.

Note that days that are selected and are now in the past are not automatically deselected.

To add a calendar element:

1. Click the **Element List** icon in the toolbar.
2. Click **Calendar**.
3. Click on the condition to which the element should be added.
4. Double-click on the element to view its settings.



Calendar

Select days within a year

Please double-click on a day to set or unselect it

January 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	**2**	**3**
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

5. Double-click on the individual dates to select or deselect them.
6. Click **OK**.

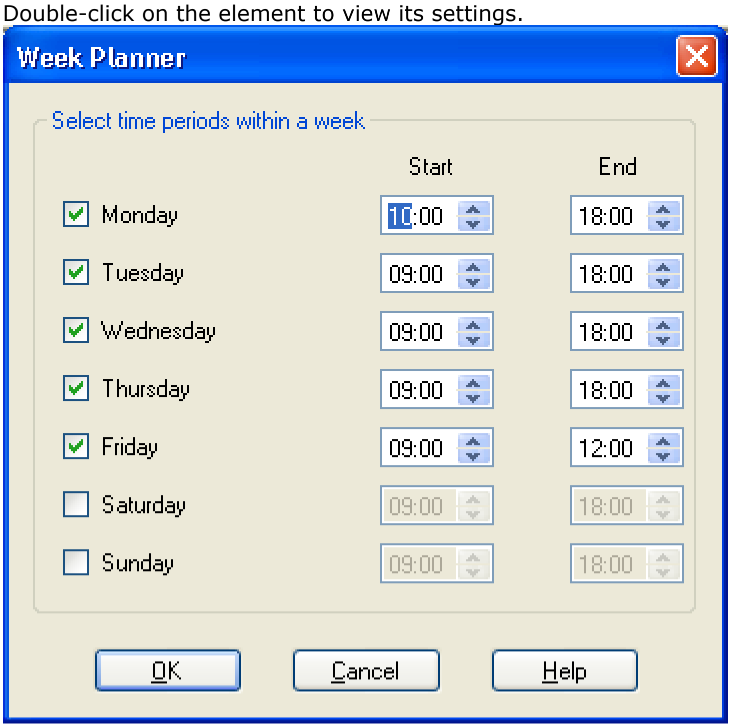
5.18.3 Week Planner

The **Week Planner** element is used to set which time periods during a normal week return 'true'. It consists of an entry for each day of the week and a start and end time for the 'true' period on each day.

- **Multiple Day Logic**
  By default a logical **OR X||** is applied to this condition element. This allows the element to be true if any of the selected days is true. If a logical **AND X=** is used and more than one day is selected, the element cannot return true.

To add a Week Planner element:

1. Click the **Element List** icon in the toolbar.
2. Click **Week Planner**.
3. Click on the condition to which the element should be added.
4. Double-click on the element to view its settings.



Week Planner

Select time periods within a week

	Start	End
☑ Monday	10:00	18:00
☑ Tuesday	09:00	18:00
☑ Wednesday	09:00	18:00
☑ Thursday	09:00	18:00
☑ Friday	09:00	12:00
☐ Saturday	09:00	18:00
☐ Sunday	09:00	18:00

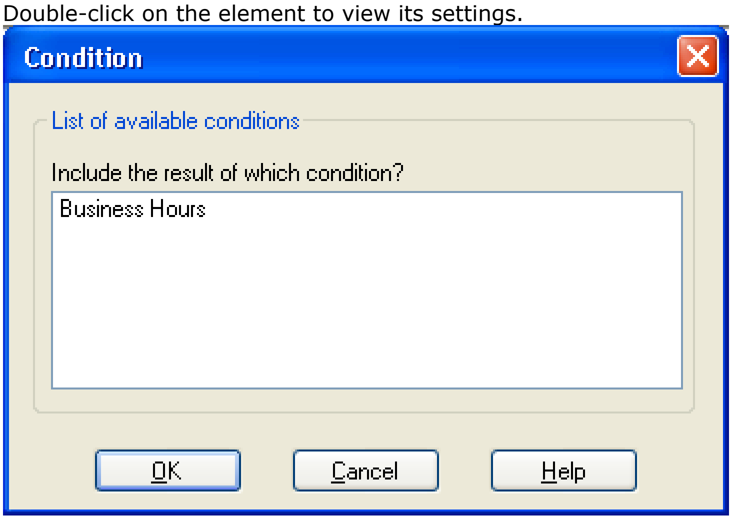
5. Select the days required and the time period during each day that will return 'true'.
6. Click **OK**.

5.18.4 Condition

The **Condition** element is used to combine the value of an already existing condition. When selected the element displays a list of the other conditions from which to select.

To add a condition element:

1. Click the **Element List** icon in the toolbar.
2. Click **Condition**.
3. Click on the condition to which the element should be added.
4. Double-click on the element to view its settings.



Condition

List of available conditions

Include the result of which condition?

Business Hours

5. Select the existing condition that you want to use.
6. Click **OK**.

Example:
Two conditions have been created:

- Using a Week Planner 147 element, a condition is created so that calls received between 09:00 and 18:00, Monday to Friday are treated differently to calls received outside of these hours. For more information.
- Using a Calender 146 element, a condition is created so that calendar dates such as public holidays can be accounted for.
- The two conditions need to be combined so that the call flow treats calls during working hours differently to calls received outside working hours and on bank holidays.

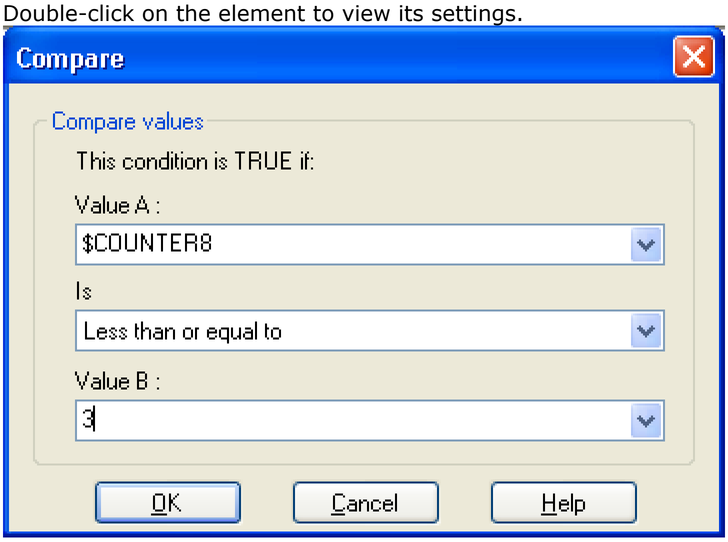
  1. Click the **Element List** icon in the toolbar.
  2. Click **Condition.**
  3. Click the Week Planner in the Condition Editor window. The condition is placed in the Condition Editor window.
  4. Open the properties of the condition element by double-clicking .
  5. Select the Calendar condition result.
  6. Click +logic options and select a ! **NOT** action. Click **Condition** to apply the logical option.
  7. Click **OK**. The condition is now true when it is between 09:00 and 18:00, Monday to Friday and not a holiday.

5.18.5 Compare

The **Compare** element is used to add a variable that will be used to determine the call flow to be presented to the caller. You can compare Voicemail Pro call variables 140, for example $POS or $ETA, against each other or against a value you enter.

To add a condition element:

1. Click the **Element List** icon in the toolbar.
2. Click **Compare**.
3. Click on the condition to which the element should be added.
4. Double-click on the element to view its settings.



This condition is TRUE if:

Value A : $COUNTER8

Is: Less than or equal to

Value B : 3

- **Value A**
  Enter a value or use the drop down to select a call variable 140.
- **Is**
  Select the criteria which should be used to determine whether the element is currently 'true' or 'false'. Options are:
  - ***Equal to***
    True if value A equals values B *(A = B)*.
  - ***Not equal to***
    True if value A does not equal value B *(A =! B).*
  - ***Less than***
    True if value A is less than value B *(A < B)*.
  - ***Greater than***
    True if value A is greater than value B *(A > B)*.
  - ***Less than or equal to***
    True if value A is less or equal to value B *(A <= B)*.
  - ***Greater than or equal to***
    True if value A is greater than or equal to value B *(A >= B)*.
- **Value B**
  Enter a value or use the drop down to select a call variable 140.

5. Click **OK**.

Chapter 6.
Voicemail Pro Actions

6. Voicemail Pro Actions

When a start point 133 has been added, it can be linked to an action. Each action can have one or several results, depending on the type of action, and each result can be linked to a subsequent action. In this way you can build up a call flow.

Each action can have a number of results (true, false, no answer, busy). The types of results depend of the type of action, most actions having just a 'Next' result. Each result can be used as a connection point to another action. See Connections 153.

A set of actions and connections can be combined and reused as a module. Modules 142 are reusable sets of actions. They allow you to create a sequence of actions that you can then use within any other start point's call flow. Changes to the module will affect all start points using that module. This simplifies the programming if a number of start points need the same sequence of actions.

You can double-click an action to display the properties in a series of tabs. Many actions share the same standard tabs but each usually also has a specific tab that contains options unique to that action's function.

The standard tabs of an action are:

- **General** 158
  Set a name for the action in the call flow and whether a PIN code is required by callers to use the action.
- **Entry Prompts** 159
  Sets the prompts that should be played to callers that reach the action.
- **Reporting** 163
  Use to provided reporting on calls that use the action. The reporting is done through the IP Office CCC or IP Office SBCC applications.
- **Results** 164
  Displays the results configured for the action. Each result can be connected to a further action in the call flow.

To add an action:

1. Select the start point to which you want to add an action.
2. Click in the Details pane.
3. Click **Actions** and select the type of action that you want to add from the list, for example Basic Actions.
4. From the submenu, select the required action. For example, if you selected Basic Actions, you might choose Speak Text. The cursor changes to show that you have selected an action to add. Alternatively on the toolbar, click the icon for the required type of action and then select an action from the submenu.
5. Click in the details pane, where you want to place the action. The new action is added. You can now edit the action and add connections to it.

You can change the properties of an action. For example, If you selected the Speak Text action you can specify the actual text to be spoken when an action is taken.

To edit an action:

1. Double-click the action in the details pane or right-click it and select **Properties**. The Properties window opens. Details of the selected action are contained in a set of tabs.
2. Select a tab and change the action properties as required.
3. Click **OK** when you have finished.

To delete an action:

1. In the Details pane where the actions are displayed, click the action to delete.
2. From the **Edit** menu, select **Delete** or right-click the action and select **Delete**.
3. The selected action is deleted.

6.1 Connections

The actions that are added to a start point must be connected before they can be used. The sequence of the connections determines how the call is routed through voicemail.

Each action can have a number of results (for example **True**, **False**, **No Answer** and **Busy**). The types of results depend of the type of action. For each result, a connection can be added.

- Most actions only have a **Next** result, i.e. a single connection to the next action.
- Other actions may have two results, for example **True** or **False**. Each of these results represents a connection point for different following actions.
- Some actions may have multiple results. For example, the Assisted Transfer action has results for **Next**, **No Answer** and **Busy**. Each of these results represents a connection point for different following actions.
- If a result occurs, for which no connection to a following action has been set, either the call is disconnected or, if it came from a hunt group queue, it is transferred back to the queue.
- Within modules, all connections should end in another action or in a Module Return action.

To add a connection:

1. Click the ⟋ icon.
2. Click and drag the cursor from action's result that triggers the connection to the action that should follow the connection.

To delete a connection:

1. Click the connection to delete. It is displayed in red.
2. Press **Delete**. The connection is removed. Alternatively, either select **Edit** and then **Delete** or right-click and then select **Delete**.

6.2 Available Actions

Once a start point has been added, it can be linked to an action. The available actions are divided into the following groups:

- **Start Point** 133
  This special action is present by in all call flows. It is simply the start point for the call flow to which other actions can be linked. While this action has **General**, **Entry Prompts**, **Reporting** and **Results** tabs they should not be used. Any settings added to those tabs will be ignored and should be applied through the tabs of the first additional action added to the call flow and linked to the **Start Point**.

Basic Actions
These actions are chiefly used to control the routing of a call between actions.

- **Generic Action** 165
  Can be used to simply play a prompt to the caller through its Entry Prompts tab. It can also be used to enter custom commands for the voicemail server.
- **Speak Text Action** 178
  Allows text to entered and then played to the caller. Requires TTS to be installed and licensed.
- **Menu Action** 180
  Branch the call flow according to the phone buttons presses made by the caller.
- **Goto Action** 182
  Go to another start point.
- **Disconnect Action** 183
  Disconnect the call.
- **Home Action** 183
  Return to the start point.
- **Module Return Action** 183
  Return to the start of a module.

Mailbox Actions
These actions relate to the leaving and collecting of messages from a mailbox.

- **Get Mail Action** 185
  Collect messages from a mailbox.
- **Leave Mail Action** 186
  Leave a message in a mailbox.
- **Listen Action** 187
  Record to a mailbox.
- **Voice Question Action** 188
  Record responses to a series of prompts.
- **Campaign Action** 189
  Access a campaign to read or leave messages.

Configuration Actions

These actions allow a caller to change the settings of a user or hunt group mailbox.

- **Edit Play List Action** 190
  Re-record a prompt.
- **Record Name Action** 191
  Re-record a mailbox name**.**
- **Play Configuration Menu Action** 192
  Change user or group settings.
- **Select System Prompt Language Action** 193
  Change the prompt language.

Telephony Actions

These actions relate to telephony functions such as call transfers.

- **Variable Routing Action** 195
  Route on a match to a variable such as the caller's CLI.
- **Route Incoming Call Action** 197
  Route a call depending on whether the call is internal or external.
- **Route by Call Status** 198
  Calls route is determined by why the reason the call was routed to voicemail.
- **Transfer Action** 199
  A blind transfer.
- **Whisper Action** 201
  Screened transfer.
- **Call List Action** 203
  Transfer to a user selected choice.
- **Dial by Name Action** 204
  Select user/group by keypad letters.
- **Conferencing Center** 206
  Provides a route for callers to enter the conference ID and their conference PIN code. IP Office Conferencing Center needs to be installed.
- **Assisted Transfer Action** 207
  A transfer with assistance for callers.
- **Alphanumeric Action** 209
  Allows the caller to input text and numeric values.

Miscellaneous Actions

- **eMail Action** 212
  Email a recording**.**
- **Open Door Action** 213
  Open and/or close a door relay.
- **Alarm Set Action** 214
  Set an alarm call time.
- **Clock Action** 216
  Play the time to the caller.
- **Post Dial Action** 217
  Play a recording to an extension.
- **VB Script Action** 218
  Allows Visual Basic to be used to script call flow events.
- **Remote Call Flow** 219
  Allows call flows developed elsewhere to be included in an existing call flow.

Condition Actions

These actions are used to create branches in the call routing according to whether a value is true or false.

- **Test Condition Action** 220
  Test whether a condition is true or false.
- **Set User Variable Action** 221
  Set a variable to a particular value.
- **Test User Variable Action** 222
  Test the value of a variable.
- **Test Variable Action** 223
  Check if user dialing matches set digits.
- **Increment and Test Counter** 226
  Increment a $COUNTER variable and then test whether is matches a specified value.
- **Decrement and Test Counter** 225
  Decrement a $COUNTER variable and then test whether is matches a specified value.

Database Actions

These actions relate to retrieving and adding data to a database. The use of database actions with Voicemail Pro requires entry of a **VMPro Database Interface** license in the IP Office configuration.

- **Database Open Action** 227
  Open a database.
- **Database Execute Action** 228
  Perform an action on a database.
- **Database Get Data Action** 229
  Get information from a database.
- **Database Close Action** 230
  Close a database.

Queue Actions

These actions are associated with hunt group queues and are not available to user and short code start points. The IP Office Manager option **Synchronise calls to announcements** should not be used when using the queue actions.

- **Queue ETA Action** 232

Speak the caller's expected time to answer.

- **Queue Position Action** 233
  Speak the caller's queue position.

6.3 Standard Action Tabs

The standard tabs of an action are:

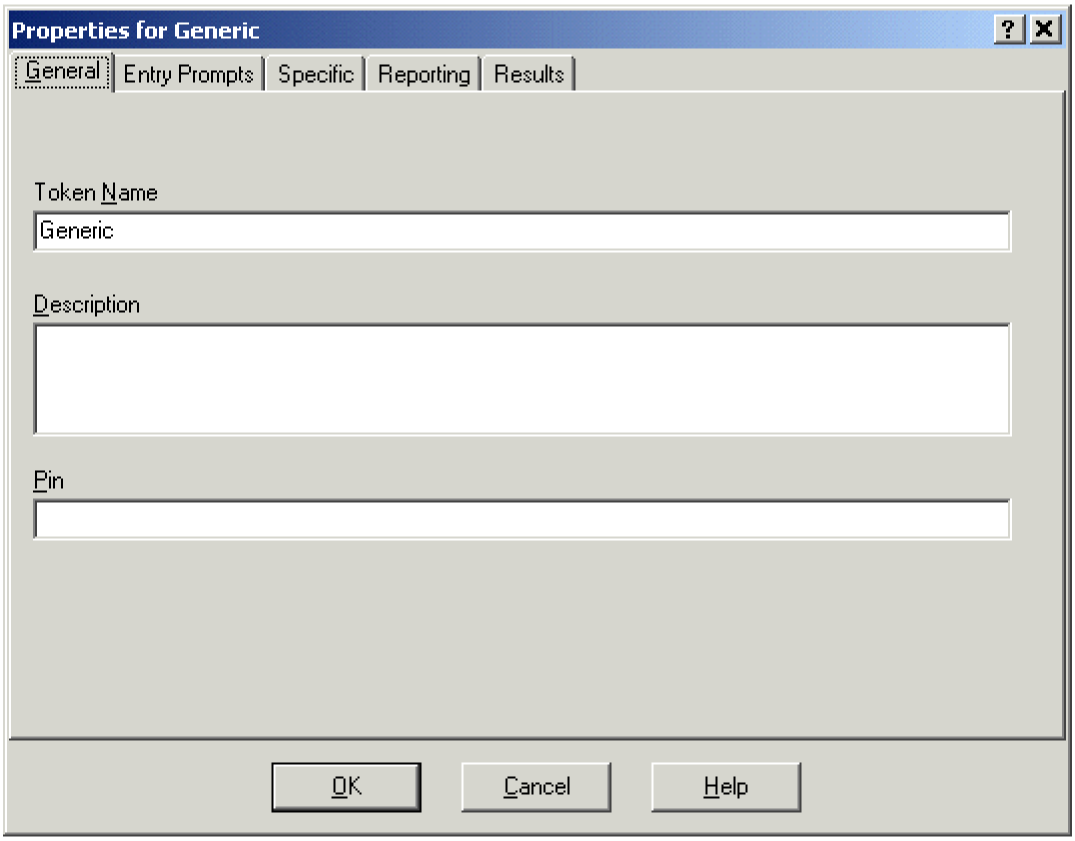
- **General** 158
  Set a name for the action in the call flow and whether a PIN code is required by callers to use the action.
- **Entry Prompts** 159
  Sets the prompts that should be played to callers that reach the action.
- **Reporting** 163
  Use to provided reporting on calls that use the action. The reporting is done through the IP Office CCC or IP Office SBCC applications.
- **Results** 164
  Displays the results configured for the action. Each result can be connected to a further action in the call flow.

6.3.1 General

The **General** tab contains the action name. You can also enter notes about the action and protect a call flow by adding an access code.

This tab is shown for the **Start** action in calls flows. However it should not be used as settings applied to the Start action are ignored and should instead be applied through the first other added to the call flow.

- **Token Name**
  The name of the action, for example, the token name for the action Menu is 'Menu'. The token name can be changed so the use of the action can be indicated. It could also be confusing having two actions within a module with the same name.
- **Description**
  Use this field to enter notes about why the action is being used or other information that may be needed.
- **Pin**
  Each action can be protected by a PIN number. The PIN number can be the voicemail code of the presumed user. To do this enter a **$** symbol. For example, entering **$** would force the caller to dial their voicemail code, entering **104$** would force the caller to dial 104 followed by their voicemail code.



Token Name
Generic

Description

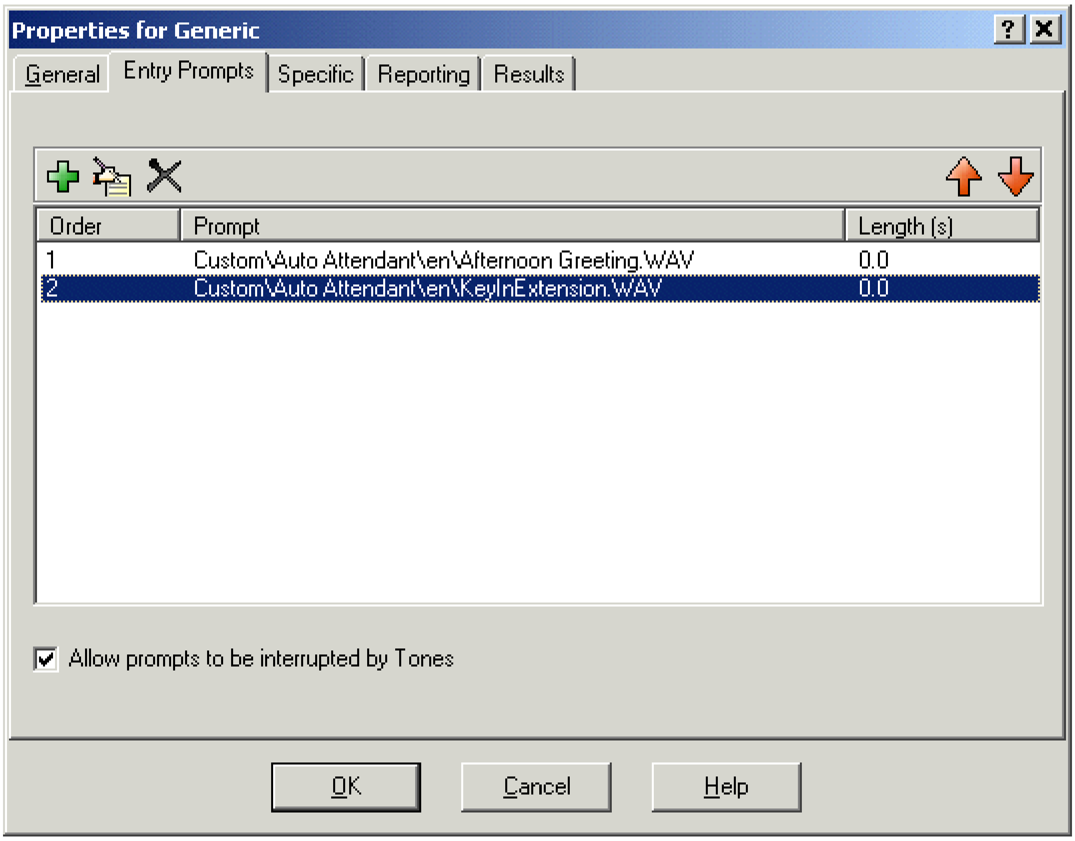
Pin

6.3.2 Entry Prompts

The Entry Prompts tab is used to select the prompts to be played before the action performs its main role. Multiple prompts can be added and the order in which they are played adjusted.

This tab is shown for the **Start** action in calls flows. However it should not be used as settings applied to the Start action are ignored and should instead be applied through the first other added to the call flow.

- When accessing voicemail prompts, voicemail variables 140 can be used in both the path and filename for the prompt. For example, if prompts Greeting1.wav, Greeting2.wav etc. are recorded, an action set to play ***Greeting$KEY.wav*** would play the greeting prompt that matched the current value of $KEY.



Order	Prompt	Length (s)
1	Custom\Auto Attendant\en\Afternoon Greeting.WAV	0.0
2	Custom\Auto Attendant\en\KeyInExtension.WAV	0.0

☑ Allow prompts to be interrupted by Tones

- ✚ **Add Prompt**
  Clicking ✚ or double-clicking an existing listed prompt starts the Wave Editor 161. This tool allows you to record and play prompts through the Voicemail Pro server PC or through an extension on the IP Office system. The dialogue that appears allows the selection of an existing prompt or the ability to specify a new file name and then record the new prompt.

- **Edit Prompt**
  Edit the details of the currently highlighted prompt using the Wave Editor 161.

- ✕ **Delete Prompt**
  Delete the currently highlighted prompt from the play list. Note that the actual prompt file is not deleted from the server.

- ↑↓ **Move Prompt**
  Move the position of the currently highlighted prompt in the play list.

- **Allow prompts to be interrupted by Tones**
  Allow the caller to press tone keys to make selections during the playing of the actions entry prompts.

The **Edit Play List** 190 action can be used in call flows to record a specified prompt. This allows the creation of call flow options where the voicemail user can record prompts themselves to reflect changes in operation.

Speaking Variables to Callers
Call variables can be used as prompts. The value of the call variable will then be spoken. This applies to all variables that are numeric values. It also applies to $NAM which will play the mailbox users recorded name prompt.

Numbers are spoken as a series of single digits. For example 123 is spoken as "one two three". To speak 123 as "one hundred and twenty-three" requires TTS to be installed and a **Speak Text** 178 action used.

Some call variables can be played as prompts, for example:

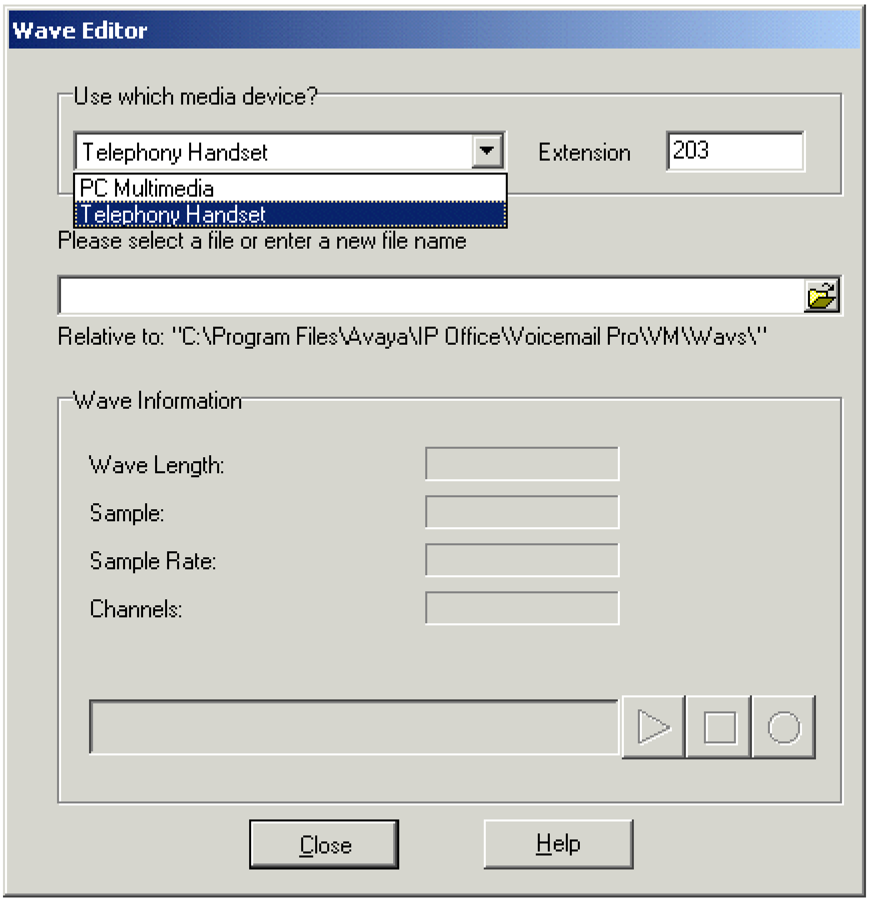
- **$NAM**
  Plays the mailbox's name prompt if one has been recorded.
- **$CLI**
  Speaks the caller's CLI.
- **$RES**
  Plays the current result if it is a .wav file.
- **$VAR**
  Plays the variable as a list of digits.

6.3.2.1 Using the Wave Editor

The Wave Editor is used by Voicemail Pro to select, record and play prompts. It can be used to select existing prompts or to record new prompts.

The Entry Prompts tab of each call flow action allows prompts to be played before the action performs its main role.

Clicking ✚ or double-clicking a listed prompt starts the Voicemail Pro Wave Editor. This tool allows you to record and play prompts through the Voicemail Pro server PC or through an extension on the IP Office system.



To record a new prompt:

1. Select the media device to use, either **Telephony Handset** or **PC Multimedia**. If **Telephony Handset** is selected, enter the extension of the telephone to be used.
2. Enter a file name for the recording. The file will be stored in the path shown. Alternatively use the browse icon 📂 to select an existing prompt file to be recorded.
    - When accessing voicemail prompts, voicemail variables 140 can be used in both the path and filename for the prompt. For example, if prompts Greeting1.wav, Greeting2.wav etc. are recorded, an action set to play ***Greeting$KEY.wav*** would play the greeting prompt that matched the current value of $KEY.
3. Click the ● record button to record the message. If the media type selected is Telephony Handset, the telephone extension will ring. When the handset is picked up a message will be heard saying *"Record at the tone"*.
4. Speak the message, click ■ stop button when finished.
5. To listen to the recording, press the ▶ play button. If there is no media device attached, the recorded message will be heard from the telephone extension.

To select a prompt.

There are a large number of standard prompts that can be used. Enter the name of the prompt or use the 📂 button to browse to the required file. For a sample listing of these prompts see US English Intuity Prompts 369 and English Non-Intuity Prompts 383.
Useful files are:

- **en\MC_00** - Plays a bleep.
- **en\MC_01** - Plays 1 second of silence.
- Entering **1234.wav** will play "one two three four" (unless a file called 1234.wav has been recorded).

Some call variables 140 can be played as prompts. For example:

- **$NAM** - Plays the user name.
- **$CLI** - Speaks the caller's CLI.
- **$RES** - Plays the current result if it is a .wav file.
- **$VAR** - Plays the variable as a list of digits.

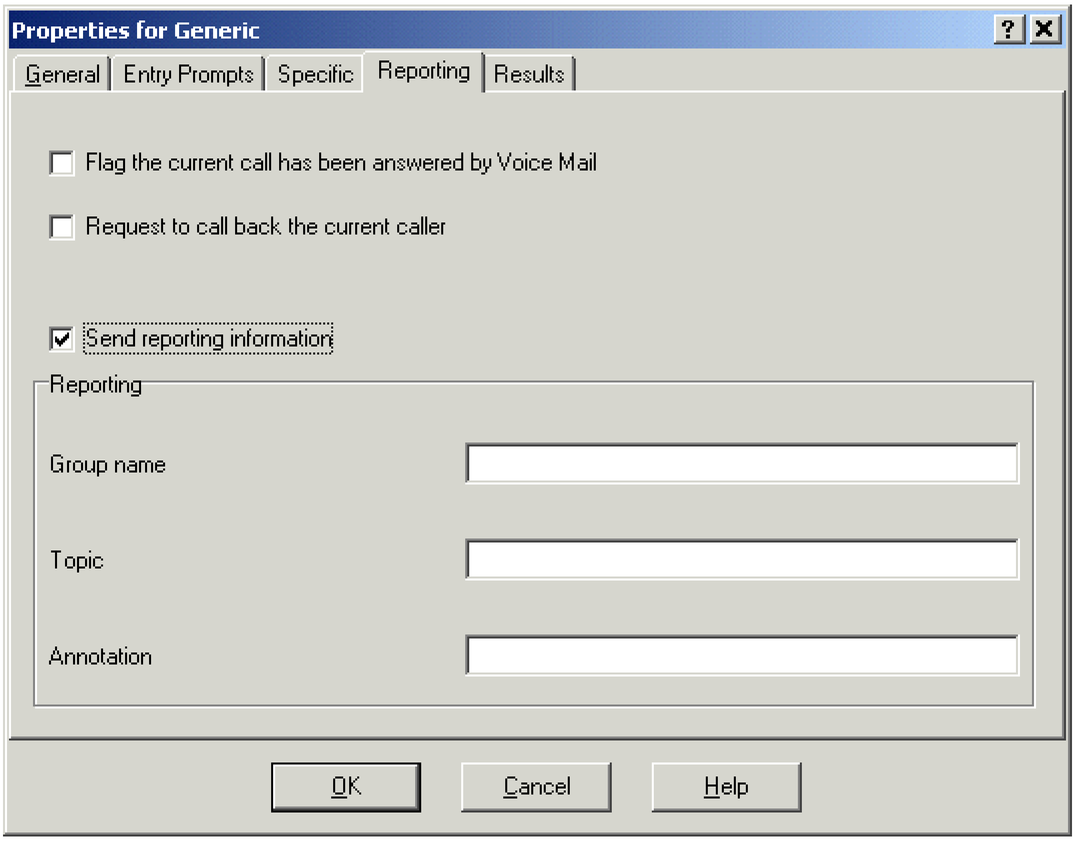
6.3.3 Specific

The contents of this tab vary according to the type of action. In some cases this tab may have a different name, for example Touch Tones for the Menu action. Not all actions contain the Specific or Touch Tones tab. Details of the specific tab are covered in the section that describes the available actions.

This tab is shown for the **Start** action in calls flows. However it should not be used as settings applied to the Start action are ignored and should instead be applied through the first other added to the call flow.

6.3.4 Reporting

The Reporting tab provides information that is then used by other IP Office applications that can report of calls that use an voicemail call flow.



☐ Flag the current call has been answered by Voice Mail

☐ Request to call back the current caller

☑ Send reporting information

Reporting

Group name

Topic

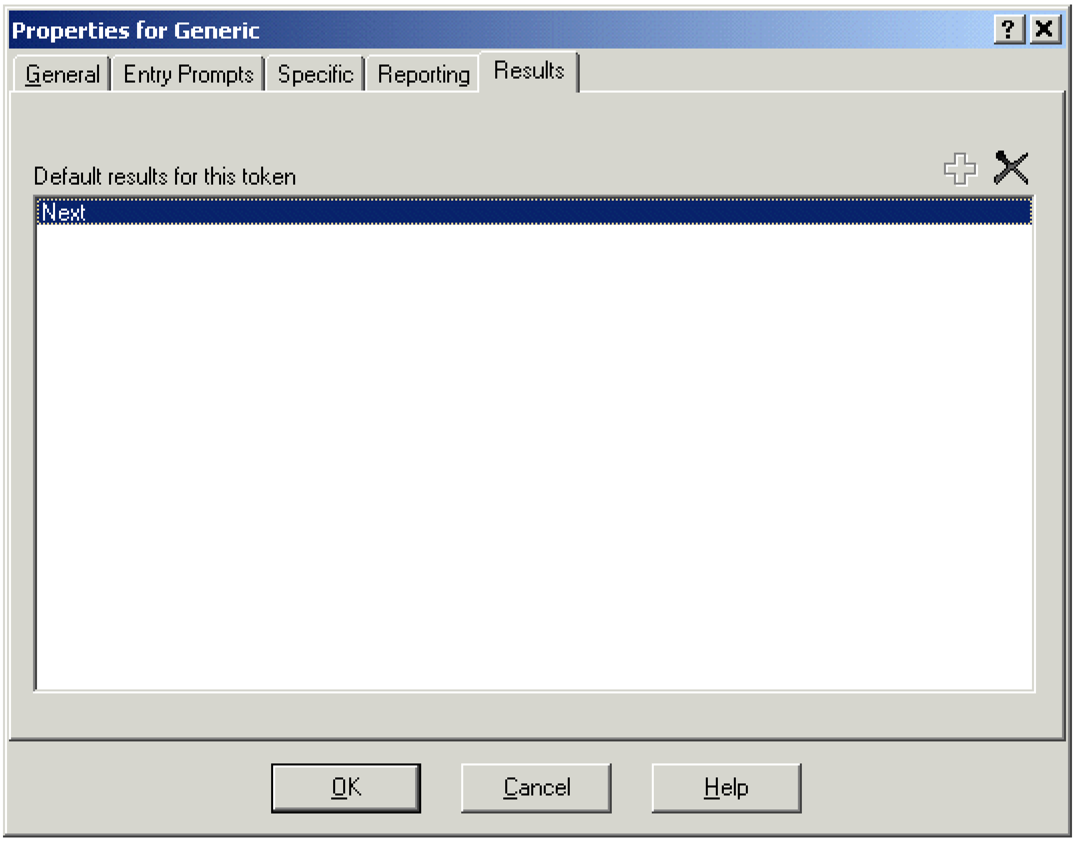
Annotation

Setting	CCC	SBCC
Flag the current call has been answered by Voice Mail	Calls are not recorded as answered until that have reached an action where this option is selected.	If not selected, the number of calls and the number of times trigger values are incremented by calls that complete the action and are routed to a further action. If selected, the number of calls and the number of times triggered values are increments by calls that reach the action.
Request to call back the current caller	If this option is selected, the CCC will keep a record of the caller's CLI if provided. This is then used within the CCC product to arrange a callback call by an agent.	Not used by SBCC.
Send reporting information	If selected, information can be associated with the call. That information then allows reports to be run.	
Group Name	These fields are used by CCC to groups details of calls that have reached the action.	Sets the label used by SBCC in its Voicemail Report.
Topic		Not used by SBCC.
Annotation		Not used by SBCC.

6.3.5 Results

This tab shows the results available from an action. For the majority of actions the results are fixed and appear grayed out, i.e. they cannot be changed. For some actions the results are variable.

This tab is shown for the **Start** action in calls flows. However it should not be used as settings applied to the **Start** action are ignored and should instead be applied through the first other added to the call flow.



6.4 Basic Actions

Basic Actions

These actions are chiefly used to control the routing of a call between actions.

- **Generic Action** 165
  Can be used to simply play a prompt to the caller through its Entry Prompts tab. It can also be used to enter custom commands for the voicemail server.

- **Speak Text Action** 178
  Allows text to entered and then played to the caller. Requires TTS to be installed and licensed.

- **Menu Action** 180
  Branch the call flow according to the phone buttons presses made by the caller.

- **Goto Action** 182
  Go to another start point.

- **Disconnect Action** 183
  Disconnect the call.

- **Home Action** 183
  Return to the start point.

- **Module Return Action** 183
  Return to the start of a module.

6.4.1 Generic

The Generic action can be used to play a prompt to the caller. It can also be used to enter custom commands for the voicemail server. The maximum length for the string is 128 characters.

Voicemail Pro 5.0+ allows generic commands to be entered either as traditional "free format" text strings such as SAVE: $KEY or through using a series of data fields to set the parameters for the required string.

The types of generic command are:

- **Arithmetic Evaluation** 166
  Perform a mathematic operation on existing variables and save the result as a call variable.

- **Change Caller's Priority** 167
  Change the priority of a call before it is presented to a hunt group.

- **Change User or Group Configuration** 168
  Get or change the current status of a range of user and hunt group settings.

- **Clear Counter** 171
  Return one of the $COUNTER variables to 0.

- **Counter Decrement** 172
  Decrement one of the 15 $COUNTER variables.

- **Counter Increment** 173
  Increment one of the 15 $COUNTER variables.

- **Generic "Free Format" Command** 174
  Enter a command as a plain text string.

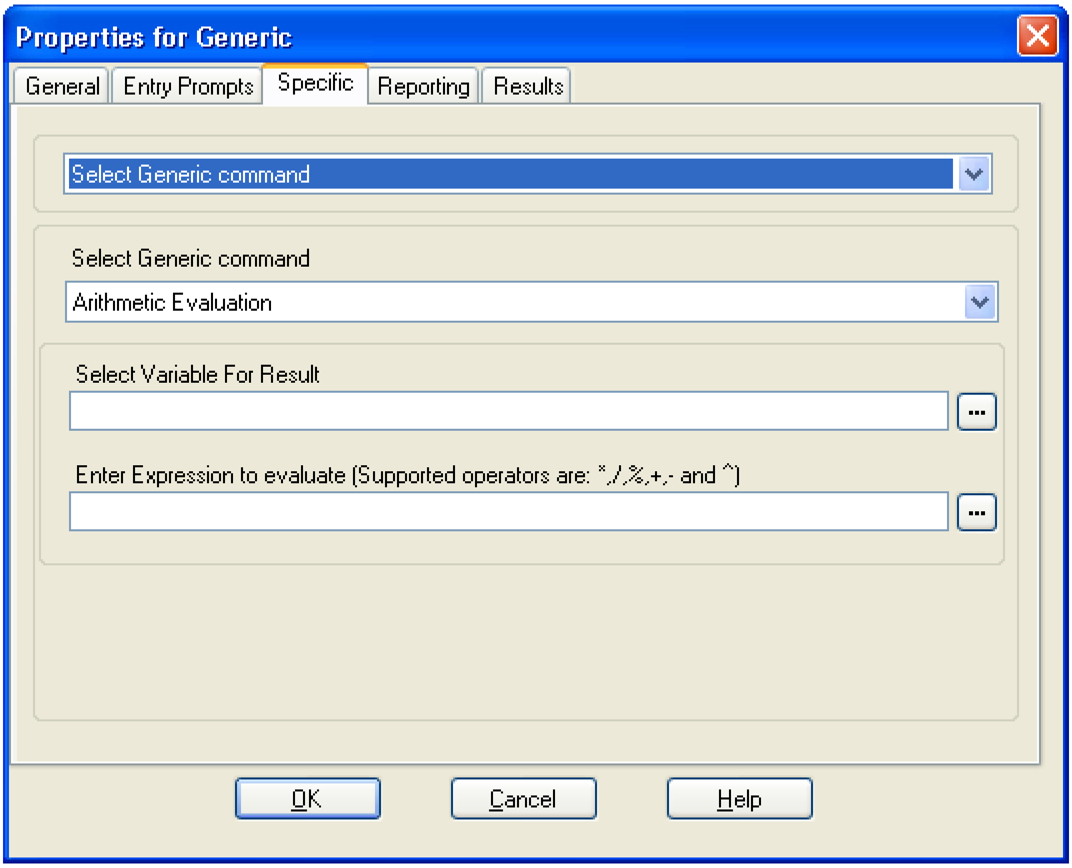
- **Set Counter** 175
  Set one of the 15 $COUNTER variables to a specific value.

- **Set CPxx Value** 176
  Set the value of one of the 15 $CP variables.

- **String Manipulation** 177
  Extract or change the string stored in an existing variable and save the result as a call variable.

6.4.1.1 Arithmetic Evaluation

This Generic option allows an arithmetic operation to be performed on call variables. The result is then stored in a selected call variable 140. For non-numeric values the string can be changed using the **String Manipulation** 177 option.



Select Generic command: Arithmetic Evaluation

Select Variable For Result

Enter Expression to evaluate (Supported operators are: *,/,%,+,- and ^)

- **Select Generic command:** *Arithmetic Evaluation*
  - **Select Variable For Result**
    Select the call variable into which the result of the arithmetic calculation should be stored.
  - **Enter Expression to evalute**
    The string entered here can include numeric values, other call variables such as $KEY and the following arithmetic operators in addition to (and) brackets:
      - ***** = Multiply by.
      - **/** = Divide by.
      - **%** = Modulus (remainder after division)
      - **+** = Add.
      - **–** = Subtract.
      - **^** = Bitwise exclusive or (XOR). Does a binary comparison of the decimal inputs, returning a 1 for each bit if only one of the corresponding input bits is 1, otherwise returning 0 for the bit.
    - If the values being evaluated are integers (eg. 123), the result will be an absolute integer value. For example 123/2 will result in 61.
    - If any value being evaluated is a decimal (eg. 123.0), the result will be a 6 decimal place value. For example 123.0/2 will result in 61.500000.

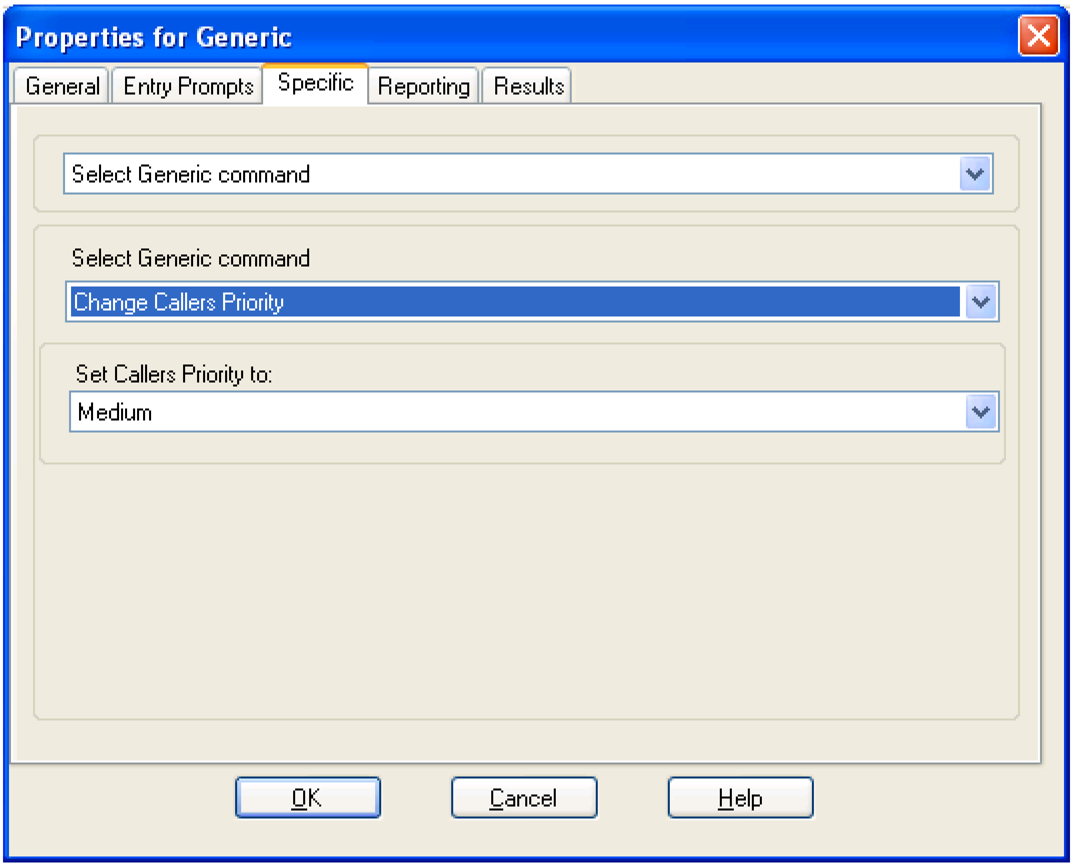
Free Format Equivalent

This action creates a free format similar to *EVAL:$CP0=$CP1+$CP2+5*. In this example the current values of ***$CP1***, ***$CP2*** plus 5 are added and then stored as ***$CP0***.

6.4.1.2 Change Callers Priority

This Generic option allows the call priority of a call to be changed. The priority value is retained when the call is transferred back to the IP Office system.

- When calls are presented to a hunt group on the IP Office, calls waiting to be answered are queue in order of priority and then longest waiting. By default internal caller's have ***Low*** priority while the priority of external callers is set by the IP Office Incoming Call Route used to route the call (default also ***Low***).
- Mixing calls of different priority is not recommended if Voicemail Pro is being used to provide queue estimate time to answer (ETA) and queue position announcements to callers, since those values will no longer be accurate when a higher priority call is placed into the queue. Note also that in such a situation Voicemail Pro will not allow a value already announced to a caller to increase.



Select Generic command

Select Generic command: Change Callers Priority

Set Callers Priority to: Medium

- **Select Generic command:** *Change Callers Priority*
  - **Set Callers Priority to:**
    The caller's priority can be set to ***Low***, ***Medium*** or ***High***. A call variable 140 set to 1, 2 or 3 can also be used to set ***Low***, ***Medium*** or ***High*** priority respectively.

Free Format Equivalent

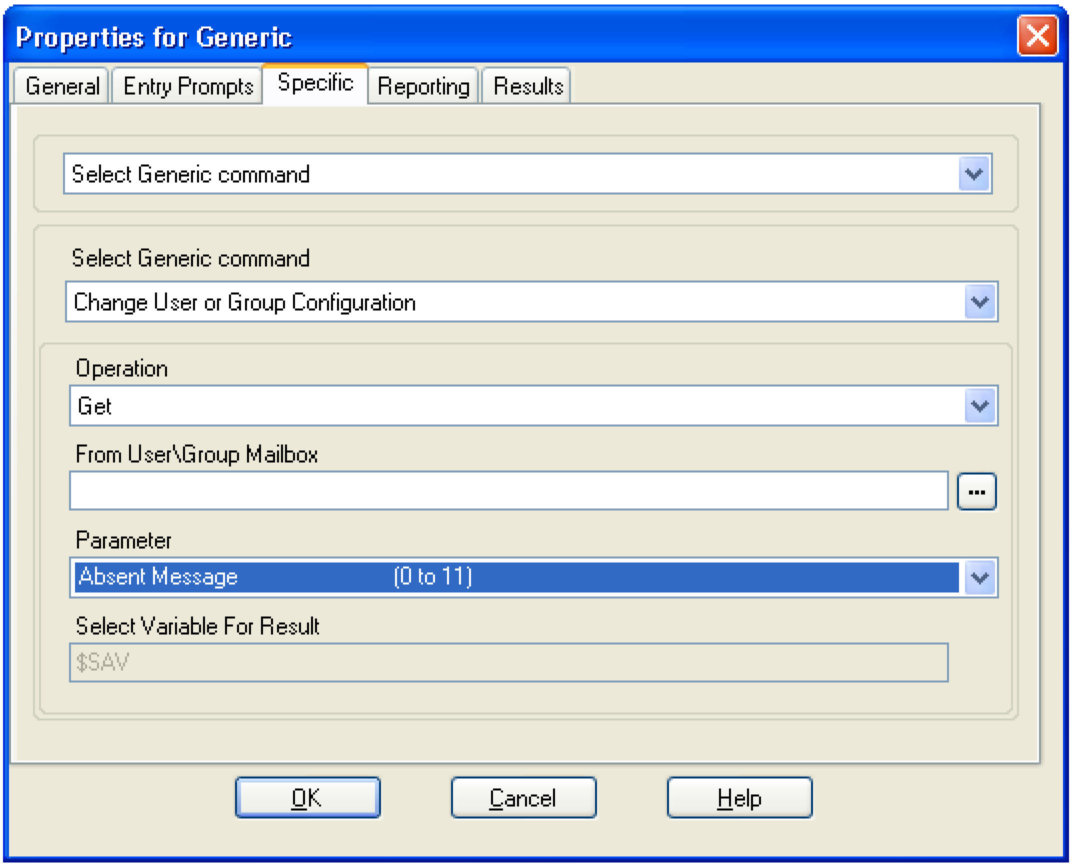
This action creates a free format similar to *CHANGECALLPRIORITY:M*. In this example the caller's priority is set to medium.

6.4.1.3 Change User or Group Configuration

This **Generic** action option allows you to create generic commands that either get or set the value of configuration settings in the IP Office system. The IP Office settings are listed in the table below.

Some of these settings as indicated below can be changed using a **Play Configuration Menu** 192 action.

Any user or group configuration changes made using this method are written the file "AuditTrail.txt" on the voicemail server PC (*C:\\Program Files\Avaya\IP Office\Voicemail Pro\VM\Logs\AuditTrail.txt*). The file includes the time, date, details of the change and the CLI of the caller making the change.



Select Generic command

Select Generic command: Change User or Group Configuration

Operation: Get

From User\Group Mailbox

Parameter: Absent Message (0 to 11)

Select Variable For Result: $SAV

- **Select Generic command:** *Change User or Group Configuration*
  - **Operation**
    Select whether the command should ***Get*** a value from the IP Office configuration or ***Set*** a value in the configuration. When ***Get*** is selected, the **Select Variable For Result** option is shown as a reminder that the value obtained is saved into the Voicemail Pro **$SAV** variable.
  - **From User\Group Mailbox**
    Select the IP Office user or mailbox whose configuration settings the command accesses.

- **Parameter**
  Select the IP Office configuration setting that is being got or set. For full details of the operation of these settings refer to the IP Office Manager Application documentation.

Parameter	User	Hunt Group	Parameter Values	Free Format Parameter Name	Play Configuration Action
Absent Message	✓	✗	***0*** ("*None*"), ***1*** ("*On vacation until*"), ***2*** ("*Will be back*"), ***3*** ("*At lunch until*"), ***4*** ("*Meeting until*"), ***5*** ("*Please call*"), ***6*** ("*Don't disturb until*"), ***7*** ("*With visitors until*"), ***8*** ("*With cust. til.*"), ***9*** ("*Back soon*"), ***10*** ("*Back tomorrow*"), ***11*** (Custom).	*absent_msg*	✗
Absent State	✓	✗	***0*** (Off) or ***1*** (On).	*absent_set*	✗
Absent Text	✓	✗	Text added to the end of the Absent Message when the **Absent State** is on.	*absent_text*	✗
Announcements	✓	✓	***0*** (Off) or ***1*** (On).	*enable_comfort_announcements*	✗
Do Not Disturb	✓	✗	***0*** (Off) or ***1*** (On).	*do_not_disturb*	✓
Ex Directory	✓	✗	***0*** (Off) or ***1*** (On).	*exdirectory*	✗
Forward Unconditional	✓	✗	***0*** (Off) or ***1*** (On).	*forward_unconditional*	✓
Forward Number	✓	✗	The destination number for the users **Forward Unconditional** when that option is on.	*forward_number*	✓
Forward on Busy	✓	✗	***0*** (Off) or ***1*** (On).	*forward_busy*	✗
Forward on No Answer	✓	✗	***0*** (Off) or ***1*** (On).	*forward_na*	✗
Forward Hunt Group Calls	✓	✗	***0*** (Off) or ***1*** (On). Used with **Forward Unconditional**.	*forward_hg*	✗
Forward on Busy Number	✓	✗	The destination number for the user's **Forward on Busy** and **Forward on No Answer** if either option is on.	*forward_busy_number*	✗
Mobile Twinning Number	✓	✗	The destination number being used for the user's mobile twinning.	*mobile_twinning_number*	✗
Twinning Type	✓	✗	***Mobile*** indicates or sets twinning on, any other value indicates or sets mobile twinning off.	*twinning_type*	✗
Voicemail On	✓	✓	***0*** (Off) or ***1*** (On).	*voicemail_on*	✓
Voicemail Reception	✓	✗	***0*** (Off) or ***1*** (On).	*voicemail_reception*	✓
Voicemail Email Mode	✓	✓	***0*** (Off), ***1*** (Copy), ***2*** (Forward), ***3*** (Alert).	*voicemail_emailmode*	✓
Voicemail Callback Number	✓	✓	The destination number for voicemail callback 285.	*voicemail_dialback*	✓

- **Select Variable For Result**
  If the **Operation** is a ***Get***, a call variable must be selected to store the value returned.

Free Format Equivalent

This action creates a free format command of the form *CFG:GET "<extension number>" <parameter name> <parameter value>* or *CFG:SET "<extension number>" <parameter name> <parameter value>*. The free format parameter names and values are listed in the table above.

For example, to set announcements on for extension 201, the free format command is *CFG:SET "201" enable_comfort_announcements 1*.

The following additional options exist only as free-format command strings:

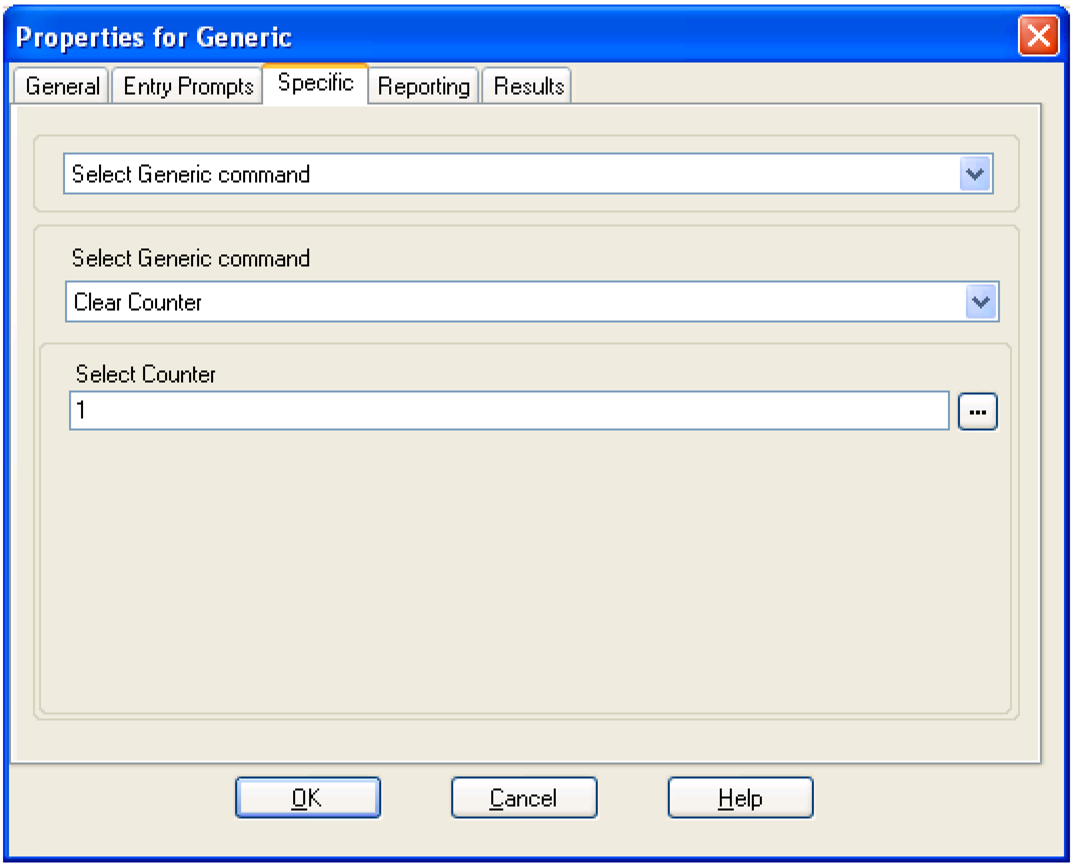
Option	User	Hunt Group	Value	Free Format Parameter Name	Play Configuration Action
Follow Me Number	✓	✗	***Number***	*follow_me_number*	✓
Voicemail Code	✓	✗	***Number***	*voicemail_code*	✓
Off Hook Station	✓	✗	**0** *(Off)* or **1** *(On)*	*off_hook_station*	✗

Dial In	✓	✗	**0** *(Off)* or **1** *(On)*	*dial_in_on*	✗
Monitor Group	✓	✗	***Number***	*monitor_group*	✗
System Phone	✓	✗	**0** *(Off)* or **1** *(On)*	*systemphone*	✗

6.4.1.4 Clear Counter

This **Generic** action option allows one of the 15 $COUNTER call variables to be reset to 0.

Voicemail Pro 5.0+ provides counter variable $COUNTER1 to $COUNTER15. These can be used in the same way as other variables. They can also be manipulated using **Generic** 165 action commands for *Set Counter* 175, *Clear Counter* 171, *Counter Decrement* 172 and *Counter Increment* 173. They can also be used with the **Decrement and Test Counter** 225 and **Increment and Test Counter** 226 actions. By default the initial value of a counter variable is 0. The formats $COUNTERx or $COUNTER[x] are both supported.



Select Generic command

Select Generic command: Clear Counter

Select Counter: 1

- **Select Generic command:** *Clear Counter*
  - **Select Counter**
    Enter ***1*** to ***15*** to select ***$COUNTER1*** to ***$COUNTER15*** respectively.

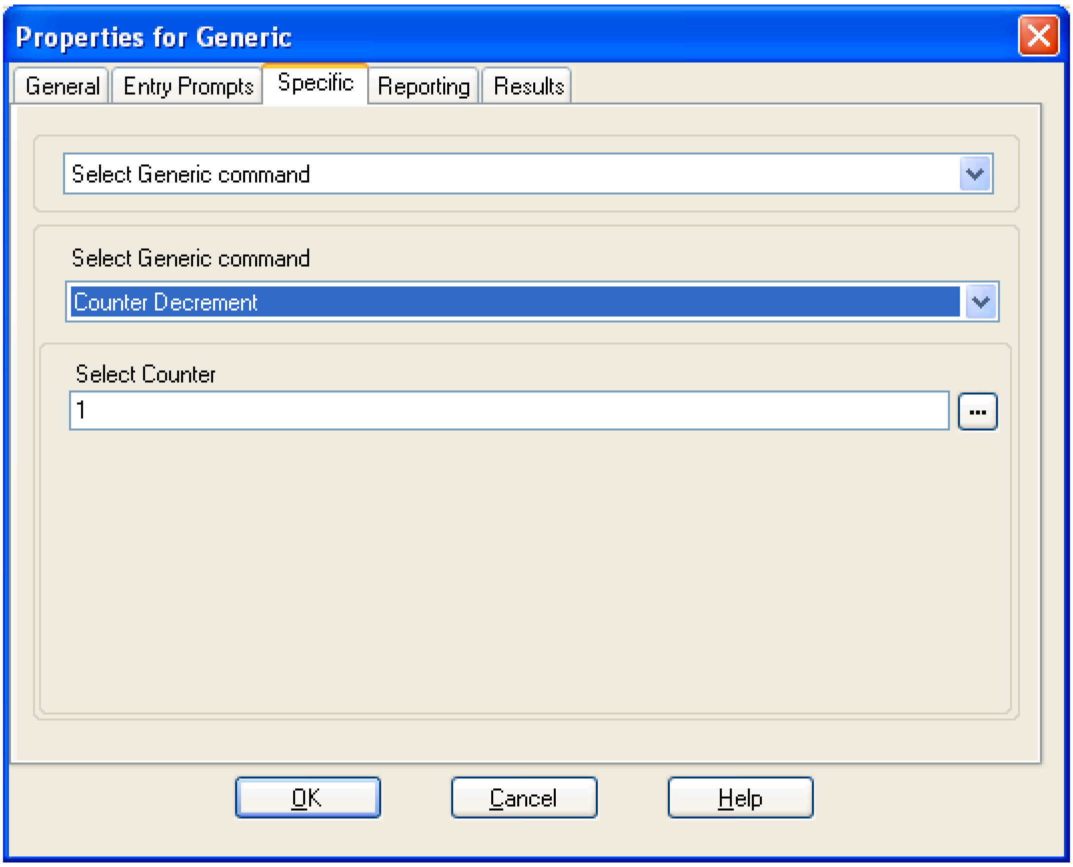
Free Format Equivalent

This action creates a command similar to *CLEARCOUNTER1*.

6.4.1.5 Counter Decrement

This **Generic** action option allows one of the 15 $COUNTER call variables to decreased by 1.

Voicemail Pro 5.0+ provides counter variable $COUNTER1 to $COUNTER15. These can be used in the same way as other variables. They can also be manipulated using **Generic** 165 action commands for *Set Counter* 175, *Clear Counter* 171, *Counter Decrement* 172 and *Counter Increment* 173. They can also be used with the **Decrement and Test Counter** 225 and **Increment and Test Counter** 226 actions. By default the initial value of a counter variable is 0. The formats $COUNTERx or $COUNTER[x] are both supported.



Select Generic command: Counter Decrement

Select Counter: 1

- **Select Generic command:** *Counter Decrement*
  - **Select Counter**
    Enter ***1*** to ***15*** to select ***$COUNTER1*** to ***$COUNTER15*** respectively.

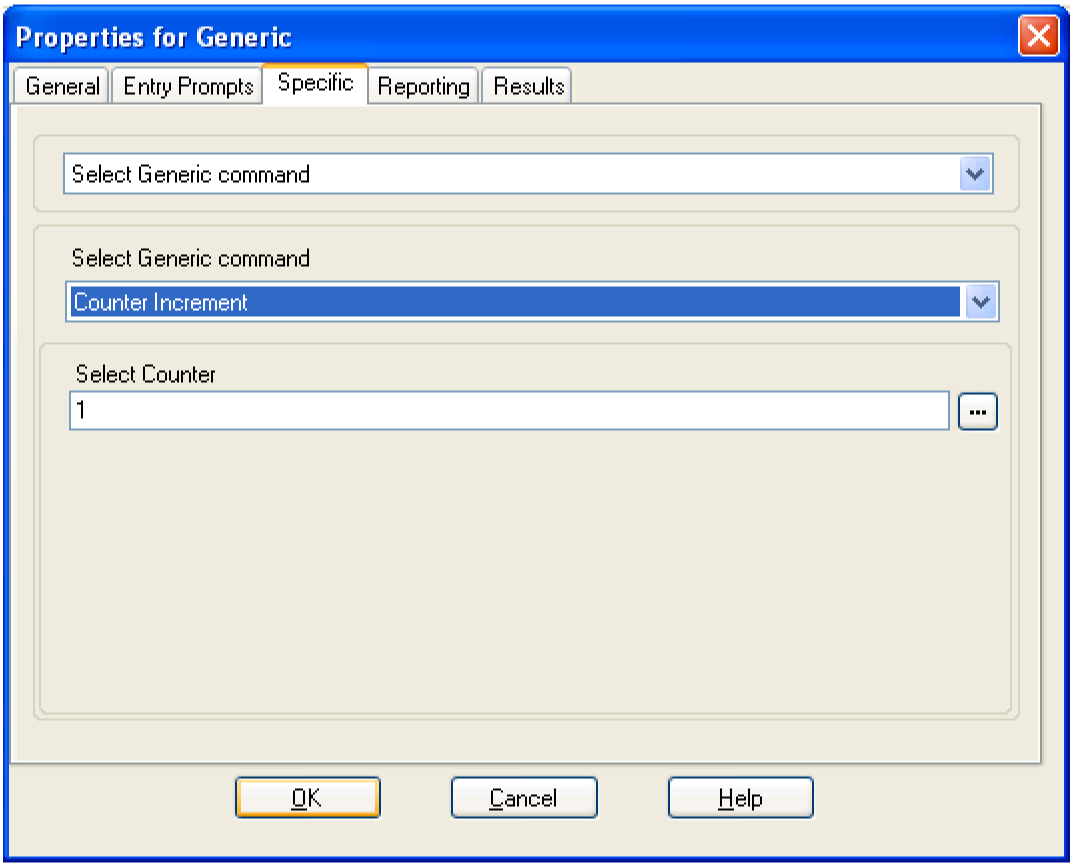
Free Format Equivalent

This action creates a command similar to *DECCOUNTER:$COUNTER1*. In this example decrementing the value of ***$COUNTER1***.

6.4.1.6 Counter Increment

This **Generic** action option allows one of the 15 $COUNTER call variables to be increased by 1.

Voicemail Pro 5.0+ provides counter variable $COUNTER1 to $COUNTER15. These can be used in the same way as other variables. They can also be manipulated using **Generic** 165 action commands for *Set Counter* 175, *Clear Counter* 171, *Counter Decrement* 172 and *Counter Increment* 173. They can also be used with the **Decrement and Test Counter** 225 and **Increment and Test Counter** 226 actions. By default the initial value of a counter variable is 0. The formats $COUNTERx or $COUNTER[x] are both supported.



Select Generic command

Select Generic command: Counter Increment

Select Counter: 1

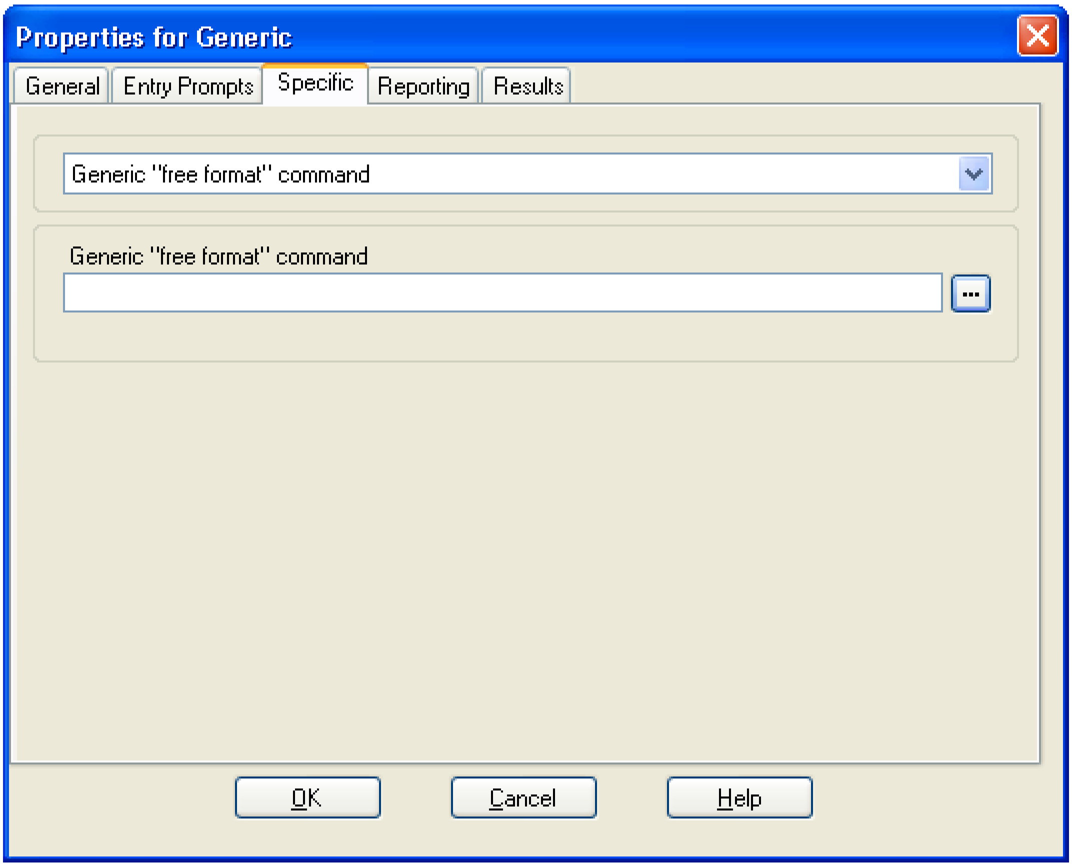
- **Select Generic command:** *Counter Increment*
  - **Select Counter**
    Enter ***1*** to ***15*** to select ***$COUNTER1*** to ***$COUNTER15*** respectively.

Free Format Equivalent

This action creates a command similar to *INCCOUNTER:$COUNTER1*. In this example incrementing the value of ***$COUNTER1***.

6.4.1.7 Generic Free Format Command

This Generic action option allows the direct entry of generic commands. If the action has been previously used to setup using a specific type of generic command, the resulting free format text string for that command is shown and can be edited if required.



Generic "free format" command

Generic "free format" command

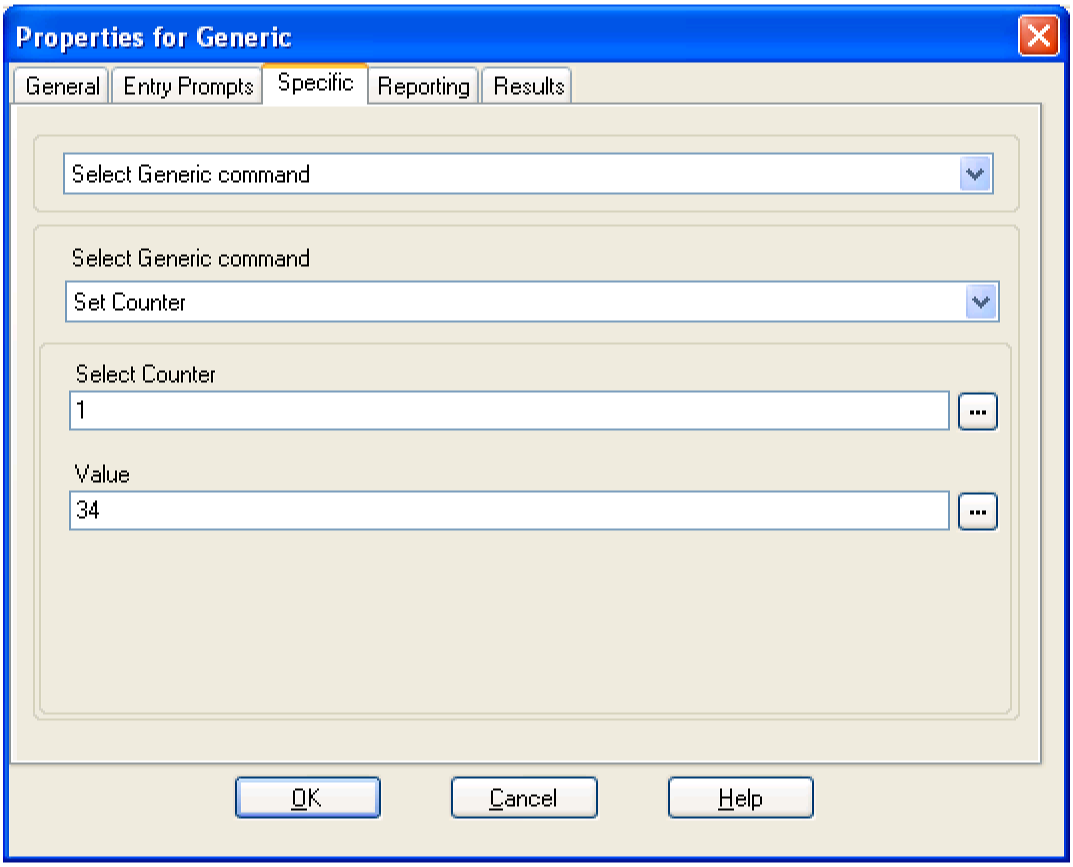
Details for many free format commands are included in the sections on other Generic action commands. In addition the following commands can be used:

- **Save a Value:** *Save:<value>*
  This generic command can be used to replace the value of the call variable ***$SAV*** with a specified value. For example *Save:$KEY* or *Save:1234*.
- **Forward a Message:** *FWD:<ext1>#<ext2>##*
  This option can be used with a generic action that is proceeded by an action that records a message such as a **Voice Question** or **Edit Play List** action. It then forwards the message to another mailbox or mailboxes. Each extension number should be followed by a # plus an additional # at the end of the string.

6.4.1.8 Set Counter

This **Generic** action option allows one of the 15 $COUNTER call variables to be set to a specific value.

Voicemail Pro 5.0+ provides counter variable $COUNTER1 to $COUNTER15. These can be used in the same way as other variables. They can also be manipulated using **Generic** 165 action commands for *Set Counter* 175, *Clear Counter* 171, *Counter Decrement* 172 and *Counter Increment* 173. They can also be used with the **Decrement and Test Counter** 225 and **Increment and Test Counter** 226 actions. By default the initial value of a counter variable is 0. The formats $COUNTERx or $COUNTER[x] are both supported.



Select Generic command: Set Counter

Select Counter: 1

Value: 34

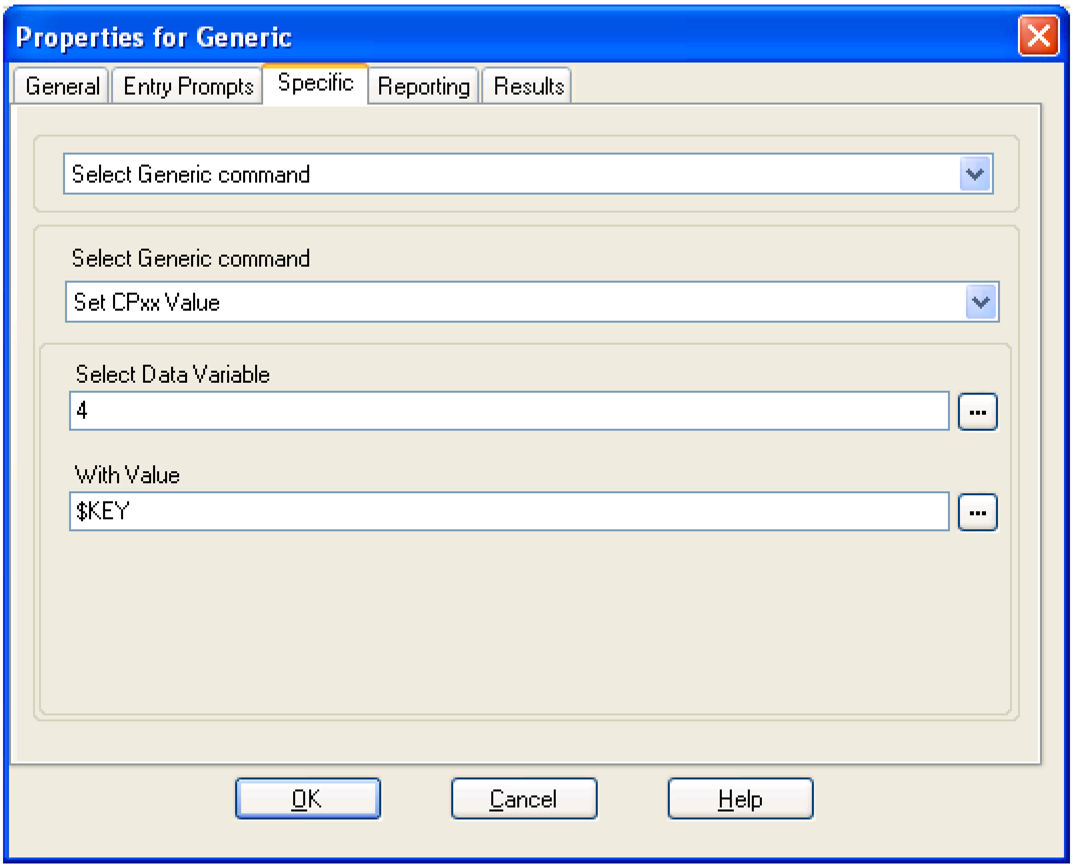
- **Select Generic command:** *Set Counter*
  - **Select Counter**
    Enter ***1*** to ***15*** to select ***$COUNTER1*** to ***$COUNTER15*** respectively.
  - **Value**
    Enter the numeric value for the counter. A call variable such as $KEY can be entered to set the counter to match the current value of that variable.

Free Format Equivalent

This action creates a command similar to *COUNTER1:34* or *COUNTER2:$KEY*. These examples set the value of ***$COUNTER1*** to ***34*** and ***$COUNTER2*** to ***$KEY*** respectively.

6.4.1.9 Set CPxx Value

This Generic action option allows a value to be stored as one of the 15 $CPxx call variables 140. The value to store can be the value of another variable or a value entered in the action.



Select Generic command

Select Generic command: Set CPxx Value

Select Data Variable: 4

With Value: $KEY

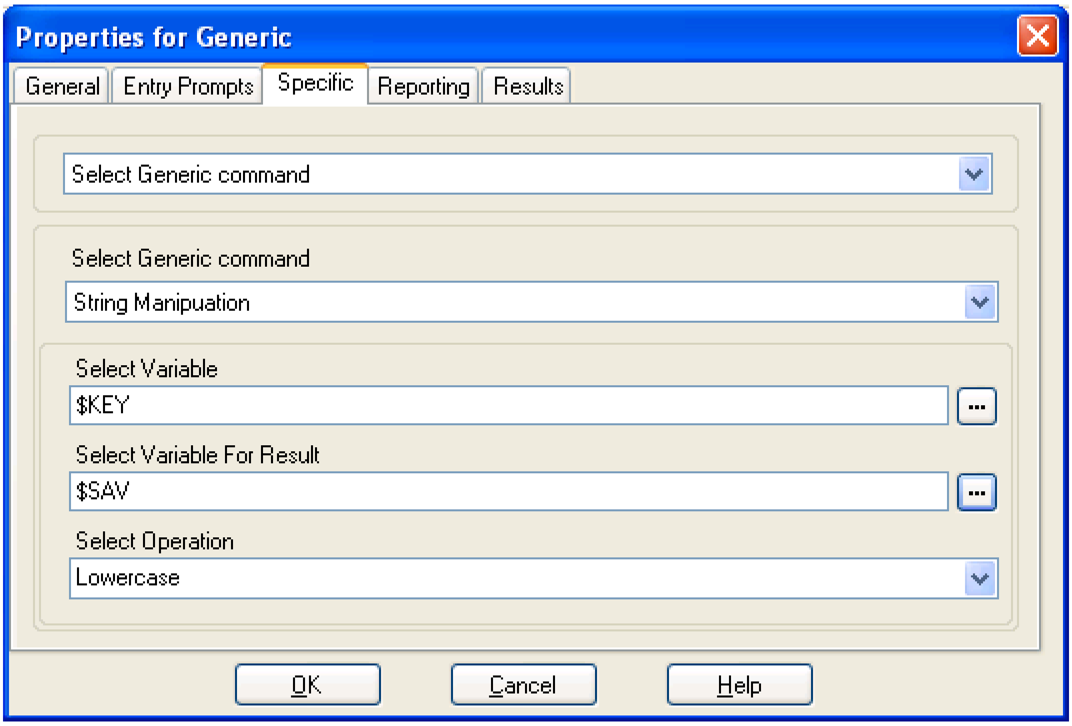
- **Select Generic command:** *Set CPxx Value*
  - **Select Data Variable**
    Enter 1 to 15 for call variable ***CP1*** to ***CP15*** respectively.
  - **With Value**
    Enter the value to store. Another call variable such as ***$KEY*** can be specified in order to have that variables current value stored.

Free Format Equivalent

This action results in a free format command like *CP4:$KEY*. In that example the current value of ***$KEY*** is stored as variable ***$CP4***.

6.4.1.10 String Manipulation

This **Generic** action option allows a call variable to be edited in various ways. For example take the full CLI of a call (for example 01555364200) and save just the area code part (in the example 555) as a new value. The action treats variable values as text strings, it does not differ whether the value is numeric or alphabetic. For numeric variables value, the value can also be manipulated using the **Arithmetic Evaluation** 166 option.



Select Generic command

Select Generic command: String Manipuation

Select Variable: $KEY

Select Variable For Result: $SAV

Select Operation: Lowercase

- **Select Generic command:** *String Manipulation*
  - **Select Variable**
    Enter the call variable on which the action should perform an operation.
  - **Select Variable For Result**
    Enter the call variable which should be used to store the result of the operation.
  - **Select Operation**
    Select the operation to be performed on the selected input. Depending on the selected operation the additional fields **Number of Characters** and **From Position Index** may be displayed.

Operation	Description	Example		
		Free Format Command	**$CP0**	**$CP1**
From Position	Return the selected number of characters starting from the position index and going right.	*STRING:$CP1=mid ($CP0,3,3)*	*01555364200*	*555*
From the Left	Return the selected number of characters starting from the left end.	*STRING:$CP1=left ($CP0,5)*	*01555364200*	*01555*
From the Right	Return the selected number of characters starting from the right end.	*STRING:$CP1=right ($CP0,5)*	*01555364200*	*64200*
Lowercase	Change any uppercase characters in the input into lowercase.	*STRING:$CP1=lower ($CP0)*	*ABCdef123*	*abcdef123*
Reverse	Reverse the order of characters in the input.	*STRING:$CP1=reverse ($CP0)*	*ABCdef123*	*321fedCBA*
Uppercase	Change any lowercase characters in the input into uppercase.	*STRING: $CP1=upper($CP0)*	*ABCdef123*	*ABCDEF123*

- **Number of Characters**
  This option is displayed for the operation ***From Position***, ***From the Left*** and ***From the Right***. It sets the number of characters to be returned.
- **From Position Index**
  This option is displayed for the operation ***From Position***. It sets the start character for set of characters to be returned.

6.4.2 Speak Text

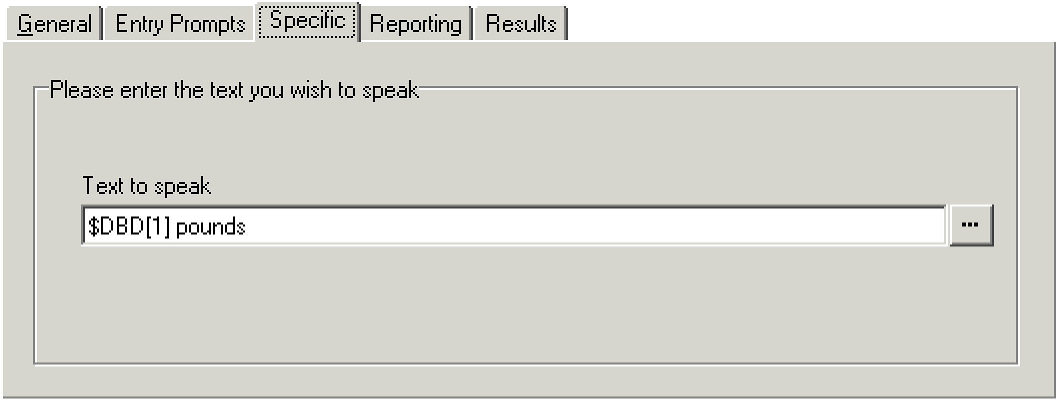
The **Speak Text** action allows any text to be spoken to the caller. To be able to use the **Speak Text** action you require TTS (Text to Speech) to be installed and licensed 73.

For examples of the action in a call flow, see:

- Entering Details in to the Database 340.
- Returning Data from the Database 338.

Settings

1. Click the **Basic Actions** icon and select **Speak Text**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab.



Text to speak: $DBD[1] pounds

- **Text to speak**
  Enter the text to be spoken in the **Text to speak** field. this can include:
  - Typed text sentences.
  - Voicemail Pro Call Variables 140. For example:
    - Entering $KEY would be replaced when spoken by the last digits dialed within the call flow by the caller.
    - If using database interaction, entering $DBD[x] would be replaced by the current value of that database field.
    - Entering $CLI would speak the caller's CLI, if available, back to them.
  - SAPI 5 XML 75 tags can be added to alter how the text is spoken. For example when 123 needs to be spoken as one two three rather than "one hundred and twenty-three", enter ***<spell>123</spell>***.

Results

This action has the following result which can be connected to a further action:

- **Next**
  Connect the result to a following action in the call flow.

Speaking Variables to Callers
Call variables can be used as prompts. The value of the call variable will then be spoken. This applies to all variables that are numeric values. It also applies to $NAM which will play the mailbox users recorded name prompt.

Numbers are spoken as a series of single digits. For example 123 is spoken as "one two three". To speak 123 as "one hundred and twenty-three" requires TTS to be installed and a **Speak Text** 178 action used.

Some call variables can be played as prompts, for example:

- **$NAM**
  Plays the mailbox's name prompt if one has been recorded.

- **$CLI**
  Speaks the caller's CLI.
- **$RES**
  Plays the current result if it is a .wav file.
- **$VAR**
  Plays the variable as a list of digits.

6.4.3 Menu

The **Menu** action allows you to specify DTMF tones for which you want to create connections to following actions. For example, a menu can be created that gives callers a choice of transfer locations.

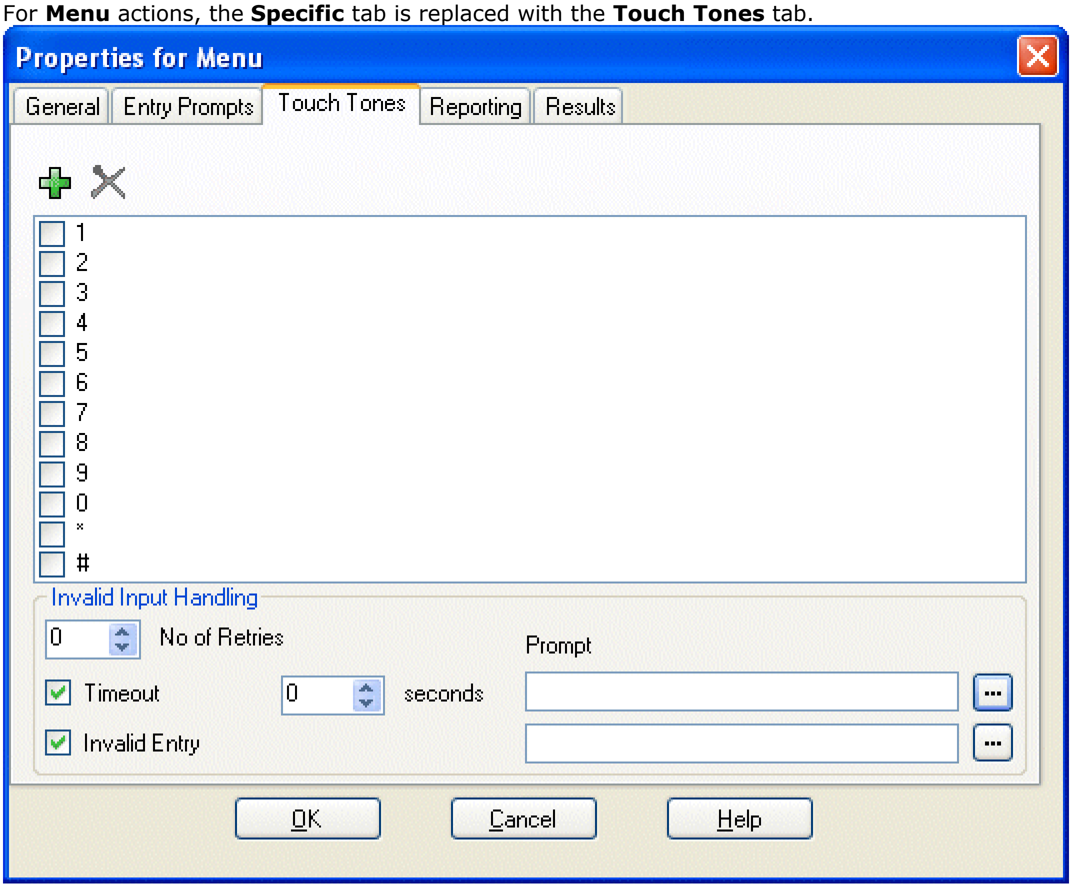
Each **Menu** action supports a maximum of 15 active touch tone entries.

For examples of the action being used in a call flow, see:

- Using a Play Configuration Menu Action 286.
- Example Call Flow for Mobile Twinning 282.
- Routing Calls to Voicemail, Example Call Flow 241.
- Changing the Language of System Prompts 279.
- Changing the Language Setting for a TTY Device 275.

Settings

1. Click the **Basic Actions** icon and select **Menu**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. For **Menu** actions, the **Specific** tab is replaced with the **Touch Tones** tab.



☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9
☐ 0
☐ *
☐ #

0 No of Retries
☑ Timeout 0 seconds
☑ Invalid Entry

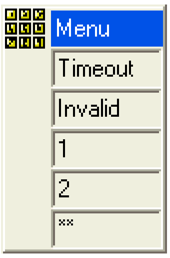
- **0-9, *, #**
  Use the dialing digits check boxes to indicate the DTMF tones for which connections are required.
- **✚ Add**
  The ✚ icon allows you to add custom sequences of dialing digits. In addition to the standard dialing digits (0 to 9, *, #) the following special digits can be used. If a sequence is added, ensure that the associated box is checked before you select **OK**. The sequence must be unique. For example, if 5 is selected, no other sequence that begins with 5 can be used.
  - **? = Any Digit**
    The ? character can be used to represent any digit (except * and #). For example, ***123???*** can be used for any six digit string starting with 123. See Example Call Flow: SelfSelect Module 241.
  - **$ = Any Sequence of Digits**
    The $ character can be used to match any sequence of digits for which there is no other match. Key press entry is ended either by the caller pressing # or 5 seconds after the last digit dialed.

  - **F = For Fax Calls**
    The **F** letter can be used to automatically detect any incoming fax calls. Once detected, the calls can be routed to another number. See Routing Fax Calls Using a Menu Action[361].
  - ✕ **Delete**
    Use this icon to delete the currently selected custom dialing sequence.

- **Invalid Input Handling**
  The following options can be used if the caller does not dial or dials an invalid digit.
- **No of Retries** *(Voicemail Pro 4.2+)*
  This option allows you to specify the number of retries a caller is allowed if they make an invalid entry or the timeout occurs.
- **Timeout**
  If selected, the Voicemail Pro will wait for the specified number of seconds for a valid digit . If the timeout expires the Voicemail Pro will either allow a retry or if the No of Retries has been reach, it will follow the Timeout result connection within the call flow.
- **Invalid Entry** *(Voicemail Pro 4.2+)*
  If selected, if the caller enters an invalid digit, the Voicemail Pro will either allow a retry or if the No of Retries has been reach, it will follow the Timeout result connection within the call flow.
- **Prompt** *(Voicemail Pro 4.2+)*
  You can associate a prompt with the Timeout and or Invalid Entry options. If a prompt is specified, before allowing a retry the Voicemail Pro will play that prompt. Use the ... to access the **Wave Editor**[161].

Results

The action can have the following results which can then be connected to further actions:



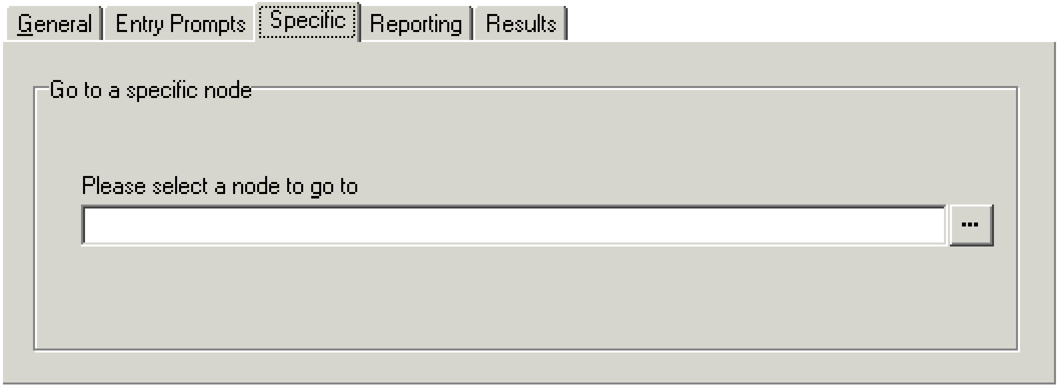
- **Timeout**
  This result is used to connect to a following call flow action if the caller does not make an entry within the specified number of seconds on their last retry.
- **Invalid**
  This result is used to connect to a following call flow action if the caller makes an invalid entry on their last retry.
- **Others**
  A result for connection to a following call flow action is shown for each select dialing digit sequence.

6.4.4 Goto

The **GoTo** action will transfer the caller to another call flow start point.

Settings

1. Click the **Basic Actions** icon and select **GoTo**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab.



- **Please select a node to go to**

  Click ... to browse to select a start point, module or system defined variable. For short codes, the browse method does not work. Instead enter "**Short Codes.*xxx***" where ***xxx*** is the short code key sequence.

  - Select the option Start point or module. Select from the available options.
    - Users - all the users with specific start points are listed.
    - Groups - all the Groups with specific start points are listed.
    - Any default start point.
    - Any available modules.
  - Select the option **System defined variables** to browse the available call variables. You can also type the name of the start point directly.

Results

This action does not have any results.

6.4.5 Disconnect

The **Disconnect** action disconnects the caller.

Settings

1. Click the **Basic Actions** icon and select **Disconnect**.

Results

This action does not have any results that can be connected to a following action. The caller is disconnected.

6.4.6 Home

The **Home** action returns the caller to the start point of the calls entry into voicemail. The PIN option in the General tab is not used for this action.

Settings

1. Click the **Basic Actions** icon and select **Home**.

Results

This action does not have any results that can be connected to a following action. Instead the caller is returned to the start point of the call entry into the voicemail.

For an example of the action being used in a call flow, see Using a Play Configuration Menu Action 286.

6.4.7 Module Return

The **Module Return** action is used within modules only. It creates a connection point from the module to subsequent actions within any call flow that uses the module. A module can use several Module Return actions if necessary.

Settings

1. Click the **Basic Actions** icon and select **Module Return**.
2. The action has no properties.

Results

This action does not have any results that can be connected to a following action. Instead it appears as a result in the module icon when the module is inserted into another call flow.

For examples see Changing the Language of System Prompts 279 and User Defined Variables 138.

6.5 Mailbox Actions

Mailbox Actions
These actions relate to the leaving and collecting of messages from a mailbox.

- **Get Mail Action** 185
  Collect messages from a mailbox.
- **Leave Mail Action** 186
  Leave a message in a mailbox.
- **Listen Action** 187
  Record to a mailbox.
- **Voice Question Action** 188
  Record responses to a series of prompts.
- **Campaign Action** 189
  Access a campaign to read or leave messages.

6.5.1 Get Mail

The **Get Mail** action allows access to the messages in the caller's mailbox or a specified mailbox. The caller then has access to the standard mailbox features setup for that mailbox. If the extension is a trusted extension, the user does not have to enter their mailbox number and code.

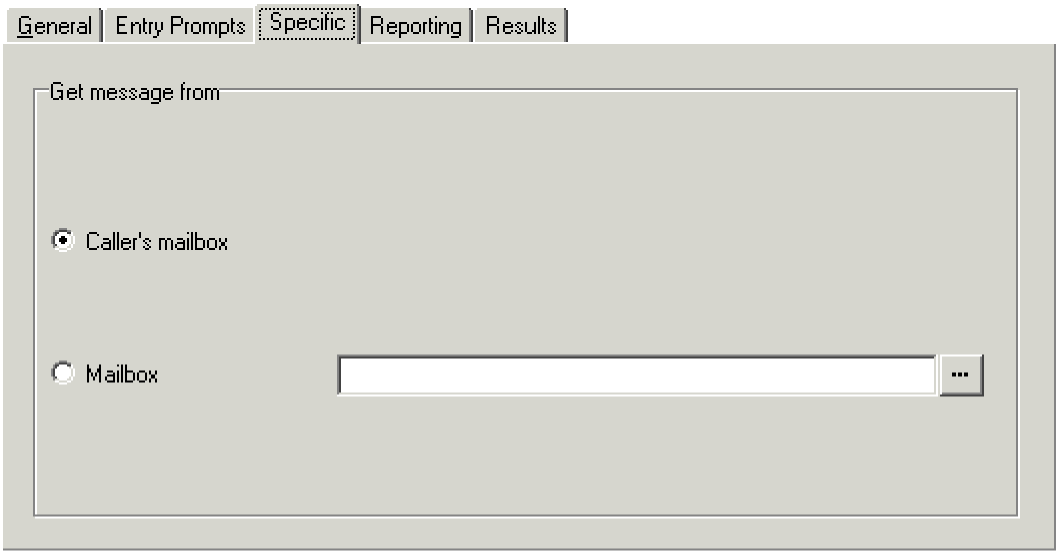
See Creating a Trusted Location 246.

For examples of the action being used in a call flow, see:

- Using a Play Configuration Menu Action 286.
- Setting Up Callback 285.
- Changing the Language of Custom Prompts 280.
- Changing the Language of System Prompts 279.
- Enabling Access to Hunt Group Voicemail 250.
- Changing the Language Setting for a TTY Device 275.

Settings

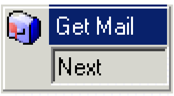
1. Click the **Mailbox Actions** icon and select **Get Mail**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. The **Specific** tab is used to select either the caller's mailbox or mailbox option.



- **Caller's mailbox**
  The mailbox matching the start point of the call.
- **Mailbox**
  Select or enter the name of the target mailbox. If **?** is entered, Voicemail will prompt caller's to enter the mailbox number required.

Results

The action can have the following results which can then be connected to further actions:



- **Next**
  This conditions when this option is used depend on the mailbox mode in which the Voicemail Pro is running:
  - **IP Office mode**
    Users who press **0** while they are logged into their mailbox will be routed to the **Next** result.
  - **Intuity mode**
    Users who press ***0** whilst in their mailbox will be routed to their Voicemail Reception number if set. The **Next** result is not used.

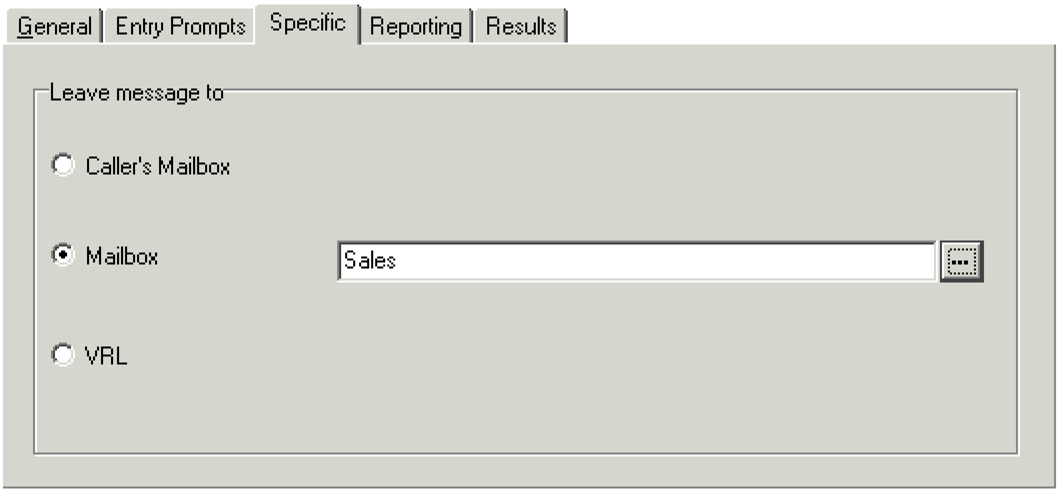
6.5.2 Leave Mail

The **Leave Mail** action allows the caller to leave a message in the start point's mailbox or in a specified mailbox. For examples of the action in a call flow, see:

- Routing Calls to Voicemail, Example Call Flow 241.
- Hunt Group Queuing, Example Call Flow using $POS. 256
- Changing the Language Setting for a TTY Device 275.
- Example Call Flow: Dial by Name 343.

Settings

1. Click the **Mailbox Actions** icon and select **Leave Mail**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. The **Specific** tab is used to indicate the target mailbox for the message.



○ Caller's Mailbox

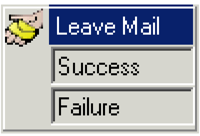
● Mailbox: Sales

○ VRL

- **Caller's Mailbox**
  The mailbox matching the start point of the call.
- **Mailbox**
  Select or enter the name of the target mailbox.
- **VRL**
  If selected, specifies that the message should be transferred to a third-party Voice Recording Library (VRL) application. See Voice Recording Library 260.

Results

The Leave Mail action has **Success** and **Failure** results. The use of these depends on which mailbox mode the Voicemail Pro server is using.



- **IP Office mode:**
  Callers in the mailbox follow the *Failure* or *Success* results depending on whether they press 0 before or after the leave a message tone respectively. This overrides the mailbox user's *Voicemail Reception* setting set in the IP Office configuration.
- **Intuity mode:**
  The results cannot be accessed. Callers pressing 0 will always follow the mailbox user's *Voicemail Reception* setting set in the IP Office configuration.

6.5.3 Listen

The Listen action allows the caller to leave a message in the start point's mailbox or in a specified mailbox. The caller can only leave a message and cannot access any other mailbox features.

For examples of the action in a call flow, see Customizing Manual Recording 264 and Customizing Auto Recording 270.

Settings

1. Click the **Mailbox Actions** icon and select **Listen**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. In the **Specific** tab, select either the Caller's mailbox or Mailbox option.
    - **Caller's Mailbox:** The mailbox matching the start point of the call.
    - **Mailbox:** Select or enter the name of the target mailbox.

Results

This action has the following result which can be connected to a further action:

- **Next**
  Connect the result to a following action in the call flow.

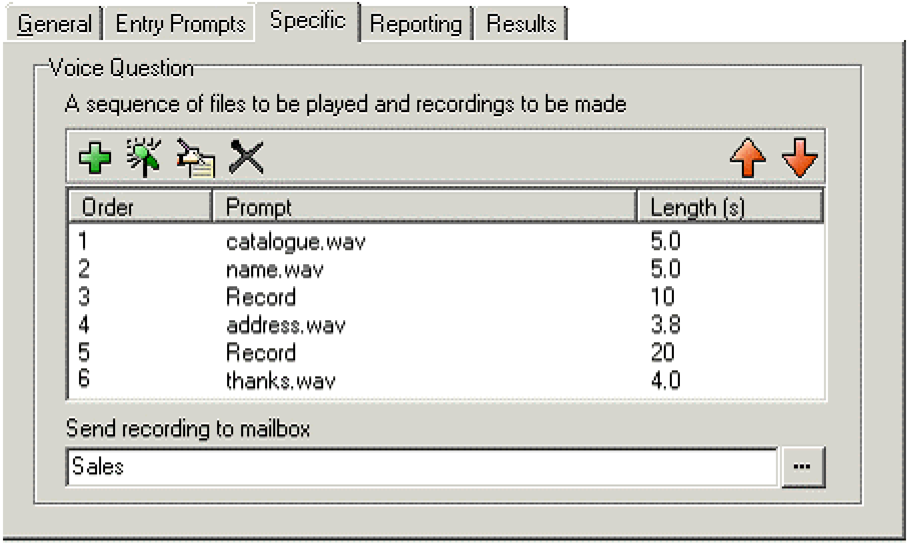
6.5.4 Voice Question

The **Voice Question** action allows you to create a play list where the caller hears a sequence of prompts and their responses are recorded.

If the play list is completed, a single file containing the recorded responses is created. That file can then be placed into a specified mailbox or passed to an eMail action.

Settings

1. Click the **Mailbox Actions** icon and select **Voice Question**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. In the **Specific** tab questions need to be added to the play list.



A sequence of files to be played and recordings to be made

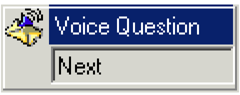
Order	Prompt	Length (s)
1	catalogue.wav	5.0
2	name.wav	5.0
3	Record	10
4	address.wav	3.8
5	Record	20
6	thanks.wav	4.0

Send recording to mailbox: Sales

4. Click **Add a Prompt**. The Wave Editor 161 window opens. Specify a new file name and then record the new prompt or select an existing prompt.
5. Click **Record a Response**. Specify a name and a length in seconds for the recorded response. Click **OK**.
6. Repeat the above steps to create a series of questions and responses. Use the following controls to adjust the list.
    - **Edit:** - Edit the settings of the currently highlighted item.
    - **Delete:** - Deletes the currently highlighted item from the play list. This does not delete the actual prompt file.
    - **Shuffle:** - Move the currently highlighted item within the play list.
7. Specify a mailbox into which the recorded file of the responses should be stored. If no mailbox is specified the file can be passed to an eMail action 212.

Results

This action has the following result which can be connected to a further action:



- **Next**
  Connect the action to a following action within the call flow. The **Next** result can be connected to an **eMail** action if no mailbox is selected in the **Specific** tab.

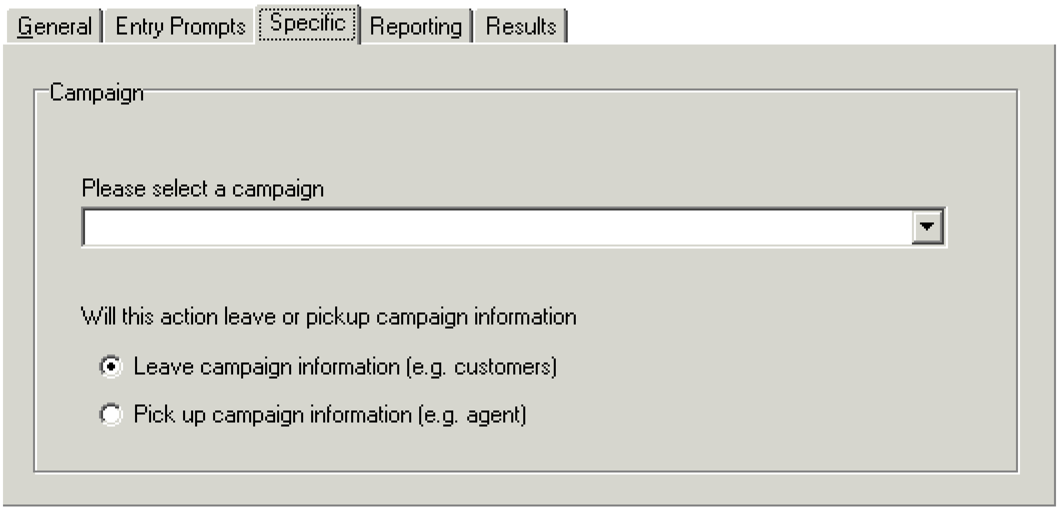
6.5.5 Campaign

A campaign is used to ask callers a series of questions and record their spoken or key press responses. Agents can then access the campaign recordings and process the response using their telephone key pad or a web interface.

Campaigns are setup using the **Campaign Wizard** 346. The **Campaign** action can be used to either route a caller into a campaign or to allow an agent to access any messages left for a campaign.

Settings

1. Click the **Mailbox Actions** icon and select **Campaign**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. You need to enter the campaign and select whether to leave or collect campaign information in the **Specific** tab.



Please select a campaign

Will this action leave or pickup campaign information

● Leave campaign information (e.g. customers)

○ Pick up campaign information (e.g. agent)

- **Please select a campaign**
  Enter the campaign that you want to use. Then select on of the following:
  - **Leave campaign information (e.g. customers)**
    Select if the action should start the campaign to collect the caller's responses.
  - **Pick up campaign information (e.g. agent)**
    Select if the action should start playing back the response left by callers to the campaign.

When accessing the caller recordings from using a **Campaign** action or park slot number, the following controls are provided through the telephone keypad.

1	Go to the start of the call.		**7**	Previous response.
2	Rewind.		**8**	Start of response.
3	Stop processing the message.		**9**	Next response.
4	Mark call as processed and delete.		**0**	Pause.
5	Mark call as processed and save.		**#**	Fast forward.

Results

This action has the following result which can be connected to a further action:

- **Next**
  Connect the action to a following action within the call flow.

6.6 Configuration Actions

Configuration Actions
These actions allow a caller to change the settings of a user or hunt group mailbox.

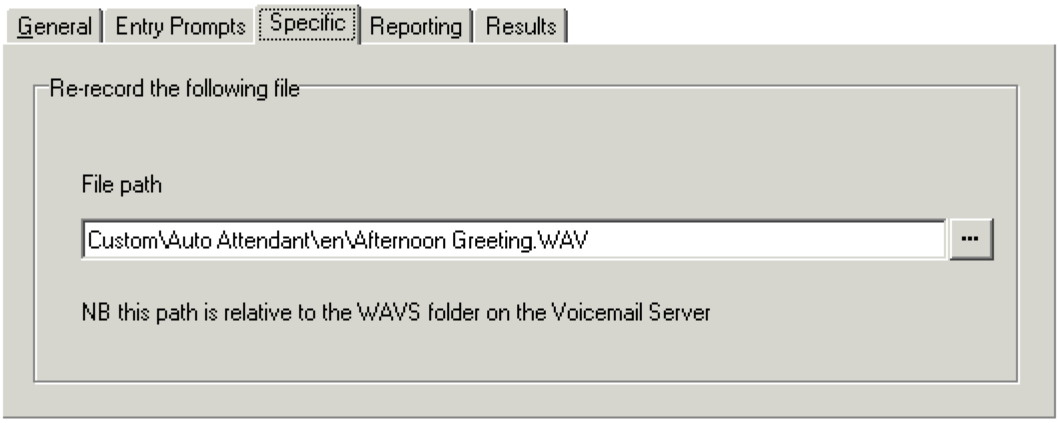
- **Edit Play List Action** 190
  Re-record a prompt.
- **Record Name Action** 191
  Re-record a mailbox name.
- **Play Configuration Menu Action** 192
  Change user or group settings.
- **Select System Prompt Language Action** 193
  Change the prompt language.

6.6.1 Edit Play List

The **Edit Play List** action can be used to record a specified prompt file held on the voicemail server PC. This allows call flows to be created to change the prompts being used by other call flows.

Settings

1. Click the **Configuration Actions** icon and select **Edit Play List**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. In the **Specific** tab, select the prompt file held on the voicemail server.



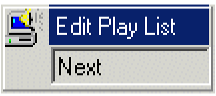
File path: Custom\Auto Attendant\en\Afternoon Greeting.WAV

NB this path is relative to the WAVS folder on the Voicemail Server

- **File Path**
  This path is relative to the WAVS folder defined 91 for the voicemail server.
  - To browse to a file location click ... . The Wave editor 161 window opens. Select an existing prompt or define and record a new one.
  - When accessing voicemail prompts, voicemail variables 140 can be used in both the path and filename for the prompt. For example, if prompts Greeting1.wav, Greeting2.wav etc. are recorded, an action set to play ***Greeting$KEY.wav*** would play the greeting prompt that matched the current value of $KEY.
  - For announcements, the formats ***[GREETING]\<name>_Queued*** and ***[GREETING]\<name>_StillQueued*** can be used, where ***<name>*** is replaced by the hunt group or user name.

Results

This action has the following result which can be connected to a further action:



- **Next**
  Connect the action to a following action within the call flow.

6.6.2 Record Name

The **Record Name** action is used to allow callers to record a name prompt for their mailbox or a specified mailbox. For an example of the action in a call flow, see Adding a Record Name Module 344.

The mailbox name prompt is used for the Dial By Name 342 feature and is played to callers who are directed to the mailbox to leave a message. If the voicemail server mailbox mode 89 is set to ***Intuity*** mode, users can record the name prompt through the telephone prompt interface.

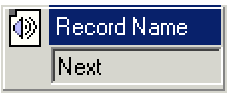
- If it is necessary to have a service for the bulk recording of mailbox name prompts an command called **NameWavsTable** 345 can be used.

Settings

1. Click the **Configuration Actions** icon and select **Record Name**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. In the **Specific** tab the mailbox to record that the name is to be recorded for is selected.
    - **Caller's mailbox**
      The mailbox matching the start point of the call.
    - **Mailbox**
      Select or enter the name of the target mailbox.

Results

This action has the following result which can be connected to a further action:



- **Next**
  Connect the action to a following action within the call flow.

6.6.3 Play Configuration Menu

The **Play Configuration** action allows various users or hunt group settings to be altered. Because of the nature of this action it should always be protected by a PIN code in its **General** tab. For an example of the action being used in a call flow, see Using a Play Configuration Menu Action 286.

The options given when a caller accesses this action are:

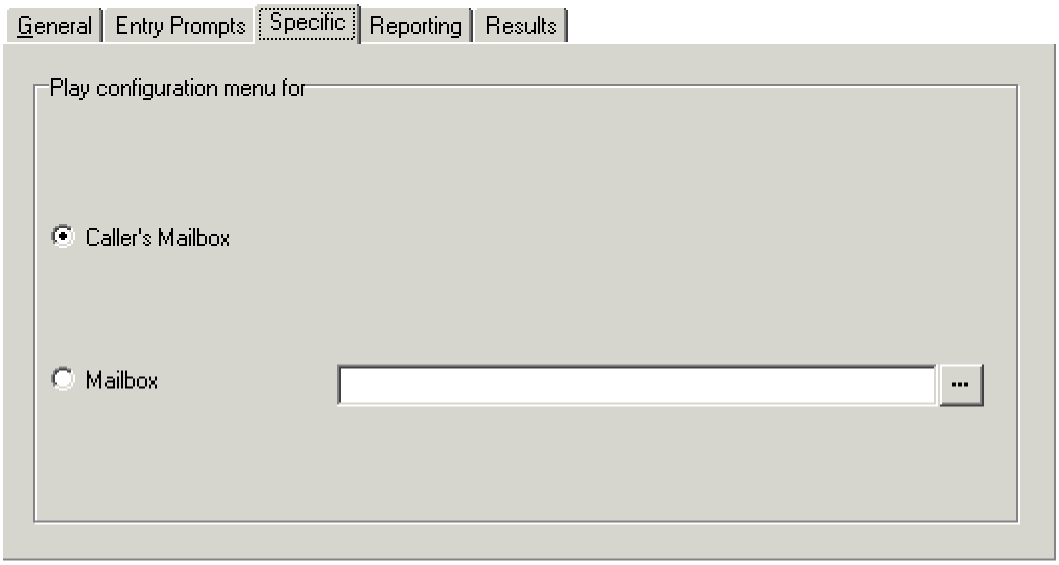
User	Hunt Group
1. Edit forwarding number[1]. 2. Edit follow me number[1]. 3. Set call forwarding[1]. 4. Set voicemail on/off[1]. 5. Set do not disturb[1]. 6. Edit voicemail code[1]. 7. Edit voicemail reception[1]. 8. Set voicemail email mode[1]. 9. Edit voicemail callback number[1].	1. Set voicemail on/off[1]. 2. Edit voicemail code. 3. Set voicemail email mode[1]. 4. Set service mode.

1. For Voicemail Pro 5.0+, those option marked as [1] can also be set using Generic 168 action commands.

Any user or group configuration changes made using this method are written the file "AuditTrail.txt" on the voicemail server PC (*C:\\Program Files\Avaya\IP Office\Voicemail Pro\VM\Logs\AuditTrail.txt*). The file includes the time, date, details of the change and the CLI of the caller making the change.

Settings

1. Click the **Configuration Actions** icon and select **Play Configuration Menu**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions. In the **General** tab, enter a PIN code in the **PIN** field.
3. In the **Specific** tab, select the mailbox to play the configuration menu for:



Play configuration menu for

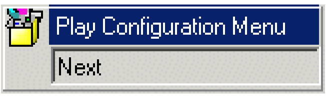
● Caller's Mailbox

○ Mailbox

- **Caller's mailbox**
  The mailbox matching the start point of the call.
- **Mailbox**
  Select or enter the name of the target mailbox.

Results

This action has the following result which can be connected to a further action:



- **Next**
  Connect the action to a following action within the call flow.

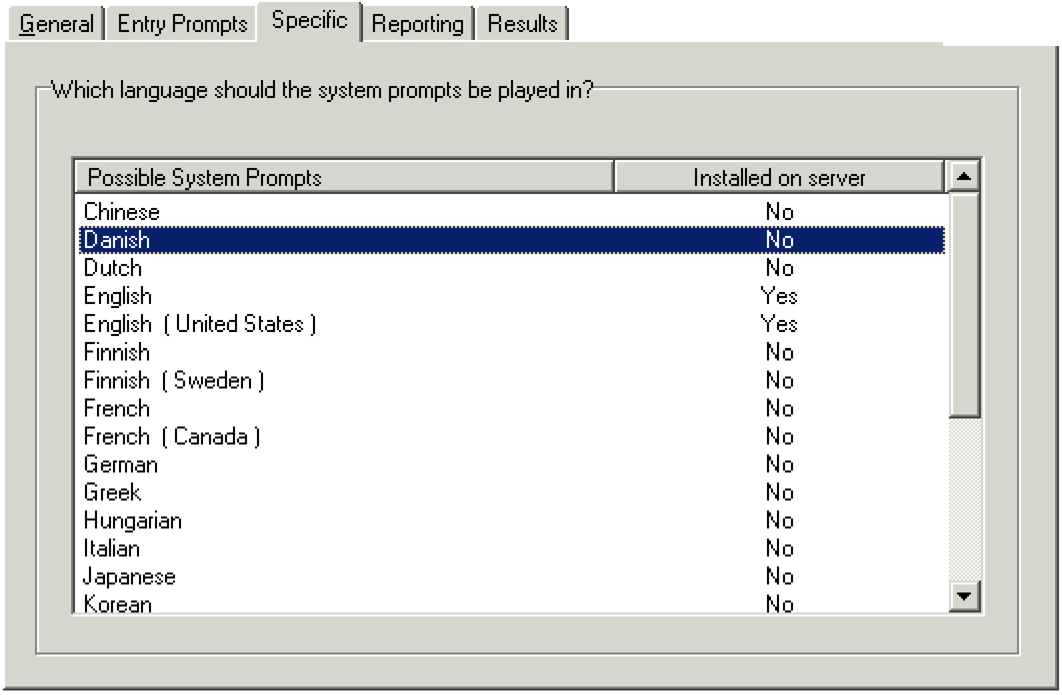
6.6.4 Select System Prompt Language

The **Select System Prompt Language** action is supported on Voicemail Pro 1.2.6 or higher. It allows the system to alter the language spoken during a call flow. For examples of the action being used in a call flow, see Changing the Language of System Prompts 279 and Changing the Language Setting for a TTY Device 275.

For details of supported languages see Supported Languages 15. Not all languages are installed by default. If the selected language is not available the voicemail server will use the next nearest language.

Settings

1. Click the **Configuration Actions** icon and select **Select System Prompt Language**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. In the **Specific** tab select the language that the system prompts are to be played in. If a language is selected which is not loaded on the Server, the system will automatically select the most appropriate language.



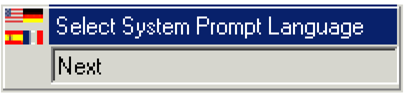
Which language should the system prompts be played in?

Possible System Prompts	Installed on server
Chinese	No
Danish	No
Dutch	No
English	Yes
English (United States)	Yes
Finnish	No
Finnish (Sweden)	No
French	No
French (Canada)	No
German	No
Greek	No
Hungarian	No
Italian	No
Japanese	No
Korean	No

- **Possible system prompts**
  List of all prompt languages that could be installed on the system.
- **Installed on the Server**
  Displays if the prompts for a particular language are installed on the server.

Results

This action has the following result which can be connected to a further action:



- **Next**
  Connect the action to a following action within the call flow.

6.7 Telephony Actions

Telephony Actions

These actions relate to telephony functions such as call transfers.

- **Variable Routing Action** 195
  Route on a match to a variable such as the caller's CLI.
- **Route Incoming Call Action** 197
  Route a call depending on whether the call is internal or external.
- **Route by Call Status** 198
  Calls route is determined by why the reason the call was routed to voicemail.
- **Transfer Action** 199
  A blind transfer.
- **Whisper Action** 201
  Screened transfer.
- **Call List Action** 203
  Transfer to a user selected choice.
- **Dial by Name Action** 204
  Select user/group by keypad letters.
- **Conferencing Center** 206
  Provides a route for callers to enter the conference ID and their conference PIN code. IP Office Conferencing Center needs to be installed.
- **Assisted Transfer Action** 207
  A transfer with assistance for callers.
- **Alphanumeric Action** 209
  Allows the caller to input text and numeric values.

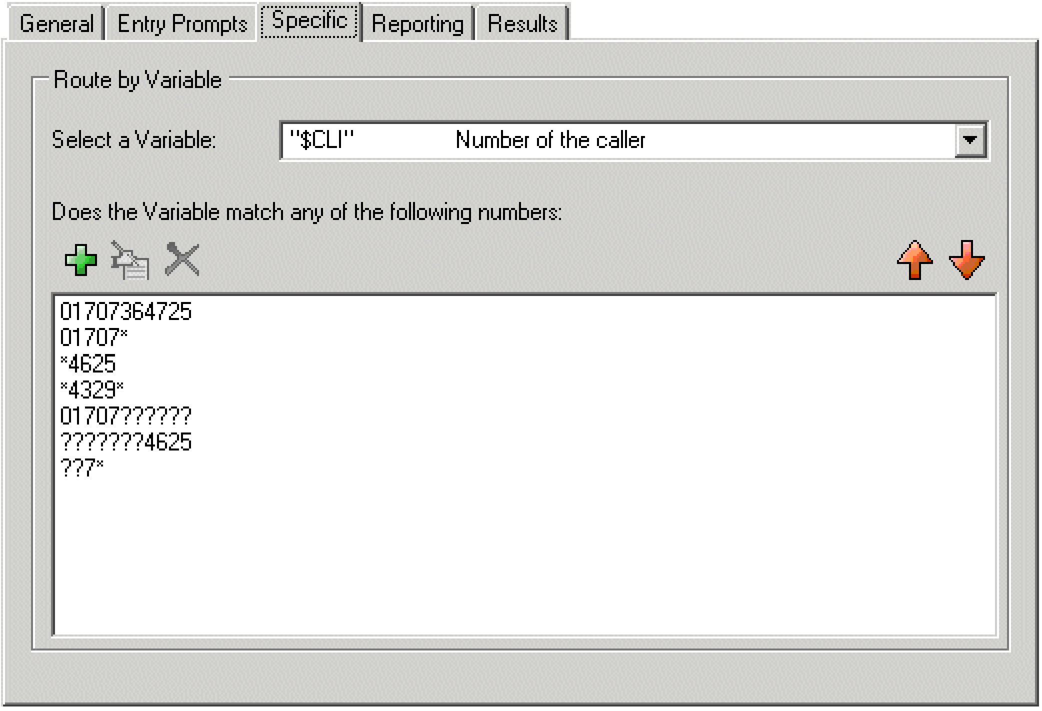
6.7.1 Variable Routing

This action routes calls based on whether a selected call variable 140 matches any of the numbers specified by the action's settings. This action replaces the previous **CLI Routing** action but can perform the same function using the ***$CLI*** variable.

The selected variable is checked for a match against all strings. Where multiple matches occur, the one with the most matching digits (excluding wildcards) is used. If several equal length matches are found, the first one in the list is used.

Settings

1. Click the **Telephony Actions** icon and select **Variable Routing**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab.



Route by Variable

Select a Variable: "$CLI" Number of the caller

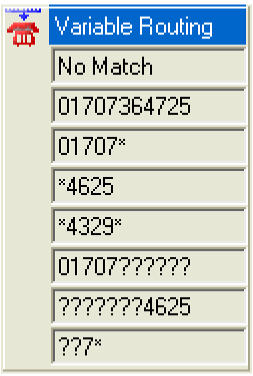
Does the Variable match any of the following numbers:

01707364725
01707*
*4625
4329
01707??????
???????4625
??7*

- **Select a Variable**
  This drop down is used to select the call variable 140 against which the values are checked for a match.
- **Does the Variable match any of the following numbers**
  The area below lists the numbers against which the selected variable will be selected for a possible match. If the variable matched multiple numbers in the list, the routing for the match nearest the top of the list is used.
  - Add a new number to the list of numbers. Some examples are listed in the results section below.
    - Numbers can include a ? wildcard to represent any single digit, with multiple ?'s to represent a matching number of digits.
    - Numbers can include a * wildcard to match any digits including multiple digits.
  - Edit an existing selected number.
  - Delete an existing selected number.
  - Move the position of the currently highlighted string.

Results

This action has a separate result for each number string entered on the action's **Specific** tab plus a **No Match** result. Examples are:



Variable Routing

No Match

01707364725

01707*

*4625

4329

0170??????

???????4625

??7*

- **01707364725** will only match that number exactly.
- ***01707**** will match any number beginning with 01707.
- ****4625*** will match any number ending in 4625.
- ****4329**** any number containing 4329.
- ***01707??????*** will match any 11 digit number beginning with 01707.
- ***???????4625*** will match any 11 digit number ending in 4625.
- ***??7**** will match any number with 7 as the third digit.

6.7.2 Route Incoming Call

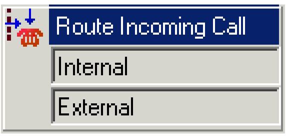
The **Route Incoming Call** action allows a call flow to be branched based on whether the call is internal or external.

Settings

1. Click the **Telephony Actions** icon and select **Route Incoming Call**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. There is no **Specific** tab for this action.

Results

This action has the following results which can be connected to further actions:



- **Internal**
  This result is used for internal calls.
- **External**
  This result is used for external calls.

6.7.3 Route by Call Status

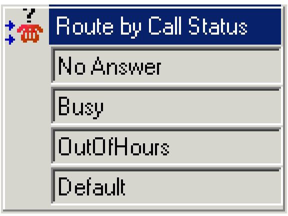
The **Route by Call Status** action allows a call flow to be branched based on the reason the original IP Office target for the call did not answer it. .

Settings

1. Click the **Telephony Actions** icon and select **Route by Call Status**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. There is no **Specific** tab for this action.

Results

This action has the following results which can be connected to further actions:



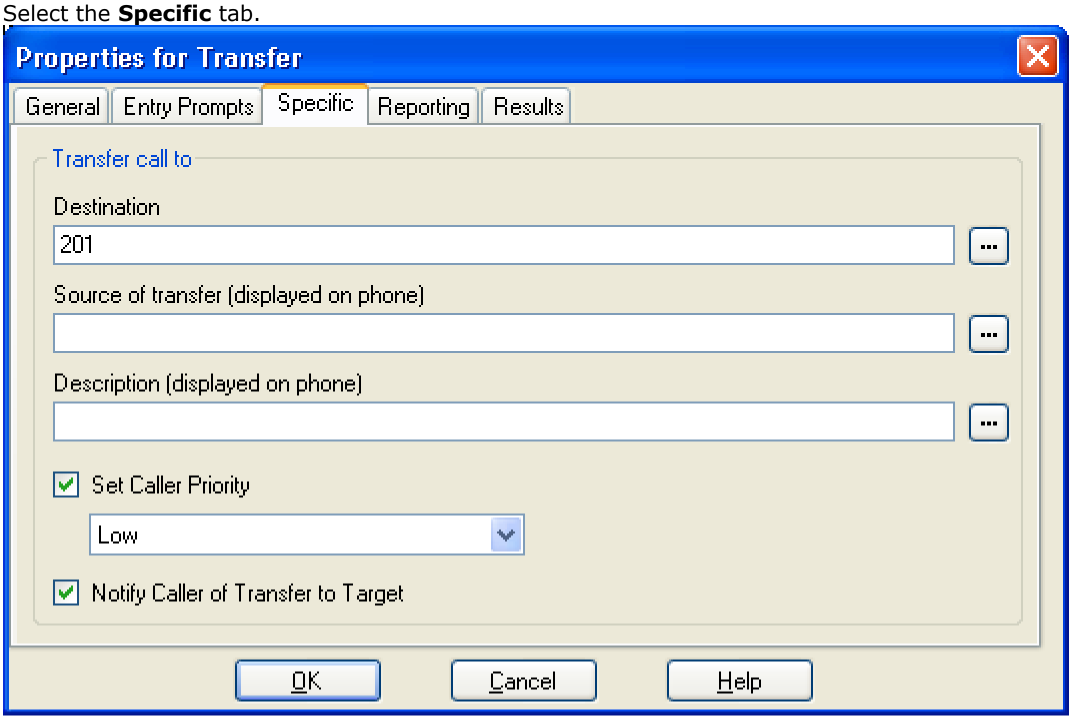
- **No Answer**
  This result is used for calls routed to the voicemail server because the original target user or hunt group was rung but did not answer.
- **Busy**
  This result is used when the call has been routed to the voicemail server because the original target user is busy.
- **Out of Hours**
  This result is used for hunt group calls when the original target hunt group is in night service mode.
- **Default**
  Where the cause for the call being routed to voicemail cannot be determined or does not fit the criteria above, the **Default** route is used.

6.7.4 Transfer

The **Transfer** action transfers the caller to the extension that matches the mailbox selected. This is a blind transfer; if the call returns to the voicemail server again, for example if unanswered, it will be treated as a new call. More advanced transfers are done using either a **Call List Action** 203 or **Assisted Transfer Action** 207.

Settings

1. Click the **Telephony Actions** icon and select **Transfer**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab.



Transfer call to

Destination: 201

Source of transfer (displayed on phone):

Description (displayed on phone):

☑ Set Caller Priority: Low

☑ Notify Caller of Transfer to Target

- **Destination**
  Enter the number of the destination for the transfer. This can include IP Office short codes or numbers specified by the current value of a Voicemail Pro call variable 140 such as ***$KEY***. Type the required text directly or use the ... browse button to select the text that should be used including using a the value of a call variable 140.
  - For IP Office 5.0+ operation, a short code can be set as the transfer destination.
- **Source of transfer (displayed on phone)**
  The number to display on the destination phone if internal. Type the required text directly or use the ... browse button to select the text that should be used including using a the value of a call variable 140.
- **Description (displayed on phone)**
  The text description to display on the destination phone if internal. Type the required text directly or use the ... browse button to select the text that should be used including using a the value of a call variable 140.
- **Set Call Priority** *(Voicemail Pro 5.0+)*
  If selected, the caller's priority can then be set to ***Low***, ***Medium*** or ***High***. A call variable 140 set to 1, 2 or 3 can also be used to set ***Low***, ***Medium*** or ***High*** priority respectively.
  - When calls are presented to a hunt group on the IP Office, calls waiting to be answered are queue in order of priority and then longest waiting. By default internal caller's have ***Low*** priority while the priority of external callers is set by the IP Office Incoming Call Route used to route the call (default also ***Low***).
  - Mixing calls of different priority is not recommended if Voicemail Pro is being used to provide queue estimate time to answer (ETA) and queue position announcements to callers, since those values will no longer be accurate when a higher priority call is placed into the queue. Note also that in such a situation Voicemail Pro will not allow a value already announced to a caller to increase.
- **Notify caller of transfer to target** *(Voicemail Pro 4.1+)*
  If enabled, the caller hears *"Transferring to"* followed by the associated mailbox name of the destination if available or otherwise the destination number if it matches an internal extension number. This follows any prompts selected in the **Entry Prompts** list above.

Results

A **Transfer** action has no results.

MS-CRM Call Data Tagging

Call Data Tags enable advanced scenarios to be built around your Microsoft CRM 3.0 and Avaya Microsoft CRM Integration Solution. In situations where CLI/ANI matching is not sufficient, you can add screening and specific data collection interactions with your customers using the Voicemail Pro. The Voicemail Pro Assisted Transfer and Transfer actions can be used to pass data to users and pop matching records based on that data.

Based on your solutions requirements, you could obtain and verify the data collected, and then transfer the call with a data tag, that will utilize your specific criteria to lookup the required, account, contact or case, once the call is offered.

The tags are conformant xml fragments, they are comprised of an element ***AV_M*** and two attributes the Microsoft CRM entity (account, contact or incident) and the schema name of the field to match on, in this example '***contactid***' and the data is the record key.

For example:

- **<AV_M O="contact" S="contactid" >{e44e6dbf-bd2a-da11-badb-505054503030}</AV_M>**

  where

  - **<AV_M** = element name.
  - **O="contact"** = crm entity.
  - **S="contactid"** = attribute to search on.
  - **> =** end of element attributes
  - **{e44e6dbf-bd2a-da11-badb-505054503030}** = the data to match on, this should be unique.
  - **</AV_M>** - Closing tag.

The xml element name, attributes names and Microsoft CRM entity and schema names are case sensitive.

Additional Examples

- **Account – Account Number: *<AV_M O="account" S="accountnumber" >TL00001</AV_M>***
- **Case – Ticket Number: *<AV_M O="incident" S="ticketnumber" >CAS-01001</AV_M>***

6.7.5 Whisper

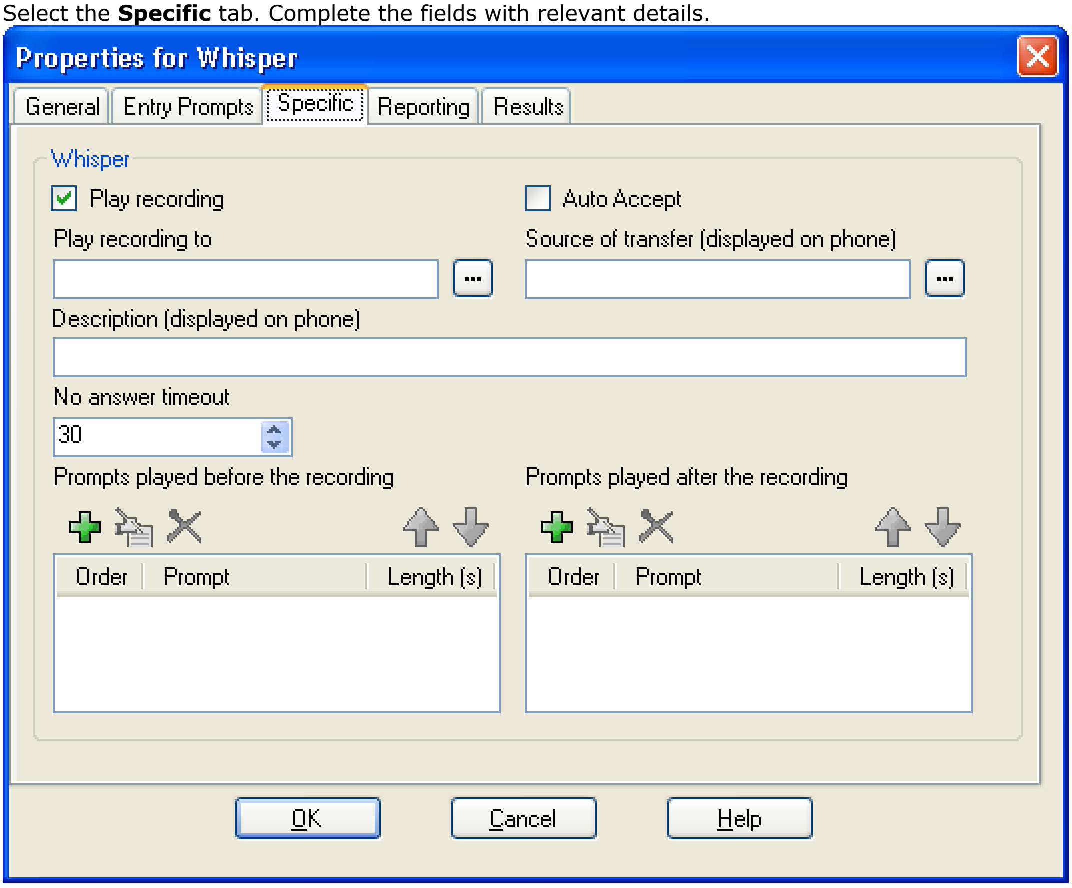
The **Whisper** action allows a recording made by the caller to be played to a transfer target while the caller is held. While listening to the recording and prompts the transfer target can either accept the call by pressing 1 or reject the call by pressing any other key or hanging up.

The caller recording is obtained by a **Voice Question** or **Listen** action preceding the **Whisper** action. The **Whisper** action also allows several text items to be set for display on the transfer target extension and for prompts to be played before and after the caller's recording.

Voicemail Pro 5.0+ allows the action to be used without requiring a recording. The transfer target decides whether to accept or reject the call based on the displayed information and the prompts if they have been setup. Voicemail Pro 5.0+ also allows the whisper call transfer to be automatically accepted after the recording (if any) and prompts have been played to the transfer target.

Settings

1. Click the **Telephony Actions** icon and select **Whisper**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab. Complete the fields with relevant details.



☑ Play recording

☐ Auto Accept

Play recording to

Source of transfer (displayed on phone)

Description (displayed on phone)

No answer timeout: 30

Prompts played before the recording

Prompts played after the recording

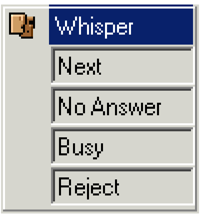
- **Play Recording** *(Voicemail Pro 5.0+)*
  If not selected, the call is presented to the target without playing the caller's recording. This allows the action to be used without requiring a recording from the caller. The prompts before and prompts after recording are still played if they have been setup.
- **Auto Accept** *(Voicemail Pro 5.0+)*
  If selected, after the recording has been played the caller is automatically connected without the target extension having to accept the call. If this option is used, the ***Reject*** result connection is not useable. If the user extension is set to auto-answer, the whisper call is answered, the recording and prompts played and the call connected without any action by the target.
- **Play recording to**
  Enter the extension that is rung with the caller's recording.
- **Source of transfer**
  Displayed in the caller's number field on Avaya phones.
- **Description**
  Displayed in the caller's name field on Avaya phones.

- **No answer timeout**
  Select how long the voice mail server should wait for an answer before following the **No Answer** connection. The whisper action will not go to the target extension voicemail.

- **Prompts played before the recording and Prompts played after the recording**
  Click ✚. The Wave Editor window opens. Select the prompts that are to be played to the target extension when they answer the call. The prompts played after the caller's recording should include the instruction *"Press 1 to accept or hang up to reject"*.

Results

This action has the following results which can be connected to further actions:



- **Next**
  This result connection is not used.

- **No Answer**
  This result connection is used if the transfer target does not answer the whisper call. The time out for no answer is set by the actions **No answer timeout** setting.

- **Busy**
  This result connection is used if the transfer target returns busy to the whisper call.

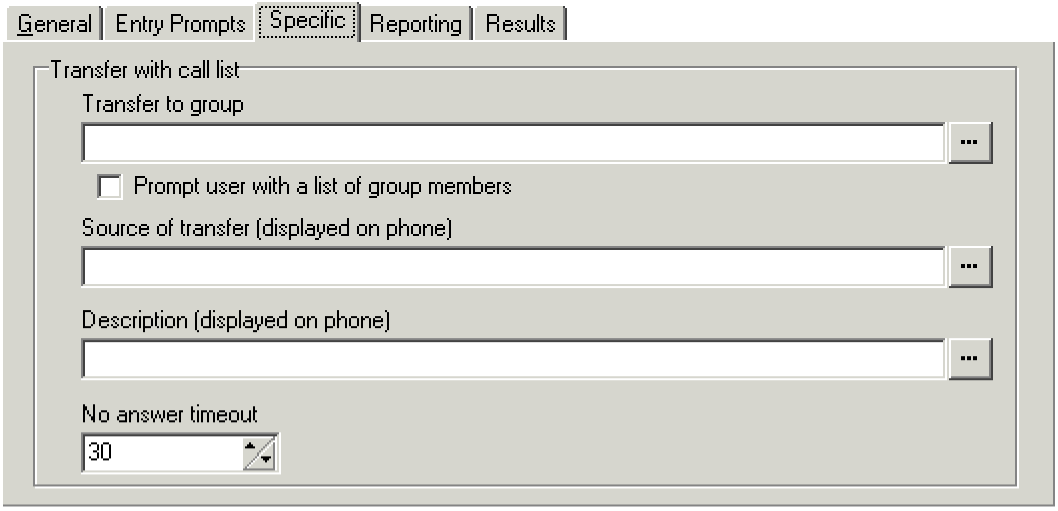
- **Reject**
  This result connection is used if the transfer target rejects the call by pressing any key other than 1 or by hanging up.

6.7.6 Call List

Using a **Call List** action, a caller can indicate the extension to which they want to be transferred. If selected the caller can be restricted to selecting an extension within a particular group. The transfer in this case is not blind, if unanswered the action can link to actions for no answer or busy .

Settings

1. Click the **Telephony Actions** icon and select **Call List**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab. Complete the fields with relevant details.

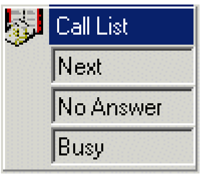

General
Entry Prompts
Specific
Reporting
Results
Transfer with call list
Transfer to group
...
☐ Prompt user with a list of group members
Source of transfer (displayed on phone)
...
Description (displayed on phone)
...
No answer timeout

No answer timeout: 30

- **Transfer to group**
  Enter a group name if you want to restrict the caller to a particular group.
  - **Prompt user with a list of group members**
    If this option is selected, the voicemail server will list the group members for the caller.
- **Source of transfer (displayed on phone)**
  The number to display on the destination phone if internal. Type the required text directly or use the ... browse button to select the text that should be used including using a the value of a call variable 140.
- **Description (displayed on phone)**
  The text description to display on the destination phone if internal. Type the required text directly or use the ... browse button to select the text that should be used including using a the value of a call variable 140.
- **No answer timeout**
  The value selected is how long the voicemail server waits for an answer before following the No Answer connection.

Results

This action has the following results which can be connected to further actions:

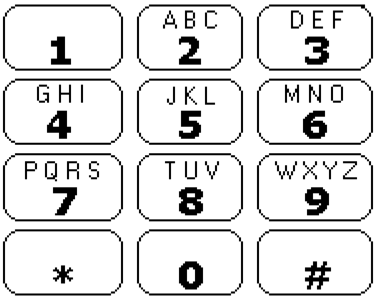


- **Next**
  This connection result is not used.
- **No Answer**
  This connection result is used if the transfer target does not answer the call.
- **Busy**
  This connection result is used if the transfer target returns busy.

6.7.7 Dial by Name

The **Dial by Name** action enables callers to enter the name of the person or group they want to contact by dialing on a keypad. The caller is then played a list of matching names from which they make a selection. The list uses the name prompts recorded by the mailbox users. For an example of the action in a call flow, see Example Call Flow: Dial by Name 343.

The action assumes that the telephone uses the ITU standard alphabet markings as shown below.



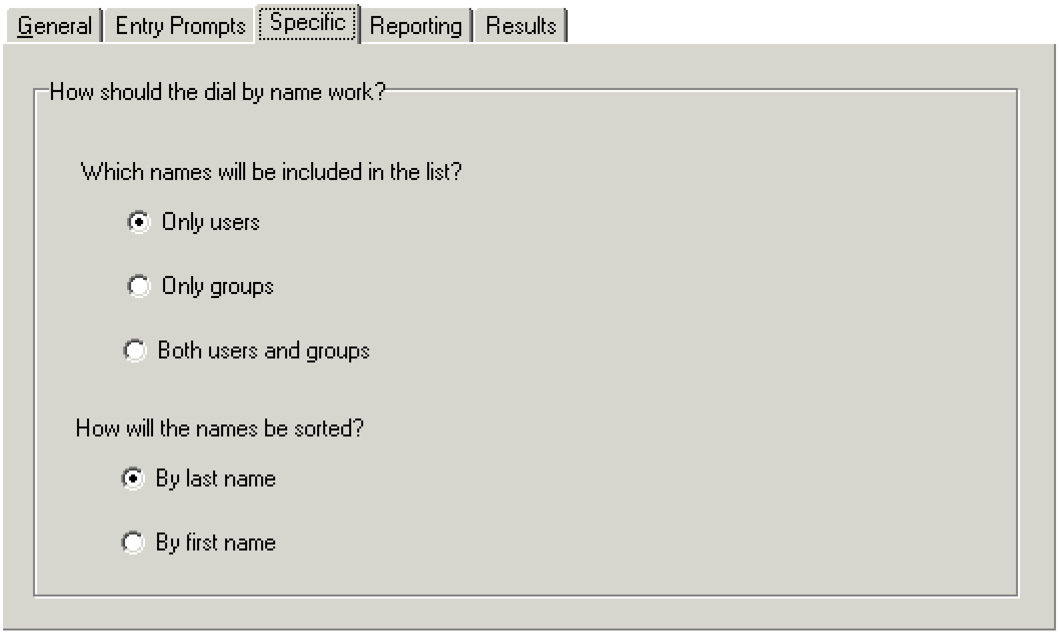
- The action prompts the caller to dial the name they require and then press **#**. Callers can also press ***#** to exit without making a selection. For example, dialing 527 matches names starting with JAS (for example "Jason") and KAR (for example "Karl").
- If no matches are found, the caller is given the option to retry.
- If 10 or less matches are found, the matching mailbox name greetings are played as part of a selection list, i.e. *"Press 1 for ..., press 2 for ..., ..."*.
- If more then 10 matches are found, the caller is prompted to either press # to hear the first 10 or to dial more characters to reduce the number of matches. If they select to play the list, after each set of 10 matches they can either make a selection or follow the prompts for other options.

For a user to be included in the dial by name list, they must:

- Have recorded a mailbox name.
- Not be marked as ex-directory in the IP Office configuration.

Settings

1. Click the **Telephony Actions** icon and select **Dial by Name**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. In the **Specific** tab you can select from three types of names that will be included in the list. Users set to ex-directory through the Manager application are not included. You can also select how the names will be sorted.



Which names will be included in the list?

● Only users

○ Only groups

○ Both users and groups

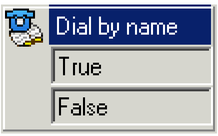
How will the names be sorted?

● By last name

○ By first name

Results

This action has the following results which can be connected to further actions:



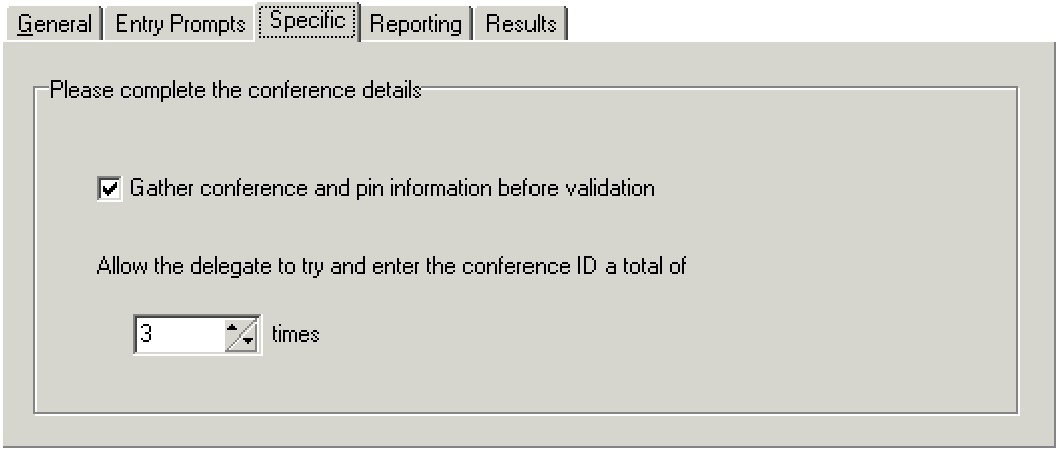
- **True**
  If the caller makes a selection, the matching extension number is stored as in the **$KEY** variable that can then be used by any following action linked to the True result .
- **False**
  This result is used if the caller does not make a selection.

6.7.8 Conferencing Center

The **Conferencing Center** action is used in conjunction with the Avaya IP Office Conferencing Center application. It provides a route for callers to enter the conference ID and their conference PIN code.

Results

1. Click the **Telephony Actions** icon and select **Conferencing Center**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab.



Please complete the conference details

☑ Gather conference and pin information before validation

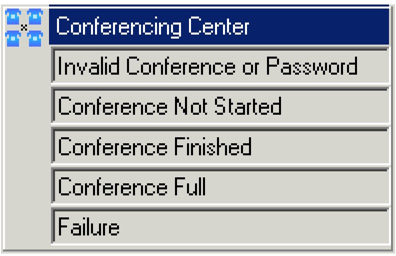
Allow the delegate to try and enter the conference ID a total of

3 times

- **Gather conference and pin information before validation**
  If selected, the caller is prompted to enter both the conference ID and then their PIN before the values are checked. If either entry is invalid the caller is notified but not told which entry is incorrect. If this option is not selected, the caller is prompted to enter the conference ID first and told if the ID is not valid. If valid they are then prompts to enter their PIN and then told if the PIN is not valid.
- **Allow the delegate to try and enter the conference ID a total of**
  Up to 10 re-tries can be allowed. If the ID is entered incorrectly the result failure is returned.

Results

This action has the following results which can be connected to further actions:



- **Invalid Conference or Password**
- **Conference Not Started**
- **Conference Finished**
- **Conference Full**
- **Failure**

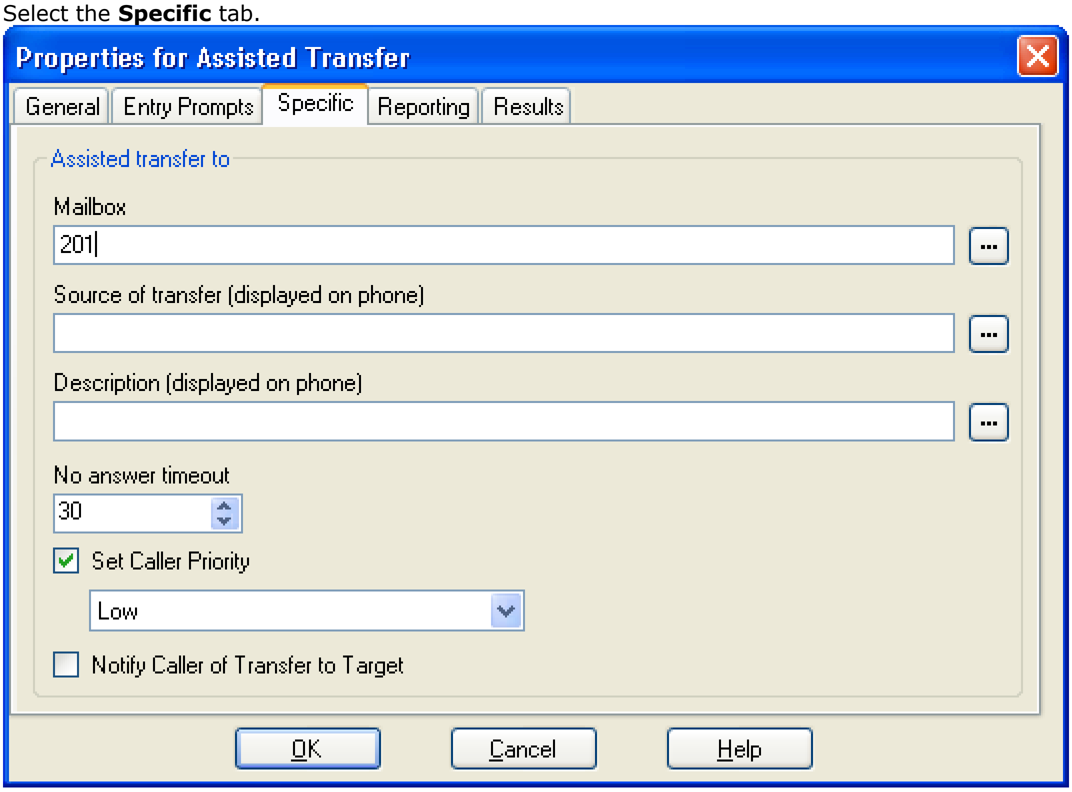
6.7.9 Assisted Transfer

The **Assisted Transfer** action transfers the caller to the specified number which can include IP Office short codes. The caller hears either music on hold if installed. The transfer is not blind, if the call receives busy or no answer then it returns to follow the appropriate connection.

- Note: On systems with IP trunks and extensions and especially within an IP Office Small Community Network there may be a short delay to connect the speech path when an assisted transfer is answered.

Settings

1. Click the **Telephony Actions** icon and select **Assisted Transfer**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab.



Mailbox: 201

Source of transfer (displayed on phone):

Description (displayed on phone):

No answer timeout: 30

☑ Set Caller Priority

Low

☐ Notify Caller of Transfer to Target

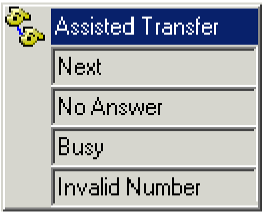
- **Mailbox**
  Enter the number of the destination for the transfer. This can include IP Office short codes or numbers specified by the current value of a Voicemail Pro call variable 140 such as ***$KEY***.
- **Source of transfer (displayed on phone)**

  The number to display on the destination phone if internal. Type the required text directly or use the ... browse button to select the text that should be used including using a the value of a call variable 140.
- **Description (displayed on phone)**
  The text description to display on the destination phone if internal. Type the required text directly or use the ... browse button to select the text that should be used including using a the value of a call variable 140.
- **No answer timeout**
  Sets how long in seconds the voicemail server should wait for the transferred call to be answered before following the **No Answer** results connection.
- **Set Call Priority:** *Voicemail Pro 5.0+.*
  If selected, the caller's priority can then be set to ***Low***, ***Medium*** or ***High***. A call variable 140 set to 1, 2 or 3 can also be used to set ***Low***, ***Medium*** or ***High*** priority respectively.
  - When calls are presented to a hunt group on the IP Office, calls waiting to be answered are queue in order of priority and then longest waiting. By default internal caller's have ***Low*** priority while the priority of external callers is set by the IP Office Incoming Call Route used to route the call (default also ***Low***).
  - Mixing calls of different priority is not recommended if Voicemail Pro is being used to provide queue estimate time to answer (ETA) and queue position announcements to callers, since those values will no longer be accurate when a higher priority call is placed into the queue. Note also that in such a situation Voicemail Pro will not allow a value already announced to a caller to increase.

- **Notify caller of transfer to target:** *Voicemail Pro 4.1+.*
  If enabled, the caller hears *"Transferring to"* followed by the associated mailbox name of the destination if available or otherwise the destination number if it matches an internal extension number. This follows any prompts selected in the **Entry Prompts** list above.

Results

This action has the following results which can be connected to further actions:



- **Next**
  This connection result is not used.
- **No Answer**
  This connection result is used if the transfer target does not answer the call.
- **Busy**
  This connection result is used if the transfer target returns busy.
- **Invalid Number**
  This connection result is used if the transfer target is not a valid.

MS-CRM Call Data Tagging

Call Data Tags enable advanced scenarios to be built around your Microsoft CRM 3.0 and Avaya Microsoft CRM Integration Solution. In situations where CLI/ANI matching is not sufficient, you can add screening and specific data collection interactions with your customers using the Voicemail Pro. The Voicemail Pro Assisted Transfer and Transfer actions can be used to pass data to users and pop matching records based on that data.

Based on your solutions requirements, you could obtain and verify the data collected, and then transfer the call with a data tag, that will utilize your specific criteria to lookup the required, account, contact or case, once the call is offered.

The tags are conformant xml fragments, they are comprised of an element ***AV_M*** and two attributes the Microsoft CRM entity (account, contact or incident) and the schema name of the field to match on, in this example '***contactid***' and the data is the record key.

For example:

- **<AV_M O="contact" S="contactid" >{e44e6dbf-bd2a-da11-badb-505054503030}</AV_M>**

  where

  - **<AV_M** = element name.
  - **O="contact"** = crm entity.
  - **S="contactid"** = attribute to search on.
  - **> =** end of element attributes
  - **{e44e6dbf-bd2a-da11-badb-505054503030}** = the data to match on, this should be unique.
  - **</AV_M>** - Closing tag.

The xml element name, attributes names and Microsoft CRM entity and schema names are case sensitive.

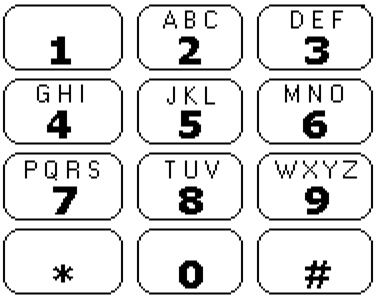
Additional Examples

- **Account – Account Number:** ***<AV_M O="account" S="accountnumber" >TL00001</AV_M>***
- **Case – Ticket Number:** ***<AV_M O="incident" S="ticketnumber" >CAS-01001</AV_M>***

6.7.10 Alphanumeric

The **Alphanumeric** action allows callers to input text and numeric values directly from the telephone keypad. When completed the entry is stored in the call variable $KEY which can be used by following actions. For an example of the action being used in a call flow, see Example Call Flow for Mobile Twinning 282.

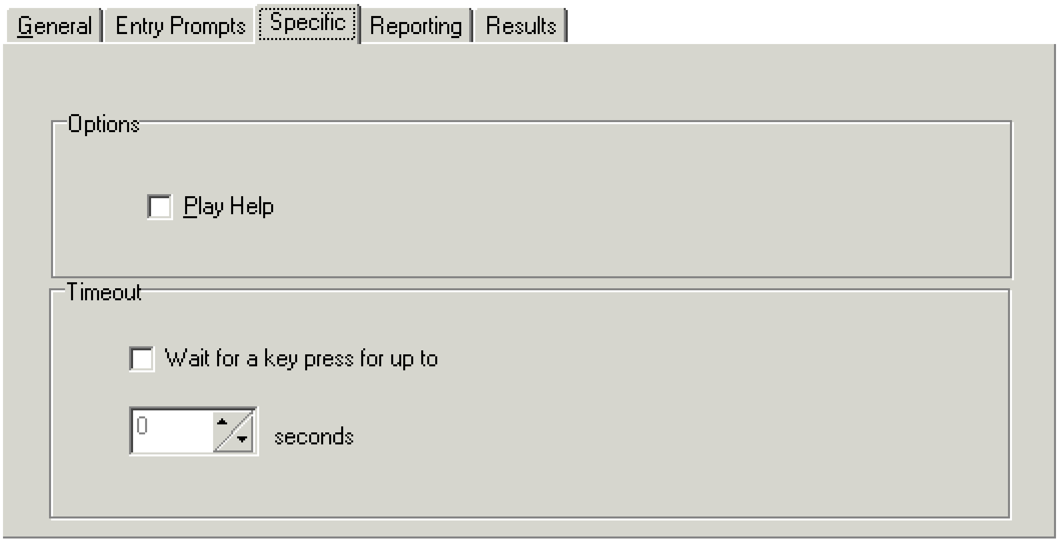
The action assumes that the telephone uses the ITU standard alphabet markings as shown below.



- Users enter data by pressing the key marked with the character required. For keys with multiple marking several key presses are required. For example, to enter **C** the user must press the **2** key three times. After each key press, the associated letter or number is spoken.
- To move on to entering the next character, the user should press whichever other key is marked with the required character or first press **#** if the required character is on the key just used.
- Controls available are:
  - **#** - Accept last character and begin entry of next character if the required character is on the key just used.
  - ***1** - Hear the characters entered so far.
  - ***2** - Delete all characters entered so far.
  - ***3** - Delete the last character entered.
  - ***#** - Accept the set of characters entered and go to next call flow action.

Settings

1. Click the **Telephony Actions** icon and select **Alphanumeric**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab.



☐ Play Help

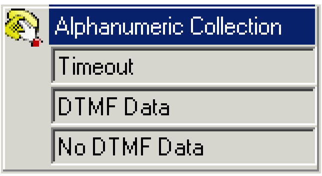
☐ Wait for a key press for up to

0 seconds

- Check the option **Play Help** if you want instruction to be given to the caller explaining how to enter information.
- If you want to use a timeout result from the action, check the option **Wait for a key press for up to** and set the number of seconds for the timeout period.

Results

This action has the following results which can be connected to further actions:



- **Timeout**
  This result connection only available if the option **Wait for a key press for up to** is selected on the **Specific** tab.
- **DTMF Data**
  This result connection is used if the caller enters some data and then presses *#.
- **No DTMF Data**
  This result connection is used if the caller presses *# without entering any data.

6.8 Miscellaneous Actions

Miscellaneous Actions

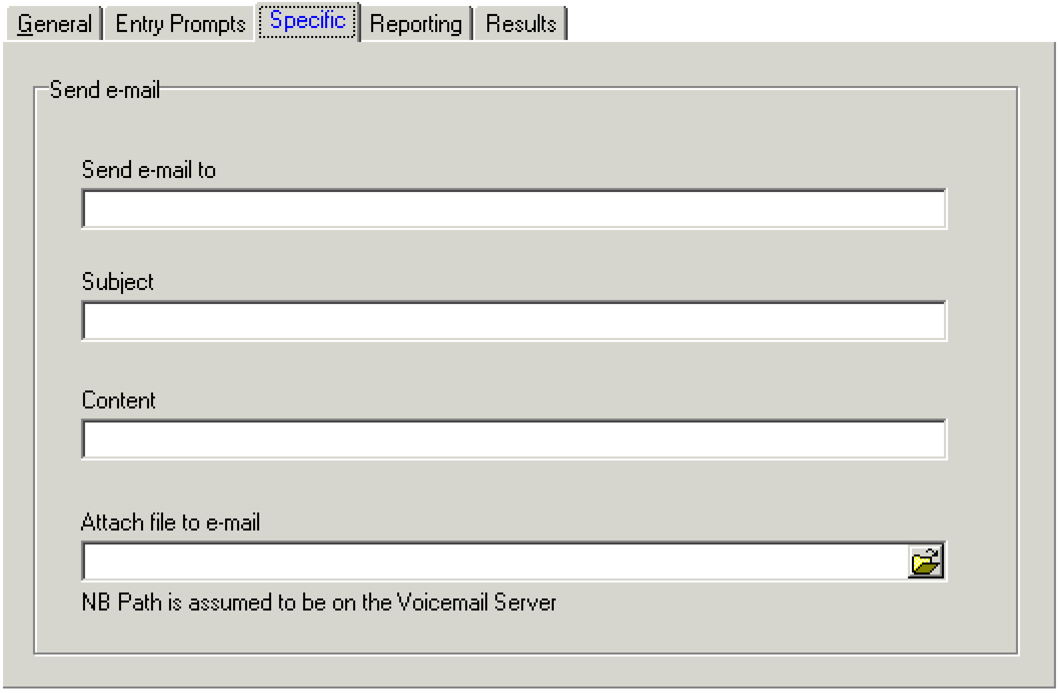
- **eMail Action** 212
  Email a recording.
- **Open Door Action** 213
  Open and/or close a door relay.
- **Alarm Set Action** 214
  Set an alarm call time.
- **Clock Action** 216
  Play the time to the caller.
- **Post Dial Action** 217
  Play a recording to an extension.
- **VB Script Action** 218
  Allows Visual Basic to be used to script call flow events.
- **Remote Call Flow** 219
  Allows call flows developed elsewhere to be included in an existing call flow.

6.8.1 eMail

The **eMail** action is used to send a recording to a specific email address.

Settings

1. Click the **Miscellaneous Actions** icon and select **eMail**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab. Complete the fields with relevant details.



- **Send e-mail to**
  Enter the email address of the recipient.
- **Subject**
  In the **Subject** field, type the subject line for the email.
- **Content**
  In the **Content** field, type the text to be placed in the email.
- **Attach file to e-mail**
  In the **Attach file to email** field the recorded file to be attached to the email needs to be selected.
  - If just **$** is entered then the action will use the recording collected by a preceding **Leave Mail** 186 action or **Voice Question** 188 action.

Results

This action has the following result which can be connected to a further action:

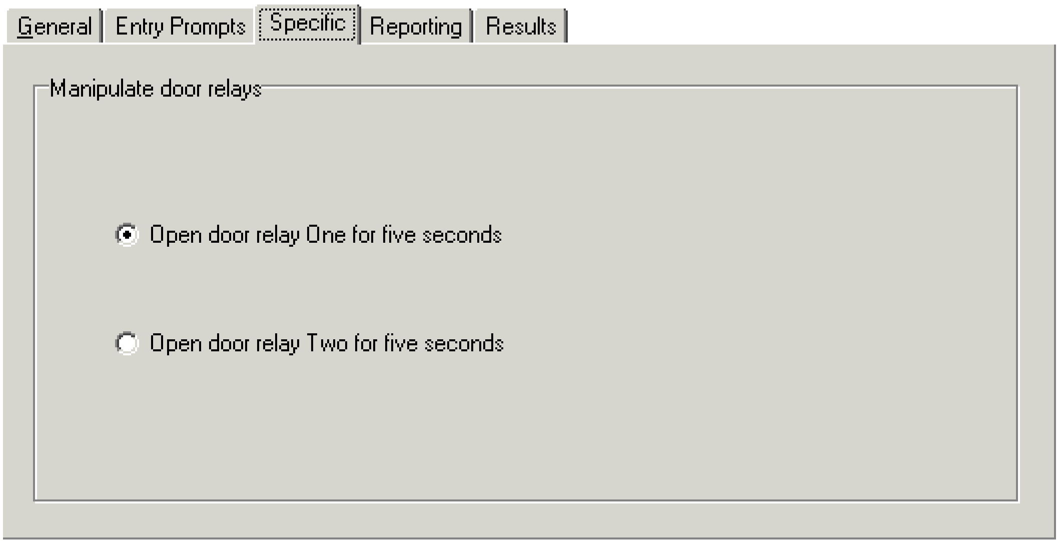
- **Next**
  Connect the result to the required action.

6.8.2 Open Door

The **Open Door** action activates either of the door entry switches provided on IP Office telephone system control units. These can be used to activate door entry relays.

Settings

1. Click the **Miscellaneous Actions** icon and select **Open Door**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. In the **Specific** tab, check either of the two door relay options.



Manipulate door relays

● Open door relay One for five seconds

○ Open door relay Two for five seconds

Results

This action has the following result which can be connected to a further action:

- **Next**
  Connect the result to the required action.

6.8.3 Alarm Set

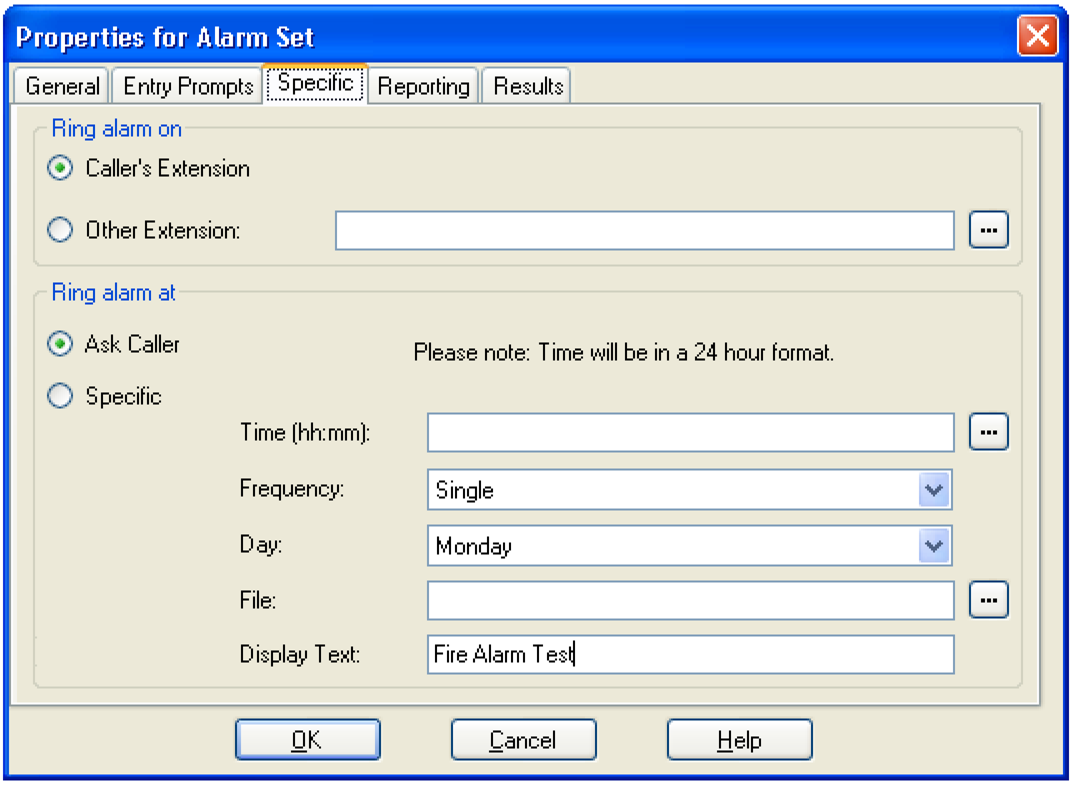
The **Alarm Set** action allows an alarm call to be setup to be played to a specified extension at a specified time. By default the alarm call displays ALARM and plays the prompt *"This is an alarm call please hang up"*.

On pre-5.0 Voicemail Pro systems this action only allowed internal callers to setup an alarm calls for themselves. Voicemail Pro 5.0+ allows the action to be used by to setup alarms for other extensions. It also allows preset alarms to be configured including regular repeating alarms.

- Alarm calls that have been setup can be viewed in the Voicemail Pro client 128. They can then be edited or deleted.
- The Voicemail Pro is limited to 2 outgoing alarm calls at the same time (subject to voicemail port availability). Any additional alarm calls are delayed until the existing alarm calls have been completed.

Settings

1. Click the **Miscellaneous Actions** icon and select **Alarm Set**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. In the **Specific** tab, complete the fields with relevant details.



Ring alarm on

● Caller's Extension

○ Other Extension:

Ring alarm at

● Ask Caller

Please note: Time will be in a 24 hour format.

○ Specific

Time (hh:mm):

Frequency: Single

Day: Monday

File:

Display Text: Fire Alarm Test

- **Ring alarm on**: *Default = Caller's Extension.*
  These options set the target for the alarm when set.
  - **Caller's Extension**
    This option sets the alarm target as the caller's own extension number.
  - **Other Extension**
    This option allows a specific number to be used for the alarm target or a call variable 140 that contains the number to use.
- **Ring alarm at**: *Default = Ask Caller.*
  These options set the time and frequency of the alarm being set.
  - **Ask Caller**
    The call flow user is asked to dial the required time in 24-hour clock format. This will set a single use alarm for that time.
  - **Specific**
    Allow a specific alarm time to be defined. This also allows a single use or a repeated alarm to be specified.

- **Time (hh:mm)**
  Set the alarm time in 24-hour format (*hh:mm* or *hhmm*). A time value can be entered or a call variable 140 can be used. If left blank or an invalid time value, the call flow user is asked to enter a time the same as if **Ask Caller** was selected.

- **Frequency**
  Sets how often the alarm should occur. The options are ***Single***, ***Daily*** or ***Weekly***. A variable with value 1, 2 or 3 respectively can be used.

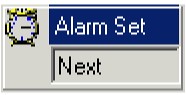
- **Day**
  Useable with ***Single*** and ***Weekly*** alarms. Set the day for the alarm. The option ***Today*** is also available for alarms where the **Frequency** is set as ***Single***.

- **File**
  This field is optional. If a file is specified here it is used for the alarm call. If no file is specified the default alarm message (*"This is an alarm call, please hang up"*) is used.

- **Display Text**
  By default the alarm will display *"Alarm"* on the target if it is an Avaya display phone. This field can be used to customize the text used.

Results

This action has the following result which can be connected to a further action:



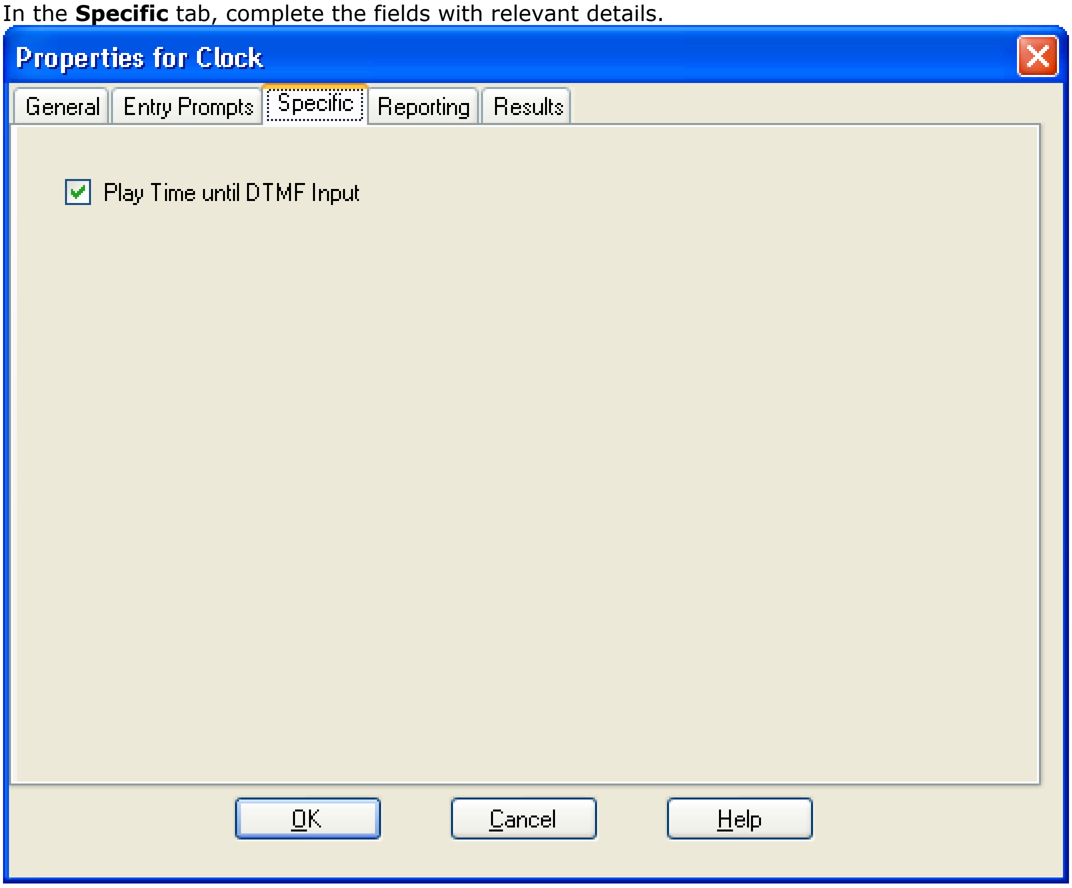
- **Next**
  This result connection can be used to connect a subsequent action after the alarm is set.

6.8.4 Clock

The **Clock** action plays the current time on the voicemail server PC.

Settings

1. Click the **Miscellaneous Actions** icon and select **Clock**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. In the **Specific** tab, complete the fields with relevant details.

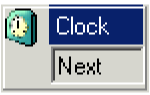


☑ Play Time until DTMF Input

- **Play Time Until DTMF Input:** *Software level = 5.0+.*
  If not selected the time is played to the caller once. If selected the time is repeated until the caller presses a DTMF key or hangs up.

Result

This action has the following result which can be connected to a further action:



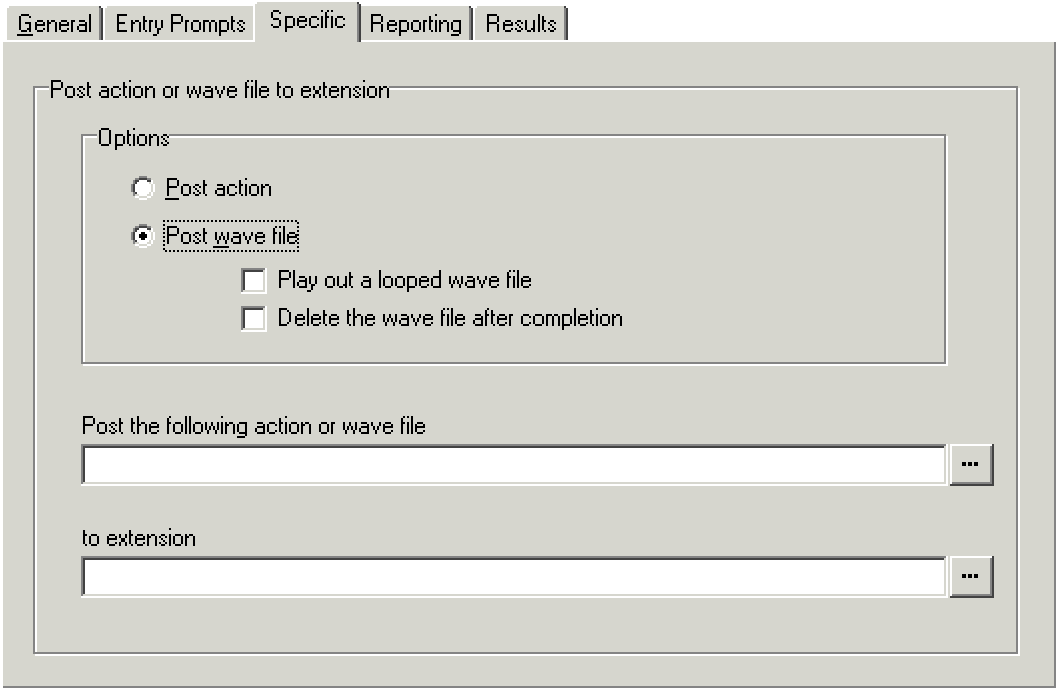
- **Next**
  If **Play Time until DTMF Input** is selected then the connection is used after the caller has pressed a DTMF key. Otherwise it is used after the time has been play once to the caller.

6.8.5 Post Dial

The **Post Dial** action can be used to connect another extension to a specified call flow start point or to play a recording to that extension.

Settings

1. Click the **Miscellaneous Actions** icon and select **Post Dial**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. In the **Specific** tab, complete the fields with relevant details.



○ Post action

● Post wave file

☐ Play out a looped wave file

☐ Delete the wave file after completion

Post the following action or wave file

to extension

- **Post action**
  Select this option if you want the connect a target extension to a selected call flow.
- **Post wave file**
  Select this option if you want the target extension to be played a selected wav file. When **Post wave file** is selected there are two options which can be selected.
  - **Play out a looped wave file**
    The wav file will be played in a continuous loop.
  - **Delete the wave file after completion**
    The wav file will be deleted after it has been played.
- **Post the following action or wave file**
  Enter the name of the required start point or use the browse button to select the start point. To play a recording, enter **c:\mywavs\hello.wav** (substitute the appropriate file path and file name for the .wav file you want played).
- **To extension**
  Enter or select the extension to which the call should be made. The voicemail server will attempt to make the call every 5 minutes for the next hour until successful. The **Post Dial** action can be used to page a .wav file to an extension number, including group extension numbers. This is done by entering **PAGE:** followed by the target extension number. In this case the wav file will not loop if selected.

Results

This action has the following result which can be connected to a further action:

- **Next**
  Connect the result to the required action.

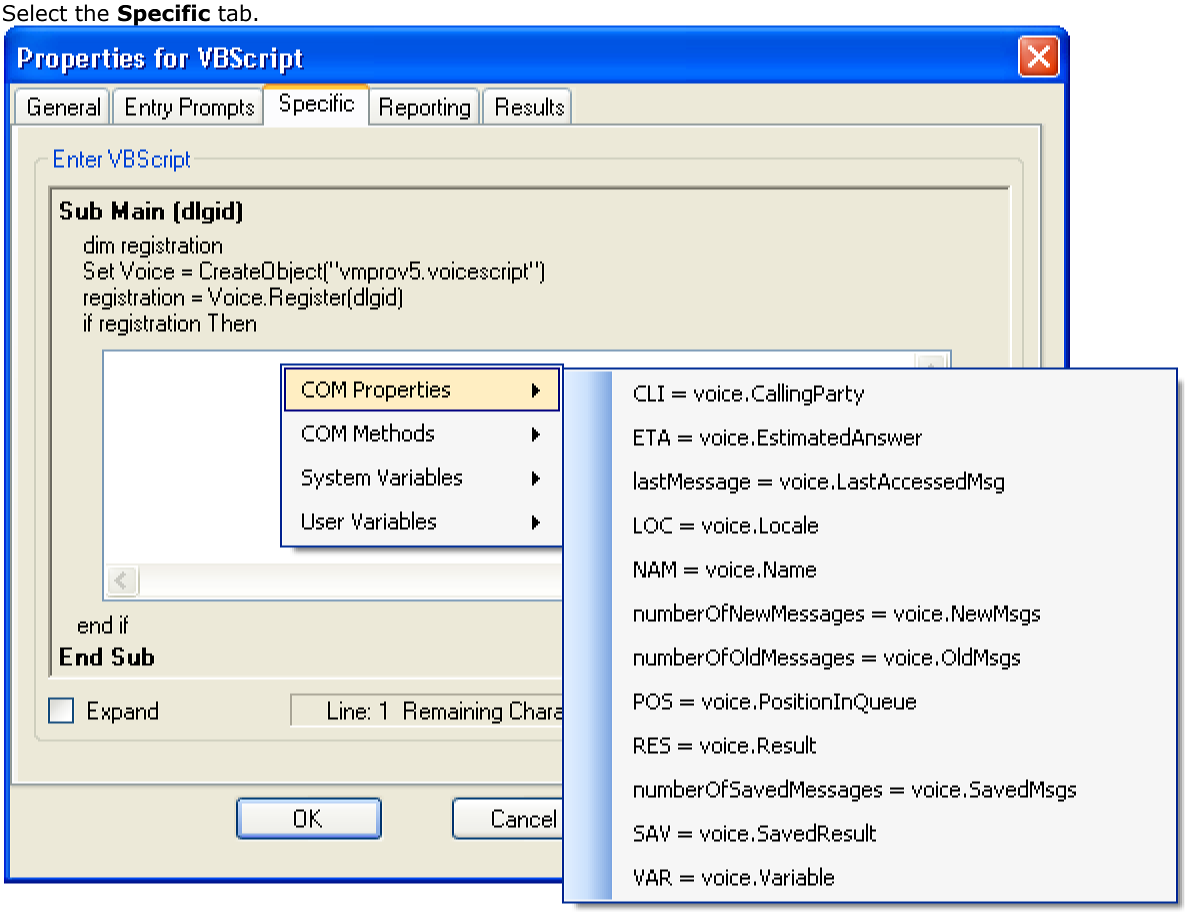
6.8.6 VB Script

The **VB Script** action allows an administrator to construct additional call flow logic using VBScript commands and various properties 312 and methods. Use of VBScript requires entry of a valid **VM Pro VBScript** license in the IP Office configuration.

When a VBScript action is executed, the voicemail server allows the script up to 1 minute to complete execution. If execution of the script takes longer then it is terminated by the voicemail server and the action's **Failure** result path is used.

Settings

1. Click the **Miscellaneous Actions** icon and select **VB Script**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab.



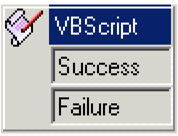
```
Sub Main (dlgid)
    dim registration
    Set Voice = CreateObject("vmprov5.voicescript")
    registration = Voice.Register(dlgid)
    if registration Then

   end if
End Sub
```

- **Enter VBScript**
  In the script area enter the VBScript as required. Strings for the variables and methods provided for VBScript by Voicemail Pro can be selected and inserted by right clicking on the script area. This script can contain a maximum of 10000 characters.
- **Expand**
  Check **Expand** to view a larger script area.
- **Syntax Check**
  Click the **Syntax Check** button to check your input for any errors.

Results

This action has the following results which can be connected to further actions:



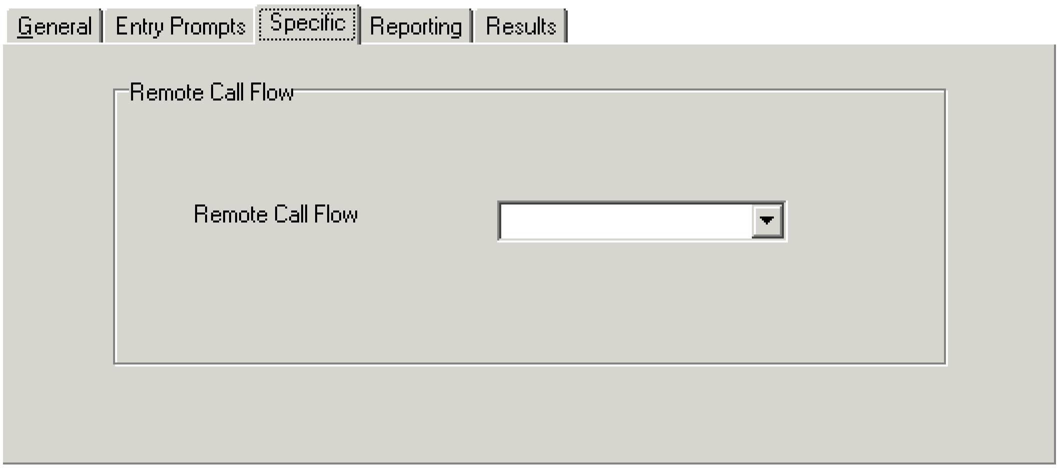
This action has two results, ***Success*** or ***Failure***.

6.8.7 Remote Call Flow

➡ The **Remote Call Flow** action allows a call flow, in the form of a .vmp file, developed elsewhere to be included in an existing call flow. The aim of this action is to allow call flows developed by other applications to be placed on the Voicemail Pro server and included in its customized call flows.

Settings

1. Click the **Miscellaneous Actions** icon and select ➡ **Remote Call Flow**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. In the **Specific** tab, the field **Remote Call Flow** will show a list of remote call flow files downloaded to the Voicemail Pro server.



Results

The Remote Call Flow action has no results. Any follow on call handling is determined by the actions in the remote call flow.

6.9 Condition Actions

Condition Actions
These actions are used to create branches in the call routing according to whether a value is true or false.

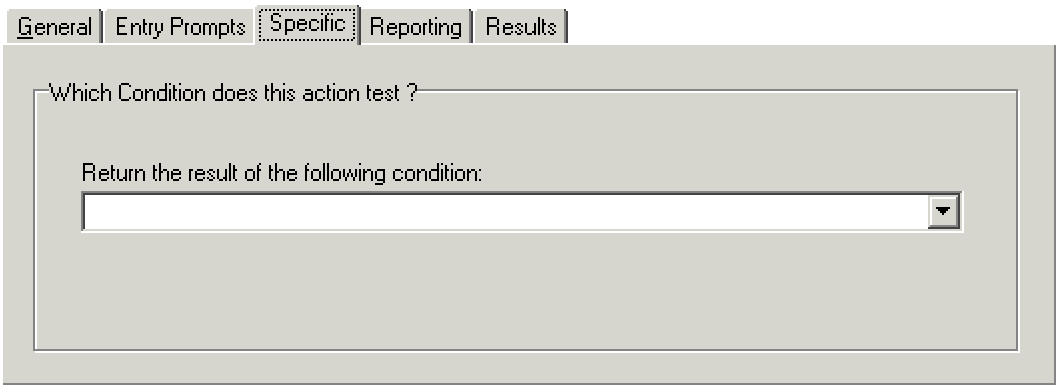
- **Test Condition Action** 220
  Test whether a condition is true or false.
- **Set User Variable Action** 221
  Set a variable to a particular value.
- **Test User Variable Action** 222
  Test the value of a variable.
- **Test Variable Action** 223
  Check if user dialing matches set digits.
- **Increment and Test Counter** 226
  Increment a $COUNTER variable and then test whether is matches a specified value.
- **Decrement and Test Counter** 225
  Decrement a $COUNTER variable and then test whether is matches a specified value.

6.9.1 Test Condition

The **Test Condition** action allows the current state (***True*** or ***False***) of a condition setup through the Conditions Editor 143 to be checked.

Settings

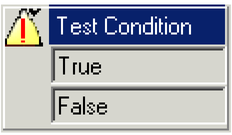
1. Click the **Conditions Actions** icon and select **Test Condition**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. In the **Specific** tab, complete the fields with relevant details.


General
Entry Prompts
Specific
Reporting
Results
Which Condition does this action test ?
Return the result of the following condition:

- **Return the results of the following condition**
  Allows a selection to be made from the conditions currently setup.

Results

This action has the following results which can be connected to further actions:



- **True**
  This result connection is used by the call if the tested condition is currently true.
- **False**
  This result connection is used by the call if the tested condition is currently false.

For examples of the Test Condition action in a call flow, see:

- Customizing a Hunt Group Call Flow 256.
- User Defined Variables 138.

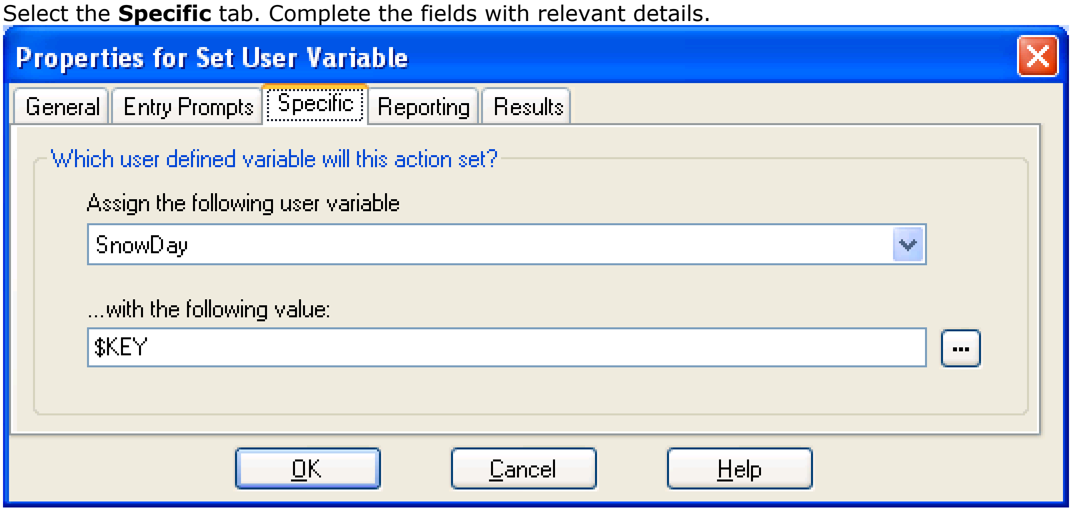
6.9.2 Set User Variable

The **Set User Variable** action sets a user variable to a particular value. Other call flows can then use **Test User Variable** 222 actions to check whether the variable has a particular value.

The variable must first be created using the **User Defined Variable** 138 menu or **User Variables** 128 panel. For an example of the action in a call flow, see User Defined Variables 138.

Settings

1. Click the **Conditions Actions icon** and select **Set User Variable**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab. Complete the fields with relevant details.



Which user defined variable will this action set?

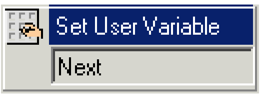
Assign the following user variable: SnowDay

...with the following value: $KEY

- **Assign the following user variable**
  The name for the existing user variable. The variable must first be created using the **User Defined Variable** 138 menu or **User Variables** 128 panel.
- **With the following value**
  The value of the variable. Type the required value directly or use the ... browse button to select the text that should be used including using a the value of a call variable 140.

Results

This action has the following result which can be to a further action:



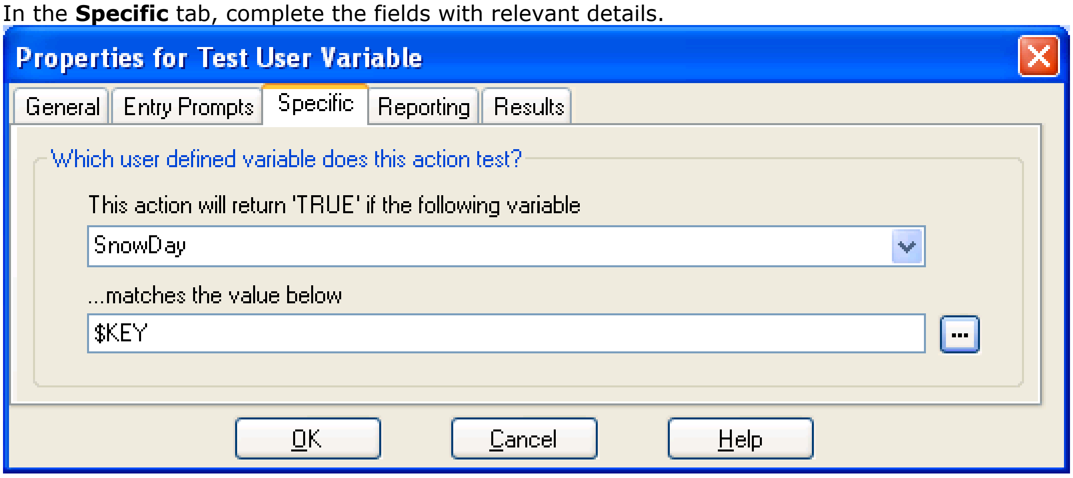
- **Next**
  We strongly recommend that this action is connected to another action (if necessary just a **Disconnect** action), whose entry prompt confirms to the caller that the value has been set. In some situations, such as where the **Set User Variable** action is accessed by the user dialing a short code, if the user hangs-up too quickly the variable may not actually be set. Having a following action with a confirmation message encourages users not to hang up too quickly.

6.9.3 Test User Variable

The **Test User Variable** action has true and false connections that are followed according to whether the selected user variables 138 current value matches a particular value. The **Set User Variable** action can be used in other calls to set the value of the variable. For an example of the action in a call flow, see User Defined Variables 138.

Settings

1. Click the **Conditions Actions** icon and select **Test User Variable**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. In the **Specific** tab, complete the fields with relevant details.



Which user defined variable does this action test?

This action will return 'TRUE' if the following variable: SnowDay

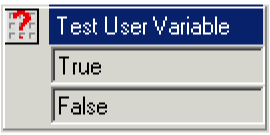
...matches the value below: $KEY

- **This action will return "TRUE" if the following variable**
  The name of the existing user variable to be checked.
- **Matches the value below**

  The value of the variable that will return a true result. Type the required value directly or use the browse button to select the text that should be used including using a the value of a call variable 140.

Results

This action has the following results which can be connected to further actions:



The action can have the following results which can then be connected to further actions:

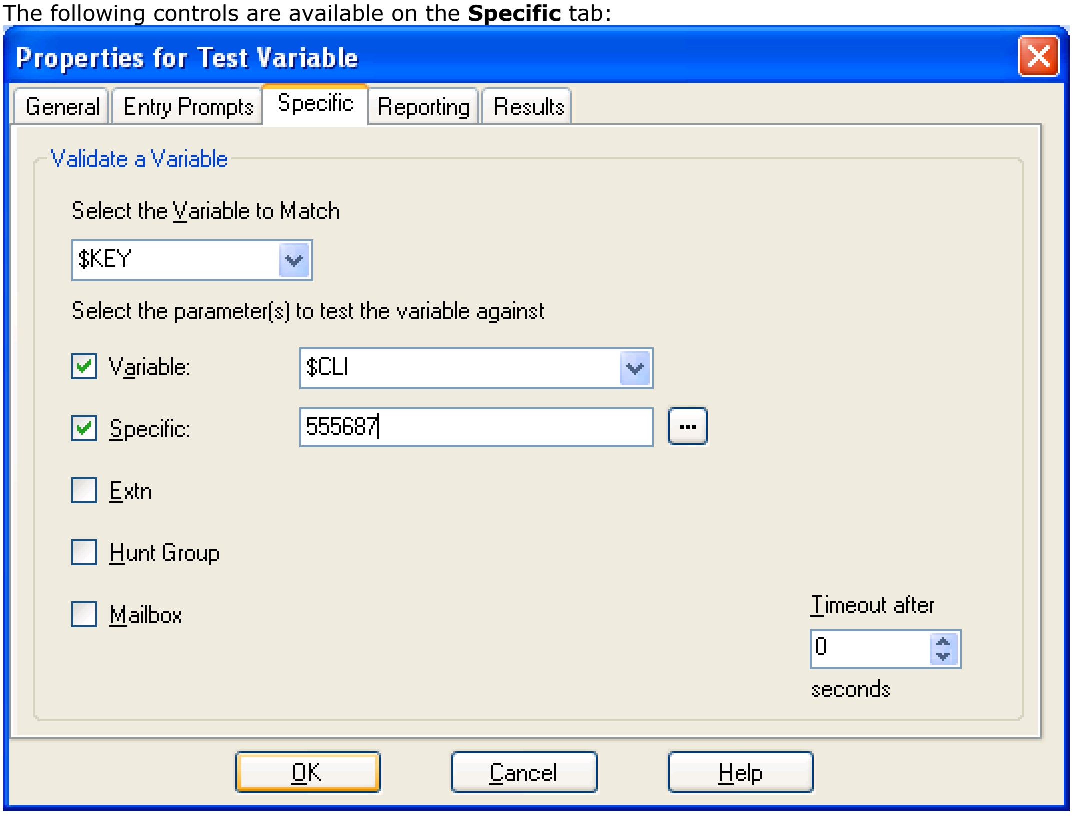
- **True**
  This result connection is used by the call if the tested condition is currently true.
- **False**
  This result connection is used by the call if the tested condition is currently true.

6.9.4 Test Variable

For Voicemail Pro 4.2+, the **Test Variable** action has been added and replaces the previous **Check Digits** action. It allows calls to be routed based on matching the value of a call variable to a specified value.

Settings

1. Click the **Conditions Actions** icon and select **Test Variable**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. The following controls are available on the **Specific** tab:



Select the Variable to Match: $KEY

Select the parameter(s) to test the variable against

☑ Variable: $CLI

☑ Specific: 555687

☐ Extn

☐ Hunt Group

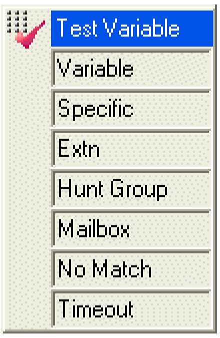
☐ Mailbox

Timeout after: 0 seconds

- **Select the variable to Match**
  This drop-down list is used to select which Voicemail Pro call variable 140 should be checked for a match. Note that with $KEY the timeout is used and additional dialing is accepted if no immediate match occurs.
- **Select the parameter(s) to test the variable against**
  Select the types of values that should be checked for a match and if necessary entry the value. If several options are selected, the Voicemail Pro checks for a match starting from the top and working down until a match occurs.
  - **Variable**
    Check for a match against the value of another selected call variable 140. Type the required value directly or use the ... browse button to select the text that should be used including using a the value of a call variable 140.
  - **Specific**
    Check for a match against the value entered in the adjacent field.
  - **Extn**
    Check for a match against valid extensions on the IP Office.
  - **Hunt Group**
    Check for a match against hunt group extension numbers.
  - **Mailbox**
    Check for a match against mailboxes.
- **Timeout after**
  The timeout value is used only if ***$KEY*** is selected as the variable to match. In that case, if no immediate match occurs on the existing value of $KEY, the Voicemail Pro will wait for the specified timeout period for the caller to dial a new value of ***$KEY***.

Results

This action will have results for connection to following actions in the call flow based on the selected options on its **Specific** tab plus a **No Match** and **Timeout** result:



- **No Match**
  This result is used if no match is found.
- **Timeout**
  This result is used when $KEY is specified as the variable to match and no match occurs within the specified timeout period.

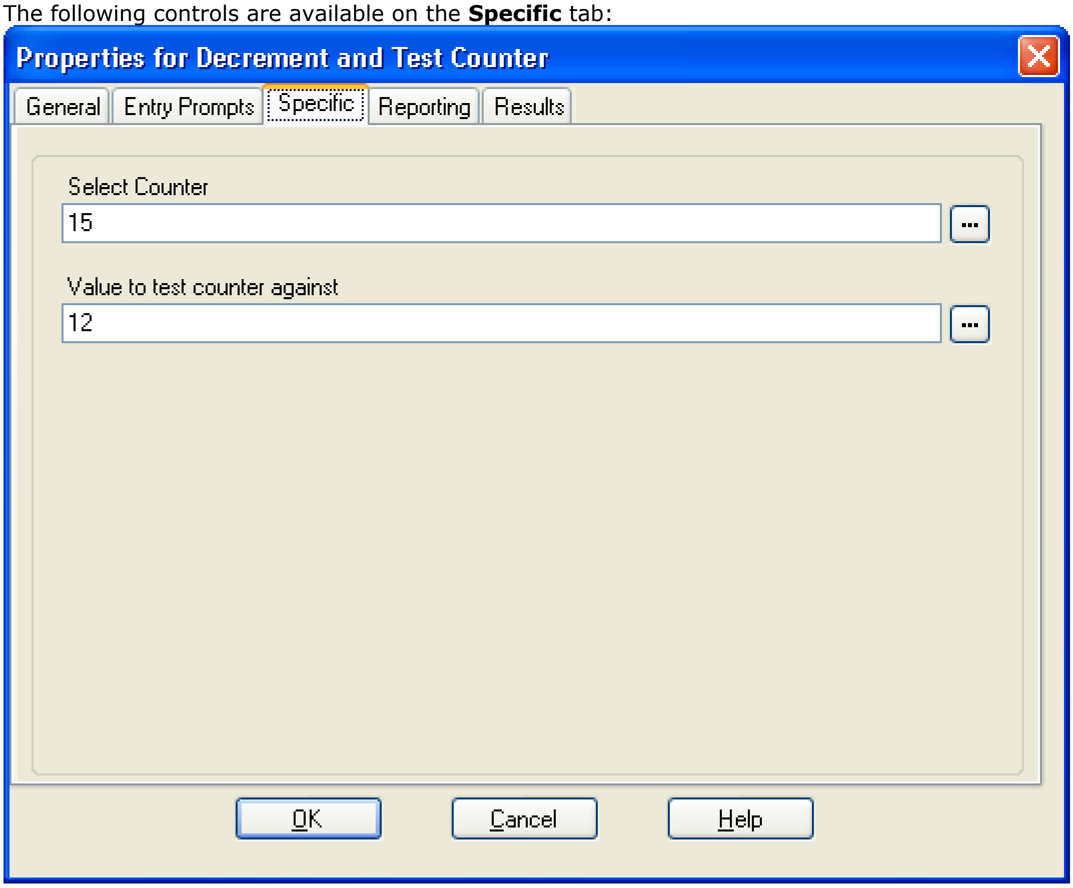
6.9.5 Decrement and Test Counter

Decrease the values of a $COUNTER variable by 1 and then test whether its new value matches a target value.

Voicemail Pro 5.0+ provides counter variable $COUNTER1 to $COUNTER15. These can be used in the same way as other variables. They can also be manipulated using **Generic** 165 action commands for *Set Counter* 175, *Clear Counter* 171, *Counter Decrement* 172 and *Counter Increment* 173. They can also be used with the **Decrement and Test Counter** 225 and **Increment and Test Counter** 226 actions. By default the initial value of a counter variable is 0. The formats $COUNTERx or $COUNTER[x] are both supported.

Settings

1. Click the **Conditions Actions** icon and select **Decrement and Test Counter**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. The following controls are available on the **Specific** tab:



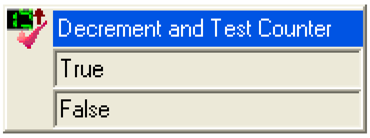
Select Counter: 15

Value to test counter against: 12

- **Select Counter**
  Select the $COUNTER variable to decrement and then test. ***$COUNTER1*** to ***$COUNTER15*** can be selected by entering ***1*** to ***15*** respectively.
- **Value to test counter against**
  This can be a number or another call variable. When the counter matches the value the ***True*** result connection is used, otherwise the ***False*** result connection is used.

Results

This action has the following results which can be connected to further actions:



- **True**
  This result connection is used if the counter value matches the test value.
- **False**
  This result connection is used if the counter value does not match the test value.

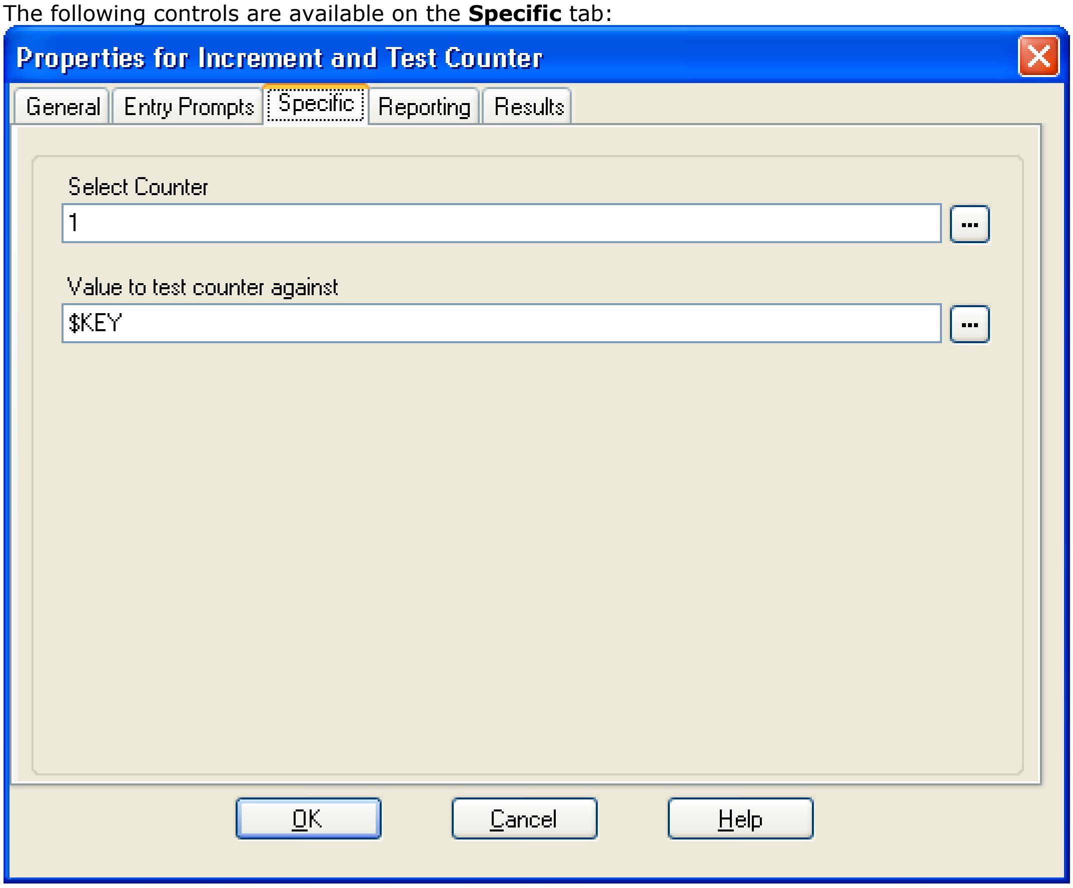
6.9.6 Increment and Test Counter

Increase the values of a $COUNTER variable by 1 and then test whether its new value matches a target value.

Voicemail Pro 5.0+ provides counter variable $COUNTER1 to $COUNTER15. These can be used in the same way as other variables. They can also be manipulated using **Generic** 165 action commands for *Set Counter* 175, *Clear Counter* 171, *Counter Decrement* 172 and *Counter Increment* 173. They can also be used with the **Decrement and Test Counter** 225 and **Increment and Test Counter** 226 actions. By default the initial value of a counter variable is 0. The formats $COUNTERx or $COUNTER[x] are both supported.

Settings

1. Click the **Conditions Actions** icon and select **Increment and Test Counter**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. The following controls are available on the **Specific** tab:



Select Counter
1

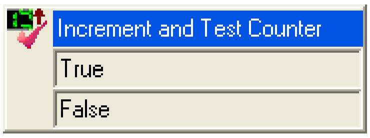
Value to test counter against
$KEY

- **Select Counter**
  Select the $COUNTER variable to increment and then test. ***$COUNTER1*** to ***$COUNTER15*** can be selected by entering ***1*** to ***15*** respectively.

- **Value to test counter against**
  This can be a number or another call variable. When the counter matches the value the ***True*** result connection is used, otherwise the ***False*** result connection is used.

Results

This action has the following results which can be connected to further actions:



- **True**
  This result connection is used if the counter value matches the test value.
- **False**
  This result connection is used if the counter value does not match the test value.

6.10 Database Actions

Database Actions

These actions relate to retrieving and adding data to a database. The use of database actions with Voicemail Pro requires entry of a **VMPro Database Interface** license in the IP Office configuration.

- **Database Open Action** 227
  Open a database.
- **Database Execute Action** 228
  Perform an action on a database.
- **Database Get Data Action** 229
  Get information from a database.
- **Database Close Action** 230
  Close a database.

6.10.1 Database Open

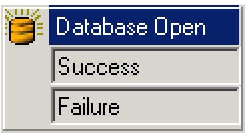
The **Database Open** action opens a link to a database. If there is a connection to the database already then the current connection is closed and the new one requested will be opened. For an example of the action in a call flow, see IVR Database Connection Example, Retrieving Data From the Database 334.

Settings

1. Click the **Database Actions** icon and select **Database Open**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab. The connection string to open the database can be entered directly into the field. For help on constructing the connection string, click ···. The **Data Link Properties** window opens.
   - **Provider Tab**
     Select the OLE DB Provider of the data that is to be connected to. Click **Next to move to the Connection Tab**.
   - **Connection Tab**
     Specific information relating the Database provider needs to be completed. Help of the information required for each of the fields can be obtained by clicking the Help button. Fields available will be dependant on the type of provider. Test that the information entered will allow entry into the database, click the Test Connection button. A message **Test Connection Succeeded** will show if successfully connected to the database.
   - **Advanced Tab**
     Network and other settings, for example access permissions. Fields showing will be dependant on the type of provider selected. Click help for specific information about any of the fields.
   - **All**
     The properties that have been selected on the previous tabs are shown in the All Tab. Amendments can be made as required by selecting the Name and click Edit Value.

Results

This action has the following results which can be connected to further actions:



- **Success**
  This result connection is used once the database is opened.
- **Failure**
  This result connection is used if the database cannot be opened.

6.10.2 Database Execute

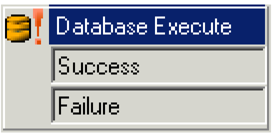
The **Database Execute** action performs an SQL query on a database opened on a preceding **Database Open** action. An SQL query that is generated by the Database Execute Action does not support spaces in field or table names. To avoid problems in a Microsoft Access database, it is advisable to avoid using a field name that has the same name as its field type. For example, you should avoid using the name *Number* for a number field.

Settings

1. Click the **Database Actions** icon and select **Database Execute**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab. The SQL Wizard window opens. Use the wizard to construct the SQL query.
    - You must ensure that any data included in the query matches the data type (number, integer or text) of the field it is being used to query. Values being used to query a text field should be enclosed by quotation marks. This applies whether using query values entered directly or using Voicemail Pro variables. For example, if using ***$KEY*** as a query value, for a text field query ensure that you enter ***"$KEY"***.

Results

This action has the following results which can be connected to further actions:



- **Success**
  The action has been successful and has returned a set of records from the database.
- **Failure**
  The action has not returned any data.

The **Database Execute** action results can only be Success or Failure. Add connections to relevant actions. For an example of the action in a call flow, see IVR Database Connection Example, Retrieving Data From the Database 334 and Entering Details in to the Database 340.

6.10.3 Database Get Data

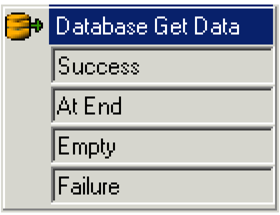
Once a **Database Execute** 228 action has been used, it may return a set of records from the database. A **Database Get Data** action or actions are then used to select which record is the currently selected record whose values are placed into the call flow's **$DBD** variables.

Settings

1. Click the **Database Actions** icon and select **Database Get Data**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab. Chose which record should be selected by selecting one of the following options:
   - **Retrieve the next item in the list**
     Select the next record returned by the **Database Execute** action as the currently selected record.
   - **Retrieve the previous item in the list**
     Select the previous record returned by the **Database Execute** action as the currently selected record.
   - **Retrieve the first item in the list**
     Select the first record returned by the **Database Execute** action as the currently selected record.
   - **Retrieve the last item in the list**
     Select the last record returned by the Database Execute action as the currently selected record.

Results

This action has the following results which can be connected to further actions:



The **Database Get Data** action has four possible results.

- **Success**
  The selected records values have successfully been assigned to the $DBD variables.
- **At End**
  There are no further records in the set of data.
- **Empty**
  The execute method returned no data, the $DBD variable contains no information.
- **Failure**
  There was a problem trying to retrieve the next data record, the $DBD variable contains no information.

Examples of using the database actions are given in the IVR database Connection section. For an example of the action in a call flow, see IVR Database Connection Example, Retrieving Data From the Database 334.

6.10.4 Database Close

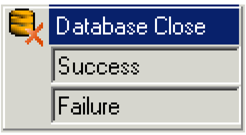
The **Database Close** action will close the current database connection. If the database is open when a call terminates, then a **Database Close** action is run automatically.

Settings

1. Click the **Database Actions** icon and select **Database Close**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. There is no **Specific** tab for this action.

Results

This action has the following results which can be connected to further actions:



- **Success**
  The database connection has been closed.
- **Failure**
  The database connection has not been closed. This action is useful during testing and development of the database call flow to validate correct operation.

6.11 Queue Actions

Queue Actions
These actions are associated with hunt group queues and are not available to user and short code start points. The IP Office Manager option **Synchronise calls to announcements** should not be used when using the queue actions.

- **Queue ETA Action** 232
  Speak the caller's expected time to answer.
- **Queue Position Action** 233
  Speak the caller's queue position.

6.11.1 Queue ETA

The **Queue ETA** action plays the estimated time to answer (ETA) in minutes to a caller in the queue of calls for a hunt group. It is not used for calls queued for a user.

The ETA is supplied by the IP Office when it requests a queue or still queued announcement message to be played to a caller. It is calculated based on the queued time in the previous hour of the last 5 queued and answered calls. It is always rounded up to the nearest minute. For an example, see Customizing Queuing 254.

Normally a simply announcement is used that does not include queue position and estimated time to answer. However if required the ***Queued*** and ***Still Queued*** call flow start points can be added and customized using actions including this one.

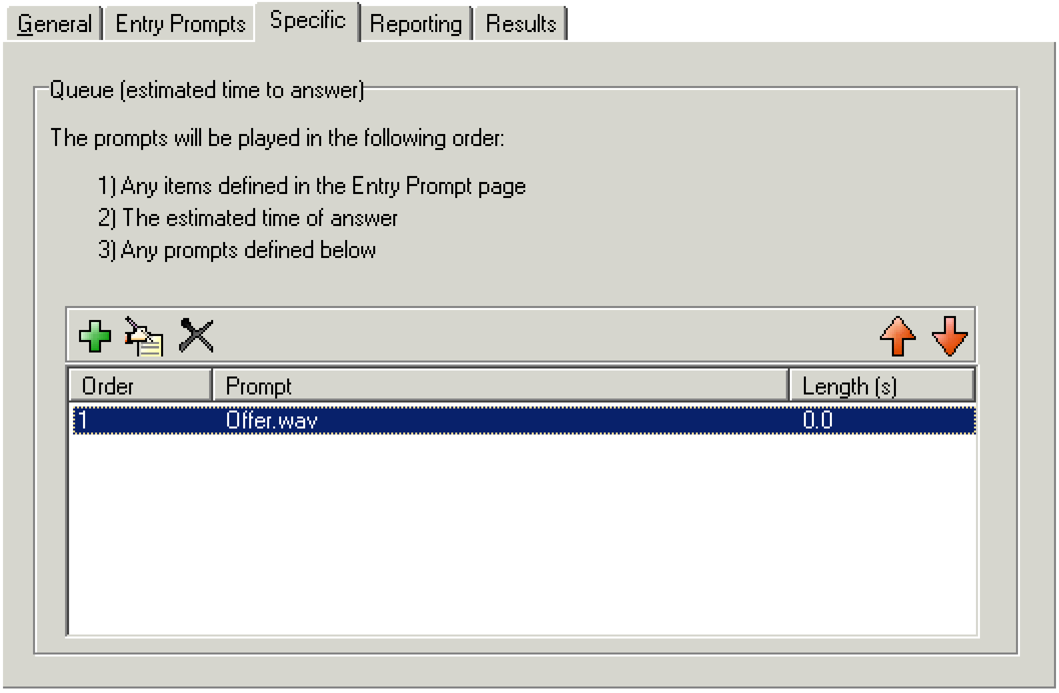
  - When calls are presented to a hunt group on the IP Office, calls waiting to be answered are queue in order of priority and then longest waiting. By default internal caller's have ***Low*** priority while the priority of external callers is set by the IP Office Incoming Call Route used to route the call (default also ***Low***).

  - Mixing calls of different priority is not recommended if Voicemail Pro is being used to provide queue estimate time to answer (ETA) and queue position announcements to callers, since those values will no longer be accurate when a higher priority call is placed into the queue. Note also that in such a situation Voicemail Pro will not allow a value already announced to a caller to increase.

- The IP Office Manager option **Synchronize calls to announcements** should not be used with call flows that include this action.

Settings

1. Click the **Queue Actions** icon and select **Queue ETA**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab. This tab may include any further prompts to be played to the caller after they hear their ETA.



Queue (estimated time to answer)

The prompts will be played in the following order:

1) Any items defined in the Entry Prompt page
2) The estimated time of answer
3) Any prompts defined below

Order	Prompt	Length (s)
1	Offer.wav	0.0

Results

This action has the following result which can be connected to a further action:

- **Next**
  Connect the result Next to a relevant action.

6.11.2 Queue Position

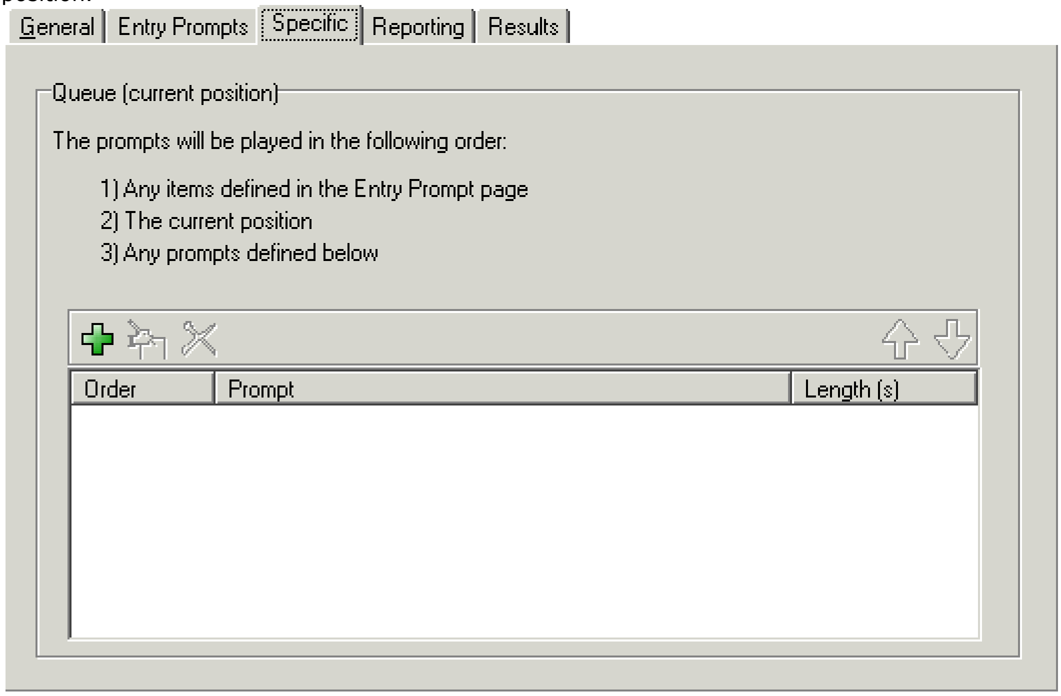
The **Queue Position** action plays the caller their position within the queue of calls for a hunt group. It is not used for calls queued for a user. The queue position is supplied by the IP Office when it requests a queue or still queued announcement message to be played to a caller.

Normally a simply announcement is used that does not include queue position and estimated time to answer. However if required the ***Queued*** and ***Still Queued*** call flow start points can be added and customized using actions including this one.

  - When calls are presented to a hunt group on the IP Office, calls waiting to be answered are queue in order of priority and then longest waiting. By default internal caller's have ***Low*** priority while the priority of external callers is set by the IP Office Incoming Call Route used to route the call (default also ***Low***).
  - Mixing calls of different priority is not recommended if Voicemail Pro is being used to provide queue estimate time to answer (ETA) and queue position announcements to callers, since those values will no longer be accurate when a higher priority call is placed into the queue. Note also that in such a situation Voicemail Pro will not allow a value already announced to a caller to increase.
- The IP Office Manager option **Synchronize calls to announcements** should not be used with call flows that include this action.

Settings

1. Click the **Queue Actions** icon and select **Queue Position**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions. The **Entry Prompts** tab should include any prompts to play to the caller before they hear their position. See Entry Prompts Tab 159.
3. Select the **Specific** tab. This tab may include any further prompts to be played to the caller after they hear their position.



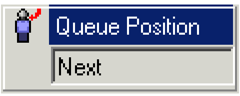
The prompts will be played in the following order:

1) Any items defined in the Entry Prompt page
2) The current position
3) Any prompts defined below

Order	Prompt	Length (s)

Results

This action has the following result which can be connected to a further action:



- **Next**
  For an example of the Queue Position action in a call flow, see Customizing a Hunt Group Callflow 256.

Chapter 7.

Administration

7. Administration

7.1 Routing Calls to Voicemail

There are different methods by which callers can be transferred to voicemail. The transfer can be used to route the caller to a specific mailbox to leave or collect messages or to a particular Voicemail Pro start point.

The sections that follow describe the use of Voicemail Collect short codes and VM: paths as telephone numbers. These can then be applied to dialing, DSS keys SoftConsole and Phone Manager buttons.

An example Voicemail Pro module is included which allows the transferred caller to select the extension to which they want to talk or leave a message.

- **VM: versus Short Codes?**
  The VM: method is easier to deploy. For IP Office applications such as SoftConsole and Phone Manager, it can be used without the need to access and change the IP Office configuration using IP Office Manager. However, the disadvantage is that **VM:** cannot be dialed from a physical phone. Short codes have the advantage that they can be dialed at an extension once set up through IP Office Manager.

7.1.1 Routing Calls to Voicemail

If a user has voicemail switched on, calls will be automatically routed to voicemail if either:

1. The extension is busy and call waiting has not been enabled.
2. The user has do not disturb set or the extension is not answered within the No Answer Time as set in IP Office Manager program (default 15 seconds).

The caller hears the standard greeting message '*Your call is being answered by IP Office. <Name> is not available. To leave a message, wait for the tone,'*. A user can record their own greeting messages if required.

When new messages are received, the user's telephone call display or IP Office Phone Manager application is updated to show the number of new messages waiting.

If Voicemail Ringback is enabled, the Voicemail Server calls the user's extension to attempt to deliver new messages when the user next uses the telephone.

All messages are stored until they have been listened to and are then automatically deleted after a set time period. The default time period for IP Office mode is 36 hours. In IP Office mode users can designate a message as saved so that it is not automatic deleted.

A mailbox owner can turn voicemail and voicemail ringback on or off using Phone Manager. The default short codes can also be used. The default short codes are:

- ***18** - To turn voicemail on.
- ***19** - To turn voicemail off.
- ***48** - To turn voicemail ring back on.
- ***49** - To turn voicemail ring back off.

7.1.2 Forward Unconditional to Voicemail

For IP Office 5.0+, the option **To Voicemail** is available for **Forward unconditional** on the **User | Forwarding** tab within the IP Office configuration. When selected, the Forward Number set for Forward Unconditional is overridden and calls are sent direct to the user's mailbox.

The option **Forward Hunt Group** calls is also overridden if **To Voicemail** is selected.

7.1.3 Transferring Calls to Voicemail

The facility to transfer a call directly to a user's voicemail is available using the SoftConsole or Phone Manager applications. For users who are not using these applications, you can create a short code for them.

For example:

Field	Setting
Code	*201
Feature	Voicemail Collect
Telephone Number	"#Extn201"
Line Group Id	0

When creating short codes for use with voicemail, the ? indicates "collect voicemail" and the # indicates "deposit voicemail". The telephone number entry must also be enclosed by quotation marks as shown in the example.

7.1.4 Using Short Codes to Access Voicemail

The short code **Voicemail Collect** feature can be used to route callers to voicemail. The voicemail service they receive is set by the telephone number field which should be enclosed in quote marks. See Voicemail Telephone Numbers 240.

- The examples use ***80** but any available short code could be used.

Example 1: Access to the Mailbox Main
The following short code will access the mailbox for **Main**. The **?** indicates that it is to collect messages. A **#** is used to indicate leave a message in the mailbox.

Field	Setting
Code	*80
Feature	Voicemail Collect
Telephone Number	"?Main"
Line Group Id	0

Example 2: Access a Voicemail Pro Module
If a Voicemail Pro module has been created and called **TimeCheck**, the following short code could be used to access it.

Field	Setting
Code	*80
Feature	Voicemail Collect
Telephone Number	"TimeCheck"
Line Group Id	0

The **Voicemail Node** short code feature can also be used to access short code start points. It uses the short code start point name as the telephone number without surrounding brackets.

7.1.5 Using VM: to Access Voicemail

Another method for accessing voicemail is the **VM:** option, where VM: is followed by the name of the mailbox or Voicemail Pro start point required.

This can be used in the telephone number field of IP Office applications such as SoftConsole, Phone Manager and Manager.

- **Example 1: SoftConsole access to the mailbox Main**
  The user wants single click access to check for messages in the hunt group mail box Main (extension ID 200).
  1. Start SoftConsole.
  2. Click one of the BLF panel tabs.
  3. Right-click and select **New** > **BLF Group Member**.
  4. Type a **Name**, for example ***Messages***.
  5. Type a **Number**, in this case enter ***VM:?Main*** or ***VM:?200***.
  6. Click **OK**. The operator can now check for messages in that group mailbox with a single click.

- **Example 2: Accessing a Module from Phone Manager**
  The user wants to access a particular Voicemail Pro module, for this example one called **TimeCheck**.
  1. Start Phone Manager.
  2. Click the **Speed Dials** tab.
  3. Right-click and select **New**.
  4. Type a **Name**, for example ***Time Check***.
  5. Type a **Number**, in this case enter ***VM:TimeCheck***.
  6. Click **OK**.

- **Example 3: Incoming Call Routing**
  The VM notation can be used in the **Destination** field of a Manager Incoming Call Route. This enables you to route calls that match the Incoming Call Route's criteria to a particular mailbox or Voicemail Pro module.

7.1.6 Voicemail Telephone Numbers

This section describes the options that can be used with **VoicemailCollect** short codes and with **VM:** to access a mailbox or Voicemail Pro start point.

	Short Code	**Application Number Field**
Collect Messages	?200	VM:?200
	"?Main"	VM:?Main
Leave Messages	#200	VM:#200
	"#Main"	VM:#Main

A user attempting to collect mail from user mailboxes will be prompted for the voicemail PIN code if not accessing from a trusted source. See Creating a Trusted Location 246.

Voicemail Pro Start Points

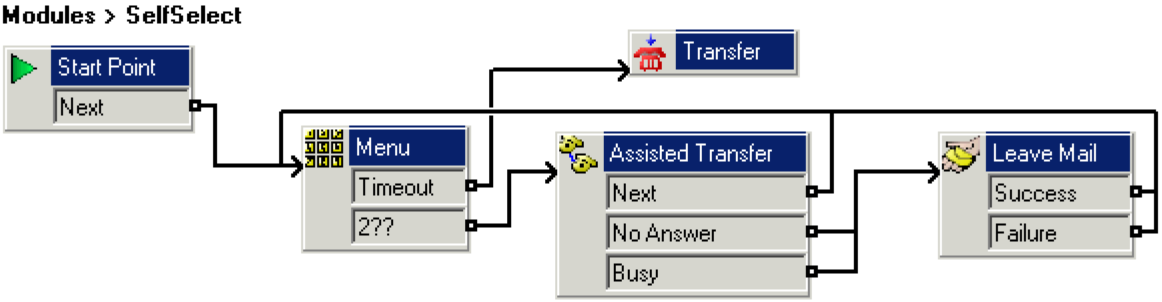
The following only apply when a matching start point has been set up. If a short burst of ringing is required then # should be inserted before the start point name. This is useful if transferring callers as it allows the transfer to be completed before the Voicemail Prompts begin.

	Short Code	**Application Number Field**
User Start Points	for examples a user called Extn205.	
Collect	"Extn205.Collect"	VM:Extn205.Collect
Leave	"Extn205.Leave"	VM:Extn205.Leave
Callback	"Extn205.Callback"	VM:Extn205.Callback
Queued	-	-
Still Queued	-	-
Group Start Points	for example a group called Main.	
Collect	"Main.Collect"	VM:Main.Collect
Leave	"Main.Leave"	VM:Main.Leave
Queued	-	-
Still Queued	-	-
Default Start Points		
Collect	"Default.Collect"	VM:Default.Collect
Leave	"Default.Leave"	VM:Default.Leave
Queued	-	VM:Default.Queued"
Still Queued	-	VM:Default.Still Queued"
Short Code Start Points (see also Voicemail Node)	for example a shortcode start point called DVM.	
	"Short Codes.DVM"	VM:Short Codes.DVM
Module Start Points	for these examples a module called Attend…	
	"Attend"	VM:Attend
Campaigns	for example a campaign called Catalogue.	
Leave	-	VM:Catalogue
Collect	-	VM:Catalogue.Collect

The **Voicemail Node** short code feature can also be used to access short code start points. It uses the short code start point name as the telephone number without surrounding brackets.

7.1.7 Example Call Flow

This example creates a Voicemail Pro module that allows callers to select the extension to which they want to be connected. If that extension is busy or does not answer they can then leave a message in the target mailbox.



The Voicemail Pro Module

1. In Voicemail Pro, a module was added named **SelfSelect**.
2. A **Menu** action was added. The properties were set as:
    - On the **Touch Tones** tab the **Wait for a key press for** option was set to 5 seconds. This gives the action a **Timeout** result which can be used if the caller does nothing or does not have DTMF dialing.
    - Our IP Office has extensions and groups numbered in the 200 to 299 range. The touch tone sequence **2??** was added to match any dialing in that range.
    - In **Entry Prompts** a prompt was recorded along the line of *"Dial the number you want or wait for reception"*.
3. A **Transfer** action was added. In its properties, on the **Specific** tab the **Destination** was set to **Main**, the hunt group containing our receptionists.
4. A connection was added from the **Menu** action's **Timeout** result to the **Transfer** action.
5. An **Assisted Transfer** action was added. In its properties, on the **Specific** tab **$KEY** was added in the **Mailbox** field.
6. A connection from the **Menu** action's **2??** result to the **Assisted Transfer** action was added.
7. A **Leave Mail** action was then added. In its properties, on the **Specific** tab **$KEY** was again added in the **Mailbox** field.
8. The **Assisted Transfer** action's **No Answer** and **Busy** result was connected to the **leave Mail** action.
9. Connections were then added from the **Assisted Transfer** action's ***Next*** result and the **Leave Mail** action's **Success** and **Failure** results back to the **Menu** action.
    - The **Success** and **Failure** results in a **Leave Mail** action are only used if the caller presses **0** when in the mailbox.
10. The call flow was then saved and made live.

Creating a Matching Short Code

A short code was needed that could be used to route callers to the **SelfSelect** module.

1. Start IP Office Manager and receive the configuration.
2. A new system short code was added so that it would be available to all callers. The short code ***80** was set up as shown in the table.

Field	Contains...
Code	*80
Feature	Voicemail Collect
Telephone Number	"#SelfSelect"
Line Group Id	0

3. The entry **"#SelfSelect"** indicates the name of the Voicemail start point for the call, in this case the VoicemailProSelfSelect module
4. For a module start point the **#** is optional. Using it provides a short period of ringing before the module actions start. This is useful if manually transferring a caller as otherwise they may miss the start of the module's entry prompts.
5. The new configuration was merged.
6. At any extension the routing can be tested by dialing ***80**. We can then wait to be transferred to reception or dial the extension or group that we want.

Using the Module

The short code ***80** can now be assigned or the path **VM:SelfSelect** to whichever method the user wants to transfer callers to the voicemail service.

A further suggestion is to provide a system short code to deal with callers who dial an invalid extension number. For our example, a short code **2??/./"SelfSelect"/VoicemailCollect** would reroute such callers back to the **SelfSelect** module.

7.2 User Voicemail Access

By default, a user can dial *17 to access their voicemail from their own extension.

A user mailbox cannot be accessed from any other location (internal or external) until a voicemail code has been set for the mailbox. This access code is set in the IP Office Manager. Voicemail can be configured for each individual user in IP Office Manager. See Configuring Voicemail for Individual Users 109.

If IP Office Manager has been configured, users can also collect their voice messages by using one the following methods.

- **Using the Messages button on their telephone**
  If their extension is a trusted extension they can access their messages without entering a voicemail code by pressing the **Messages** button. See Creating a Trusted Location 246.
- **Using a Voicemail Collect button**.
  A button can be programmed to allow a user to collect voice messages from their telephone. If their extension is a trusted extension they can access their messages without entering a voicemail code See Giving Users Button Access to Voicemail 244.
- **Using Visual Voice**
  A user can be given a display menu to user for access to their mailbox. The menu provides the user with options to listen to messages, send messages, change their greetings and password. See Giving Users Button Access to Voicemail 244.
- **Using a short code.**
  Short codes can be created so a user can be given access to their mailbox from locations other than their office desk. When they call the mailbox, they will be prompted to enter the access code. See Giving Users Access from Any Extension 245 and Voicemail Telephone Numbers 240.

If direct access is required a specified location can be set up as a *trusted location*. The caller then does not need to enter an access code. Access can be from the users own extension or another location. See Creating a Trusted Location 246.

If users need to access their voicemail messages when they are away from the office, you can set up an Incoming Call Route in IP Office Manager with the destination as Voicemail. Giving Users Access from an External Location 246.

Users can also receive notification of new voicemail messages at either their own extension or at another location. To receive notification of new messages a user needs to configure their outcalling. See Outcalling 287.

7.2.1 Giving Users Button Access

A user's telephone can have buttons programmed to allow access to voicemail. Not all telephones support this feature, refer to the relevant guide for more information.

Buttons can be programmed for:

- **Visual Voice** 244
- **Voicemail Collect** 244.

Voicemail Collect Button
Users can collect their voice messages from their own extension using a button programmed for voicemail collect. If their extension is a trusted extension they will not need to enter their voicemail code. See Creating a Trusted Location 246.

A button on the user's telephone will display the label **VMCol**. The extension number or voicemail code do not need to be entered if the extension is a trusted extension.

To add a voicemail collect button:

1. Start IP Office Manager and receive the IP Office configuration.
2. Click **User** to display the list of existing users.
3. Click the required user.
4. Click the **Button Programming** tab.
5. Click the button line that you want to change.
6. Right-click in the **Action** field.
7. Select **Advanced** > **Voicemail** > **Voicemail Collect**.
8. Click **OK** to save the button details for the selected user.
9. Repeat for any other users.
10. Click to merge the changes back to the IP Office system.

Visual Voice Button
A Voicemail Pro user can be given a display menu for access to their mailbox. The menu provides the user with options to listen to messages, send messages, change their greetings and password.

- The Visual Voice feature is not available on all telephones. Please refer to the user's telephone guide for more information.
- Visual voice is only available when in Intuity mode.
- For IP Office 4.2+, the MESSAGES button on phones can be set to access visual voice. This is done using the **Messages Button Goes to Visual Voice (System | Voicemail)** option in IP Office Manager.

To give a user access to Visual Voice:

1. Start IP Office Manager and receive the IP Office configuration.
2. Click **User** to display the list of existing users.
3. Click the required user.
4. Click the **Button Programming** tab.
5. Click the button line that you want to change.
6. Right-click in the **Action** field.
7. Select **Emulation** > **Visual Voice**.
8. Click **OK** to save the button details for the selected user.
9. Repeat for any other users.
10. Click to save the changes back to the IP Office system.

7.2.2 Giving Users Access from Any Extension

Access to voicemail from any extension can be given to either:

- **An individual user**
  So that a specified user can log in to their voicemail from any extension, you need to set up a short code and associate it with the user's extension number. For example, a short code *90 could be associated with extension number 201. The user with extension 201 can then dial ***90** from any extension and enter their voicemail code to collect their voicemail messages.

To give a specific user access from any extension:

1. Open IP Office Manager.
2. Set up a short code, for example *90.

Field	Contains...
Code	*90
Feature	Voicemail Collect
Telephone Number	"?Extn201"
Line Group ID	0

- **All users**
  To give all users access to voicemail from any extension you need to set up a short code. When a user dials the short code from any extension they will be prompted for their mailbox number (extension number) and voicemail code.

To give all users access from any extension:

1. Open IP Office Manager.
2. Set up a short code, for example *98:

Field	Contains...
Code	*98
Feature	Voicemail Collect
Telephone Number	?Anonymous
Line Group ID	0

7.2.3 Giving Users Access from an External Location

If users need to access their voicemail messages when they are away from the office, you can set up an Incoming Call Route in IP Office Manager with the destination as Voicemail. See the IP Office Manager help or guide.

To give users access from an external location:

1. Open IP Office Manager.
2. In the Navigation pane, click **Incoming Call Route** and add a new call route.
3. In the destination field, select the option **Voicemail**. When an incoming call is matched the call is passed to voicemail to enable remote mailbox access. Callers are asked to enter the extension ID of the mailbox required and then the mailbox access code.
4. Click **OK** to save the changes.
5. Click to merge the configuration back to the IP Office.

7.2.4 Creating a Trusted Location

If a user regularly accesses their voicemail messages from another extension or a number that presents a CLI, such as their mobile or home number, this extension or number can be set up as a trusted location.

To configure a trusted location:

1. Open IP Office Manager.
2. In the Navigation pane, click **User** and select the individual user.
3. View the **Source Numbers** tab.
4. Add a **V** source number.
    - Enter the users extension number.
      For example, a user whose extension number is 214 wants to be able to collect their voicemail without entering their voicemail code. A source number **V214** would be entered.
    - Enter a different extension number.
      For example, a user whose extension is 214 wants to be able to collect their voicemail from extension 204. A source number **V204** would be entered. From now on when the user of extension 214, dials a short code from extension 204 they will not be prompted for their voicemail code. Not supported for Intuity mailbox users.
    - Add a **V** source number containing the external telephone number.
      For example, **V01923 38383** would be entered if the external number was 01923 38383.When the user dials the number set up as the Incoming Call Route to Voicemail from the "trusted location", they will not be prompted for their mailbox number or Voicemail Code. See Giving Users Voicemail Access from an External Location 246. Not supported for Intuity mailbox users.
5. Click **OK** to save the changes.
6. Click to merge the configuration back to the IP Office.

7.3 Hunt Group Voicemail

Hunt groups must first be set up in IP office. You can then use Voicemail Pro to configure the way in which voicemail works for a hunt group.

Voicemail Provides a number of services for hunt groups.

- **Announcements**
  If a caller is waiting to be answered, queuing or the hunt group is in out-of-hours mode, the voicemail server can provide appropriate greetings to callers. These greetings can be changed through the normal mailbox controls. Mailbox users can find out more in the IP Office or Intuity Mailbox user guides. See Out of Hours Operation 251. See Configuring Announcements 252.
  - Voicemail Pro allows the actions available to a queued caller to be customized as well as the greeting messages.
  - Voicemail Pro does not control the queuing of calls. Queuing is controlled by the IP Office switch that presents queued and still queued calls at the appropriate times and provides the queue position and ETA data.
- **Messaging**
  If voicemail for a hunt group is on (the IP Office default), calls to the hunt group are automatically routed to voicemail if all available extensions have been called for the number of seconds defined in the IP Office No Answer Time parameter. The default time setting is 15 seconds.
- **Message Waiting Indication**
  By default there is no indication on the handset when a hunt group mailbox contains messages and no direct access method to a hunt group mailbox.
  - For hunt group members to receive message indication, an appropriate **H** source number entry needs to be added. See Configuring Hunt Group Message Waiting Indication 248.
  - For access by other users an access short code can be used. See Enabling Access to Hunt Group Voicemail with a Short Code 250.

7.3.1 Configuring Message Waiting Indication

By default no message waiting indication (MWI) is provided for hunt groups. If required indication can be enabled for specific users including users who do not belong to the hunt group. If the user is not a member of the hunt group, a voicemail code is also required. This is entered in the **Voicemail Code** field on the **Hunt Group > Voicemail** tab in the IP Office's configuration. Alternatively the user can be made a member or the group but have their membership set to disabled. This allows them to access the group mailbox without receiving group calls.

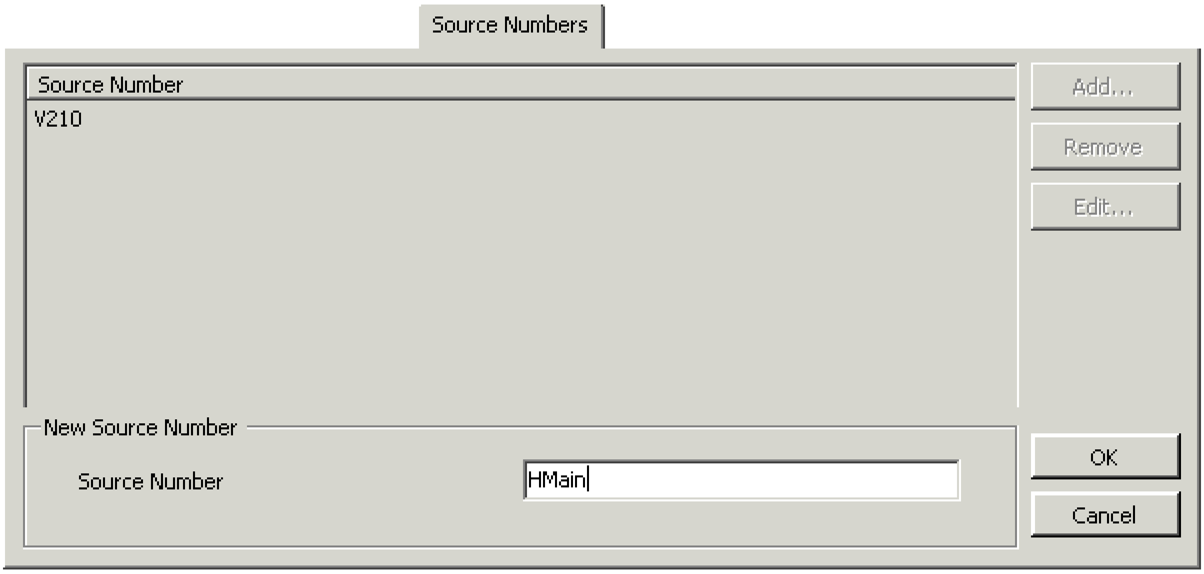
Depending on the type of telephone phone or IP Office application they are using, users who receive hunt group message waiting indication can choose any of the following methods to collect messages.

- **Phone Manager**
  If Phone Manager is used, the group name and number of new messages is displayed in the **Messages** tab. Users click the Messages tab to access the group mailbox.
- **4400 Series Phones**
  On phones with a **Menu** button, press **Menu | Menu | Msgs | Voice**. The group name is shown along with the number of new messages. Press the display button to access the group mailbox.
- **Voicemail Ringback**
  If a user has voicemail ringback enabled, ringback will occur for new group messages as well as new personal messages. Ringback for personal messages takes place before any ringback for new group messages.

This method of configuring hunt group message waiting indication allows individuals, including users who are not members of the group, to receive hunt group message waiting indication.

To configure message waiting indication:

1. Open IP Office Manager.
2. In the Navigation pane, click **User** and select the individual user.
3. View the **Source Numbers** tab.
4. Click **Add**.



Source Number
V210

New Source Number
Source Number: HMain

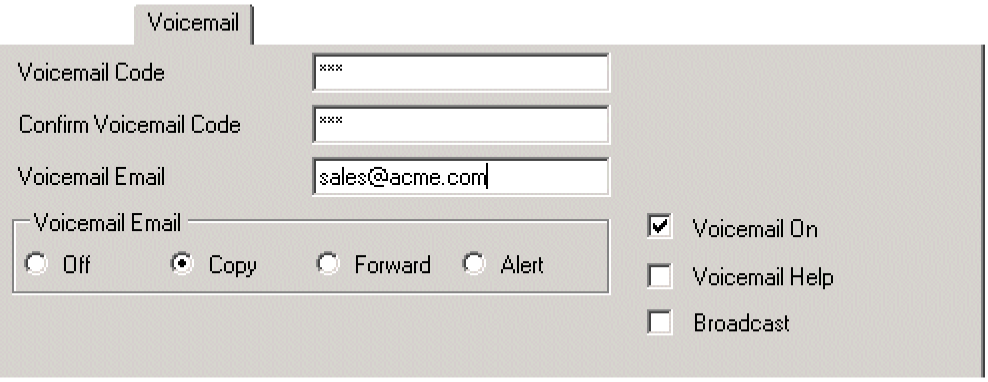
5. In the Source Number field, enter **H** followed by the hunt group name. For example, to receive message waiting indication from a hunt group called Main, enter **HMain**.
6. Click **OK**.
7. Click to merge the configuration change back to the IP Office.

7.3.2 Configuring Group Broadcast

If the Broadcast option is enabled, a message for a hunt group is copied to the individual user mailboxes of each hunt group member. A call flow can be created that includes the Generic Action. See Generic Action 165. If messages need to be forwarded to the same group a Personal Distribution List could be created. See Personal Distribution Lists 290.

To configure Group Broadcast:

1. Open IP Office Manager.
2. In the Navigation pane, click **HuntGroup** and select the required group.
3. Click the **Voicemail** tab.



Voicemail

Voicemail Code: ***

Confirm Voicemail Code: ***

Voicemail Email: sales@acme.com

Voicemail Email: ○ Off ● Copy ○ Forward ○ Alert

☑ Voicemail On

☐ Voicemail Help

☐ Broadcast

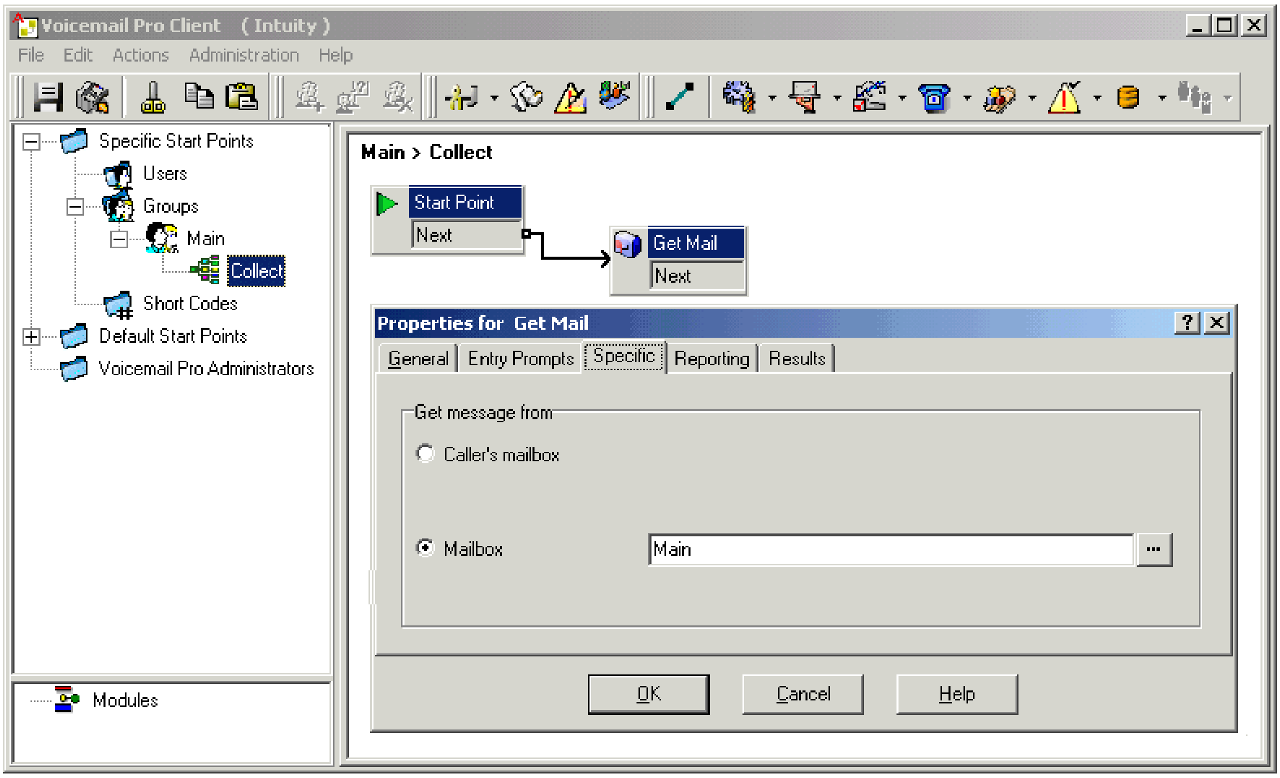
4. Check **Broadcast**.
5. Click **OK**.
6. Click to merge the configuration change back to the IP Office.

7.3.3 Using a Short Code to Collect Voicemail

To access messages for a hunt group, a short code can be created. For example, for a group called **Main** a short code can be added with the following properties.

Field	Contains...
Code	*99
Feature	Voicemail Collect
Telephone Number	"?Main"
Line Group Id	0

For systems running in Intuity mode, the above will work only if the user is a member of the group and a custom call flow has also been set up for the collect start point to that hunt group.



○ Caller's mailbox

● Mailbox: Main

Members of the hunt group Main can now dial ***99** from their own extensions to access hunt group messages. In IP Office mode, to use this short code for access from an extension that is not a member of the hunt group, a voicemail code should be configured for the group.

7.3.4 Out of Hours Operation

Voicemail Provides a number of greetings for groups. One of these is an Out of Hours Greeting.

Through IP Office Manager or using a short code a hunt group can be taken in or out of service. When the group is Out of Service, callers are played the group's "Out of Hours" greeting and can then leave a message. Alternatively, if an Out of Service Fallback Group has been configured, callers are passed to that group.

Similarly, a group can be taken in or out of Night Service by using Manager, short codes or an associated time profile. When the group is in Night Service, callers are played the group's "Out of Hours" greeting and can then leave a message. Alternatively, if an Out of Hours Fallback Group has been configured, callers are passed to that group.

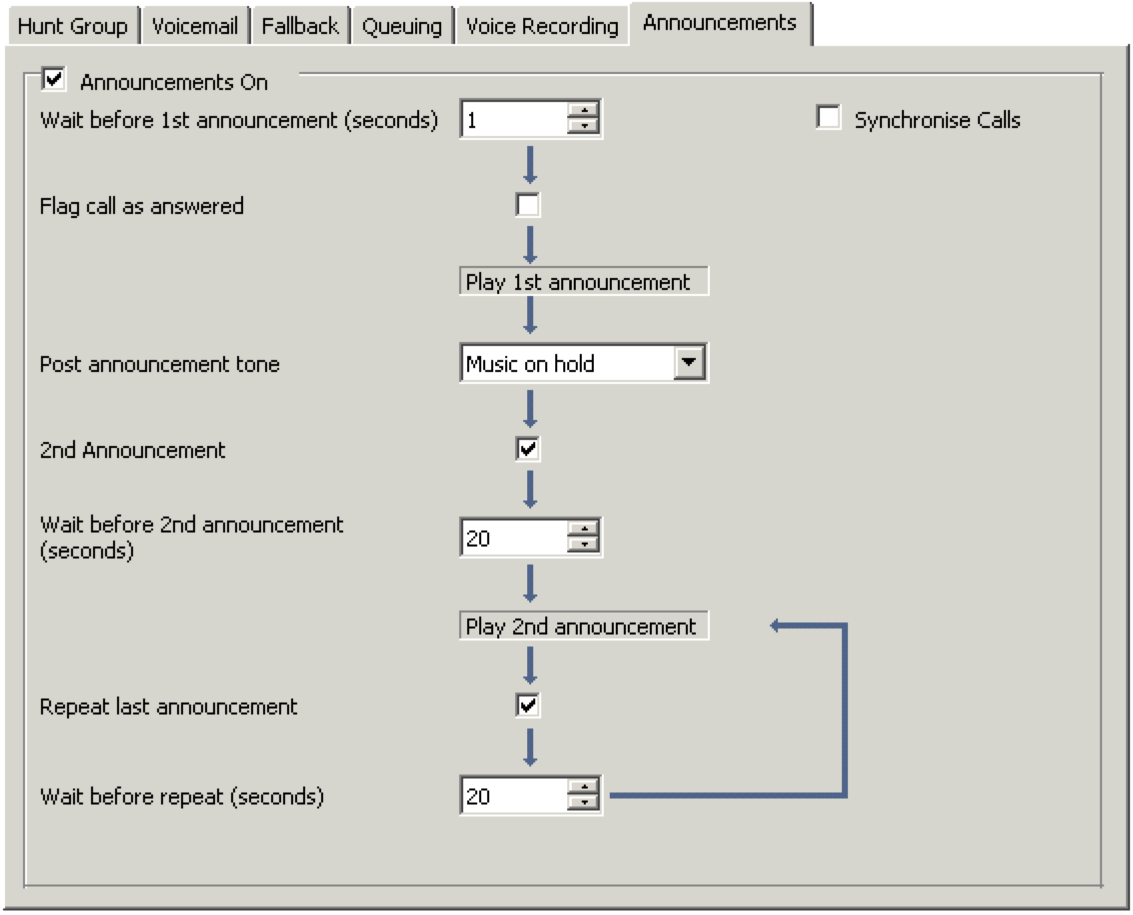
7.3.5 Configuring Announcements

When a caller is waiting to be answered or queuing, announcements can be played to the caller. The announcements are activated in IP Office Manager.

The standard announcement used is *"I am afraid all the operators are busy at the moment but please hold and you will be transferred when somebody becomes available*." This can be replaced by separate recordings for the 1st and 2nd announcements if required (see Recording the Announcements 253 below) or by custom call flows (see Customizing Announcements 254).

Enabling Announcements

1. Open IP Office Manager and receive the configuration from the IP Office system.
2. In the Navigation pane, click **HuntGroup** and select the hunt group.
3. View the **Announcements** tab.
4. Check **Announcements On**. Announcements will be played to a caller who is in a queued or waiting for the hunt group.



☑ Announcements On

Wait before 1st announcement (seconds): 1

☐ Synchronise Calls

Flag call as answered ☐

Play 1st announcement

Post announcement tone: Music on hold

2nd Announcement ☑

Wait before 2nd announcement (seconds): 20

Play 2nd announcement

Repeat last announcement ☑

Wait before repeat (seconds): 20

5. Select the amount of time for the caller to be queued or waiting before they hear the first announcement. The **Wait before 1st announcement (seconds)** default is 10.
6. Select the **Post announcement tone**. The options are ***Ringing***, ***Music on Hold*** or ***Silence***. The default selection is ***Music on hold***.
7. (Optional) Check **2nd announcement** to play another message to the caller.
8. (Optional) Select the amount of time between the first and second announcements. The default time is 20 seconds.
9. (Optional) If the second announcement is to be repeatedly played to the caller until their call is answered, check **Repeat last announcement**.
10. Click **OK** to save the changes.
11. Click to merge the configuration back to the IP Office.

Recording the Announcements

The standard announcement used is *"I am afraid all the operators are busy at the moment but please hold and you will be transferred when somebody becomes available*." This can be replaced in a number of ways, depending on the

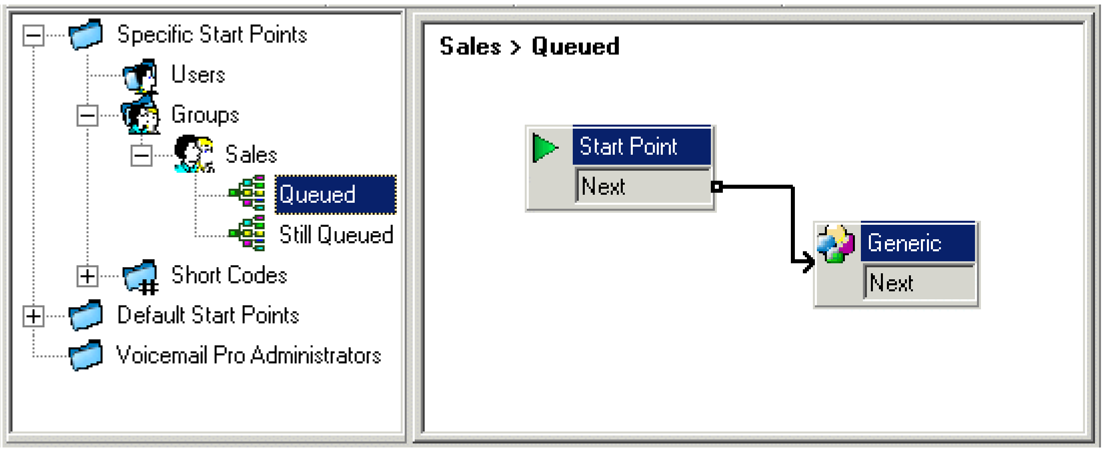
The maximum length for announcements is 10 minutes. New announcements can be recorded using the following methods:

- **Voicemail Pro - IP Office Mode**
  Access the hunt group mailbox and press **3**. Then press either **3** to record the 1st announcement for the hunt group or **4** to record the 2nd announcement for the hunt group.
- **Voicemail Pro - Intuity Emulation Mode**
  There is no default mechanism within the Intuity telephony user interface to record hunt group announcements. To provide one a custom call flow containing an Edit Play List 190 action should be used. In the file path enter ***[GREETING]\<hunt_group_name>_Queued*** or ***[GREETING]\<hunt_group_name>_StillQueued***. where ***<hunt_group_name>*** is replaced by the hunt group name.
  - **[GREETING]** is a variable that points to the current location of the voicemail servers greeting folder (by default ***c:\Program Files\Avaya\IP Office\Voicemail Pro\VM\Greetings***.

7.3.6 Customizing Announcements

The announcements and actions provided to a caller can be customized using the **Queued** and **Still Queued** start points.

- The **Queued** start point replaces the default Announcement 1.
- The **Still Queued** start point replaces the default Announcement 2.



It is important to note that unconnected results in **Queued** and **Still Queued** call flows will return the caller to the queue rather than disconnect them. An attempt to return the caller using a Transfer or similar action places the caller at the back of the queue as a new call.

- Use of customized start point call flows for **Queued** and **Still Queued** is not recommended if the **Synchronize Calls** option is enabled for the hunt group in the IP Office configuration. If this is the case, the only options supported by Voicemail Pro is the playing of prompts.

To customize announcement 1 for a specific group:

1. In the Start Points Navigation pane, select **Groups**. If necessary add a Queued start point 136 for the required group.
2. Select the group's **Queued** start point.
3. Add the required actions to the call flow and link them. To just play a message use a **Generic** action.
   - Use of customized start point call flows for **Queued** and **Still Queued** is not recommended if the **Synchronize Calls** option is enabled for the hunt group in the IP Office configuration. If this is the case, the only options supported by Voicemail Pro is the playing of prompts.
4. Double on the actions added and on the **Entry Prompts** tab add the prompts required using the Wave Editor 161.
5. Click **OK** to save the changes.
6. Click **Save and make live**.
7. Any caller queuing for the selected group will hear the new announcement when they first join the queue.

To customize announcement 2 for a specific group:

1. As above but use the **Still Queued** start point.

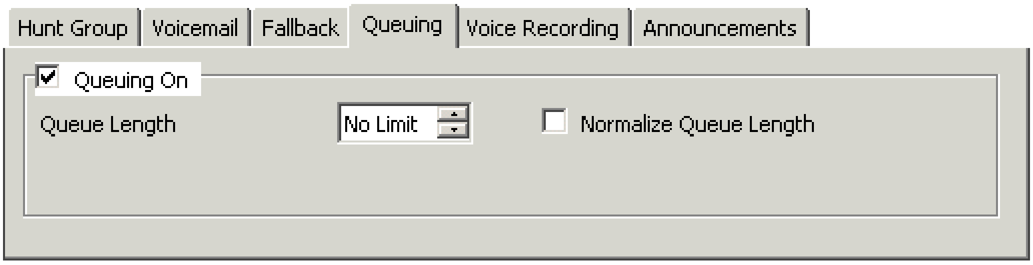
7.3.7 Hunt Group Queuing

If hunt group queuing options are enabled, a call will be held in a queue when **all** available extensions in the hunt group are busy. Using Voicemail Pro you can define custom actions and prompts for the queuing sequence.

- The Still Queued message is not played if the hunt group name exceeds 13 characters.

To configure queuing for a hunt group:

1. Open IP Office Manager.
2. In the Navigation pane, click **HuntGroup** and select the hunt group.
3. View the **Queuing** tab.



☑ Queuing On

Queue Length: No Limit

☐ Normalize Queue Length

- **Queuing On :** *Default = On*
  If selected, queuing will be available for the hunt group.
- **Queue Length:** *Default = No Limit*
  This feature sets the number of calls that will be held in the queue at any one time. If this number is exceeded the caller will receive the busy tone or be passed to voicemail.
- **Normalize Queue Length:** *Default = Blank*
  This facility selects whether to include calls that are ringing but not answered in the queue length.

When queuing is selected, announcements can be played to the queued caller. See Configuring Queue Announcements 252.

7.3.8 Customizing a Hunt Group Call Flow

Voicemail Pro allows for customization of queuing operation through the use of **Queued** and **Still Queued** start points, either specific to a particular hunt group or default for all groups.

The **Queue ETA** and **Queue Position** actions can be used to provide callers with queue information and then place them back in the queue. Within a **Queue** or **Still Queued** start points call flow, the default action for any unlinked results is to place the caller back in to the queue rather than disconnect the caller.

- **Incoming Call Route 'Priority'**
  The IP Office supports a configurable Priority setting (1, 2 or 3) on Incoming Call Routes. Calls assigned a high priority are moved up any call queue ahead of those with a lower priority. The use of this feature is not compatible with **Queue ETA** and **Queue Position** messages as the spoken queue positions and ETA for some callers may be overridden by calls with a higher priority. For example, a caller might hear that their queue position is 5. If a call is received on an Incoming Call Route with a higher priority, the next time the queue position is heard their queue position could be 6, further back in the queue.

- **Synchronized Announcements**
  If the option **Synchronize Calls** is enabled for the hunt group announcements within the IP Office configuration, actions other than speaking recorded prompts are not supported in custom Queued and Still Queued start points.

Further customization can be applied using actions such as a **Menu** action to let the caller select, for example, to leave a message, be transferred to another number or return to the queue.

The Voicemail Pro variables, **$QTIM, and $POS** 140, can be used to further customize the **Queued** and **Still Queued** call flows.

- **$QTIM: Queued Callers Estimated Time to Answer**
  If used in a prompt list, will speak the callers' estimated time to answer (ETA). For example, *"Your estimated time to answer is 5 minutes."* If used elsewhere, such as in a condition, returns the ETA in minutes as a simple numeric value.

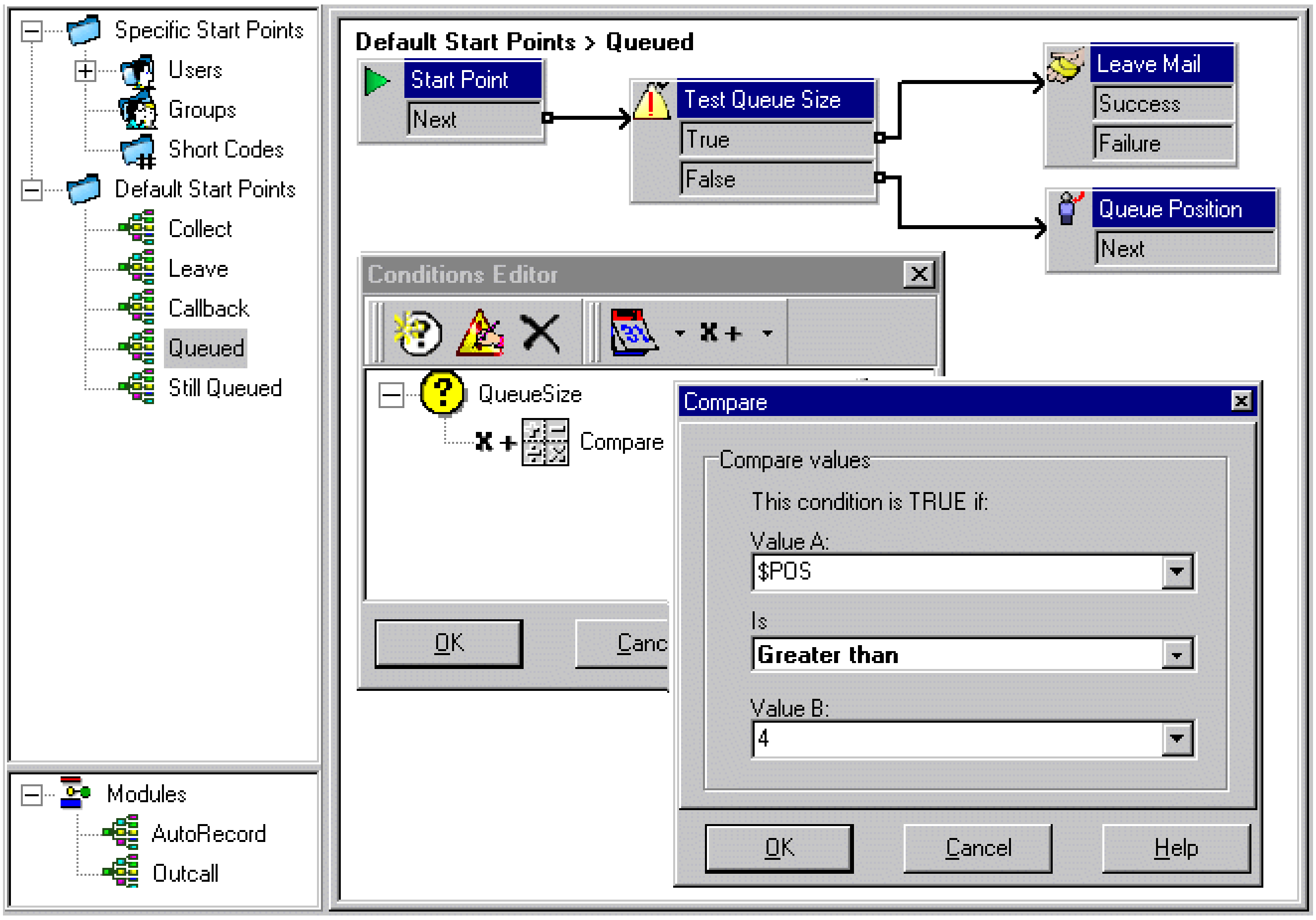
- **$POS: Queued Callers Queue Position**
  If used in a prompt list, will speak the caller's queue position, for example, "You are in queue position 2." If used elsewhere, such as in a condition, returns the caller's queue position as a numeric value.

- **$TimeQueued**
  IP Office 4.1+ and Voicemail Pro 4.1+. Holds the length of time, in seconds, that the call has been part of a particular hunt group queue. Only available when using Queued and Still Queued start points.

- **$TimeSystem**
  IP Office 4.1+ and Voicemail Pro 4.1+. Holds the length of time, in seconds, since the call was presented to the IP Office system. Only available when using Queued and Still Queued start points.

The importance of these variables is that, instead of or in addition to customizing the queue call flow for all queued callers, you can customize the actions for callers whose ETA or position match selected criteria.

The screen below shows an example of a queued call flow that uses a condition to test the value of $POS for the queued caller.



This condition is TRUE if:

Value A: $POS

Is: Greater than

Value B: 4

- When the caller is in queue positions 1 to 4, they are passed to a **Queue Position** action and hear their queue position before returning to the queue.
- When the caller is in queue position 5, they are asked to leave a message.
- Instead of using a **Leave Mail** action, the caller could be taken through a **Voice Question** or **Campaign** action to collect required information and the caller's responses could be saved as a message.

7.4 Recording Calls

As well as providing messaging services, Voicemail Pro can provide a call recording service. Call recording can be turned on manually. See Starting Manual Call Recording 261. Alternatively, call recording can be configured to take place automatically for specified users, hunt groups, incoming call routes or out going calls with account codes. See Automatic Call Recording 265.

- If a conference call is being recorded, recording continues when a new party joins the conference.
- If a call that is being recorded is put on hold or parked, the recording will pause. When the call is reconnected the recording resumes.
- By default, a recording is placed in a user's own mailbox but this location can be changed.
- A recording by an agent that is intruding on to a call will keep recording after the intruded call has ended. This is to allow the recording to be annotated.

- **Conference Capacity**
  Call recording uses conferencing capacity and so is subject to the available conferencing capacity of the IP Office system.
- **IP Trunks and Extensions**
  When the direct media path option is used with IP trunks and or an extension, it is not possible to guarantee call recording.
- **Call Recording Warning**
  In many locations, it is a local or national requirement to warn those involved in a call that they are being recorded. The Voicemail Pro does this by playing an **Advice of Call Recording** prompt which can be switched off. On automatically recorded call, some telephones may also display a recording symbol. See Call Recording Warning 259.
- **Recording Duration**
  Call recording is limited to the maximum length of 1 hour. See Changing the Recording Time 260.
- **Voice Recording Library (VRL)**
  Recordings are normally placed into standard mailboxes. VRL operation allows recordings to be transferred to a specialist archiving application. This allows both longer recording and the sorting and searching of recordings. See Voice Recording Library (VRL) 260.

7.4.1 Call Recording Warning

In many locations, it is a local or national requirement to warn those involved in a call that they are being recorded. One method for doing this is to enable the Advice of Call Recording (AOCR) message provided by the Voicemail Pro server.

- The 'advice of recording' will always be played if the Advice of Call Recording message is enabled.
- It can not be guaranteed that a caller will hear an 'advice of recording' announcement when the call is using analogue trunks. Analogue trunks do not support call status signalling so the 'advice of recording' announcement is played as soon as the trunk is seized even if the call is ringing and has not been answered.
- The Play Advice on Call Recording option is **on** by default.

The Advice of Call Recording Message
This message is provided in the file ***aor_00.wav***. For each language installed on the Voicemail Pro server, a copy is located in the sub-folders of *c:\Program Files\Avaya\IP Office\Voicemail Server\WAVS.*

To switch the recording warning on or off:

1. From the Voicemail Pro Client, click or select **Administration** > **Preferences** > **General**.
2. Click **Play Advice on Call Recording** to switch this option on (checked) or off (unchecked).
3. Click **OK**.
4. Click **Save & Make Live**.

To hide the auto record indication
In addition to the audible advice of call recording prompt , some Avaya terminals display REC to show that the call is being recorded. The display can be suppressed.

1. Open IP Office Manager and load the configuration from IP Office.
2. In the Navigation pane, click **System**.
3. In the System Configuration window, click the **System** tab.
4. Check **Hide auto recording**. The terminal display **REC** will be suppressed.
5. Save the configuration back to the IP Office system.

7.4.2 Changing the Recording Time

For recordings being placed into a Voicemail Pro mailbox, the maximum recording time is 1 hour.

To change the recording length:

1. Start the Voicemail Pro Client.
2. Click or select **Administration > Preferences** > **General**.
3. The **Max. VRL Record Length (secs)** setting is used only for calls being recorded to VRL. The maximum record length is 3600 seconds (60 minutes).
4. Click **OK**.
5. Click **Save & Make Live**.

7.4.3 Voice Recording Library (VRL)

Voice Recording Library (VRL) operation allows the Voicemail Pro to transfer specific users who are automatically or manually recording calls to a third-party application. It can also be selected as the destination for calls recorded via a **Leave Mail** action in a call flow.

Currently this mode of operation is only supported with Avaya IP Office ContactStore. This application provides tools to sort, search and playback recordings. It also supports the archiving of recordings to DVD.

- Installation and configuration of VRL with IP Office ContactStore is documented separately.
- VRL is a licensed feature. It requires entry of a valid **Voice Recording Administrators** license into the IP Office configuration.
- The VRL application must be configured to store recording on a separate partition, drive or PC from the Voicemail Pro. This is necessary to ensure that the long term storage or recording archives and space available for mailbox messages do not conflict.

7.4.4 Manual Call Recording

There are several ways to start manually recording a telephone call.

Phone Manager Pro

Users can initiate call recording using Phone Manager Pro when they are working in Agent Mode. The recording feature is active during a telephone call and when call recording is available.

- Press ● on the toolbar to start recording. Press ■ on the toolbar to stop the recording.
- Select **Actions** > **Start Recording**. The call will be recorded. Press **Actions** > **Stop Recording** to finish recording the call.

SoftConsole

The SoftConsole operator can manually record all or part of a current telephone call.

- Press the ● button on the toolbar. The button acts as a toggle. Press the button again to stop recording.
- Select **Actions** > **Record Call**. This action toggles and so is also used to stop recording.
- Press **F5** to start recording. Press F5 again to stop the recording.

4400 Series

Telephones in the 4400 Series with a Menu key can manually trigger call recording by:

- Press **Menu | Menu | Func| Recor**.

Using DSS Keys

The call record function can be programmed against a DSS key. When a DSS key has been programmed it can be pressed during a call to record the conversation.

To set a DSS key for manual recording:

1. Open IP Office Manager and load the configuration from IP Office.
2. In the Navigation pane, click 👤 **User** and select the individual user.
3. Select the **Button Programming** tab.
4. Select the required DSS key and click **Edit**.
5. Click ... browse for the **Action**. The Button Programming window opens.
6. Select **Advanced | Call | Call Record**. Click **OK**.
7. In the **Action Data** field, enter a description that will appear on the telephone display.
8. Click **OK**.
9. Click 💾 to save the configuration file.

A call is recorded if the user presses the programmed DSS key during any call. The caller will hear an announcement that the call is being recorded if the mandatory call recording warning is active. See Call Recording Warning 259.

Using Short Codes

The short code feature "Call Record" can be used to trigger recording of calls into the user's designated mailbox. The example short code (*95) can be set up as a user short code or a system short code. In either case it will trigger recording

Field	Contains...
Code	*95
Feature	Call Record
Telephone Number	[Leave blank]
Line Group Id	0

To use the short code

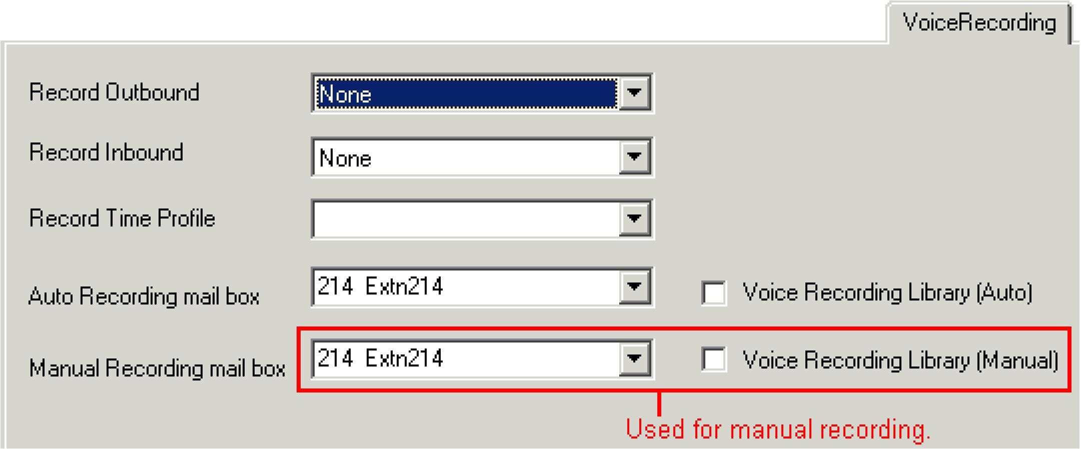
1. During a call, put the caller on hold.
2. Dial the short code. The call is automatically reconnected and recording begins.

7.4.4.1 Setting Manual Recording Options

The IP Office Manager can be used to specify where recordings triggered by a user are placed:

To configure a user's recording options:

1. Open IP Office Manager and load the configuration from IP Office.
2. In the Navigation pane, click **User** and select the individual user.
3. Select the **Voice Recording** tab.



Record Outbound: None

Record Inbound: None

Record Time Profile:

Auto Recording mail box: 214 Extn214 ☐ Voice Recording Library (Auto)

Manual Recording mail box: 214 Extn214 ☐ Voice Recording Library (Manual)

Used for manual recording.

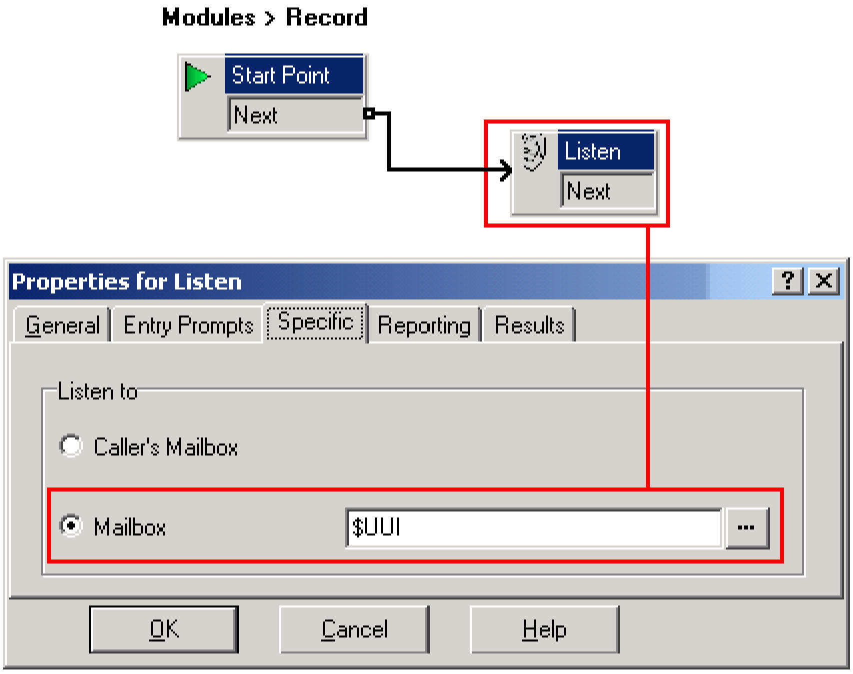
4. In **Manual Recording Mailbox**, select from the list the mailbox that is to be used to contain recordings triggered by the user.
   - The **Voice Recording Library** options can be used only if a VRL application has been installed and licensed. See Voice Recording Library 260.
   - Click **OK**.
   - Click to merge the configuration change back to the IP Office.

7.4.4.2 Customizing Manual Recording

Normally recording is performed by the Voicemail Pro server as a default task. However, a module named **Record** can be used to customize the operation of auto-recording.

Notes

- If a **Record** module is created, it overrides the default record operation. Therefore it must at minimum emulate the default manual recording process of placing recordings into the mailbox of the user who triggered recording. For example, in the module call flow shown below, the Listen action is set to ***$UUI***.
- Whenever recording is triggered, ***$UUI*** contains the user name of the user who that triggered the recording process.



Listen to

○ Caller's Mailbox

● Mailbox $UUI

7.4.5 Automatic Call Recording

The IP Office system can be configured to automatically record calls based on the user, hunt group, incoming call route or account code.

Trigger	Incoming	Outgoing	Default Recording Destination	Duration
Incoming Call Route	✓	✗	None	For the call duration or up to 1 hour.
Hunt Group	✓	✗	Hunt group mailbox	Until ended or transferred to a user outside the hunt group or its overflow group.
User	✓	✓	User mailbox	Until the user ends or transfers call.
Account Code	✗	✓	User mailbox	Until the user ends or transfers calls.

- Individual calls may match several recording criteria. Where that is the case the following applies:
  - If the destinations for the recordings are different, separate recordings occur with the durations are indicated above.
  - If the destinations for the recordings are the same, a single recording is made using either the incoming call route, hunt group or user duration in that order or priority.
- Multiple recordings of the same call use multiple voicemail channels.
- Time profiles can be used to control when automatic call recording is used.
- For inbound calls recording will not take place if the call goes to normal voicemail.
- Different frequency settings, set in percentage terms, can be applied to the automatic recording of inbound and outbound calls.
- A mandatory setting can be used to return a busy tone when call recording is triggered but no voicemail ports are available.
- Where calls have been answered using a Line appearance button, the call recording goes to the mailbox setting of the original call route destination.

7.4.5.1 Setting Automatic Recording Options

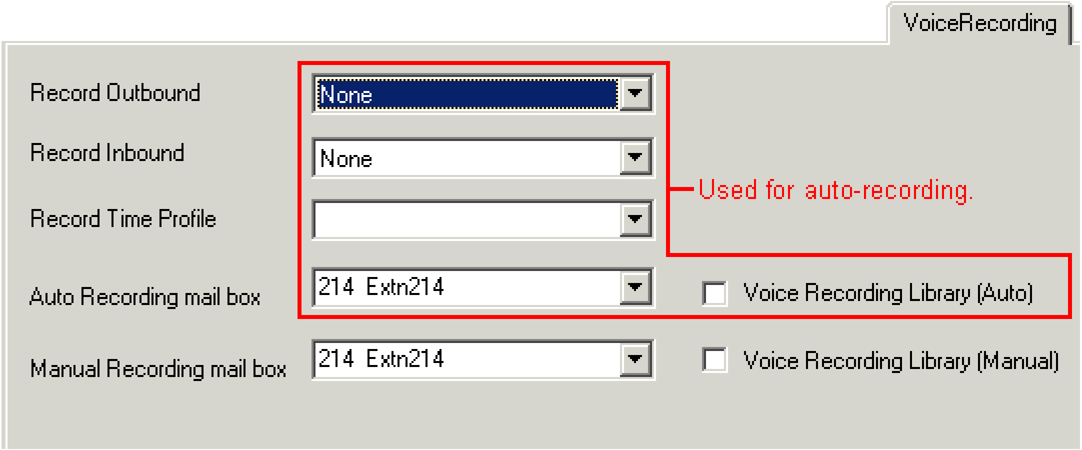
Automatic recording can be configured for:

- Calls received and/or made by a user 266.
- Calls on a specific incoming call route 268.
- Calls to a specific hunt group 267.
- Outgoing calls associated with a specific account code 269.

The calls that are to be auto-recorded are selected through IP Office Manager.

To set automatic call recording for a user:

1. Open IP Office Manager and load the configuration from IP Office.
2. In the Navigation pane, click **User**.
3. Select the required user.
4. Select the **Voice Recording** tab.



Record Outbound: None

Record Inbound: None

Record Time Profile:

Auto Recording mail box: 214 Extn214 ☐ Voice Recording Library (Auto)

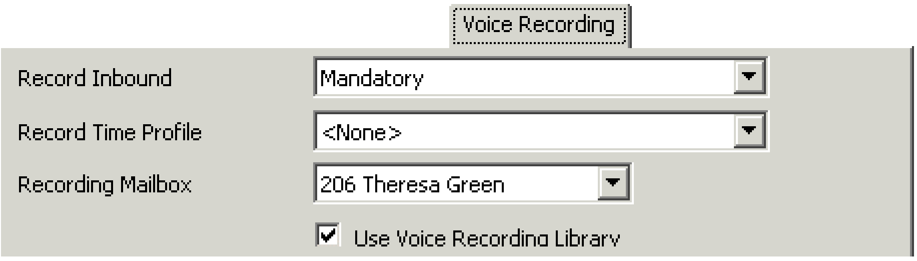
Manual Recording mail box: 214 Extn214 ☐ Voice Recording Library (Manual)

Used for auto-recording.

5. From the **Record Inbound** and **Record Outbound** drop-down lists select the recording frequency required.
   - **None:** Do not record.
   - **On:** Record all calls if possible.
   - **Mandatory:** Record all calls. If recording is not possible, return busy tone to the caller.
   - **xx%:** Record calls at intervals matching the set percentage, eg. for every other call for ***50%***.
   - For inbound calls, recording will not take place if the call also goes to normal voicemail.
6. Specify the destination for the recordings. By default, this is a user's own mailbox.
7. The **Voice Recording Library** options can be used only if a VRL application has been installed and licensed. For more information, see Voice Recording Library 260.
8. Click **OK**.
9. Click to send the configuration back to the IP Office.

To set automatic call recording for a hunt group:

1. Open IP Office Manager and load the configuration from IP Office.
2. In the Navigation pane, click **HuntGroup**.
3. Select the required hunt group.
4. Select the **Voice Recording** tab.

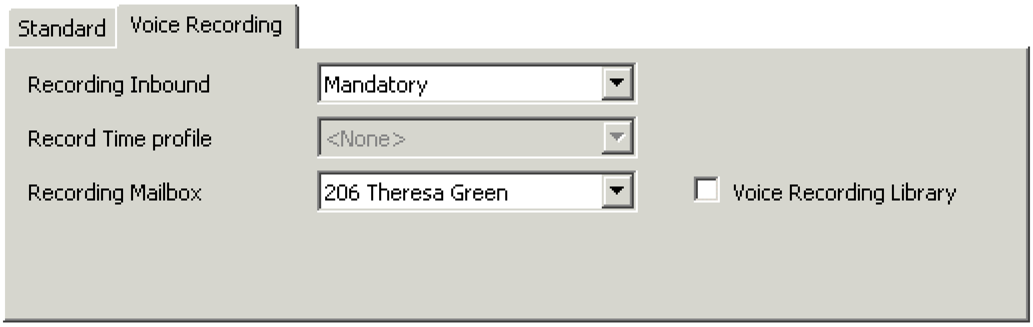


Record Inbound: Mandatory
Record Time Profile: <None>
Recording Mailbox: 206 Theresa Green
☑ Use Voice Recording Library

5. From the **Record Inbound** drop-down lists select the recording frequency required.
   - **None:** Do not record.
   - **On:** Record all calls if possible.
   - **Mandatory:** Record all calls. If recording is not possible, return busy tone to the caller.
   - **xx%:** Record calls at intervals matching the set percentage, eg. for every other call for ***50%***.
6. For inbound calls, recording will not take place if the call also goes to normal voicemail.
7. Select the **Recording Time Profile** is required. If not set, recording is applied at all times.
8. The **Recording Mailbox** option is available for IP Office 4.1+. For previous releases the destination is always the mailbox of the user making the call.
9. Click **OK**.
10. Click to send the configuration back to the IP Office.

To set automatic call recording for an incoming call route:

1. Open IP Office Manager and load the configuration from IP Office.
2. In the Navigation pane, click **Incoming Call Route**.
3. Select the required incoming call route.
4. Select the **Voice Recording** tab.



Recording Inbound: Mandatory

Record Time profile: <None>

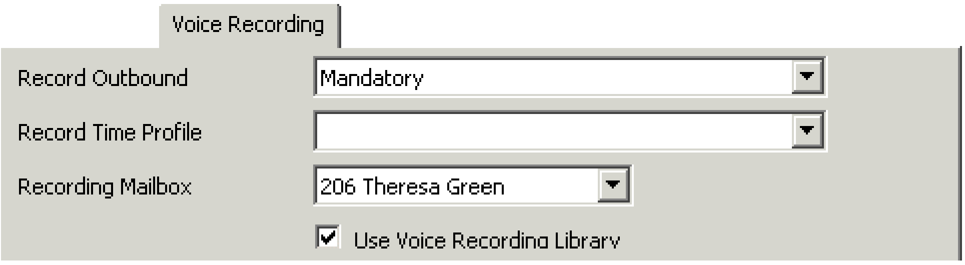
Recording Mailbox: 206 Theresa Green

☐ Voice Recording Library

5. From the **Record Inbound** drop-down lists select the recording frequency required.
   - **None:** Do not record.
   - **On:** Record all calls if possible.
   - **Mandatory:** Record all calls. If recording is not possible, return busy tone to the caller.
   - **xx%:** Record calls at intervals matching the set percentage, eg. for every other call for ***50%***.
6. For inbound calls, recording will not take place if the call also goes to normal voicemail.
7. Select the **Recording Time Profile** is required. If not set, recording is applied at all times.
8. Specify the destination for the recordings or select the option to place the recordings in the voice recording library.
9. The **Voice Recording Library** options can be used only if a VRL application has been installed and licensed. For more information, see Voice Recording Library 260.
10. Click **OK**.
11. Click to send the configuration back to the IP Office.

To set automatic call recording for an outgoing account call:

1. Open IP Office Manager and load the configuration from IP Office.
2. In the Navigation pane, click **Account Code**.
3. Select the required account code.
4. Select the **Voice Recording** tab.



Voice Recording

Record Outbound: Mandatory

Record Time Profile:

Recording Mailbox: 206 Theresa Green

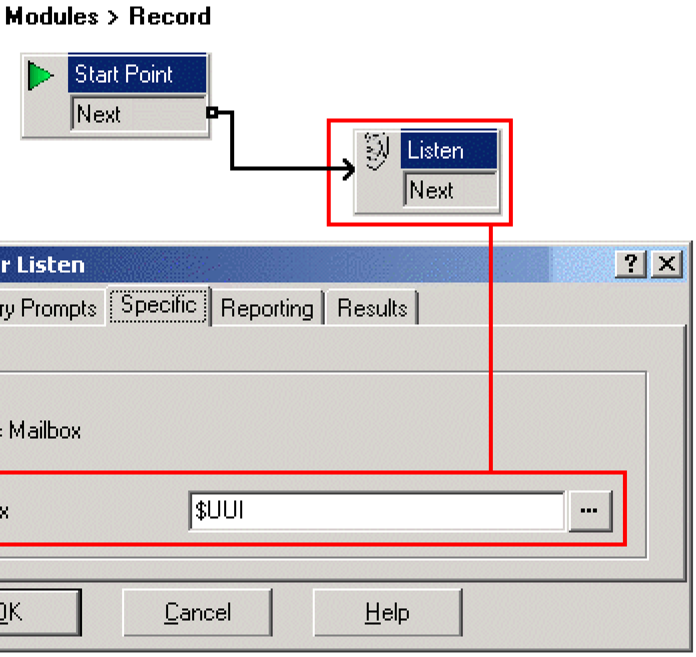
☑ Use Voice Recording Library

5. From the **Record Outbound** drop-down lists select the recording frequency required.
   - **None:** Do not record.
   - **On:** Record all calls if possible.
   - **Mandatory:** Record all calls. If recording is not possible, return busy tone to the caller.
   - **xx%:** Record calls at intervals matching the set percentage, eg. for every other call for ***50%***.
6. For inbound calls, recording will not take place if the call also goes to normal voicemail.
7. Select the **Recording Time Profile** is required. If not set, recording is applied at all times.
8. The **Recording Mailbox** option is available for IP Office 4.1+. For previous releases the destination is always the mailbox of the user making the call.
9. Select the option to place the recordings in the voice recording library.
   - The **Voice Recording Library** options can be used only if a VRL application has been installed and licensed. For more information, see Voice Recording Library 260.
10. Click **OK**.

7.4.5.2 Customizing Auto Recording

Normally auto-recording is performed by the Voicemail Pro server as a default task. However, a module named **AutoRecord** can be used to customize the operation of auto-recording. If an **AutoRecord** module is created, it overrides the default auto-record operation.

Whenever auto recording is triggered, ***$UUI*** contains either the account code, user name or hunt group name that triggered the auto recording.



○ Caller's Mailbox

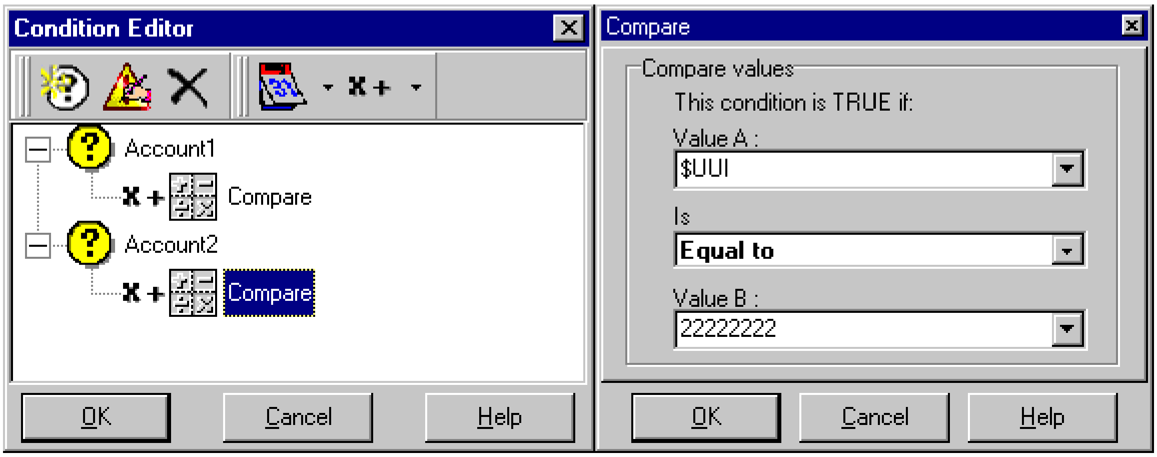
● Mailbox: $UUI

The value of condition ***Account1*** is checked using a **Test Condition** action.

If found ***True***, the call is recorded using a **Listen** action, which specifies the mailbox for the recording.

If found ***False***, the next condition test is tried.

The conditions, created within the **Condition Editor**, compare the variable ***$UUI*** against possible account code values.



Compare values

This condition is TRUE if:

Value A : $UUI

Is: Equal to

Value B : 22222222

The final **Listen** action, used if none of the condition tests are True, has its Mailbox set to ***$UUI***. If ***$UUI*** hasn't matched any account code being used for auto recording, then its value will be either the user name or hunt group name that triggered the auto recording.

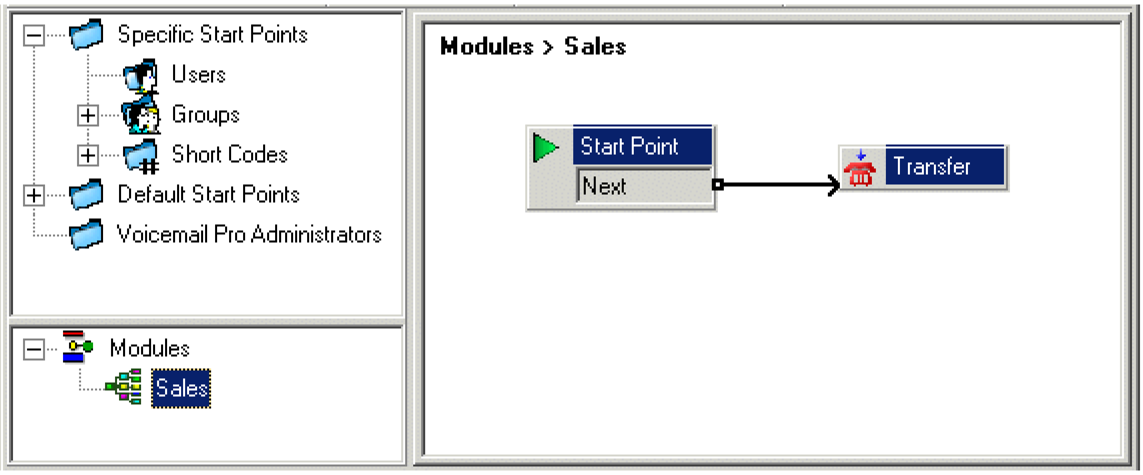
7.5 Announcements

Announcements can be played when:

- **Callers are waiting to be answered or queued against a hunt group**
  With Voicemail Pro, the announcements and actions provided to a caller held in a group's queue can be customized using the Queued and Still Queued start points for that group. The call can be answered at any stage of the announcement. See Configuring Announcements 252.
- **Calls are going to be recorded**
  In many locations, it is a local or national requirement to warn those involved in a call that they are being recorded. See Call Recording Warning 259.
- **Calls are received**
  A call flow containing an announcement can be created so that all callers hear a mandatory announcement. The announcement is played before the call is answered. See Mandatory Announcement Example 271.
- **Calls are queuing against an user's extension**
  User's can configure their personal announcements. When the user's extension is busy any new calls are held in a queue against the busy extension until the No Answer Time is reached. The caller will hear the user's personal announcement before being transferred to voicemail, if available. See Personal Announcements 272.

7.5.1 Mandatory Announcement Example

The screen below shows an example of a call flow that plays an announcement to any caller to the sales hunt group. Callers entering at this start point can not bypass the announcement.



The Entry Prompt of the transfer action contains the announcement. After the announcement is played the caller is transferred to the sales hunt group as specified in the Specific tab. See Transfer Action 199.

Once the call flow has been created, IP Office needs to be configured so that callers are transferred to the call flow.

In IP Office Manager the destination for the incoming call route is entered as **VM:Sales**. The incoming call route targets the voicemail module 'Sales'. As the call flow module name is the same as the hunt group name, if voicemail is unavailable the call will automatically be routed to the hunt group. The calls will not be lost but the callers will not have heard the announcement.

If calls are required to only be answered after they have heard the announcement, make sure that the call flow module name is different from the hunt group name. If voicemail is unavailable the call will not be transferred to the target hunt group.

7.5.2 Personal Announcements

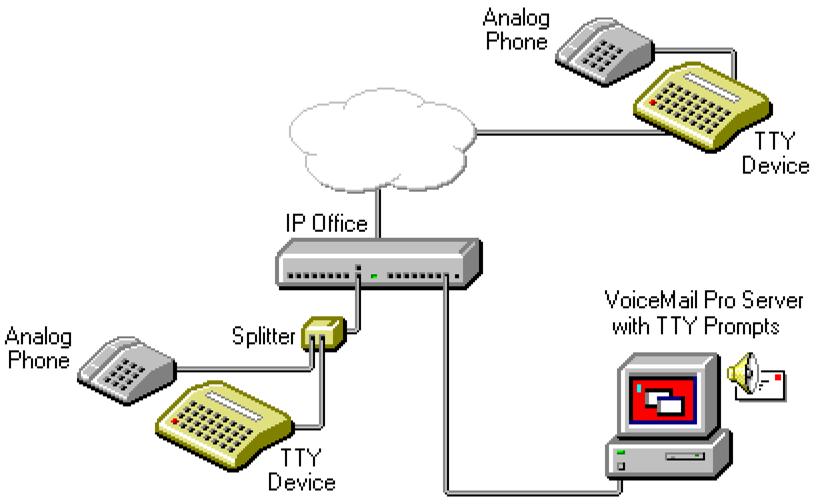
Voicemail Pro 4.0+ supports personal announcements that are played when a caller is queuing against a user's extension number. A call will be held in a queue when the user's extension is busy before passing to voicemail, if voicemail is available. Personal announcements are enabled in the same way as hunt group announcements 252, but using the **User | Announcements** tab in IP Office Manager.

- If the user requires announcements only, voicemail should be turned off for the user.
    - Start points can be amended to include other actions. Voicemail Pro 4.0+ allows personal announcements to be customized using user **Queued** and **Still Queued** start points in the same ways as customizing hunt group announcements 254. For example, a menu action could be added to the **Still Queued** start point giving users the option to continue to hold for the caller or to transfer to reception.
- If voicemail is on the announcements are played until the **No Answer Time** is reached. The caller is then transferred to the user's voicemail. The system default setting for **No Answer Time** is 15 seconds, however it can be set for individual users.

7.6 Support for Callers with Impaired Hearing

TTY is a method of sending and receiving text messages within the speech path of telephone calls. The text is entered and displayed through a TTY device, such as a text phone, connected in parallel with the user's normal telephone. Due to its widespread usage and support it has become the standard used by devices for the users with impaired hearing or vision.

Voicemail Pro 1.4 and higher supports the addition of TTY prompts for leaving messages in and collecting messages from Intuity mode mailboxes. Callers with a TTY device can see the TTY prompts and leave TTY format messages. The mailbox user, also with a TTY device, can collect and display those messages by following the prompts that are displayed on the TTY device.



The TTY device and associated analog telephone (linked either by a pass-through port on the TTY device or a telephone splitter) are connected to an analog extension port (POT) on the IP Office system. During calls the TTY can be used to display and send TTY messages. The analog telephone can be used to send dialing digits and provide a speech path during calls.

7.6.1 Installing Voicemail Pro TTY Prompts

You can select TTY prompts from the list of language options when you install Voicemail Pro. See Installation Overview 18. When the prompts have been installed, the user settings must be configured so that the IP Office recognizes the TTY device.

There are two ways to configure a user so that they can use a TTY device with Voicemail Pro.

1. The simplest method is to change the user locale in IP Office Manager. This method requires no customization of a user's mailbox. See Changing User Locale 274 or refer to the IP Office Manager help or User Guide.
2. An alternative to changing the user locale to TTY is to change the language setting in the Voicemail Pro call flows for the user who needs TTY prompts. See Changing the Language Setting for a Text Phone 275.

7.6.2 Changing User Locale

The locale setting *tty* is not actually recognized by IP Office Manager. Therefore all aspects of a user's telephony operation on the IP Office will default to the system's locale setting (System > System > Locale). However, the user locale setting is transferred to the Voicemail Pro server during mailbox access and so will affect the prompts that are provided.

To change the user locale:

1. Open IP Office Manager.
2. In the Navigation pane, click 👤 **User** and select the individual user.
3. Select the **User** tab.
4. Select the option **Teletype (Textphone)** in the **Locale** field.
5. Click **OK**.
6. Click 💾 to merge the configuration change back to the IP Office.

7.6.3 Advice for Mailbox Owners Using a TTY Device

To log into their mailbox with a TTY device, such as a text phone, mailbox owners must dial *17 and then take the analog telephone handset off hook.

When they are connected, users see prompts on the display of the text phone.

For requests such as "Press 1 for …" users should dial from the keypad of the telephone. For messages followed by ***GA*** (go ahead) users are required to type text using their text device.

For more information, refer to the document "User Guide for Audix TTY Interface" (555-300-710).

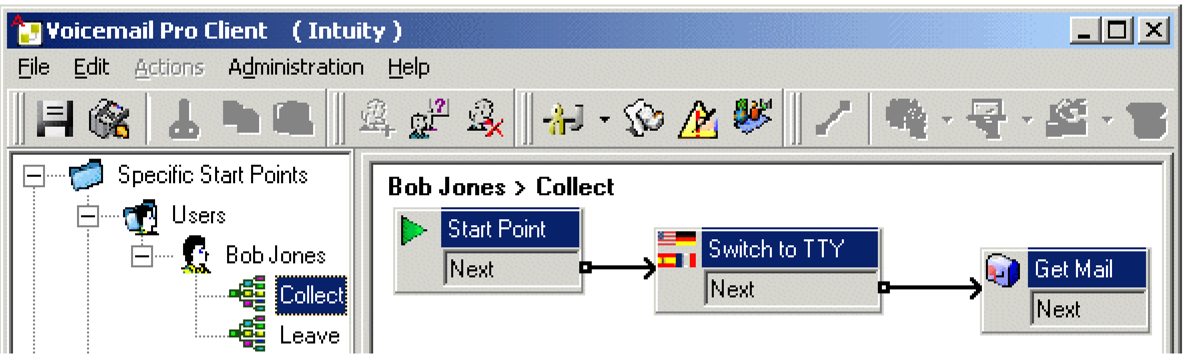
7.6.4 Changing the Language Setting for a TTY Device

An alternative to setting the user locale as TTY is to change the user's language setting in the Voicemail Pro call flows for that user. Here are two examples.

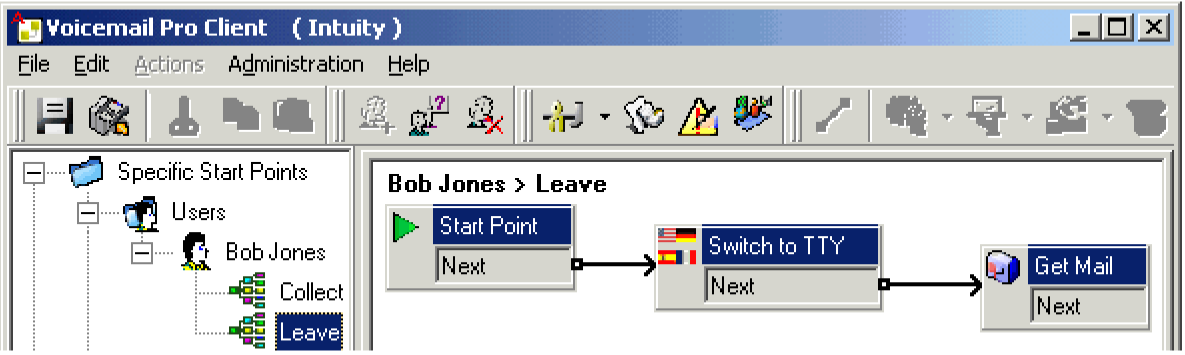
An Example of Customizing a Simple Mailbox Call Flow

The **Select System Prompt Language** action can be used to change the prompt language used by subsequent actions in a call flow. Once the TTY Maintenance Patch has been installed, TTY is one of the selectable languages provided by the action.

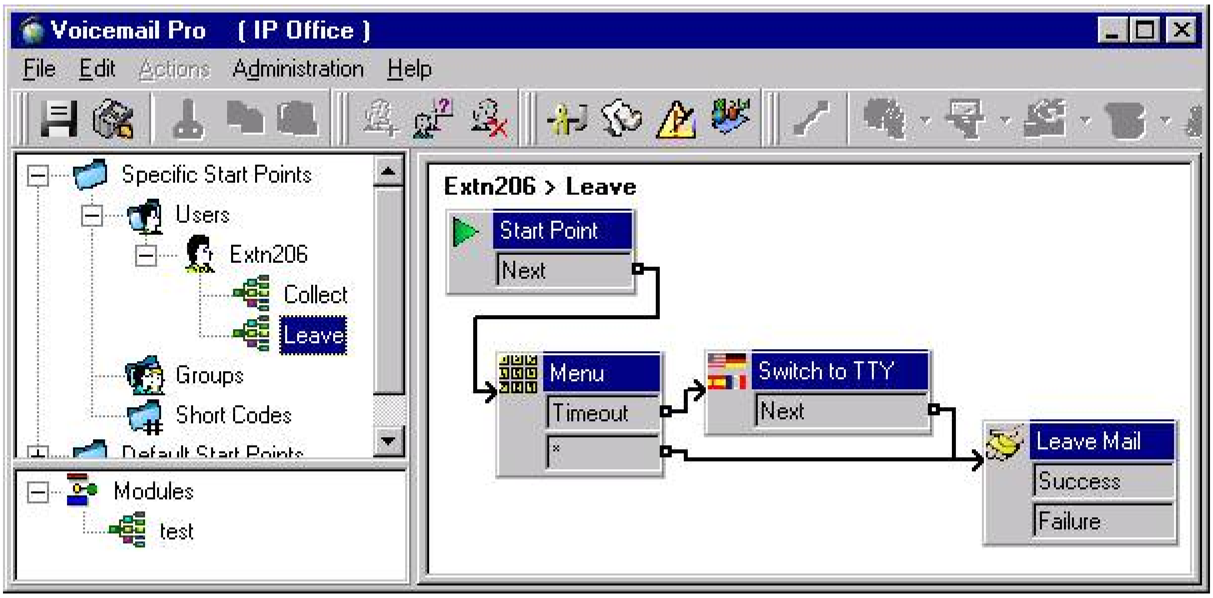
In the simplest form, a **Select System Prompt Language** action set to ***TTY (Teletype (Textphone))*** would be added to the user's **Collect** start point and followed by a **Get Mail** action.



Similarly, a **Select System Prompt Language** action set to ***TTY (Teletype (Textphone))***, would be added to the user's **Leave** start point and followed by a **Leave Mail** action.



An Example of Customizing a Complex Mailbox Call Flow
If required, more complex call flows can be configured. For example, the call flow below allows callers to press * to receive spoken language prompts or to wait a few seconds for the timeout and then receive TTY prompts.



In this case, messages are left in the same mailbox, but callers can select to have spoken prompts or default to TTY prompts.

For hearing impaired users who cannot handle spoken messages, the call flow for callers who select spoken prompts could have place those messages into an alternate mailbox of a hearing user. These could then be collected and transcribed for the user.

7.7 Changing Language

Voicemail Pro can be used in a wide range of languages. For external callers, the Voicemail Pro tries to match the **Locale** setting of the IP Office system. For internal callers, if they have a different user locale in their user setting, VoicemailProtries to match that language.

With centralized Voicemail Pro, the default locale is that of the central IP Office. If users on the remote IP Office want different language prompts, each of their user locales must be changed separately.

If prompts for a required language are not installed, Voicemail Pro has a set of rules that it follows to find the best alternate language. For example if prompts are not available for users with their locale set to French Canadian, Voicemail Pro looks for French prompts instead. If French prompts are not installed, it looks for English US and finally English UK. See Supported Languages 15.

The language played to a caller can be changed during a call. This is achieved using a **Select System Prompt** action. See Changing the Language of System Prompts 279.

7.7.1 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	WAV Folder	Fallback Selection	TTS 5.0
Brazilian Portuguese	ptb	> pt > en.	✓
Chinese (Cantonese)	zzh	> en > enu.	✓
Chinese (Madarin)	ch	> en > enu.	✓
Danish	da	> en.	✓
Dutch	nl	> en.	✓
English UK	en	en.	✓
English US	enu	> en.	✓
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.	✓
Korean:	ko	> en.	✓
Latin Spanish	eso	> es > enu > en.	✓
Norwegian	no	> en.	✓
Polish	pl	> en.	✓
Portuguese	pt	> ptb > en.	✓
Russian	ru	> en.	✓
Spanish	es	> eso > en.	✓
Swedish	sv	> en.	✓

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 for 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.
System Locale	If no user or incoming call route locale is set system locale is used unless overridden by a short code locale.
Incoming Call Route Locale	The incoming call route locale, if set, is used if 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 table of languages above 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** 193 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. See Support for Callers with Impaired Hearing 273.

7.7.2 Changing the Language of System Prompts

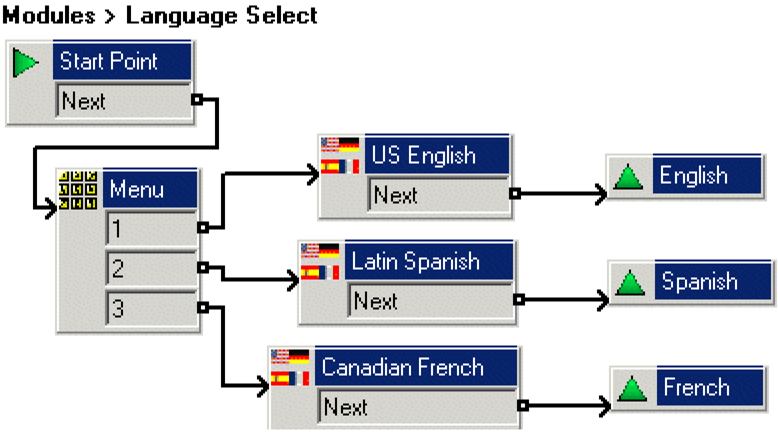
With the **Select System Prompt** action you can change the language that is used in a call flow from that of the IP Office system or the mailbox user's locale.

A step by step example that illustrates how to use the **Select System Prompt** action is provided here.

- The **Select System Prompt** action changes the default language prompts but not any custom prompts. To change the custom prompts you need to use the $LOC variable in the path to the custom prompt files. See Changing the Language of Custom Prompts 280.

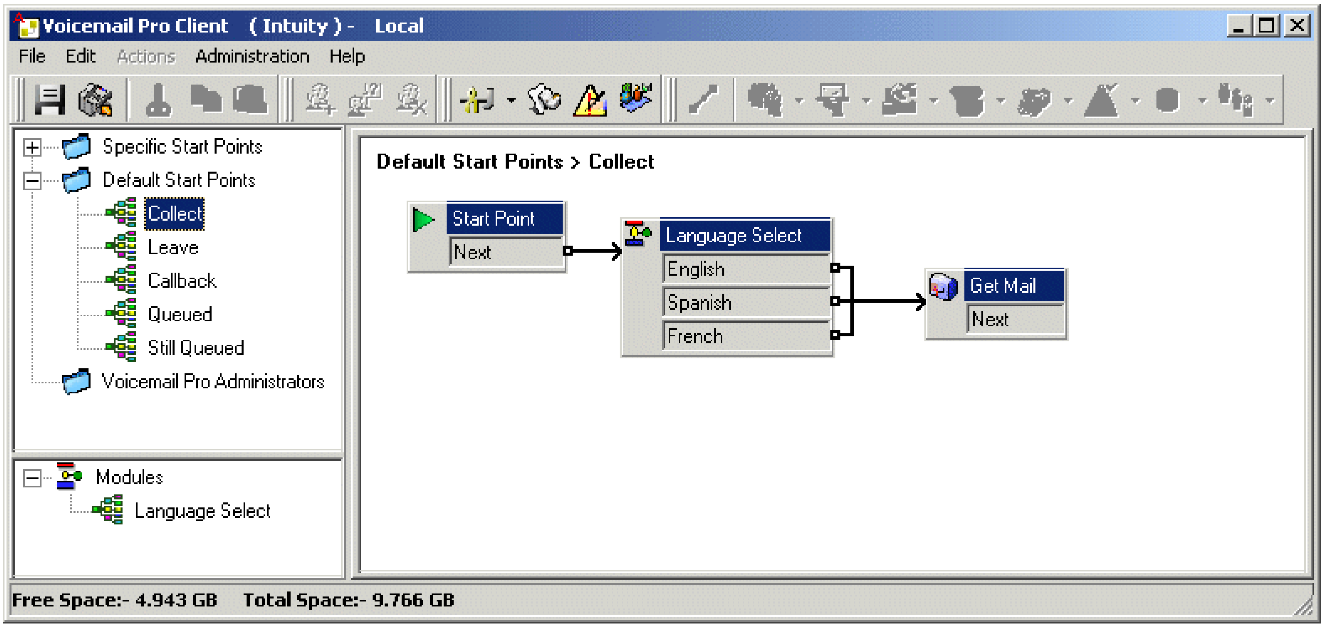
Example
In a small hotel, Voicemail Pro is providing mailboxes for rooms. To assist the room users, we want to start message collection by letting them indicate their preferred language for Voicemail Prompts.

1. First a module for language selection was created.



   The module contains a Menu action with a Select System Prompt action set to the required language for each key press.
   - For the Menu action an Entry Prompt was recorded asking the user to indicate their language choice; "Press 1 for English, 2 por Español, 3 pour Français".
   - The Select System Prompt actions were all connected Module Return actions.

2. Next the default start point for message collection was altered. The **Language Select** module and a **Get Mail** action were inserted.



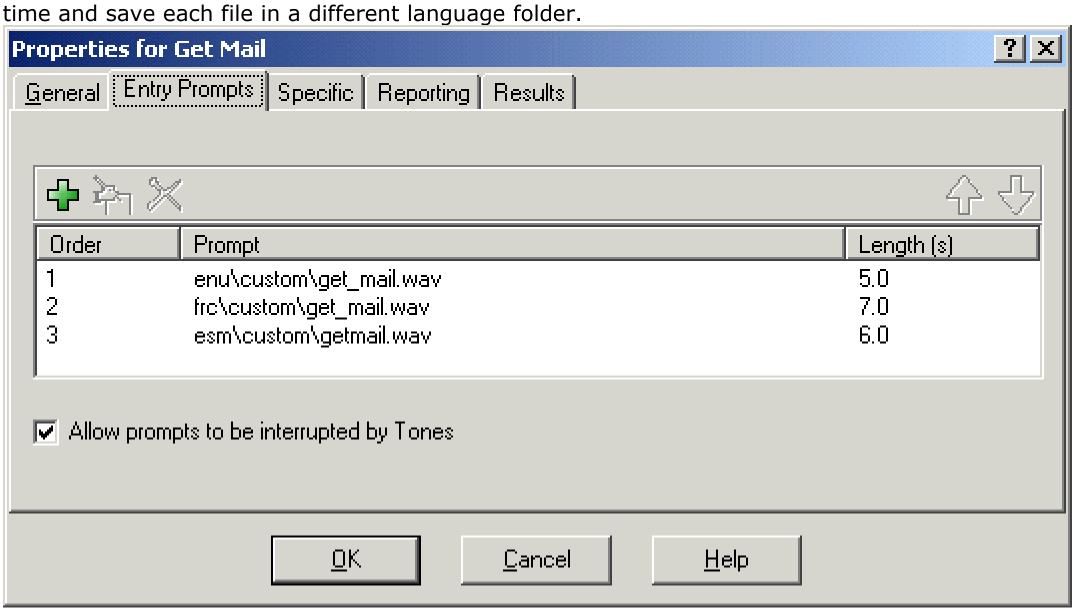
3. The actions for language selection could have been inserted directly into the call flow. However, by doing it as a module the language selection process can be reused in other start points.

7.7.3 Changing the Language of Custom Prompts

Instead of using multiple return points from a Language Select module (one for each language) and linking to separate Get Mail actions (each with an Entry Prompt in the required) language, you can use a single Get Mail action.

To change the language of custom prompts:

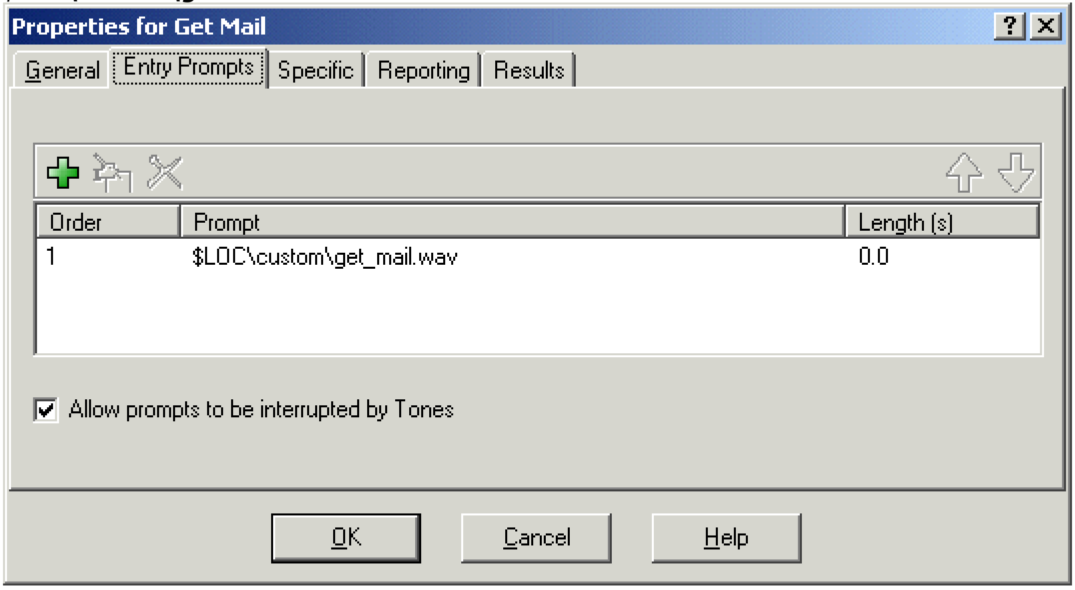
1. Through the **Get Mail** action's properties, record an **Entry Prompt** for US English users and save it as ***enu\custom\getmail.wav***.
2. Record a similar prompt for French Canadian users and Latin Spanish users. You need to use the same file name each time and save each file in a different language folder.



Order	Prompt	Length (s)
1	enu\custom\get_mail.wav	5.0
2	frc\custom\get_mail.wav	7.0
3	esm\custom\getmail.wav	6.0

☑ Allow prompts to be interrupted by Tones

3. Delete all except one of the entry prompt entries. That this does not delete any of the recorded prompts.
4. For the remaining entries, change the file path by inserting ***$LOC*** in place of the language folder name, for example ***$LOC\custom\getmail.wav***.



Order	Prompt	Length (s)
1	$LOC\custom\get_mail.wav	0.0

☑ Allow prompts to be interrupted by Tones

7.8 Mobile Twinning

Mobile Twinning is a licensed feature. If Mobile Twinning is enabled in IP Office, a user can send internal and external calls to an external number, for example, their mobile telephone.

- Both the internal and external telephones ring when a call is received. The call can be answered from either telephone.
- If the feature Do Not Disturb (DND) is active for the user, any callers to the internal extension number will hear the busy tone and the external telephone will not ring. If a caller is entered in to the DND exception list, for example using the application Phone Manager, only the internal telephone will ring.
- If any of the forward options are active, both the external and the telephone where the calls are forwarded to will ring.
- If the Follow Me option is active, only the telephone that the calls are forwarded to will ring. The external telephone number will not ring.

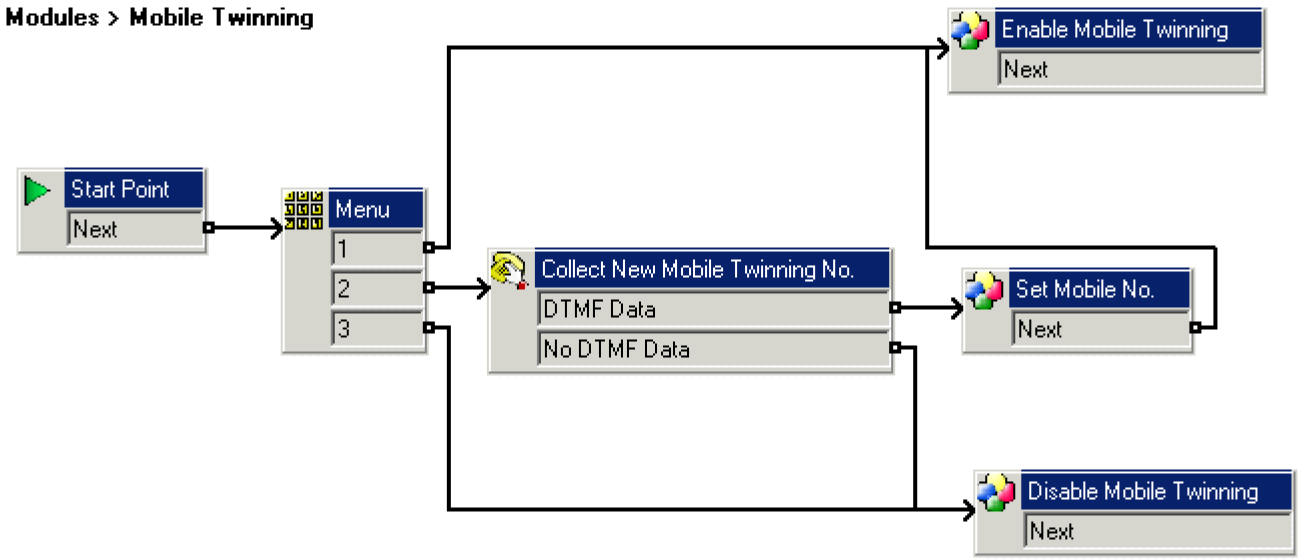
Within Voicemail Pro you can administer the mobile twinning features using call flows. Mobile twinning can be turned on or of and the external twinning number entered.

In a call flow the Generic action is used to control Mobile twinning. Within the Generic action details are entered in the specific tab. In the generic 'free format' field, the following syntax can be added.

- **CFG:Set MattR twinning_type Mobile**
  Used to turn the Mobile twinning on for the named extension ***MattR***. The extension number can be entered instead of the named extension. If mobile twinning has been previously used and then turned off, the previous mobile twinning number will become active.
- **CFG:Set MattR twinning_type Internal**
  Used to turn the Mobile twinning off for ***MattR***.
- **CFG:Set MattR mobile_twinning_number $KEY**
  Used to set the mobile twinning number.

7.8.1 Example Call Flow

This example creates a Voicemail Pro module that allows a user to turn Mobile Twinning on or off. They can also set their mobile number. The example sets the mobile twinning for extension 203.



To create the example call flow:

1. Create a new module called **Mobile Twinning**.
2. Add a menu action with the menu options 1,2 and 3. Add a prompt to tell the caller the options available.
3. The option to turn mobile twinning on needs to be added.
    - Click the **Basic Actions** icon and select **Generic**.
    - Change the token name to **Enable Mobile Twinning**.
    - Click the **Specific** tab.
    - Enter the command **CFG:Set 203 twinning_type Mobile**.
    - Click **OK**.
4. The option to turn mobile twinning off needs to be added.
    - Click the **Basic Actions** icon and select **Generic**.
    - Change the token name to **Disable Mobile Twinning**.
    - Click the **Specific** tab.
    - Enter the command **CFG:Set 203 twinning_type Internal**.
    - Click **OK**.
5. The ability to enter the mobile number needs to be added.
    - Click the **Telephony Actions** icon and select **Alphanumeric Collection**.
    - Change the token name to **Collect New Mobile Twinning No**.
    - Record an Entry Prompt to tell the user to enter their mobile twinning number.
    - Click **OK**.
6. An action needs to be added to set the mobile number.
    - Click the **Basic Actions** icon and select **Generic**.
    - Change the token name to **Set Mobile No**.
    - Click the **specific** tab.
    - Enter the command **CFG:Set 203 mobile_twinning_number_$KEY**.
    - Click **OK**.
7. The actions need to be connected and then the changes need to be made permanent.

Create a short code to test the call flow.

1. In IP Office Manager, add the following short code. This example uses ***90** but any short code can be used.

Field	Contains...
Code	*90
Feature	Voicemail Collect
Telephone Number	"Mobile Twinning"
Line Group ID	0
Locale	[leave blank]
Force Account Code	[leave blank]

2. Save and merge the configuration to the IP Office unit.
3. Test the short code by dialing ***90** from extension 203.
   - Press **1** to turn mobile twinning on for extension 203.
   - Press **2** to enter a new mobile twinning number for extension 203.
   - Press **3** to turn mobile twining off for extension 203.

7.9 Remote Voicemail Notification

A user can be set up to receive notification of new voicemail messages when they are away from their main extension. There are two ways that notification can be implemented.

- **Voicemail Callback** 285
  A service whereby the Voicemail Pro calls a specified number whenever the user receives a new voicemail message. Callback requires a callback start point to be created in Voicemail Pro and a callback number entered in IP Office Manager.
- **Voicemail Outcalling** 287
  A service where voicemail notification can be configured to specific external numbers and the notification escalated if the message is not listened to. Outcalling can be configured by any user of voicemail in Intuity mode.

Note

- Both the Callback and Outcalling features are separate from voicemail ringback. Ringback alerts the user's own extension whilst Callback and Outcalling will provide voicemail notification to an external location, for example a mobile telephone or pager.

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 cal 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 115 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.

7.9.1 Callback

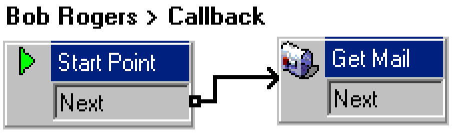
Voicemail callback is a service whereby the Voicemail Pro calls a specified number whenever the user receives a new voicemail message. When the callback is answered, the system announces the outbound alert and waits for a key press for confirmation before continuing with the associated call flow.

This service requires configuration of a callback start point in Voicemail Pro and entry of a callback number through IP Office Manager. See Using a Play Configuration Menu Action 286.

The call flow created below is a very simple example. In practice you could include a menu that allows the user access to other features. For example access to a Play Configuration Menu action would allow the user to remotely change various mailbox settings including their callback number.

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 cal 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 115 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.



To set up the callback:

1. Under **Specific Start Points**, right-click **Users** and select **Add**.
2. In the **Name** field, enter the user's mailbox name. Select the **Callback** entry point and select **OK**.
3. Within select **Callback**.
4. Add a **Get Mail** action and under the **Specific** tab, in **Mailbox** enter the user's name again or extension number.
   - **Important**

     Record an entry prompt for the first action in the callback call flow. Experience with connection to some cell phone systems has revealed that this entry prompt may need to be up to 20 seconds in length.
5. Connect the **Start Point** and the **Get Mail** action.
6. Click **Save and Make Live** and select **Yes**.

The Default Callback Start Point
In the example above a callback call flow was created for an individual users. The **Default Callback** start point can be used to create a default callback call flow for all users.

If the Default Callback start point is used, it must be designed so that users have to indicate which mailbox they are accessing. In the simple call flow used above, this can be done by entering **?** in the **Mailbox** field of the **Get Mail** action.

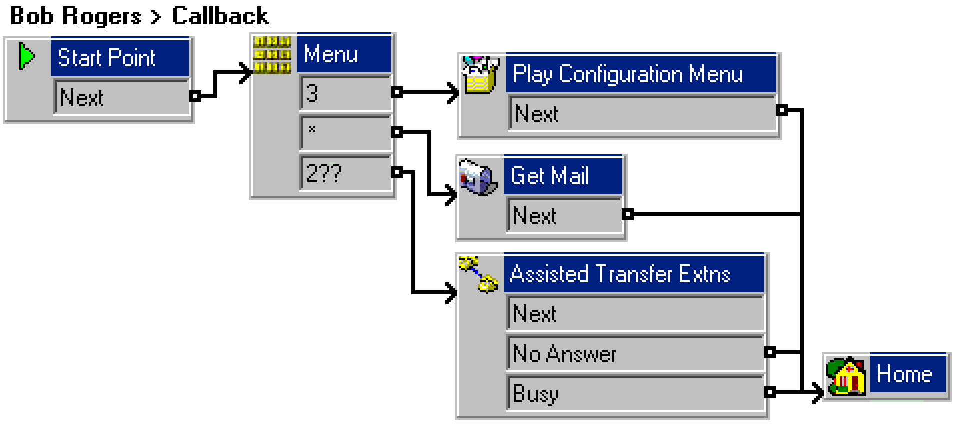
The callback number is initially set through IP Office Manager.

To set the user's callback number:

1. In IP Office Manager, open the system's configuration.
2. Click **User** to display a list of existing users.
3. Double-click the user for whom callback is being set up.
4. Select the **Voicemail** tab.
   - In **Voicemail Code**, enter a pin code and confirm this in **Confirm Voicemail Code**.
5. Select the **Source Numbers** tab. Right-click and select add to add a new number.
   - **Callback Number**
     Enter ***P*** followed by the destination telephone number. If you system requires an external dialing then that prefix must be included, for example ***P901923555456***. If connecting to a cell phone or pager system that expects digits in separate sets, use , (comma) characters to add pauses to the telephone number dialing.
   - **Trusted Source**
     If calls from the callback number include ICLID, you can set that number as a trusted source. In that case no request for the user's voicemail code is made following the callback. Enter V followed by the CLI displayed on calls from the callback number, for example ***V01923555456***.
6. Click **OK**.
7. Click to send the configuration back to the IP Office. If the only changes made were to user settings, select **Merge Config**.

7.9.1.1 Using a Play Configuration Menu Action

The callback call flow below is more advanced than the previous example. It allows the user to check messages, transfer themselves to another extension and to alter several aspects of their mailbox configuration.



Of main interest to a callback user is the Play Configuration Menu action. This action allows the remote user to alter their extensions forwarding and voicemail operation. Option 9 in the menu played to the caller allows them to change the callback number.
To exit a **Get Mail** or **Play Configuration Menu** action and follow the call flow to the next action, the user should press 0 (not supported for **Get Mail** in Intuity mode).

7.9.2 Outcalling

The Outcalling feature is only available when using Voicemail Pro 4.0+ in Intuity mode.

Voicemail Pro can be configured to send notification that a new message has been received in a user's mailbox. It will call a specified number and when answered, will prompt the user *"This is IP Office. <your name>, you have new messages. To access your messages, please enter your extension number and press hash. To avoid further notification of these messages, press * #"*. If any other action is taken then the outcalling notification attempt is treated as unanswered.

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 cal 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 115 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.
- For IP Office 4.2+, users with Phone Manager Pro 4.2+ can configure their outcalling through Phone Manager's graphical interface rather than having to use the mailbox voice prompts.

Retries
If an outcalling notification attempt is not answered, the voicemail server can make another attempt. The number of retries, up to 10, and the delay after a failed notification attempt can use either system default or the users own defined settings.

Destinations
The mailbox user can define up to 5 destination numbers to be used with outcalling. The destinations must include any external dialing prefixes required for the IP Office system. For each destination a ring time can also be defined (default 15 seconds) after which the voicemail server disconnects the call.

- **Desk.**
- **Home.**
- **Mobile.**
- **Delegate** (called **Secretary** in some locales.
- **Other.**

Escalation List
The user can choose to use an escalation list, which combines several of their destinations into a sequence that will be tried as part of a single outcalling notification attempt. Up to 9 destinations can be included in the list and the same destination can be used more than once. Use of the escalation list counts as a single outcalling notification attempt.

- For Voicemail Pro 4.2+, users using Phone Manager 4.2+ can specify a delay to be used between the call to each destination in their escalation list.

Configuration Methods

- **System Settings** 95
  The Voicemail Pro can be configured with a set of default times for when outcalling is used, the number of retries for outcalling notification and the interval after a failed notification attempt before the next retry.
- **User Mailbox Settings**
  Mailbox owners can configure their outcalling options using their telephone, for example, entering the destination telephone numbers. Details on how to configure outcalling for individuals can be found in the Intuity Mailbox guide.
- **Phone Manager Control**
  For Voicemail Pro 4.2+, users with Phone Manager 4.2+ can configure their own outcalling settings using Phone Manager. This includes setting their own number of retries and the interval before any subsequent retry. When using an escalation list, this interface also allows the user to set a delay to be used between each number in the escalation list.

7.9.2.1 Setting the Outcalling Preferences

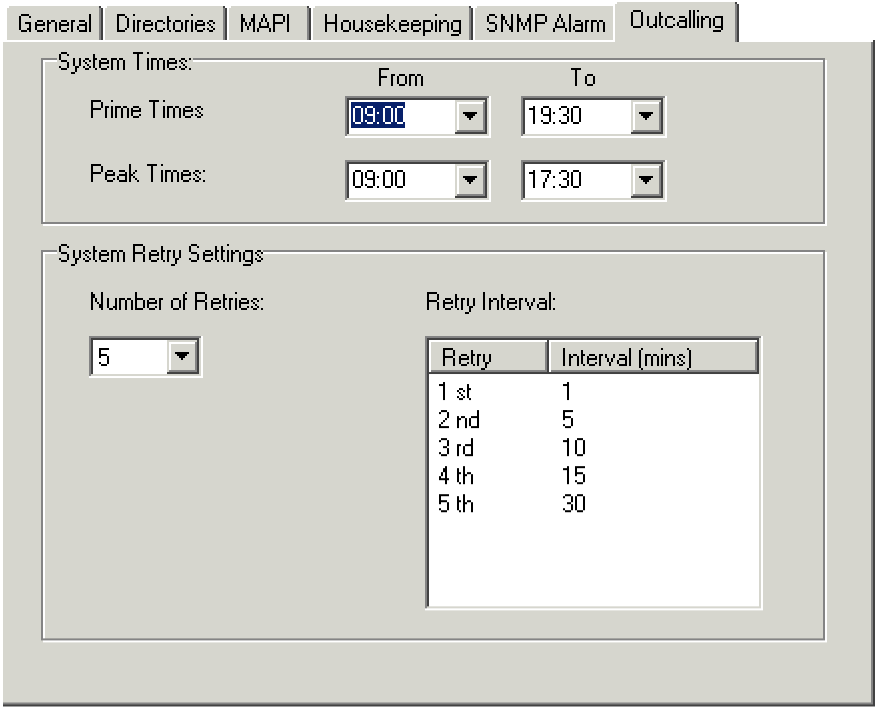
The outcalling preferences in Voicemail Pro are defaults for global operation. Mailbox owners can configure their own outcalling options from their telephone, for example, create their own time profile.

Details on how users can configure outcalling are found in the Intuity Mailbox guide and Phone Manager User Guide.

A timeout value can also be set by a user. This is how long outcalling will attempt to call 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.



System Times:

	From	To
Prime Times	09:00	19:30
Peak Times:	09:00	17:30

System Retry Settings

Number of Retries: 5

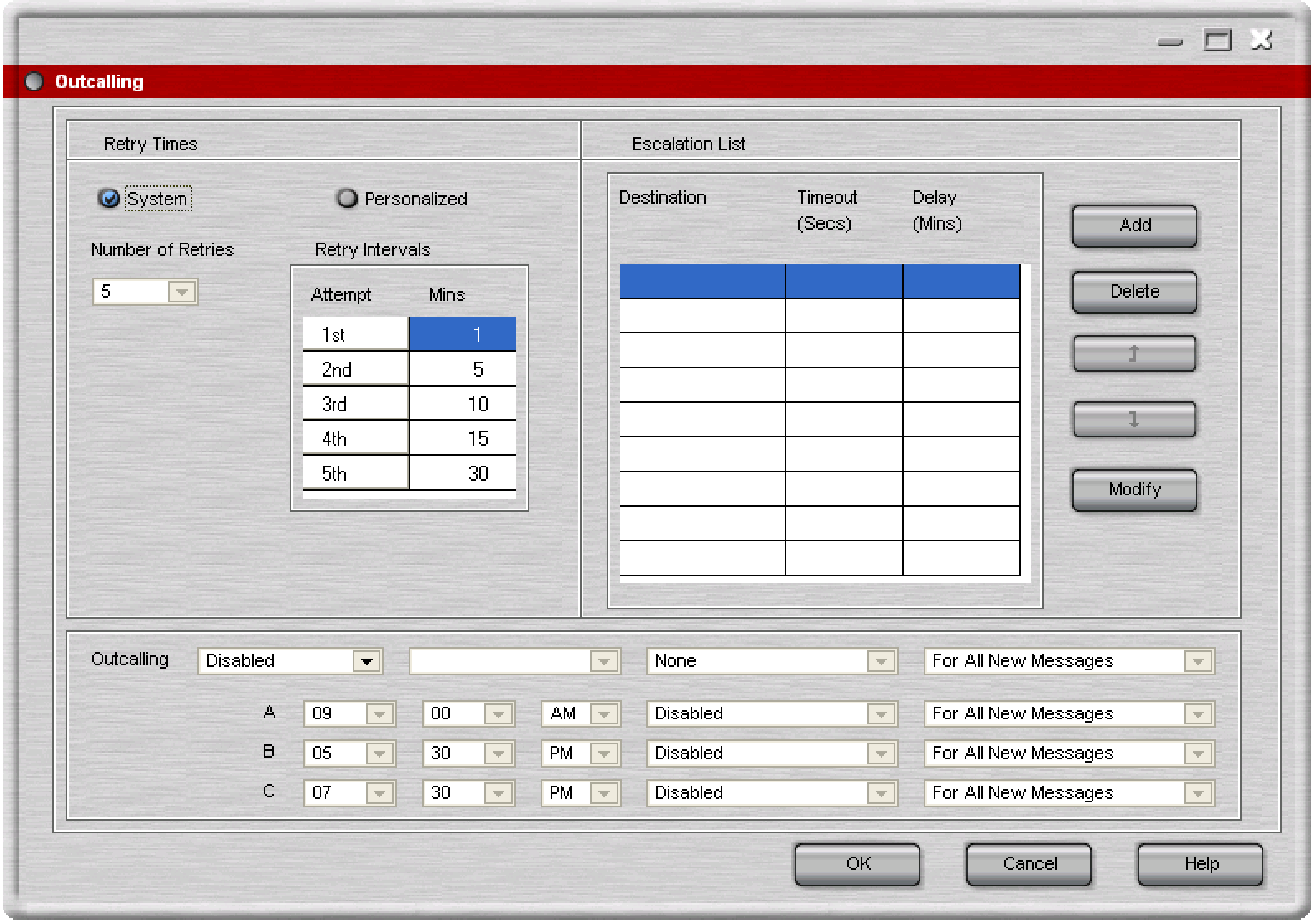
Retry Interval:

Retry	Interval (mins)
1 st	1
2 nd	5
3 rd	10
4 th	15
5 th	30

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 retry attempt. The interval is the length of time between each attempt to ring to targeted 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**.

7.9.2.2 Phone Manager Outcalling

Users with Phone Manager Pro can access their outcalling settings using this application. For full details refer to the Phone Manager User Guide.



● System ○ Personalized

Number of Retries: 5

Retry Intervals

Attempt	Mins
1st	1
2nd	5
3rd	10
4th	15
5th	30

Destination	Timeout (Secs)	Delay (Mins)

Outcalling	Disabled			None	For All New Messages
A	09	00	AM	Disabled	For All New Messages
B	05	30	PM	Disabled	For All New Messages
C	07	30	PM	Disabled	For All New Messages

7.10 Personal Distribution Lists

Personal distribution lists (also known as mailing lists) are available to mailbox users when the system is in Intuity mode.

Each mailbox can accommodate up to 20 lists. Each list can contain up to 360 mailbox numbers. Lists can then be used or forwarding or sending messages from the mailbox.

Each list can be marked as private or public. Public lists can be used by other mailbox users when forwarding or sending messages. A user can also import the contents of a public list into one of their own lists.

If Voicemail Pro Networked Messaging (VPNM) is installed, lists can include mailboxes on remote systems. The only difference in presentation is that, where the mailbox user name is used to identify local mailboxes in a list, remote mailboxes are listed by number only.

Lists are maintained either through the mailbox or through Phone Manager Pro version 3.0 or higher. Lists cannot be viewed or controlled from the Voicemail Pro Client. For more information about mailing lists, mailbox owners can refer to the Intuity Mailbox User Guide.

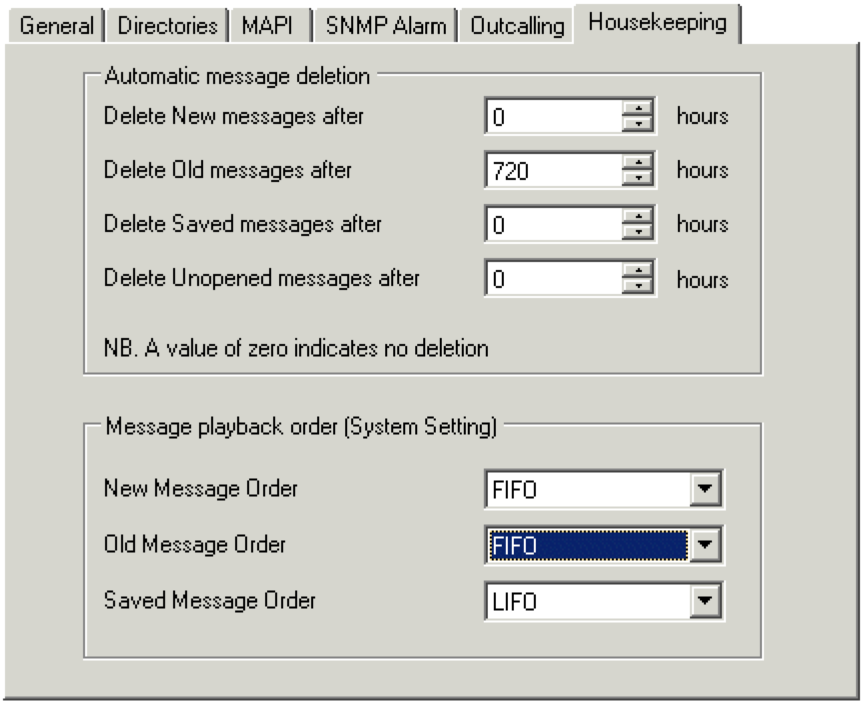
7.11 Automatic Message Deletion

Messages are automatically deleted from the voicemail server after a set delay. This delay can be adjusted for different message type including unread messages.

The process of housekeeping is performed after any two hour idle period, that is a period with no call into or from the voicemail server.

To set housekeeping rules:

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



Automatic message deletion

Delete New messages after 0 hours

Delete Old messages after 720 hours

Delete Saved messages after 0 hours

Delete Unopened messages after 0 hours

NB. A value of zero indicates no deletion

Message playback order (System Setting)

New Message Order FIFO

Old Message Order FIFO

Saved Message Order LIFO

- 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.

3. **Automatic message deletion**
   Sets the time, in hours, after which messages of various types automatically deleted. A value of ***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. **Message playback order (System Setting)**
   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.
5. Click **OK**.
6. Click **Save and Make Live** and select **Yes**.

7.12 Using Voicemail to Give Error Messages

Voicemail can be used to give out messages when certain numbers are dialed. For example, if users are barred from making international calls, rather than giving users the busy tone a recording similar to "International calls are not permitted" could be played instead.

To create an International Calls are not Permitted error message:

1. In IP Office Manager create a virtual user. Complete the User tab with the following details:
   - **Name**: Barred.
   - **Full Name**: Internal Calls Error Message.
   - **Extension:** 403.
2. You need access to the virtual user's extension from any telephone extension attached to the system. A voicemail code needs to be added.
   - Select the user **Barred**.
   - Click the **Voicemail** tab.
   - Add a **Voicemail Code**.
   - Click **OK.**
3. Add a short code to access the virtual user's voicemail.
   - **Code:** *95
   - **Feature:** Voicemail Collect
   - **Telephone Number:** "?Barred" *(include quote marks)*
   - **Line Group ID:** 0
4. Save the configuration file.
5. You can now use the virtual user's voicemail to record a greeting message stating that international calls are not permitted.
   - Dial *95 from any telephone connected to the system.
   - Enter the extension number **403**.
   - Enter the voicemail access code. The first time you enter the mailbox for extension 403 you will be asked to change the password and record a user name.
   - Press **3** to record a greeting.
   - Press **1** to change the message.
   - Press **1** to record greeting 1.
   - Speak the new message. In this case it would be similar to "International calls are not permitted"
   - Press **#** to end the recording.
   - Press **1** to save for all calls.
   - Replace the telephone handset.
6. A short code needs to be created in IP Office Manager so that when a user dials an international call they will be played the error message.
   - **Code:** 00N
   - **Feature:** Voicemail Collect
   - **Telephone Number:** "#Barred" *(include quote marks)*
   - **Line Group ID:** 0
7. Save the configuration file.
8. Test the error message by trying to dial an international number from any telephone. You should be played the message that you have just recorded.

7.13 Disabling a Mailbox

By default, Voicemail Pro automatically creates a voicemail mailbox for each user and hunt group in the IP Office configuration. It is also defaulted to use use voicemail to record a message if a user or hunt group call is not answered.

There are a number of ways that use of voicemail to record messages can be disabled if it is not required for a particular user or hunt group. These are:

- **Disabling IP Office Using a Mailbox for Unanswered Calls**
  Within the IP Office configuration, each user and hunt group has a **Voicemail On** setting. When enabled, IP Office will use voicemail to record a message if a call is not answered. Disabling this option stops the IP Office from using the mailbox to record messages for unanswered calls, instead calls continue ringing. Other voicemail users can still manually forward callers and messages to the mailbox.
    - IP Office users can change their Voicemail On settings themselves by dialing short codes (*18 for on, *19 for off) or through IP Office Phone Manager.
- **Intuity Accept Call Answer**
  If the voicemail server is set to Intuity mode, users can set their mailbox to no longer accept calls using the Accept call answer setting (select 5, 7 , 1 after logging into the mailbox). Callers directed to the mailbox by IP Office here *"Sorry, the mailbox you have reached is no accepting messages at this time. Please disconnect*".
- **Customized Leave Mail**
  A customized call flow can be setup for a user or group's **Leave** start point (or all users and groups using the **Default Start Points**). That call flow can direct redirect messages to another mailbox or a range of other actions. The **Collect** start point can also be customized.
- **Voicemail Server Disable Mailbox** *(Voicemail Pro 5.0+)*
  All operation and usage of a mailbox can be disabled on the voicemail server. This is done through the details pane view of user or group mailboxes 124. Right-click on the user or hunt group and select **Disable**.

Chapter 8.

Mailbox Access Controls

8. Mailbox Access Controls

With IP Office mailbox owners can control their mailbox and messages in a number of ways after they have logged in to the mailbox.

- **Standard IP Office Mailbox Mode** 299
  This is the only mode for Voicemail Lite. Voicemail Pro can also be set to run 74 in this mode rather than Intuity emulation mode.

- **Intuity Mailbox Mode** 298
  This is the default mode for Voicemail Pro. It provides through a series of spoken prompt menus an IP Office emulation of many of the Avaya Intuity features.

- **Phone Manager** 300
  The Phone Manager application enables a user to switch voicemail and voicemail ringback on/off. Phone Manager Pro also provides full visual access to a user's voicemail and allows messages to be played back and controlled through their PC.

- **Visual Voice** 302
  This is a system of display menus rather than spoken prompts that can be used to access a mailboxes.

- **UMS Web Voicemail** 304
  This method of access allows users to access mailboxes using a web browser. The user must be configured for UMS. The feature is licensed.

- **UMS IMAP Email Access** 307
  This method allows users to access mailbox messages through a IMAP compatible email program. The user must be configured for UMS. The feature is licensed.

- **UMS Exchange 2007** 308
  Allows playback via a user's PC using Outlook 2007.

If a mailbox does not have a recorded name greeting, when that mailbox is accessed to collect messages, the caller is asked to record their name before proceeding to collect messages. The name greeting is used for functions such as Dial by Name actions and Intuity mode name lookup (**`**6`**).

- **Tip**
  As Voicemail Pro system administrator, you should ensure that mailbox owners have the help and user guide for their type of mailbox available to them. There is an IP Office User Guide and an Intuity Mailbox User Guide. Both are available in PDF and online help formats.

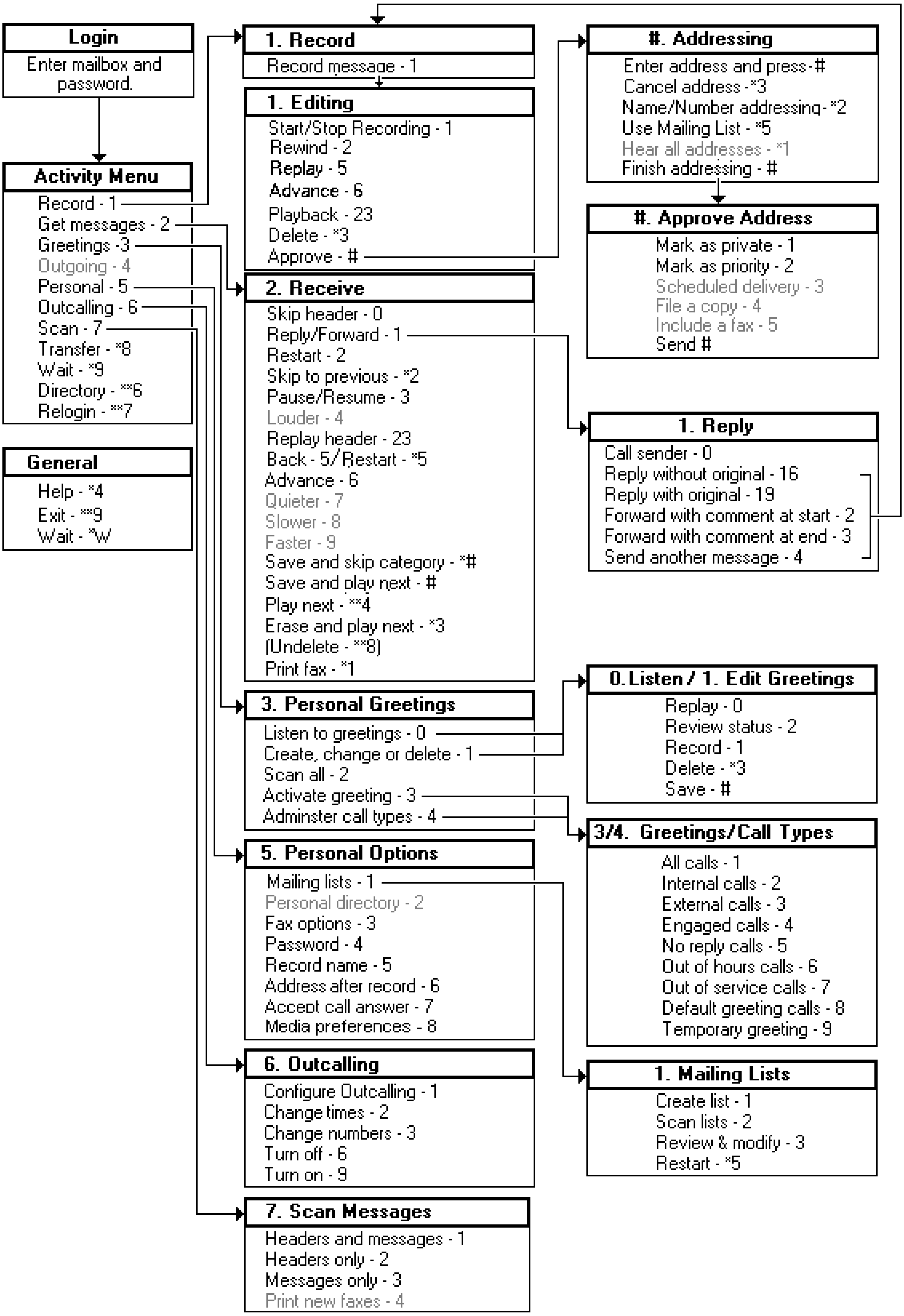
8.1 General Controls

The following default IP Office short codes can be dialed by any user from their own extension.

- ***17 - Collect Messages**
  Access their mailbox from their own extension.
- ***18 - Voicemail on** / ***19 - Voicemail off**
  When on, the IP Office telephone system will use voicemail as the destination for unanswered calls.
- ***48 - Turn voicemail ringback on** / ***49 - Turn voicemail ringback off**
  When on, if the user has a new message, the voicemail server will 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.
- ***01 - Sets the Voicemail Email mode to Forward**
- ***02 - Sets the Voicemail Email mode to Alert**
- ***03 - Sets the Voicemail Email mode to Off**

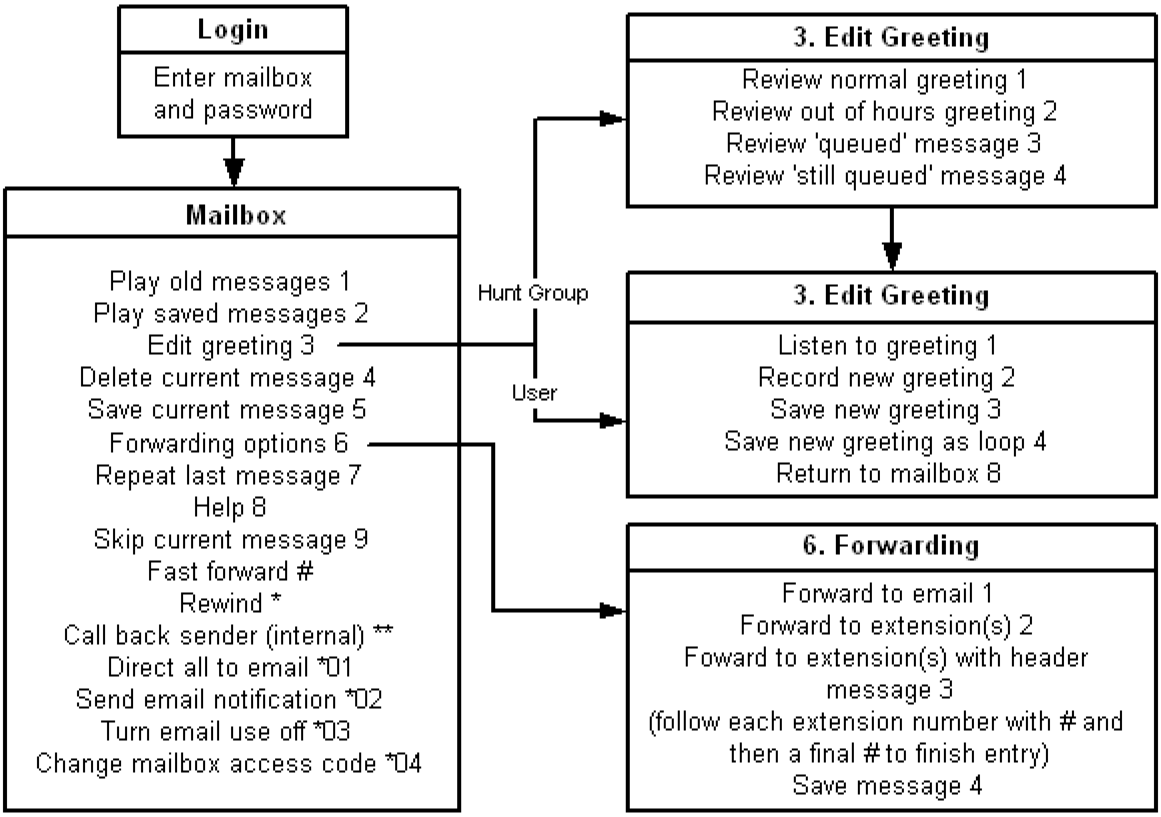
8.2 Intuity Mode

The following is a summary of the controls available when the voicemail server is set to run 74 in Intuity emulation mode. The options that are shown in gray are not supported by IP Office Intuity emulation. For full details refer to the IP Office Intuity Mailbox User Guide.



8.3 IP Office Mode

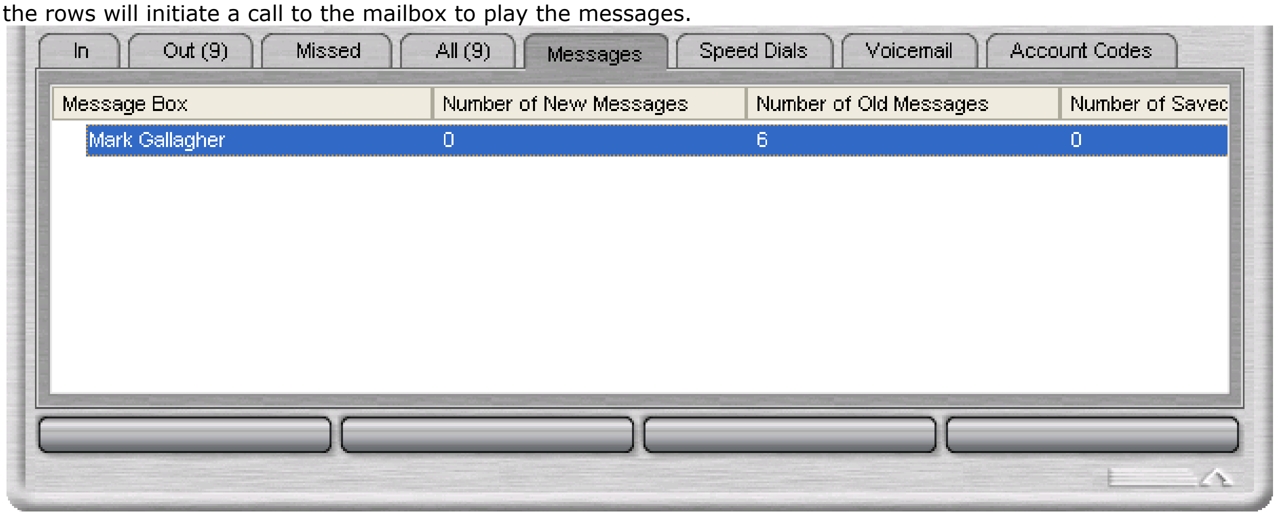
The following is a summary of the controls available when the voicemail server is set to run 74 in Intuity emulation mode. For full details refer to the IP Office Mailbox User Guide.



8.4 Phone Manager

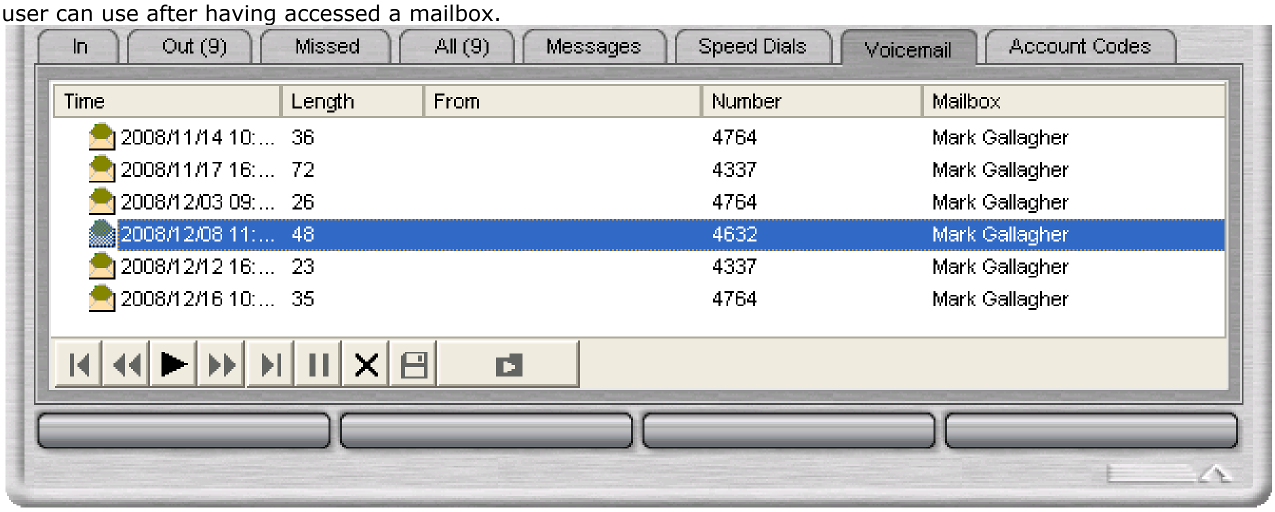
The IP Office Phone Manager application provides a number of features relevant for Voicemail Pro. For full details refer to the Phone Manager User Guide.

- **Messages Tab**
  This tab is available for all Phone Manager users and will show them the number of messages in their mailbox. The user can also be configured to see the number of messages in selected hunt group mailboxes. Clicking on any of the rows will initiate a call to the mailbox to play the messages.



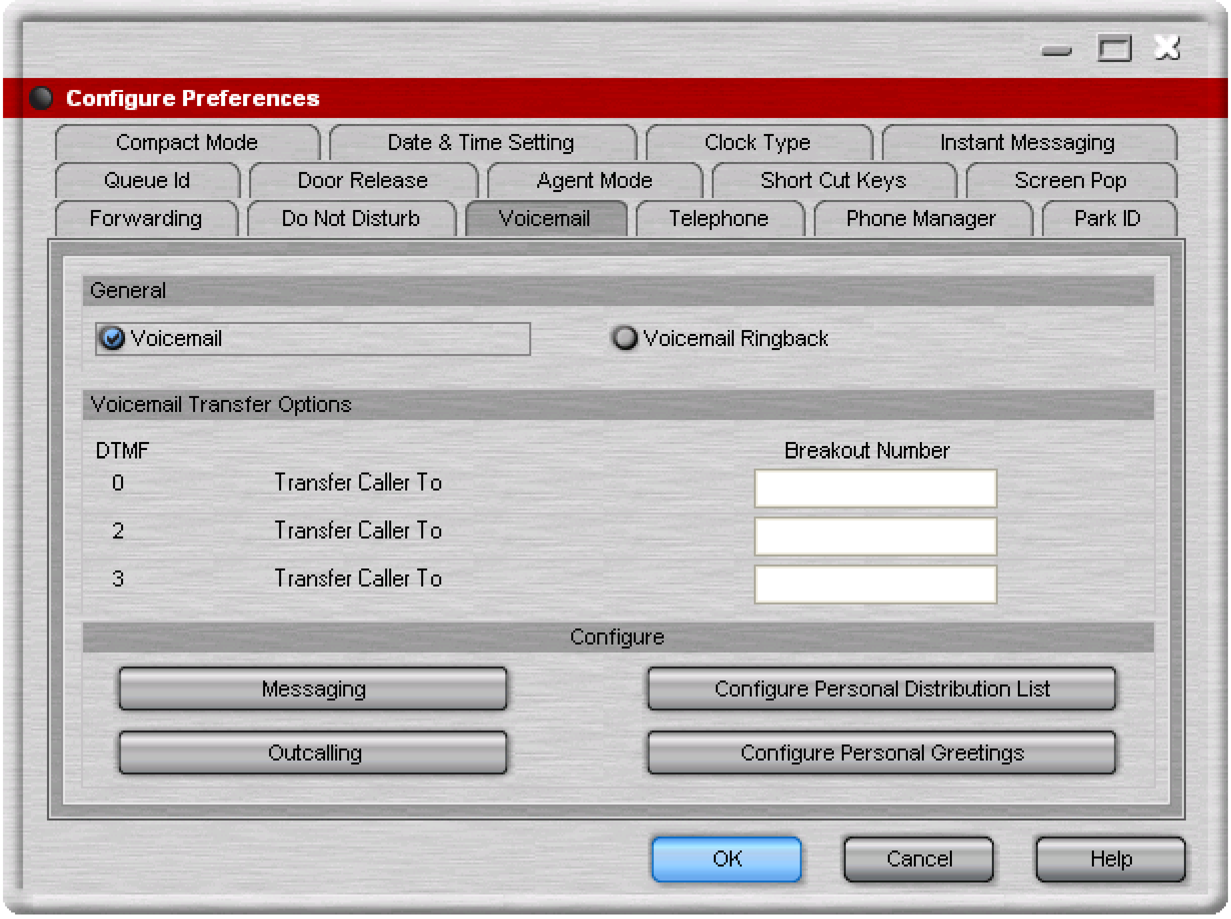
Message Box	Number of New Messages	Number of Old Messages	Number of Savec
Mark Gallagher	0	6	0

- **Voicemail Tab**
  This tab is available for Phone Manager Pro users. It provides a number of controls for message playback that the user can use after having accessed a mailbox.



Time	Length	From	Number	Mailbox
2008/11/14 10:...	36		4764	Mark Gallagher
2008/11/17 16:...	72		4337	Mark Gallagher
2008/12/03 09:...	26		4764	Mark Gallagher
2008/12/08 11:...	48		4632	Mark Gallagher
2008/12/12 16:...	23		4337	Mark Gallagher
2008/12/16 10:...	35		4764	Mark Gallagher

- **Configuration Preferences**
  Through the Phone Manager many user settings for voicemail can be accessed and changed.



● Voicemail ○ Voicemail Ringback

8.5 Visual Voice

Visual Voice provides the user with a display menu for access to their mailbox rather than having to follow spoken prompts. It can be used with Voicemail Pro (Intuity and IP Office modes) and Embedded Voicemail. The menu provide the user with options to listening to messages, leaving messages and managing the mailbox.

It is supported on most Avaya phones with multi-line displays (more than 2 lines) and programmable buttons.

Access to visual voice can be provided in a number of ways:

- Assign a programmable button to the function **Visual Voice**. For full details on button programming refer to the IP Office Manager documentation.
- For IP Office 4.2+, access to visual voice can be triggered by the phone's **MESSAGES** button rather than requiring a separate Visual Voice programmable button. This is done using the **System | Voicemail** 107 option **Messages button goes to Visual Voice**.
- T3 phones can access visual voice via the menu selection **Menu | Settings | Voicemail Settings**. If a **Visual Voice** programmable button is used on these phones it will only access the **Listen** functions.

On phones that have a display but do not support full visual voice operation, use of the buttons above will trigger normal spoken prompt voicemail access.

- **Direct Voicemail Transfer**
  On phones with a button set to provide visual voice access, if pressed when a call is connected, the button allows entry of an extension number for direct to voicemail transfer of the connected call.

Visual Voice Controls

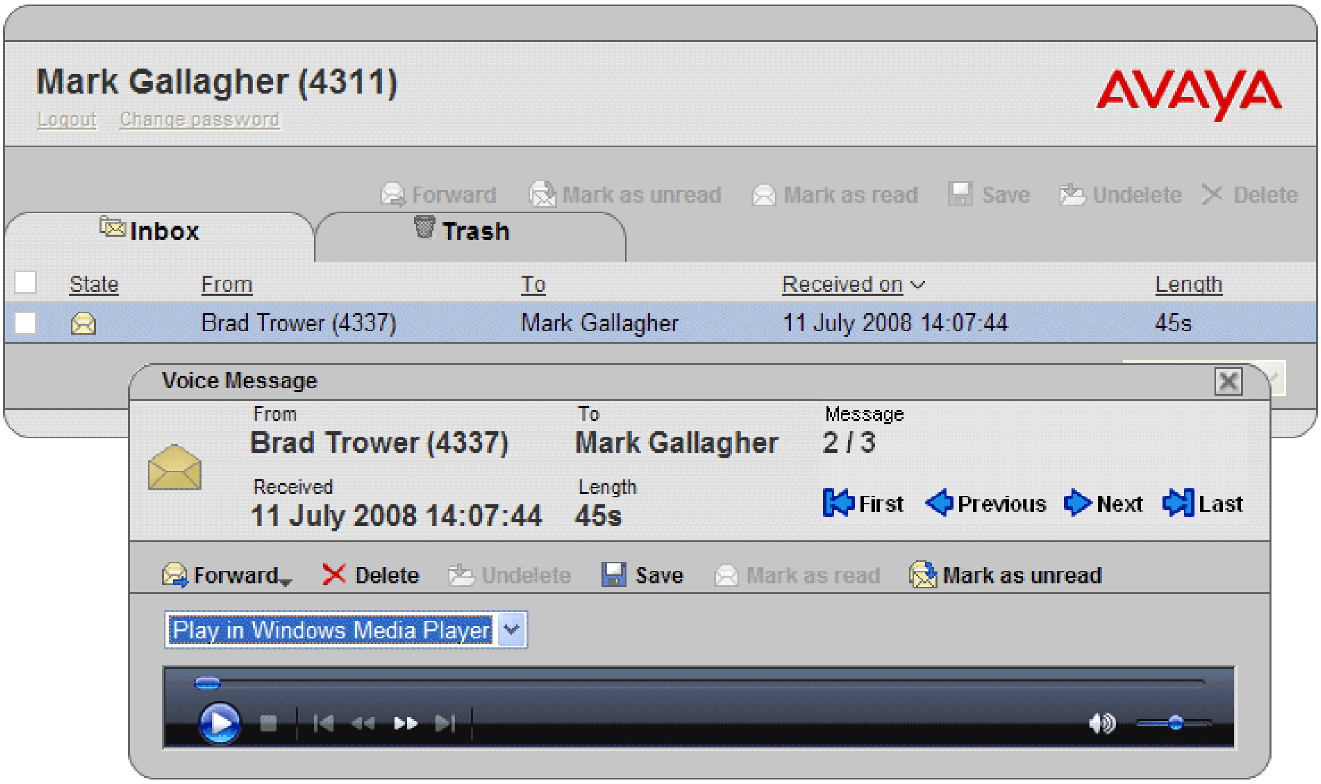
The arrangement of options on the screen will vary depending on the phone type and display size. Controls that cannot be fitted on the current display are accessed by using the phones < and > buttons to move between screen pages.

- **Listen**
  Used to access the user's own mailbox. When pressed the screen will show the number of New, Old and Saved messages. Select one of those options to start playback of messages in that category. Once message playback is selected the available controls change:
  - **Previous:** Play the previous message.
  - **Next:** Play the next message.
  - **Rewind:** Rewind approximately 5 seconds.
  - **FFwd:** Step forwards approximately 5 seconds.
  - **Delete:** Delete the current message.
  - **Save:** Mark the messaged as a saved message.
  - **Copy:** Copy the message to another mailbox. When pressed as number of additional options are displayed.
    - **Pre-Rec:** Record a message that will be attached to the start of the message being copied.
    - **Targets:** Enter the destination for the message copy.
    - **Done:** Copy the message using the targets entered.
  - **Pause:** Pause the current message. Press the button again to unpause.
- **Main(0)**
  Hunt group names may be displayed if the user is configured for hunt group mailbox access. The number of new messages in the mailbox is shown after the name. Press the button to access the mailbox in the same way as the Listen option above.
- **Message**
  Record and send a voicemail message to another mailbox or mailboxes.
- **Greeting**
  Change the main greeting used for callers to the mailbox. If no greeting has been recorded then the default system mailbox greeting is used.
    - Note: Depending on the voicemail server type and mailbox mode, it may be possible to record and use additional greetings via the mailboxes voice prompt menus.
  - **Record:** Record a new greeting.
  - **Listen:** Listen to the current greeting or the new greeting just recorded.
  - **Submit:** Submit the new greeting just recorded.
  - **Delete:** Delete the current greeting. The mailbox will revert to using the default system greeting unless Record and Submit are used to record a new greeting.
- **Email**
  This option is only shown if the user has been configured with an email address for voicemail email usage in the IP Office configuration. This control allows you to see and if required change the current voicemail email mode being used for new messages received in your voicemail mailbox. Use **Change** to change the selected mode. Press **Done** when the required mode is displayed. Possible modes are:
  - **Email Mode Off**
    Voicemail email is not used.
  - **Email Mode Copy**
    New voicemail messages are copied to the user's email address. The original message is left in the voicemail mailbox.
  - **Email Mode Fwd**
    New voicemail messages are forwarded to the user's email address. The original message is deleted from their voicemail mailbox.
  - **Email Mode Alert**
    A alert email message is sent to the user's email address. The original message is not attached to the email and is left in the voicemail mailbox.
- **Password**
  Change the voicemail mailbox password. To do this requires entry of the existing password.

8.6 UMS Web Voicemail

The URL will be that of the voicemail server PC plus ***/voicemail***. This will display the web voicemail login page.

1. Logon using your user name and voicemail code as set on the IP Office system. The System Administrator can change these if necessary.
    - Note: This is the user name set in the IP Office and used by Voicemail Pro. It is not the full name that is shown on phones and used by IP Office Phone Manager and SoftConsole if set.
2. Note that multiple failures to login correctly can cause your access to Web Voicemail to be locked for 1 hour. If necessary Web Voicemail access can be unlocked using the Voicemail Pro administration client (select **Users**, right click on the user marked as ***Account Locked*** in the Web Voicemail column, enter a new password for the user and click **OK**).



Mark Gallagher (4311)

☐	State	From	To	Received on ⌄	Length
☐		Brad Trower (4337)	Mark Gallagher	11 July 2008 14:07:44	45s

From: Brad Trower (4337)
To: Mark Gallagher
Message: 2 / 3
Received: 11 July 2008 14:07:44
Length: 45s

The interface shows the messages in your mailbox. Note that it is not updated in realtime. To check if new messages have arrived in your mailbox since starting Web Voicemail, refresh the browser view using the browser controls. Similarly changes to the IP Office configuration such as new or deleted users and groups are not shown until you refresh the browser view.

The columns can be sorted by clicking on the column title. The currently selected sort column is shown by a **V** symbol next to it.

Message Types
The following icons are used for different types of messages:

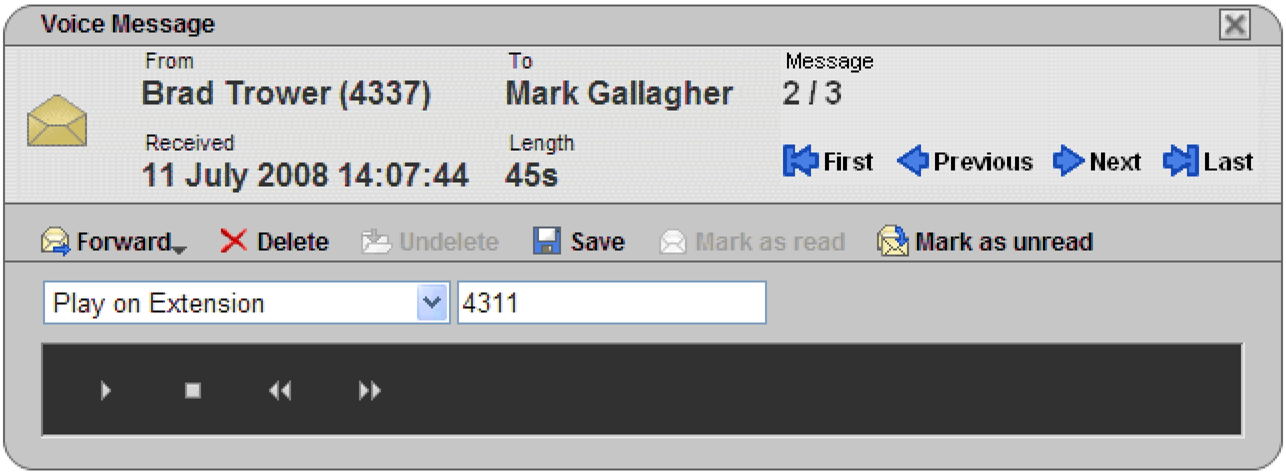
- **Unread message**
- **Read message**
  Note that by default a read message is permanently deleted from the mailbox after 30 days unless changed to a saved message.
- **Deleted message**
  Manually deleted messages are automatically moved to the **Trash** folder. Deleted messages remain visible for at least 24 hours after they were marked as deleted.
  - Deleted messages are not accessible through the voicemail spoken prompts interface or Visual Voice.
  - Deleted messages can be undeleted by marking them as saved, read or unread. They can then be moved back out of the Trash folder. Moving a deleted message out of the Trash folder automatically changes it to read.
- **Saved message**
  Setting a message as saved stops it being automatically deleted after a period of time.
- **Priority message**
  This icon is added the message icon to indicate that the caller has set the message as a priority message.

Controls

- ☐ **Select**
  Before performing many actions such as saving, deleting or forwarding, you can select the messages to which the action should be applied.
  - The select box at the top of the list of messages can be used to select/deselect all messages on the currently displayed page.
- **Save**
  Change the status of the selected messages to saved.
- **Mark as read**
  Change the status of the selected messages to read. Changing the status of a message will override its previous status including those marked as saved.
- **Mark as unread**
  Change the status of the selected messages to unread. Changing the status of a message will override its previous status including those marked as saved.
- **Forward**
  Forward a copy of the selected message to another mailbox. When clicked, the type of mailbox (user or hunt group) can be selected. The list of mailboxes is then shown and allows selection of multiple target mailboxes.
- ✗ **Delete**
  Delete the selected messages. Manually deleted messages remain visible until the voicemail server next performs its mailbox housekeeping. See the deleted message description above.
- **Change password**
  This option allows you to change your voicemail mailbox code.

Playing Messages

To play a message just click on it. The message menu is displayed. The appearance of this will vary depending on whether you select playback via the default media player on your computer or through an extension on the telephone system.



Voice Message

From
Brad Trower (4337)

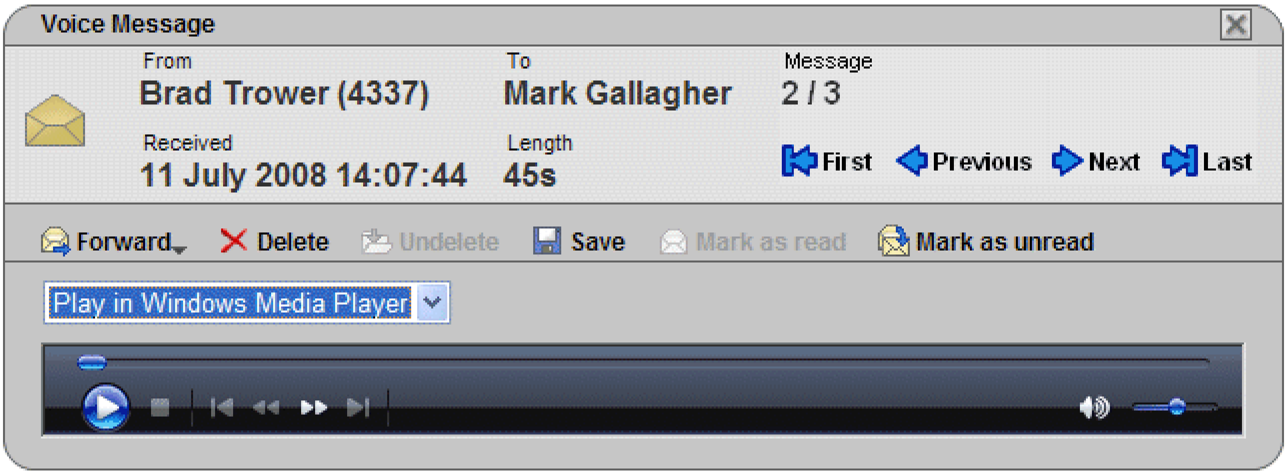
To
Mark Gallagher

Message
2 / 3

Received
11 July 2008 14:07:44

Length
45s

Play on Extension: 4311



Voice Message

From
Brad Trower (4337)

To
Mark Gallagher

Message
2 / 3

Received
11 July 2008 14:07:44

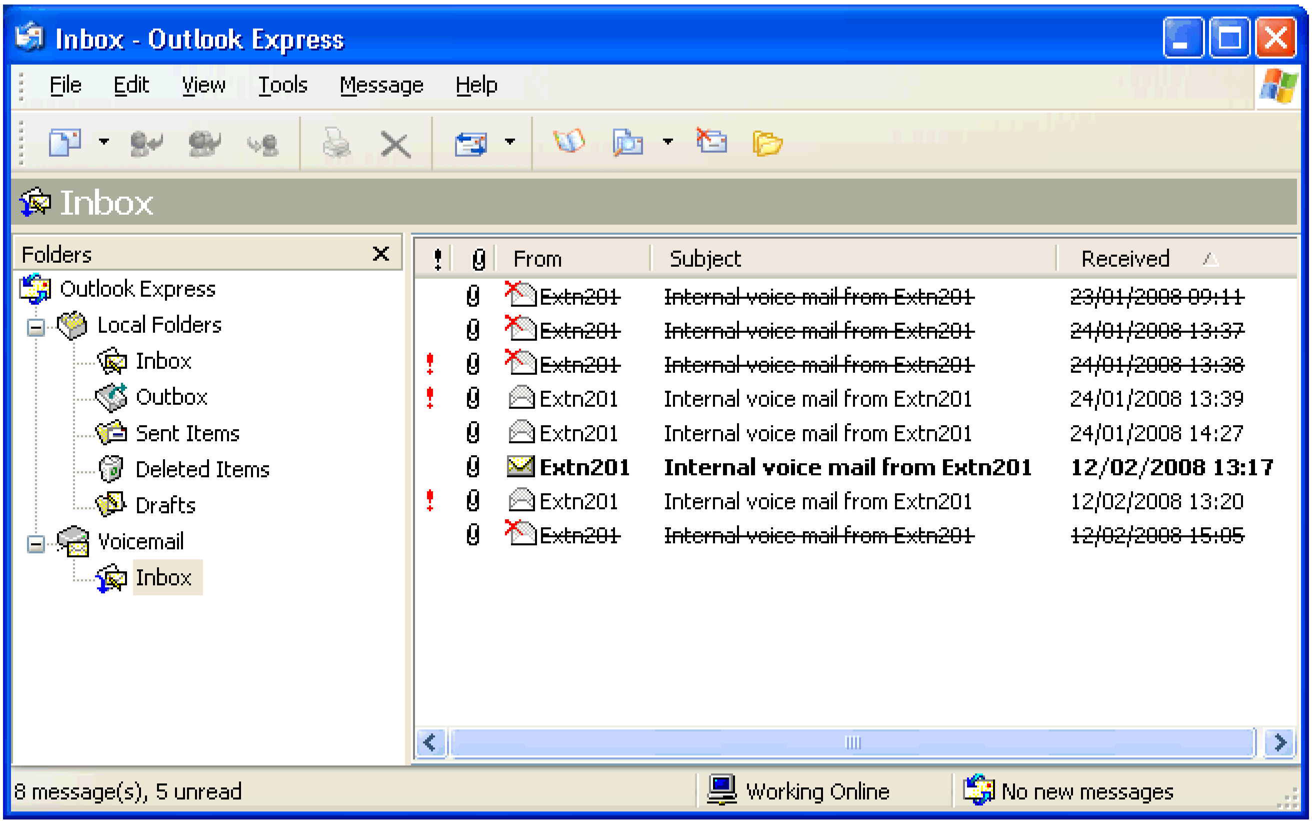
Length
45s

Play in Windows Media Player

8.7 UMS IMAP

Most email clients that support IMAP display IMAP messages in a separate folder. The contents of that folder are synchronized when the folder is viewed.

Note that the types of icons used and whether different icons are supported for different message statuses depends on the email client used.



!	📎	From	Subject	Received
	📎	~~Extn201~~	~~Internal voice mail from Extn201~~	~~23/01/2008 09:11~~
	📎	~~Extn201~~	~~Internal voice mail from Extn201~~	~~24/01/2008 13:37~~
!	📎	~~Extn201~~	~~Internal voice mail from Extn201~~	~~24/01/2008 13:38~~
!	📎	Extn201	Internal voice mail from Extn201	24/01/2008 13:39
	📎	Extn201	Internal voice mail from Extn201	24/01/2008 14:27
	📎	**Extn201**	**Internal voice mail from Extn201**	**12/02/2008 13:17**
!	📎	Extn201	Internal voice mail from Extn201	12/02/2008 13:20
	📎	~~Extn201~~	~~Internal voice mail from Extn201~~	~~12/02/2008 15:05~~

8 message(s), 5 unread

Working Online

No new messages

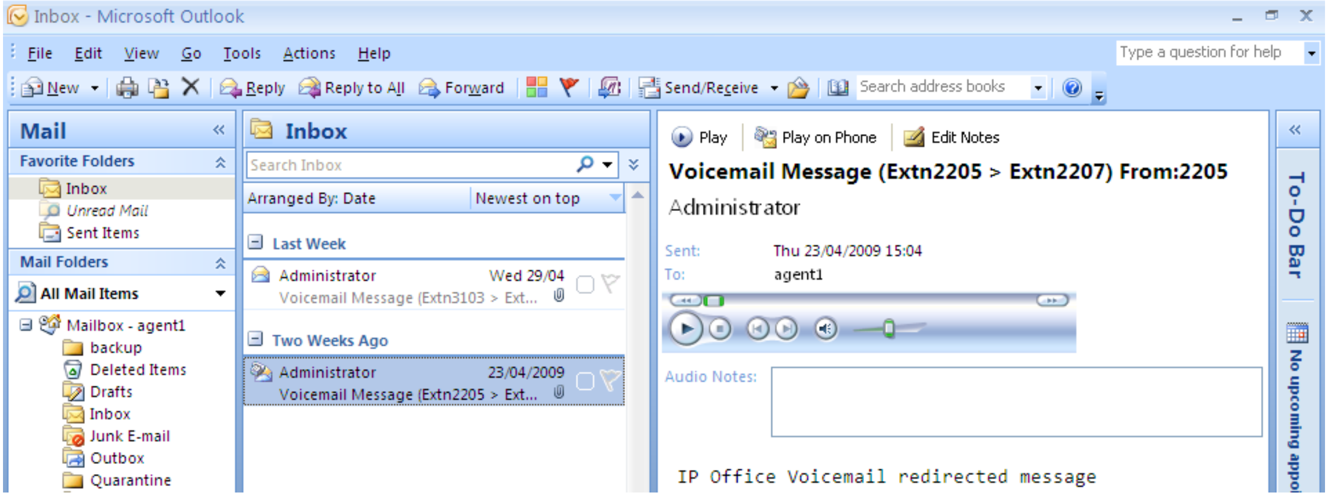
The following should be noted about the IMAP folder view:

- New messages are presented as a closed envelope.
- Read messages are presented as an open envelope.
- Priority messages are indicated as such.
- Private messages are not indicated as such.
- Saved messages are not indicated as such.
- Deleted messages are indicated as deleted but remain visible.
  - The voicemail server does not actually delete messages until at least 24 hours after it was marked as deleted.
  - Deleted messages are no longer accessible through the voicemail telephone prompts interface or Visual Voice.
  - Deleted messages can be undeleted. Those messages are then available through all the mailbox interfaces.
- Moving a message in the IMAP folder to another folder in the Email client will cause the email to be copied to the new folder and the original message is shown as deleted in the IMAP folder.
- The Voicemail Pro housekeeping settings for automatic deletion of different message types (New, Read and Saved) are still applied.
- IMAP cannot be used to send or forward messages to other voicemail mailboxes.

8.8 UMS Exchange 2007

UMS can be configured to use a users Exchange 2007 email account as the user's voicemail message store rather than the voicemail server. The user can then see and playback messages through their email inbox.

This option requires the Exchange 2007 server to include the Unified Messaging component.



Administrator Wed 29/04
Voicemail Message (Extn3103 > Ext...

Administrator 23/04/2009
Voicemail Message (Extn2205 > Ext...

Voicemail Message (Extn2205 > Extn2207) From:2205

Administrator

Sent: Thu 23/04/2009 15:04
To: agent1

Audio Notes:

```
IP Office Voicemail redirected message
```

- Mailbox access using the telephone, visual voice or Phone Manager is done against voicemail messages in the email account.
- Access using UMS IMAP and UMS web voicemail is not supported.
- Messages are not subject to Voicemail Pro housekeeping.
- Only voicemail messages in the inbox are recognized. If a message is moved to another mailbox folder it is no longer visible to the voicemail system.
- Message waiting indication (MWI) is supported.

- **Note**
  When using an Exchange 2007 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.

Chapter 9.

Voicemail Pro Examples

9. Voicemail Pro Examples

This section contains a number of example for specific areas of Voicemail Pro operation.

For simple examples refer to the separate document "Voicemail Pro Example Exercises". That document contains a series for setting up a basic auto attendant and then adding additional features. Working through that document should leave you familiar with the process of setting up and testing call flows.

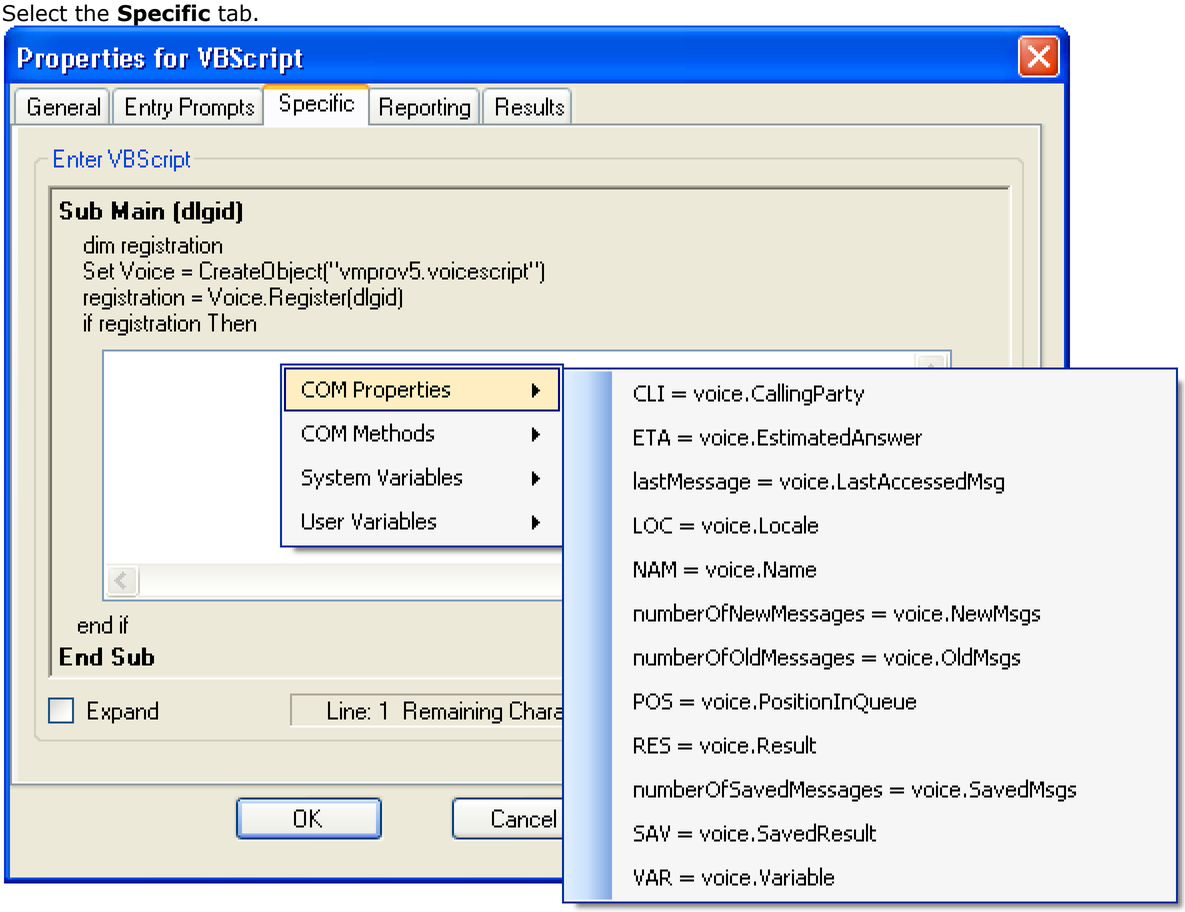
9.1 Using VB Script

The **VB Script** action allows an administrator to construct additional call flow logic using VBScript commands and various properties 312 and methods. Use of VBScript requires entry of a valid **VM Pro VBScript** license in the IP Office configuration.

When a VBScript action is executed, the voicemail server allows the script up to 1 minute to complete execution. If execution of the script takes longer then it is terminated by the voicemail server and the action's **Failure** result path is used.

Settings

1. Click the **Miscellaneous Actions** icon and select **VB Script**.
2. The **General** 158, **Entry Prompts** 159, **Reporting** 163 and **Results** 164 tabs are standard tabs available to all actions.
3. Select the **Specific** tab.



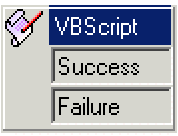
```
Sub Main (dlgid)
   dim registration
   Set Voice = CreateObject("vmprov5.voicescript")
   registration = Voice.Register(dlgid)
   if registration Then

   end if
End Sub
```

- **Enter VBScript**
  In the script area enter the VBScript as required. Strings for the variables and methods provided for VBScript by Voicemail Pro can be selected and inserted by right clicking on the script area. This script can contain a maximum of 10000 characters.
- **Expand**
  Check **Expand** to view a larger script area.
- **Syntax Check**
  Click the **Syntax Check** button to check your input for any errors.

Results

This action has the following results which can be connected to further actions:



This action has two results, ***Success*** or ***Failure***.

9.1.1 VBScript Properties

The following properties can be accessed within VBScripts. Note that unless otherwise stated they are session based. The data is specific to a particular Voicemail Pro call and does not persist between calls.

Voicemail contains various state variables that are associated with a specific interaction with voicemail. The call variables listed map to properties associated with the object:

- **$NAM** 315 – (read-only). See Name Property 315.
- **$CLI** 313 – (read-only). See CallingParty Property 313.
- **$RES** 316 – (read-write). See Result Property 316.
- **$VAR** 317 – (read-write). See Variable Property 317.
- **$SAV** 317 – (read-write). See SavedResult Property 317.
- **$LOC** 314 – (read-write).See Locale Property 314.

The following properties are specific to queued and still queued call flows only.

- **$QPOS** 316 – (read-only). See PositionInQueue Property 316.
- **$QTIM** 313 – (read-only) See EstimatedAnswer Property 313.

The following properties are related to the messages within the mailbox.

- **NewMsgs Property** 315
  Returns the count of new messages within the session's mailbox.
- **OldMsgs Property** 315
  Returns the count of old messages within the session's mailbox.
- **SavedMsgs Property** 317
  Returns the count of saved messages within the session's mailbox.
- **LastAccessedMsg Property** 314
  Returns the name of the last recorded or accessed message.

Note: VB Scripting will only support variant types.

Internal Variables
Some of the variables that exist within Voicemail Pro can be split into smaller sections using a delimiter.

- **Example**:
  A CLI contains the number 01707364143. If the call flow references the variable as **CLI@0,4** then the value **01707** will be returned as they are the first five numbers.

9.1.1.1 CallingParty Property

The **CallingParty** property returns the caller id associated with the voicemail session used for VBS interaction with Voicemail (equivalent to $CLI call variable).

- **Owning object:** vmprov5.voicescript
- **String:**
  - **Set:** This property is read-only.
  - **Get:** A String object containing the name of the calling party (or $CLI). For example: `String = Voice.CallingParty`
- **Remarks:** The *CallingParty* property is only valid for the current session to Voicemail.
- **Example**

```
Sub Main (dlgid)
dim registration
Set Voice = CreateObject("vmprov5.voicescript")
registration = Voice.Register(dlgid)
if registration Then
      dim callerid
      callerid = Voice.CallingParty
end if
End Sub
```

9.1.1.2 EstimatedAnswer Property

The **EstimatedAnswer** property returns the **$QTIM** voicemail call variable. This is the user's estimated time to answer within the queue in minutes and is only available for queued and still queued call flows.

- **Owning object:** vmprov5.voicescript
- **String:**
  - **Set:** This property is read-only.
  - **Get:** A long containing the current value for $QTIM. For example: `Long = Voice.EstimatedAnswer`

9.1.1.3 LastAccessedMsg Property

The **LastAccessedMsg** property returns the name of the last recorded message. If the IP Office TUI is used then this will also contain the name of the last played message.

- **Owning object:** vmprov5.voicescript
- **String:**
  - **Set:** This property is read-only.
  - **Get:** A string object containing the fully qualified name of the last played or recorded message. For example: `String = Voice.LastAccessedMsg`

9.1.1.4 Locale Property

The **Locale** property gets and sets the $LOC voicemail call variable.

- **Owning object:** vmprov5.voicescript
- **String:**
  - **Set:** A string object that contains the new value for the $LOC variable. For example: `Voice.Locale = String`
  - **Get:** A string object containing the current value for $ LOC. For example: `String = Voice.Locale`
- **Example**

```
Sub Main (dlgid)
dim registration
Set Voice = CreateObject("vmprov5.voicescript")
registration = Voice.Register(dlgid)
if registration Then
      dim locale
      DO SOME PROCESSING.
      locale = Voice.Locale
      Rem NOW SET LOCALE TO FRENCH
      Voice.Locale = “fr”
      DO SOME PROCESSING.
      Rem NOW SET LOCALE BACK TO WHAT IT WAS
      Voice.Locale = locale
end if
End Sub
```

9.1.1.5 Name Property

The **Name** property returns the name of the mailbox associated with the voicemail session used for VBScript interaction with Voicemail (equivalent to $NAM call variable).

- **Owning object:** vmprov5.voicescript
- String:
  - **Set:** This property is read-only.
  - **Get:** A String object containing the name of the associated voice mailbox. for example:
    - `String = Voice.Name`

9.1.1.6 NewMsgs Property

The **NewMsgs** property returns the number of new messages contained within the session mailbox.

- **Owning object:** vmprov5.voicescript
- **String:**
  - **Set:** This property is read-only.
  - **Get:** The number of new messages within the mailbox. For example: `Number = Voice.NewMsgs`

9.1.1.7 OldMsgs Property

The **OldMsgs** property returns the number of old messages contained within the session mailbox.

- **Owning object:** vmprov5.voicescript
- **String:**
  - **Set:** This property is read-only.
  - **Get:** The number of old messages within the mailbox. For example: `Number = Voice.OldMsgs`

9.1.1.8 PositionInQueue Property

The **PositionInQueue** property returns the $QPOS voicemail call variable. This is the user's current position in the queue and is only available for queued and still queued call flows.

- **Owning object:** vmprov5.voicescript
- **String:**
  - **Set:** This property is read-only.
  - **Get:** A string object containing the current value for $QPOS. For example: `String = Voice.PositionInQueue`

9.1.1.9 Result Property

The **Result** property gets and sets the $RES voicemail call variable. The $RES variable contains the result property of a call flow action. The result is action-specific, for example OK, FAILED, BUSY and so on. The call flow action is able to use the variable to determine logic to be based upon the Result of a preceding Action, or as a temporary variable in the VB-Script. However the variable will be overwritten after the VB Action is completed. If the values from the VB action icon need to be passed to subsequent actions, it is advisable to use user variables.

- **Owning object:** vmprov5.voicescript
- **String:**
  - **Set:** A string object that contains the new value for the $RES variable. For example: `Voice.Result = String`
  - **Get:** A string object containing the current value for $RES. For example: `String = Voice.Result`
- **Example**

```
Sub Main (dlgid)
dim registration
Set Voice = CreateObject("vmprov5.voicescript")
registration = Voice.Register(dlgid)
if registration Then
      dim result
      dim success
      DO SOME PROCESSING.
      if success Then
            Voice.Result = TRUE
      else
            Voice.Result = FALSE
end if
End Sub
```

9.1.1.10 SavedMsgs Property

The **SavedMsgs** property returns the number of saved messages contained within the session mailbox.

- **Owning object:** vmprov5.voicescript
- **String:**
  - **Set:** This property is read-only.
  - **Get:** The number of saved messages within the mailbox. For example: `Number = Voice.SavedMsgs`

9.1.1.11 SavedResult Property

The **SavedResult** property gets and sets the $SAV voicemail call variable.

- **Owning object:** vmprov5.voicescript
- **String:**
  - **Set:** A string object that contains the new value for the $SAV variable. For example: `Voice.SavedResult = String`
  - **Get:** A string object containing the current value for $SAV. For example: `String = Voice.SavedResult`

9.1.1.12 Variable Property

The **Variable** property gets and sets the $VAR voicemail call variable.

- **Owning object:** vmprov5.voicescript
- **String:**
  - **Set:** A string object that contains the new value for the $VAR variable. For example: `Voice.Variable = String`
  - **Get:** A string object containing the current value for $VAR. For example: `String = Voice.Variable`

9.1.2 VBScript Methods

9.1.2.1 ForwardMsg Method

This method can be used to forward a file or message to other mailboxes.

Method	`Voice.ForwardMsg(`*`file, mailboxes, ident`*`)`
Parameters	• **file** *(String)* This contains the name of the file to be translated. If the fully qualified path is specified (drive:\path\file) then the full specified path name is used otherwise the file is relative to the specified locale within the WAVS directory. ◦ ***[GREETING]\greeting*** Plays out the greeting stored within the greetings directory. The .WAV extension is automatically appended. ◦ ***[ACCOUNTS]\mailbox\message*** Plays out the message stored within the specified mailbox. The .WAV extension is automatically appended. ◦ ***[CAMPAIGN]\campaign\message*** Plays out a campaign message stored within the specified campaign. The .WAV extension is automatically appended. • **mailboxes** *(String)* The list of mailboxes to forward the message to, separated by non digits other than commas, for example 202 203 204. • **ident** *(String)* The CLI to be associated with the message.
Return Value	This method does not return a value.

9.1.2.2 ForwardMsgToMailbox Method

This method is used to forward a file or message to another mailbox.

Method	`Voice.ForwardMsgToMailbox(`*`file`*`, `*`mailbox`*`, `*`ident`*`)`
Parameters	• **file** *(String)* This contains the name of the file to be translated. If the fully qualified path is specified (drive:\path\file) then the full specified path name is used otherwise the file is relative to the specified locale within the WAVS directory. ◦ ***[GREETING]\greeting*** Plays out the greeting stored within the greetings directory. The .WAV extension is automatically appended. ◦ ***[ACCOUNTS]\mailbox\message*** Plays out the message stored within the specified mailbox. The .WAV extension is automatically appended. ◦ ***[CAMPAIGN]\campaign\message*** Plays out a campaign message stored within the specified campaign. The .WAV extension is automatically appended. • **mailbox** *(String)* The mailbox to forward the message to. • **ident** *(String)* The CLI to be associated with the message.
Return Value	The name of the new message. *(String)*

9.1.2.3 FullFilename Method

This method is used to translate the shortcut filename to the equivalent fully qualified pathname for the file.

Method	`Voice.FullFilename(`*`file`*`)`
Parameters	• **file** *(String)* This contains the name of the file to be translated. If the fully qualified path is specified (drive:\path\file) then the full specified path name is used otherwise the file is relative to the specified locale within the WAVS directory. • ***[GREETING]\greeting*** Plays out the greeting stored within the greetings directory. The .WAV extension is automatically appended. • ***[ACCOUNTS]\mailbox\message*** Plays out the message stored within the specified mailbox. The .WAV extension is automatically appended. • ***[CAMPAIGN]\campaign\message*** Plays out a campaign message stored within the specified campaign. The .WAV extension is automatically appended.
Return Value	The equivalent fully qualified path name for the specified file. *(String)*

9.1.2.4 GetCallingParty Method

This method can be used to obtain the CLI from the current call.

Method	`Voice.GetCallingParty([dlgid])`
Parameters	• **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The CLI value associated with the specified voicemail session. *(String)*

9.1.2.5 GetDTMF Method

This method is used to return user's DTMF input.

Method	`Voice.GetDTMF(`*`[digits], [timeout], [dlgid]`*`)`
Parameters	• **digits** *(Long, Default = 1)* The maximum number of DTMF digits to capture. • **timeout** *(Long, Default = 30)* The maximum time to wait for DTMF input. • **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The DTMF keys that were pressed. *(String)*

9.1.2.6 GetEstimatedAnswer Method

This method is used to obtain the $QTIM session variable.

Method	`Voice.GetEstimatedAnswer(`*`[dlgid]`*`)`
Parameters	• **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The value of the $QTIM session variable associated with the specified voicemail session. *(String)*

9.1.2.7 GetExtension Method

This method is used to obtain an extension.

Method	`Voice.GetExtension(`*`index`*`)`
Parameters	- **index** *(Long)* The extension to return. Note that the actual extension number should not be entered as index refers to the offset number of the extension in the listing.
Return Value	The extension at that position within the list, an empty string if end of list. *(String)*

Example

```
Sub Main (dlgid)
dim registration
Set Voice = CreateObject("vmprov5.voicescript")
registration = Voice.Register(dlgid)
if registration Then
     dim index
     dim ext
     index = 0
     Do
           ext = Voice.GetExtension(index)
           index = index + 1
     Loop Until Len(ext) = 0
end if
End Sub
```

9.1.2.8 GetLastAccessed Msg Method

This method returns the name of the last recorded or played message. It is the same as using $ for the filename with an eMail 212 action.

Method	`voice.GetLastAccessedMsg(dlgid)`
Parameters	- **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The message name. *(String)*

9.1.2.9 GetLocale Method

This method can be used to obtain the $LOC session variable.

Method	`Voice.GetLocale(`*`[dlgid]`*`)`
Parameters	- **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The value of the $LOC session variable associated with the specified voicemail session.

9.1.2.10 GetMailbox Method

This method can be used to obtain a mailbox.

Method	`Voice.GetMailbox(`*`index`*`)`
Parameters	- **index** *(Long)* The extension to return. Note that the actual extension number should not be entered as index refers to the offset number of the extension in the listing.
Return Value	The mailbox at that position within the list, an empty string if end of list.

9.1.2.11 GetMailboxMessage Method

This method can be used to obtain a message within a mailbox.

Method	`Voice.GetMailboxMessage(`*`mailbox`*`, `*`msgtype`*`, `*`index`*`)`
Parameters	- **mailbox** *(String)* The mailbox to which the message belongs. - **msgtype** *(String)* The type for the message(s). ***N*** for new, ***O*** for old and ***S*** for saved. - **index** The message to return.
Return Value	The message at that position within the list, an empty string if end of list. *(String)*

9.1.2.12 GetMailboxMessages Method

This method can be used to obtain the count of specific messages within a mailbox.

Method	`Voice.GetMailboxMessages(`*`mailbox`*`, `*`msgtype`*`)`
Parameters	- **mailbox** *(String)* The mailbox to which the message belongs. - **msgtype** *(String)* The type for the message(s). ***N*** for new, ***O*** for old and ***S*** for saved.
Return Value	The number of messages of a particular type within the mailbox. *(String)*

9.1.2.13 GetMessagePriority Method

This method is used to determine whether the message was left with priority.

Method	`Voice.GetMessagePriority(`*`mailbox`*`, `*`message`*`)`
Parameters	- **mailbox** *(String)* The mailbox to which the message belongs. - **message** The message to query.
Return Value	True if the message was left with priority, otherwise false. *(Boolean)*

9.1.2.14 GetMessagePrivate Method

This method can be used to determine whether the message was left with privacy.

Method	`Voice.GetMessagePrivate(`*`mailbox`*`, `*`message`*`)`
Parameters	- **mailbox** *(String)* The mailbox to which the message belongs. - **message** The message to query.
Return Value	True if the message was left with privacy, otherwise false. *(Boolean)*

9.1.2.15 GetMessageStatus Method

This method can be used to obtain the state of the message within a mailbox.

Method	`Voice.GetMessageStatus(`*`mailbox`*`, `*`message`*`)`
Parameters	- **mailbox** *(String)* The mailbox to which the message belongs. - **message** The message to query. The message name format should be *[Accounts]\mailbox\message*. For example [Accounts]\Extn247\MSG00004.
Return Value	The state of the message within the mailbox - **N** for new, **O** for old, **S** for saved. *(String)*

9.1.2.16 GetName Method

This method is used to obtain the $NAM session variable.

Method	`Voice.GetName(`*`[dlgid]`*`)`
Parameters	- **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The value of the $NAM session variable associated with the specified voicemail session. *(String)*

9.1.2.17 GetNewMsgs Method

This method is used to obtain the number of new messages contained within the session’s mailbox.

Method	`Voice.GetNewMsgs(`*`[dlgid]`*`)`
Parameters	- **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The number of new messages contained within the session’s mailbox. *(Long)*

9.1.2.18 GetOldMsgs Method

This method is used to obtain the number of old messages contained within the session’s mailbox.

Method	`Voice.GetOldMsgs(`*`[dlgid]`*`)`
Parameters	- **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The number of old messages contained within the session’s mailbox. *(Long)*

9.1.2.19 GetPositionInQueue Method

This method is used to obtain the $QPOS session variable.

Method	`Voice.GetPositionInQueue(`*`[dlgid]`*`)`
Parameters	- **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The value of the $QPOS session variable associated with the specified voicemail session. *(String)*

9.1.2.20 GetRegister Method

This method is used to retrieve a string stored in one of the session sixteen data variables $CP0 to $CP15.

Method	`Voice.GetRegister(`*`regnum, [dlgid]`*`)`
Parameters	• **regnum** *(Long)* Data register to use for storage (0-15). • **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The data stored within the specified register. *(String)*

9.1.2.21 GetResult Method

This method is used to obtain the $RES session variable.

Method	`Voice.GetResult(`*`[dlgid]`*`)`
Parameters	• **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The value of the $RES session variable associated with the specified voicemail session. *(String)*

9.1.2.22 GetSavedMsgs Method

This method is used to obtain the number of saved messages contained within the session’s mailbox.

Method	`Voice.GetSavedMsgs (`*`[dlgid]`*`)`
Parameters	• **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The number of saved messages contained within the session’s mailbox. *(Long)*

9.1.2.23 GetSavedResult Method

This method is used to obtain the $SAV session variable.

Method	`Voice.GetSavedResult(`*`[dlgid]`*`)`
Parameters	• **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The value of the $SAV session variable associated with the specified voicemail session. *(String)*

9.1.2.24 GetUserExtension Method

This method returns the extension number associated with the specified mailbox.

Method	`voice.GetUserExtension(`*`mailbox`*`)`
Parameters	• **mailbox** *(String)* The mailbox to which the message belongs.
Return Value	The extension number. *(String)*

9.1.2.25 GetUserMailboxFromExtn Method

This method returns the mailbox associated with a specified extension number.

Method	`voice.GetUserMailboxFromExtn(extension)`
Parameters	- **extension** *(String)* The extension number. A variable such as $CLI can be used with internal callers to identify the user's own mailbox.
Return Value	The mailbox name. *(String)*

9.1.2.26 GetUserVariable Method

This method returns the current value of a specified user variable.

Method	`voice.GetUserVariable(`*`variable`*`)`
Parameters	- **variable** *(String)* The user variable name.
Return Value	The current value of the user variable. *(String)*

9.1.2.27 GetVariable Method

This method is used to obtain the $VAR session variable.

Method	`Voice.GetVariable(`*`[dlgid]`*`)`
Parameters	- **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The value of the $VAR variable associated with the specified voicemail session. *(String)*

9.1.2.28 MessageCLI Method

This method is used to obtain the CLI of the caller that left a message within a mailbox.

Method	`Voice.MessageCLI(`*`mailbox, message`*`)`
Parameters	- **mailbox** *(String)* The mailbox to which the message belongs. - **message** The message to query.
Return Value	The CLI of the caller that left the message. *(String)*

9.1.2.29 MessageDisplay Method

This method is used to obtain the display field associated with the message within a mailbox.

Method	`Voice.MessageDisplay(`*`mailbox, message`*`)`
Parameters	- **mailbox** *(String)* The mailbox to which the message belongs. - **message** The message to query.
Return Value	The display string associated with the message. *(String)*

9.1.2.30 MessageLength Method

This method is used to obtain the length of a message within a mailbox.

Method	`Voice.MessageLength(`*`mailbox, message`*`)`
Parameters	- **mailbox** *(String)* The mailbox to which the message belongs. - **message** The message to query.
Return Value	The length of the message in milliseconds. *(Long)*

9.1.2.31 MessageTime Method

This method is used to obtain the date and time the message was left within a mailbox.

Method	`Voice.MessageTime(`*`mailbox`*`, `*`message`*`)`
Parameters	- **mailbox** *(String)* The mailbox to which the message belongs. - **message** The message to query.
Return Value	The time the message was left in the format: YEAR/MONTH/DAY HOUR:MINUTE. For example 2003/09/23 13:26. *(String)*

9.1.2.32 PlayDigits Method

This method is used to play the digits specified through voicemail to the active connection.

Method	`Voice.PlayDigits(`*`digits`*`, `*`[wait], [interruptables], [dlgid]`*`)`
Parameters	- **digits** *(String)* This contains the digits to be played. For example "12345" plays "one two three four five". - **wait** *(Boolean)* This optional parameter specifes whether voicemail should return immediately (***0***) or wait until the wave file has been played first (***1***). - **interruptables** *(String, Default = "Any")* This is for future development. - **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The key press that was used to terminate the playback. *(String)*

Example

```
Sub Main (dlgid)
dim registration
Set Voice = CreateObject("vmprov5.voicescript")
registration = Voice.Register(dlgid)
if registration Then
      dim key
      key = Voice.PlayDigits("12345");
end if
End Sub
```

9.1.2.33 PlayLocaleWav Method

This method is used to play a wave file through voicemail to the active connection taking into account the system locale.

Method	`Voice.PlayLocaleWav(`*`wav, [wait], [interruptables], [dlgid]`*`)`
Parameters	• **wav** *(String)* This contains the name of the wave file to be played. If the fully qualified path is specified (drive:\path\file) then the full specified path name is used otherwise the file is relative to the specified locale within the WAVS directory. ◦ ***[GREETING]\greeting*** Plays out the greeting stored within the greetings directory. The .WAV extension is automatically appended. ◦ ***[ACCOUNTS]\mailbox\message*** Plays out the message stored within the specified mailbox. The .WAV extension is automatically appended. ◦ ***[CAMPAIGN]\campaign\message*** Plays out a campaign message stored within the specified campaign. The .WAV extension is automatically appended. • **wait** *(Boolean)* This optional parameter specifes whether voicemail should return immediately (***0***) or wait until the wave file has been played first (***1***). • **interruptables** *(String, Default = "Any")* This is for future development. • **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	• The key press that was used to terminate the playback. *(String)*

9.1.2.34 PlayWav Method

This method is used to play a wave file through voicemail to the active connection.

Method	`Voice.PlayWav(`*`wav, [wait], [interruptables], dlgid`*`)`
Parameters	- **wav** *(String)* This contains the name of the wave file to be played or the name of a system parameter to be spoken. The following formats are allowable. If the string just contains numbers, then the digits are played, for example 12345 plays "one two three four five". If the fully qualified path is specified (drive:\path\file) then the full specified pathname is used otherwise the file is relative to the WAVS directory. - ***$NAM*** Plays the recorded name for the mailbox if one has been recorded. If a name has not been recorded then optional TTS can be used (providing it has been licensed). - ***$TIME:hh[:mm[:ss] [Y][dd[/mm[/yy]]]] =*** Plays out the specified time and date. The hours to speak must always be specified and optional the number of minutes, seconds, day, month and year. Note that the actual prompts spoken and order of playing of the elements varies according to locale. Further examples are given in the table below: - English UK: *"At eleven hour fifty five, date twenty first September two oh oh three"*. - English US: *"Sunday September twenty first, eleven fifty five AM"*. - ***$QPOS [:position]*** = This plays out *"You are at queue position 'position' in the queue"*. - ***$QTIM [:eta]*** = This plays out *"Estimated time to answer is 'eta' minutes"*. - ***$MSGN:msgs*** = Plays out the specified number of new messages. For example $MSGN:10 plays *"You have ten new messages"*. - ***$MSGO:msgs*** = Plays out the specified number of old messages. For example $MSGN:0 plays *"You have no old messages"*. - ***$MSGS:msgs*** = Plays out the specified number of saved messages. For example $MSGS:5 plays *"You have five saved messages"*. - ***$CID, $CLI, $DATE, $ETA, $KEY, $POS, $SAV, $TIME*** Play out the contents of the call variable. - ***[GREETING]\greeting*** Plays out the greeting stored within the greetings directory. The .WAV extension is automatically appended. - ***[ACCOUNTS]\mailbox\message*** Plays out the message stored within the specified mailbox. The .WAV extension is automatically appended. - ***[CAMPAIGN]\campaign\message*** Plays out a campaign message stored within the specified campaign. The .WAV extension is automatically appended. - **wait** *(Boolean)* This optional parameter specifes whether voicemail should return immediately (***0***) or wait until the wave file has been played first (***1***). - **interruptables** *(String, Default = "Any")* This is for future development. - **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The key press that was used to terminate the playback. *(String)*

Example

```
Sub Main (dlgid)
dim registration
Set Voice = CreateObject("vmprov5.voicescript")
registration = Voice.Register(dlgid)
if registration Then
     dim key
     key = Voice.PlayWav(“test”, True, “Any”, dlgid);
end if
End Sub
```

Examples of Time Playback

voice.PlayWav(...)	UK English	US English
"$TIME:0", True, "Any", dlgid	*"At Midnight Oh Zero"*	*"Twelve Midnight"*
"$TIME:11", True, "Any", dlgid	*"At Eleven Hour O'Clock"*	*"Eleven AM"*
"$TIME:12", True, "Any", dlgid	*"At Twelve Hour O'Clock"*	*"Twelve Noon"*
"$TIME:13", True, "Any", dlgid	*"At Thirteen Hour Hundred"*	*"One PM"*
"$TIME:23", True, "Any", dlgid	*"At Twenty Three Hour Hundred""*	*"Eleven PM"*
"$TIME:24", True, "Any", dlgid	*"At Midnight Oh Zero"*	*"Twelve Midnight"*
"$TIME:0:00:00 Y", True, "Any", dlgid	*"Yesterday At Midnight Oh Zero"*	*"Thursday May Seventh Twelve Midnight"*
"$TIME:11:00:00 Y", True, "Any", dlgid	*"Yesterday At Eleven Hour O'Clock"*	*"Thursday May Seventh Eleven AM"*
"$TIME:12:00:00 Y", True, "Any", dlgid	*"Yesterday At Twelve Hour O 'Clock"*	*"Thursday May Seventh Twelve Noon"*
"$TIME:13:00:00 Y", True, "Any", dlgid	*"Yesterday At Thirteen Hour Hundred"*	*"Thursday May Seventh One PM"*
"$TIME:23:00:00 Y", True, "Any", dlgid	*"Yesterday At Twenty Three Hour Hundred"*	*"Thursday May Seventh Eleven PM"*
"$TIME:24:00:00 Y", True, "Any", dlgid	*"At Midnight Oh Zero"*	*"Twelve Midnight"*
"$TIME:0:00:00 13/10/2008", True, "Any", dlgid	*"At Midnight Oh Zero date Thirteenth October Two Oh Oh Eight"*	*"Monday October Thirteenth Twelve Midnight"*
"$TIME:11:00:00 13/10/2008", True, "Any", dlgid	*"At Eleven Hour O'Clock Date Thirteenth October Two Oh Oh Eight"*	*"Monday October Thirteenth Eleven AM"*
"$TIME:12:00:00 13/10/2008", True, "Any", dlgid	*"At Twelve Hour O'Clock Date Thirteenth October Two Oh Oh Eight"*	*"Monday October Thirteenth Twelve Noon"*
"$TIME:13:00:00 13/10/2008", True, "Any", dlgid	*"At Thirteen Hour Hundred Date Thirteenth October Two Oh Oh Eight"*	*"Monday October Thirteenth One PM"*
"$TIME:23:00:00 13/10/2008", True, "Any", dlgid	*"At Twenty Three Hour Hundred Date Thirteenth October Two Oh Oh Eight"*	*"Monday October Thirteenth Eleven PM"*
"$TIME:24:00:00 13/10/2008", True, "Any", dlgid	*"At Midnight Oh Zero Date Thirteenth October Two Oh Oh Eight"*	*"Monday October Thirteenth Twelve Midnight"*

9.1.2.35 RecordMsg Method

This method is used to record a user's speech input to the specified file.

Method	`Voice.RecordMsg(`*`recording, maxtime, [interruptables], [appendtofile], [dlgid], [playbeep]`*`)`
Parameters	• **recording** *(String)* This contains the name of the file for the recording to be stored to and can be in the following formats. If the fully qualified path is specified (drive:\path\file) then the full specified pathname is used otherwise the file is relative to the specified locale within the WAVS directory. ◦ ***[GREETING]\greeting*** Plays out the greeting stored within the greetings directory. The .WAV extension is automatically appended. ◦ ***[ACCOUNTS]\mailbox\message*** Plays out the message stored within the specified mailbox. The .WAV extension is automatically appended. ◦ ***[CAMPAIGN]\campaign\message*** Plays out a campaign message stored within the specified campaign. The .WAV extension is automatically appended. • **maxtime** *(Long)* The maximum recording length specified in seconds. • **interruptables** *(String, Default = "Any")* This is for future development. • **appendtofile** *(Boolean. Default = False)* Set to true if the recording should be appended to the file, false to clear the file first. • **dlgid** *(Long. Default = 0)* The connection for the voicemail session. • **playbeep** *(Boolean. Default = False)* This flag sets whether a beep is played before the start of recording.
Return Value	The key press that was used to terminate the recording. *(String)*

9.1.2.36 RecordRegister Method

This method is used to record a user's speech input to the specified file stored in the specified register.

Method	`Voice.RecordRegister(`*`regnum, [maxtime], [interruptables], [dlgid], [playbeep]`*`)`
Parameters	• **regnum** *(Long)* Data register containing file to store recording to. • **maxtime** *(Long. Default = 60)* The maximum recording length specified in seconds. • **interruptables** *(String, Default = "Any")* This is for future development. • **dlgid** *(Long. Default = 0)* The connection for the voicemail session. • **playbeep** *(Boolean. Default = False)* This flag sets whether a beep is played before the start of recording.
Return Value	The key press that was used to terminate the recording. *(String)*

9.1.2.37 Register Method

This method is used to determine whether the voicemail session that was used to launch the VB script is still active.

Method	`Voice.Register(dlgid)`
Parameters	- **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	A Boolean variable indicating whether the specified voicemail session is still active. *(Boolean)*

Example

```
Sub Main (dlgid)
dim registration
Set Voice = CreateObject("vmprov5.voicescript")
registration = Voice.Register(dlgid)
if registration Then
      do something.
end if
End Sub
```

9.1.2.38 SetLocale Method

This method is used to set the $LOC session variable.

Method	`Voice.SetLocale(locale, [dlgid])`
Parameters	- **locale** *(String)* The new value for the $LOC variable. - **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	This method does not return a value.

9.1.2.39 SetMailboxMessage Method

This method is used to change the status of a message within a mailbox.

Method	`Voice.SetMailboxMessage(`*`mailbox, message, msgtype`*`)`
Parameters	- **mailbox** *(String)* The mailbox to which the message belongs. - **message** *(String)* The message to modify. The message name format should be **[Accounts]\*mailbox*\*message***. For example [Accounts]\Extn247\MSG00004. - **msgtype** *(String)* The type for the message(s). ***N*** for new, ***O*** for old and ***S*** for saved.
Return Value	This method does not return a value.

9.1.2.40 SetRegister Method

This method is used to store a string in one of the sixteen session data variables $CP0 to $CP15.

Method	`Voice.SetRegister(`*`regnum`*`, `*`data`*`, `*`[dlgid]`*`)`
Parameters	- **regnum** *(Long)* Data register to use for storage (0-15). - **data** *(String)* The data to store within this register. - **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	This method does not return a value.

9.1.2.41 SetResult Method

This method is used to set the $RES session variable.

Method	`Voice.SetResult(`*`result, [dlgid]`*`)`
Parameters	- **result** *(String)* The new value for the $RES variable. - **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	This method does not return a value.

9.1.2.42 SetSavedResult Method

This method can be used to set the value of the $SAV variable.

Method	`Voice.SetSavedResult(`*`result, dlgid`*`)`
Parameters	- **result** *(String)* The new value for the $SAV variable. - **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	This method does not return a value.

9.1.2.43 SetUserVariable Method

This method can be used to set the value of a user variable.

Method	`voice.SetUserVariable(`*`variable, value`*`)`
Parameters	- **variable** *(String)* The variable name. - **value** *(String)* The value to assign to the variable.
Return Value	This method does not return a value.

9.1.2.44 SetVariable Method

This method is used to set the $VAR session variable.

Method	`Voice.SetVariable(`*`value, dlgid`*`)`
Parameters	- **value** *(String)* The new value for the $VAR variable. - **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	This method does not return a value.

9.1.2.45 Speak Method

This method is used to speak out the specified speech provided TTS has been licensed.

Method	`Voice.Speak(text, [wait], [interruptables], [dlgid])`
Parameters	• **text** *(String)* This contains the text to be spoken. • **wait** *(Boolean)* This optional parameter specifes whether voicemail should return immediately (***0***) or wait until the wave file has been played first (***1***). • **interruptables** *(String, Default = "Any")* This is for future development. • **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	The key press that was used to terminate the playback. *(String)*

9.1.2.46 Stop Method

This method can be used to stop any current play back.

Method	`voice.Stop(dlgid)`
Parameters	• **dlgid** *(Long. Default = 0)* The connection for the voicemail session.
Return Value	This method does not return a value.

9.2 Database Connection

Voicemail Pro call flows can interact, read and write data, with almost any Windows database that supports ODBC (Open Database Connectivity) and SQL (Structured Query Language) format.

- **Requirements for Voicemail Pro Database Operation**
  To use the Database actions within Voicemail Pro, a **VM Pro Database Interface** must be added to the IP Office configuration.

The **Database Actions** that can be used in a call flow are:

- **Database Open**
  Opens the required database, including any necessary permissions and security options.

- **Database Execute**
  Defines a SQL query to either read matching records from the database or to write data to the database. Up to 6 fields can be defined to be returned in matching database records.

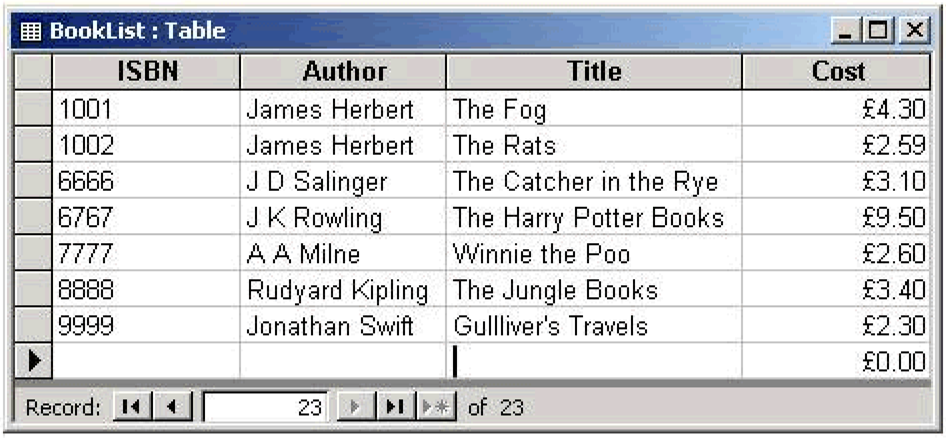
- **Database Get Data**
  Selects the current record from the matches returned by the preceding Database Execute action. The record fields are then placed into Voicemail Pro variables **DBD[0]** to **DBD[5]**. The Database Get Data allows selection of the first, next, previous or last record.

- **Database Close**
  Closes the database connection. This also occurs automatically if the caller disconnects.

9.2.1 Example Database Scenario

In this call flow example, an auto-attendant has been created to allow callers to order books. The book details are held within a Microsoft Access database. Callers will be able to enter either the ISBN or Author's name. The title and cost of the item will be looked up allowing the caller to purchase the item if they wish to. If the caller purchases the book they will be able to enter their credit card details and a contact number.

Example of the database used in the call flow.

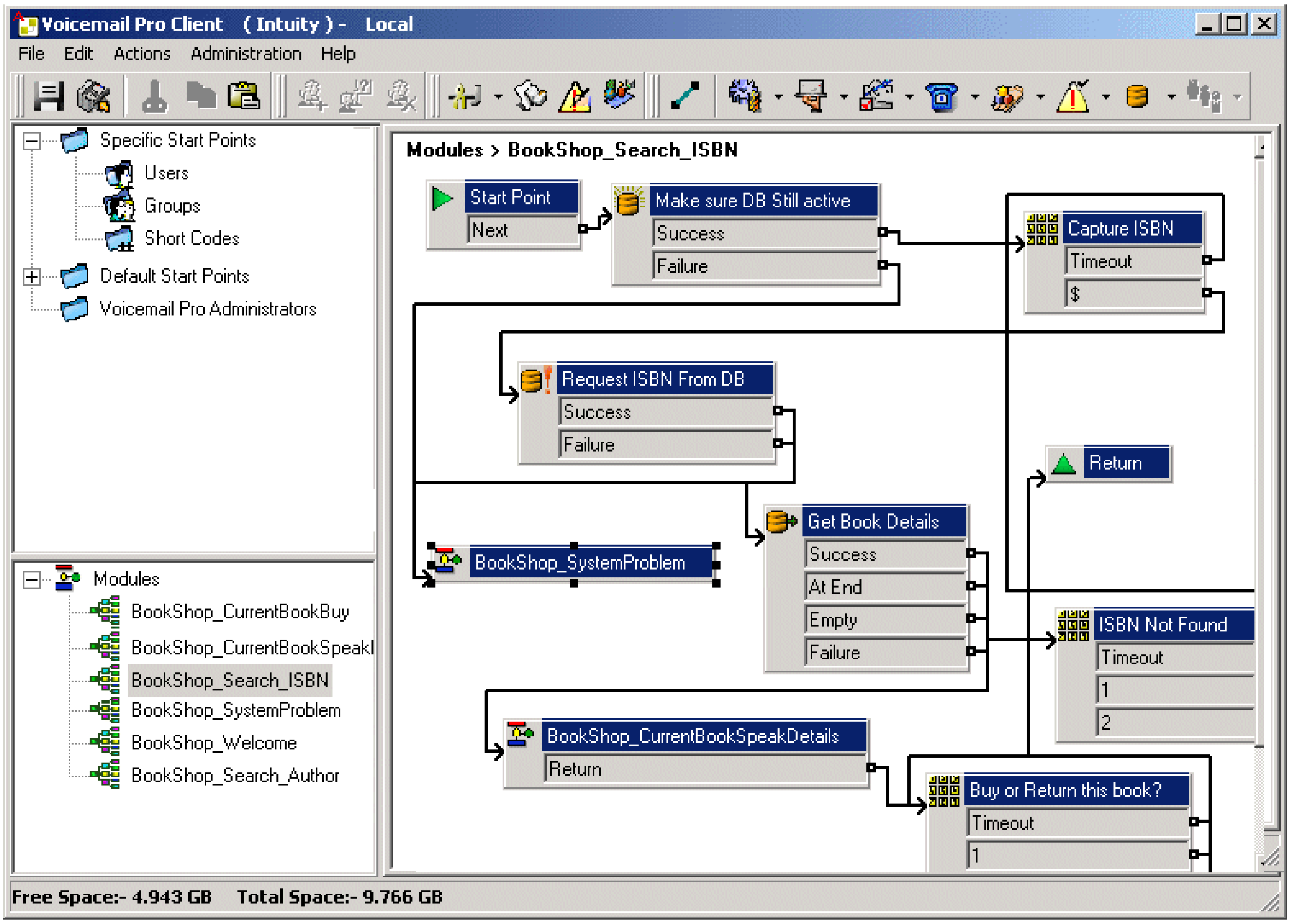

BookList : Table

ISBN	Author	Title	Cost
1001	James Herbert	The Fog	£4.30
1002	James Herbert	The Rats	£2.59
6666	J D Salinger	The Catcher in the Rye	£3.10
6767	J K Rowling	The Harry Potter Books	£9.50
7777	A A Milne	Winnie the Poo	£2.60
8888	Rudyard Kipling	The Jungle Books	£3.40
9999	Jonathan Swift	Gullliver's Travels	£2.30
			£0.00

Record: 23 of 23

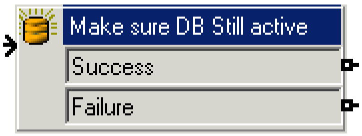
9.2.1.1 Retrieving Data from the Database

The **Bookshop_Welcome** module allows callers to choose to search the database by either the books ISBN number or the author's name. The screen below shows the call flow module used when a search by ISBN is selected. The database actions that have been used are shown below the call flow diagram, with details on the following pages.

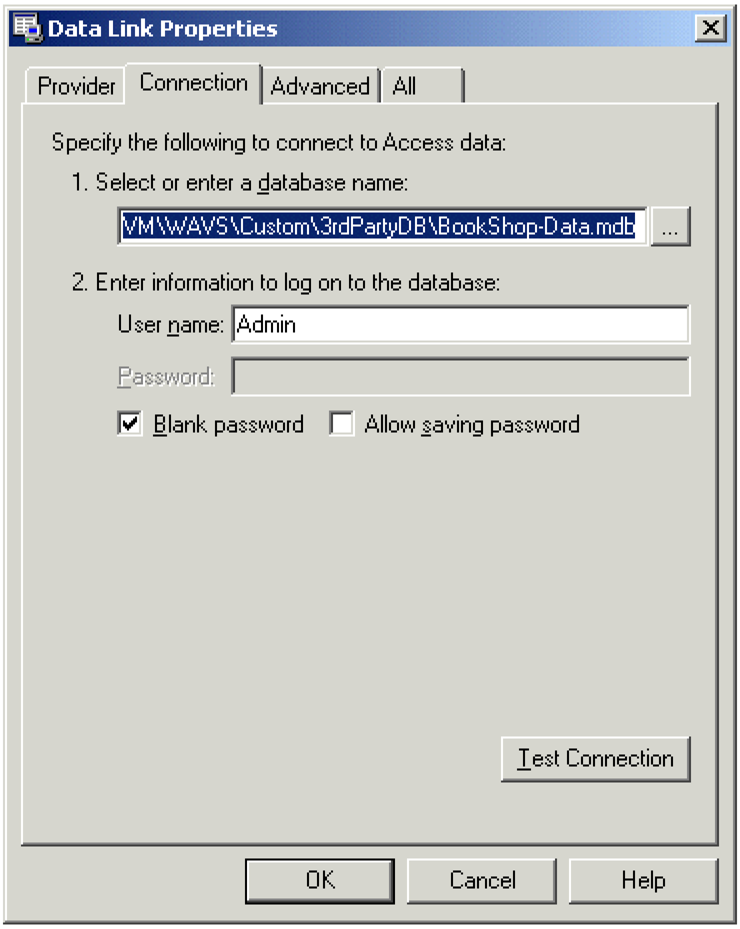


Database Open Action

The Database Open Action is used to link to the bookshop database.



The specific tab of the action contains the location of the database. Click the browse button to view the Data Link Properties dialog. The details entered into these screens will depend upon the type of database used. This example uses a Microsoft Access Database. The example shown below shows the connection to the database. If the database is available the callers move through the call flow to a menu action that will capture the ISBN number entered.



Specify the following to connect to Access data:

1. Select or enter a database name:

VM\WAVS\Custom\3rdPartyDB\BookShop-Data.mdb

2. Enter information to log on to the database:

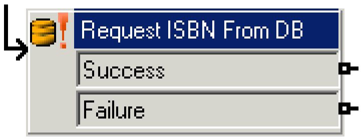
User name: Admin

Password:

☑ Blank password ☐ Allow saving password

Database Execute Action

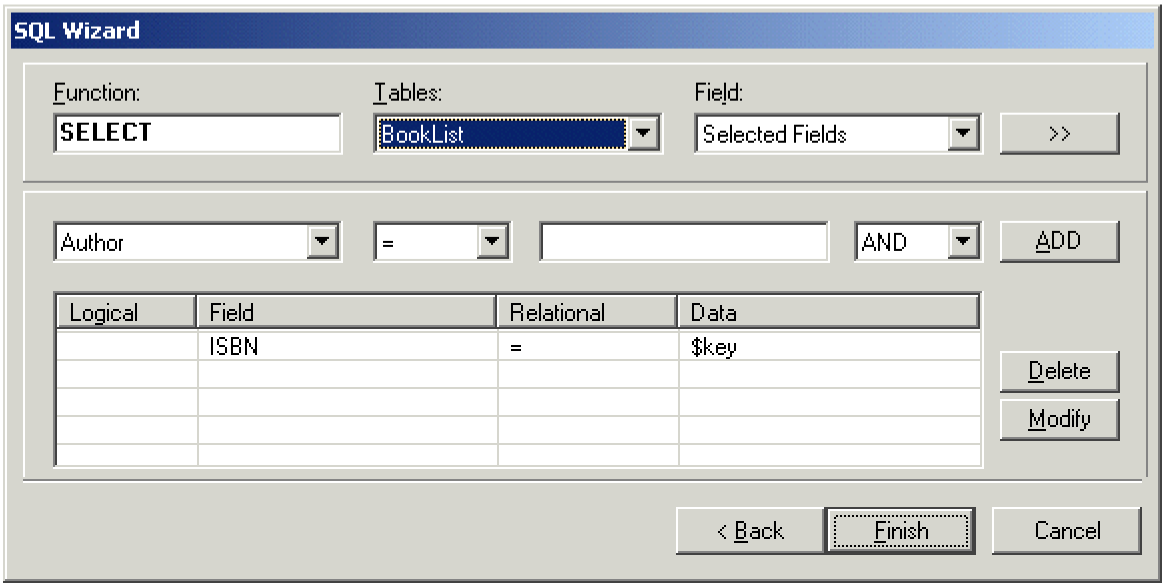
The Database Execute Action contains a query against the open database, in this example it concerns the ISBN captured in the previous menu action.



If the sequence of numbers entered by the caller matches an ISBN entry in the database, then the Author's name, cost, ISBN and book title details are captured. This query is entered into the Database Execute Action via the specific tab.

When entering information into the specific tab for the first time you are taken through a series of steps.

1. Select the Database Open Icon required. In this example the 'Make sure Database still active' icon was selected.
2. At the SQL Function window the option to 'Select ...From' was chosen as information from the database is required.
3. Details are then entered into the SQL Wizard, as shown below.



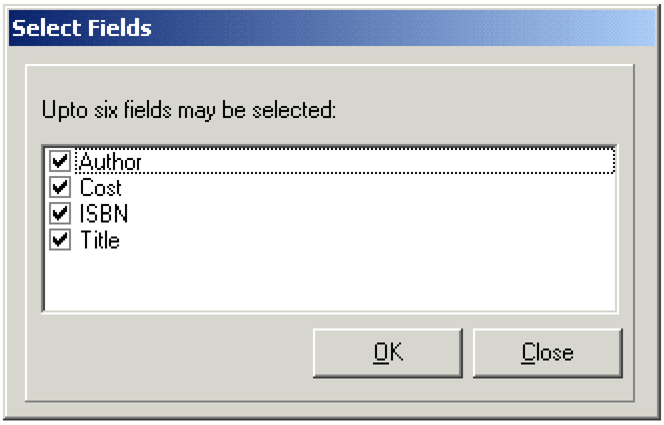
Function: SELECT

Tables: BookList

Field: Selected Fields

Author = AND

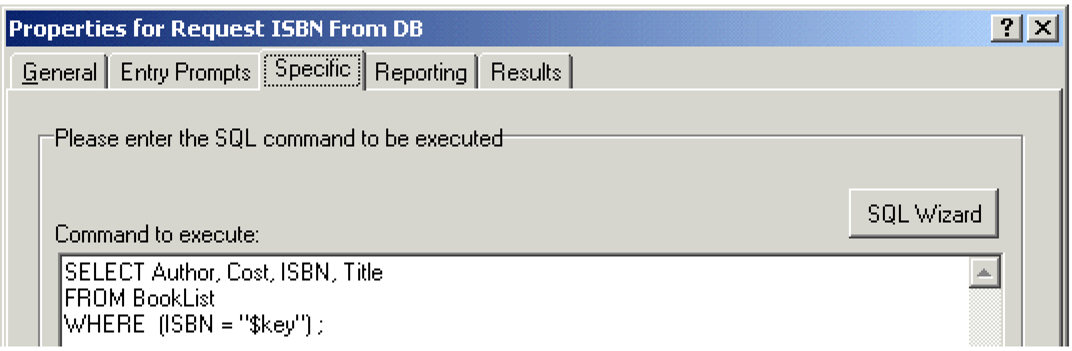
Logical	Field	Relational	Data
	ISBN	=	$key



Upto six fields may be selected:

☑ Author
☑ Cost
☑ ISBN
☑ Title

4. When the query has been entered the SQL wizard is closed. The specific tab of the action will contain the entered query, see example shown below.

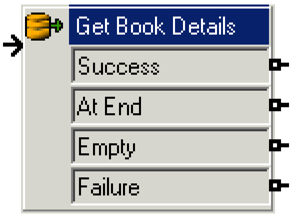

Properties for Request ISBN From DB
General
Entry Prompts
Specific
Reporting
Results
Please enter the SQL command to be executed
SQL Wizard

Command to execute:

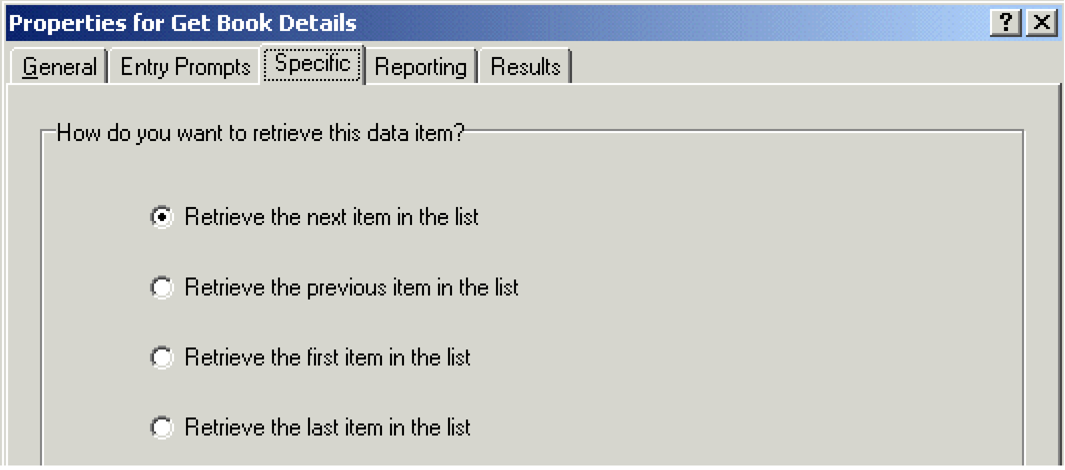
```
SELECT Author, Cost, ISBN, Title
FROM BookList
WHERE  (ISBN = "$key") ;
```

Database Get Data Action

The Database Get Data Action is used to return details of any matching entries following a search against a database.



To retrieve the results an option is selected on the specific tab to select how the data is retrieved from the database. In this example the option 'retrieve the next item in the list' was selected to allow the caller to step through the results, if more that one match ISBN occurred.



How do you want to retrieve this data item?

● Retrieve the next item in the list

○ Retrieve the previous item in the list

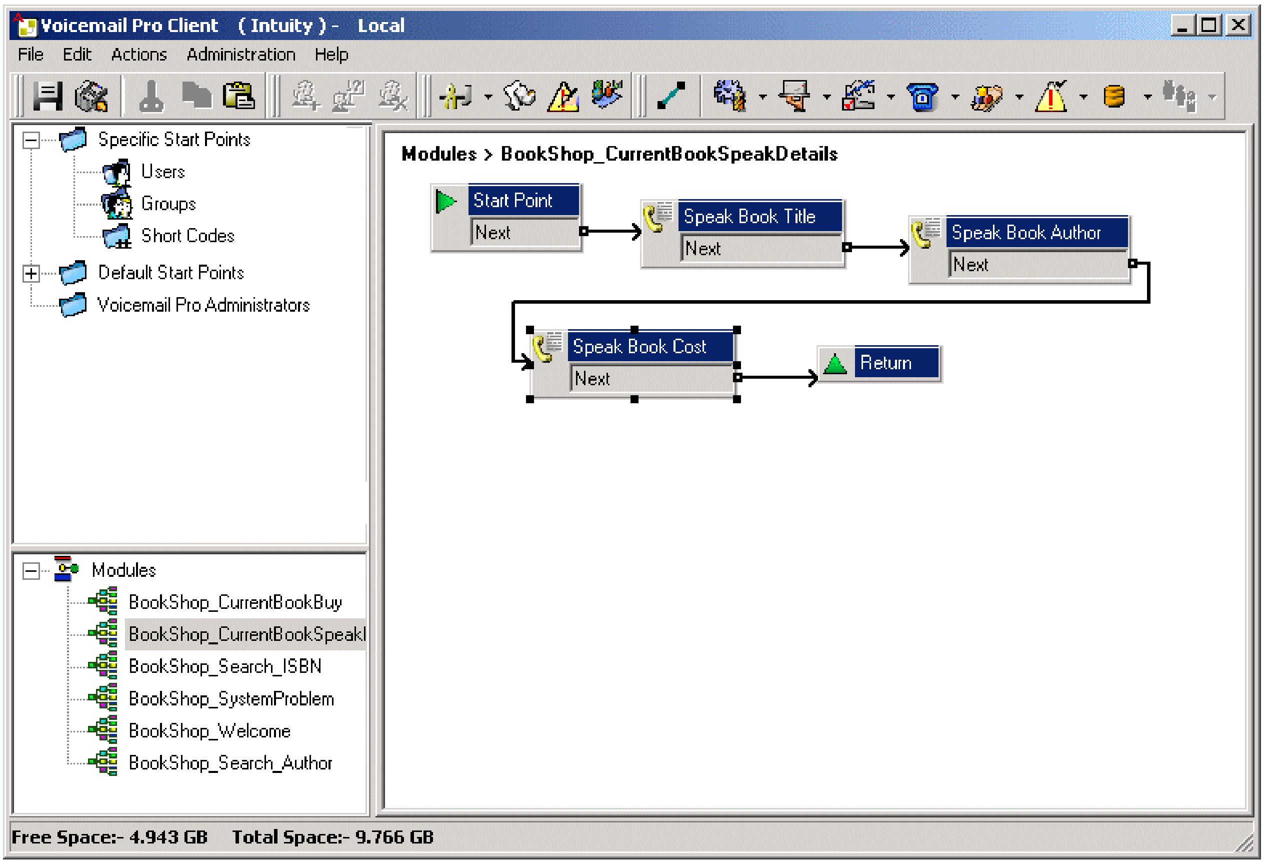
○ Retrieve the first item in the list

○ Retrieve the last item in the list

If a matching ISBN has been found the call flow is routed to another module called 'Bookshop_CurrentBookSpeakDetails'.

9.2.1.2 Returning Data from the Database

The ***Bookshop_CurrentBookSpeakDetails*** module tells the caller the book title, the author's name and the cost of the book matching the ISBN that they entered.



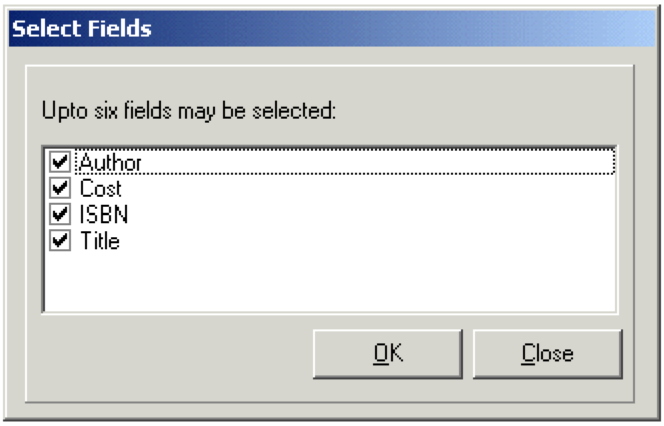
The information from the database is conveyed to the caller using the 'Speak Text Action'.

- To use the **Speak Action**, the IP Office must be licensed for and have installed Text to Speech.

Speak Book Title

The Speak Book Title action is used to tell the caller the book title associated with the ISBN that was entered.

The fields selected in the 'Request ISBN from DB' action contain the information retrieved from the bookshop database. The fields selected were Author, Cost, ISBN and Title.



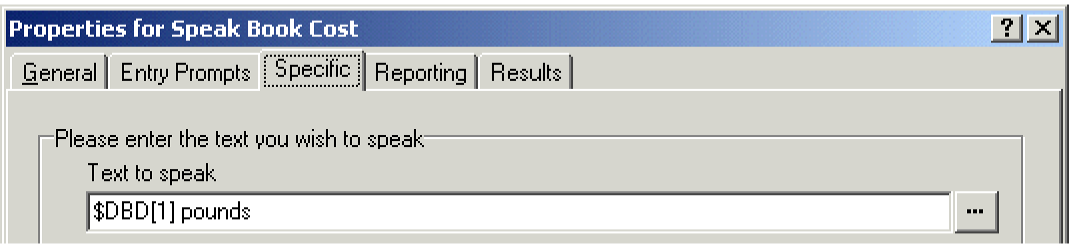
Upto six fields may be selected:

☑ Author
☑ Cost
☑ ISBN
☑ Title

Any fields selected in a query will appear in alphabetical order.

- $DBD[0] would return details from the field Author
- $DBD[1] would return details from the field Cost
- $DBD[2] would return details from the field ISBN
- $DBD[3] would return details from the field Title.

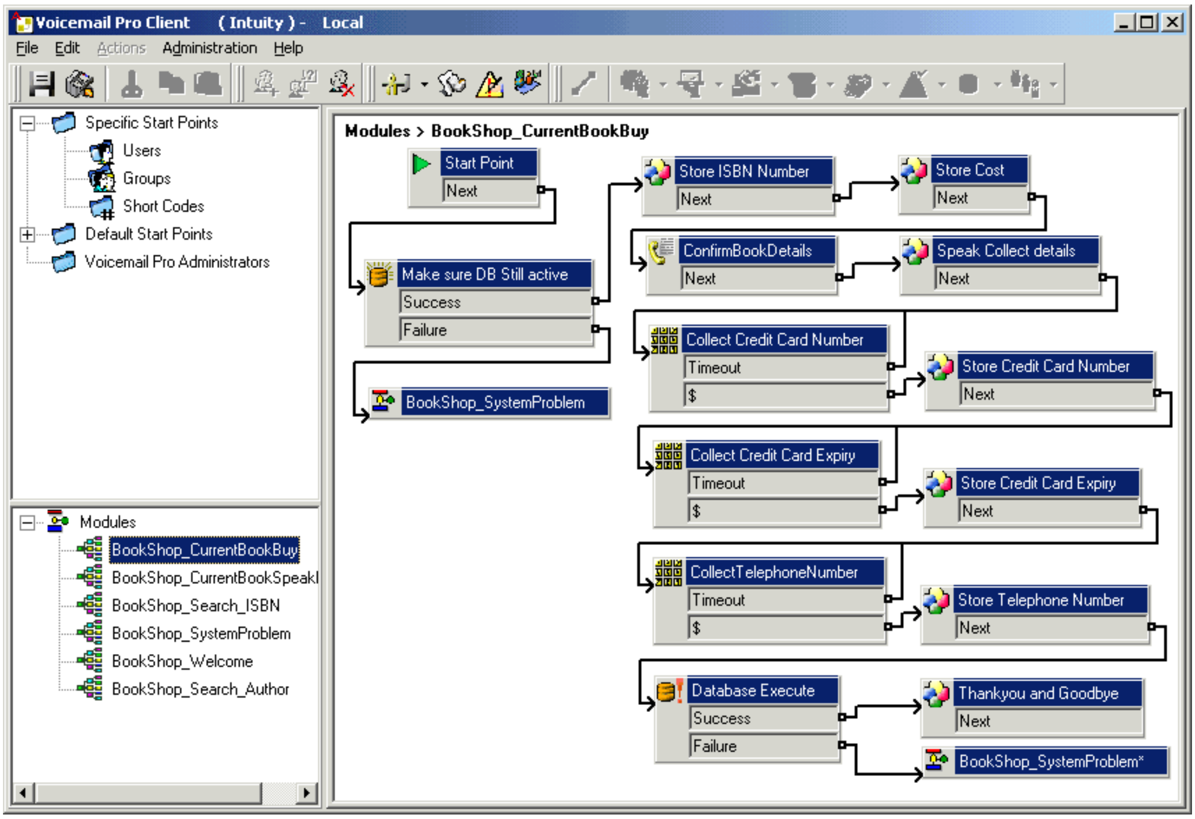
Each **Speak Text** action in the call flow returns the values from a different field selected within the database query. The 'Speak Book Cost' action has additional text added so that the currency can be spoken. In this example pounds are used.


Properties for Speak Book Cost
General
Entry Prompts
Specific
Reporting
Results
Please enter the text you wish to speak

Text to speak: $DBD[1] pounds

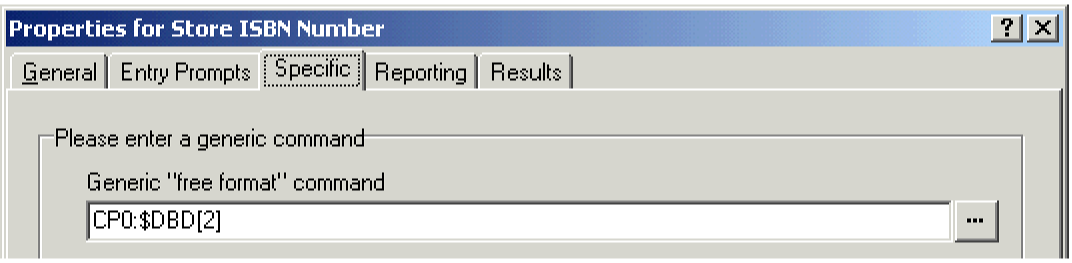
9.2.1.3 Entering Details into the Database

The caller is given an option to buy the book. If they select to buy the book, the call flow module ***Bookshop_CurrentBookBuy*** operates. The call flow immediately checks that access to the bookshop database is still available via a Database Open action.



Confirm Book Details

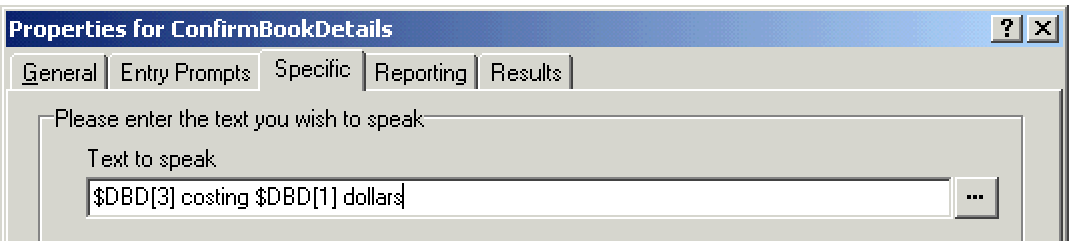
Generic actions are used to store the ISBN number and cost. The example below shows how the ISBN number is stored in the call variable ***CP0***.



Please enter a generic command

Generic "free format" command: CP0:$DBD[2]

When the details have been stored the book title and cost are spoken to the caller using a **Speak Text** action. See the example below.

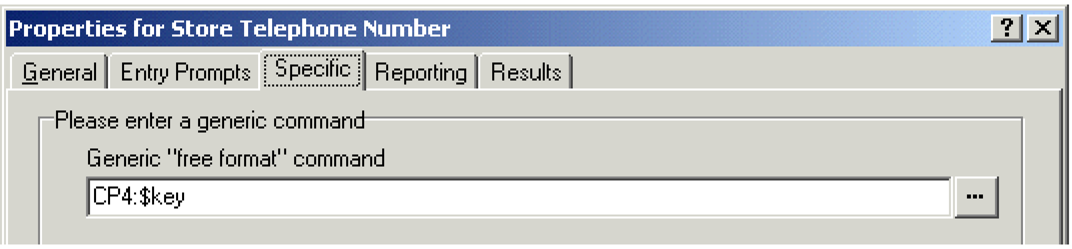


Please enter the text you wish to speak

Text to speak: $DBD[3] costing $DBD[1] dollars

Collect Callers Details

Details can be entered into a database by a caller. In this example we collect the caller's credit card number, expiry date and telephone number. All these details are collected and then the database is updated. The example below shows the Specific tab entry used to collect the caller's telephone number and assign it to the call variable CP4.

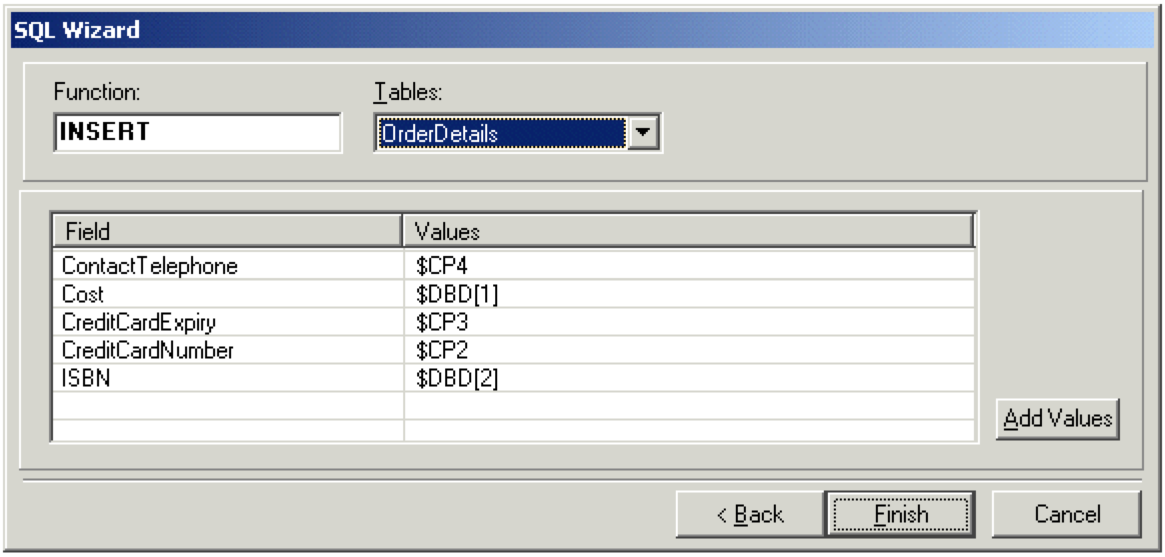


Please enter a generic command

Generic "free format" command: CP4:$key

When all the details have been collected, the database needs to be updated. The database Execute Action is used. When entering information into the specific tab for the first time you are taken through a series of steps.

1. Select the **Database Execute** icon.
2. At the SQL Function window the option to 'Insert ...values' was chosen as information needs to be added to the database.
3. Details are then entered into the SQL Wizard, as shown below. When the Database table is selected, the list of fields contained within the table is inserted.

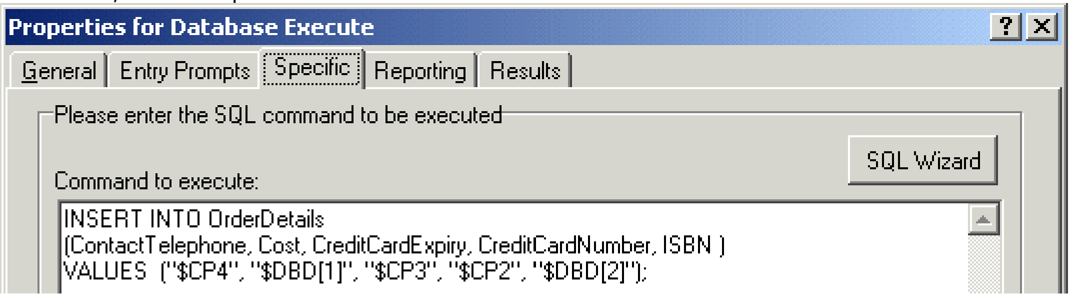


Function: INSERT

Tables: OrderDetails

Field	Values
ContactTelephone	$CP4
Cost	$DBD[1]
CreditCardExpiry	$CP3
CreditCardNumber	$CP2
ISBN	$DBD[2]

4. When the details have been entered the SQL wizard is closed. The specific tab of the action will contain the command to execute, see example shown below.



Please enter the SQL command to be executed

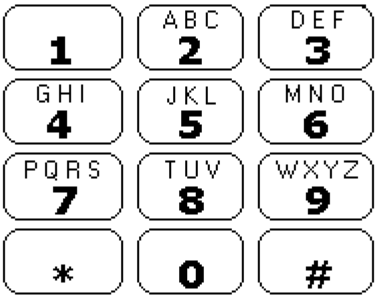
Command to execute:

```
INSERT INTO OrderDetails
(ContactTelephone, Cost, CreditCardExpiry, CreditCardNumber, ISBN )
VALUES  ("$CP4", "$DBD[1]", "$CP3", "$CP2", "$DBD[2]");
```

9.3 Dial by Name

The Dial by Name action allows callers to indicate the user or group that they require by dialing the name on their telephone keypad and then making a selection from the matches found.

To use this feature the caller must use a telephone with DTMF dialing and with ITU alphabet letter keys as shown here.



The main pre-requisites before a Dial by Name action can be used are:

1. **User Names**
   The user names are set through the IP Office Manager. Either the user's **Name** or **Full Name** field can be used for Dial by Name. If the **Full Name** field is set then it takes precedence over the **Name** field.

   - **Changing Names**
     Voicemail Pro mailboxes are created to match existing user Name's. If a user Name is changed, Voicemail Pro will create a new mailbox to match the new Name. Therefore care must be taken to ensure that Name field entries are as accurate as possible when first setting up users. Using the **Full Name** field for Dial by Name is recommended as the **Full Name** entry can be changed without affecting the existing mailbox entries.

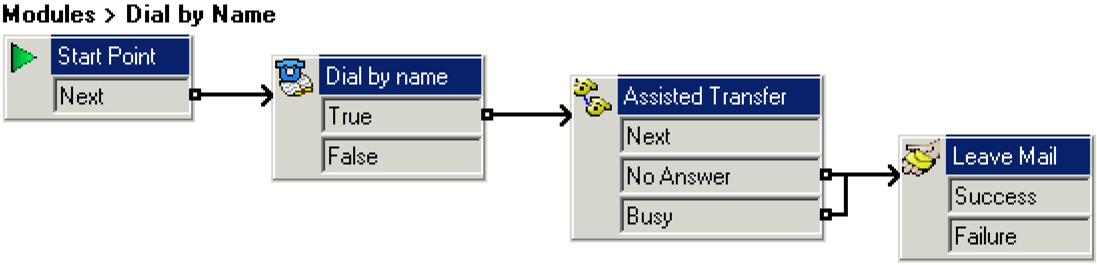
2. **User Name Recordings**
   Each mailbox to be included by the **Dial by Name** action needs to have had a user name recorded. This can be done in two ways:

   - **Intuity Mailbox Mode**
     By default when the user first enters their mailbox, they will be asked to set their voicemail code password and then to record their name.

   - **IP Office Mailbox Mode**
     In this mode you need to set up a call flow that allows users to record their name. In this document we have included an example module that can be used for that purpose. The same module can also be used by Intuity mode mailbox systems to let users re-record their names. See Adding a Record Name Module 344.

9.3.1 Example Call Flow

In this example, after selecting a name using the Dial by Name service, the caller is transferred to the matching extension. If that extension doesn't answer or is busy the caller is transferred to leave a message.



1. In Voicemail Pro a new module was added called ***Dial by Name***.

2. From **Telephony Actions** the **Dial by name** action was added.

3. From **Telephony Actions** an **Assisted Transfer** action was also added. In its properties **Specific** tab the **Mailbox** was set as ***$KEY***.

4. The **Dial by name** action's ***True*** result was connected to the Assisted Transfer action.

5. From **Mailbox Actions** a **Leave Mail** action was added.
   Again in its **Specific** tab the **Mailbox** was set as ***$KEY***. Links were added from the **Assisted Transfer** action's ***No Answer*** and ***Busy*** results to this action.

To add a short code:

1. In IP Office Manager, a new system short code was added. For this example we chose ****75*** and then entered the details as shown below.

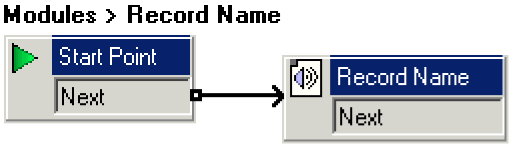
Field	Contains...
Code	*75
Feature	Voicemail Collect
Telephone Number	"Dial by Name"
Line Group Id	0
Locale	[Leave blank]
Force Account Code	[Leave blank]

2. After merging this back into the IP Office, users can dial ***75** to access dial by name. They can also transfer callers to this call flow.

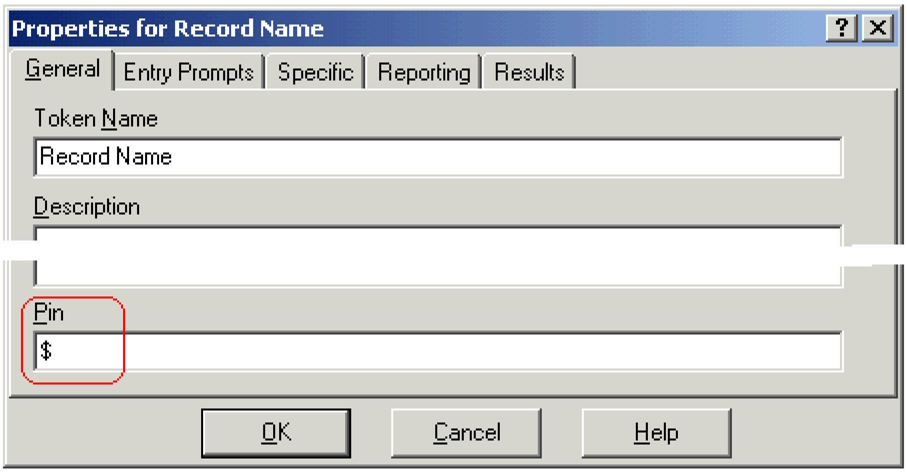
3. The short code can be added a SoftConsole or DSS button. In addition, an Incoming Call Route could be used to direct specific external calls direct to the function, for example if you had a specific external number used by employees to ring in when off site.

9.3.2 Adding a Record Name Module

This module allows users to record/re-record their mailbox name. This, or a similar module, is necessary if Voicemail Pro is using IP Office mailbox mode. However it is still useful if the Voicemail Pro is using Intuity mailbox mode as it gives users quick access to re-record their name.



1. In Voicemail Pro, a new module called ***Record Name*** was added.
2. A Record Name action was added.
3. In **the General** tab of the **Record Name** action's properties we set the **Pin** as ***$***. The ***$*** means that caller's must enter their voicemail code in order to use the action.



Token Name: Record Name

Description:

Pin: $

4. The **Specific** tab was left set to the **Caller's Mailbox**.
5. The module was saved and made live.

To add a Shortcode:

1. In IP Office Manager, a new system short code was added. In this example, we chose ****74*** and then entered the details as shown in the table.

Field	Contains...
Code	*74
Feature	Voicemail Collect
Telephone Number	"Record Name"
Line Group Id	0
Locale	[Leave blank]
Force Account Code	[Leave blank]

2. After merging this back into the IP Office, users can dial ***74** at their extension to record their mailbox name.

9.3.3 Using the Name Table

It is possible to create a service that will allow access to re-record the name of any mailbox. The **NameWavsTable** does this by requesting an extension number and then allowing you to play, re-record and submit a name recording for that extension. It then allows another extension number to be entered and so on.

Naturally if this option is used it should be behind suitable PIN code and other security protection as it allows the recording of names for any mailbox.

To use the Name table:

1. In Voicemail Pro, create a new module.
2. Add a **Goto** action and open its properties.
3. In the **General** tab, enter a unique number in the **Pin**.
4. In the **Specific** tab, in **Please select a node to go** to enter **NameWavsTable**.
5. Click **OK**.
6. Using a short code or other method, create a route to the new module.

9.3.4 Changing Full Names

Users with DS port display phones can set and change the way in which their full name is displayed through their telephone. This name will then be used for the text matching part of Dial by Name.

To changing your name using a telephone with a menu Key:

1. Press **Menu** twice.
2. Press ▶ and select **ProgA**.
3. Press ▶ and select **Name**.
4. Enter the new name. Use the dialing keys and **Rotat** to enter characters. For example, to enter an L, press the 5 key and then press **Rotat** until an **L** is displayed. You can use the top-left display key to backspace.
5. When the text is as you require, press **Done**.
6. Press **Exit**.

9.4 Campaigns

A campaign is a series of questions and answers. Callers to a campaign hear the recorded questions and give their responses, either by speaking or using the telephone keypad. The results are then saved for processing later.

Call processing agents can access a campaign 351 to hear the caller answers, which they can then transcribe into a database or other records.

A Web Campaign Component is installed as part of a typical Voicemail Pro installation 26. If the Web Campaign was not installed it can be added by doing a custom installation and selecting the Web Campaigns component.

9.4.1 Managing Campaigns

Within the Voicemail Pro client, the **Campaign Wizard** is used to create and modify campaigns.

To start the campaign Wizard:

1. Press **F7** or click **Campaign Editor**.
2. The Campaign Wizard Introduction window opens. Select the required activity.
   - **Create a new Campaign** 347
     This option takes you through a series of campaign wizard menus to set the campaigns settings.
   - **Modify an existing Campaign** 348
     This option displays a list of existing campaigns from which you can select the one you wish to modify. You will then be taken through the campaign wizard menus for the campaign settings.
   - **Delete an Existing Campaign** 348
     This option displays a list of existing campaign from which you can then select the campaign to delete.

To create a new campaign:

1. Press **F7** or click **Campaign Editor**.
2. Select **Create a new Campaign** and click **Next**.
3. The **Customer Prompts** 349 window is displayed.
   - Click ✚ . The **Please Edit the Campaign** action window opens.
   - Click **OK** when you have entered the customer prompts.
   - Adjust the prompts as required.
     - **Edit action:** - Edit the currently highlighted campaign action.
     - ✕ **Delete action:** - Delete the currently highlighted campaign action.
     - ↑↓ **Move action:** - Move the position of an action in the sequence of campaign actions.
   - Click **Next**.
4. The **Customer Menu** 350 window is displayed.
   - Select which options are available after the prompt is played.
   - Click **Next**.
5. The **Campaign Identification** 351 window is displayed.
   - Enter the details on identifying the campaign.
   - Click **Next**.
6. Click **Finish** to create the campaign.

To modify a campaign:

1. Press **F7** or click **Campaign Editor**.
2. Select **Modify an existing Campaign** and click **Next**.
3. Select the required campaign and click **Next**.
4. The **Customer Prompts** 349 window is displayed.
    - Click ✚ . The **Please Edit the Campaign** action window opens.
    - Click **OK** when you have entered the customer prompts.
    - Adjust the prompts as required.
        - **Edit action:** - Edit the currently highlighted campaign action.
        - ✕ **Delete action:** - Delete the currently highlighted campaign action.
        - ↑↓ **Move action:** - Move the position of an action in the sequence of campaign actions.
    - Click **Next**.
5. The **Customer Menu** 350 window is displayed.
    - Select which options are available after the prompt is played.
    - Click **Next**.
6. The **Campaign Identification** 351 window is displayed.
    - Enter the details on identifying the campaign.
    - Click **Next**.
7. Click **Finish** to update the campaign.

To delete a campaign:

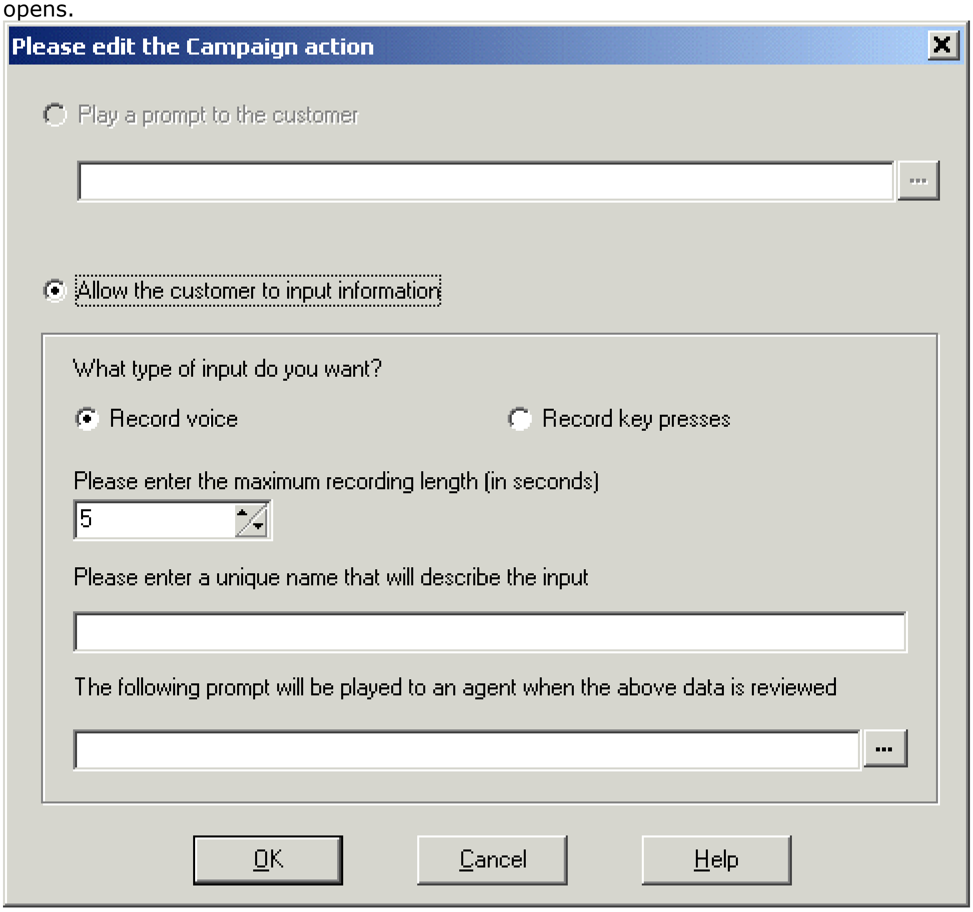
1. Press **F7** or click **Campaign Editor**.
2. Select **Delete an existing Campaign** and click **Next**.
3. Select the required campaign and click **Next**.
4. Click **Finish** to delete the selected campaign.

9.4.1.1 Customer Prompts

The Customer Prompt window of the Campaign Wizard is used to set the sequence of questions that are played to callers and to record their responses.

- ✚ **Add action**
  To add a new campaign action, click ✚**Add action**. The **Please edit the Campaign action** window opens.

- **Edit action**
  Select the prompt or recording to edit then click Edit action. The **Please edit the Campaign action** window opens.



○ Play a prompt to the customer

● Allow the customer to input information

● Record voice

Please enter the maximum recording length (in seconds): 5

Please edit the Campaign action
What type of input do you want?
○ Record key presses
Please enter a unique name that will describe the input
The following prompt will be played to an agent when the above data is reviewed
...
OK
Cancel
Help

- **Play a prompt to the customer**

  Select this option to play a prompt to the caller. Click ... to specify which prompt to play or create a new prompt in the Wave Editor window. See Using the Wave Editor 161.

- **Allow the customer to input information**
  Select this option to if you want the action to record the caller's response.

  - **What type of input do you want**
    This option sets whether the voicemail server should **Record voice** or **Record key presses**.

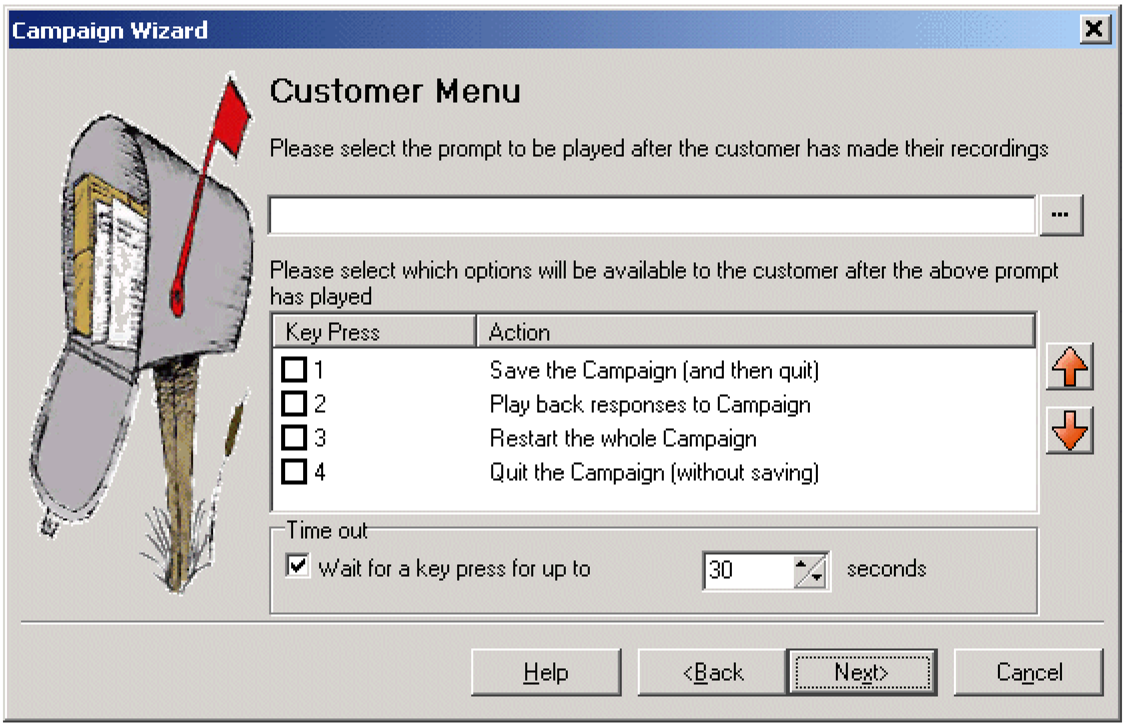
  - **Please enter the maximum recording length** or **Please enter the maximum number of key presses**.
    The field name depends on the type of input chosen. The time specified in seconds sets the maximum length of recording or the maximum number of key presses to record before the next action.

  - **Please enter a unique name that will describe the input**
    A name to associate with the action. The name should be a single word with no spaces.

  - **The following prompt will be played to an agent when the above data is reviewed**
    This option allows you to select or create a prompt that is played to agents before hearing the caller's response. Click ... to specify which prompt to play or create a new prompt in the Wave Editor window. See Using the Wave Editor 161.

9.4.1.2 Customer Menu

After completing the sequence of questions and responses, the caller can be offered a menu of options. The Customer Menu window of the Campaign Wizard is used to select the options available.



Campaign Wizard

Customer Menu

Please select the prompt to be played after the customer has made their recordings

Please select which options will be available to the customer after the above prompt has played

Key Press	Action
☐ 1	Save the Campaign (and then quit)
☐ 2	Play back responses to Campaign
☐ 3	Restart the whole Campaign
☐ 4	Quit the Campaign (without saving)

Time out

☑ Wait for a key press for up to 30 seconds

- **Please select the prompt to be played after the customer has made their recordings**
  You can select or create a prompt that is then played to callers after completing the sequence of questions and answers. The prompt should inform the customer of which actions selected from the list they can use. Click ... to specify which prompt to play or create a new prompt in the Wave Editor window. See Using the Wave Editor 161.
- **Please select which options will be available to the customer after the above prompt has played**
  Check the boxes to select the options that will be available to the customer. The customer then needs to press the corresponding key.
  - **Save the Campaign (and then quit)**
    Saves caller responses and then disconnects the caller.
  - **Play back response to the Campaign**
    Plays back the customers responses to them and then repeats this customer menu.
  - **Restart the whole Campaign**
    Delete the customers responses and restarts the sequence of questions and answers.
  - **Quit the Campaign (without saving)**
    Disconnects the customer without saving their responses.
  - ↑↓ **Move options**
    You can move the currently highlighted option so that the key presses associated with the options differ.
- **Timeout**
  Sets how long the voicemail server should wait for an answer before following the **No Answer** connection.

9.4.1.3 Campaign Identification

The Campaign Identification window of the Campaign Wizard is used to set a park location for the campaign and to name the campaign.

- **Where should this Campaign be parked**
  Enter a park slot number for the campaign. This number can be programmed under a DSS key. That key can then be used by agents to access the campaign. If the DSS key also incorporates a BLF lamp, that lamp is lit when new campaign messages are left.
- **The name of the Campaign is**
  Enter a name for the campaign.

9.4.2 Accessing Campaign Results

The results of a campaign can be accessed in several ways:

- **Using the Campaign Action** 189
  The Campaign action is used to route calls into a campaign after those calls have been routed to an appropriate start point on the voicemail server. The action's properties set whether the call is treated as a caller to the campaign or an agent processing the campaign messages. See Campaign Action 189.
- **Using a Campaign Park Slot Number** 352
- **Through a Web Browser** 353

When accessing the caller recordings from using a **Campaign** action or park slot number, the following controls are provided through the telephone keypad.

1	Go to the start of the call.		**7**	Previous response.
2	Rewind.		**8**	Start of response.
3	Stop processing the message.		**9**	Next response.
4	Mark call as processed and delete.		**0**	Pause.
5	Mark call as processed and save.		**#**	Fast forward.

9.4.2.1 Campaign Park Slots

The Park Slot number assigned to the Campaign can be used with programmable buttons to access that campaign. If the telephone has a message waiting lamp, the lamp will be lit when there are campaign messages waiting to be processed.

- Phone Manager park slot keys cannot be used for this function.

When accessing the caller recordings from using a **Campaign** action or park slot number, the following controls are provided through the telephone keypad.

1	Go to the start of the call.		**7**	Previous response.
2	Rewind.		**8**	Start of response.
3	Stop processing the message.		**9**	Next response.
4	Mark call as processed and delete.		**0**	Pause.
5	Mark call as processed and save.		**#**	Fast forward.

To assign a campaign to a programmable button:

1. In IP Office Manager, receive the IP Office configuration.
2. Open the required **User** form.
3. Select the **Button Programming** tab.
4. Select a free button
5. Right-click in the **Action** field.
6. Select **Emulation** > **Call Park**.
7. Right-click in the **Action Data** field. Enter the campaign's park slot number.
8. Save the configuration back to the IP Office and reboot.
9. The programmable button on the user's telephone will flashing red when there are new messages in the campaigns park slot.
10. Press the button to display the campaign name and number of messages.
11. Press the button again to start processing those messages.

The UnPark Call function can also be used to collect the calls, but this method does not provide any visual feedback when messages are present.

To use the UnPark Call function:

1. Select a free programmable button
2. Right-click in the **Action** field.
3. Select **Advanced** > **Call** > **UnPark Call**.

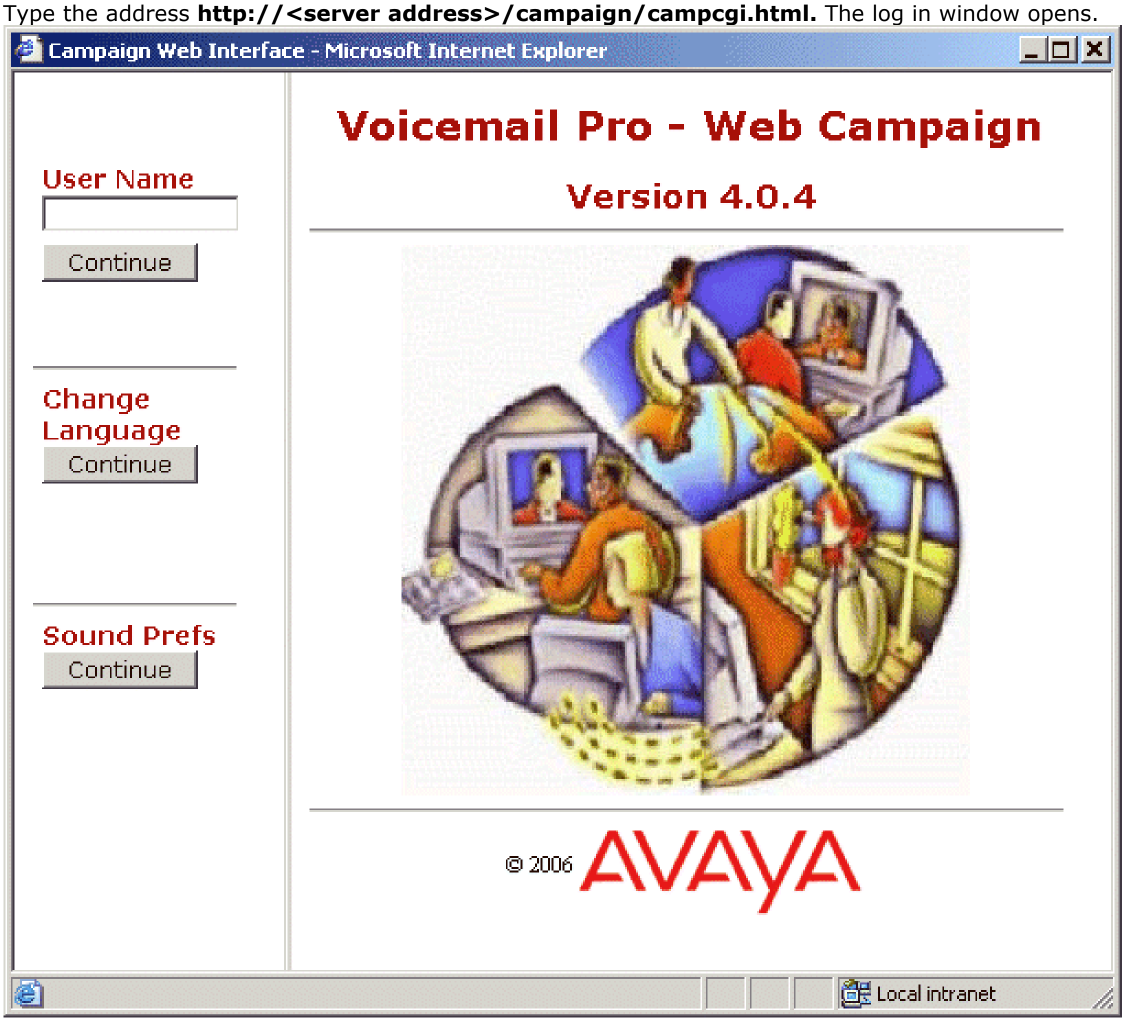
9.4.2.2 Using the Web Campaign

The Web Campaign Component allows access to play and change the status of campaign messages through a Web browser.

- Anyone who wants to use the web campaigns must have Microsoft Internet Explorer 5.0 or higher (not Netscape). Their PC must also have multimedia sound capabilities. The Web campaign user must also have a voicemail mailbox. The name of their mailbox is requested when the user browses the campaign messages.
- During installation of the Campaign Web Component, the root address of the web server is requested. A folder called *campaign* is then added to that root. The web address for browsing will normally be set up as a link from a page within a company intranet rather than typed directly by users.
- Access must be via http: and not network file routing.

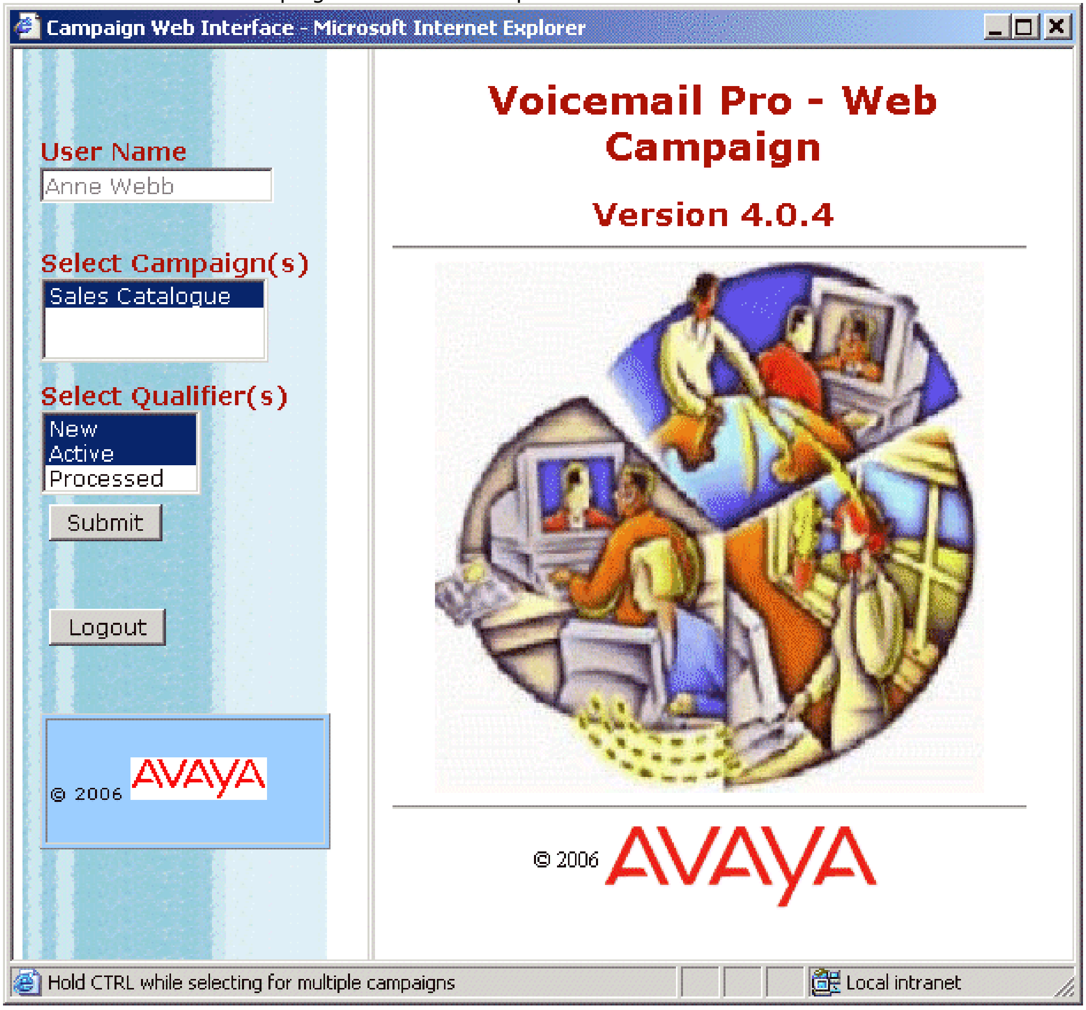
To view open the Campaign Web Campaign:

1. Open your internet browser.
2. Type the address **http://<server address>/campaign/campcgi.html.** The log in window opens.



3. (Optional) To change the language click the language **Continue** button. A menu containing the countries flag is shown. If you place your mouse cursor over a flag, the language that it represents in indicated.
   - Click the required flag to change the language.
4. (Optional) To change the sound preferences click the Sound Prefs **Continue** button.
   - Select the playback type of either the browser default or as background. The option background is the default selection.
   - Click **Back** to continue.
5. Enter your mailbox box name in the **User Name** field.

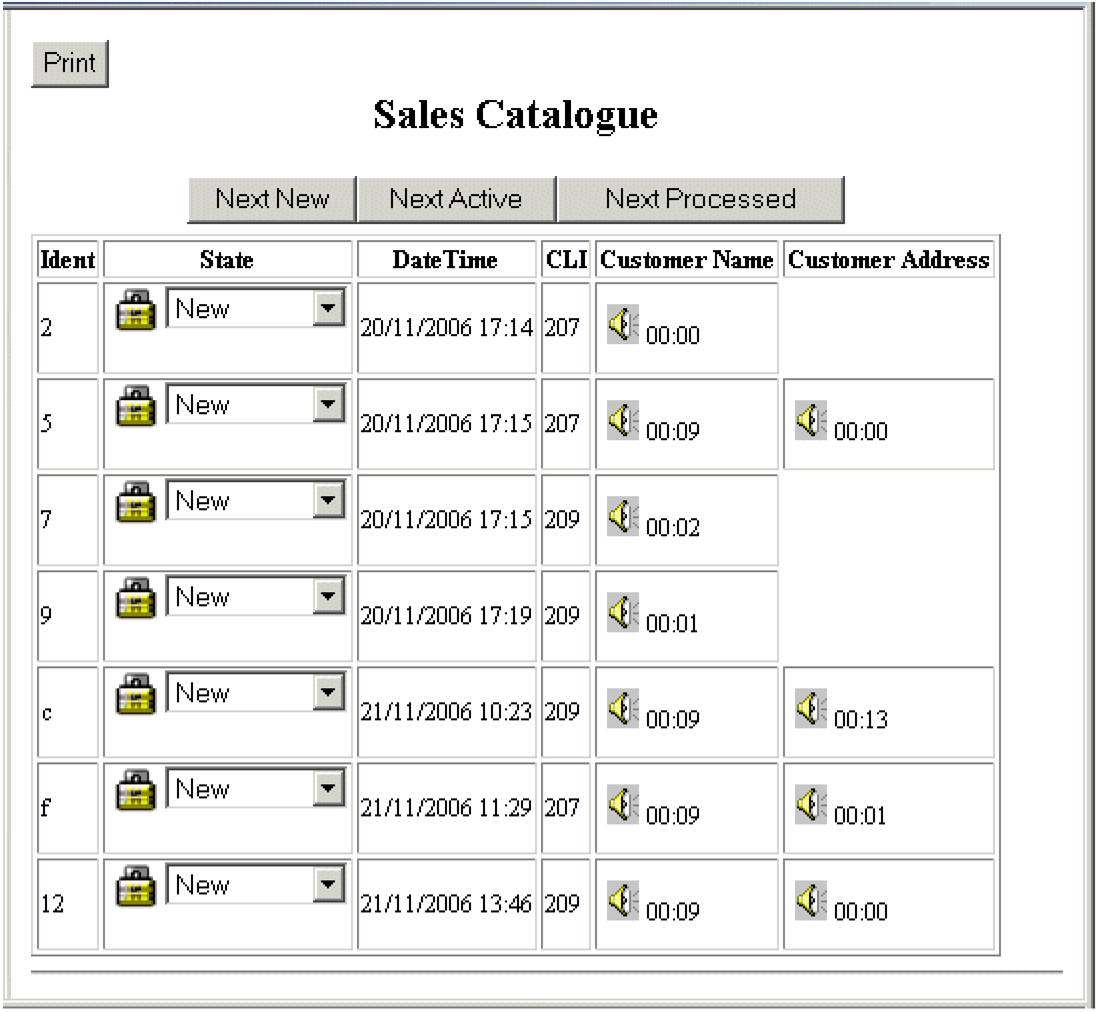
6. Click **Continue**. The Campaign Web interface opens.



7. Select the campaign results that you want to view.

8. Select the type of results that you want to view.

9. Click **Submit** to view the results. The details are listed in the main part of the window.



Sales Catalogue

Ident	State	DateTime	CLI	Customer Name	Customer Address
2	New	20/11/2006 17:14	207	00:00	
5	New	20/11/2006 17:15	207	00:09	00:00
7	New	20/11/2006 17:15	209	00:02	
9	New	20/11/2006 17:19	209	00:01	
c	New	21/11/2006 10:23	209	00:09	00:13
f	New	21/11/2006 11:29	207	00:09	00:01
12	New	21/11/2006 13:46	209	00:09	00:00

9.5 Fax Server Configuration

With an IP Office system, fax machines and servers can process fax messages in a number of ways.

- **Fax calls can be handled without the use of Voicemail Pro**
  In IP Office a fax machine can be set up to direct faxes to individual extensions or hunt groups. Faxes can be directed to the fax machines or servers based on the DDI or DID numbers of the incoming calls. See the IP Office Manager help and guide.

- **Fax calls detected by Voicemail Pro**
  When a fax message is left in a voicemail mailbox, Voicemail Pro can detect that the call is a fax call, and redirect the call to a fax machine or fax server to receive the fax. The incoming call can be routed to a system fax number or, in Intuity Mode, a fax number that the mailbox owner has specified.

- **Fax calls can be sent to a system-wide fax number**
  If Voicemail Pro detects a fax tone, it passes the call to the number that is set as the system fax number. This number can be an analog extension that is connected to a fax board in the fax server. For information about configuring an analog extension, see Configuring an Analog Extension Number for Fax Use 362.

- **Fax calls can be sent to a user defined mailbox number**
  If Voicemail Pro detects that the incoming call is a fax and if a system fax number has been specified, Voicemail Pro checks to determine whether the target destination is a user defined fax number. If it is, the system fax number is overridden and the incoming call is redirected to the user defined fax number.

  If no user defined fax number has been set, the fax is sent to the system fax number. When a system fax number is set, any fax calls that are received in user or hunt group mailboxes are directed to this number. This applies to both IP Office and Intuity Mailboxes. See Setting the Voicemail Pro System Fax Number 358.

  Intuity mailbox owners have options available through their telephone handset so that they can forward a fax to a preferred fax machine or send a fax to a printer. Intuity mailbox owners can find out how to set a mailbox fax number in the IP Office Intuity Mailbox User Guide.

  If a fax system, such as a C3000, requires prefix addressing the system fax number is not used. Instead a prefix is specified so that a fax message can be identified and forwarded to the extension number of the intended recipient. For example if a prefix of 54 is being used, a fax message for extension 201 would have the prefix of 54 automatically added so that the complete number would become 54201. The fax server then removes the system prefix and uses the extension number to determine the target destination for the fax. See Setting the Voicemail Pro System Fax Number 358.

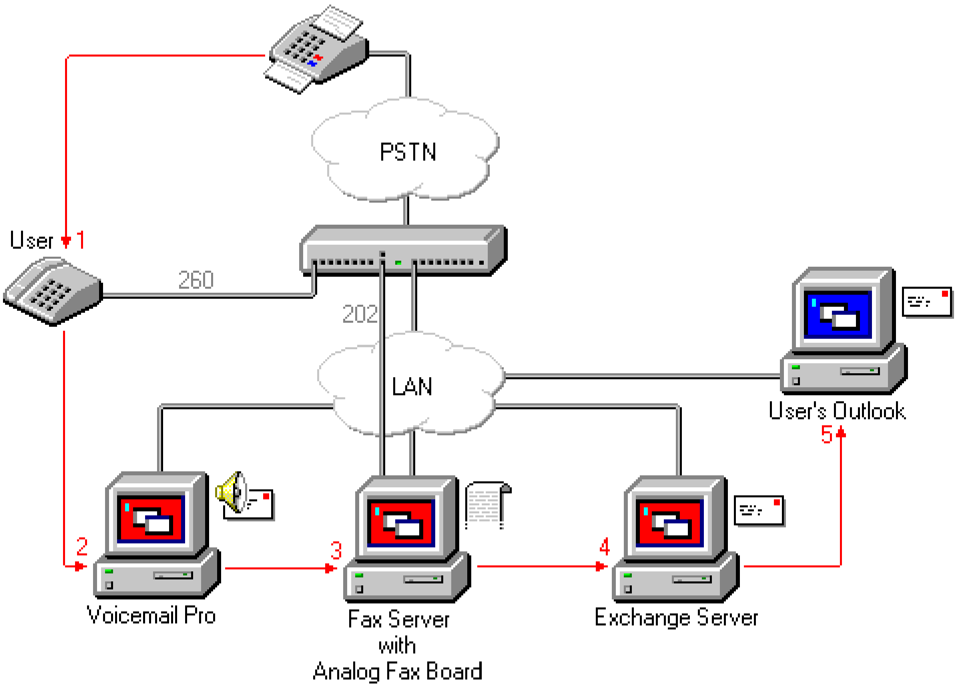
- **Fax calls can be redirected using a call flow Menu action instead of a system fax number**
  If a system fax number is not set up, a menu action can be used instead. The **F** character can be used as one of the touch tone choices of a Menu action to specify the actions that should be applied to fax calls. See Routing Fax Calls Using a Menu Action 361.

- **Important**
  By default, Voicemail Pro fax detection is disabled. To enable fax detection, you must define a system fax number. See Setting the Voicemail Pro System Fax Number 358.

9.5.1 Fax Server Configuration

Here is an illustration to show how a fax server can be configured to work with an IP Office system. The illustration applies to the following popular fax server applications:

- Gfi FAXMaker
- Fenestrae Faxination
- Equisys Zeta*fax*
- Captaris RightFax



The fax server is configured to distribute faxes to exchange server mailboxes based on the original (DTMF) fax sub address that is passed by Voicemail Pro. For the fax server and Voicemail Pro to interact, specific user rights are needed.

If the PC that is being used as the fax server uses an analog fax board, the fax board must be connected to an IP Office analog extension (POT) port.

The sections that follow explain how to configure a fax server to work with Voicemail Pro. The information provided assumes that:

- The fax server software is installed.
- The hardware is installed and connected to an IP Office.
- The Exchange Connector is installed and configured.

For details of system requirements and information about installing a fax server, refer to the manufacturer documentation or visit the manufacturer web site.

The process for configuring a fax server to work with Voicemail Pro involves the following key steps:

1. Set the system fax number. See Setting the Voicemail Pro System Fax Number 358.
2. If prefixed numbers are being used you can set up a short code so that fax calls are routed to prefixed numbers.
3. If the chosen mailbox mode is Intuity, inform all mailbox owners that they can set up their own preferred fax destinations if they like. See Setting Up a User Defined Fax Number 360.
4. If a system fax number is not being used, you can set up a menu action to route fax calls. See Routing Fax Calls Using a Menu Action 361.
5. If the fax server PC uses an analog fax card, configure the extension number to use for faxes. See Configuring an Analog Extension Number for Fax Use 362.

9.5.2 Setting the VoiceMail Pro System Fax Number

The **System Fax Number** is used to:

- Enable fax detection.

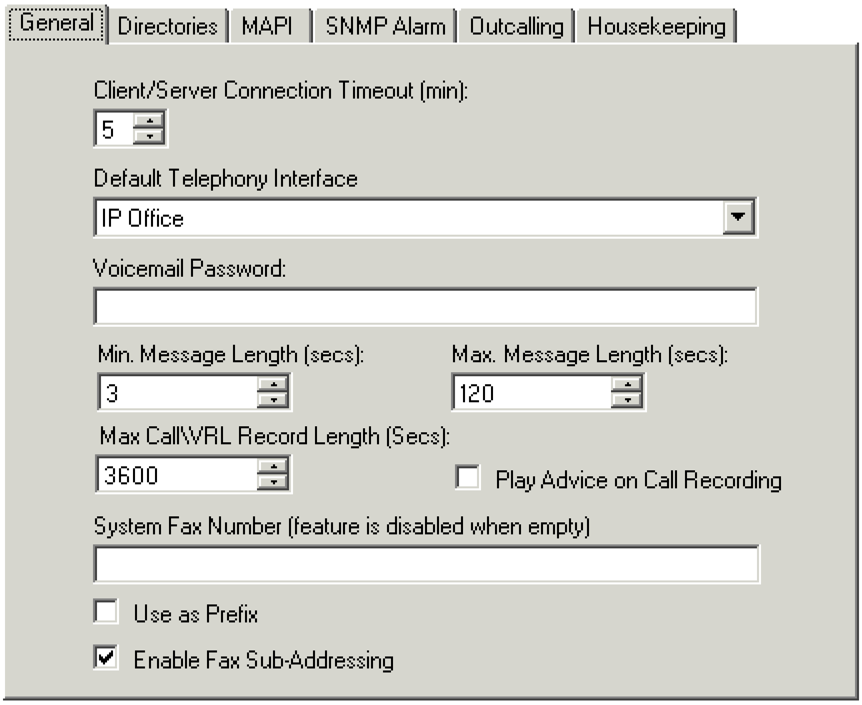
By default fax detection is not enabled when Voicemail Pro is first installed. When fax detection is enabled, any fax calls that are left in a voicemail mailbox, are redirected to the defined system fax number.

- Define the default destination for fax calls that arrive in a voicemail mailbox and which are to be redirected to a fax machine.

Intuity mailbox owners have the additional option to define their own personal fax number instead of the system fax number. Incoming calls are directed to Voicemail Pro and then Voicemail Pro redirects fax calls to a mailbox owner's personal fax number, if one has been set. For information mailbox owners should read the Intuity Mailbox User Guide.

To set the Voicemail Pro system fax number:

1. From the **Administration** menu, select **Preferences**. The System Preferences window opens.
2. Click the **General** tab.



Client/Server Connection Timeout (min): 5

Default Telephony Interface: IP Office

Voicemail Password:

Min. Message Length (secs): 3

Max. Message Length (secs): 120

Max Call\VRL Record Length (Secs): 3600

☐ Play Advice on Call Recording

System Fax Number (feature is disabled when empty)

☐ Use as Prefix

☑ Enable Fax Sub-Addressing

3. In the **System Fax Number** box, type the number of the general fax machine to which all incoming faxes are to be directed. This number must match the number of the analog extension that is connected to the fax board of the fax server PC.
   - Intuity mailbox owners can receive fax messages into their mailboxes and set a preferred fax number to use instead of the system fax number. As the administrator you still need to set up a system fax number to enable mailbox owners to set their own numbers. A personal mailbox fax number overrides the system fax number. Mailbox owners can find out more in the Intuity Mailbox User Guide.
   - 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 54, a fax message for extension 201 would have the prefix of 54 automatically added so that the complete number would become 54201.
4. To use the specified prefix, check the **Use as a Prefix** box so that the number that you typed in to the **System Fax Number** box is used. If your fax system does not use prefix addressing, leave this box unchecked.
   - **Important**
     For this feature to work, you also need to set up a short code.
5. Most fax servers perform fax forwarding based on DTMF signalling 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. This is so that the fax can be forwarded to the email address of the intended recipient.
6. Click **OK**.
7. Click **Save & Make Live**.

If prefixed numbers are being used, the next step is to up a short code so that fax calls are routed to prefixed numbers.

If the chosen mailbox mode is Intuity, you should then inform all mailbox owners that they can set up their own preferred fax destinations if they like. See Setting Up a User Defined Fax Number 360.

If a system fax number is not being used, you can set up a menu action to route fax calls. See Routing Fax Calls Using a Menu Action 361.

If the fax server PC uses an analog fax card, you need to configure the extension number to use for faxes. See Configuring an Analog Extension Number for Fax Use 362.

9.5.3 Setting up Fax Forwarding

Voicemail Pro is set up to forward faxes when users dial *1. Faxes are forwarded as follows:

- Gfi FAXMaker faxes are sent to <faxnumber>@faxmaker.com
- Fenestrae Faxination faxes are sent to <faxnumber>@faxination.com
- Equisys Zeta*f*ax faxes are sent to <faxnumber>@zfconnector.com
- Captaris RightFax faxes are sent to <faxnumber>@rightfax.com

Example
For example, if a GFi FAXMaker user dials *1 and enters the fax number to use followed by # to end the fax number and # to confirm, the fax is forwarded to <faxnumber>@faxmaker.com. Therefore if the user dials *1 followed by 201# and # to confirm, the fax is forwarded to 201@faxmaker.com.

- It is the responsibility of the fax server administrator to ensure that exchange connectors are configured to receive such messages.

9.5.4 Setting Up a User Defined Fax Number

If you enable the feature for them, Intuity mailbox owners can set up a preferred personal fax number that is more convenient to their location, for example if they are out of the office.

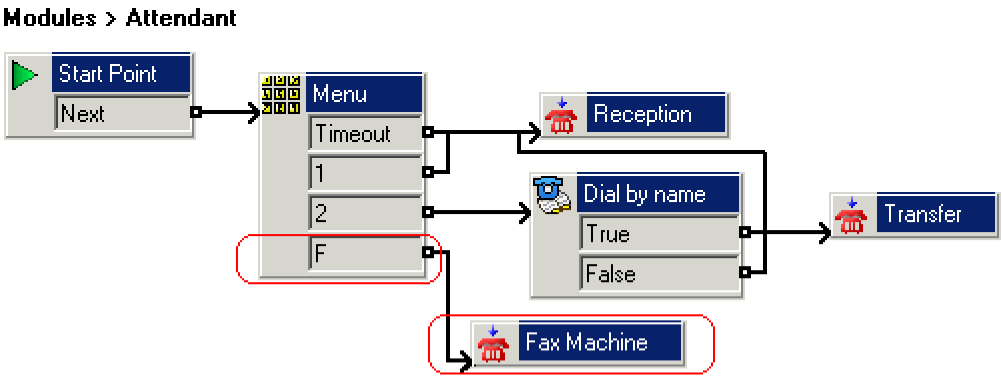
To set up a user defined fax number:

1. Complete the steps for setting up the system fax number. See Setting the Voicemail Pro System Fax Number 358.
2. Inform the mailbox owner that they can go ahead and set their preferred fax number. Refer the mailbox owner to the IP Office Intuity Mailbox User Guide.
3. If it has not already been done and the fax server PC is using an analog fax card, the next step is to configure the analog fax number to use. See Configuring an Analog Extension Number for Fax Use 362.

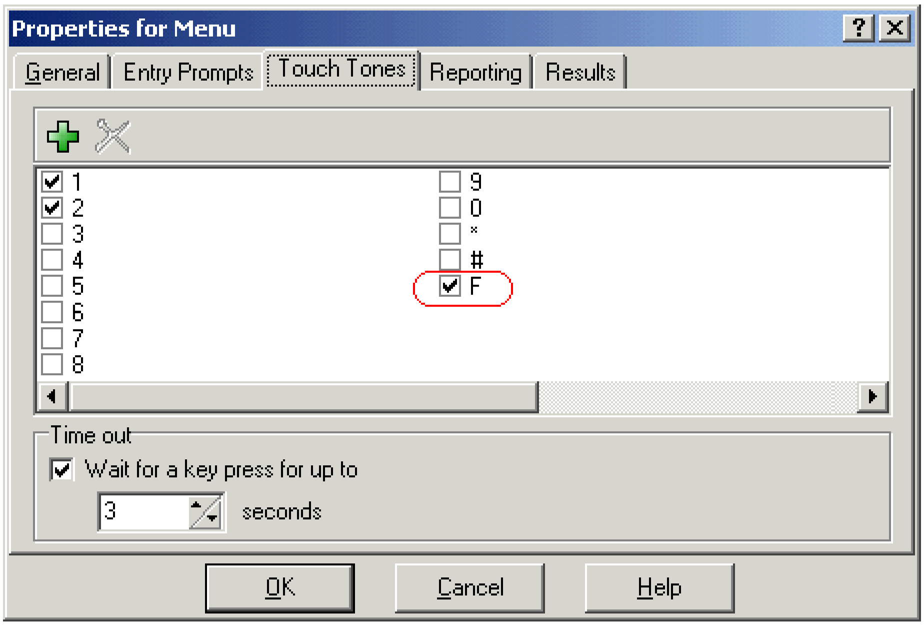
9.5.5 Routing Fax Calls Using a Menu Action

When an incoming call is routed to the auto attendant, the Menu action has the facility to detect and redirect fax calls. This capability is enabled by including a number in the system fax number field via the Voicemail Pro Client, and adding 'F' as the tone to detect in the Menu action. From the Menu action, incoming calls presenting a fax tone will then follow the 'F' call flow route, which could be a transfer call to a fax server extension or hunt group.

You can add the **F** character to the touch tone options of a **Menu** action to specify the actions that should be applied to fax calls. The corresponding result can then be routed as required for fax calls received by the associated call flow. The following example module call flow is using **F** to redirect incoming fax calls to a specific transfer number.



The **F** result was added to the **Menu** action **Touch Tones** tab using the ✚ icon.



☑ 1
☑ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9
☐ 0
☐ *
☐ #
☑ F

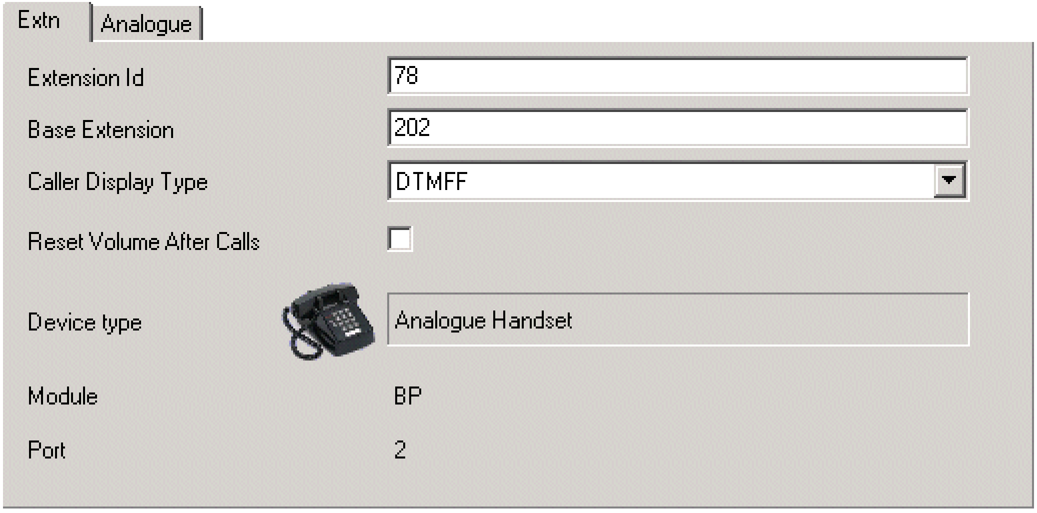
Time out
☑ Wait for a key press for up to
3 seconds

9.5.6 Configuring an Analog Extension Number for Fax Use

If the PC that is being used as the fax server uses an analog fax card, it must be connected to an IP Office analog extension (POT) port. You are then ready to configure the analog extension for fax use.

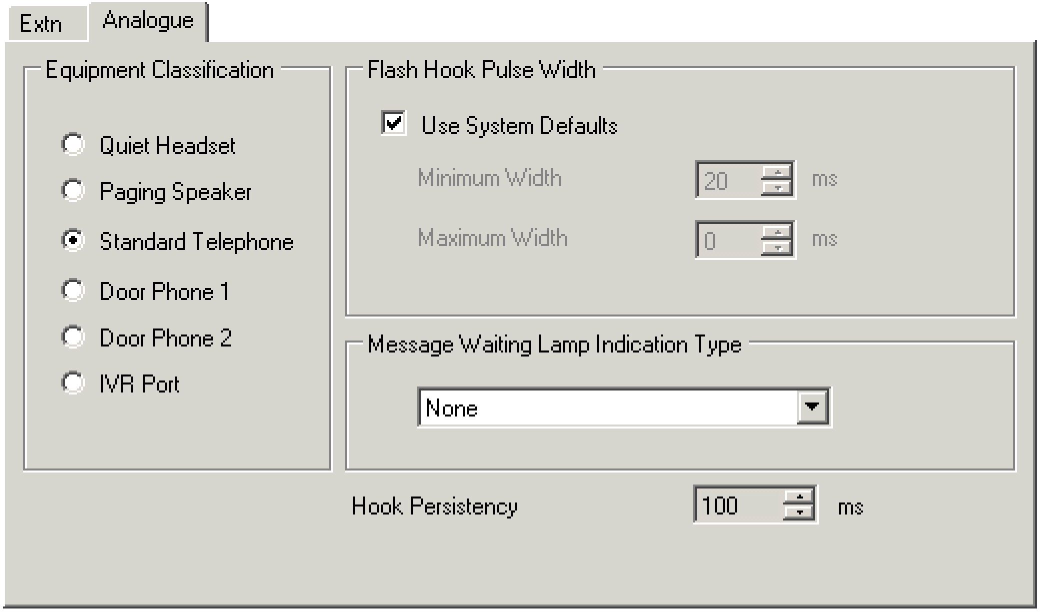
To configure an analog extension number for fax use:

1. In IP Office Manager, display the extension details for the extension that you are using for the fax.
2. View the **Extn** tab.
3. In the **Caller Display Type** field, select ***DTMFF***.



Extension Id: 78
Base Extension: 202
Caller Display Type: DTMFF
Reset Volume After Calls: ☐
Device type: Analogue Handset
Module: BP
Port: 2

3. View the **Analogue** tab.
4. Set up the incoming DDI routing of calls to specific users as required.



Equipment Classification
○ Quiet Headset
○ Paging Speaker
● Standard Telephone
○ Door Phone 1
○ Door Phone 2
○ IVR Port

Flash Hook Pulse Width
☑ Use System Defaults
Minimum Width: 20 ms
Maximum Width: 0 ms

Message Waiting Lamp Indication Type: None

Hook Persistency: 100 ms

- **Tip**
  If the fax board can support multiple lines, you can configure them as a group. The group number can then be used as the fax destination instead of an individual extension number.

The next step is to set the Voicemail Pro system fax number. See Setting the Voicemail Pro System Fax Number 358.

9.5.7 Castelle Fax Server

Voicemail Pro 4.1 added support for Castelle FaxPress products. This uses SMTP rather than MAPI to exchange fax emails with the Voicemail Pro server.

In order for the Voicemail Pro to recognize emails received from the fax server, the From name used must start with FaxPress. This is configured through the FaxPress client software as follows:

1. Login to the FaxPress client software as a supervisor.
2. Expand the Administration section on the left.
3. Select **Embedded Services**.
4. Select **Email Gateway**. Right-click on this and select **Configuration**.
5. Select the **Email to Fax** tab.
6. In the **Return address used in emails sent from the SMTP gateway** section, in the **Name** field enter a name in beginning with ***FaxPress***.

Chapter 10.

Appendix

10. Appendix

10.1 What Was New in 4.2

In conjunction with IP Office 4.2, Voicemail Pro 4.2 supports the following new features:

- **IP Office Unified Messaging Service (UMS)** 37
  Two new methods for users to access their mailbox are now supported. The methods are mailbox access using email applications that support IMAP (Internet Message Access Protocol) and mailbox access via web browsers. The use of these requires the IP Office configuration to contain ***UMS Web Services*** licenses for the number of required users.

  - **IMAP Service** 38
    The Voicemail Pro now includes an IMAP server. Users can then access their voicemail messages using email clients such as Outlook and Lotus notes that support an IMAP Client. When connected, the IMAP client and Voicemail Pro will synchronize messages in the mailbox with message files in the IMAP client. Playback is through the sound facilities of the user PC.

  - **Web Voicemail Service** 41
    The Voicemail Pro web service allows users to access their mailbox using a web browser. This has been tested with the Internet Explorer 7, Firefox 2 and Opera 9.10 PC browsers. This method of access requires Voicemail Pro to be installed on a PC already running Microsoft's IIS web server. Users can select to have message playback via an IP Office extension or through their PC's sound facilities.

- **Test Variable Action** 223
  The existing **Check Digits** action has been replaced by a **Test Variable** action. This, in addition to offering the capabilities of the **Check Digits** action, provides significant enhancements. In addition to being able to match the user's DTMF input against a specified string offered by the **Check Digits** action, the **Test Variable** action allows the testing of the contents of any call variable against known user extensions, hunt-groups, mailboxes and the contents of another variable. This allows a number entered by a caller to be verified as matching an existing extension or hunt group prior to attempting a transfer to that number.

- **Menu Action Invalid Input Handling** 180
  The **Menu** action has been enhanced. It now includes a control for the number of retries for the caller to make a valid entry and an ***Invalid Input*** result for connection to following call flow actions. Also prompts can be selected for playback whenever an invalid entry or entry timeout occurs.

- **License and Service Status Display** 79
  When the Voicemail Pro client is connected to a Voicemail Pro server, the **Help | About** screen displays a list of the licenses being used by the Voicemail Pro server. This license details include the validation status and capacity of those licenses. The status of related services, for example the UMS IMAP server, are also listed.

- **Call Variable Length Increase** 140
  Previously the length of values stored by call variables has been limited to 64 characters. That maximum length has been increased to 512 characters.

- **Outcalling Configuration** 289
  In conjunction with Phone Manager 4.2, Voicemail Pro 4.2 allows users to adjust their outcalling settings through using a visual menu within Phone Manager.

  - Using the Phone Manager interface, users can now apply a delay between each notification call in an escalation list.

10.2 What Was New in 4.1

In conjunction with IP Office 4.1, Voicemail Pro 4.1 supports the following new features:

- **Windows Vista Support** 19
  Those components of Voicemail Pro previously supported on Windows XP Pro are now also supported on Windows Vista (excluding Vista Home Basic and Vista Home Premium). The Voicemail Pro client is supported on Vista. The Voicemail Pro server is supported on Vista but not with IMS or Web Campaigns.
- **Automatic Recording Mailbox for Hunt Groups** 266
  By default automatic recordings for hunt groups are routed to the hunt group mailbox. Previously this could not be changed except through customized call flows on the Voicemail Pro. An alternate mailbox destination can now be specified through the **Hunt Group | Voice Recording** 266 tab.
- **Automatic Recording Mailbox for Account Codes** 266
  By default automatic recordings for account codes are routed to the mailbox of the user making the call. Previously this could not be changed except through customized call flows on the Voicemail Pro. An alternate mailbox destination can now be specified through the **Account | Voice Recording** 266 tab.
- **Call Data Tagging on Transfer Actions** 199
  The Transfer action now supports fields for setting the transfer source and description to display on phones receiving the transfer. The ability to associate call data for MS-CRM via **Assisted Transfer** actions is now also supported on **Transfer** actions.
- **Call Transfer Announcements** 199
  The **Transfer** 199 and **Assisted Transfer** 207 actions can be configured to announce the transfer to the caller. The announcement uses the recorded name of the mailbox associated with the transfer if available or the number if otherwise.
- **LIFO/FIFO Mailbox Operation** 93
  The default message playback order of First In-First Out (***FIFO***) can now be changed to Last In-First Out (***LIFO***). This is separately adjustable for new, old and saved messages. These are set through the **System Preferences | Housekeeping** 93 tab (**Administration | Preferences | General** 93).
- **Time in Queue and Time on Call Variables** 140
  Two new variables can be used in Queued and Still Queued call flows. They are **$TimeQueued** for the time in the queue and **$TimeSystem** for the time the call has been on the IP Office system.
- **Castelle Fax Server Support** 363
  The Voicemail Pro can be configured to recognize faxes of this type left in user's email mailboxes and include announcement of there presence in the user's mailbox prompts.
- **Hunt Group/Account Code Call Recording Destination** 266
  Previously the destinations for automatic call recording triggered by hunt groups or account codes could not be changed except through a custom Voicemail Pro call flow. The IP Office 4.1 configuration now allows the required destination for the call recording to be specified.
- **$DDI Call variable for DDI Numbers** 140
  This variable is available on DDI calls passed from the IP Office to the Voicemail Pro.
- **Variable Routing (replaces the CLI Routing Action)** 195
  The existing CLI Routing action has been replaced by the **Variable Routing** 195 action. This action allows the call routing to be based on matching specified values to call variables such as ***$CLI*** and ***$DDI***. The numbers to which matching is performed can include wildcards such as ***?*** for a single digits and ***** for any digits.

10.3 What Was New in 4.0

In conjunction with IP Office 4.0, Voicemail Pro 4.0 supports the following new features:

- **Upgrade** 35
  You can now upgrade without having to remove previous 3.2+ versions of the software.
- **Outcalling** 287
  When a new voice message is left in a user's mailbox, notification can be automatically sent to a selected external number. Notification can be sent for all new messages or only messages marked as priority. If there is no response to the first notification there is an escalation capability. A user can configure their outcalling settings using their telephone handset. Details on how to configure outcalling for individuals can be found in the Intuity Mailbox guide.
- **Personal & Hunt Group Announcements** 271
  Personal announcements can be recorded. A caller will hear the user's personal announcement before being transferred to voicemail, if available.
- **Channel Reservations** 115
  Specific functions can have voicemail channels reserved for their use. The channels are reserved in IP Office Manager. By default there are no reserved channels.
- **Automatic Recording** 265
  Incoming call routes can be configured to be automatically recorded.

10.4 Prompts

10.4.1 US English Intuity Prompts

The following a list of the numbered .wav files used by Voicemail Pro for US English. These are predominately, though not exclusively, used for Intuity mailbox features.

All files are Microsoft WAVE file format (.wav) 8kHz, 16 bit mono.

Important

- It is important to note that the corresponding .wav file in other languages is not the same prompt.

WAV File	Intuity Prompt
2	"at".
4	"Not private".
8	"To record a new message press 4".
13	"To record press 1 after recording press 1 again".
14	"To make private press 1, to make public press 2".
15	"And is".
18	"To forward with comment press 2".
19	"To review from beginning press *1, if finished press *#".
21	"To listen press 0".
24	"To delete press *D".
27	"To attach original, press y for yes or n for no.".
30	"To change press 1".
35	"Login incorrect".
41	"To forward message with comment at beginning, press 2".
43	"Your call is being answered by IP Office".
44	"Is not available to leave a message wait for the tone".
45	"Is busy, to leave a message wait for the tone".
46	"To access your mailbox press *R".
49	"No operator defined".
56	"Thank you for leaving you message".
58	"For name addressing press *A".
60	"Changed".
61	"To modify status, press 9 for yes, or 6 for no".
63	"New".
65	"Contains".
67	"To create another list".
70	"Unopened".
71	"To leave a message wait for the tone".
73	"You have".
74	"Deleted".
75	"To skip press # to delete press *D".
77	"Deleted".
80	"To have system wait press *W if finished please hang up or to disconnected IP Office press **X".
84	"Entry".
85	"Erased".
86	"Extension".
87	"This call is experiencing difficulties".
88	"Cannot use the guest password".
89	"First message".
91	"At end".
94	"Goodbye".
95	"Please disconnect".
96	"For help press *H".
97	"For help at anytime press *H".
100	"Invalid entry".

WAV File	Intuity Prompt
105	"To restart at the activity menu press *R".
108	"You are recording a message".
109	"Later".
110	"List".
111	"Please enter list ID".
112	"Otherwise for assistance press Zero now".
113	"You already have a list".
114	"To replace list renter ID and # sign, to create a new list enter new list ID".
115	"To transfer using names instead press *2".
117	"To reach the covering extension press *Zero".
118	"Enter last name".
119	"You wish to call".
120	"Too large to include".
124	"No more list space".
125	"Must be six or fewer numerals".
126	"To forward message with comment at end press 3".
127	"Return to previous activity".
130	"Because there were no entries".
134	"You can store your list or delete members but you cannot add members".
141	"No more lists".
142	"To list to the header press 3".
143	"To set back again press 2".
145	"List has no entries".
146	"To continue press #".
147	"Review completed".
148	"For extension addressing press *2".
150	"Members".
156	"Maximum length recorded".
159	"Member".
160	"Message".
161	"Midnight".
163	"To call sender press zero".
164	"Category".
165	"Returned to getting messages".
166	"At end to play back press 23".
167	"To approve press #, to record from here press 1, to play back press 23".
168	"Messages".
170	"Delivery scheduled".
173	"Please enter new password".
175	"Please note only IP Office subscribers can be specified by name".
178	"No addresses identified".
180	"Nothing to approve".
182	"Nothing to delete".
185	"Not found".
188	"Passwords do not match, please re-enter new password".
191	"No more messages".
192	"No messages".
193	"No name recorded".
194	"No new messages".
197	"Cannot step back".
198	"Partial name deleted".
201	"Noon".
202	"Not valid".
208	"Is not a public list".

WAV File	Intuity Prompt
209	"Cannot modify another subscriber's list".
210	"Please enter a new password".
211	"To 15 digits".
212	"Please enter password again for confirmation, to delete the password you just entered press *D".
213	"Re-enter password".
214	"Approved".
219	"Owned by".
220	"Enter password".
223	"Please enter extension".
224	"And # sign".
226	"Private".
227	"Public".
228	"Record at the tone".
232	"Recording stopped".
233	"Previous login incorrect please re-enter extension".
234	"To respond or forward press 1".
235	"To restart at the activity menu press *R, to transfer to another extension press *T".
236	"Try again".
238	"To review another list".
240	"To skip press # to listen press zero".
242	"Returned to the".
243	"Rewound".
244	"Rewound to previous message".
252	"To respond to this message press 1".
253	"Please enter month, day".
255	"To delete this message press *D".
256	"At beginning to re-record press 1 to playback press 23".
262	"Received".
272	"Contact administrator for help".
274	"Please make entry soon or be disconnected".
275	"Cannot get your messages now due to multiple logins to your mailbox".
277	"To exit directory press #".
282	"To have system wait press *W, to access the names or numbers directory press **N. If finished please hang up or to disconnect IP Office press **X".
285	"To add a member enter extension".
286	"To add a member enter last name".
287	"Welcome to IP Office".
288	"You are in the main directory. To find a subscribers extension, enter the last name followed by the # sign. To enter the letter Q press 7, for z press 9. To lookup by extension instead press *2".
290	"If you wish to specify a non IP Office subscriber, first change to extension addressing by pressing *A".
291	"To transfer to another extension press *T".
292	"Louder press 4, softer press 7, faster press 9, slower press 8".
294	"To add entries press 1".
295	"To renter list press *5".
298	"To specify owner by name press *2".
300	"AM".
301	"PM".
305	"You are at the activity menu".
306	"You are changing your password".
310	"January".
311	"February".
312	"March".
313	"April".
314	"May".

WAV File	Intuity Prompt
315	"June".
316	"July".
317	"August".
318	"September".
319	"October".
320	"November".
321	"December".
322	"You are in the numbers directory. To find a subscribers name, enter the extension followed by the # sign. To lookup by name instead press *2".
323	"You are responding to a piece of incoming mail".
325	"You are administering your lists. To create a mailing list press 1, to play a summary of all your lists press 2, to review a particular list press 3".
327	"You are creating a mailing list".
328	"To delete the previous entry, press *3. To add a mailing list you have already created or a public list owned by others, press *5. To review or modify the list you are creating, press *1. To approve the list you are creating and move on to the next step, press #".
329	"You have not yet entered enough characters to identify a specific subscriber. To enter the letter Q press 7, for Z press 9".
330	"Or enter just the # sign if it is your phone".
332	"System greeting used".
333	"To add entries to the list or to change status of the list press 1".
334	"When finished addressing press #".
335	"When finished press #".
339	"To replay the last few seconds press 5, to advance a few seconds press 6.".
347	"You are adding a list".
348	"You are specifying a mailing list to review".
350	"Sunday".
351	"Monday".
352	"Tuesday".
353	"Wednesday".
354	"Thursday".
355	"Friday".
356	"Saturday".
357	"You are choosing between subscribers whose names match your entry. To indicate no subscribers match, delete entry by pressing *3. To change to extension addressing and delete your entry press *2".
358	"You are identifying a list as private or public".
360	"You are scanning mailing lists, to review list members press 0, to rewind to previous list press 2, to continue scanning lists press 3".
361	"To skip to next list press #, to delete list press *3".
362	"If you own the list press #, if some else owns the list".
363	"To approve the list you are creating press #".
364	"Enter owner's extension".
367	"To specify a different owner by name press *3".
368	"You are entering the number for a new list. Please enter a number up to 6 digits long".
369	"To replace an existing list, enter that list's number".
370	"These are entries in your list".
371	"To rewind to current entry press 2, to rewind to previous entry press 2 as many times as necessary, to continue playback of list press 3".
372	"To skip to next entry press #, to delete current entry press *D".
373	"You are choosing whether to attach a copy of original message to your reply. To include the original press y for yes, to send only your reply press n for no".
376	"To skip the next header press the # sign to listen to the header rewind by pressing 2 then play by pressing 3 to skip to the next category press *#".
377	"To delete message press *D".
380	"Please wait".
381	"To listen to the message press 0, to re record message before delivery press 1".

WAV File	Intuity Prompt
388	"To skip press the # key".
390	"O" (Oh)
391 - 450	"One" to "sixty". For zero see 585.wav
451	"Seventy".
452	"Eighty".
453	"Ninety".
454	"Hundred".
455	"Thousand".
456	"Million".
464	"Enter extensions".
468	"To continue playing press 3".
471	"If it's your list press #".
472	"To approve press #, to record from here press 1".
477	"Press 1 to select".
478	"2 to select".
479	"3 to select".
484	"Enter more characters followed by the # sign. If you just completed entering the last name enter the first name".
485	"Has".
486	"To reply to sender by voicemail press 1".
493	"You are requesting a transfer".
499	"When finished recording press # to approve or 1 to edit your message".
556	"To exit press *# now".
561	"You addressing your message".
562	"Enter the".
563	"Digit extension".
569	"To modify press 1, if finished press *#".
577	"To hold the message in its current category press **H".
578	"To skip to the next category press *#".
579	"Password must be".
585	"Zero".
587	"You are reviewing a list".
601	"Priority".
604	"As you use IP Office, your name will be included in system announcements that you and other people will hear. Press 1 and at the tone please speak your name. After speaking your name press 1 again".
606	"To re-record you name press 1, to approve press #".
608	"At the tone please speak your name. After speaking your name press 1".
610	"You are recording your name. After you record your name, you can access other IP Office features. As you use IP office your name will be included in system announcements that you and other people will hear. Press 1 and at the tone please speak your first and last name as you would like others to hear it. After speaking your name press 1 again".
611	"You are recording your name. To record your name, press 1. After recording press 1 again. To play back name press 23, to approve press #".
612	"To make private press 1".
613	"To make priority press 2".
617	"To remove private status press 1".
618	"To remove priority status press 2".
622	"Not priority".
643	"You are choosing options for this message there are no options currently set".
644	"You are choosing options for this message with the current settings".
645	"Private messages cannot be forwarded by the recipients".
646	"A priority message will be delivered before other messages and will be flagged for special attention in the recipients mailbox".
647	"The message will be private".
648	"The message will be priority".

WAV File	Intuity Prompt
651	"The message will be private and priority".
681	"Sorry cannot leave a message now because this users mailbox is full".
700	"To administer mailing lists press 1".
701	"To change your password press 4".
702	"To record your name press 5".
703	"You are at subscriber administration".
704	"To create lists press 1, to scan lists press 2, to review and modify lists press 3".
707	"If finished press *#".
708	"If finished adding entries press #".
736	"You are recording your name. As you use IP office your name will be included in system announcements that you and other people will hear".
744	"For all calls".
745	"Active".
747	"For internal calls".
748	"For external calls".
749	"For busy calls".
750	"For no answer".
751	"For out of hours calls".
752	"To listen to a greeting press 0, to create change or delete a greeting press 1, to scan all your greetings press 2, to activate a greeting press 3, to administer call types press 4, if finished press #".
753	"Enter greeting number".
754	"Greeting".
755	"Not recorded".
756	"To listen to greeting".
757	"To re-record, press 1".
759	"To review status, press 2".
760	"Press 0".
764	"To use this greeting for all calls press 0, for internal calls press 1, for external calls press 2".
765	"Recorded but not active".
766	"To use this greeting for all calls press 1".
767	"To use this greeting for all calls press 0, for busy calls press 1, for no answer calls press 2".
770	"Recorded and active".
771	"Approved and active".
772	"Again".
773	"To activate for out of hours call press 3".
775	"To record messages press 1 to get messages press 2 to administer personal greetings press 3".
776	"The system greeting".
777	"Cannot listen to system greeting".
778	"Cannot modify system greeting".
779	"No greetings recorded".
780	"Personal greetings review completed".
781	"To skip to the next greeting press the # sign".
782	"To activate a greeting enter greeting number, to de-activate a greeting activate a different greeting in its place".
783	"To activate another greeting enter greeting number to de-activate a greeting activate a different greeting in its place".
784	"To activate system greeting enter 0".
785	"Same greeting used for all calls".
786	"To identify calls as internal and external press 1".
787	"To identify calls as busy and no answer press 2".
788	"To identify calls as out of hours press 3".
790	"Calls identified as internal and external".
791	"Calls identified as busy and no answer".
792	"Calls identified as out of hours".
793	"Calls not identified as out of hours".

WAV File	Intuity Prompt
797	"To use the same greeting for all calls press 5".
810	"External".
812	"No answer".
814	"Calls".
815	"You are administering your personal greetings".
816	"You are listening to a personal greeting".
817	"You are recording a personal greeting".
818	"You have just recorded".
819	"You are scanning your personal greetings".
820	"You are selecting which greeting to activate".
821	"You administering call types".
822	"As you use IP Office, your name will be included in system announcements that you and other people will hear. At the tone please speak your name, after speaking your name press 1".
823	"For all calls".
825	"For internal".
826	"For external".
827	"For busy".
828	"For no answer".
829	"For out of hours".
830	"You must approve your recording".
832	"Please enter extension and # sign".
839	"To rewind to the previous greeting press 2".
843	"To scan headers and messages press 1, to scan headers only press 2, to scan messages only press 3".
844	"End of message".
845	"Next message".
846	"You are selecting an option for automatic message scan".
847	"You are automatically scanning your incoming messages. To listen to the message press 0, to respond to or forward the message press 1".
848	"You are automatically scanning your incoming messages. To listen to the message press 0 to respond to the message press 1".
849	"To skip the next message press the # sign, to the listen to the header rewind by pressing 2, then play by pressing 3, to skip to the next category press *#".
850	"Broadcast and login message services are not available".
852	"To rewind to the current entry press 2, to rewind to previous entry press 2 as many times as necessary".
868	"Mailbox id must be less than or equal to less than 16 digits".
869	"If the extension entered belongs to a casual subscriber you will be prompted for a mailbox id".
905	Short silence.
907	2 seconds of silence.
913	"If finished press #".
915	"No options menu available".
916	"To send message press # or enter an option to hear a list of options press 0".
924	"Seconds".
925	"Minutes".
926	Beep
928	"New messages".
929	"Old messages".
935	"Unopened messages".
936	"Partial entry deleted".
937	"Sorry you are having difficulty please get help and try again later".
938 - 968	Ordinal numbers "1st" to "31st".
971	"To send press #".
972	"To reach the covering extension press Zero".
973	"If you are finished please hang up or press **X".

WAV File	Intuity Prompt
977	"Name not found".
987	"Enter last name of the person".
990	"To record and send voicemail messages press 1".
992	"To get messages press 2".
1001	"To scan incoming messages automatically press 7, to relogon press **R".
1006	"To record or change the greeting heard by callers press 3".
1010	"With priority".
1011	"With fax".
1020	"No message to send".
1028	"Page".
1029	"Pages".
1041	"There are no new faxes".
1048	"Nothing to print".
1052	"To specify your fax preferences press 3".
1061	"Your default print destination is...".
1071	"Fax message from..".
1073	"To print press *1".
1075	"To change the default print destination press 1".
1087	"To print to destination".
1088	"Press #".
1089	"To specify destination, enter digits followed by the # key".
1091	"You are specifying where your documents will be printed".
1092	"A default print destination has not been assigned".
1093	"To assign a default print destination press *7 then 53".
1098	"To approve press #".
1118	"You are specifying the default print destination for fax items".
1141	"When finished recording press # for more options".
1144	"To specify whether a message can be addressed before it is recorded press 6".
1145	"To administer call answer options press 7".
1152	"Address before record turned on".
1153	"To turn off press 1".
1154	"Address before record turned off".
1155	"To turn on press 1".
1157	"You are administering addressing options".
1158	"To prevent callers from leaving messages press 1".
1159	"Call answer messages will not be accepted".
1160	"To allow callers to leave messages press 1".
1161	"You are administering call answer options".
1162	"Sorry the mailbox you have reached is not accepting messages at this time".
1163	"Is not available".
1164	"Call answer messages will be accepted".
1219	"To review or change your reach options press 7".
1305	"Please enter an outcalling option to hear a list of options press 0".
1430	"To following message was restored".
1431	"No message to restore".
1432	"To undelete last deleted message press **U".
1434	"To return to getting messages press #".
1440	Beep
1443	"Voice file system is out of space".
1444	"Please contact the administrator".
1457	"Old and new passwords cannot be the same".
1461	"You are getting your incoming messages".
1462	"To listen to the message press Zero".
1463	"To reply to sender by voicemail press 17".

WAV File	Intuity Prompt
1464	"To forward with comments press 12".
1465	"To record a new message press 14".
1466	"To respond to or forward the message press 1".
1467	"The return address for this message is not a mailbox on this system".
1469	"To reply to sender by voicemail press 7".
1964	"The ability for callers to leave messages in your mailbox is turned off".
1965	"To allow callers to leave messages press 571".
1970	"Invalid password please enter new password and # sign".
2007	"With text".
2008	"With other media".
2010	"Zero".
2011	"bytes".
2012	"Byte".
2013	"Kilobyte".
2014	"Kilobytes".
2015	"Megabyte".
2016	"Megabytes".
2018	"And".
2019	"Message from".
2021	"Private".
2022	"Private priority".
2023	"Priority".
2025	"Call from".
2026	"Call received".
2029	"This is a ".
2030	"Voice".
2031	"Fax".
2032	"Text".
2033	"Attached file".
2035	"To advance to the end of the message press *6".
2038	"Rewound".
2039	"Component".
2040	"To listen press 3".
2041	"To customize your mailbox, for example to create or edit your mailing lists or change your password, press 5".
2042	"To administer your media preference for sorting messages, press 8".
2043	"You are administering your preferred media type for sorting incoming messages. Messages with a primary media type matching your preference will be presented before other messages, regardless of the order in which they have been received".
2044	"No media preference for sorting incoming messages has been specified".
2045	"For voice press 1, for fax press 2, for text press 3, for binary files press 4".
2046	"To retain your current preference press the # key".
2047	"You media preference for sorting incoming messages is".
2048	"For no preference press zero".
2049	"Will be your preferred media type".
2051	"Your password cannot be the same as your extension number consecutive digits or a single repeated digit. Please enter new password and the # key".
2052	"At beginning of message to step back to previous message press *2 to listen press Zero".
2053	"Approximately".
2057	"At beginning of message".
2061	"To enter the telephone number of a fax machine press **5".
2063	"Enter the telephone number of a fax machine followed by the # sign".
2065	"The telephone number of a fax machine should be entered as it would be dialed from the location of your messaging system. It can contain a maximum of 23 digits including trunk access, long distance or international access codes if necessary and is subject to administrator restrictions".

WAV File	Intuity Prompt
2071	"You are specifying the telephone number of a fax machine".
4409 -4434	Alphabetic characters "A" to "Z".
G0000 - G0009	"Press zero" through to "Press 9"
G0010 - G0019	"Press *zero" through to "Press *9".
G0020	"Press ** zero".
G0029	"Press **9".
G0031	"Press the # key".
G0032	"Press *#".
G0040	"You are changing your Outcalling options".
G0041	"System not administered for Outcalling".
G0042	"You are not authorised for Outcalling".
G0043	"When finished please hang up or ".
G0044	"You are selecting which messages will receive out calls".
G0045	"For instructions on entering your outcalling number".
G0046	"For instruction on configuring outcalling".
G0047	"You are not authorised to input a number".
G0051	"To return to the activity menu".
G0052	"Subject to administrator restrictions".
G0053	"To change times".
G0054	"To turn off"
G0055	"To turn on"
G0061	"To de-activate".
G0062	"To activate".
G0063	"To activate for all calls".
G0064	"To activate for external calls only".
G0065	"To activate for internal calls only".
G0071	"For all calls".
G0072	"For internal calls".
G0073	"For internal calls only".
G0074	"For external calls".
G0075	"For external calls only".
G0076	"For other calls".
G0080	"To use this greeting".
G0081	"For the temporary greeting"
G0082	"For number engaged calls"
G0083	"For no reply calls".
G0084	"For the default greeting".
G0085	"When finished".
G0086	"Please enter a number between".
G0087	"Where zero will set the temporary greeting to not expire".
G0088	"Please enter the number of days you wish this greeting to be active for".
G0089	"Your temporary greeting".
G0090	"For the next".
G0091	"Days".
G0092	"For today".
G0099	"Not configured".
G0100	"Turned off".
G0101	"Inactive".
G0102	"Desk".
G0103	"Home".
G0104	"Mobile".
G0105	"Temporary".
G0106	"Delegate".
G0107	"Secretary".

WAV File	Intuity Prompt
G0108	"Other".
G0109	"SMS".
G0110	"Voicemail".
G0111	"Escalation".
G0112	"An escalation list".
G0113	"Extension".
G0120	"For none".
G0121	"For internal".
G0122	"For desk".
G0123	"For home".
G0124	"For mobile".
G0125	"For temporary".
G0126	"For delegate".
G0127	"For secretary".
G0128	"For other".
G0129	"For SMS".
G0130	"For voicemail".
G0131	"For escalation".
G0140	"Currently".
G0141	"For help".
G0142	"For help at any time".
G0143	"To leave".
G0144	"To change".
G0145	"To reject".
G0147	"Time".
G0148	"The time out is".
G0149	"To change the time out".
G0150	"To configure outcalling".
G0151	"Your escalations have not been configured".
G0152	"Your escalations are configured to call the following locations in the listed order".
G0153	"To repeat list".
G0154	"To repeat list with numbers".
G0155	"To review the list".
G0156	"You are selecting locations for the escalation list".
G0157	"To input the list again".
G0158	"You have completed inputting the escalation list".
G0159	"To select a destination".
G0160	"Where the following destinations will be called in order".
G0161	"To configure escalations".
G0162	"Please input your".
G0163	"Location".
G0185	"To".
G0186	"Where".
G0187	"Between".
G0188	"Invalid time".
G0191	"Is active".
G0192	"Is inactive".
G0193	"Is set to".
G0194	"Is not set".
G0195	"To repeat".
G0200	"And".
G0201	"Your outcalling is".
G0202	"Your outcalling is set".
G0203	"Your outcalling destination is set to".

WAV File	Intuity Prompt
G0204	"The number is".
G0205	"Number is".
G0206	"Number".
G0207	"To change numbers".
G0208	"To input a number".
G0209	"For instructions on entering your outcalling number".
G0210	"For instructions on configuring outcalling".
G0211	"To change the number".
G0212	"There is no number defined for the selected destination".
G0213	"You are configuring outcalling destination".
G0214	"To configure outcalling".
G0215	"To re-configure outcalling".
G0216	"To change outcalling".
G0217	"To change outcalling destination".
G0218	"To change destination".
G0219	"To change".
G0220	"Destination".
G0221	"You have selected".
G0222	"There is no number defined".
G0223	"To select an alternate destination".
G0224	"To select another location".
G0225	"You have selected the option to configure your telephone numbers".
G0226	"To exit".
G0227	"To accept".
G0228	"To disable".
G0229	"To enable".
G0230	"To turn outcalling off".
G0231	"To turn outcalling on".
G0232	"To turn outcalling on for all new messages".
G0233	"To turn outcalling on for new priority messages only".
G0234	"To turn outcalling on for new private messages only".
G0235	"To turn outcalling on for new priority private messages only".
G0236	"The destination is set to".
G0237	"To change the destination".
G0238	"To set a number".
G0240	"Outcalling is turned off".
G0241	"Outcalling is turned on".
G0242	"Outcalling is turned on for all new messages".
G0243	"Outcalling is turned on only for new priority messages".
G0244	"Outcalling is turned on only for new private messages".
G0245	"Outcalling is turned on only for new priority private messages".
G0251	"Outcalling is turned on between".
G0252	"Outcalling is turned on for all new messages between".
G0253	"Outcalling is turned on only for new priority messages between".
G0254	"Outcalling is turned on only for new private messages between".
G0255	"Outcalling is turned on only for new priority private messages between".
G0260	"Outcalling is turned off".
G0261	"Outcalling is turned on".
G0262	"Outcalling is turned on for all new messages"
G0263	"Outcalling is turned on only for new priority messages".
G0264	"Outcalling is turned on only for new private messages".
G0265	"Outcalling is turned on only for new priority private messages".
G0272	"For all new messages".
G0273	"For all new priority messages".

WAV File	Intuity Prompt
G0274	"For all new private messages".
G0275	"For all new priority private messages".
G0278	"Enter the time in second and #".
G0279	"Enter the new number and #".
G0280	"To input a new number".
G0281	"To input an outcalling number".
G0282	"Enter the number followed by #".
G0283	"Anything entered will be interpreted as part of the called number".
G0284	"No global commands, such as *4 will be accepted at this time".
G0285	"A * or # entered as the first character will result in the * or # being output".
G0286	"A * entered as part of the digit string will be interpreted as a pause of one and a half seconds.
G0287	"If a longer pause is required, use multiple stars in a row".
G0288	"To return to outcalling administration".
G0289	"Enter outcalling number and #".
G0290	"To exit press *# now".
G0301	"Your destination is currently configured to".
G0306	"For system outcalling schedules".
G0307	"You are specifying your outcalling time period".
G0308	"For outcalling during peak time".
G0309	"If not press *3 and re-enter time".
G0310	"To specify your times".
G0311	"To delete own time".
G0312	"Peak time is".
G0313	"For outcalling ant time press 1".
G0314	"The time you specify will be restricted by the times allowed by the system administrator".
G0315	"Outcalling specified to any time subject to administrator restrictions".
G0316	"For outcalling during prime time press 2".
G0317	"The system allows outcalls from".
G0318	"To change outcalling information press 6.
G0319	"Outcalling specified for".
G0320	"If correct press #".
G0321	"From time".
G0322	"To time".
G0350	"There is a message for".
G0351	"Based on an outcalling time profile which is currently configured as follows".
G0352	"Your outcalling time profile is currently configured as follows".
G0353	"Your outcalling time profile is not configured".
G0360	"You are specifying the time for outcalling time profile".
G0361	"To leave the current time profile".
G0362	"To change the time profile".
G0363	"Is set to".
G0364	"Please enter the time".
G0365	"The time should be entered as follows: hour, hour, minute, minute, where the hours are given in 24 hour format. For example, 5 past 1 in the afternoon would be entered as 1305".
G0366	"You are configuring outcalling time profile".
G0367	"The end time should be greater than the start time".
G0400	"You are modifying your personal settings".
G0401	"You are modifying your callback options".
G0402	"You are modifying your do not disturb options".
G0403	"You are modifying your email mode options".
G0404	"You are modifying your follow me forward options".
G0405	"You are modifying your mobile twinning options".
G0406	"You are modifying your voicemail transfer options".
G0410	"To modify your personal settings".

WAV File	Intuity Prompt
G0411	"To modify your callback options".
G0412	"To modify your DND options".
G0413	"To modify your email mode options".
G0414	"To modify your follow me forward options".
G0415	"To modify your mobile twinning options".
G0416	"To modify your reception transfer options".
G0417	"To modify your follow me feature setting".
G0418	"To modify your forward unconditional setting".
G0419	"To modify your forward on busy and on no answer setting".
G0421	"Your follow me feature".
G0422	"Your forward unconditional feature".
G0423	"Your forward on busy and on no answer is set to".
G0424	"Your forward on busy is set to".
G0425	"Your forward no answer is set to".
G0426	"Your forward on busy and on no answer are inactive".
G0427	"Your do not disturb feature".
G0428	"Your email mode feature".
G0429	"Your mobile twinning feature".
G0430	"Your callback option".
G0450	"To modify your voicemail transfer on zero".
G0451	"To modify your voicemail transfer on 1".
G0452	"To modify your voicemail transfer on 2".
G0453	"To modify your voicemail transfer on 3".
G0460	"Your voicemail transfer on zero".
G0461	"Your voicemail transfer on 1".
G0462	"Your voicemail transfer on 2".
G0463	"Your voicemail transfer on 3".
G0501	"A".
G0502	"B".
G0503	"C".
G0504	"D".
G0505	"E".
G0551	"The first".
G0552	"The second".
G0553	"The third".
G0554	"The fourth".
G0555	"The fifth".
G0680	"Second".
G0681	"Seconds".
G0682	"Star".
G0683	"Hash".

10.4.2 English Non-Intuity Prompts

Here is a list of the named .wav files used by Voicemail Pro for US and UK English. These are predominately, though not exclusively, used for IP Office mode mailbox features and Voicemail Pro custom call flow actions.

All files are Microsoft WAVE file format (.wav) 8kHz, 16 bit mono.

WAV File	Non-Intuity Prompt
a60	"Please enter extension and # sign".
aa_01	"Good morning and thank you for calling. Please key in the required extension number or hold the line for other options".
aa_02	"Good afternoon and thank you for calling. Please key in the required extension number or hold the line for other options".
aa_03	"Good evening and thank you for calling. Please key in the required extension number or hold the line for other options".
aa_04	"Please hold while we try to connect you".
aa_05	"An operator is currently unavailable".
aa_06	"Please key in the extension number you would like to leave a message for".
aa_07	"Good bye and thank you for calling".
alpha_01	"Press # to accepted data, *1 to hear the data, *2 to delete the data, *3 to delete the last character, *# to accept the data and continue".
alpha_02	"Data has been deleted".
alrm_1	"You have an alarm call set for".
alrm_2	"Alarm has been deleted press 1 to continue or * to quit".
alrm_3	"Please enter the time for the alarm call in 24 hour clock notation".
alrm_4	"You have set an alarm call for".
alrm_5	"Press 1 to validate press 2 to add a message to the end press # to cancel".
alrm_6	"Your alarm has now been set".
alrm_7	"Press 1 to verify this alarm or press 2 to delete it".
alrm_8	"This time is invalid please try again".
alrm_9	"This is an alarm call please hang up".
AM	"AM".
aor_00	"Warning: your call is being recorded".
cmp_01	"The current campaign message has been marked as deleted".
cmp_02	"The current campaign message has been marked as completed".
cmp_03	"The current campaign message has been abandoned".
cmp_04	"Press 1 to start again, press 2 to rewind, press 3 to abandon, press 4 to delete, press 5 to complete, press 7 for previous field, press 8 for start of current field, press 9 for next field, press # to forward, press 0 to pause, press * to rewind".
conf_01	"A conference is not currently scheduled".
conf_02	"There was a problem transferring you into the conference".
conf_03	"Please enter your conference id and press # to finish".
conf_04	"Please enter your PIN and press # to finish".
conf_05	"Your conference ID or PIN is not valid".
conf_06	"Your conference ID is not valid".
conf_07	"Your PIN is not valid".
conf_08	"Please try again".
conf_09	"To be announced into the conference please speak your name and press # when you have finished".
conf_10	"Your name is too short please try again".
conf_11	"Has invited".
conf_12	"To join them in an immediate conference press 1 to accept, 2 to decline and 3 if the delegate is not available".
conf_13	"Has requested".
conf_14	"To join in an ad-hoc conference press 1 to accept, 2 to decline and 3 if the delegate is not available".
conf_15	"Has declined the offer to attend the conference".
conf_16	"Is not available".
conf_17	"Has just entered the conference".
conf_18	"Has just left the conference".

WAV File	Non-Intuity Prompt
conf_19	"An unknown caller".
conf_20	"Has been invited".
conf_21	"No conference selected, thank you and good bye".
conf_22	"Transferring you to the conference now".
conf_23	"Conference not accessible".
conf_24	"You have been invited to a conference".
dbn_01	"There are".
dbn_02	"Press # to play list".
dbn_03	"To select".
dbn_04	"# for next".
dbn_05	"*# for previous".
dbn_06	"And #".
dbn_07	"Press **2".
dbn_10	"For selection by group".
dbn_11	"For selection by first name".
dbn_12	"For selection by last name".
dbn_13	"For selection by extension".
dbn_14	"Entries that match your selection".
dbn_15	"*3 to clear the list and restart".
dbn_16	"Or enter more characters followed by a # to reduce the size of the list".
dbn_17	"To change name format entry to".
dbn_18	"First name last name".
dbn_19	"Last name first name".
dbn_20	"Enter group name".
dbn_21	"Enter first name".
dbn_22	"Enter last name".
dbn_23	"Enter extension".
dom_01.wav... dom_31.wav	Day of month ordinal numbers "1st" to "31st".
dow_01	"Sunday".
dow_02	"Monday".
dow_03	"Tuesday".
dow_04	"Wednesday".
dow_05	"Thursday".
dow_06	"Friday".
dow_07	"Saturday".
EOC_1	"Warning, your conference will end in".
EOC_2	"Your conference will end in".
int_na	"Service not supported".
ivr_01	"The time according to the IVR server is".
ivr_02	"Directory wave table. Enter the number of the caller you want to edit".
ivr_03	"Name wave table. Enter the number of the extension you want to edit".
ivr_04	"Enter form entries with the # sign to terminate each line. Press # at the end to complete the form".
ivr_05	"Form verified".
ivr_06	"Form entry is complete".
ivr_07	"Press * to abort # to accept or 0 to listen again".
ivr_08	"Do not disturb".
ivr_09	"Voicemail mode".
ivr_10	"Call forwarding".
ivr_11	"Forward number is set to".
ivr_12	"Follow me number is set to".
ivr_13	"Voicemail reception number is set to".
ivr_15	"Parameter is set to".

WAV File	Non-Intuity Prompt
ivr_16	"Parameter is enabled".
ivr_17	"Parameter is disabled press 1 to enable".
ivr_18	"Parameter is disabled".
ivr_19	"Parameter is enabled press 2 to disable".
ivr_20	"Press 1 to change press # to cancel".
ivr_21	"Enter new number after the tone".
ivr_22	"Repeat new number after the tone".
ivr_23	"Sorry the numbers you have entered are different".
ivr_24	"Email options".
ivr_25	"Alert email on incoming message".
ivr_26	"Copy messages to email".
ivr_27	"Forward messages to email".
ivr_28	"Email turned off".
ivr_29	"Service mode".
ivr_30	"In service".
ivr_31	"Out of service".
ivr_32	"Night service".
mc_00	Beep.
mc_01	Short silence.
mc_02	One seconds silence.
misc_24	"Is on holiday until".
misc_25	"Is unavailable until".
misc_26	"Is at lunch until".
misc_27	"Is away on business until".
misc_28	"And will be picking up messages regularly".
misc_29	"And will not be contactable until their return".
misc_30	"List length exceeded".
misc_31	"*, cannot access private list".
misc_32	"*, list length exceeded".
mnu_1	"You have four greeting options. For standard greeting press 1, for after hours greeting press 2, for you are in a queue greeting press 3, for you are still in a queue greeting press 4".
mnu_2	"To hear your greeting message press 1, to change your greeting message press 2, to save your greeting message press 3, to save your message for playing as a continuous loop press 4".
mnu_2a	"To hear your greeting message press 1, to change your greeting message press 2, to save your greeting message press 3, to save your message for playing as a continuous loop press 4, to return to the previous menu press 8".
mnu_3	"When playing a message to delete the message press 4, to save the message press 5, to forward the message to email press 6, to repeat the message press 7, to skip the message press 9, at the end of your messages to play old messages press 1, to play saved messages press 2, to edit your greeting press 3, to direct all messages to email press *01, to turn off email redirection press *02".
mnu_4	"When playing a message to delete the message press 4, to save the message press 5, for forwarding options press 6, to repeat the message press 7, to skip the message press 9, to call back the sender press ** at the end of your messages, to play old messages press 1, to play saved messages press 2, to edit your greeting press 3, to direct all messages to email press *01, to send email notifications press *02, to turn off email functions press *03, to change your access code press *04".
mnu_5	"To forward message to email press 1, to forward message to other extensions press 2, to add a header message press 3, to send message into your saved messages list press 4, to skip this forwarding press #".
mnu_6	"User configure options. To edit forwarding number press 1, to edit follow me number press 2, to set call forwarding press 3, to set voicemail press 4, to set do not disturb press 5, to edit voice mail access code press 6, to edit voicemail reception press 7, to set voicemail email mode press 8, to edit voicemail call back number press 9".
mnu_7.	"Hunt group configure options. To set voicemail press 1, to edit voicemail access code press 2, to set voicemail email mode press 3, to set service mode press 4".
mnu_8	"Invalid entry please try again".
mnu_9	"That destination is unavailable".

WAV File	Non-Intuity Prompt
MNU_10.	"To play your old messages, press1. To play your saved messages, press 2. To edit your greeting, press 3. To delete the current message, press 4. To save the current message, press 5. To change your access code, press *04. For help at any time, press *4".
mo_01	"January"
mo_02	"February"
mo_03	"March"
mo_04	"April"
mo_05	"May"
mo_06	"June"
mo_07	"July"
mo_08	"August"
mo_09	"September"
mo_10	"October"
mo_11	"November"
mo_12	"December"
no_	"Number".
no_00.wav ... no_59.wav	"Zero" to "Fifty-nine".
no_24p	"More than 24".
noon	"Noon".
out_01	"To administer Outlook based greetings, press 5".
out_02	"You are administering Outlook based greetings".
out_03.	"Outlook based greetings are active for all calls".
out_04	"Outlook based greetings are used for the following call types".
out_05	"Outlook based greetings are currently inactive".
out_06	"To deactivate Outlook based greetings".
out_07	"To activate Outlook based greetings".
out_08	"They will be out of the office until".
out_09	"They will be busy until".
out_10	"Due to".
outb_01	"This is an IP Office outbound alert".
outb_04	"Press any key to accept".
pg_0001	"To use this greeting for all calls press 1".
pg_0002	"To use this greeting for all calls press 0".
pg_0003	"For internal calls press 1".
pg_0004	"For external calls press 2".
pg_0005	"To activate for out of hours call press 3".
pg_0006	"If the number is busy press 4".
pg_0007	"For no reply calls press 5".
pin_01	"Enter your current access code after the tone".
pin_02	"Now enter your new access code after the tone".
pin_03	"Now repeat your new access code after the tone".
pin_04	"Your access code has now been changed".
pin_05	"It has been possible to change your access code at this time".
pin_06	"Press # when you have finished".
pin_07	"Access code must contain 4 or more digits".
PM	"PM".
que_01	"You are at queue position".
que_02	"In the queue".
que_03	"Call per".
que_04	"Estimated time to answer is".
que_05	"Your call will be answered in".
rec_01	"Warning: this call is being recorded".
RECNAM_01	"As you use IP Office, your name will be included in system announcements that you and other people will hear. At the tone please say your name. After saying your name, press 1".

WAV File	Non-Intuity Prompt
RECNAM_02	"To re-record your name press 1, to confirm press #".
RECNAM_03	"Record at the tone".
PressHash	"To continue, press #".
sac_01	"Cannot retrieve your messages now due to multiple logins to your mailbox".
sac_02	"Please disconnect".
seconds	"Seconds".
ssb_00	"O" (Oh).
ssb_01	"O'Clock".
ssb_02	"No".
ssb_03	"None".
ssb_04	"Midnight".
ssb_05	"And".
ssb_06	"Date".
ssb_07	"Deleted".
ssb_08	"T number".
ssb_09	"For".
ssb_10	"Forwarded".
ssb_11	"Item".
ssb_12	"Press".
ssb_13	"Quantity".
ssb_14	"Saved".
ssb_15	"Yesterday".
ssb_16	"Hundred".
ssb_17	"Hour".
ssb_18	"O" (oh).
ssb_19	"At".
ssb_20	"1" (Down tone).
ssb_21	"1" (Up Tone).
ssb_22	"1" (Level Tone).
ssb_23	"Function failed to complete".
ssb_29	"Minutes".
svm_02	"Calls have been forwarded to email. New calls will also be forwarded to email until turned off".
svm_03	"Caller was".
svm_04	"Thank you for leaving a message. Mailbox has now stopped recording".
svm_05	"Please enter your mailbox number".
svm_06	"Please enter your access code".
svm_07	"There is no one available to take your call at the moment so please leave a message after the tone".
svm_08	"For help at anytime press 8".
svm_09	"That was the last message".
svm_10	"New message".
svm_11	"New messages".
svm_12	"Old message".
svm_13	"Old messages".
svm_14	"Saved message".
svm_15	"Saved messages".
svm_16	"Remote access is not configured on this mailbox".
svm_17	"Email is not enabled on this mailbox".
svm_18	"I am afraid all the operators are busy at the moment but please hold and you will be transferred when somebody becomes available".
svm_19	"Message was recorded".
svm_20	"You're being transferred".
svm_21	"You have".
svm_22	"Unknown caller".

WAV File	Non-Intuity Prompt
svm_23	"Forwarding to email is now turned off".
svm_24	"Start speaking after the tone and your message will be inserted before the message prior to forwarding".
svm_25	"To hear the recording press 1, to change the recording press 2, to save the recording press 3".
svm_26	"Enter the extension to which you wish this message to be forwarded, separating each extension using the # sign. Press # at the end to complete the list".
svm_27	"Message has not yet been recorded".
svm_28	"Start speaking after the tone and press 2 when you have finished recording".
svm_29	"There are no messages".
tim_m00	"Minute".
tim_m01	"One minute".
tim_m02	"Minutes".

10.5 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 on the link for **Voicemail Pro** and then double-click on **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.
4. 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 appears you need to follow the upgrade process 34.
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. The recommended option is **Anyone who uses this computer (all users**).
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 so that you can choose the components that you want to install.
11. In the Messaging Components window, highlight **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 log on and 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 PC 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 have entered are verified. If you entered a new user name, a message is displayed to ask if you want to create a new PC 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. Scroll down if necessary.
19. If for any reason the details are not what you expect, click **Back** and make the necessary 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 now.
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 Email 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 emails 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 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.
26. Click **Finish**. An attempt is made to validate the email settings. If everything has been installed correctly and the license requirements are met, you are prompted to start the Voicemail service. If the attempt to connect with the

SMTP server fails, an error message is displayed. You might need to start the Voicemail service manually. See Starting the Voicemail Pro Service 32.

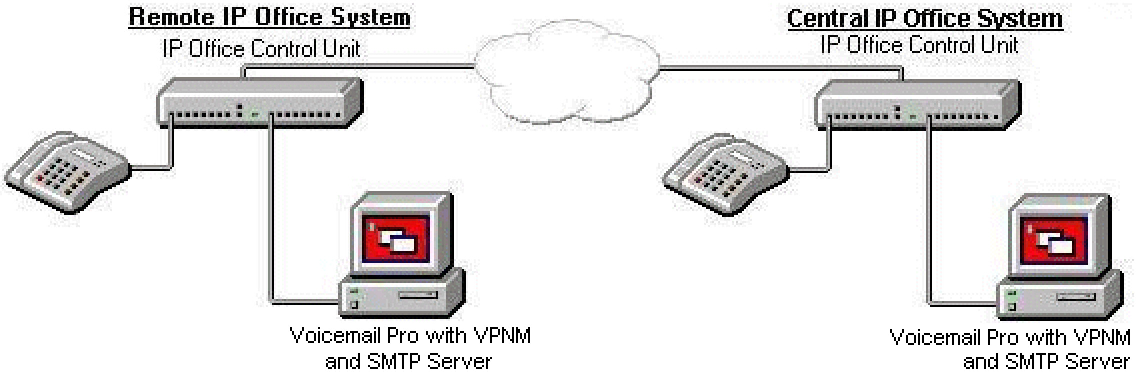
27. Click **OK** to acknowledge the message. You have now finished installing the Voicemail Pro ACM Gateway software.

10.6 Installing Networked Messaging (VPNM)

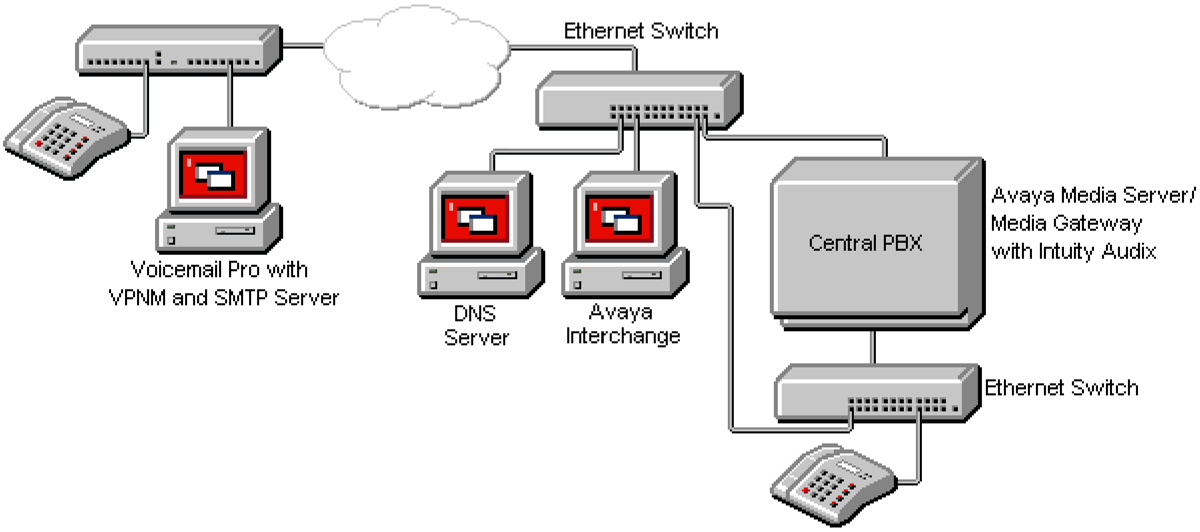
Voicemail Pro Networked Messaging (VPNM) allows users to forward voicemail to mailboxes on remote voicemail systems. This is done by adding a VPNM component to the Voicemail Pro installation.

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.


Ethernet Switch
Voicemail Pro with VPNM and SMTP Server
DNS Server
Avaya Interchange
Central PBX
Avaya Media Server/ Media Gateway with Intuity Audix
Ethernet Switch

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 Release 5.4, Adding a VPIM System to Your Network". This is because the setup for Interchange VPIM is the same as for VPNM.

10.6.1 Requirements for VPNM

Check that the following requirements have been before attempting to install 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 to ensure that they can communicate across 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 VMPro 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.

10.6.2 Installing VoiceMail Pro with VPNM Support

This section describes how to install the Voicemail Pro software with its VPNM component onto the Voicemail Pro server PC.

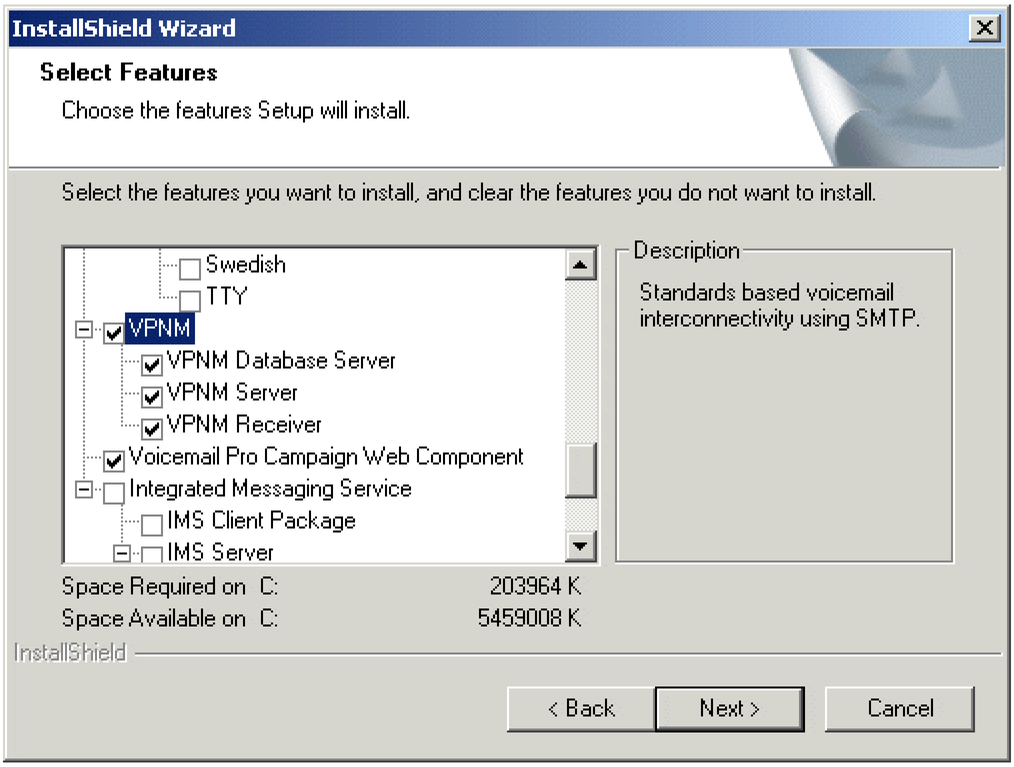
Before you begin:

1. Using IP Office Manager, check that the correct licenses for Voicemail Pro are installed and show a status of **Valid**. The licenses required are:

- **Voicemail Pro (4 ports)** plus Additional Voicemail Pro (X ports) licenses up to the total number of port required or supported by the IP Office control unit.
- **Networked Messaging** - Enables operation of VPNM with Voicemail Pro.

To install Voicemail Pro Software with VPNM support:

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. This language is used for the installation and for the default language prompts.
3. Click **OK**. Installation preparation begins.
4. If the following window is displayed, Voicemail Pro is already installed. You need to upgrade rather than install a new version. See Upgrading a Voicemail Pro System 34.
5. If the **Modify, repair or remove the program** window appears you need to follow the upgrade process 34.
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. The recommended option is **Anyone who uses this computer (all users)**.
9. In the Customer Information window, click **Next**. The Choose Destination Location window opens.
10. In the Choose Destination Location window, click **Browse** and choose the folder where the Voicemail Pro files are to be installed. Otherwise, click **Next** to use the proposed folder. The Messaging Components window opens so that you can choose the components that you want to install.
11. Unless there are specific reasons for changing the location, the default setting is recommended.
12. In the Messaging Components window, highlight **Voicemail Pro (Full)**.
13. Click **Next**. The Setup Type window opens.
14. In the Setup Type window, select **Custom**.
15. Click **Next**. The Select Features window opens so that you can select which additional Voicemail Pro features to install.
16. Scroll down and check VPNM.


InstallShield Wizard
Select Features
Choose the features Setup will install.
Select the features you want to install, and clear the features you do not want to install.
☐ Swedish
☐ TTY
☑ VPNM
☑ VPNM Database Server
☑ VPNM Server
☑ VPNM Receiver
☑ Voicemail Pro Campaign Web Component
☐ Integrated Messaging Service
☐ IMS Client Package
☐ IMS Server
Description
Standards based voicemail interconnectivity using SMTP.
Space Required on C: 203964 K
Space Available on C: 5459008 K
InstallShield
< Back
Next >
Cancel

17. Ensure that the following are selected:
    - The Voicemail Pro Campaign Web Component is **not** required for VPNM but is installed as part of a typical VoicemailPro Server installation. If a web server has already been installed but the Voicemail Pro Campaign Web Component is not required, uncheck it to remove it. If Voicemail Pro Campaign Web Component is required for other use, make sure that it is checked so that it is not removed.
    - ***Voicemail Pro*** and ***Voicemail Pro Server Service*** should be already selected.
    - Ensure that **Voicemail Pro Client** and **Voicemail Pro Service** are also checked.
    - Check the boxes for any additional required languages. It is recommended that either **English** or **English US** is always selected in addition to any languages that are required by the customer.
    - **Important**
      Do not uncheck any other boxes as this will remove the corresponding software features.
    - Scroll down and check **VPNM**.
18. Click **Next**. If you have chosen not to install the Web Campaign Component, the Service Account Name window opens. The Select the Web Server root directory window opens so that you can specify the folder where the web campaign web pages are to be stored.
19. The default folder is ***C:\inetpub\wwwroot***. To use the default folder, click **Next**. To specify a different folder, type the path to the preferred folder location. Alternatively, click **Browse** and locate the folder to use.
20. Click **Next**. The Destination of the Web Script Directory window opens so that you can specify the folder where the web campaign components are to be stored.
21. The default folder is ***C:\inetpub\scripts.*** To use the default folder, click **Next**. To specify a different folder, type the path to the preferred folder location. Alternatively, click **Browse** and locate the folder to use.
22. The Service Account Name window opens. Details of the default administrator account might already be filled in.
23. In the Service Account Name window, type the **User Name** and **Password** for the user account under which the Voicemail Pro service should log on and run. This should be the ***IMS*** account created previously on the domain and Exchange server. Alternatively, click **Browse** and select from the list of available PC or network accounts.
24. Click **Next**. The Select Program Folder window opens.
25. 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.
26. 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.
27. Review the settings to make sure that they are what you expect. In particular, check that the required languages are listed. Scroll down if necessary. 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.
    - If for any reason the details are not what you expect, click **Back** and make the necessary changes.
28. When the installation is complete you are prompted to restart your computer. Choose **Yes I want to restart my**

computer now.

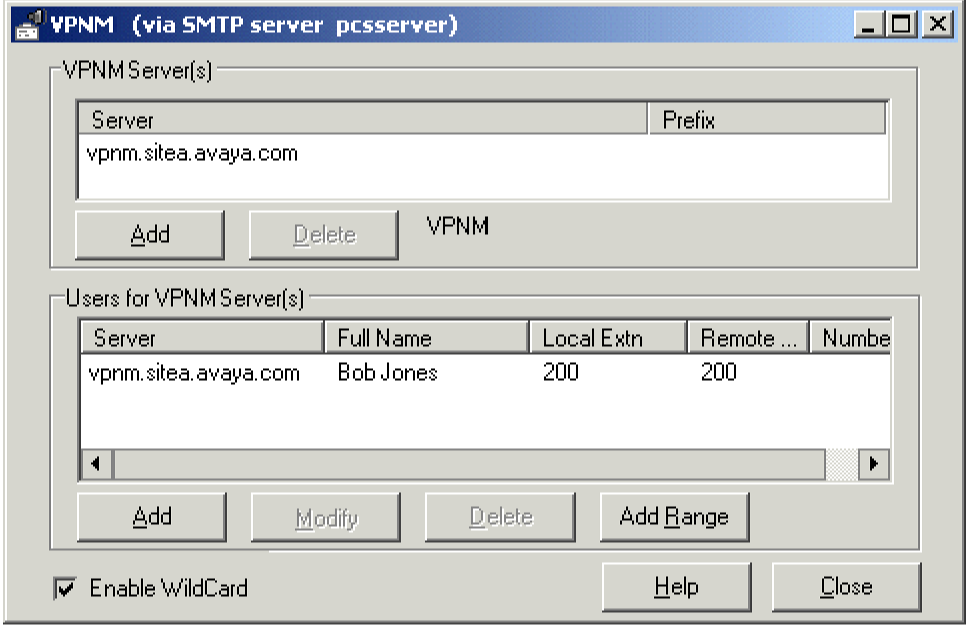
29. Click **Finish** to restart now.
30. When the server PC has restarted, the IP Office Voicemail Pro - Email Settings window is displayed so that you can specify the name of the email account to use for outgoing SMTP e-mails from the Voicemail Pro server.
31. In the Account Details box, type the name of the email account to use. Alternatively, click **Browse** and select an account to use.
32. Click **Next**. IP Office Voicemail Pro - SMTP Email Settings window opens so that you can specify details of the SMTP server to which the Voicemail Pro server should send messages. A proposed server name might already be filled in.
    - In the **Mail Server** box, leave the proposed name unchanged or type the name of the server to use. 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.
    - 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.
33. Click **Finish**. An attempt is made to validate the email settings. An error message is displayed when the attempt to connect with an SMTP server fails.
34. Click **OK** to acknowledge the message. You have now finished installing the Voicemail Pro Server and VPNM software. The next step is to configure the VPNM accounts.

10.6.3 Configuring VPNM Preferences

This set of preferences are only available if VPNM was selected 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.

To open the VPN 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	

Server	Full Name	Local Extn	Remote ...	Numbe
vpnm.sitea.avaya.com	Bob Jones	200	200	

☑ Enable WildCard

To add a VPNM server:

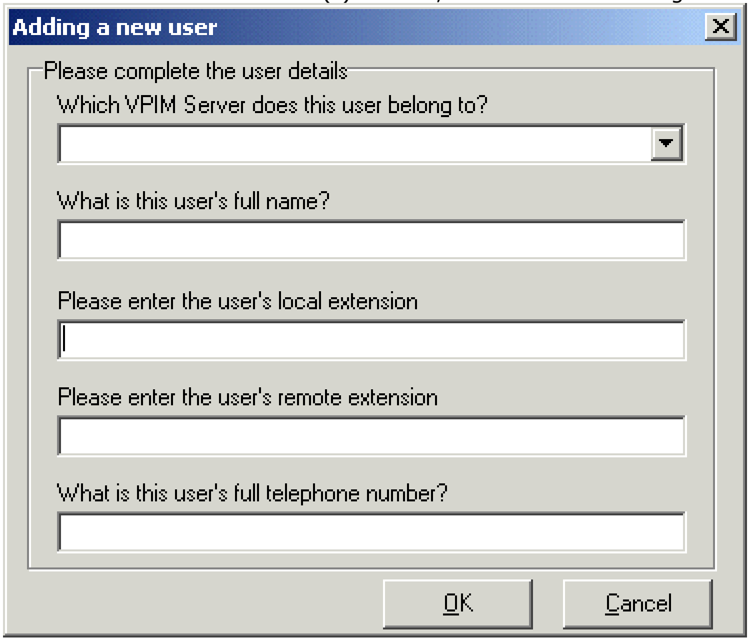
1. In the **VPNM Server(s)** section, click **Add**.
2. Enter the fully qualified domain name of the remote VPNM destination (the remote Voicemail Pro server PC or Avaya Interchange).
3. Enter the two digit access prefix, if these are being used.
4. Click **OK**.

To delete a VPNM server:

1. In the VPNM Server(s) section, select the server that you need to delete.
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.

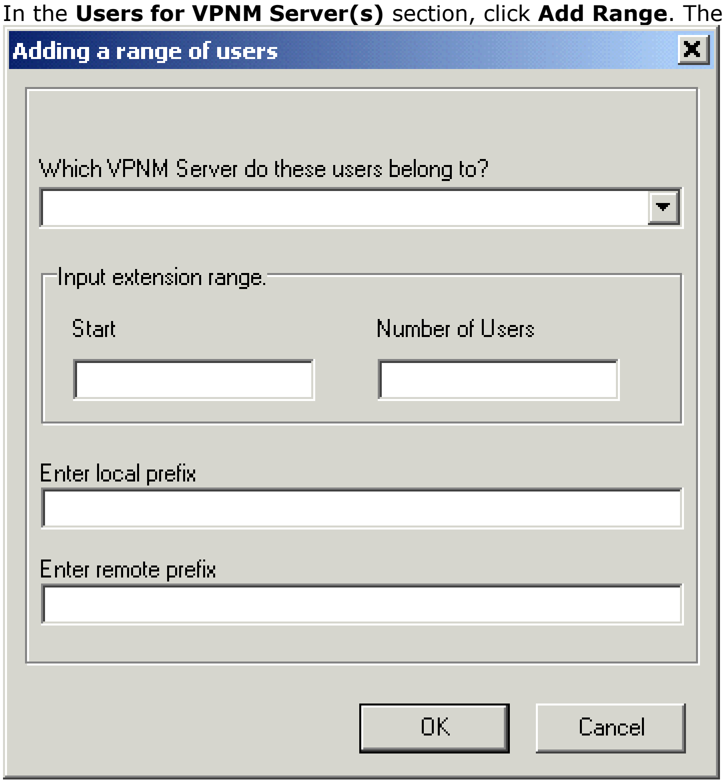


Adding a new user
Please complete the user details
Which VPIM Server does this user belong to?
What is this user's full name?
Please enter the user's local extension
Please enter the user's remote extension
What is this user's full telephone number?
OK
Cancel

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.



3. Enter details for the users. All of these details MUST be completed before the users can be added.
    - Select the VPNM server to which you want to add the users.
    - Enter the start number of the extension range.
    - Enter the local prefix.
    - Enter remote prefix.
4. Click **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.

10.6.4 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.

10.7 IP Office to Avaya Interchange

10.7.1 Configuring the Avaya Intuity Audix

This section is based upon the S8100/G600 Intuity Audix. It is assumed that the IP address of the S8100 processor is known. A browser should be available and the Avaya Terminal Emulator or the equivalent to do the necessary configuration.

To configure the Avaya Intuity Audix:

1. Issue a **telnet** command to the S8100/G600, log in and enter "audix" to reach the audix command prompt.
2. Enter **list configuration** and verify that the TCP/IP value is set to at least **1**. If not, these ports must be activated through the license process before proceeding.
3. From a PC browser, access the S8100 processor IP address and login.
   - At the S8100 main page, select **Administer System > Audix Networking > Administrative Menu** > **Network Channel Administration**.
   - Enable each channel in the Channel Configuration Column.
   - Select **Save** when finished.
4. Return to the Audix command prompt screen. Inspect the system for the list of mailboxes that will be eligible to receive messages.
   - Type **change machine**. Note the range of local extensions. **List subscribers** will provide a more specific list. It is best to distinguish mailboxes that are eligible to receive messages for example, call answer mailboxes.
   - On page 2 of the change machine form, ensure that all the update settings are set to **y**.
   - Make sure that Network Turnaround is set to **y**. Select **Enter**.
5. To administer the password for message exchange:
   - From the S8100 home page select **Administer System > Audix Networking > Administrative Menu** > **Local Machine Administration**.
   - Enter the password to be used for transfer of messages between this system and the Avaya interchange. Select **Change**.
6. To enter the information for connecting to the Interchange:
   - From the S8100 home page select **Administer System > Audix Networking > Administrative Menu > Remote Machine Administration** > **Digital Machine Administration**.
   - Select **Add New Machine**.
   - Enter the Avaya interchange name, IP address and networking password.
   - Define the schedule for exchanging messages.
   - Select **Add** to complete.
7. To administer the parameters associated with the Interchange:
   - Type **change machine <*machine name*>** from the AUDIX command prompt.
   - If all extensions that are not on the Intuity Audix are configured to be on the Interchange and "Send to non-Administered Recipients" is set to yes, errant messages may be sent. This will waste bandwidth and processing time.
   - The extension Length setting is the dial plan length that has been configured in the Avaya Interchange.
   - Set all the parameters of page 2 to **y**. (Send to non-administered recipients, Updates In, Updates Out and Network Turnaround).
   - Select **F3** to Add the remote machine.

10.7.2 Configuring the Avaya Interchange

For more information about the options that are mentioned in this section, refer to the Interchange documentation which is available from www.support.avaya.com.

To configure the Interchange Intuity interface:

- Log in to the Intuity interchange.
  - To verify that the system is optioned for TCP/IP digital ports, select **Customer/Service Administration** from the Interchange Main Menu.
  - The VPNM ports will also be required for interfacing to the Voicemail Pro.
- Ensure that the TCP/IP networking is set up so that the machine can communicate to and from the Intuity Audix.
  - From the Main Menu, select **Networking Administration** > **TCP/IP Administration**.
  - Make a note of the IP Address, Subnet Mask and default Gateway IP Address. The information will be required later in the setup.
- Make sure that an entry exists with the data that corresponds to the information entered for connecting to the Interchange.
  - From the Main Menu, select **Networking Administration** > **Local Machine Administration**.
- To verify that there are equipped TCP/IP ports for the networking to Intuity Audix and to Voicemail Pro:
  - From the Main Menu, select **Networking Administration** > **Networking Channel Administration**. The status should be **Idle**.
- Information corresponding to the Intuity Audix information entered in Step 4 when configuring the Audix needs to be entered under Digital Networking Machine Administration.
  - From the Main Menu, select **Networking Administration** > **Remote Machine Administration** > **Audix Digital networking Machine Administration**.
  - Enter the transmission schedule for sending messages to the Audix System. Select **Chg-Keys** and then the **Add** key to enter the form.
- Administer The Intuity Audix parameters in the Interchange.
  - Select **Interchange Administration** > **Remote Machine Administration > Remote Machine Parameters**.
  - Select **Choices**, then the system to be updated.
  - Ensure that the address range corresponds to the mailboxes on the Intuity Audix system that are eligible to receive messages. Set the parameters as shown.
- Avaya Interchange? = n.
- Mailbox ID Length = 5.
- Default Language = us-eng.
- Failed Msg. Notification Priority = n.
- Msg ID? = y.
- Send Message for Warning? = n.
- Default NameNet type = u.
  - Select the **Details** key to enter the following details:
- Subscriber Updates Type = dynamic.
- Updates In? = y.
- Updates Out? = y.
- Voiced Names for Dynamic? = y.
- Network Turnaround? = y.
- Provide Local Mapped Addresses = n.
- Dynamic Sub Expiration Days = 90.
  - Select **Save**, **Continue** and then **Save** again.

7. If both systems are set for 5 digit dialing this step can be omitted. If both systems are not then Dial Plan Mapping needs to be used to map the mailbox identification from the Interchange Dial Plan to the Intuity Audix Dial Plan.
   - Select **Interchange Administration** > **Remote Machine** > **Administration** > **Dial Plan Mapping**. Update the form as required.

Configure the Interchange VPIM Interface to Voicemail Pro

These steps follow the instructions in *Avaya Interchange Release 5.4 Adding a VPIM System to Your Network* which should be referenced for greater detail on Interchange configuration steps and options.

1. Check that Interchange has available VPNM ports.
    - From the Interchange Main Menu, select **Customer/Service Administration** > **Feature Options**. Check that there are sufficient current entries for the Maximum Number of Digital Nodes and VPNM ports.
2. Set the Interchange General Parameters.
    - From the Interchange Main Menu, select **System Parameters** > **General Parameters**. Ensure that the VPNM Port Field is set to 25.
3. Identify the Avaya Voicemail Pro to the interchange system.
    - From the Interchange Main Menu, select **Networking Administration** > **Remote Machine Administration** > **VPIM Machine Administration**.
    - Select the name of the machine by telnet to the SMTP port of the Voicemail Pro to see how it identifies itself.
4. Set the IP Office parameters.
    - From the Interchange Main Menu, select **Interchange Administration** > **Remote Machine Administration > Remote Machine Parameters**.
    - Select **Choices**. Select the Voicemail Pro name as the Remote Machine Name then enter the values as shown.
        - Machine Type = VPIM.
        - Avaya Interchange? = n.
        - Mailbox ID Length = 5.
        - Failed Msg. Notification Priority = n.
        - Msg ID? = y.
        - Send Message for Warning? = n.

- Select the **Details** key to enter the following details:
    - Subscriber Updates Type = dynamic.
    - Voiced Names for Dynamic? = y.
    - Use DNS? = n.
    - Domain Name = *Enter the domain name.*

5. If the Voicemail Pro Dial Plan length is shorter than the Interchange Dial Plan, select **Interchange Administration** > **Remote Machine Administration > Dial Plan Mapping**. Follow the instructions in *Avaya Interchange Release 5.4 Adding a VPIM System to Your Network* to map from the shorter length to the longer length dial plan.
6. Add the subscribers for Voicemail Pro. The following is one of several ways that this can be done.
    - Select **Interchange Administration** > **Remote Machine Administration** > **Dial Plan Mapping**.
    - Select the Voicemail Pro as the Remote Machine and then select **Options**.
    - Select **Add Subscribers from range**. Only mailboxes that are eligible to receive messages should be included.
    - Subscriber entries can be checked from **interchange Administration** > **Subscriber Administration** > **Subscriber Lists** > **By Remote Machine Name**. From **Choices** select the Voicemail Pro PC name to see the list of known subscribers.

Directory View in Interchange for Intuity Audix and Voicemail Pro

Setting the directory view specifies which other messaging machines can provide subscriber updates to a particular messaging machine. Each machine listed is associated with a range of mailboxes from which updates can be accepted and whether a voiced name can be accepted.

1. Select **Interchange Administration** > **Remote Machine Administration** > **Directory Views**.
2. At the Machine Name prompt, select the Voicemail Pro.
3. Select the **Options** key and then **Add** all entries.
4. Select **Save**.
5. Repeat these steps for the Avaya Intuity Audix.

Avaya Interchange Enterprise List Administration

This section describes how to configure a list of endpoints in the Interchange. Interchange-based lists are an efficient way to send messages to stable lists of mailboxes. Only one copy of the message is sent from the originating system to the interchange, which takes care of distributing that message to the destination machines and mailboxes.

1. From the Interchange Main Menu, select **Interchange Administration > Enterprise List Administration > System Parameters**. Set or check the address range of the interchange Dial Plan that can be used for lists.
2. From the Interchange Main Menu, select **Interchange Administration > Enterprise List Administration > List Definition**.
    - Choose a unique list id from the list range and assign an owner.
    - In the 'Network Address' grid, enter the list of destination addresses from the Interchange Dial Plan.
    - The 'Remote Address' grid should contain the systems where those destinations reside.
    - The range of mailboxes that have permissions to send through the list is set in the 'permissions' grid.

10.7.3 Configuring a DNS Server

A Domain Name Service Server is not required for the messaging systems, but may be a highly desirable way to centralize the mapping of names to IP addresses. This section briefly describes the setup of DNS server used in this type of configuration.

To configure a DNS Server:

1. From the Start menu of the PC running Microsoft Exchange Server, select **Programs > Administrative Tools** > **DNS**. If DNS is not available, DNS needs to be installed from the Operating System CD.
2. Check that there is an entry within the domain for each messaging hosts involved.
3. Configure each PC to use the DNS server to resolve names. This is done in the Internet protocol (TCP/IP Properties form of each LAN interface).

10.7.4 Verification and Troubleshooting

The configuration can be tested by creating a message and forwarding it to the far end of the system. Check that the message is received at the correct destination. If the test fails, one of the following procedures may isolate the problem.

Ping Test
Make sure that you can ping all end points. If DNS is used, ping using the machine name.

SMTP Service Test and Name Determination
Test that the SMTP service of a messaging system is working by using telnet command as follows.

1. From a DOS or UNIX prompt, type **telnet ip-address 25**.
2. At the response, type **Helo**.
3. At the response, type **Quit**.
4. If the response is not as shown below, then the SMTP service is not running on the machine and incoming VPNM messages will not be processed. Check that the required PC services are running.

```
telnet 172.16.254.197 25
220 avaya-8ccy2i4d3 Microsoft ESMTP MAIL Service, Version 5.0.2195.6713
ready a
t, Wed, 22 Oct 2003 08:45:03 -0400
Helo
250 avaya-8ccy2i4d3 Hello [172.16.254.197]
Quit
221 2.0.0 avaya-8ccy2i4d3 Service closing transmission channel
Connection t
```

Check That the Required PC Services are Running
From the Control Panel, select **Administrative Tools** > **Services**. Check that the following services are **Started** with a Startup type of **Automatic**.

- SMTP.
- Voicemail Pro Service.
- VPNM Database Service.
- VPNM Server.
- VPNM Receiver.

Check the Voicemail Pro SMTP Settings

From the PC Control Panel, select the Avaya Voicemail Pro icon.

1. Select the SMTP name.
2. Ensure that the Mail Server name is exactly the name of the Voicemail Pro server PC.
3. Select **Check** to make sure that a successful connection to the SMTP service can be made.

Interchange Basic Tests

From the Interchange Main Menu, select **Customer/Services Administration** > **Diagnostics**. Perform the following basic checks.

- TCP/IP Diagnostics.
- Send and receive Test Packets - ping the IP address.
- View Packet Statistics - look for any interface issues for example. collisions.
- Display Message Queue - monitors the contents of the outgoing message queue. If messages cannot be sent e.g. due to administrative errors, then this queue is likely to contain the unsent messages.
- Remote Connection Test - test the basic connection to a remote Audix system.

Audix Browser Status Test

- From the Browser interface to the S8100, select **System Administration > AUDIX Networking > Maintenance Menu** > **Network Snapshot**. See the status of connectivity to the Interchange.

S8100 Ping Test

- From the Avaya Terminal Emulator interface to the S8100, select **cmd** at the Enter Command prompt.
- At the DOS prompt, enter **ipconfig** to verify the IP address and gateway.
- **Ping** to test the connection.

Check the Status Through the Intuity Audix Command Line Interface

- To update the Audix with reachable subscribers through the interchange, from the audix command line prompt type **get remote-updates machine** and **Enter** where the machine is the name of the interchange system.
- Repeat the command periodically (and cancel out) until the 'Status of Last Update' entry is **completed**.
- From the command line prompt type **display administrator's-log** where message delivery failures and reasons can be found.

Message Exchange Test

In general the following capabilities are supported and can be verified.

- Sending Messages to lists or individuals, preserving any combination of Priority and Privacy.
- Replying to the sender.
- Forwarding.

Couldn't Send Message! Warning

The following warning is normally associated with not having specified a fully qualified domain name for the local SMTP server address.

```
" <CVPIM::bSendMessage>Couldn't send message!Response:550 5.7.1 Unable to relay for 210@avaya2k.test.
avaya.com "
```

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Any comments or suggestions regarding this document should be sent to "wgctechpubs@avaya.com".

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