



# **IP Office 4.2**

## **Embedded Voicemail Installation**

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#### Documentation information

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# **Chapter 1.**

# **IP Office Embedded Voicemail**



# 1. IP Office Embedded Voicemail

IP Office Embedded Voicemail is supported on the IP Office Small Office Edition, IP Office 406 V2 and IP Office 500 control units. Embedded Voicemail does not require an IP Office license. It provides basic voicemail mailbox operation without requiring a permanent voicemail server PC. It also provides multiple auto-attendant support for incoming calls.

Embedded Voicemail uses the following components:

- **Memory Card**

The type and capacity depends on the memory card of the IP Office control unit. However, in all cases, the cards are specially formatted for Embedded Voicemail use. Alternate third-party memory cards are not supported for Embedded Voicemail.

- **IP Office IP406 V2 and IP Office 500 Control Units**

Use an Avaya supplied 512MB Type II Compact Flash memory card. Provides up to 15 hours of uncompressed message storage. A memory card supplied for a Small Office Edition control unit can not be used in the IP 406 V2 or IP 500 control unit.

- **IP Office Small Office Edition**

Uses an Avaya supplied 64MB Compact Flash memory card within a PCMCIA card carrier. Provides up to 10 hours of compressed message storage. A memory card supplied for a IP406 V2 or IP 500 control unit can not be used in the Small Office Edition control unit.

- **Voice Compression Channels**

Messages and prompts stored on the Small Office Edition memory card are compressed using the IP Office control unit's voice compression channels. Thus voice compression channels are required during any voicemail accesses. It is important to note that the same voice compression channels are also used for VoIP calls.

- **IP Office IP406 V2 and IP500 Control Units**

Do not require or use voice compression channels for Embedded Voicemail.

- **IP Office Small Office Edition**

On the Small Office Edition, voice compression channels are pre-built into the control unit. Small Office Edition control units are available in 3 channel and 16 channel variants. An existing Small Office Edition control unit cannot be upgraded to add further voice compression channels.

- **IP Office Manager Application**

During installation, connection to a PC running the IP Office Manager application is required. This is required for IP Office configuration.

## Note

- Embedded Voicemail cannot be used in conjunction with Voicemail Lite or Voicemail Pro. The presence of a running Voicemail Lite or Voicemail Pro server on the same network may cause Embedded Voicemail to fail.

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# 1.1 Mailbox Features

## Supported Features

- Hunt group and user voicemail for the leaving and collection of messages.
- Auto attendant.
- For security a voicemail access code can be assigned to any mailbox. This can be changed by the mailbox user or the system administrator.
- Message waiting indication to suitable phones and IP Office Phone Manager.
- Message waiting indication for hunt group mailboxes can be assigned to specified users.
- Internal ringback on new messages.
- Short code features for collecting messages, leaving messages, voicemail on/off and ringback on/off.

## Embedded Voicemail System Comparison

Feature	Small Office Edition	IP406 V2 and IP500
<b>Memory Type</b>	64MB Compact Flash (in PCMCIA carrier).	512MB Compact Flash.
<b>Compression Method</b>	3 or 16 channels built into control unit motherboard.	Not required.
<b>Storage</b>	10 Hours.	15 Hours.
<b>Maximum Simultaneous Connections *</b>	Up to 3 on VC3 system. Up to 10 on VC16 system.	4
<b>Maximum Individual Message Length</b>	Adjustable between 3 and 180 seconds (default 120 seconds).	Adjustable between 3 and 180 seconds (default 120 seconds).
<b>Auto Attendant</b>	Yes	Yes

- **\*Maximum Simultaneous Connections**

For Small Office Edition systems, this figure may be reduced whenever voice compression channels are already in use for VoIP call support.

## Major Features Not Supported

- User trusted source settings.  
The use of V numbers in the User Source Numbers to bypass the mailbox access code is not supported.
- Call Recording.
- Voicemail Email.



## 1.2 Languages Supported

Embedded Voicemail supports a range of language prompt sets. The following languages are supported for Embedded Voicemail. The matching folder name is shown in ( ) brackets.

- Chinese-Mandarin (chs)
- Chinese-Cantonese (zhc)
- Danish (dan)
- Dutch (nld)
- English-UK (eng)
- English-US (enu)
- Finnish (fin)
- French (fra)
- French-Canadian (frc)
- German (deu)
- Italian (ita)
- Korean (kor)
- Norwegian (nor)
- Portuguese (ptg)
- Portuguese-Brazilian (ptb)
- Russian (rus)
- Swedish (sve)
- Spanish (esp)
- Spanish-Mexico (esm)
- Spanish-Argentina (ess)

The IP Office system **Locale** setting is used to determine the default language prompts used. This can be overridden for individual user mailboxes by setting a different User Locale. If a unsupported locale is selected for a user, the system locale is used. If a selected Locale is not supported a fallback language is used, as indicated in the table.

Locale selected in Manager	Embedded Voicemail Fallback Language
<b>Australia (UK English)</b>	English-UK (eng)
<b>Belgium (Dutch)</b>	Dutch (nld)
<b>Belgium (French)</b>	French (fra)
<b>Canada (Canadian French)</b>	French (fra)
<b>Chile (Latin Spanish)</b>	Spanish (esp)
<b>Colombia (Latin Spanish)</b>	Spanish (esp)
<b>Greece (Greek)</b>	English-UK (eng)
<b>Hong Kong (Cantonese)</b>	English-UK (eng)
<b>Hungary (Hungarian)</b>	English-UK (eng)
<b>Iceland (Icelandic)</b>	English-UK (eng)
<b>India (UK English)</b>	English-UK (eng)
<b>New Zealand (UK English)</b>	English-UK (eng)
<b>Peru (Latin Spanish)</b>	Spanish (esp)
<b>Poland (Polish)</b>	English-UK (eng)
<b>Saudi Arabia (UK English)</b>	English-UK (eng)
<b>South Africa (UK English)</b>	English-UK (eng)
<b>Switzerland (French)</b>	French (fra)
<b>Taiwan (Putonghua)</b>	Chinese (mandarin)
<b>Venezuela (Latin Spanish)</b>	Spanish (esp)

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## 1.3 What's New

### What's New in IP Office 4.2

In Avaya IP Office 4.2, the following features were added to Embedded Voicemail operation:

- **Cantonese Prompt Support** <sup>[9]</sup>  
Cantonese Chinese prompts are now supported. They will be used for the system or user Locale set to Hong Kong (Cantonese).
- **Forward a message or message alert to Email** <sup>[27]</sup>  
Users can have use the voicemail email features of IP Office. This allows then to forward a message as an attachment to their email address via an SMTP email server. In addition, for each new voicemail message they can chose to either receive an email alert or have the message forwarded.
- **Embedded File Management** <sup>[21]</sup>  
The file contents of the Embedded Voicemail memory card can be viewed and managed through IP Office Manager. Select **File | Advanced | Embedded File Management**. The discovery dialog will then show only systems that can support memory cards. Once the contents of the card in a system are shown, new files can be dragged onto the card and existing files can be deleted or downloaded off the card. The creation and deletion of folders is not possible.
  - Message and mailbox prompt files in **.clp** format are protected and cannot be deleted or overwritten.
  - Other file type such as bin files for phones can be placed onto the card and then be deleted or downloaded.

### What's New in IP Office 4.1

In Avaya IP Office 4.1, the following features were added to Embedded Voicemail operation:

- **Support for 40 Auto Attendants**  
The number of supported Auto Attendants has been increased from 4 to 40. The following additional changes relating to this were also made:
  - **Auto Attendant Number**  
In addition to its name, each auto attendant now has a unique AA Number assigned by the IP Office. This number can be used in place of the name in short codes used to access the auto attendant and record auto attendant greetings.
  - **Default Short Codes**  
The default short codes created for recording auto attendant prompts have been changed. On IP Office 4.1+ system, only four default short codes are created, one for each greeting, rather than 4 per auto attendant. These short codes use the auto attendant number rather than name.
- **Recording Name**  
The Recording Name field on the **Auto Attendant | Auto Attendant** tab can be used to select a named greeting file stored on the embedded voicemail memory card. The same file can be used by several auto attendants. The tool needed to converts .wav files to the formats used by embedded voicemail, called **LVMGreeting**, is provided with IP Office Manager 6.1+.

### What's New in IP Office 4.0 May 2007

In the IP Office 4.0 May 2007 maintenance release, the following features were added to to Embedded Voicemail operation:

- **Auto Attendant Greeting 'Record Name'**  
This field appears next to the short code used for recording auto-attendant prompts. The field is only useable for IP Offices being managed through the Avaya Integrated Management (AIM) application. Refer to the 'AIM for IP Office' documentation for details.
- **Local Recording Control**  
The use of short codes to record auto attendant greetings can be disabled if required.
- **Embedded Voicemail Shutdown Short Code**  
The Embedded Voicemail memory card is not a hot-swappable device, and so the IP Office system must be switched off in order to remove/replace the memory card. Use of this short code feature allows safe removal of the memory card whilst the IP Office system is running.

### What's New in IP Office 4.0

In Avaya IP Office 4.0, the following features were added to Embedded Voicemail operation:

- **IP500 Support**  
The Avaya IP Office 500 control unit is supported using a 512MB uncompressed Compact Flash memory card. This method does not require the use of voice compression channels except when connected to an IP device.

- **Fax transfer**

A fax transfer action can be set within IP Office Manager. If a transfer action has been set, on detecting a fax tone the auto attendant will route the call to the fax transfer destination. For more information, see [Auto Attendant Configuration](#)<sup>[35]</sup>.

- **Enhanced options when listening to messages**

When a message is being played you can now skip to the next message, rewind or fast forward for approximately 5 seconds. For more information, see the user guide.

- **Forward a message**

A message can be forwarded to one or many mailboxes. For more information, see the user guide.

- **Reply to a message**

If a CLI is available you can reply to a message to either an internal or external number. For more information, see the user guide.

- **Choice of transfer options**

Up to 3 breakout numbers can be set up. When callers are directed to your mailbox they can either leave a message or choose to be transferred to one of three numbers. For more information, see [User Mailbox Configuration](#)<sup>[25]</sup>.

- **Visual Voice**

Users can access their mailbox using a soft key programmed for visual voice. A display menu provides the user with options to listen to messages, send messages, change their greetings and password. Access to visual voice is granted by the system administrator using IP Office Manager. For more information, see [Visual Voice](#)<sup>[48]</sup>.

- The visual voice feature is not available on all telephones. Please refer to the telephone guide for more information.

- **Announcements**

Specific queue announcements can be recorded and then played when a call is held in a queue for the hunt group. For more information, see [Configuring Queue Announcements](#)<sup>[33]</sup>.

- **User Announcements**

The IP Office also support announcements for individual users. These can be used with embedded voicemail in the same way as hunt group announcements.



# **Chapter 2.**

# **Installing Embedded Voicemail**

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## 2. Installing Embedded Voicemail

The installation process can be divided into the following steps:

### 1. Gather Setup Information

The [Setup Information](#)<sup>[15]</sup> section contains a number of forms which can be used to gather customer information about required settings. Completing these forms before installation will assist in speeding up the installation process.

### 2. Hardware Installation

The physical installation of the memory card. This process varies according to the IP Office control unit type.

- [IP406 V2 control unit](#).<sup>[18]</sup>
- [Small Office Edition control unit](#).<sup>[19]</sup>
- [IP 500 control unit](#).<sup>[20]</sup>

### 3. System Configuration

Set the IP Office to use Embedded Voicemail and set the maximum record time for messages, greetings and prompts. For more information, see [System Configuration](#)<sup>[24]</sup>.

### 4. User Mailbox Configuration

Configure the personal settings for individual users. For more information, see [User Mailbox Configuration](#)<sup>[25]</sup>.

### 5. Hunt Group Mailbox Configuration

Configure the settings for any hunt groups where voicemail is required. This includes configuring message waiting indication and mailbox access which are not enabled by default.

### 6. Auto Attendant Configuration

Setup any required auto-attendant services and associate them with incoming call routes.







Time Profiles

- Remember that IP Office configuration uses a 24-hour clock format for times.

Time Profiles	Morning			Afternoon			Evening (Out of Hours)		
Name									
Start Time									
End Time									
Sunday									
Monday									
Tuesday									
Wednesday									
Thursday									
Friday									
Saturday									

Menu Actions

Key	Action						Destination
	Transfer to Attendant	Normal Transfer	Replay Greeting	Blind Transfer	Dial By Number	Not Defined	
0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
#	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fax				<input type="checkbox"/>			

---

## 2.2 IP406 V2 Installation

The following instructions detail the process for installing Embedded Voicemail for an IP406 V2 system.

1. Check that the following requirements have been met.

- **Hardware:**

- IP Office 406 V2 control unit. No voice compression channels are required.
- Avaya supplied 512MB Memory (Compact Flash) Card.

- **Configuration:**

- PC, connected to the IP Office network with the IP Office Manager application installed.

2. **Install the Memory Expansion Card**

The IP 406 V2 Memory Card is a Type II Compact Flash memory card. Only a card supplied by Avaya can be used for Embedded Voicemail. Compact Flash cards from other sources **cannot** be used for Embedded Voicemail.

- Switch off the IP Office unit before you insert the memory card.

- **Warning**

You must always switch off the IP Office before you insert or remove a memory card. Alternately when removing the card use a **ShutdownEmbeddedVoicemail** short code.

- Insert the memory card into the **C/F TII** card slot on the front of the IP406 V2 control unit. Insert the card with the memory card label upwards. As you insert the card, the card eject button adjacent to the slot will come out.
- Switch on the IP Office unit.

3. The system can now be configured for Embedded Voicemail. For more information, see [System Configuration](#) <sup>24</sup>.

## 2.3 Small Office Edition Installation

The following instructions detail the process for installing Embedded Voicemail for a Small Office system.

1. Check that the following requirements have been met.

- **Hardware:**

- IP Office Small edition control unit with VC (voice compression) channels.

- **Note** - Existing systems cannot be upgraded to add additional voice compression channels.

- Avaya 64MB Small Office Memory (Compact Flash) Card. This is supplied with a PCMCIA memory card carrier.

- **Configuration:**

- PC, connected to the IP Office network with the IP Office Manager and IP Office Monitor applications installed.

2. Check for the voice compression channels. The number of voice compression channels in the Small Office Edition control unit (either 3 or 16) controls the maximum number of simultaneous Embedded Voicemail calls. The number of voice compression channels is indicated by the label on the control unit.

- Look at the label on the base of the control unit.

- At the top of the label, the line **SMALL OFFICE** is followed by a list of the components within the unit. The number of voice compression channels is indicated by **VC** and a number.

- **Note** - As with all IP Office control units, the number of installed voice compression channels can also be checked using the IP Office Monitor application. For more information, see [Monitoring Embedded Voicemail](#)<sup>[46]</sup>.

3. Install the Memory Expansion Card. The Small Office Memory Card is supplied with a PCMCIA card carrier.

- Insert the Memory Card into the PCMCIA card carrier.

- The PCMCIA card carrier can be inserted into either of the PCMCIA card slots on the rear of the Small Office Edition control unit. Insert the carrier with the memory card label pointing upwards. As the carrier is inserted, the card eject button for the PCMCIA slot will come out.

- Due to the raised shape of the optional Small Office wireless card, we recommend that the Small Office Memory Card carrier is inserted in **Slot A**, leaving **Slot B** free. This allows either card to be inserted or removed without also having to remove the other.

- Switch on the IP Office unit.

4. The system can now be configured for Embedded Voicemail. For more information, see [System Configuration](#)<sup>[24]</sup>.

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## 2.4 IP 500 Installation

The following instructions detail the process for installing Embedded Voicemail for an IP500 system.

1. Check that the following requirements have been met.

- **Hardware:**

- IP Office 500 control unit. No voice compression channels are required.
- Avaya supplied 512MB Memory (Compact Flash) Card.

- **Configuration:**

- PC, connected to the IP Office network with the IP Office Manager application installed.

2. Install the Memory Expansion Card

The IP 500 Memory Card is a Type II Compact Flash memory card. Only a card supplied by Avaya can be used for Embedded Voicemail. Compact Flash cards from other sources **cannot** be used for Embedded Voicemail.

3. Switch off the IP Office unit before you insert the memory card.

- **Warning**

You must always switch off the IP Office before you insert or remove a memory card. Alternately when removing the card use a **ShutdownEmbeddedVoicemail** short code.

4. Insert the memory card into the **C/F TII** card slot at the rear of the IP500 control unit. Insert the card with the memory card label upwards. As you insert the card, the card eject button adjacent to the slot will come out.

5. Switch on the IP Office unit.

6. The system can now be configured for Embedded Voicemail. For more information, see [System Configuration](#)<sup>[24]</sup>.

## 2.5 Upgrading Prompts


For IP Office 3.0 and higher, Embedded Voicemail memory cards are supplied with the necessary prompt files pre-installed. Previous releases required that the prompts be initially transferred using TFTP from a PC running IP Office Manager. All the prompts for Embedded Voicemail can be found in the **LVMSound** folder on the IP Office Administrator Applications CD. There are two sets, one for compressed memory cards in the **G723 Files** folder, and one for uncompressed memory cards in the **G711 Files** folder. Each set contains a folder for each supported language.

- **IP Office Small Office Edition - Compressed Prompts**  
The sub-folders in **LVMSound/G723 Files** should be copied to **LVMAIL** on the memory card.
- **IP Office 406 V2 - Uncompressed Prompts**  
The sub-folders in **LVMSound/G711 Files** should be copied to **LVMAIL** on the memory card.

### Extracting the Prompt Files

1. This process requires a temporary folder on the PC to which files can be copied. It also requires an application which can open and extract the contents of a **.zip** file.
2. First check that the IP Office system has been upgraded to the expected level of IP Office core software.
3. Insert the CD or DVD on which the IP Office Administration suite was provided. Cancel the auto-installation process if it starts.
4. Locate the folder **LVMSOUND**. Open either the **G711 Files** (IP460 V2 and IP500) folder or **G723 Files** (Small Office Edition) folder and copy the zip file within that folder to a location on the PC's own hard disk.
5. Using a suitable application, open the zip file and extract the files contained within it. Ensure that you extract the files including their file structure which should show a folder for each supported language.

### Transferring Prompt Files Using TFTP

1. Extract the set of prompt files to a temporary location on your PC as detailed above.
2. Start IP Office Manager and receive the IP Office configuration.
3. Display the **System** configuration form.
4. Click the **System** tab.
5. In the **File Writer IP Address** box, type the IP address of the PC that you are using for the file transfer.
6. Click  to send this configuration back to the control unit and allow it to reboot.
7. Open a Command prompt window.
8. Type the CD drive letter and press **Enter**, for example enter **D:**
9. Type **cd LVMSOUND** and press **Enter**.
10. The next step depends on the IP Office control unit type:
  - **For an IP406 V2 or IP500 control unit:**
    1. Type **cd G711 Files** and press **Enter**.
    2. Type **send711** followed by the IP Office's LAN1 IP address, for example **send711 192.168.42.1**. The batch file will start transferring all the necessary folders and prompt files. The whole process of transferring the prompt files can take up to 40 minutes.
  - **For a Small Office Edition control unit:**
    1. Type **cd G723 Files** and press **Enter**.
    2. Type **send723** followed by the IP Office's LAN1 IP address, for example **send723 192.168.42.1**. The batch file will start transferring all the necessary folders and prompt files. The whole process of transferring the prompt files can take up to 40 minutes.
11. When all the files have been transferred, close the Command prompt window.
12. Restart the IP Office control unit by removing and then reapplying power.
13. When the IP Office has restarted, wait approximately 10 minutes while it scans the new prompts that are available.
14. The IP Office Monitor application can be used to show this activity. For more information, see [Monitoring Embedded Voicemail](#)<sup>46</sup>.
15. Test Embedded Voicemail operation by dialing **\*17** at an extension. Embedded Voicemail should answer and start to give you prompts.



# **Chapter 3.**

# **Configuring Embedded Voicemail**



---

## 3. Configuring Embedded Voicemail

### 3.1 System Configuration

The system configuration for Embedded Voicemail is common to all the IP Office systems that support Embedded Voicemail memory cards.

#### To configure an IP Office for Embedded Voicemail:

1. Open IP Office Manager and receive the IP Office configuration.
2. In the Navigation Pane click  **System** and select the system.
3. View the **System** tab. The **Locale** setting should match the language for spoken prompts required from the Embedded Voicemail. For more information, see [Languages Supported](#)<sup>94</sup>.
  - If it is not correct, consult with the customer first. This Locale setting controls many default aspects of IP Office operation and so should normally already be set to match the customer's locale.
4. Click the **Voicemail** tab.
5. From the **Voicemail Type** list select **Embedded Voicemail**.
  - Only one type of voicemail system can be used on an IP Office Control Unit at a time.
6. Set the **Maximum Record Time** for messages and prompts to the value required by the customer. The allowable range is 30 to 180 seconds with 110 seconds as default.
7. Click **OK** to save the voicemail system changes.
8. Click  to send the configuration change back to the control unit.
9. From an extension on the system, dial **\*17**. The Embedded Voicemail should answer and start to give you prompts.



## 3.2 User Mailbox Configuration

Embedded Voicemail creates a mailbox for each user on the IP Office system. Calls are routed to the mailbox whenever the user's extension is busy or does not answer within the users allocated no answer time. This includes calls that are forwarded to another internal destination.

An individual user's mailbox can be configured either through the mailbox and system short codes (refer to the Embedded Voicemail User Guide) or by configuring the user settings in the IP Office Manager.

- **Message Waiting Indication**

If supported by the user's current extension, the user will receive message waiting indication whenever their mailbox contains new messages. The type of message waiting indication will depend on the telephone.

- **Mailbox Access**

The standard default short code (**\*17**) can be used to access an extensions associated user mailbox. Other methods of mailbox access can be configured.

- For IP Office 4.2+, the **MESSAGES** button on phones, which normally emulates \*17, can be configured to access Visual Voice mode on phones that can support Visual Voice.

- **Ringback**

Embedded Voicemail can be set to ring the user whenever they have new messages in their mailbox. This ringback is triggered the completion of a call at the user's extension. Ringback from a hunt group mailbox containing new messages may also occur if the user is configured to receive hunt group message waiting indication.

- **Voicemail On/Off**

The sending of calls to the user's mailbox can be switched off. Note however that this does not stop other methods of leaving messages directly in the user's mailbox.

- **Access Code**

An access code can be assigned to the mailbox. Anyone accessing the mailbox must first enter this code, before they can collect messages. The access code can be reset by the user once they are in their mailbox.

- **Voicemail Reception & Breakout Numbers**

Setting a Voicemail Reception number for a user, allows callers leaving a message in their mailbox to dial 0 to be transferred to that number. If used this feature should be announced in the mailbox greeting prompt. Two transfer numbers can also be entered. The user can record a message stating that the caller can press 2 or 3 to transfer to the specified telephone numbers.

- **Announcements**

IP Office 4.0+ allows Embedded Voicemail to provide announcements to calls waiting to be answered by users. This is similar to the announcements provided for [hunt groups](#)<sup>[33]</sup>, with announcements being played to callers waiting to be answered. Due to the overlap of various timeouts, the use of user announcements is not recommended in conjunction with forwarding and voicemail.

- **Voicemail Email**

IP Office 4.2+. A user can have notification of new messages sent to your their address. The notification can be a simple alert to tell them that they have a new message or the voicemail message can be sent if required. See [Voicemail Email Integration](#)<sup>[27]</sup>.

### **WARNING: Changing User Names**

Mailboxes are created based on the unique user name within the IP Office configuration. Changing a user name will associate that user with a new mailbox. If it is necessary to change a user name, ensure that they have played and deleted all messages first. If a user name is changed without clearing the original mailbox, it will be necessary to create a short code based on the old user name in order to access the old mailbox.

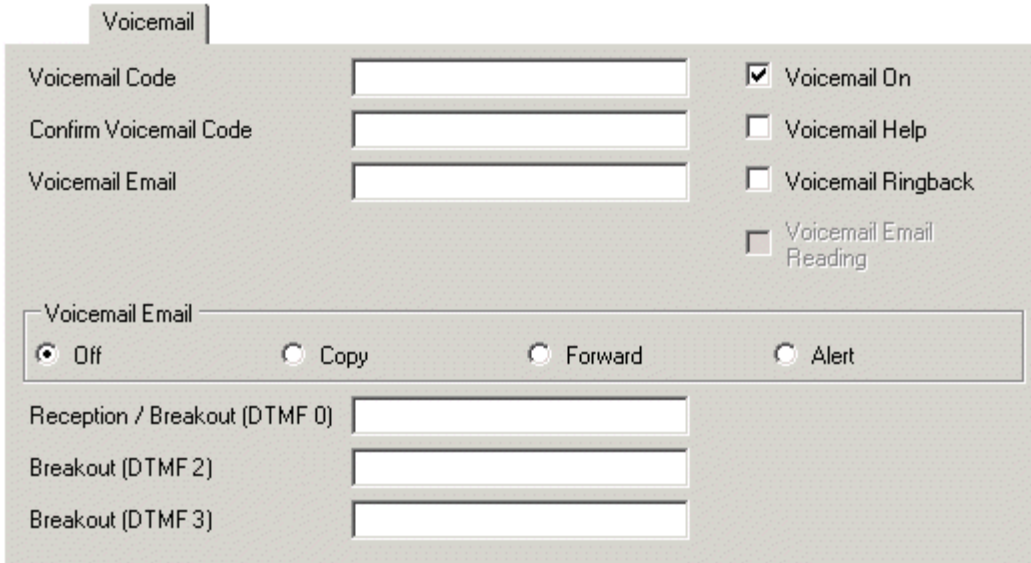
---

**To change voicemail configuration for an individual:**

1. Open IP Office Manager and receive the IP Office configuration.

2. In the Navigation pane click  **User** and select the individual user.

3. View the **Voicemail** tab.



4. Optional: Enter a voicemail code between 4-15 digits in the **Voicemail Code** field. This is required when users retrieve voicemail messages remotely, for example from another user's extension or from an external telephone.

- The Voicemail Code must be retyped in the **Confirm Voicemail Code** field to ensure it has been correctly entered.

5. For Voicemail Email features see [Voicemail Email Integration](#) <sup>[27]</sup>.

6. Optional: Voicemail can be turned off by un-checking the **Voicemail On** option. When on, the mailbox is used to answer the user's unanswered or busy calls.

7. Optional: When a new message is received, the voicemail server can call the user's extension whenever the extension returns from off-hook to on-hook. The voicemail server will not ring the extension more than once every 30 seconds. Check the **Voicemail Ringback** option to enable this feature.

8. Optional: When a caller reaches voicemail 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 field. External breakout numbers can be used if the user has the option 'Inhibit Off-Switch Forward/Transfer' checked in their Telephony tab.

- **Reception/Breakout (DTMF 0)**

The number to which callers are to be transferred if they are directed to voicemail and press \*0. Usually this is the reception number.

- **Breakout (DTMF 2)**

The number to which callers are to be transferred if they are directed to voicemail and press \*2. This number might be, for example, the number of a colleague of the mailbox owner whose extension was originally dialed.

- **Breakout (DTMF 3)**

The number to which callers are to be transferred if they are directed to voicemail and press \*3. This number might be, for example, the mobile or cell number of the mailbox owner whose extension was originally dialed.

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

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

### 3.3 Remote Mailbox Access

The standard methods for remote mailbox access apply to users or to hunt groups. Remote Mailbox Access is defined as:

- Accessing a mailbox from an extension that does not match the mailbox number.
- External caller access to voicemail to collect messages from a mailbox.

#### WARNING

Where remote access is setup for any mailbox there must be a mailbox access code is set for the user or hunt group. If a mailbox does not have an access code remote access is not available.

There are a number of ways to enable remote mailbox access.

1. An auto attendant can be used to enable remote access to a mailbox. A short code similar to the example could be entered as the Destination for one of the auto attendant **Normal Transfer** key options. For more information, see [Using Auto Attendant to Access Voicemail](#)<sup>[42]</sup>.
2. An incoming call route could be configured to enable remote access to a mailbox. The option **Voicemail** can be selected as the **Destination** and/or **Night Service Destination** of an **Incoming Call Route**.
3. A short code can be created that uses the **Voicemail Collect** feature but without a mailbox name specified in the **Telephone Number** field will trigger remote access. An example is shown below. This short code could be utilized by users on the system, as the destination in an Incoming Call Route or as the destination for a auto attendant option.

Field	Contains...
Code	*99
Feature	Voicemail Collect
Telephone Number	?
Line Group Id	0
Locale	[Leave blank]
Force Account Code	[Leave blank]

### 3.4 Voicemail Email Integration

For IP Office 4.2+ (excluding Small Office Edition), the use of Voicemail Email features with Embedded Voicemail is supported. This uses the IP Office systems SMTP settings to send messages to the customer email server. That server then forwards those messages into the user email mailboxes.

Once enabled, users can select to have a email alert about each new voicemail message or to have the voicemail message forwarded to their email mailbox. In addition when listening to a message in their voicemail mailbox they can forward it to their email mailbox.

- **Warning**

The sending of .wav files across a network creates a high loading on the network and networks servers. A one-minute message requires a 1MB .wav file.

1. Note that changing the IP Office's SMTP settings requires the system to be restarted.
2. Obtain details of the customer's SMTP email server. It may be necessary to configure a user account on that server in order for it to accept and relay emails from the IP Office.
3. Using IP Office Manager, receive the IP Office system configuration.
4. Select **System** and then the **SMTP** tab.
5. Enter the details to match the customer SMTP server.
  - **IP Address**  
The IP address of the customer's SMTP server. If not on the same subnet as the IP Office LAN, an IP route must also be added.
  - **Port**  
The SMTP listening port of the server. The default is 25.
  - **Email From Address**  
This is the address that will be used by the IP Office. Some servers will only relay messages from recognized full addresses or addresses in the same domain.
  - **Server Requires Authentication**  
If the server requires a user account to receive and send emails, enter the details of an account configured on that server for use by the IP Office.

---

6. For each user, select **User | Voicemail**.

7. In the **Voicemail Email** field enter the user's email address.

8. Using the radio button select the type of Voicemail Email function alerts for the user.

- **Off**  
Don't send email alerts for new messages. Users can select this themselves by dialing **\*03**.
- **Copy**  
Send a copy of each new message received to the user's email address. User's cannot select this mode themselves.
- **Forward**  
Forward each new message received to the user's email address, deleting the message from their mailbox. Users can select this themselves by dialing **\*01**.
- **Alert**  
Send an email alert for each new message received. Users can select this themselves by dialing **\*02**.

9. Send the configuration back to the IP Office.

## 3.5 Hunt Group Mailbox Configuration

Embedded Voicemail creates a mailbox for each hunt group on the IP Office system. Calls are sent to the mailbox only when each available group member has been rung for the group's set ring time.

The group mailbox can be configured either through the mailbox (refer to the Embedded Voicemail User Guide) or through the hunt group settings in the IP Office Manager.

- **Message Waiting Indication**

By default there is no message waiting indication to any user for hunt group messages. Users must be configured individually. For more information, see [Message Waiting Indication](#) [30].

- **Mailbox Access**

By default there is no mailbox access to hunt group mailboxes to collect messages. Users assigned hunt group message waiting indication may also gain access depending on their phone type or if using IP Office Phone Manager. Otherwise an access short code must be created for the hunt group. For more information, see [Hunt Group Mailbox Access](#) [31].

- **Ringback**

Embedded Voicemail can be set to ring the user whenever they have new messages in a hunt group mailbox for which they receive message waiting indication. This ringback is triggered the completion of a call at the user's extension.

- **Voicemail On/Off**

The sending of calls to the group's mailbox can be switched off. Note however that this does not stop other methods of leaving messages directly in the mailbox.

- **Access Code**

An access code can be assigned to the mailbox. Anyone accessing the mailbox must first enter this code before they can collect messages. The access code can be reset by the user once they are in the mailbox.

### **WARNING: Changing Hunt Group Names**

Mailboxes are created based on the unique group name within the IP Office configuration. Changing a group name will associate that group with a new mailbox. If it is necessary to change a group name, ensure that they have played and deleted all messages first. If a group name is changed without clearing the original mailbox, it will be necessary to create a short code based on the old group name in order to access the old mailbox.

The group mailbox can be configured either through the mailbox and system short codes or through the hunt group settings within the IP Office configuration.

### **To configure a group mailbox in IP Office Manager:**

1. Open IP Office Manager and receive the IP Office configuration.

2. Click  **Hunt Group** to display the list of existing hunt groups.

3. Double-click the required hunt group.

4. Click the **Voicemail** tab. This tab includes settings that are used by IP Office Voicemail Lite and Voicemail Pro. For Embedded Voicemail complete the following details:

- **Voicemail Code**

This field can be used to set a mailbox access code. That code must then be entered by anyone attempting to retrieve messages from the mailbox.

- **Voicemail On**

When ticked, calls to the hunt group's number will divert to voicemail if all available group members are busy or do not answer within the group's set allocated answer interval.

5. Make any changes as required for the hunt group and click **OK**.



6. Repeat for any other hunt group.

7. Use  to save the new changes back to the IP Office system.

---

### 3.5.1 Message Waiting Indication

By default no message waiting indication is sent to any user for a hunt group mailbox. The following process shows how to give a user message waiting indication from a hunt groups mailbox. The method of indication will depend on the type of telephone the user has and whether they are using IP Office Phone Manager.

1. Start IP Office Manager and receive the IP Office configuration.
2. Click  **User** to display the list of existing users.
3. Double-click the name of the user who requires message waiting indication.
4. Click the **Source Numbers** tab.
5. Click **Add**.
6. In the **Source Number** field, enter **H** followed by the name of the hunt group. For example, for the hunt group Main, enter **HMain**.
7. Click **OK** and repeat for any other hunt groups for which the user requires message waiting indication.
8. Click **OK** and repeat for any other users.
9. Use  to save the new changes back to the IP Office system.




### 3.5.2 Mailbox Access

By default no user has access to a hunt group mailbox until specifically configured for such access. Hunt group mailboxes can be accessed using the following methods:

#### Message Waiting Indication

Users who have been assigned hunt group message waiting indication are also given methods to access the hunt group mailbox. The method will depend on the telephone and/or software they are using. For more information, see [Message Waiting Indication](#) <sup>[30]</sup>.

##### 1. Avaya 4400 Series Telephone Users

DS display phone users on telephone models with a  **MENU** key also gain access once they have been configured for hunt group message waiting. The hunt group name is then displayed when the user presses  **MENU**,  **MENU**, **Msgs**, **Voice**. For more information, see your telephone user guide.

##### 2. Phone Manager Users

Phone Manager users see the hunt group name and number of messages listed on the Messages tab. They can click this to access the hunt group mailbox.

##### 3. 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.

##### 4. Visual Voice

If Visual Voice is available the user will see the name of the hunt group listed. The number of new calls are shown in brackets next to the hunt group name.

#### Short Code and button Access

A short code can be created for hunt group mailbox access, as detailed in the table. This can be a system wide or user specific short code. For information about setting up short codes, see the IP Office Manager help or guide.

Field	Contains...
Code	*99
Feature	Voicemail Collect
Telephone Number	"?Sales"
Line Group Id	0
Locale	[Leave blank]
Force Account Code	[Leave blank]

The Voicemail Collect feature and hunt group mailbox name can also be assigned to a user's programmable button.

#### Remote Access

The standard methods for remote mailbox access apply to users or to hunt groups. For more information, see [Remote Mailbox Access](#) <sup>[27]</sup>.

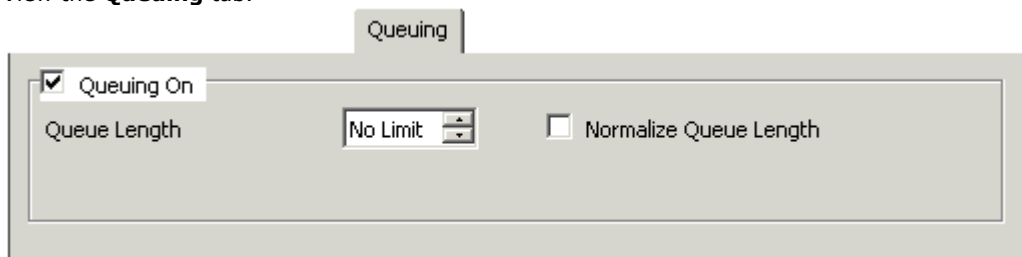
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### 3.5.3 Configuring Queues

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. Queuing is configured for each hunt group in IP Office Manager. When queuing is selected, announcements can be played to the queued caller. For more information, see [Configuring Queue Announcements](#)<sup>[33]</sup>.

#### 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** : *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.

For more information, see the IP Office Manager help.

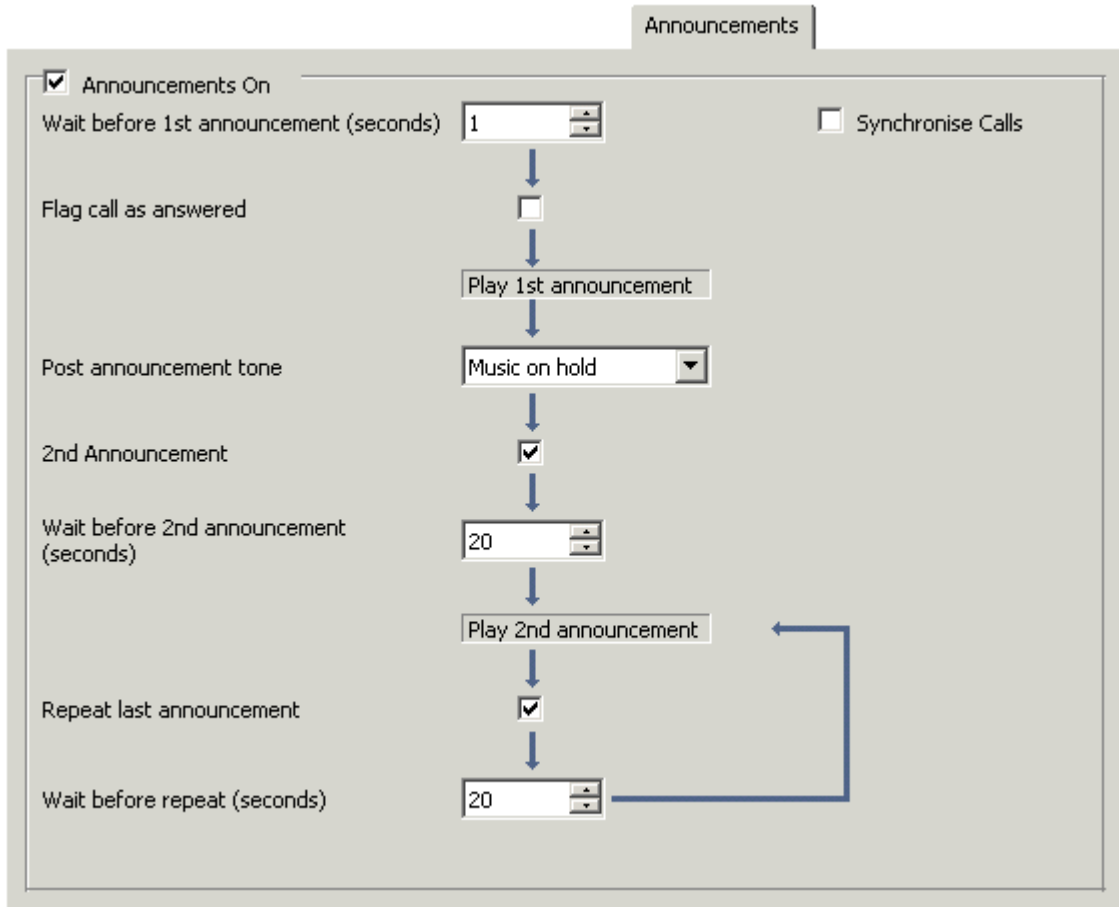



### 3.5.4 Configuring Queue Announcements

When a caller is in a queue, announcements can be played to the queued caller. The announcements are activated in IP Office Manager. For more information, see the IP Office Manager help.

**To configure your announcements:**

1. Open IP Office Manager.
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 queue for the hunt group.
5. Select the amount of time for the caller to be queues before they hear the first announcement. The **Wait before 1st announcements (seconds)** default is 10.
6. Select the **Post announcements 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 queued 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.

There are no default queue announcements for user and hunt groups. On new IP Office 4.0+ systems there are two default short codes that enable you to record announcements. The short codes are:

- **\*91N; / N".1" / Record Message**  
Used to record an announcement 1. For example, to record announcement 1 for a hunt group on extension 300 dial **\*91300#** and follow the instructions to record the new announcement.

---

- **\*92N; / N".2" / Record Message**

Used to record an announcement 2. For example, to record announcement 2 for a hint group on extension 300 dial **\*92300#** and follow the instructions to record the announcement.

## 3.6 Auto Attendant Configuration

In addition to basic voicemail operation, you can create auto attendants using Embedded Voicemail. For IP Office 4.1+, up to 40 auto attendant services are supported whereas previously only 4 were supported.

The IP406 V2 and IP500 support up to 4 simultaneous calls to Embedded Voicemail services. The Small Office Edition supports up to 10 simultaneous calls to Embedded Voicemail depending on available voice compression channels.

Each auto attendant consists of:

- **Actions**

Each of the normal DTMF dialing keys; \*, # and 0 to 9, can be assigned to an action. Callers can dial-through prompts, that is press an action key while listening to the greetings prompts. For IP Office 4.0+, you can also assign an action to the key Fax. If a transfer action is set, on detecting fax tone the auto attendant will route the call to the fax transfer destination as specified using the Blind Transfer action.

- **Blind Transfer**

Callers are transferred to the selected destination. This action is used with the key Fax so that when a fax tone is detected the call is transferred to the specified extension.

- **Dial by Number**

Callers can dial the required extension number. There is no prompt associated with the action. If a prompt is required you need to record your own.

- Unexpected results may occur if the dial plan is not a uniform length. Hunt group and user extension numbers should all be the same length.

- **Normal Transfer**

Transfers the caller to a specified number. This is a supervised transfer, that is, if busy or unanswered the call will follow the settings of the target user or hunt group. If the destination field is left blank, callers can dial the extension number that they require, however no prompts will be played.

- **Not Defined**

Take no action.

- **Replay Greeting**

Repeat the menu greeting.

- **Transfer to Attendant**

Used to access one auto attendant from another.

- **Prompts**


You can record separate morning, afternoon and evening (out of hours) greeting prompts. Which prompt is used is defined by associated Time Profiles. The greeting prompt is followed by a menu options prompt. This is used to inform the caller of the auto attendant options. For more information, see [Recording Prompts](#)<sup>[38]</sup>.

- In situations where time profiles are absent, overlap or conflict; the order of precedence given is to time profiles assigned to **Morning**, **Afternoon** and then **Evening**.

### 3.6.1 Create an Auto Attendant

The following process shows by example the setup for an auto attendant for Embedded Voicemail. In this example the auto-attendant should give callers the option to press 0 for reception (hunt group 200) or 1 for sales (hunt group 301).

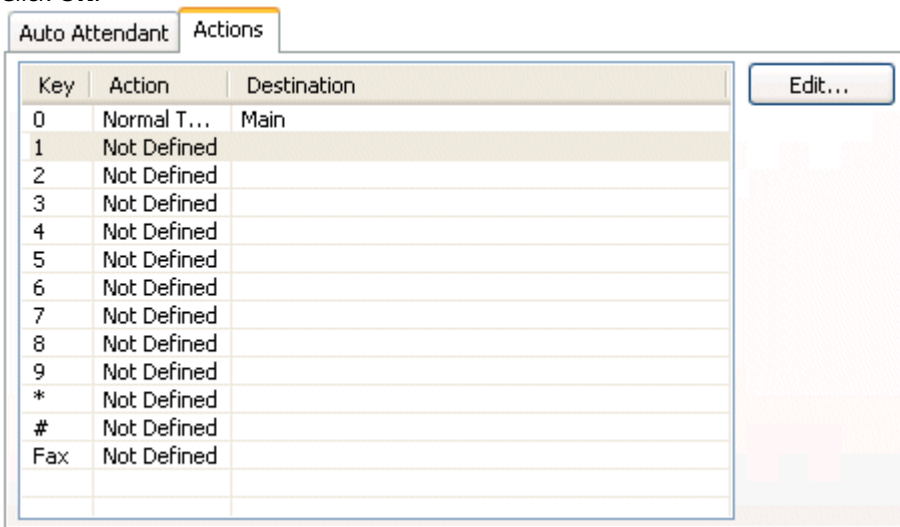
#### To create an auto attendant:

1. Start IP Office Manager and load the required configuration.
2. Note that if time profiles are going to be used in an auto attendant, the time profile has to be created before creating the auto attendant. For more information, see the IP Office Manager help.
3. Click  **Auto Attendant**. Any existing Auto Attendants are listed.
4. Click **Create a New Record** in the Group Pane. Select **Auto Attendant**.
5. View the Auto Attendant tab. In the **Name** field enter the name for the auto attendant. This can be up to 15 characters in length.

- For IP Office 4.1+, an AA Name field is shown, with a number assigned to the auto attendant by the IP Office Manager.
6. In the **Time Profile** area select the appropriate time profile for the different time periods of **Morning**, **Afternoon** and **Evening**.
    - If the periods in which particular time profiles are active overlap, preference is given in the order **Morning**, **Afternoon** and then **Evening**.
    - Any in periods not covered by a time profile are assumed to be part of the **Morning**.
    - Callers will hear two prompts, first the greeting prompt matching the time profile periods, for example "Good morning", and then the menu options prompt, for example "Press 0 for reception, press ...".
  7. Set the required **Maximum Inactivity** time. This is how long, after playing the prompts, the auto attendant should wait for a valid key press. The time can be set between 1 and 20 seconds, the default is 8 seconds.
    - If exceeded, the caller is transferring to the **Fallback Destination** in the **Incoming Call Route** used to route their call to the auto attendant, or disconnected.

8. Click the **Actions** tab. The option to press 0 for reception (hunt group **Main**) is entered by:

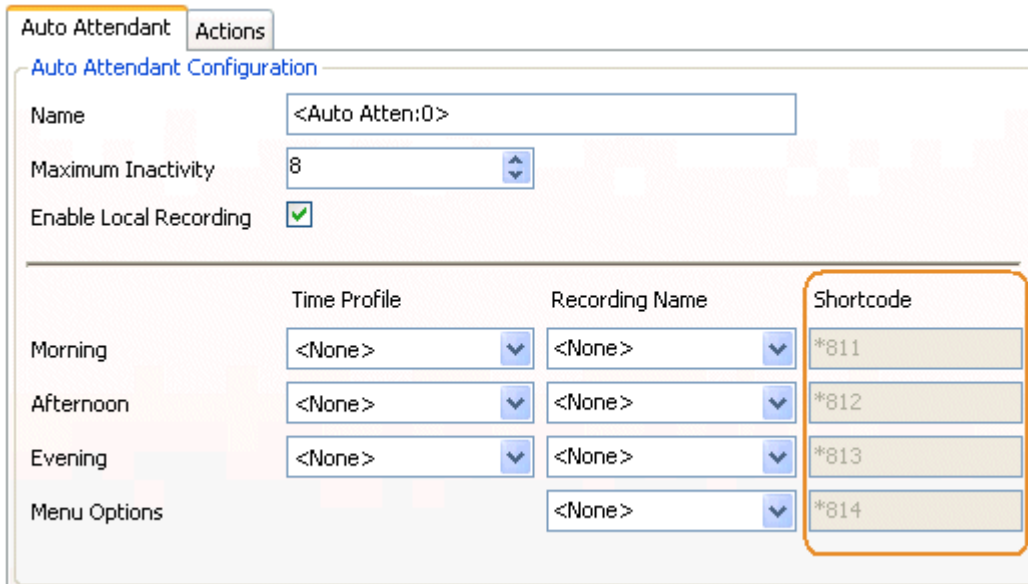
- Click with the Key 0 row.
- Click **Edit**.
- Select the action **Normal Transfer** from the available options.
- Select the required destination. In this example the group **Main** is selected.
- Click **OK**.



9. The option to press 1 for sales (hunt group 301) is entered by:

- Click within the Key 1 row.
- Click **Edit**.
- Select the action **Normal Transfer** from the available options.
- Select the required destination, for this example the group **Sales**.
- Click **OK**.

10. Click **OK** to save the auto attendant. Short codes are automatically created for the auto attendant and the codes can be viewed in the Auto Attendant tab.



11. Click  to save the new changes back to the IP Office system.

12. Following the system reboot, you can record prompts for the auto attendant using the short codes created. For more information, see [Recording Prompts](#)<sup>38</sup>.

For details of routing calls to the auto attendant see [Routing Incoming Calls to an Auto Attendant](#)<sup>39</sup>.

---

## 3.6.2 Recording Prompts

When a new auto attendant is created, a number of short codes are automatically added to the system short codes table. The short codes allow the recording of the various auto attendant prompts. The appropriate number to dial is indicated against each greeting on the Auto Attendant tab in IP Office Manager.

The telephone number part takes the form **AA:Name.x**, where **Name** is the name of the auto attendant service, and **x** is **1** for the morning greeting, **2** for the afternoon greeting, **3** for the evening greeting and **4** for the menu options prompt.

For IP Office 4.1+ the number can also take the form "**AA:"N".x**" where **N** is the auto attendant number and **x** is as above.

When using any of these short codes, you hear the options:

- **1** to hear the current prompt.
- **2** to record a new prompt.
- **3** to save the new prompt.


### Notes

- To prevent abuse of these default short codes, they can be deleted or changed. They can also be removed from the system short codes section and rebuilt in the user short codes of a trusted user. Alternately disabling the **Enabling Local Recording** option (IP Office 4.0 May 2007 maintenance release and higher) stops the use of short codes to record the auto attendant greetings.
- Using the **Dial** feature, the short codes can be assigned to a programmable button. This allows quick access and recording of any prompts that change frequently.


### 3.6.3 Routing Incoming Calls to an Auto Attendant

An integral voicemail auto attendant created can be specified as a destination in the IP Office Incoming Call Routes table. Internal callers can access an auto attendant through a programmed DSS button or Phone Manager speed dial.

#### To route incoming calls to an auto attendant:

1. Start IP Office Manager and load the required configuration.
2. Click  **Incoming Call Route** and select the required route.
3. View the **Standard** tab. Click the **Destination** drop-down box and select **AA:Name** where **Name** is the auto attendant name. This will now route all incoming voice calls, on lines in Line Group selected (0 is the default) to the auto attendant.

Standard	Voice Recording
Bearer Capability	Any Voice
Line Group Id	0
Incoming Number	
Incoming Sub Address	
Incoming CLI	
Destination	AA:Example
Locale	
Priority	1
Fallback Extension	200 Main
Night Service Profile	<None>
Night Service Destination	

- In this example a **Fallback Extension** has also been set to route calls direct to the **Main** hunt group. This will be used for callers in the auto attendant who do not make a valid key press within the auto attendants **Maximum Inactivity** time.
  - Another auto attendant could be created to provide options for when the Main and Sales hunt groups are not open. This could then be set as the **Night Service Destination** along with a **Night Service Time Profile**.
  - For IP Office 4.1+, the incoming call route destinations are set through the **Destinations** sub-tab. However the general method of selection and entry remains the same.
4. Click **OK**.
  5. Use  to save the new changes back to the IP Office system.

---

## 3.6.4 Transferring Calls to an Attendant

Normally calls are directed to an auto attendant by an IP Office incoming call route. However it can also be useful to transfer calls received at an internal extension to an auto attendant.

You can transfer calls to an Auto Attendant by:

- [Using Programmed Buttons](#) <sup>40</sup>.
- [Using Phone Manager](#) <sup>40</sup>.
- [Using SoftConsole](#) <sup>41</sup>.
- [Using Short Codes](#) <sup>41</sup>.

### Using Programmed Buttons

On Avaya phones with programmable buttons, those buttons can be programmed to access auto attendant services.

#### To create an auto attendant button:

1. From the IP Office system configuration, set the action of one of the users programmable buttons to **Dial**.
2. Set the associated telephone number to **AA:Name** where **Name** matches the name of the auto attendant.
3. Save this configuration change back to the IP Office.

When the user receives a call they want to transfer to the auto-attendant, they can use a programmed button.

#### To transfer a call using the programmed button:



1. Place the call on hold.
2. Press the button programmed for the auto-attendant.
3. Hang-up the call at their extension. This will cause a blind transfer of the held call to the auto-attendant.

### Using Phone Manager

#### To create an auto attendant speed dial:

1. Within the user's Phone Manager, click the **Speed Dials** tab.
2. Right-click the speed dial panel and select **New > Speed Dial Group Member**. The Speed Dial window opens.
3. In the **Name** field, enter a name for the Auto Attendant.
4. In the **Number** field, enter **AA:Name** where **Name** matches the name of the auto attendant.
5. Click **OK**.

#### To transfer a call using the Speed Dial:

1. During a call that you want to transfer to the auto attendant click  Hold to place the call on hold.
2. Click the Speed Dials tab.
3. Click the speed dial created for the auto attendant.
4. Click  Complete Transfer to transfer the held caller.





## Using SoftConsole

### To create an auto attendant speed dial:

1. Click the required BLF Group tab.
2. Right-click the speed dial panel and select **New > BLF Group Member**. The New BLF Group Member window opens.
3. In the **Name** field, enter a name for the Auto Attendant.
4. In the **Number** field, enter **AA:Name** where **Name** matches the name of the auto attendant.
5. Click **OK**.

### To transfer a call using the Speed Dial:

1. During a call that you want to transfer to the auto attendant click  Hold to place the call on hold.
2. Click the BLF Group tab.
3. Click the speed dial created for the auto attendant.
4. Click  Complete Transfer to transfer the held caller.

## Using Short Codes

The **Auto Attendant** short code feature can be used to connect to a particular auto attendant. The **Telephone Number** field takes the form **AA:** followed by the Auto Attendant service name.

In the example below, dialing **\*98** would connect the user with the auto attendant named **Example**.

Field	Contains...
Code	*98
Feature	Auto Attendant
Telephone Number	AA:Example
Line Group Id	0
Locale	[Leave blank]
Force Account Code	[Leave blank]

Once a short code for a particular auto attendant has been created, callers can be transferred.

### To transfer a caller:


1. Place the caller on hold.
2. Dial the auto attendant short code.
3. Hang up.

---


### 3.6.5 Using Auto Attendant to Access Voicemail

A useful function in auto attendants is to let callers access their own voicemail mailbox. This can be achieved by first creating a short code and then using the short code as an auto attendant destination.

#### To create a short code for remote access:

1. Start IP Office Manager and load the required configuration.
2. For the user or hunt group for which you want to create remote access, open their settings and on the **Voicemail** tab ensure that a **Voicemail Code** has been set. Remote access will not work without this.
3. In the configuration tree panel, click  **Shortcode**. Any existing system short codes are listed.
4. Click **Create a New Record** in the Group Pane. Select **Short Code**.
5. Create a short code such as the following example:

Field	Contains...
Code	*99
Feature	Voicemail Collect
Telephone Number	?
Line Group Id	0
Locale	[Leave blank]
Force Account Code	[Leave blank]

6. Click **OK** to add the new short code.
7. Create an auto attendant and select the key that the caller should use. Set the keys **Action** to **Normal Transfer**. Type the short code in the destination, in the example it would be **\*99**.
8. Click **OK**.
9. Click  to save the new changes back to the IP Office system.

External callers to the auto-attendant selecting the right option will now be challenged to enter the mailbox number and then the mailbox access code. If entered correctly they will be able to collect messages.

### 3.6.6 Using Named Announcement Files

IP Office 4.1+ allows pre-recorded files to be converted and used as auto attendant greetings. This approach allows greetings to be recorded by methods other than through the IP Office phone short codes. It also allows the same greeting to be shared between by several auto attendants.

#### Notes

- **Preventing Over Recording of Uploaded Files**

Once uploaded to the IP Office, the converted files can still be recorded over using the default short codes for recording auto attendant greetings. To prevent this use de-select the **Enable Local Recording** option of the auto attendant.

#### A. Converting the Recordings

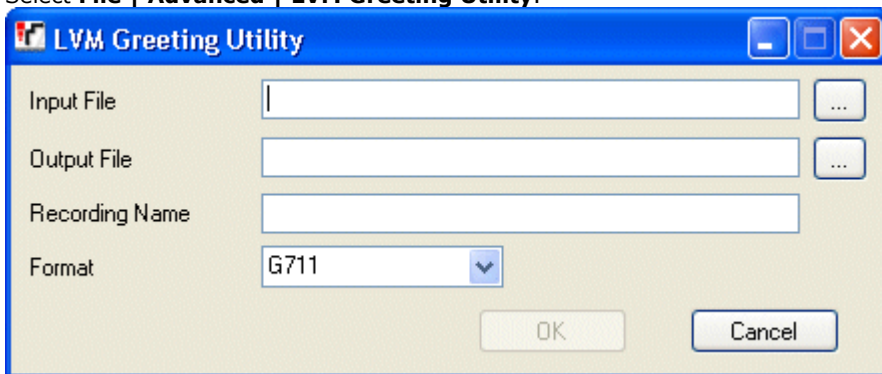
This process converts the source WAV file recording to the format required by the IP Office Embedded Voicemail.

1. The original recording must be in the following WAV file format. If it is in a different format, convert the file using a tool such as Windows Sound Recorder.

- **PCM/Uncompressed.**
- **8000 KHz, 16bit, Mono.**

2. Start IP Office Manager.

3. Select **File | Advanced | LVM Greeting Utility**.



4. Click on the ... button for **Input File** and select the WAV file.

5. Click on the ... button for **Output File** and select the location into which you want the converted file saved.

- Select the required file type. For Small Office Edition systems this should be **G723 Files (\*.c23)**. For other IP Office systems use **G711 Files (\*.c11)**.
- Enter a name for the file (up to 8 characters with no spaces) and end the file name as either **.c23** or **.c11** to match the selected file type.


6. Enter a name for the recording in the **Recording Name** field. This is the name that will be entered into the IP Office configuration to use the recording. Note that the field is case sensitive.

7. Ensure that the **Format** matches that selected for the **Output File** settings chosen above.

8. Click **OK**.

---



## B. Editing an Auto Attendant to Use Named Recordings

1. Start IP Office Manager and receive the IP Office configuration.
2. Select the  **Auto Attendant** form and select or create the required auto attendant.
3. In the **Recording Name** field enter the name of the greeting to be used. This is the **Recording Name** entered during the files conversion, not the actual file name. It is case sensitive.
4. If only converted greeting files are to be used with the auto attendant, it may be advisable to disable the **Enable Local Recording** option to stop any system user recording over the file.
5. Send the configuration back to the IP Office.

## C. Transferring the Recording to the Embedded Voicemail Memory Card

This process uses TFTP to transfer the converted file to the Embedded Voicemail memory card. It first requires the IP Office to be configured with the IP address of the PC from which it should accept TFTP file transfers.

- The process below uses command line TFTP to transfer files. IP Office 4.2+ allows files to be transferred using the IP Office Manager program to display the contents of the Embedded Voicemail memory card. Select **File | Advanced | Embedded File Management** and then drag and drop files directly into the **lvmail\AAG** folder. This method cannot be used to overwrite an existing file.

1. Determine the IP address of the PC from which you want to transfer the files.
2. Start IP Office Manager and receive the IP Office configuration.
3. Select the  **System** configuration form.
4. Select the **System** tab.
5. In the **File Writer IP Address** field, type the IP address of the PC from which you want the sending of files to the memory card to be allowed.
6. Click  to send the configuration back to the control unit.
7. Open a command window in Windows (select **Start | Run** and enter *cmd*).
8. From the command window, you can use TFTP to upload files to the memory card.
  - The command is **tftp -i <IP Office IP address> put <source file> a:\lvmail\<filename>**
  - For example, to transfer the file c:\greeting01.c11 to an IP Office with a LAN1 IP address of 192.168.42.1, the command would be **tftp -i 192.168.42.1 put c:\greeting01.c11 a:\lvmail\AAG\greeting01.c11**
  - **a:\lvmail\AAG** is the destination folder on the Embedded Voicemail memory card used for auto-attendant greetings.

# Chapter 4.


# Miscellaneous

---

## 4. Miscellaneous

### 4.1 Monitoring Embedded Voicemail

The IP Office Monitor application can be used to observe the operation of Embedded Voicemail.



1. From the Start menu select **Programs > IP Office**.
2. Select  **Monitor**.
3. From the File menu, click **Select Unit**. The Select System to Monitor window opens.
4. Enter the **Control Unit IP Address** and password. Depending on the IP Office system's configuration, the password required is either the system password or the separate monitor password if set.
5. Check that the **Control Unit Type** is set to **IP Office**.
6. Click **OK**.
7. The Monitor application attempts to connect with the control unit. If successful, something similar to the following will appear.


```
***** SysMonitor v6.0 (11031) *****
***** contact made with 192.168.42.119 at 10:08:25 15/11/2006 *****
***** System (192.168.42.119) has been up and running for 1day, 19hrs, 3mins and 7secs(154987775mS) *****
154987776mS PRN: Monitor Started IP=192.168.42.130 IP 500 4.0(11031) IP500_40
      (IP Office: Supports Unicode, System Locale is eng)
154987776mS PRN: LAW=A PRI=0, BRI=4, ALOG=4, ADSL=0 VCOMP=32, MDM=0, WAN=0, MODU=0 LANM=0 CkSRC=1 VMAIL=1(VER=2 TY
154987778mS LIST2: IFACE(4) "LAN1", "LAN2", "DialIn", "RemoteManager"
A:\lvmail\ENG\*.
155088356mS PRN: LVM Flash A: NextFlashItemScan: Scanning A:\lvmail\ITA\*.
155088456mS PRN: LVM Flash A: NextFlashItemScan: Finished Scanning A:\lvmail\ITA\*.
155088462mS PRN: LVM Flash A: NextFlashItemScan: Finished Scanning A:\lvmail\*.
155088462mS PRN: LVM Flash A: NextFlashItemScan: END-OF-LIST found
155088462mS PRN: LVM FlashMan: FiveMinuteActions: called 2006/11/15 10:10:02
155088520mS PRN: LVM FlashMan: FiveMinuteActions: Free: 955.9 MBytes ( 92% )
155088520mS PRN: 33 Hours 11 Minutes Approx. Remaining
155088520mS PRN: FMML Size: 27
```

8. From the **Filters** menu select **Trace Options**. The All Settings window opens.
9. The following Embedded Voicemail events can be selected to be included on the monitor trace:
  - On the **Call** tab, select the options that you want to monitor in the **Embedded Voicemail** section.
  - On the **System** tab, select **Print**.
    - The **Trace Color** selection on the System tab is applied to Embedded Voicemail events.
10. Click **OK**.
11. Embedded Voicemail events are now shown in the Monitor trace when running. These events are all prefixed **LV**.

## 4.2 Button Programming

The same features used for Embedded Voicemail short codes can also be assigned to telephone buttons.

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. Click **Edit**. The Edit Button fields are shown at the bottom of the form.
6. Click  at the end of the **Action** field. The Button Programming window opens.
7. Select **Advanced** > **Voicemail** to display the list of voicemail features.

8. Select the feature required:
  - **Voicemail Collect**  
Allows access to a mailbox to collect or leave messages. The mailbox and action are determined by the associated telephone number. This takes the form "**?Name**" for message collection and "**#Name**" for leaving a message. The **Name** part must match the user or hunt group name set in the IP Office configuration. On suitable phones the DSS key displays **VMCol** followed by the name.
  - **Voicemail On**  
This feature switches the diversion of calls to the user or group mailbox on/off. When programmed on a DSS key, the action toggles so no separate Voicemail Off key is required. On suitable phones the DSS key displays **VMon**.
  - **Voicemail Ringback On**  
This feature switches new message ringback notification on/off. When programmed on a DSS key, the action toggles so that no separate Voicemail Ringback Off key is required. On suitable phones the DSS key displays **VMRB+**.
9. Repeat for all the keys required.
10. Click **OK**.
11. Repeat for any other users.
12. Use  to save the new changes back to the IP Office system.



---

## 4.3 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.

- **Note**  
The Visual Voice feature is not available on all telephones. It requires an Avaya phone with multi-line (more than 2 ) display.
- **MESSAGES Button**  
For IP Office 4.2+, the **MESSAGES** button on phones can be configured to activate Visual Voice rather than access the spoken voicemail prompts. Within IP Office Manager, select **System | Voicemail | Messages Button Goes to Visual Voice**.

### To give a user a Visual Voice 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 **Emulation > Visual Voice**.
8. Click **OK** to save the button details for the selected user.
9. Repeat for any other users.
10. Use  to save the new changes back to the IP Office system.





## 4.4 Loading Other Files onto the Memory Card

The Compact Flash memory card used with the Small Office Edition, IP406 V2 and IP 500 systems can be used to store files other than those used for Embedded Voicemail. For example it can store the holdmusic.wav file.

- Compact Flash memory cards that are not supplied by Avaya can be used for this type of file storage. However they cannot be used for Embedded Voicemail.
- If a memory card supplied by Avaya is used, any files stored in this way will reduce the message storage capacity of the Compact Flash memory card.

### To configure the file source

1. Start IP Office Manager and receive the IP Office configuration.
2. Display the **System** configuration form.
3. Click the **System** tab.
4. In the **File Writer IP Address** box, type the IP address of the PC from which sending files to the memory card will be allowed.
5. Use  to send this configuration back to the control unit and allow it to reboot.
6. Open a command window in Windows.
7. From the command window, you can use TFTP to upload files to the memory card.
  - For example: **c:\tftp -i 192.168.42.1 put c:\holdmusic.wav**  
This command will send the file c:\holdmusic.wav to the LAN1 IP address of the IP Office control. In the example shown this address is: 192.168.42.1. For additional information about the TFTP command, enter **TFTP**.
  - If a destination needs specifying, the memory card is treated as the IP Office's drive **a:**
8. Using IP Office Manager, receive the IP Office system configuration again.
9. On the **System** tab of the **System** form, set the **TFTP Server IP Address** to the control unit's own LAN1 IP address.
10. Use  to send the configuration back to the IP Office system and allow it to reboot. The IP Office system will now look on the memory card for any files it needs to download following a reboot.
11. If a future upgrade or file transfer from the IP Office Manager PC is required, you will first need to change the IP address of the TFTP server back to the IP address of the IP Office Manager PC.

---

## 4.5 Short Codes

### 4.5.1 Default Short Codes

Embedded Voicemail supports many of the same short codes available for Voicemail Lite and Voicemail Pro. The following default system short codes can be used with Embedded Voicemail.

- **Collect Messages: \*17**  
Can be used by users to access the mailbox associated with their extension.
- **Voicemail On/Off: \*18/\*19**  
Switches the diverting of callers to the user's mailbox on/off.
- **Voicemail Ringback On/Off: \*48/\*49**  
Switches new message ringback to the user on/off.
- **Record Message:**  
The Record Message feature is used to record announcements that are used when callers to a hunt group are queued. For more information, see [Configuring Queue Announcements](#)<sup>[33]</sup>.
  - **\*91N;** - To record an Announcement 1 for a hunt group.
  - **\*92N;** - To record an Announcement 2 for a hunt group.

### 4.5.2 Custom Short Codes

Additional short codes can be added as required using the features listed below.

- **Voicemail Collect**  
This short code feature can be used to create short codes for collecting or leaving messages. The exact action is set by the use of either **?** or **#** in the telephone number. For example **"?Main"** would indicate collection of messages in the mailbox called *Main*. **"#Main"** would indicate that a user wants to leave a message in the mailbox called *Main*. Note that the quotation marks " " are required and the name must match the user or hunt group whose mailbox is being accessed. For example:

Field	Contains...
Code	*99
Feature	Voicemail Collect
Telephone Number	"?Main"
Line Group Id	0
Locale	[Leave blank]
Force Account Code	[Leave blank]

- Using just **?** in the Telephone Number without quote marks and a mailbox name allows remote access. The user would be prompted to enter the mailbox number and then the mailboxes access code if set.
- **Voicemail On/Voicemail Off**  
These two features switch the diversion of calls to the user or group mailbox on/off. No telephone number is required for either of these features.
- **Voicemail Ringback On/Off**  
These two features switch new message ringback notification on/off. No telephone number is required for either of these features.
- **Auto Attendant**  
This feature is used for the recording of auto attendant prompts and greetings. Normally the short codes for this are created automatically. However they can be deleted and reassigned as required. For more information, see [Create an Auto Attendant](#)<sup>[36]</sup>.

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