



# **IP Office™ Platform 9.1**

**Deploying IP Office™ Platform  
Embedded Voicemail**

#### Notice

While reasonable efforts have been made to ensure that the information in this document is complete and accurate at the time of printing, Avaya assumes no liability for any errors. Avaya reserves the right to make changes and corrections to the information in this document without the obligation to notify any person or organization of such changes.

#### Documentation disclaimer

"Documentation" means information published by Avaya in varying mediums which may include product information, operating instructions and performance specifications that Avaya may generally make available to users of its products and Hosted Services. Documentation does not include marketing materials. Avaya shall not be responsible for any modifications, additions, or deletions to the original published version of documentation unless such modifications, additions, or deletions were performed by Avaya. End User agrees to indemnify and hold harmless Avaya, Avaya's agents, servants and employees against all claims, lawsuits, demands and judgments arising out of, or in connection with, subsequent modifications, additions or deletions to this documentation, to the extent made by End User.

#### Link disclaimer

Avaya is not responsible for the contents or reliability of any linked websites referenced within this site or documentation provided by Avaya. Avaya is not responsible for the accuracy of any information, statement or content provided on these sites and does not necessarily endorse the products, services, or information described or offered within them. Avaya does not guarantee that these links will work all the time and has no control over the availability of the linked pages.

#### Warranty

Avaya provides a limited warranty on Avaya hardware and software. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya's standard warranty language, as well as information regarding support for this product while under warranty is available to Avaya customers and other parties through the Avaya Support website: <http://www.avaya.com/support> or such successor site as designated by Avaya. Please note that if you acquired the product(s) from an authorized Avaya Channel Partner outside of the United States and Canada, the warranty is provided to you by said Avaya Channel Partner and not by Avaya.

#### Licenses

THE SOFTWARE LICENSE TERMS AVAILABLE ON THE AVAYA WEBSITE, [HTTP://SUPPORT.AVAYA.COM/LICENSEINFO](http://SUPPORT.AVAYA.COM/LICENSEINFO), OR SUCH SUCCESSOR SITE AS DESIGNATED BY AVAYA, ARE APPLICABLE TO ANYONE WHO DOWNLOADS, USES AND/OR INSTALLS AVAYA SOFTWARE, PURCHASED FROM AVAYA INC., ANY AVAYA AFFILIATE, OR AN AVAYA CHANNEL PARTNER (AS APPLICABLE) UNDER A COMMERCIAL AGREEMENT WITH AVAYA OR AN AVAYA CHANNEL PARTNER. UNLESS OTHERWISE AGREED TO BY AVAYA IN WRITING, AVAYA DOES NOT EXTEND THIS LICENSE IF THE SOFTWARE WAS OBTAINED FROM ANYONE OTHER THAN AVAYA, AN AVAYA AFFILIATE OR AN AVAYA CHANNEL PARTNER; AVAYA RESERVES THE RIGHT TO TAKE LEGAL ACTION AGAINST YOU AND ANYONE ELSE USING OR SELLING THE SOFTWARE WITHOUT A LICENSE. BY INSTALLING, DOWNLOADING OR USING THE SOFTWARE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE INSTALLING, DOWNLOADING OR USING THE SOFTWARE (HEREINAFTER REFERRED TO INTERCHANGEABLY AS "YOU" AND "END USER"), AGREE TO THESE TERMS AND CONDITIONS AND CREATE A BINDING CONTRACT BETWEEN YOU AND AVAYA INC. OR THE APPLICABLE AVAYA AFFILIATE ("AVAYA").

Avaya grants you a license within the scope of the license types described below, with the exception of Heritage Nortel Software, for which the scope of the license is detailed below. Where the order documentation does not expressly identify a license type, the applicable license will be a Designated System License. The applicable number of licenses and units of capacity for which the license is granted will be one (1), unless a different number of licenses or units of capacity is specified in the documentation or other materials available to you. "Software" means Avaya's computer programs in object code, provided by Avaya or an Avaya Channel Partner, whether as stand-alone products, pre-installed, or remotely accessed on hardware products, and any upgrades, updates, bug fixes, or modified versions thereto. "Designated Processor" means a single stand-alone computing device. "Server" means a Designated Processor that hosts a software application to be accessed by multiple users. "Instance" means a single copy of the Software executing at a particular time: (i) on one physical machine; or (ii) on one deployed software virtual machine ("VM") or similar deployment.

**Designated System(s) License (DS).** End User may install and use each copy or an Instance of the Software only on a number of Designated Processors up to the number indicated in the order. Avaya may require the Designated Processor(s) to be identified in the order by type, serial number, feature key, Instance, location or other specific designation, or to be provided by End User to Avaya through electronic means established by Avaya specifically for this purpose.

**Concurrent User License (CU).** End User may install and use the Software on multiple Designated Processors or one or more Servers, so long as only the licensed number of Units are accessing and using the Software at any given time. A "Unit" means the unit on which Avaya, at its sole discretion, bases the pricing of its licenses and can be, without limitation, an agent, port or user, an e-mail or voice mail account in the name of a person or corporate function (e.g., webmaster or helpdesk), or a directory entry in the administrative database utilized by the Software that permits one user to interface with the Software. Units may be linked to a specific, identified Server or an Instance of the Software.

**Database License (DL).** End User may install and use each copy or an Instance of the Software on one Server or on multiple Servers provided that each of the Servers on which the Software is installed communicates with no more than an Instance of the same database.

**CPU License (CP).** End User may install and use each copy or Instance of the Software on a number of Servers up to the number indicated in the order provided that the performance capacity of the Server(s) does not exceed the performance capacity specified for the Software. End User may not re-install or operate the Software on Server(s) with a larger performance capacity without Avaya's prior consent and payment of an upgrade fee.

Named User License (NU). You may: (i) install and use the Software on a single Designated Processor or Server per authorized Named User (defined below); or (ii) install and use the Software on a Server so long as only authorized Named Users access and use the Software. "Named User," means a user or device that has been expressly authorized by Avaya to access and use the Software. At Avaya's sole discretion, a "Named User" may be, without limitation, designated by name, corporate function (e.g., webmaster or helpdesk), an e-mail or voice mail account in the name of a person or corporate function, or a directory entry in the administrative database utilized by the Software that permits one user to interface with the Software.

Shrinkwrap License (SR). You may install and use the Software in accordance with the terms and conditions of the applicable license agreements, such as "shrinkwrap" or "clickthrough" license accompanying or applicable to the Software ("Shrinkwrap License").

#### Heritage Nortel Software

"Heritage Nortel Software" means the software that was acquired by Avaya as part of its purchase of the Nortel Enterprise Solutions Business in December 2009. The Heritage Nortel Software currently available for license from Avaya is the software contained within the list of Heritage Nortel Products located at <http://support.avaya.com/LicenseInfo/> under the link "Heritage Nortel Products," or such successor site as designated by Avaya. For Heritage Nortel Software, Avaya grants Customer a license to use Heritage Nortel Software provided hereunder solely to the extent of the authorized activation or authorized usage level, solely for the purpose specified in the Documentation, and solely as embedded in, for execution on, or (in the event the applicable Documentation permits installation on non-Avaya equipment) for communication with Avaya equipment. Charges for Heritage Nortel Software may be based on extent of activation or use authorized as specified in an order or invoice.

#### Copyright

Except where expressly stated otherwise, no use should be made of materials on this site, the Documentation, Software, Hosted Service, or hardware provided by Avaya. All content on this site, the documentation, Hosted Service, and the Product provided by Avaya including the selection, arrangement and design of the content is owned either by Avaya or its licensors and is protected by copyright and other intellectual property laws including the sui generis rights relating to the protection of databases. You may not modify, copy, reproduce, republish, upload, post, transmit or distribute in any way any content, in whole or in part, including any code and software unless expressly authorized by Avaya. Unauthorized reproduction, transmission, dissemination, storage, and or use without the express written consent of Avaya can be a criminal, as well as a civil offense under the applicable law.

#### Virtualization

Each product has its own ordering code and license types. Note that each Instance of a product must be separately licensed and ordered. For example, if the end user customer or Avaya Channel Partner would like to install two Instances of the same type of products, then two products of that type must be ordered.

#### Third Party Components

"Third Party Components" mean certain software programs or portions thereof included in the Software or Hosted Service may contain software (including open source software) distributed under third party agreements ("Third Party Components"), which contain terms regarding the rights to use certain portions of the Software ("Third Party Terms"). As required, information regarding distributed Linux OS source code (for those Products that have distributed Linux OS source code) and identifying the copyright holders of the Third Party Components and the Third Party Terms that apply is available in the Documentation or on Avaya's website at: <http://support.avaya.com/Copyright> or such successor site as designated by Avaya. You agree to the Third Party Terms for any such Third Party Components.

#### Preventing Toll Fraud

"Toll Fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there can be a risk of Toll Fraud associated with your system and that, if Toll Fraud occurs, it can result in substantial additional charges for your telecommunications services.

#### Avaya Toll 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. For additional support telephone numbers, see the Avaya Support website: <http://support.avaya.com>, or such successor site as designated by Avaya. Suspected security vulnerabilities with Avaya products should be reported to Avaya by sending mail to: [securityalerts@avaya.com](mailto:securityalerts@avaya.com).

#### Trademarks

The trademarks, logos and service marks ("Marks") displayed in this site, the Documentation, Hosted Service(s), and Product(s) provided by Avaya are the registered or unregistered Marks of Avaya, its affiliates, or other third parties. Users are not permitted to use such Marks without prior written consent from Avaya or such third party which may own the Mark. Nothing contained in this site, the Documentation, Hosted Service(s) and Product(s) should be construed as granting, by implication, estoppel, or otherwise, any license or right in and to the Marks without the express written permission of Avaya or the applicable third party.

Avaya is a registered trademark of Avaya Inc.

All non-Avaya trademarks are the property of their respective owners.

Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

#### Downloading Documentation

For the most current versions of Documentation, see the Avaya Support website: <http://support.avaya.com>, or such successor site as designated by Avaya.

#### Contact Avaya Support

See the Avaya Support website: <http://support.avaya.com> for Product or Hosted Service notices and articles, or to report a problem with your Avaya Product or Hosted Service. For a list of support telephone numbers and contact addresses, go to the Avaya Support website: <http://support.avaya.com> (or such successor site as designated by Avaya), scroll to the bottom of the page, and select Contact Avaya Support.

# Contents

<b>1. IP Office Embedded Voicemail</b>	
1.1 Mailbox Features.....	10
1.2 Languages Supported.....	11
1.3 Fallback Language Operation.....	12
<b>2. Installing Embedded Voicemail</b>	
2.1 IP500v2 Installation.....	17
2.2 Enabling Embedded Voicemail.....	18
2.3 Removing Memory Cards.....	20
2.4 Upgrading Prompts.....	21
<b>3. User Mailbox Configuration</b>	
3.1 Voicemail Email Integration.....	27
3.2 User Announcements.....	28
3.3 Using Pre-Recorded Greetings.....	30
3.4 Other User MWI.....	30
3.5 Creating a Trusted Location.....	32
3.6 Visual Voice.....	33
<b>4. Hunt Group Mailbox Configuration</b>	
4.1 Group Message Waiting Indication.....	37
4.2 Hunt Group Mailbox Access.....	38
4.3 Announcements.....	39
<b>5. Auto Attendant Configuration</b>	
5.1 Create an Auto Attendant.....	43
5.2 Recording Prompts.....	46
5.3 Routing Incoming Calls to an Auto Attendant.....	47
5.4 Transferring Calls to an Attendant.....	48
5.5 Using Auto Attendant to Access Voicemail.....	50
5.6 Dial by Name.....	51
5.7 Using Pre-Recorded Prompts.....	52
<b>6. Miscellaneous</b>	
6.1 Remote Mailbox Access.....	54
6.2 Password Rules Enforcement.....	55
6.3 Button Programming.....	56
6.4 Short Codes.....	57
<b>7. Mailbox Maintenance</b>	
7.1 Viewing Mailboxes.....	60
7.2 Viewing Embedded Files.....	60
7.3 Monitoring Embedded Voicemail.....	60
7.4 DTE Port Maintenance.....	62
<b>8. Document History</b>	
Index .....	65



# Chapter 1.

# IP Office Embedded Voicemail



---

# 1. IP Office Embedded Voicemail

For IP Office Release 9.1, embedded voicemail is supported by IP500 V2 control units. Embedded voicemail provides basic voicemail mailbox operation and auto-attendant operation without requiring a separate voicemail server PC.

Embedded Voicemail uses the following components:

- **Memory Card**  
The type of memory card used depends on the type of IP Office control unit. However, in all cases, the cards are specially formatted by Avaya. Alternate third-party memory cards are not supported for Embedded Voicemail.
- **IP500 V2 Control Units**  
This type of control unit uses the mandatory System SD card installed in all IP500 V2 systems for embedded voicemail if required.
- **IP Office Manager Application**  
Embedded Voicemail is configured using options in the IP Office configuration using the IP Office Manager application.

## Notes

- **Other Voicemail Servers**  
Embedded Voicemail cannot be used in conjunction with another voicemail server, for example IP Office Voicemail Pro server. The presence of another voicemail server on the same network can cause Embedded Voicemail to fail to operate correctly and vice versa.
- **IP Office Essential Edition - PARTNER Version and IP Office Essential Edition - NORSTAR Version**  
This guide does not cover IP Office Essential Edition - PARTNER Version, IP Office Essential Edition - NORSTAR Version or IP Office Essential Edition.

---

## 1.1 Mailbox Features

The IP Office system automatically creates an embedded voicemail mailbox for every user and hunt group in the IP Office configuration.

For users, the mailbox is automatically used to answer calls to the user that ring unanswered for the user's configured **No Answer Time**. The mailbox is also used in other situations where the IP Office would have otherwise returned busy tone, for example when the user is set to Do Not Disturb.

For hunt groups, the mailbox is used when a call has rung for the group's **Voicemail Answer Time**.

- For security, a voicemail access code can be assigned to any mailbox. This can be changed by the mailbox user or the system administrator.
- For user mailboxes, message waiting indication is provided to the user's IP Office phone extension and to their IP Office user application (for example one-X Portal).
- For hunt group mailboxes, message waiting indication can be assigned to specified users.
- Various [dialling short codes](#) <sup>57</sup> can be used to control voicemail features and for actions such as collecting messages, leaving messages, turning voicemail on/off.

### Embedded Voicemail System Comparison

Feature	IP500 V2 Control Unit
Memory Type	4GB SDHC Card
Compression Method	Uses G711. VCM not required.
Storage	25 Hours. 15 Hours by default. An additional 5 hours is added for each 2 additional channels licensed below.
Maximum Simultaneous Connections	6 Channels maximum. 2 Channels by default. Additional channels require licenses.
Maximum Individual Message Length	Default 120 seconds. Adjustable between 3 and 180 seconds.
Auto Attendant	Yes

## 1.2 Languages Supported

Embedded Voicemail supports a range of language prompt sets. The following languages are supported for Embedded Voicemail. The Arabic prompt set is only supported IP Office Basic Edition modes.

Language	WAV Folder
Arabic	ara
Chinese - Cantonese	zhc
Chinese - Mandarin	chs
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
Polish	plk
Portuguese	ptg
Portuguese - Brazil	ptb
Russian	rus
Spanish	esp
Spanish - Mexico	esm
Spanish - Argentina	ess
Swedish	sve
Turkish	trk

The IP Office system **Locale** setting is used to determine the default language prompts used. A **Locale** setting is set for the whole IP Office system. For individual users and incoming call routes the system local can be overridden.

For calls to voicemail, the locale used is determined as follows:

- The user locale, if set, is used if the caller is internal.
- The incoming call route locale, if set, is used if caller is external.
- If no user or incoming call route locale is applicable, the system locale is used.
- A short code locale, if set, is used and overrides the options above if the call is routed to voicemail using the short code.
- If the required language prompts are not available, the voicemail fallbacks in a set order (see [Fallback Language Operation](#) <sup>[12]</sup>).

## 1.3 Fallback Language Operation

If the prompts for the [required language](#) <sup>(11)</sup> are not available, the system attempts to use the prompts from a fallback language. The fallback language used depends on the configuration mode used by the IP Office server (Standard, Partner, Quick, or Norstar).

Locale	Default Language	Fallback Language Order	
		Standard/Norstar Modes	Basic Edition/PARTNER Modes
Argentina	Spanish	Spanish > English (UK) > English (US)	Spanish > English (US) > English (UK)
Australia	UK English	English (UK) > English (US)	English (US) > English (UK)
Bahrain	Arabic	Arabic > English (UK) > English (US)	Arabic > English (US) > English (UK)
Belgium	Dutch	Dutch > English (UK) > English (US)	Dutch > English (US) > English (UK)
Belgium	French	French > French (Canadian) > English (UK)	French > French (Canadian) > English (US)
Brazil	Brazilian Portuguese	Portuguese > English (UK) > English (US)	Portuguese > English (US) > English (UK)
Canada	Canadian French	French > English (US) > English (UK)	French > English (US) > English (UK)
Chile	Latin Spanish	Latin Spanish > Spanish > English (US)	Latin Spanish > Spanish > English (US)
China	Mandarin	English (UK) > English (US)	English (US) > English (UK)
Colombia	Latin Spanish	Latin Spanish > Spanish > English (US)	Latin Spanish > Spanish > English (US)
Denmark	Danish	English (UK) > English (US)	English (US) > English (UK)
Egypt	Arabic	Arabic > English (UK) > English (US)	Arabic > English (US) > English (UK)
Finland	Suomi	English (UK) > English (US)	English (US) > English (UK)
France	French	French (Canadian) > English (UK) > English (US)	French (Canadian) > English (US) > English (UK)
France2	French	French (Canadian) > English (UK) > English (US)	French (Canadian) > English (US) > English (UK)
Germany	German	English (UK) > English (US)	English (US) > English (UK)
Greece	Greek	English (UK) > English (US)	English (US) > English (UK)
Hong Kong	Cantonese	Cantonese > English (UK) > English (US)	Cantonese > English (US) > English (UK)
Hungary	Hungarian	English (UK) > English (US)	English (US) > English (UK)
Iceland	Icelandic	English (UK) > English (US)	English (US) > English (UK)
India	UK English	English (UK) > English (US)	English (US) > English (UK)
Ireland	English (UK)	English (UK) > English (US)	English (UK) > English (US)
Italy	Italian	English (UK) > English (US)	English (US) > English (UK)
Japan	English (US)	English (US) > English (UK)	English (US) > English (UK)
Korea	Korean	English (UK) > English (US)	English (US) > English (UK)
Kuwait	Arabic	Arabic > English (UK) > English (US)	Arabic > English (US) > English (UK)
Malaysia	English (UK)	English (UK) > English (US)	English (UK) > English (US)
Mexico	Latin Spanish	Spanish > English (US)	Spanish > English (US)
Morocco	French	French > French (Canadian) > English (UK)	French > French (Canadian) > English (US)
Netherlands	Dutch	English (UK) > English (US)	English (US) > English (UK)
New Zealand	UK English	English (UK) > English (US)	English (US) > English (UK)
Norway	Norwegian	English (UK) > English (US)	English (US) > English (UK)
Oman	Arabic	Arabic > English (UK) > English (US)	Arabic > English (US) > English (UK)
Pakistan	UK English	English (UK) > English (US)	English (US) > English (UK)
Peru	Latin Spanish	Latin Spanish > Spanish > English (US)	Latin Spanish > Spanish > English (UK)
Poland	Polish	English (UK) > English (US)	English (US) > English (UK)

Locale	Default Language	Fallback Language Order	
		Standard/Norstar Modes	Basic Edition/PARTNER Modes
<b>Portugal</b>	Portuguese	Brazilian Portuguese > English (UK) > English (US)	Brazilian Portuguese > English (US) > English (UK)
<b>Qatar</b>	Arabic	Arabic > English (UK) > English (US)	Arabic > English (US) > English (UK)
<b>Russia</b>	Russian	English (UK) > English (US)	English (US) > English (UK)
<b>Saudi Arabia</b>	UK English	English (UK) > English (US)	English (US) > English (UK)
<b>Singapore</b>	UK English	Mandarin > English (UK) > English (US)	Mandarin > English (US) > English (UK)
<b>South Africa</b>	UK English	English (UK) > English (US)	English (US) > English (UK)
<b>Spain</b>	Spanish	Latin Spanish > English (UK) > English (US)	Latin Spanish > English (US) > English (UK)
<b>Sweden</b>	Svenska	English (UK) > English (US)	English (US) > English (UK)
<b>Switzerland</b>	French	English (UK) > English (US)	English (US) > English (UK)
<b>Switzerland</b>	German	German > English (UK) > English (US)	German > English (US) > English (UK)
<b>Switzerland</b>	Italian	Italian > English (UK) > English (US)	Italian > English (US) > English (UK)
<b>Taiwan</b>	Mandarin	Mandarin > English (UK) > English (US)	Mandarin > English (US) > English (UK)
<b>Turkey</b>	Turkish	English (UK) > English (US)	English (US) > English (UK)
<b>United Arab Emirates</b>	UK English	Arabic > English (UK) > English (US)	Arabic > English (US) > English (UK)
<b>United Kingdom</b>	UK English	English (US)	English (US)
<b>United States</b>	US English	English (UK)	English (UK)
<b>Venezuela</b>	Latin Spanish	Latin Spanish > Spanish > English (US)	Latin Spanish) > Spanish > English (UK)



# Chapter 2.

# Installing Embedded Voicemail

---

## 2. Installing Embedded Voicemail

The installation process can be divided into the following steps:

**1. [IP500 V2 Control Unit](#)** <sup>[17]</sup>

No hardware installation is needed for IP500 V2 control units as they use the already installed mandatory System SD card for embedded voicemail.

**2. [Upgrade Prompts](#)** <sup>[21]</sup>

A set of prompts are provided on Embedded Voicemail memory cards supplied by Avaya. If you need prompts that are not provided on your existing card, you can add any additional prompts that are required for new features.

**3. [Enable Embedded Voicemail](#)** <sup>[18]</sup>

Set the IP Office to use Embedded Voicemail and set the maximum record time for messages, greetings and prompts.

**4. [User Mailbox Configuration](#)** <sup>[24]</sup>

Configure the personal settings for individual users.

**5. [Hunt Group Mailbox Configuration](#)** <sup>[36]</sup>

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](#)** <sup>[42]</sup>

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

## 2.1 IP500v2 Installation

The following instructions detail the process for installing Embedded Voicemail for an IP500 V2 system.

**1. Upgrade the Prompts** <sup>[21]</sup>

The prompts on the Embedded Voicemail memory card can now be upgraded to match the software level of the IP Office.

**2. Enable Embedded Voicemail** <sup>[18]</sup>

For new and defaulted systems embedded voicemail is enabled by default.

**3. Add Embedded Voicemail Licenses**

If more than 2 channels are required, the licenses for the additional channels up to a total of 6 channels should be added.

---

## 2.2 Enabling Embedded Voicemail

The system configuration for embedded voicemail is common to all the IP Office systems that support it. This option is enabled by default and needs to be disabled if not using embedded voicemail.

In IP500 V2 systems, you can choose whether embedded voicemail operates in IP Office mode, or in Intuity mode. In new installations of embedded voicemail in Partner, Norstar, or Quick modes, the default operating mode for voicemail is Intuity mode. For new installations of embedded voicemail in Standard configuration mode, the default operating mode for voicemail is IP Office mode. You can switch between modes without losing user data, such as passwords, greetings, or messages.

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

1. This process requires the IP Office system to be rebooted to complete the process. That will end all current calls and operation for a period of up to 5 minutes.
2. Open IP Office Manager and receive the IP Office configuration.
3. Select  **System**.
4. Click the **Voicemail** tab.
5. From the **Voicemail Type** list, select **Embedded Voicemail**.
6. From the **Voicemail Mode** list, select either **IP Office Mode** or **Intuity Mode**.
7. Set the require rules for mailbox password enforcement applied when users change their mailbox passwords:
  - **Enforcement:** *Default = On*  
When selected, the requirements for minimum password length and complexity below are applied when a user changes a mailbox password.
    - **Minimum length:** *Default = 4*  
Sets the minimum password length allowed on password changes when Enforcement is selected.
    - **Complexity:** *Default = On*  
When selected, the following complexity rules are applied to new mailbox passwords:
      - No forward (eg. 1234) or reverse (4321) sequence of numbers.
      - No repeated digits (eg. 1111).
      - No match to the extension number.
8. Set the **Maximum Record Time (secs)** field for messages and prompts to the value required by the customer. The allowable range is 30 to 180 seconds with 110 seconds as default.
9. View the **System** tab.
  - The **Locale** setting sets the default language for embedded voicemail prompts. However, when a call is routed to voicemail, the locale language used is determined as shown below.
    - The user locale, if set, is used if the caller is internal.
    - The incoming call route locale, if set, is used if caller is external.
    - If no user or incoming call route locale is applicable, the system locale is used.
    - A short code locale, if set, is used and overrides the options above if the call is routed to voicemail using the short code.
    - If the required language prompts are not available, the voicemail fallbacks in a set order (see [Fallback Language Operation](#)<sup>[12]</sup>).
    - If the required language prompts are not available, the voicemail fallbacks in a set order (see [Fallback Language Operation](#)<sup>[12]</sup>).
  - **Missing Languages**  
For IP500 V2 systems, if the configuration of the options above requires a locale language that is not present on the System SD card, IP Office Manager displays a warning message. Click the warning to open a window and follow the prompts to add the locales. Alternatively, click **Add/Display VM locales** and select the language to upload. See also [Upgrading Prompts](#)<sup>[21]</sup> for additional methods of loading prompts.
10. Click OK to save the voicemail system changes.
11. Click  to send the configuration change back to the control unit.
12. Once the IP Office system has restarted, from an extension on the system dial \*17. The embedded voicemail should answer and start to give you prompts.
13. Embedded voicemail is not started immediately after the system restarts. There is a delay while the system performs housekeeping operations on the existing set of messages and prompts. On a new system the delay is less than a minute. However, as the number of messages increases the delay increases.



---

## 2.3 Removing Memory Cards

The memory card should never be removed from the system during normal IP Office operation. Doing so can cause the corruption of files in use. Either the memory card or the whole IP Office system must be shutdown before removing a memory card.

Whilst the card is shutdown, voicemail is not available to the IP Office system. Any other services that use the memory card will also be disabled. For IP500 V2 systems, features licensed by the card will continue for up to 2 hours while the card is not present.

Once a memory card has been removed, reinserting the memory card will restart it.

### Memory Card Shutdown Using IP Office Manager

1. In IP Office Manager, select **Start | Advanced | Memory Card Command | Shutdown**. For IP500 V2 systems select the **System SD** card.
2. Check that the LED for the memory card slot has been extinguished. The card can now be removed.
3. To restart the card without removing and reinserting it, select **File | Advanced | Memory Card Command | Startup**.

### Memory Card Shutdown Using the IP Office System Status Application

1. In System Status, select **System | Memory Cards**. For IP500 V2 systems select the **System SD** card.
2. Select **Shutdown**.
3. Check that the LED for the memory card slot has been extinguished. The card can now be removed.
4. To restart the card without removing and reinserting it, select **Startup**.

## 2.4 Upgrading Prompts

Embedded voicemail memory cards are normally supplied with the prompt files pre-installed.

When you install a new System SD card in IP Office 500v2 systems, or upgrade an existing card, a default set of languages is loaded on the card. You can use the **Add/Display VM Locales** button on the **System > Voicemail** tab to select additional language prompt sets to upload. For example, when you upgrade to a new release of IP Office, it is possible that new features require additional prompts. Click the button to launch a list of available languages. Languages that are already on the card are greyed-out.

The **Add/Display VM Locales** button displays on active systems only, and is not available for offline configuration. This button displays only when you select **Embedded Voicemail** as the **Voicemail Type**.

You can also reload languages that are already installed on the System SD card. For example, you can reload languages if new prompts have been added in a maintenance release. To reload the existing languages, upgrade the system (File | Advanced | Upgrade) with Upload System Files option checked. You can also choose Upload System Files from the Embedded File Management utility (File | Advanced | Embedded File Management).

All the prompts for Embedded Voicemail are found in the **LVMSound** folder in the installation package for IP Office Administrator Applications.

### Checking the Prompt Sets

The additional embedded voicemail features added in new IP Office releases require new prompts. Missing prompts can be reported in IP Office System Monitor by enabling the trace options **Filters | Trace Options | System | Error**. Error messages are output at regular intervals.

```
158267586mS ERR: EVM 4p0 upgrade file clips missing
158267587mS ERR: EVM 4p2 upgrade file clips missing
158267592mS ERR: EVM 5p0 upgrade file clips missing
```

### Transferring the Prompt Files Using IP Office Manager

1. Start IP Office Manager.
2. Select **File | Advanced | Embedded File Management**.
3. Use the **Select IP Office** menu to select the required IP Office system.
4. Select **File | Upload System Files**. This will transfer the the prompts files installed with IP Office Manager and the IP Office firmware files. Do not do this if the level of IP Office Manager software is not appropriate for the IP Office system.



# Chapter 3.

## User Mailbox Configuration

---

## 3. 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 phone, 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.

- The **MESSAGES** button on phones, which normally emulates \*17, can be configured to access Visual Voice mode on phones that can support [Visual Voice](#)<sup>[33]</sup>. This is done using the **Messages Button Goes To Visual Voice (System | Voicemail)** option.

- **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 can 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.

- **DTMF Breakout Numbers**

Options can be configured that allows callers leaving a message to instead dial 0, 2 or 3 to be transferred to another number. If used this, this feature should be announced in the mailbox greeting. The breakout numbers can be defined at the system level for application to all mailboxes or at the individual user level.

- **Announcements**

Embedded voicemail can provide announcements to calls waiting to be answered by users. This is similar to the announcements provided for [hunt groups](#)<sup>[39]</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**

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>.

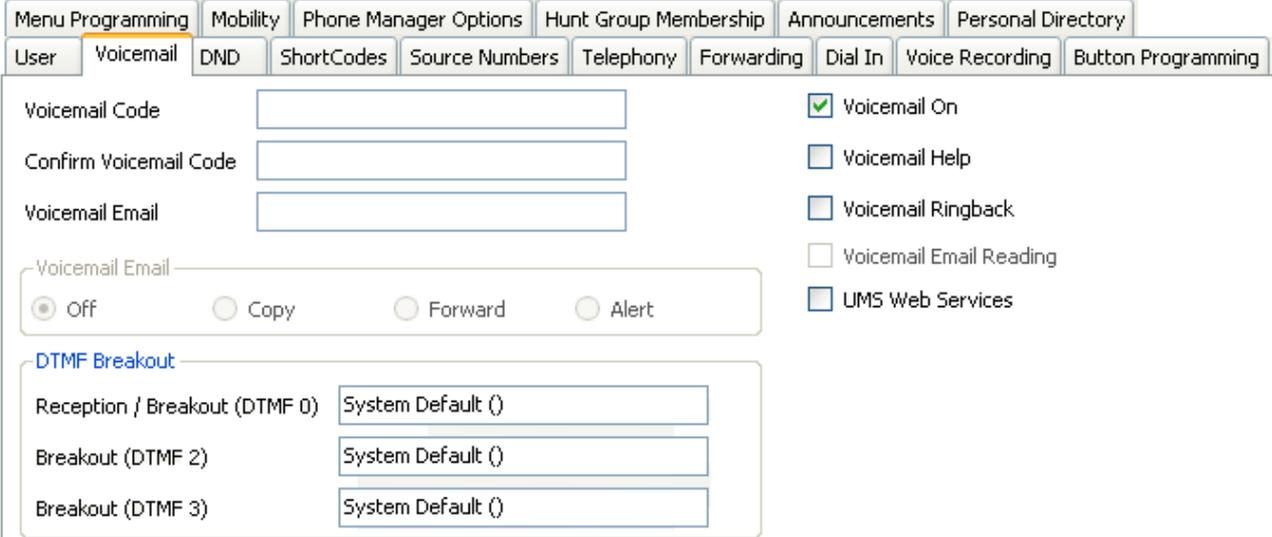
### **WARNING: Changing User Names**

Mailboxes are created based on each user's unique user name within the IP Office configuration. Changing a user name will associate that user with a new mailbox. If you need to change a user name, ensure that the user has played and deleted all messages first. If a user name is changed without clearing the original mailbox, you must create a short code based on the old user name in order to access the old mailbox.

## To change voicemail configuration for an individual:

A  symbol indicates that the setting can also be set and locked through user rights. For details refer to the IP Office Manager documentation.

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.



The screenshot shows the 'Voicemail' configuration page in IP Office Manager. The page has a navigation pane on the left with 'User' and 'Voicemail' tabs. The main content area is divided into several sections:

- Menu Programming**: Includes tabs for Mobility, Phone Manager Options, Hunt Group Membership, Announcements, and Personal Directory.
- Voicemail**: Includes tabs for DND, ShortCodes, Source Numbers, Telephony, Forwarding, Dial In, Voice Recording, and Button Programming.
- Voicemail Code**: A text input field.
- Confirm Voicemail Code**: A text input field.
- Voicemail Email**: A text input field.
- Voicemail Email**: A section with radio buttons for Off (selected), Copy, Forward, and Alert.
- DTMF Breakout**: A section with three text input fields for Reception / Breakout (DTMF 0), Breakout (DTMF 2), and Breakout (DTMF 3), all set to 'System Default ()'.
- Checkboxes**: A list of checkboxes on the right side:
  - Voicemail On
  - Voicemail Help
  - Voicemail Ringback
  - Voicemail Email Reading
  - UMS Web Services

- **Voicemail Code:** *Default = Blank, Range = 0 (no code) to 15 digits.*  
A code (1-15 digits) used to validate access to the mailbox. If remote access is attempted to a mailbox that has no voicemail code set, the prompt "Remote access is not configured on this mailbox" is played.
  - The mailbox user can change the code by dialing \*04 after having entered 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 would have otherwise returned busy. Note that selecting off does not disable use of the user's mailbox. Messages can still be forward to their mailbox. The mailbox can also still be accessed to collect messages.
- **Voicemail Help** *Default = Off*  
This setting is not used for embedded voicemail. Help can be accessed by dialing \*4 after accessing the mailbox.
- **Voicemail Ringback:** *Default = Off*   
When enabled and a new message has been received, the voicemail server calls the user's extension to attempt to deliver the message each time the telephone is put down. Voicemail will not ring the extension more than once every 30 seconds.
- **Voicemail Email Reading:** *Default = Off*  
This setting is not used for embedded voicemail.
- **UMS Web Services:** *Default = Off, Software level = 4.2+.*  
This setting is not used for embedded voicemail.
- **Voicemail Email:** *Default = Blank (No voicemail email features)*  
This field is used to set the user or group email address used for [voicemail email operation](#)<sup>[27]</sup>. When an address is entered, the additional Voicemail Email controls below are selectable.
- **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.
  - **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 there is no message waiting indication. As with Copy, there is no mailbox synchronization between the email and voicemail mailboxes. Users can also select this mode by dialing **\*01** from their extension.

- **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.

- **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 mailbox 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.

- System default values can be set for these numbers and are used unless a different number is set within these user settings. These values can also be set using **User Rights**.

- **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.

- **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.

- **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.

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

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

## 3.1 Voicemail Email Integration

Voicemail Email features with Embedded Voicemail is supported. This uses the IP Office system's SMTP settings to send messages to the customer's 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.

### To enable the system for SMTP email:

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. You can 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.

- **Server Address**

The IP address of the customer's SMTP server. If not on the same subnet as the IP Office LAN, it may be necessary to add an IP route.

- **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.

- **Use STARTTLS**

Select this field to enable TLS/SSL encryption. Encryption allows voicemail-to-email integration with hosted email providers that only permit SMTP over a secure transport.

- **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. Send the configuration back to the IP Office.

### To enable voicemail email for a user:

1. Using IP Office Manager, receive the IP Office system configuration.
2. For each user, select **User | Voicemail**.
3. In the **Voicemail Email** field enter the user's email address.
4. 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.

5. Send the configuration back to the IP Office.

## 3.2 User Announcements

Announcements are played to callers waiting to be answered. This includes callers being presented to hunt group members, ie. ringing, and callers queued for presentation.

- IP Office 4.0+ supports announcements using Embedded Voicemail.
- If no voicemail channel is available for an announcement, the announcement is not played.
- Calls can be answered during the announcement.
- If a call is rerouted to a hunt group's Night Service Group or Out of Service Fallback Group, the announcements of the new group are applied.
- If a call overflows, the announcements of the original group are still applied, not those of the overflow group.
- For announcements to be used effectively, the hunt group's **Voicemail Answer Time** must be extended or **Voicemail On** must be unselected.

### Announcement Configuration

1. Open IP Office Manager.
2. Select the user or hunt group for which announcements are required.
3. View the **Announcements** tab.

The screenshot shows the 'Announcements' configuration window in IP Office Manager. The window is titled 'Announcements' and has a 'Synchronise Calls' checkbox. The main configuration area is divided into several sections:

- Announcements On:** A checked checkbox.
- Wait before 1st announcement (seconds):** A numeric spinner set to 1.
- Flag call as answered:** An unchecked checkbox.
- Post announcement tone:** A dropdown menu set to 'Music on hold'.
- 2nd Announcement:** A checked checkbox.
- Wait before 2nd announcement (seconds):** A numeric spinner set to 20.
- Repeat last announcement:** A checked checkbox.
- Wait before repeat (seconds):** A numeric spinner set to 20.

Blue arrows indicate the flow of the announcement process: from the first wait time to the first announcement, then to the post-announcement tone, then to the second announcement, and finally to the repeat wait time and back to the second announcement.

- **Announcements On:** *Default = Off.*  
This setting enables or disables announcements.
- **Wait before 1st announcement:** *Default = 10 seconds. Range = 0 to 255 seconds.*  
This setting sets the time delay from the calls presentation, after which the first announcement should be played to the caller. If **Synchronize Calls** is selected, the actual wait may differ, see below.
- **Flag call as answered:** *Default = Off.*  
This setting is used by the IP Office CCC and CBC applications. By default they do not regard a call as answered until it has been answered by a person. This setting allows calls to be marked as answered once the caller has heard the first announcement. This setting is not used by the IP Office Customer Call Reporter application.
- **Post announcement tone:** *Default = Music on hold.*  
Following the first announcement, you can select whether the caller should hear **Music on Hold**, **Ringing** or **Silence** until answered or played another announcement.
- **2nd Announcement:** *Default = On.*  
If selected, a second announcement can be played to the caller if they have still not been answered.
- **Wait before 2nd announcement:** *Default = 20 seconds. Range = 0 to 255 seconds.*  
This setting sets the wait between the 1st and the 2nd announcement. If **Synchronize Calls** is selected, the actual wait may differ, see below.

- **Repeat last announcement:** *Default = On.*  
If selected, the last announcement played to the caller is repeated until they are answered or hang-up.
- **Wait before repeat:** *Default = 20 seconds. Range = 0 to 255 seconds.*  
If **Repeat last announcement** is selected, this setting sets is applied between each repeat of the last announcement. If **Synchronize Calls** is selected, this value is grayed out and set to match the **Wait before 2nd announcement** setting.

4. Click **OK** to save the changes.

5. Click  to merge the configuration back to the IP Office.

### Recording the Announcements

There are no default queue announcements for user and hunt groups. The maximum length for announcements is 10 minutes. On new systems there are two default short codes that enable you to record announcements. On existing and upgraded systems these or similar short codes need to be added manually.

The default 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 hunt group on extension 300 dial **\*92300#** and follow the instructions to record the announcement.

Pre-recorded files can also be converted for use as announcements. See [Using Pre-Recorded Greetings](#) <sup>30</sup>.

---

## 3.3 Using Pre-Recorded Greetings

For IP Office Release 9.0 and higher, it is possible to convert pre-recorded files for use as mailbox names, greetings and announcements.

Note that when a pre-recorded file is uploaded, it can take up to 5 minutes before the system begins using a newly uploaded file. In all cases, if the user records a new name, greeting or announcement from the phone, the pre-recorded file is deleted.

The source WAV file must have the following properties. If the file has different properties, convert the file using a tool such as Windows Sound Recorder.

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

Unlike greetings recorded through the embedded voicemail interface, you cannot loop pre-recorded greetings.

### To convert the file:

1. Start IP Office Manager.
2. Select **File | Advanced | LVM Greeting Utility**.
3. In the **Input File** field, click the ... button and select the WAV file.
4. In the **Output File** field, click the ... button and select the location where you want the converted file saved.
5. In the **Save Output File** window, enter a name for the file in the **File Name** field and click **Save**. The file extension must be **.c11** for IP500 V2 files.
6. In the **Output File Type** field, select one of the following.
  - **Announcement1**
  - **Announcement2**
  - **Greeting**
  - **Name**
7. In the **User Extension** field, enter the user or group name as set in the **Name** field in the IP Office configuration.
8. In the **Format** field, select **G711** for an IP500 V2 file.
9. Click **OK**. Note that this button is greyed out if any of the required fields has not been set.

### To transfer the file:

1. In IP Office Manager select **File | Advanced | Embedded File Management**.
2. Drag and drop the file into the appropriate folder on the memory card. For IP500 V2 systems, it is the **System SD\DYNAMIC\LVMAIL\AAG** folder.

## 3.4 Other User MWI

By default a user only receives message waiting indication (MWI) for their own mailbox. However, message waiting indication for another user's mailbox can be configured.

Depending on the type of telephone or IP Office application they are using, users who receive other user message waiting indication can choose any of the following methods to collect messages. Note that if not configured as a trusted source for that other user's mailbox, the user will have to enter the mailbox password for that mailbox when accessing it.

- **Visual Voice**  
On telephone that support Visual Voice, the user name is shown along with the number of new messages. Press the display button to access the user mailbox.
- **one-X Portal for IP Office**  
If the one-X Portal for IP Office application is used, the other user name and number of new messages is displayed in the **Messages** gadget. Use the **Messages** gadget to access the group mailbox.

### To configure other user message waiting indication:

1. Use IP Office Manager to receive the configuration of the IP Office system.
2. Click  **User** and select the individual user.
3. View the **Source Numbers** tab.
4. Click **Add**. In the **Source Number** field, enter **U** followed by the user name or extension.

5. Click **OK**.

6. Click  to merge the configuration change back to the IP Office.

---

## 3.5 Creating a Trusted Location

If a user regularly accesses their mailbox from another extension or from a number that presents a CLI, such as a mobile or home number, that location can be set a trusted location. In that case, the user is no longer prompted to enter their password.

By default a user's own extension is already configured as a trusted location. That setting should be removed if the mailbox should always prompt the user for their password.

### To configure a trusted location:

1. Using IP Office Manager, receive the configuration from the IP Office system.

2. Click  **User** and select the individual user.

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

4. Add or delete the source numbers prefixed with V. These numbers are user as follows:

- **User's own extension number**

For example, a user whose extension number is 214 wants to be able to access voicemail messages without entering the voicemail code. A source number **V214** would be entered.

- **Other user extension numbers**

For example, a user whose extension is 214 wants to be able to access voicemail messages from extension 204. A source number **V204** would be entered. From then on when the user of extension 214 dials a short code from extension 204, system will not prompt the user for the voicemail code.

- **External telephone numbers**

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 users dial 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.

5. Click **OK** to save the changes.

6. Click  to merge the configuration back to the IP Office.

## 3.6 Visual Voice

Visual voice uses the display on the user's phone to display the number of messages and to access functions such as changing their password.

- By default, the **MESSAGES** button on telephones is set to launch Visual Voice. On systems configured that way, the user does not need a specific Visual Voice button configured on their telephone.
- For user's whose phone does not have a **Messages** button and or when the above option is not enabled, a programmable button for the **Visual Voice** can be created using the process below.
- If the user is configured to receive message waiting indication from another user or hunt group mailbox, that information is included in their Visual Voice display. It is also possible to configure a Visual Voice button directly to a specific user or hunt group mailbox in order to receive message waiting indication on that button and access that mailbox using the button.

### 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. Click the required user.
3. Click the **Button Programming** tab.
4. Click the button line that you want to change.
5. Right-click in the **Action** field.
6. Select **Emulation > Visual Voice**.
  - To create a button for the user's own mailbox (and any for which they receive message waiting indication), leave the **Action Data** field blank.
  - To create a button for another user or hunt group mailbox, select the user or hunt group in the Action Data field.
7. Click **OK** to save the button details for the selected user.
8. Repeat for any other users.
9. Click  to save the changes back to the IP Office system.



# Chapter 4.

## Hunt Group Mailbox Configuration

---

## 4. 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](#)<sup>[37]</sup>.

- **Mailbox Access**

By default there is no mailbox access to hunt group mailboxes to collect messages. Users assigned hunt group message waiting indication can also gain access depending on their phone type. Otherwise, an access short code must be created for the hunt group. For more information, see [Hunt Group Mailbox Access](#)<sup>[38]</sup>.

- **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 you need 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, you must 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.

## 4.1 Group 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 of the group but have their membership set to disabled. This provides them access to the group mailbox without receiving group calls.

Depending on the type of telephone 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.

- **Visual Voicemail**  
If the user has visual voicemail on their phone, the name of the hunt group appears in the visual voice display along with the number of messages details.
- **one-X Portal for IP Office**  
If the one-X Portal for IP Office application is used, the group name and number of new messages is displayed in the **Messages** gadget. Use the Messages gadget 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.

### To configure hunt group 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**. 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**.
5. Click **OK**.
6. Click  to merge the configuration change back to the IP Office.

---

## 4.2 Hunt Group 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>37</sup>.

- **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.

- **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.

- **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

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>54</sup>.

## 4.3 Announcements

Announcements are played to callers waiting to be answered. This includes callers being presented to hunt group members, ie. ringing, and callers queued for presentation.

- IP Office 4.0+ supports announcements using Embedded Voicemail.
- If no voicemail channel is available for an announcement, the announcement is not played.
- Calls can be answered during the announcement.
- If a call is rerouted to a hunt group's Night Service Group or Out of Service Fallback Group, the announcements of the new group are applied.
- If a call overflows, the announcements of the original group are still applied, not those of the overflow group.
- For announcements to be used effectively, the hunt group's **Voicemail Answer Time** must be extended or **Voicemail On** must be unselected.

### Announcement Configuration

1. Open IP Office Manager.
2. Select the user or hunt group for which announcements are required.
3. View the **Announcements** tab.

The screenshot shows the 'Announcements' configuration window in IP Office Manager. The settings are as follows:

- Announcements On:**
- Wait before 1st announcement (seconds):** 1
- Synchronise Calls:**
- Flag call as answered:**
- Post announcement tone:** Music on hold
- 2nd Announcement:**
- Wait before 2nd announcement (seconds):** 20
- Repeat last announcement:**
- Wait before repeat (seconds):** 20

Blue arrows in the diagram indicate the sequence of events: Wait before 1st announcement → Play 1st announcement → Post announcement tone → Play 2nd announcement → Repeat last announcement → Wait before repeat → Play 2nd announcement.

- **Announcements On:** *Default = Off.*  
This setting enables or disables announcements.
- **Wait before 1st announcement:** *Default = 10 seconds. Range = 0 to 255 seconds.*  
This setting sets the time delay from the calls presentation, after which the first announcement should be played to the caller. If **Synchronize Calls** is selected, the actual wait may differ, see below.
- **Flag call as answered:** *Default = Off.*  
This setting is used by the IP Office CCC and CBC applications. By default they do not regard a call as answered until it has been answered by a person. This setting allows calls to be marked as answered once the caller has heard the first announcement. This setting is not used by the IP Office Customer Call Reporter application.
- **Post announcement tone:** *Default = Music on hold.*  
Following the first announcement, you can select whether the caller should hear **Music on Hold**, **Ringing** or **Silence** until answered or played another announcement.
- **2nd Announcement:** *Default = On.*  
If selected, a second announcement can be played to the caller if they have still not been answered.
- **Wait before 2nd announcement:** *Default = 20 seconds. Range = 0 to 255 seconds.*  
This setting sets the wait between the 1st and the 2nd announcement. If **Synchronize Calls** is selected, the actual wait may differ, see below.

- 
- **Repeat last announcement:** *Default = On.*  
If selected, the last announcement played to the caller is repeated until they are answered or hang-up.
  - **Wait before repeat:** *Default = 20 seconds. Range = 0 to 255 seconds.*  
If **Repeat last announcement** is selected, this setting sets is applied between each repeat of the last announcement. If **Synchronize Calls** is selected, this value is grayed out and set to match the **Wait before 2nd announcement** setting.

4. Click **OK** to save the changes.

5. Click  to merge the configuration back to the IP Office.

## Recording the Announcements

There are no default queue announcements for user and hunt groups. The maximum length for announcements is 10 minutes. On new systems there are two default short codes that enable you to record announcements. On existing and upgraded systems these or similar short codes need to be added manually.

The default 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 hunt group on extension 300 dial **\*92300#** and follow the instructions to record the announcement.

Pre-recorded files can also be converted for use as announcements. See [Using Pre-Recorded Greetings](#) <sup>30</sup>.

# Chapter 5.

# Auto Attendant Configuration

---

## 5. Auto Attendant Configuration

In addition to basic voicemail operation, you can create auto attendants using Embedded Voicemail. These can then be used to answer calls and prompt the caller for the server that they require.

Up to 40 auto attendant services are supported. 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. You can also assign an action to the key **Fax** to detect incoming fax tone on calls.

- **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>46</sup>.

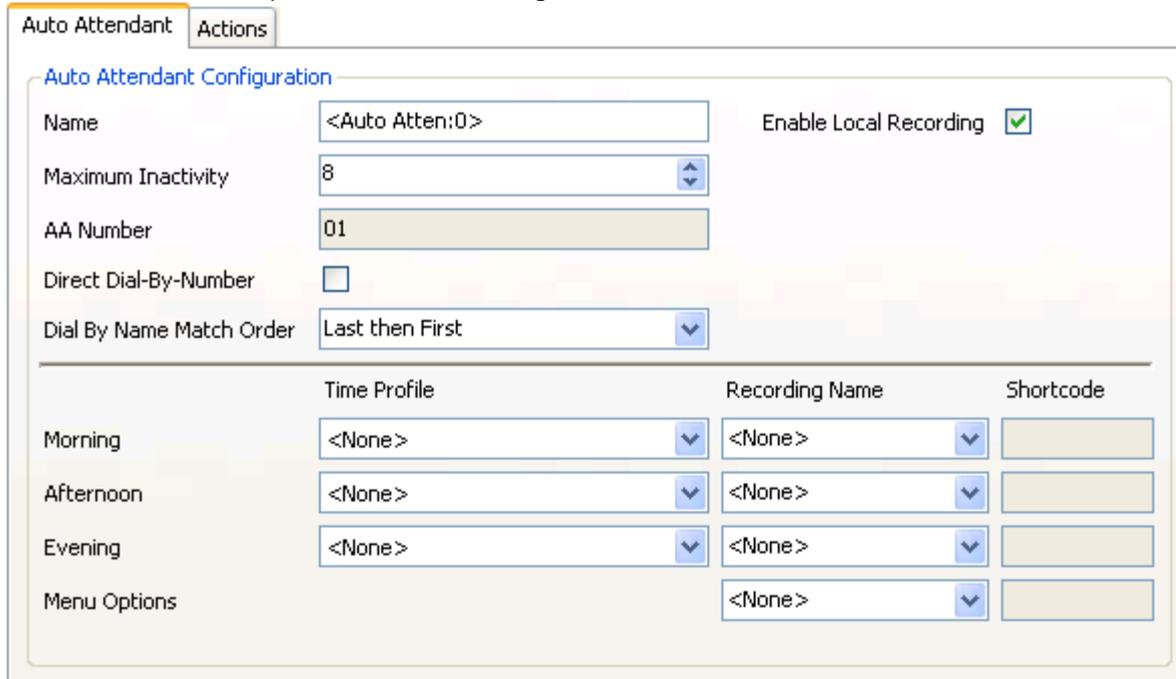
- In situations where time profiles are absent, overlap or conflict; the order of precedence given is to time profiles assigned to **Morning**, **Afternoon** and then **Evening**.

## 5.1 Create an Auto Attendant

For details of routing calls to the auto attendant, see [Routing Incoming Calls to an Auto Attendant](#)<sup>[47]</sup>.

### To create an auto attendant:

1. Start IP Office Manager and load the required configuration. 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.
2. Click  **Auto Attendant**. Any existing Auto Attendants are listed.
3. Click **Create a New Record** in the Group Pane. Select **Auto Attendant**. In the **Name** field enter the name for the auto attendant. This can be up to 15 characters in length.



**Auto Attendant Configuration**

Name: <Auto Atten:0>      Enable Local Recording:

Maximum Inactivity: 8

AA Number: 01

Direct Dial-By-Number:

Dial By Name Match Order: Last then First

	Time Profile	Recording Name	Shortcode
Morning	<None>	<None>	
Afternoon	<None>	<None>	
Evening	<None>	<None>	
Menu Options		<None>	

- **Name:** Range = Up to 12 characters  
This field sets the name for the auto-attendant service. External calls can be routed to the auto attendant by entering AA:Name in the destination field of an Incoming Call Route.
- **Maximum Inactivity:** Default = 8 seconds; Range = 1 to 20 seconds, Software level = 3.0+.  
This field sets how long after playing the prompts the Auto Attendant should wait for a valid key press. If exceeded, the caller is either transferred to the Fallback Extension set within the Incoming Call Route used for their call or else the caller is disconnected.
- **Enable Local Recording:** Default = On, Software level = 4.0+ (Q2 2007 Maintenance release).  
When off, use of short codes to record auto-attendant prompts is blocked. The short codes can still be used to playback the greetings.
- **Direct Dial-By-Number:** Default = Off, Software level = 6.0+.  
This setting affects the operation of any key presses in the auto attendant menu set to use the **Dial By Number** action.
  - If selected, the key press for the action is included in any following digits dialed by the caller for IP Office extension matching. For example, if 2 is set in the actions to **Dial by Number**, a caller can dial just 201 for extension 201.
  - If not selected, the key press for the action is not included in any following digits dialed by the caller for IP Office extension matching. For example, if 2 is set in the actions to **Dial by Number**, a caller must dial 2 and then 201 for extension 201.
- **Dial by Name Match Order:** Default = First Name/Last Name, Software level = 5.0+.  
Determines the name order used for the the Embedded Voicemail Dial by Name function. The options are **First then Last** or **Last then First**.
- **AA Number:** Software level = 4.1+.  
This number is assigned by the IP Office and cannot be changed. It is used in conjunction with short codes to access the auto attendant service or to record auto attendant greetings.
- **Morning/Afternoon/Evening/Menu Options:**  
Each auto-attendant can consist of three distinct time periods, defined by associated time profiles. A greeting can be recorded for each period. The appropriate greeting is played to callers and followed by the Menu Options greeting which should list the available actions.

---

- **Time Profile**

The time profile that defines each period of auto-attendant operation. When there are overlaps or gaps between time profiles, precedence is given in the order morning, afternoon and then evening.

- **Short code**

These fields indicate the system short codes automatically created to allow recording of the time profile greetings and the menu options prompt.

- **Recording Name:** *Default = Blank. Range = Up to 31 characters, Software level = 4.0+ (Q2 2007 Maintenance release).*

This field appears next to the short code used for manually recording auto-attendant prompts. It is only used if using pre-recorded wav files as greeting rather than manually recording greetings using the indicated short codes. If used, note that the field is case sensitive and uses the name embedded within the wav file header rather than the actual file name. The utility for converting .wav files to the correct format is provided with Manager and can be launched via [File | Advanced | LVM Greeting Utility](#)<sup>[52]</sup>. Files then need to be manually transferred to the embedded voicemail memory card.

4. Click the **Actions** tab. 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. You can also assign an action to the key **Fax** to automatically reroute calls where fax tone is detected.

- **Centrex Transfer**

If the auto attendant is being used to answer incoming calls from a Centrex exchange, this option can be used to perform a Centrex transfer. When selected by the caller, the IP Office sends a flash hook signal to the exchange using the same line as the incoming call, dials the configured destination numbers and then disconnects itself from the call.

- **Dial by Name** *IP Office 5.0+*

Callers can dial the name of the user they require. A list of matching names is then played to them to make a selection.

- **Dial by Number**

Callers can dial the required extension number. There is no prompt associated with the action. If a prompt is required it is as part of the menu prompt. Unexpected results can 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.

- **Park & Page**

This option parks the caller and then performs a page to the set destination to announce the parked call. When selected, the following additional fields are configurable. Note: Calls parked using this feature use a voicemail channel whilst parked and also an additional channel during the page.

- **Park Slot Prefix**

The park slot number prefix of up to 8 digits. When the system parks a call, it uses the prefix plus an additional digit, 0 to 9, for each call it has parked. The full park slot number is announced as part of the page.

- If the **Park Slot Prefix** plus additional digit (0 to 9) falls within the range configured for the manual park and page feature (**System | Telephony | Park & Page | Central Park Range**), then calls parked by embedded voicemail can be unparked by simply dialing the park slot number.

- Any **Call Park** buttons configured to a park slot number used by the embedded voicemail will indicate when there is a parked call and can be used to unpark the call.

- **Paging Number**

This is the number which the system will page to announce the parked call. It does so using the recorded **Page prompt** (see below) followed by then announcing the park slot number used.

- **Retry count**

Sets the number of times that the system repeats the parked call announcement, up to a maximum of 5 times.

- **Fallback Number**

The parked call is transferred to this number if it is still unanswered 1 minute after the last page. Calls are also transferred to this number if the system cannot park the call for any reason.

- **Retry timeout**

Sets the delay in minute:seconds between paging repeats. The range can be set in 15-second increments. The minimum setting is 15 seconds (the default) and the maximum setting is 5 minutes.

- **Page prompt**

The prompt used for the page can either be recorded manually or using a pre-recorded file. In both cases, the page is automatically followed by an announcement of the park slot number used.

- The short code for manual recording of the prompt is only displayed after the configuration is saved and then reloaded into IP Office Manager.
  - To use a pre-recorded file, enter the filename into the field. Create and upload the file using the same method used for pre-recorded auto attendant menu prompts. See [Using Pre-Recorded Prompts](#)<sup>[52]</sup>.
- **Replay Menu Greeting**  
Repeat the menu greeting recorded to list the auto attendant actions.
  - **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.
  - **Transfer to AutoAttendant**  
Transfer the caller to another auto attendant.
5. 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.
  6. Click  to save the new changes back to the IP Office system.
  7. Following the system reboot, you can record prompts for the auto attendant using the short codes created. For more information, see [Recording Prompts](#)<sup>[46]</sup>.

---

## 5.2 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. Pre-recording files can also be converted for use by the auto-attendant, see [Using Pre-Recorded Prompts](#)<sup>[52]</sup>.

To use the short codes, the appropriate number to dial is indicated against each greeting on the Auto Attendant tab in IP Office Manager. For example, for each auto attendant added to the configuration, the following default short codes are also automatically added with **xx** replaced by the auto attendant number:

- **Morning:** \*81xx  
Record the morning greeting prompt that is played before the menu options prompt during the morning time profile.
- **Afternoon:** \*82xx  
Record the afternoon greeting prompt that is played before the menu options prompt during the afternoon time profile.
- **Evening:** \*83xx  
Record the evening greeting prompt that is played before the menu options prompt during the evening time profile.
- **Menu Options:** \*84xx  
Record the menu actions prompt that is played after whichever greeting prompt is currently in use.

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 **Enable Local Recording** option 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.

## 5.3 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.

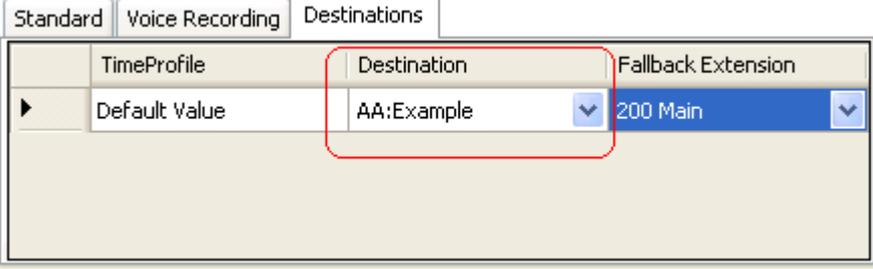
### To route incoming calls to an auto attendant:

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. Check that the settings match the calls you expect to be routed to the auto attendant (for full details refer to the IP Office Manager documentation).

4. Click the **Destination** tab. In the Destination field use the drop down list to select the auto attendant. The names of the configured auto attendants are shown prefixed with **AA:**.



TimeProfile	Destination	Fallback Extension
Default Value	AA:Example	200 Main

5. In the example above the **Fallback Extension** has also been set to route calls to a hunt group. The **Fallback Extension** setting is used for callers in the auto attendant who do not make a valid key press within the auto attendant's **Maximum Inactivity** time.

6. Using time profiles, additional destination sets can be added to use the auto attendant at certain times of day or to use different auto attendants at different times.

7. Click **OK**.

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

---

## 5.4 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 Short Codes](#) <sup>[48]</sup>.
- [Using Programmed Buttons](#) <sup>[48]</sup>.
- [Using SoftConsole](#) <sup>[49]</sup>.

### 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

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

#### To transfer a caller:

1. Press **TRANSFER**.
2. Dial the auto attendant short code.
3. Press **TRANSFER** again to complete the process.

### 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 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.

---

## 5.5 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 using that 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

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.

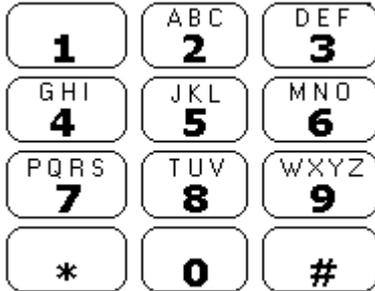
## 5.6 Dial by Name

IP Office 5.0 allows the option **Dial by Name** to be selected as an auto attendant option. Callers selecting this option are asked to dial the name they require and then press #. The recording name prompts of matching users are then used to allow the caller to make their selection.

The name order used for set to first name/last name or last name/first name by the [Dial by Name Match Order](#)<sup>[43]</sup> setting on the Auto Attendants settings.

The name used for matching is taken from the user's configuration within the IP Office configuration. The Full Name is used if set, otherwise the Name is used.

- Users are exclude from Dial by Name if they:
  - Are marked as **Ex Directory** (User | User) in the IP Office configuration.
  - Do not have a recorded mailbox name prompt. They can record their own name by dialing **\*05** after accessing their mailbox.
- The function assumes that a standard ITU lettered dialing pad is being used.



- The action prompts the caller to dial the name they require and then press #. For example, dialing 527 matches names starting with JAS (for example "Jason") and KAR (for example "Karl"). Callers can also press **\*#** to exit without making a selection.
  - 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.

---

## 5.7 Using Pre-Recorded Prompts

You can use pre-recorded files as auto attendant greetings. This allows greetings to be recorded by methods other than through the IP Office phone short codes. For IP Office Release 9.0 and later, you can also use pre-recorded files for mailbox names, greetings, and announcements.

The source WAV file must have the following properties. If the file has different properties, convert the file using a tool such as Windows Sound Recorder.

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

### To convert the file:

1. Start IP Office Manager.
2. Select **File | Advanced | LVM Greeting Utility**.
3. In the **Input File** field, click the ... button and select the WAV file.
4. In the **Output File** field, click the ... button and select the location where you want the converted file saved.
5. In the Save Output File window, enter a name for the file in the **File Name** field and click **Save**. The file extension must be **.c11**.
6. In the **Output File Type** field:
  - a. To create an auto attendant greeting file, select **Auto Attendant**.
  - b. To create a greeting file for a user or group mailbox, select one of the following.
    - **Announcement1**
    - **Announcement2**
    - **Greeting**
    - **Name**
7. If you are creating an auto attendant greeting, enter a **Recording Name**. Note that the name is case sensitive.
8. If you are creating a user extension greeting, in the **User Extension** field, enter the user or group name as set in the Name field in the configuration.
9. In the Format field, select **G711**.
10. Click **OK**.

### To transferring the auto attendant files

1. In IP Office Manager select **File | Advanced | Embedded File Management**.
2. Drag and drop the greeting file into the appropriate folder on the memory card. For IP500 V2 systems, this is the **System SD\dynamic\lvm\AAG** folder.

### To configuring an auto attendant to use a greeting file

The same greeting file can be used by multiple auto attendants.

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 file conversion, not the actual file name. It is case sensitive.
4. 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.
5. Send the configuration back to the IP Office.

# Chapter 6.

## Miscellaneous

---

## 6. Miscellaneous

### 6.1 Remote Mailbox Access

Remote mailbox access is accessing a mailbox from any location does not match the mailbox user or hunt group's number. That includes both internal and external access.

- Remote access is only possible if the mailbox user or hunt group has a voicemail code set in the IP Office configuration.

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

#### 1. Direct from an Incoming Call Route

An incoming call route could be configured to enable remote access to a mailbox. The option **Voicemail** can be selected as the **Destination** of an **Incoming Call Route**.

#### 2. Using a Short Code

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

#### 3. Via an Auto Attendant

An auto attendant can be used to enable remote access to a mailbox. A short code similar to the example above 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>[50]</sup>.

## 6.2 Password Rules Enforcement

The IP Office system controls the rules applied to mailbox passwords. These are:

- Whether the password has a minimum length and what that length is.
- Whether complexity rules are applied when passwords are changed. When applied, the complexity rules are:

Note: You can set and change (though not see) mailbox passwords through the IP Office system configuration. The passwords set there do not need to comply with the password enforcement rules. However, when changed by the user, the password enforcement rules are applied.

### To set the mailbox password rules:

1. Use IP Office Manager to receive the configuration of the IP Office system.
2. Select **System** and then select the **Voicemail** tab.
  - **Enforcement:** *Default = On*  
When selected, the requirements for minimum password length and complexity below are applied when a user changes a mailbox password.
    - **Minimum length:** *Default = 4*  
Sets the minimum password length allowed on password changes when Enforcement is selected.
    - **Complexity:** *Default = On*  
When selected, the following complexity rules are applied to new mailbox passwords:
      - No forward (eg. 1234) or reverse (4321) sequence of numbers.
      - No repeated digits (eg. 1111).
      - No match to the extension number.
3. Click **OK**.
4. Click the  icon to save any changes back to the IP Office system.

---

## 6.3 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.

## 6.4 Short Codes

Embedded Voicemail supports a number of IP Office short code features.

### Default Short Codes

The following default system short codes can be used with Embedded Voicemail.

- **Voicemail Collect: \*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>[39]</sup>.
  - **\*91N;** - To record an Announcement 1 for a hunt group.
  - **\*92N;** - To record an Announcement 2 for a hunt group.

### Short Code Features

Additional short codes can be added as required using the short code features listed below. For full details of short codes refer to the IP Office Manager documentation.

- **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

- 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 short code feature is used as follows:
  - This feature is used for the recording of auto attendant prompts and greetings. Normally the short codes for these are created automatically though they may not be displayed until the configuration is saved and then reloaded. However, the short codes can be deleted and reassigned as required. For more information, see [Create an Auto Attendant](#)<sup>[43]</sup>.
  - This feature can also be used to create short codes for internal access to the auto attendant. The short code can then be used as the target for internal transfers to the auto attendant.
- **Record Message**  
Allows the recording of announcement messages for users and hunt groups.
- **Shutdown Embedded Voicemail**  
Allows the embedded voicemail service provided by the memory card to be disabled.
- **Startup Embedded Voicemail**  
Allows an embedded voicemail service that has been shutdown to be restarted.



# Chapter 7.

## Mailbox Maintenance

---

## 7. Mailbox Maintenance

Unlike Voicemail Pro, embedded voicemail does not support a dedicated client for voicemail configuration and mailbox management. However, using other standard IP Office applications, mailbox management is possible.

### 7.1 Viewing Mailboxes

Using the <SSA%> application, it is possible to view the voicemail mailboxes. The details include the number of messages of different types (new, read and saved) in each mailbox.

#### To view the mailboxes:

1. Start <%SSA%> and connect to the IP Office system.
  - If not installed on the PC, <%SSA%> can be started from the system by browsing to its IP address and selecting **System Status**.
2. From the navigation tree select **Voicemail** and then **Mailboxes**.

### 7.2 Viewing Embedded Files

The files for embedded voicemail are all stored on the System SD card inserted into the system. They are all stored in the same folder, there are not separate folders for each mailbox.

#### To file embedded voicemail files:

1. Start IP Office Manager.
2. Select **File | Advanced | Embedded File Management**.
3. Use the **Select IP Office** menu to select the required IP Office system and enter the user name and password for system administration.
4. In the Folders navigation tree, select **System SD | SYSTEM | DYNAMIC | LVMAIL**.
5. The files shown are the messages, greetings and prompts for all the mailboxes.
6. Select a file to show its details in the **File Details** section.
  - **Deleting Files**  
The file manager can be used to delete files. Right-click on the file and select **Delete**. However, ensure that the file is the required file by checking its file details first.

### 7.3 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 TYP=3) CAL
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:

- 10. On the **Call** tab, select the options that you want to monitor in the **Embedded Voicemail** section.
- 11. On the **System** tab, select **Print**.
- 12. The **Trace Color** selection on the **System** tab is applied to Embedded Voicemail events.
- 13. Click **OK**.
- 14. Embedded Voicemail events are now shown in the Monitor trace when running. These events are all prefixed **LV**.

### Embedded Voicemail Housekeeping

The embedded voicemail performs housekeeping approximately every 5 minutes, subject to other system activity. This can be seen in IP Office System Monitor by enabling the trace option **Filters | Call | House Keeping (Embedded Voicemail)**.

The details include the approximate remaining message capacity of the memory card.

```
156165753mS LVM(housekeeping): FlashMan: FiveMinuteActions: called 2009/01/29 06:52:55
156165796mS LVM(housekeeping): FlashMan: FiveMinuteActions: Free: 426.4 MBytes ( 81% )
156165796mS LVM(housekeeping): 14 Hours 48 Minutes Approx. Remaining
156165796mS LVM(housekeeping): FMML Size: 35
```

### Checking the Prompt Sets

The additional embedded voicemail features added in new IP Office releases require new prompts. Missing prompts can be reported in IP Office System Monitor by enabling the trace options **Filters | Trace Options | System | Error**. Error messages are output at regular intervals.

```
158267586mS ERR: EVM 4p0 upgrade file clips missing
158267587mS ERR: EVM 4p2 upgrade file clips missing
158267592mS ERR: EVM 5p0 upgrade file clips missing
```

---

## 7.4 DTE Port Maintenance

Using a serial cable, it is possible to perform a range of commands on the system running embedded voicemail. See the "Installing IP500 V2" manual for details of the cable required and the serial port settings.

- **! WARNING**

These options should be used with caution. The DTE interface includes other options that can erase the whole systems software and configuration.

### To manage files and mailboxes using DTE:

1. Connect to the IP Office system using a serial cable.

2. Enter **AT**. The system should respond **OK**.

3. Enter **AT-DEBUG**. The system responds with **hello >**.

4. Enter **ivm-help**. The system responds by listing the mailbox and messages commands.

- Most hyperterminal programs can capture the text responses to a text file. This may be useful when list the status of mailboxes as the results may scroll off screen.

- **ivm-mbox-show**

Show the details of all mailboxes.

- **ivm-mbox-show nnn**

Show the details of the mailbox specified.

- **ivm-mbox-clear nnn**

Delete all messages, prompts and recordings relating to the mailbox specified.

- **ivm-msg-del nnn yy/mm/dd hh:mm:ss**

Delete all messages in the mailbox extension number specified up to the date specified. If the date is omitted then all messages are deleted.

- **ivm-msg-del-all**

Delete all mailbox messages.

- **ivm-status-show**

Show the summary of the embedded voicemail status.

- **ivm-tls-show**

Show the current status of SMTP TLS.

- **ivm-tls-set <Y/N>**

Set the current status for SMTP TLS.

5. Enter the command required.

# Chapter 8.

# Document History

---

## 8. Document History

Date	Issue	Change Summary
10th July 2014	10a	<ul style="list-style-type: none"><li>• Removal of support for IP500 systems for IP Office Release 9.1.</li></ul>
13th November 2014	10b	<ul style="list-style-type: none"><li>• Document title change.</li></ul>
27th November 2014	10c	<ul style="list-style-type: none"><li>• Improved the short codes description.</li></ul>
14th April 2015	10d	<ul style="list-style-type: none"><li>• Minor note that pre-recorded greeting cannot be looped. [81161]</li></ul>
20th August 2015	10e	<ul style="list-style-type: none"><li>• Correct of <a href="#">announcement wait time limits</a> <sup>[28]</sup> to 255 from 999.</li></ul>

# Index

## A

Access Code 24  
 Announcements 24  
 Auto Attendant 47  
 Auto Attendant Tricks 50

## B

Breakout Numbers 24

## C

Configuring  
   IP Office 18  
   Queues 39

## D

DSS Key Programming 56

## E

Embedded VoiceMail 18  
   Monitoring 60  
   Overview 9  
 Embedded VoiceMail Mailbox Features 10  
 Example Auto Attendant Setup 43

## H

Hunt Group Mailbox Access 38

## I

Incoming Call Route  
   Voicemail 32  
 Incoming Calls  
   Routing 47  
 Internal Access#DSSKeys 48  
 IP Office  
   Configuring 18

## L

Languages Supported 11

## M

Mailbox Access 24  
 Message Waiting Indication 24, 37  
 Mobile 32  
 Monitoring  
   Embedded VoiceMail 60

## O

Overview  
   Embedded VoiceMail 9

## P

Prompts  
   Recording 46  
   Upgrading 21

## Q

Queues  
   Configuring 39

## R

Recording  
   Prompts 46  
 Remote Access 54  
 Ringback 24  
 Routing  
   Incoming Calls 47

## S

Short Codes 57  
 Source 32  
 Source Numbers  
   View 32

## T

Trusted Location  
   Creating 32

## U

Upgrading  
   Prompts 21  
 User Mailbox Configuration 24  
 Using Named Announcement Files 52

## V

Visual Voice 33  
 Voicemail Code 32  
 Voicemail Email 24  
 Voicemail Reception 24





Performance figures and data quoted in this document are typical, and must be specifically confirmed in writing by Avaya before they become applicable to any particular order or contract. The company reserves the right to make alterations or amendments to the detailed specifications at its discretion. The publication of information in this document does not imply freedom from patent or other protective rights of Avaya or others.

All trademarks identified by the ® or ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners.

This document contains proprietary information of Avaya and is not to be disclosed or used except in accordance with applicable agreements.

© 2015 Avaya Inc. All rights reserved.