IP Office Technical Bulletin

Bulletin no: **97**

Date: 11th August 2008

Title: General Availability (GA) of IP Office 4.2 Software

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IP Office Technical Bulletin

Bulletin No: **97b**

Date: **11 August 2008**

Region: **GLOBAL**

General Availability (GA) of IP Office 4.2 Software

Avaya is delighted to announce the launch and availability of IP Office 4.2 software. IP Office is Avaya's Small and Medium Enterprise (SME) solution designed as a global solution for customers with up to 360 extensions.

1 Product Overview

The Avaya IP Office 4.2 software is the latest advancement in converged voice and data technology from Avaya. IP Office combines high-end voice and data applications, allowing the smallest of businesses to deliver cutting edge customer service.

IP Office 4.2 is the entry-level software to support the following new hardware:

- **New IP 1600 Series Telephones *****

As well as increased reliability through improvements to the core system software, IP Office 4.2 also supports the following new features:

IP Office Core Software

- **IP Office Core (Version 4.2.4)**
  - Mobile Call Control **
  - Static NAT
  - Date and Time Display
  - SSA Enhancements
  - 4 x Music-On-Hold Sources *
  - Manager Enhancements
  - Priority Ringing Enhancements
  - ETSI CHI Enhancements
  - S0/T0 BRI **
  - Restrict Network Interconnect
  - T3 Telephone Enhancements *
  - Embedded VoiceMail Enhancements *
  - Telephone Message Button to Visual Voice
  - Reversal of Operation 'Dialled digits'
  - SMDR Output from IP Office
  - VoIP Enhancements **

- Hunt Group Queuing Option
- Set Hunt Group Fallback
- Call Initiation Timeout
- Logout Enhancements
- BLF Enhancements
- Automatic Impedance Balancing ****
- Partial Rerouting Enhancement
- New IP Office Locales
- Embedded VoiceMail -Cantonese

Please note that not all of the 4.2 features are supported on all IP Office platforms

*** Feature not supported on the Small Office Edition platform.**

**** Feature only supported on the IP Office 500 platform.**

***** Available from November 2008.** ***Note: Specific instruction on IP 1600 series telephones will be published in the Q4 maintenance release technical bulletin.***

****** IP 500 only using US Locale.**

- **IP Office VoiceMail Pro (Version 4.2.19)**
  - Unified Messaging incorporating
    - Web Integration
    - IMAP Server
  - Check Digit Enhancements

- **Phone Manager (Version 4.2.12)**
  - Visual Outcalling
  - VoiceMail Message Forwarding
  - VoiceMail Password change
  - Vista Support – PC Softphone

****

Note: *IP Office 4.2 runs on the same IP Office platforms as version 4.1. Please refer to Technical Bulletin 90 for further details.*

****

2 IP Office Hardware

2.1 IP 1600 Series Telephones

Avaya is introducing a new family of IP 1600 series telephones in November 2008. Based on the 1600 series available with Communication Manager, the new IP 1600 series telephones are competitively priced making IP Telephony cost effective.

IP 1600 series telephones address many customer requests, such as backlit displays, more function keys and highly visible LEDs for line appearances.

The SMBD 1600 series telephones have different material codes compared to Enterprise 1600 series.

Note: The 1600 series telephones are not supported on IP Office

IP Office 4.2 supports the Avaya IP 1600 series telephones alongside other Avaya IP telephones available, in any combination up to the existing limits supported:

System	Max Capacity
SOE	16
IP406 V2	190
IP412	360
IP500	272

The IP 1600 series telephone is the first Avaya IP telephone supported by IP Office that does not utilize TFTP for obtaining firmware or configuration settings. To support the IP 1600 series telephone on small stand alone IP Office sites, or systems with low numbers of IP Phones, IP Office can implement an HTTP to TFTP protocol converter to allow the IP 1600 series telephone operation.

Avaya IP 1600 series telephone supports the same IP Office features and functionality as the 5410 including:

- Volume Reset
- Disable Speakerphone
- Headset Mode (phone has dedicated key)
- Auto Answer
- Force Feed
- Paging and Answer Page
- Live Keypad
- Visual Voice
- Call Appearance Buttons
- Directory
- 'Assisted Dialing' - e.g. Call Forward All with no Action Data
- Self Administer (program buttons, set system Date/Time, get system info)
- Login
- External Twinning
- Conference Drop

1616

- “Navigator” Full Size Phone
- 16 Feature Keys
- Adjustable Backlit Display
- Two Way Speaker Phone
- 10 / 100 Port PC Expansion Ethernet Port
- Headset Jack
- Supports BM 32 Button Module
- Flip Stand Flexible Adjustment
- PoE Support

1608

- “Everyday” User Phone
- 8 Feature Keys
- Backlit Display
- Two Way Speaker Phone
- 10 / 100 Port PC Expansion Ethernet Port
- Headset Jack
- Flip Stand Flexible Adjustment
- PoE Support

1603

- “Walkup” Basic User Phone
- 3 Feature Keys
- Backlit Display
- Two Way Speaker Phone
- Mains Adaptor or PoE Adaptor

Note: *If powering a 1603 using POE, then an adaptor is required.*

BM 32 Button Module Expansion Unit

- Supported on 1616 only
- 16 x BM 32 units maximum on any IP Office
- Maximum of 2 x BM32 to 1 x IP 1616 (requires Mains Adaptor to 1616)

IP 1600 Series Material Codes

Material Code	Description
700462922	IP 1616 Telephone
700462914	IP 1608 Telephone
700462906	IP 1603 Telephone
700415573	BM 32 Module (IP 1616 only)
700415631	1616 Wall Mount Bracket
700415623	1608 Wall Mount Bracket
700415607	1603 POE Adaptor
700416985	Ethernet Adaptor
700429665	EU Power Adaptor
700429640	US Power Adaptor
700451297	Australia Power Adaptor
700451271	Korea Power Adaptor
700451289	China Power Adaptor
700451263	Argentina Power Adaptor

For a complete list of IP 1600 series material codes, inclusive of Paper Labels, Headsets and replacement parts please refer to the IP Office 4.2 Product Update. . IP 1600 series phones will not be orderable until November 2008.

3 IP Office Software Enhancements

3.1 Mobile Call Control

Manager - Twinning License

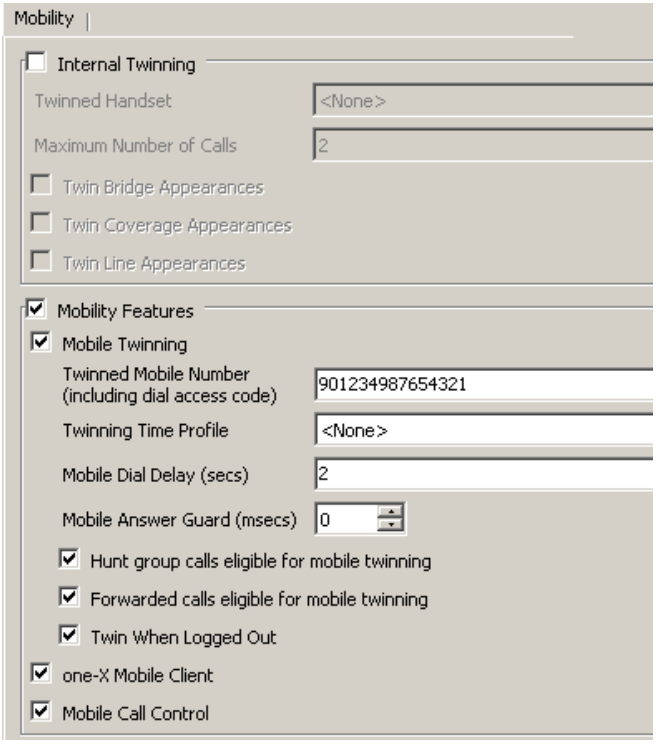
IP Office 4.2 has renamed the existing Mobile Twinning license to Mobility Features license. IP Office 4.2 consumes one instance of the Mobility Features license for every user who has Mobility features checked. If more users are configured with Mobility features than there are license instances available, then a Manager warning and SSA license alarm will be generated.

When a user is unable to obtain a valid license instance, all Mobility features will be disabled for that user.

A user with Mobility Features will take their license with them if they hot desk on the SCN – i.e. they will consume a license on their home system (where they are configured) and not the system where they will be a hot desk 'guest'.

Manager - Mobile Call Control Programming

The Manager has renamed the User -> Twinning tab to 'Mobility'. This tab provides all the new enhancements when programming the mobility feature available to IP Office 4.2. When the Mobility field is checked for one user then one Mobility license instance is consumed.



Logged Out Mobile Twinning

In releases prior to IP Office 4.2 a user had to be logged into an extension to have Mobile Twinning. IP Office 4.2 enables the user to be permitted to logout from an extension and maintain a logical presence on the system through Mobile Twinning.
Logged out includes the extension error state where the user's association to an extension is broken due to the extension being unplugged or a network fault.

Manager User Rights

There is no User Rights template support for the Mobility Features.

3.1.1 Avaya one-X Mobile Client

IP Office 4.2 supports Avaya one-X Client "Single Mode" (GSM) operation, in conjunction with mobile technology 'Symbian' Single-Mode and Windows Mobile WM5 and WM6 technology.

Licensing for this feature is provided by the Mobility Features license, previously explained.
The feature is supported on IP 500 only and must use either of the following trunk types:

- IP500 PRI-U (single or dual)
- IP500 Quad BRI (daughter boards only)
- SIP (RFC 2833)

Users require a method for accessing IP Office features without first receiving a call. This is achieved as part of the 4.2 IP Office one-X Mobile Client support. The FNE (Feature Name/Number Extension) searches through the IP Office user list for a user with Mobile Call Control enabled and an External Twinning number that matches the incoming Caller ID. If there is a match the caller can use IP Office features.

The call will be rejected if any of the following are true:

- the CallerID is not matched
- the CallerID is blank
- the call is on an unsupported trunk

IP Office 4.2 - FNE Supported Functionality

FNE No.	Service Function
00	IDLE_APPEARANCE SELECT = ;
01	ACTIVE_APPEARANCE_SELECT = ;
02	AUTO_CALL_BACK_TOGGLE = ;
04	CALL_FORWARDING_ALL_ACTIVATION = ;
05	CALL_FORWARDING_BUSY_NO_ANSWER_ACTIVATION = ;
06	CALL_FORWARDING_DISABLE = ;
07	CALL_PARK = ;
08	CALL_UNPARK = ;
09	CALL_PICKUP_GROUP_EXTENDED = ;
10	CALL_PICKUP_DIRECTED = ;
12	CALLING_PARTY_NUMBER_BLOCK = ;
13	CALLING_PARTY_NUMBER_UNBLOCK = ;
14	CONFERENCE_ON_ANSWER = ;
15	DROP_LAST_ADDED_PARTY = ;
16	EXCLUSION = ;
17	HELD_APPEARANCE_SELECT = ;
18	IDLE_APPEARANCE_SELECT = ;
19	OFF_PBX_ENABLE = ;
20	OFF_PBX_DISABLE = ;
24	SEND_ALL_CALLS_ENABLE = ;
25	SEND_ALL_CALLS_DISABLE = ;
26	TRANSFER_ON_HANGUP = ;
27	TRANSFER_TO_COVERAGE = ;

Each FNE supported requires a specific DID/DDI number to route to the correct FNE as set through the IP Office core programming. Each supported FNE is required to be correctly set though the one X Mobile client “settings.ini” or “settings.1xme” file, depending on the Mobile technology used.

The following shows an FNE specific example, which will allow the one-X Mobile client to dial through the IP Office system to call another user on switch.

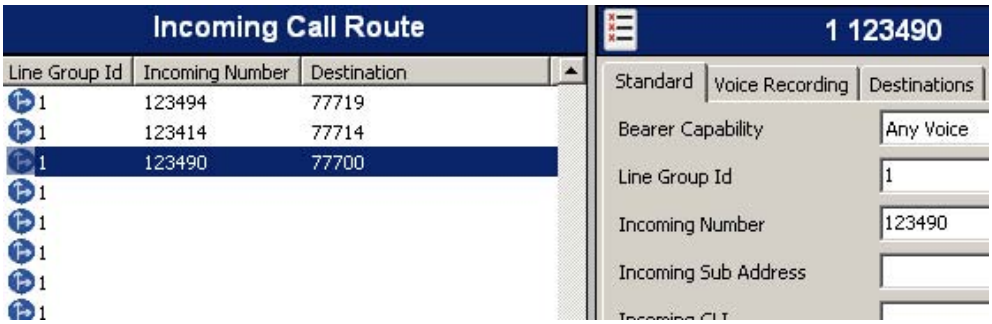
Example of Settings.ini / Settings.1xme file.

LOCATION_NAME = TESTSETUP;
DID_PREFIX = 017071234;
INTERNATIONAL_DIRECT_DIAL_PREFIX = 00;
NATIONAL_DIRECT_DIAL_PREFIX = 0;
HOME_COUNTRY_DIAL_CODE = +44;
ARS_CODE = 9;
EXTENSION_LENGTH = 7;
NATIONAL_NUMBER_LENGTH = 11;
USERS_EMERGENCY_NUMBERS = 999,911;
SETTINGS_PIN = ;

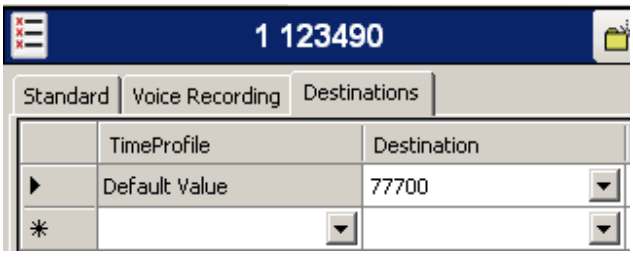
ACTIVE_APPEARANCE_SELECT = ;
AUTO_CALL_BACK_TOGGLE = ;
DISABLE_AUTO_CALL_BACK_TOGGLE = ;
CALL_FORWARDING_ALL_ACTIVATION = ;
CALL_FORWARDING_BUSY_NO_ANSWER_ACTIVATION = ;
CALL_FORWARDING_DISABLE = ;
CALLING_PARTY_NUMBER_BLOCK = ;
CALLING_PARTY_NUMBER_UNBLOCK = ;
CALL_PARK = ;
CALL_PICKUP_DIRECTED = ;
CALL_PICKUP_GROUP_EXTENDED = ;
CALL_UNPARK = ;
CONFERENCE_ON_ANSWER = 14;
DROP_LAST_ADDED_PARTY = ;
EXCLUSION = ;
HELD_APPEARANCE_SELECT = ;
IDLE_APPEARANCE_SELECT = 90;
OFF_PBX_DISABLE = 93;
OFF_PBX_ENABLE = 94;
SEND_ALL_CALLS_ENABLE = ;
SEND_ALL_CALLS_DISABLE = 09;
TRANSFER_ON_HANGUP = 91;
TRANSFER_TO_COVERAGE = ;
SPEECH_ACCESS_NUMBER = ;

SUB_MENU_NAME = TESTAW
<VoiceMail> =*96;
<Avaya Internal AutoAttn> =*97;

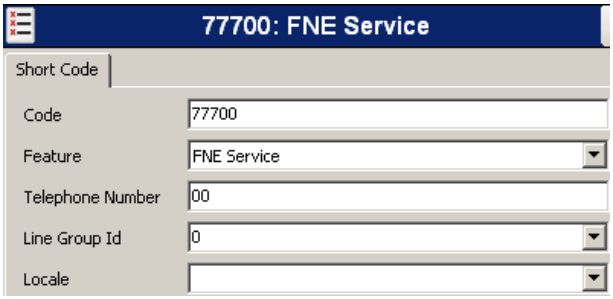
The example FNE **Idle_Appearance_Select = 01707123490** Matches the Incoming Call Route set in IP Office Programming



Incoming Call Route Destination for **123490** = shortcode 77700



Shortcode 77700 = FNE 00



Using this example each required FNE can be programmed appropriately. Therefore each required FNE utilises 1 DID / DDI number.

Note: *FNE Service telephone numbers MUST reflect the option required. Therefore the "Telephone Number" field in the short code will change appropriately.*

The one-X Mobile client requires twinning to be correctly programmed and one-X Mobile to be checked 'On' (see page 9 example) for the appropriate User.

When the one-X Mobile client has been correctly configured the one-X Mobile client device must select the option "Ext to Cellular" and then "Enable". This will enable the one-X Mobile client side twinning to the IP Office twinning. Failure to do this will result in twinned calls not ringing the cell phone. When twinning is set the one-X Mobile client device phone will display either '**A**' or '**phone**' icons.

Selecting the option "Ext to Cellular" then "Disable" cancels twinning to the one-X Mobile client. This will not disable the twinning programming seen though the IP Office Manager application or Phone Manager application. This is design intent. The one-X Mobile client side Enable or Disable twinning is a toggle that will not disrupt the core IP Office programming. The one-X Mobile Enable and Disable will directly integrate to the IP Office Twinning On / Off in future IP Office software release moving forward.

Setting "Ext to Cellular" – "Disable" will not stop the one-X Mobile client from making supported FNE calls through the IP Office. It merely stops twinned calls ringing. However if the IP Office removes the User Twinned number or turns off twinning to the User, then the one-X Mobile client will fail to work completely.

FNE options are enabled when programming the one-X Mobile client Settings.ini file. If the FNE option remains blank, E.g. **SEND_ALL_CALLS_ENABLE =;** then the option is NOT shown on the one-X Mobile client display.

The one-X Mobile profile must be set to Business mode to make FNE calls. When set to Personal mode the mobile device will dial through the mobile network provider.

Loading the Avaya one-X Mobile client software to a mobile phone requires a minimum of 20 megabytes of free memory.

3.1.2 One-X Compatibility List

The following list includes the makes and models of mobile devices that are currently certified and qualified to support the one-X Mobile client applications in conjunction with the Avaya IP Office 4.2.

Avaya one-X Mobile supports the mobile devices listed below. They are split into 3 different operating system categories:

- **Symbian Single Mode**
  one-X Mobile version 4.5.5 (Service Pack) supports the listed Nokia devices.

- **Windows Mobile 5**
  one-X Mobile Version 4.0.25 supports Pocket PC (PPC) devices (PDA with touch screen)
  one-X Mobile Version 4.0.26 supports Smartphone devices (Cell phone without touch screen)
  one-X Mobile Version 4.0.27 supports Palm devices.
- **Windows Mobile 6**
  one-X Mobile Version 1.0.18 supports PPC or Smartphone devices

Supported devices specific to IP Office 4.2 and one-X integration

Note: *Supported devices will be updated on www.support.avaya.com*

Device	Avaya one-X Mobile for …	Version
AT&T 8125	Windows Mobile 5	4.0.25 (PPC)
AT&T 8525	Windows Mobile 5	4.0.25 (PPC)
AT&T 8525	Windows Mobile 6	1.0.18 (PPC)
AT&T Palm Treo 750v	Windows Mobile 5	4.0.27 (Treo)
AT&T Samsung BlackJack (i607)	Windows Mobile 5	4.0.26 (Smartphone)
Dopod C730	Windows Mobile 6	1.0.18 (Smartphone)
HTC P4300	Windows Mobile 5	4.0.25 (PPC)
HTC S620	Windows Mobile 5	4.0.26 (Smartphone)
HTC S630	Windows Mobile 6	1.0.18 (Smartphone)
HTC S710	Windows Mobile 6	1.0.18 (Smartphone)
HTC Touch	Windows Mobile 6	1.0.18 (PPC)
HTC TyTN	Windows Mobile 5	4.0.25 (PPC)
HTC TyTN II	Windows Mobile 6	1.0.18 (PPC)
iMate KJAM	Windows Mobile 5	4.0.25 (PPC)

Motorola Q	Windows Mobile 5	4.0.26 (Smartphone)
Motorola Q9c (Sprint)	Windows Mobile 6	1.0.18 (Smartphone)
Motorola Q9h	Windows Mobile 6	1.0.18 (Smartphone)
Nokia E50	Symbian Single Mode	4.5.5
Nokia E60	Symbian Single Mode	4.5.5
Nokia E61	Symbian Single Mode	4.5.5
Nokia E61i	Symbian Single Mode	4.5.5
Nokia E62	Symbian Single Mode	4.5.5
Nokia E65	Symbian Single Mode	4.5.5
Nokia E70	Symbian Single Mode	4.5.5
Palm Treo 700W	Windows Mobile 5	4.0.27 Treo
Sprint Palm Treo 700wx/w	Windows Mobile 5	4.0.27 Treo
Sprint Mogul	Windows Mobile 6	1.0.18 (PPC)
Sprint PPC-6700	Windows Mobile 5	4.0.25 (PPC)
Sprint Touch	Windows Mobile 6	1.0.18 (PPC)
UTStarcom 6700 (Telus)	Windows Mobile 5	4.0.25 (PPC)
Vodafone v1415	Windows Mobile 6	1.0.18 (Smartphone)

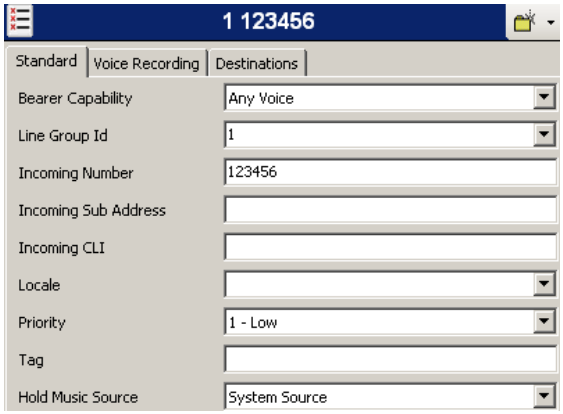
3.1.3 Mobile Call Control – DISA

The feature is supported on IP 500 only using the listed trunk types below and is subject to the licensing requirement as previously described. The one-X Mobile Client software is not required to utilize DISA operation.

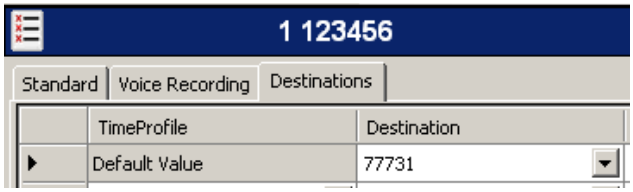
- IP500 PRI-U (single or dual)
- IP500 Quad BRI (daughter boards)
- SIP (RFC 2833)

Inbound calls can utilize DISA (Direct Inward System Access) facilities that IP Office 4.2 offers to Mobility twinned users. When dialing a number attributed to FNE 31, a mobile twin user can access IP Office system dial tone. Calls can then be made direct to a User number on switch.

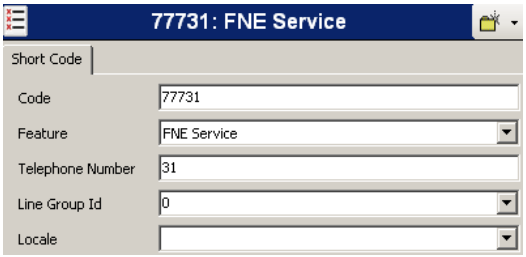
Example set up. Inbound DISA DID / DDI number **01707123456** matches the Incoming Call Route set in IP Office Programming



ICR Destination for **123456** = shortcode 77731



Shortcode 77731 = FNE 31



DISA calls made or received on the mobile twin are able to dial DTMF sequence '**' (star-star) to put the call on hold and receive IP Office system dial tone.

'**' Acts as hold; all other behavior thereafter is treated the same as a POT phone.

The '**' must be consecutively received by the IP Office within one second to be treated as the'**' sequence. Two '*' tones further apart will be ignored.

The user pressing '**' will be able to perform supervised and un-supervised transfer, shuttle (switch between held calls), and conference (Conference add and transfer to a meet-me conference).

When the user is making an enquiry call the call will present their name/number as if they were calling from the 'master' internal extension

Note: *External calls requiring breaking out across SCN systems is not supported through the Mobility Enhancement.*

3.2 Static NAT

This new feature is designed primarily for dial-up diagnostic requirements and maintenance abilities. For example this could be utilized to give access to VoiceMail Pro servers.

Static NAT allows the following applications though the Static NAT translations:

- PC-Anywhere
- Windows Terminal Server
- Ping and Tracert
- Manager
- IP Office "Sysmon"
- Upgrade Wizard
- SSA
- VM Pro Client

IP Office Firewall settings now support Static NAT, set with the ability to 'pair' external to internal IP addressing to which 64 pairs can be created within programming via the Manager.

The IP Address for any received incoming packets from outside (external) will be checked against the External column list. If there is a match the target address in the IP header will be changed to the corresponding Internal address; no other data will be modified (the CRC will be updated) and the packet will be passed to the IP route engine to forward it out of the appropriate interface. If there is no match, the packet will be discarded.

Packets received on the 'Internal' interface will be routed by the IP Routing Table and through the firewall, where the source address will be checked against the internal column list. If there is a match the source address will be changed to the corresponding External address. Operation will be protocol agnostic: only the IP source/destination address will be changed. There is no attempt to handle higher level protocols.

3.3 System Date and Time

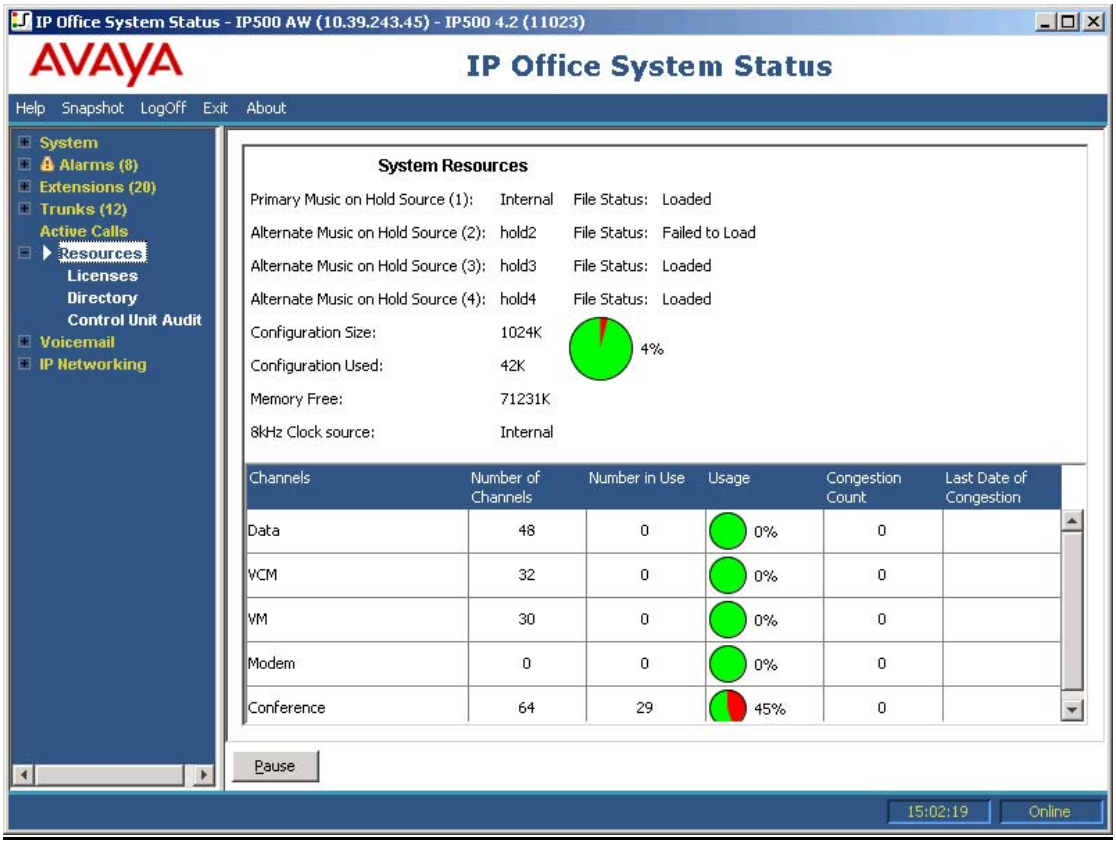
IP Office 4.2 introduces date and time display on telephone types 2410, 2420, 5410 and 5420.

Release 4.1 introduced the ability to set system date and time using the 'Admin 2' button. The ability to change the time via the short code *9000*hold has subsequently been removed.

3.4 System Status Application Enhancements

IP Office Release 4.2 delivers the following enhancements to the System Status Application when connecting to IP Office core 4.2:

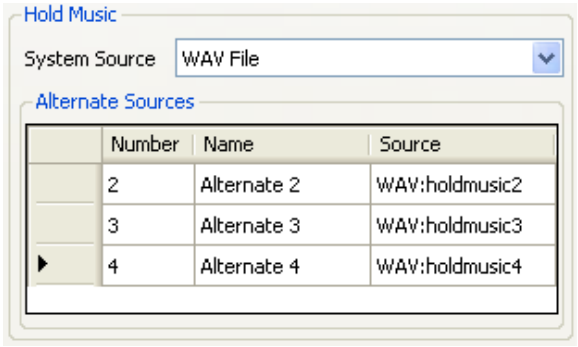
Description
Small Community Networking Duplicate Number Alarm
VoiceMail Summary/Detail information
Directory including Users on SCN
IP Route and Service status
No Routing for Line
Licensing fail and VM Storage alarms
Configuration Audit Trail
Real Time VM port status
Tunnel Status
Real Time Configuration Alarms
Mailbox Real Time status
Feature Key and License Status
Resources & MOH Status



3.5 Four Sources of Music on Hold

IP Office 4.2 supports Four Music on Hold settings. These settings are:

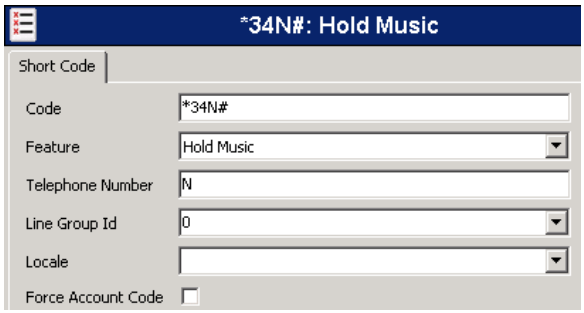
- External
- WAV file
- Tone



When the WAV file is selected but cannot be loaded, Tone will be used. This is the 'System' Source as it is numbered 1.

Note: *- This new feature requires 1 x data channel per connection for MoH.*

IP Office 4.2 offers a new Short code facility (see below) where N represents the MOH number (1, 2, 3 or 4) that can play the MOH file once uploaded.



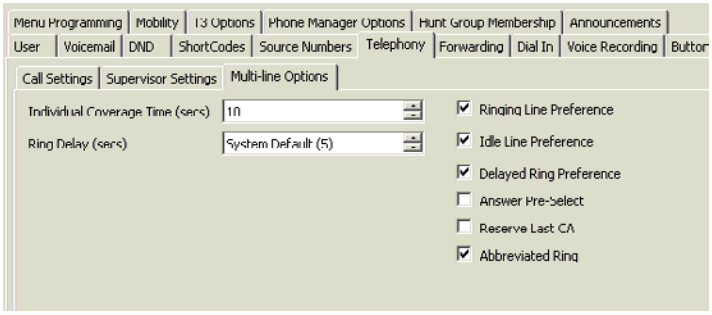
On IP Office 406v2 and 412 systems the four sources have a maximum of 30 seconds per MOH file. The IP Office 500 offers four sources with up to 90 seconds per file. The Incoming Call Route or Groups can now have specific MOH allocation set through Manager programming.

Multiple MOH sources are supported on Small Community Networks. Calls carry their MOH source attribute but it will apply to whichever system puts the call on hold. Therefore it is advised that the same MOH files be loaded in the same order across SCN.

Note: *This new feature will not be available on the IP Office Small Office Edition.*

3.6 Manager Enhancements

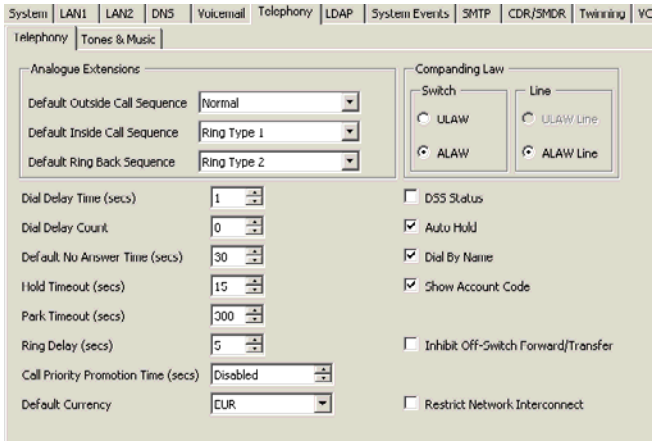
User ->Telephony: There are several Multi Line options that are now individually split into their relevant operational tabs.



Manager now displays the System/Default value to a user when programming has not individually specified the “No Answer Time” and “Ring Delay”

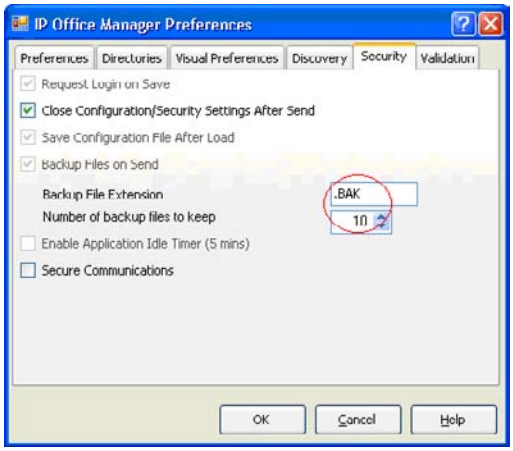
System -> System: DSS Status and Beep on Listen are now relocated within the System -> Telephony Tab.

System -> Telephony: Conferencing tones Check Box has been replaced with two options; Entry&Exit tones/Repeating Tone now found in the Tones and Music options under System/Telephony.



Setting Limited .BAK Files

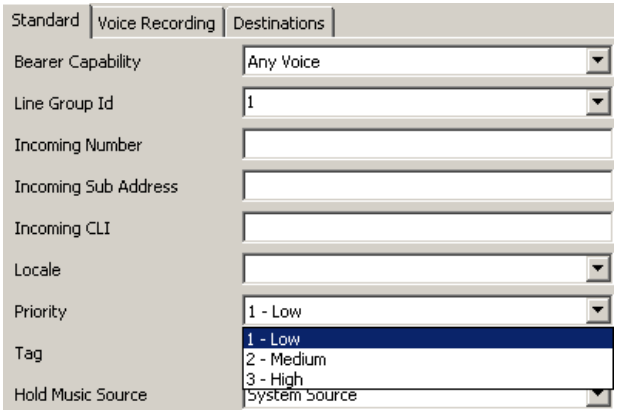
IP Office 4.2 Manager can now limit the number of BAK files to keep.



3.7 Priority Enhancements

Manager Priority Changes to Incoming Call Route

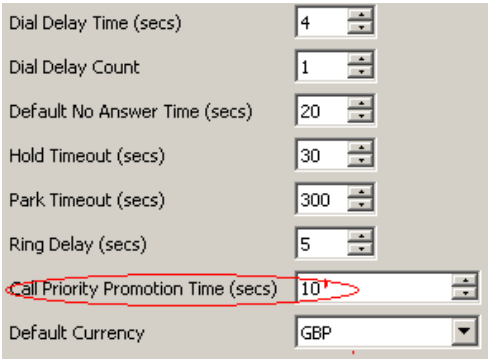
The Incoming Call Route "Priority" has been modified from a simple 1, 2, and 3 to now display Low, Medium and High against the Priority number, making easier understanding of the priority value.



Priority Promotional Timer

Priority can be set on the Incoming Call Route. The priority is used in current hunt group behaviour so that calls with a higher priority number go to the front of the queue. IP Office 4.2 introduces priority override features.

A new setting on the System/Telephony tab called Call Priority Promotion Timer (sec), with the default time set to “Off”. This can be configured to a Minimum = 10, Maximum = 9999 seconds.



When IP Office 4.2 has calls queuing against a Hunt Group, it will compare the queuing time against its Call Priority Promotion Time setting. If the call has been queuing for longer than this timer the call priority will be increased one step. The call priority is permanently increased and will not be reset to the Incoming Call Route value, for example, on transfer.

If the call is still in the queue for a second period of the promotion timer it will have its priority increased again. Calls will not have their priority increased above the maximum value of 3.

Note that the queue time associated with a call is not reset when its priority is increased. This means that a call will jump ahead of other calls of the same priority if the newly promoted call has a longer time in queue. Due to this, the use of call priority promotion is not recommended on systems where VoiceMail Pro is being used to provide estimated time to answer and position in queue information to the callers.

Shortcode Priority Character 'p'

The priority of a call is normally assigned by the Incoming Call Route or else is 1-Low for all other calls. Dial Extn short codes can use p(x) as part of the Telephone Number to change the priority of a call. Allowable values for x are 1, 2 or 3 for low, medium or high priority respectively.

- Code: *56N#, Telephone Number: p(1)N, Feature: DialExtn
- Code: *56N#, Telephone Number: p(2)N, Feature: DialExtn
- Code: *56N#, Telephone Number: p(3)N, Feature: DialExtn

3.8 ETSI-CHI

ETSI-CHI (European Telecommunications Standards Institute – Call Handling Initiator) line subtype is now available for the following PRI types:

- PRI 30
- PRI 24
- E1R2
- PRI Universal (IP 500 only)

When ETSI-CHI is selected the channel allocation can either run from 1 to 30 or 30 to 1:

- Channel allocation (1-30, 30-1)

Further per-channel configuration:

- Incoming Line Group ID
- Outgoing Line Group ID
- Channel Name
- In/Out of Service
- Direction
- Bearer (Voice, Data, Any)

3.9 S0/T0 Interfaces for IP 500 BRI

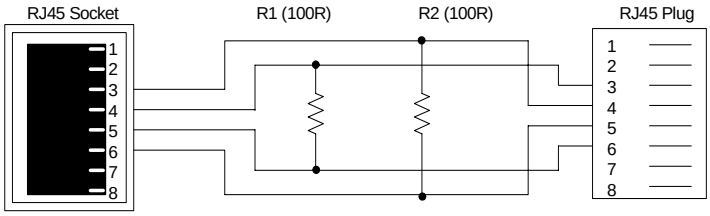
IP Office 4.2 allows circuits on the IP 500 Quad BRI trunk interface (daughter card) to operate as S0 interfaces in the same way as ports on the S08 Expansion Module. The devices will provide clocking and will run the ETSI Protocol as network rather than TE equipment.

There is no hardware modification to the card and as a result there will be no 'signaling power'.

IP Office 4.2 Manager has a new option within the Line form to select T or S interface; default being T.

When set as an S interface the settings for the Line will be exactly the same as for a circuit on a S08 Expansion Module, plus the S/T option.

S Bus operation will require terminating resistors and a reversal of wiring to the port, needing to swap the pair on 3/6 with the 4/5 pair.



BRI S0 Convectors can be ordered using the following material code.

Material Code	Description
700458649	BRI S0 Converter

3.10 Restrict Network Interconnect

This feature is designed for certain locales where the national carriers impose restrictions on carrying external traffic over internal networks. When enabled calls cannot be connected between private and public trunk interface groups. The default setting for this feature is off.

Trunk Type	Default Setting
Analogue GS/LS	Public
Digital trunks set as QSIG	Private
Digital Trunks not set as QSIG	Public
H.323 IP Trunks	Private
SES IP Trunk	Private
SIP Trunks	Public
IP DECT trunk	N/A

Note: *Restrict Network Interconnect settings cannot be applied to IP DECT Trunks*.

When enabled the IP Office will check every call scenario to ensure that if there is more than one trunk involved in a call they must both be of the same class (Public/Private), otherwise the action will fail. The failure mode will be dependant on the scenario and will be compatible with the existing restriction/error checking for the scenarios, for example:

- Forwarding and Mobile Twinning. The call will be processed as if the Forwarding/Twinning was not enabled.
- Conference, call rejected or party left on hold.
- Call Pick-Up for a remote user receiving an external call will fail.

Note: *If Restrict Network Interconnect is not enabled there will be no change to the current IP Office 4.1 core behaviour.*

3.11 T3 Telephone Enhancements

The following enhancements are available through IP Office 4.2 for all variants of Avaya T3 telephones:

- Display Hunt Group membership status
- Edit T3 private phone directory
- Enhance T3 display “follow Me” target
- Visual Voice and Conferencing
- Program Function and Soft keys
- Night Service Button
- VoiceMail and VoiceMail on Toggle Button
- Line Appearance keys
- Transfer to VM
- Button Programming

Line Appearance Buttons

Each T3 button can be used for Line Appearance: softkeys, function keys and buttons of T3 DSS modules. Below is an example for Line 601:

Line Status	Display on T3 soft key	Display with T3 LED
Idle	L601	off
Idle Selected	✓601	off
Alerting	L601 (fast alternating with bell symbol)	fast flashing
Alerting Selected	✓601 (fast alternating with bell symbol)	fast flashing
In Use Elsewhere	L601	on
In Use Here	✓601	on
On Hold Here	L601 (slowly flashing)	slowly flashing
On Hold Elsewhere	L601 (slowly flashing)	slowly flashing
Inaccessible	-601	off

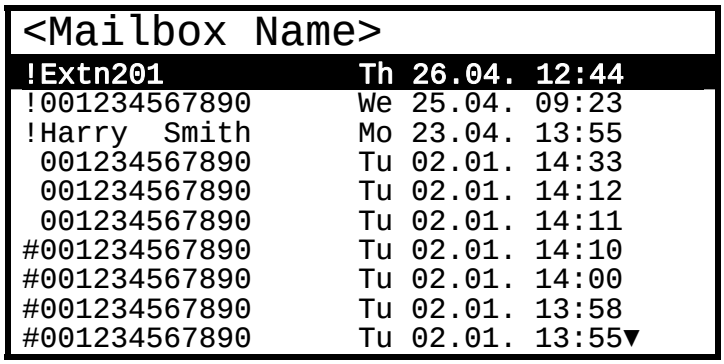
Note: *Delayed ringing of Line Appearances is not supported on T3 telephones, only immediate or No Ring.*

Visual Voice

Visual Voice options can be found when scrolling from the T3 Menu -> Settings -> VoiceMail:

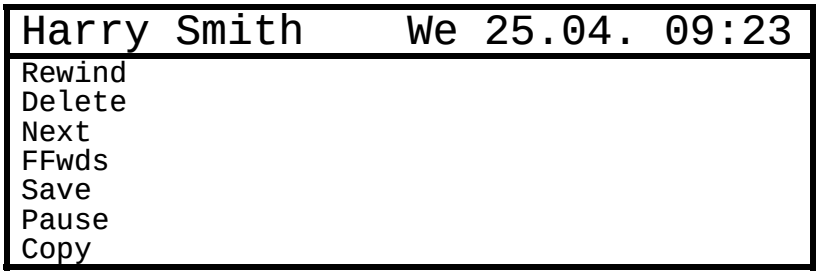
Option	Visual Voice
VoiceMail (xxx)	Y
Listen	Y
Message	Y
Greeting	Y
Password	Y
Email	Y

To listen to new messages the T3 will show messages in the format below:



- **!** indicates new messages
- "space" indicates old messages
- # indicates saved messages

Messages that have been listened to can have the following actions performed upon them:



Hunt Group Service

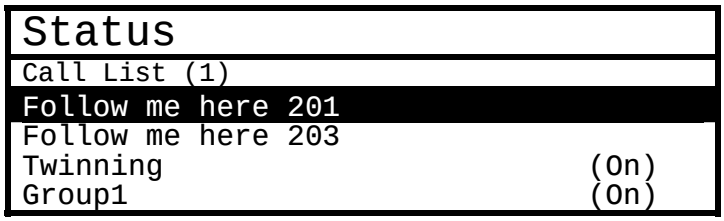
In addition to changing the status of the individual hunt groups displayed via Menu -> Group State, the T3 menu also displays option to change the status of all the groups: All in service, All night service and All out service.

Hunt Group Membership Status

The selected hunt groups and the user's current membership status are displayed on the T3 phones status display. This display can be used to change the status:

Follow Me

When telephone A sets "follow me" to telephone B, telephone B displays "follow me here extn_A" on the status menu:



3.12 Embedded VoiceMail to E-Mail

IP Office 4.2 supports the ability to send an e-mail containing notification or the complete VoiceMail message from the Embedded VoiceMail when using IP 406v2 and IP 500 units. The IP Office Manager SMTP options are now programmable within a unique SMTP Tab.

Note: *This feature is not supported on Small Office Edition.*

Where the User programmable options are selected to either move or copy messages to e-mail, the Embedded VoiceMail message is converted to the same WAV format as supported by VoiceMail Pro/Lite (16bit Linear PCM, Mono, 8 kHz sample rate).

Setting this feature utilizes the existing User VoiceMail features announce, copy or move to e-mail, e-mail address.

Visual Voice allows these options to be changed when Embedded VoiceMail is configured, the user has an e-mail address configured and the system SMTP settings have been set.

The Embedded TUI is enhanced to add the e-mail options; this will remain compatible with the VoiceMail Lite/Pro in IP Office mode. The TUI options are:

- "To direct all messages to email press *01"
- "To send email notifications press *02",
- "To turn off email functions press *03"

The un-voiced *00 option to enable copying VoiceMail to e-mail has also be added.

When a VoiceMail is left for a User, an alert will be sent via SMTP to the corresponding email address configured for that user. If a ".wav" file has been sent, it will be viewed as an attachment which can be played using the PCs audio player.

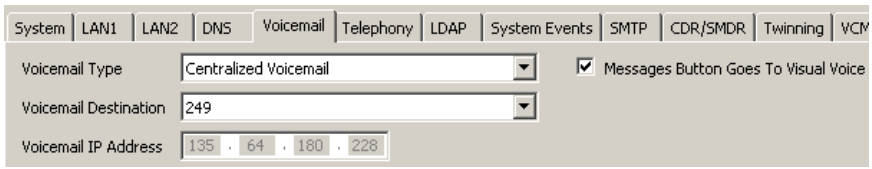
Note: *SMTP must be enabled in the Email Server for this enhancement to work*.

Using the SysMon -> Call -> EmbeddedVoiceMail -> Email filter, you can track the status of the message sent over email.

```
191466mS PRN: LVM Flash A: WriteItemAnySector:   exitting after 170 ms\par
   192575mS PRN: LVM Flash A: AppendFlashItem:   File: 31021   nBodyLen: 10244   file: 31021\par
   193855mS PRN: LVM Flash A: AppendFlashItem:   File: 31021   nBodyLen: 10244   file: 31021\par
   195135mS PRN: LVM Flash A: AppendFlashItem:   File: 31021   nBodyLen: 10244   file: 31021\par
   195374mS PRN: LVM Flash A: AppendFlashItem:   exitting after 49 ms\par
\cf1    197192mS LVM EMAIL: Sending packet 1500 (1)\par
   197193mS LVM EMAIL: Sending packet 1500 (2)\par
   197206mS LVM EMAIL: Sending packet 1500 (25)\par
   197206mS LVM EMAIL: SMTPServer snoozing...\par
   197218mS LVM EMAIL: SMTPServer::BufferSent msg_size(47422) buffer_count(25) in use(24)\par
206113mS LVM EMAIL: LvmEmailManager::MsgSent\par
   206113mS LVM EMAIL: LvmEmailManager::MsgSent: More messages to send. Wake up the task.\par
   206114mS LVM EMAIL: SMTPServer snoozing...\par
   206116mS LVM EMAIL: LvmEmailManager woken up...\par
   206116mS LVM EMAIL: LvmEmailManager Email for deletion\par
   206116mS LVM EMAIL: LvmEmailManager marking msg for deletion\par
\cf0    206116mS PRN: LVMailFlashMan::UpdateMsgWaitLamp mailbox(Extn279) calling party(201) ctype(233)\par
   206116mS PRN: LVMailFlashMan::UpdateMsgWaitLamp mailbox(Extn279) calling party(202) ctype(233)\par
   206117mS PRN: LVM Notify:  Extn279  New: 7 Old: 0 Saved: 0\par
   206118mS PRN: LVM Flash A: DiscardFlashItem:   File: 31021 \par
\cf1    206127mS LVM EMAIL: LvmEmailManager snoozing...\par
```

3.13 Telephone 'Messages' button goes to Visual Voice

A new manager configuration option allows the dedicated messages button on Avaya 24/54xx and IP 1600 series telephones to initiate Visual Voice. This configurable option will free the button programming currently required for Visual Voice.



3.14 Reversal of Operation 'Dialled Digits' From 4.0/4.1

IP Office Release 4.0/4.1 changed the feature phone display for outgoing calls from the user dialled digits to the digits sent to line.

IP Office 4.2 reverses this change and the display for outbound external calls from the IP Office will be the user dialled digits. Where the call is made using the directory feature the number from the directory will be displayed as if the user dialled the digits.

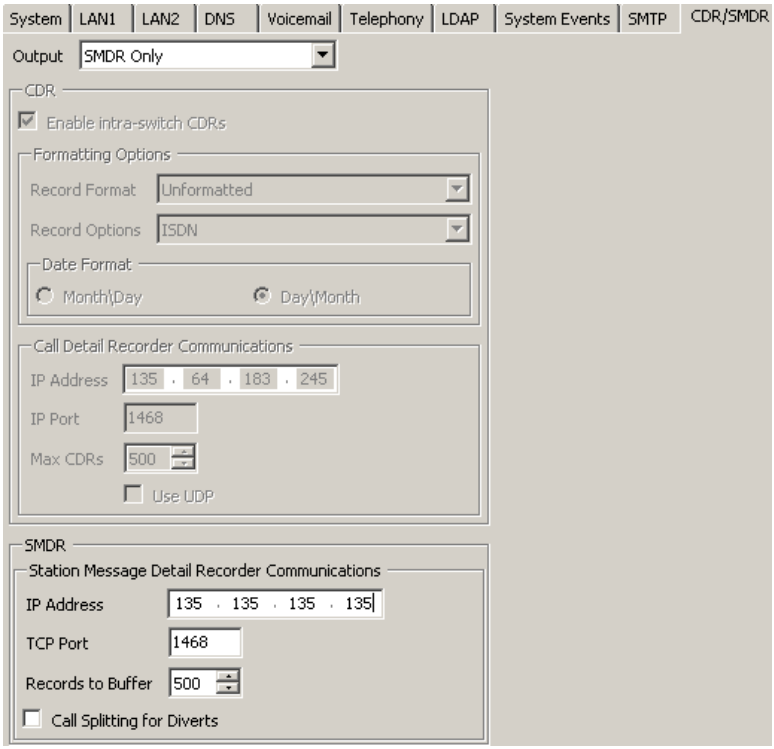
The user dialled number will go with the call and be displayed if the call is held/retrieved, transferred, parked and un-parked, or otherwise manipulated.

3.15 SMDR Output from IP Office Core

IP Office 4.2 can now provide SMDR call logging information directly from the IP Office. The existing CDR tab has been renamed CDR/SMDR. It is now possible to select:

- No Output
- CDR
- SMDR

Note: *It is not possible to output both SMDR and CDR simultaneously*.



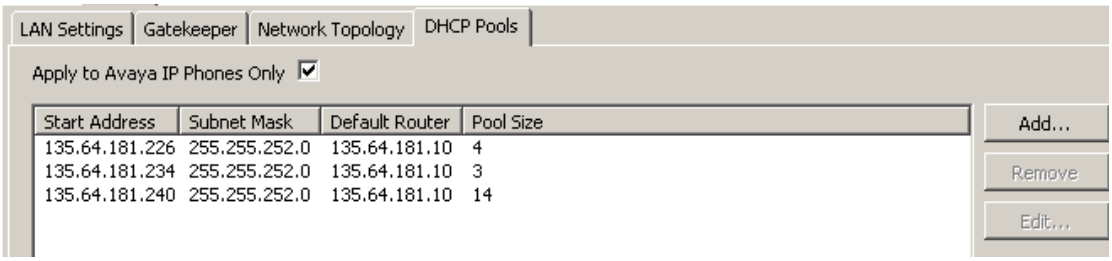
Note: *Only 1 session of SMDR output from IP Office core is supported.*

3.16 Voice over IP Enhancements

Embedded Server Changes (IP 500 Only)

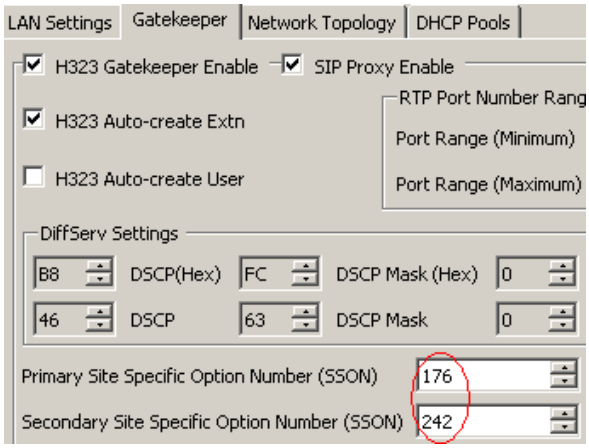
DHCP is the recommended configuration mechanism for Avaya VoIP telephones. The following changes to IP Office 4.2 embedded DCHP server is intended to assist in the installation of Avaya 46xx/56xx and IP 1600 series telephones with minimal user intervention and to allow greater configurability for more complex network environments. These requirements will also be beneficial for the deployment of Avaya T3 IP and Avaya IP DECT.

The embedded DHCP server has been enhanced to support 8 non-contiguous pools of address ranges, each fully configurable into different subnets. The DHCP server can be configured to only serve Avaya VoIP telephone clients. It also offers consistent IP addresses to clients after reboots.



The total number of clients that can be reliably served by all embedded servers (DHCP, TFTP/HTTP, RAS/H323) is 50 – this is an increase from the 5 clients currently supported. If more than 50 DHCP clients are to be supported, then a suitable external DHCP server should be used.

The SSON default settings have been enhanced by a new Secondary Site Specific Option Number set to default 242, required by the IP 1600 series.

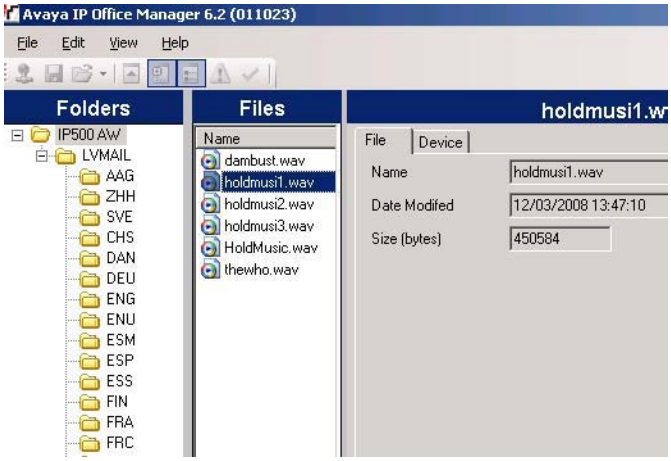


User and Extension Auto Creation Enhancements

Auto Create User and Extension settings have been made consistent across all IP telephone types, including 3rd Party Open H323, Avaya IP 46xx/56xx, 16xx IP, T3 IP and IP DECT telephones. The IP DECT Line Gateway tab now includes an Auto-Create User option (default = enabled).

File Management (IP 500 Only)

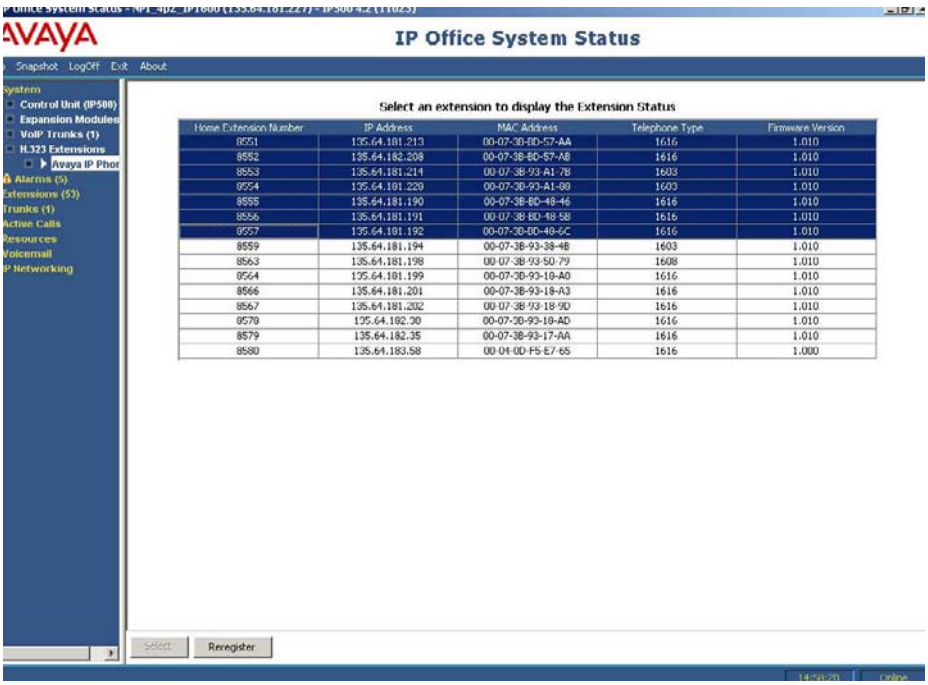
In order to improve and manage files served by the embedded TFTP server, the IP Office 4.2 Manager application provides a new interface which lists the server's directory content, and can manage upload, download and deletion of files from the Compact Flash card.



The underlying mechanism for file management communication between the IP Office 4.2 and the Manager application remains TFTP.

SSA IP Phone Forced Re-Registration

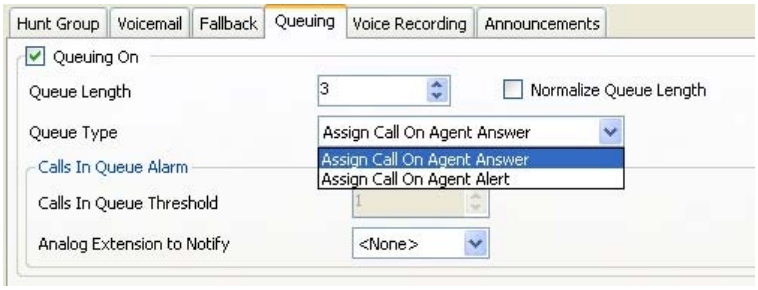
This permits the remote re-registration of Avaya IP telephones for firmware upgrade and maintenance purposes, SSA has been upgraded to allow the selective forced re-registration of individual and groups of telephones.



The SSA supports force re-registration, allowing re-registering of 50 IP telephones maximum (in any one time) on 412, 406v2 and IP 500 and 12 on SOE.

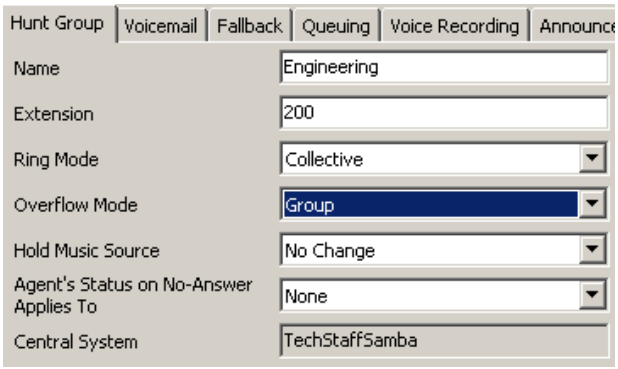
3.17 Hunt Group Queuing Option

The change to strict Queuing in Release 4.0 has had some negative implications in certain applications (Phone manager, SoftConsole, Fax Servers and some 3rd party CTI Applications). To provide a viable solution to these problems a new field has been added to the Hunt Group/Queue tab:



- Assign Call on Agent Answer is Release 4.x strict Queuing
- Assign Call on Agent Alert is Release 3.2 behavior

Another 4.0 change that has caused negative feedback from the field is Overflow behaviour. In Release 4.0 the whole Hunt Group goes into overflow, meaning that new calls will ring users in the overflow group, rather than queuing for users in the main hunt group for the overflow time as in Release 3.2.



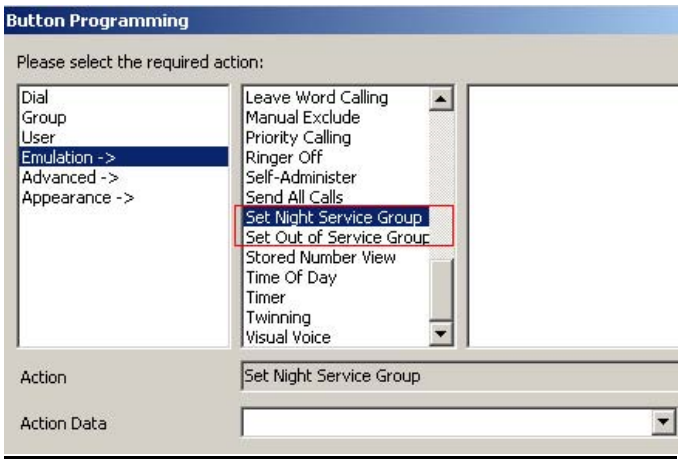
A new Overflow Mode configuration option has been added to select the overflow mode for the Hunt Group:

- "Group" mode being the 4.x behaviour
- "Call" mode being the 3.2 behaviour.

3.18 Set Hunt Group Fall Back

IP Office 4.2 has been enhanced to allow a user to set the group fallback destinations. These enhancements benefits supervisors where this flexibility is required. The Fallback destinations for Night Service and Out of Service are configurable from Feature phones, including the option to set no destination and can be set from the following feature phones:

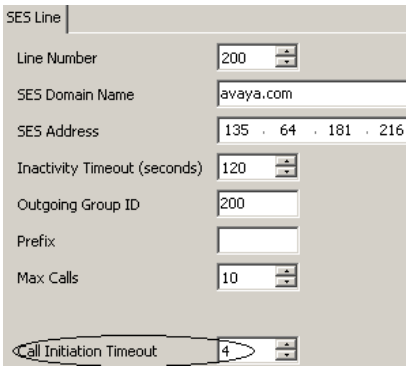
- 2410/5410
- 2420/5420
- 4610/5610
- 4620/4621/4625/5620/5621
- T3 Comfort
- T3 Classic
- 1608
- 1616

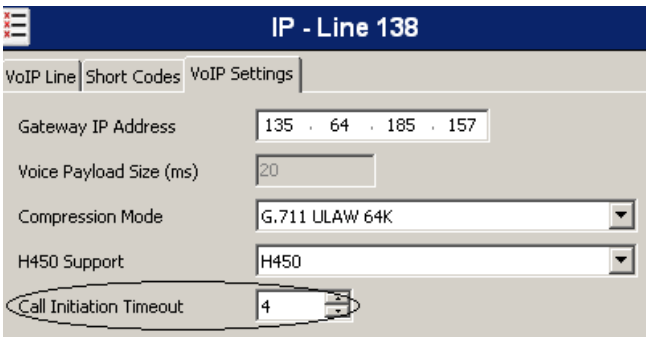


Setting a User's button programming to utilize these options will allow a hunt group to have the fallback destination changed and set to Out of Service or Night Service. Toggling the HGOS – or + state will set the group back In-Service. This new feature also works to groups across SCN.

3.19 Call Initiation Timeout

Due to the nature of IP telephony signalling, a system set to route calls over SIP and then utilise ARS to route over conventional trunks would only go to the second route when the SIP trunk was full and not on failure of the communication to the SIP server.





Release 4.2 introduces a new timer to allow detection of a failed server allowing fallback to alternate routes. A timeout on the SIP and SES line form (configurable per SIP or SES trunk) which will determine how long the IP Office will wait for a response to message initiating a call (INVITE) before going to the next route. The default timeout for SIP/SES lines is 4 seconds (Minimum is 1 second and maximum is 99 seconds)

This enhancement is also available to IP Trunk Line forms, configurable per H.323 trunk. Operating in a similar fashion the default timeout for H.323 lines is also set to 4 seconds. (Minimum is 1 second and maximum is 99 seconds)

3.20 User Logout Enhancement

In previous releases a User may only Logout if they have a login code. In IP Office 4.2 a User may logout without a login code when the User number is not the same as the base extension of the phone that they are on, or has no corresponding base extension number. (Provided they do not have force login set).

3.21 Base Extension Merge

Moves and changes to a configuration are simplified when using the 4.2 Manager application; changes to base extension numbers can now be merged on IP Office 4.2 Systems.

3.22 User BLF Enhancements

Historically IP Office User BLF indications have represented the state of the extension that the User is logged on at. Twinning modified this to add the state of the twinned device.

IP Office 4.2 redefines User BLF indications to represent the state of the user as understood by the system.

If a user is logged-on to an extension (including Phone manager Telecommuter) IP Office 4.2 will show the same states as previous releases, including Twinning interactions.

A user logged-off, with Mobile features enabled, will show the state as understood by IP Office:

- Calls alerting.
- Calls connected made from the associated one-X client.

A logged out user without Mobile Features will show as DND unless they have Forward Unconditional enabled in which case they will show as idle, including when there is a call routed to them through that forward.

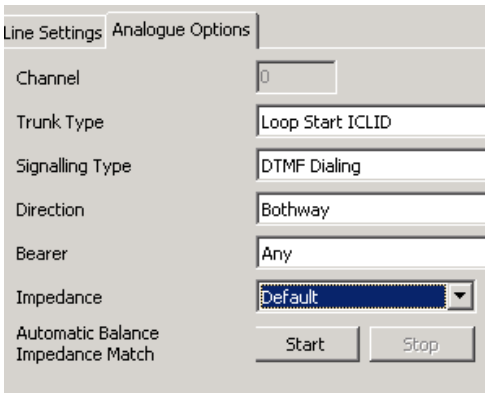
DND when set will show as Busy on BLF screen updates via Phone Manager and Softconsole.

When a user goes on DND through Mobile Call Control or one-X Mobile Client, the master will show as DND on the BLF updates.

3.23 USA Only – Automatic Balance Impedance Match

For IP500 systems running IP Office 4.2

These controls can be used to test the impedance of a line and to then display the best match resulting from the test. Testing should be performed with the line connected but the IP Office system otherwise idle.



The IP Office will then send a series of signals to the line and monitor the response, repeating this at each possible impedance setting. Testing can be stopped at any time by clicking Stop. When testing is complete, Manager will display the best match and ask whether that match should be used for the line. If *Yes* is selected, Manager will also ask whether the match should be applied to all other analogue lines provided by the same analogue trunk card or module.

For IP500 systems running IP Office 4.2, the range of selectable analogue impedance settings has been expanded. The additional options are 600+2150nF, 600, 900+2150nF, 900, 220+820||115nF, 370+620||310nF, 270+750||250nF, 320+1050||230nF, 350+1000||210nF, 800+100||210nF. These settings are also used by the Automatic Balance Impedance Matching option.

Quiet Line

This setting may be required to compensate for signal loss on long lines. Please note that this enhancement is IP 500 only set to American Locale and the setting by default is Off.

3.24 Partial Rerouting Enhancement

Force Number Plan to ISDN

This option is only configurable when Support Partial Rerouting is also enabled. When selected, the plan/type parameter for Partial Rerouting is changed from Unknown/Unknown to ISDN/Unknown. For IP Office 4.0 and 4.1 the plan/type is fixed as Unknown/Unknown. The use of this setting will depend on line provider requirements for Partial Rerouting.

3.25 New IP Office Locales

- **Turkey** (Turkish) Locale

This locale provides European Trunk settings and US type tones with UK English displays and Prompts. VoiceMail Pro will give US English.

- **Switzerland** (Italian) Locale
- **Switzerland** (German) Locale

These have the same tone definitions as the existing Switzerland Locale, but have German and Italian Phone display language.

Previous Switzerland Locale is renamed Switzerland (French).

3.26 Embedded VoiceMail Messaging - Cantonese

Embedded VoiceMail now supports Cantonese prompts. Locale Hong Kong (Cantonese) prompts the system to now use Cantonese prompts. Previously this locale used English prompts.

3.27 VoiceMail Collect Shortcode

When creating a new VoiceMail Collect shortcode or editing the telephone number field of an existing VoiceMail Collect shortcode, the manager now forces the Telephone Number setting into " " quotes, reducing the possibility of programming errors when interoperating with a specific start point or module programmed within the VoiceMail Pro.

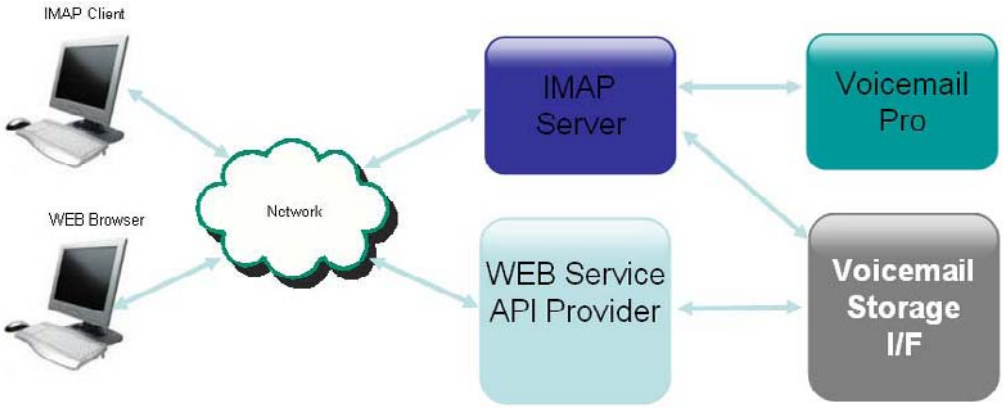
4 VoiceMail Pro Enhancements

4.1 Unified Messaging Server (UMS)

VoiceMail Pro 4.2 replaces the existing IMS with the Unified Messaging Server (UMS). IMS cannot operate alongside UMS. When the UMS license is 'Valid' the IMS operation will cease.

VoiceMail Pro 4.2 introduces a Web Browser based connection that will allow IP Office licensed users to connect to a URL from where they can be authenticated, prior to gaining access to their voicemails.

With a view to providing a solution that does not require the installation of client side components, VoiceMail Pro 4.2 provides an IMAP Server to which Microsoft Outlook can connect**.**



VoiceMail Pro Web Services, IMAP Server and IMAP Client

A User can access their mailbox by way of a published URL, to which they can login to their mailbox. Once authenticated, a User can then access VoiceMail.

This is a low cost installation and maintenance solution which provides the ability for users to access their VoiceMails via a browser without the need to install client side applications, providing an 'anytime access' feature crucial for today's modern business needs.

4.2 VoiceMail Pro UMS License

The IP Office core requires a new UMS License that licenses the number of users that will be allowed Web Access.

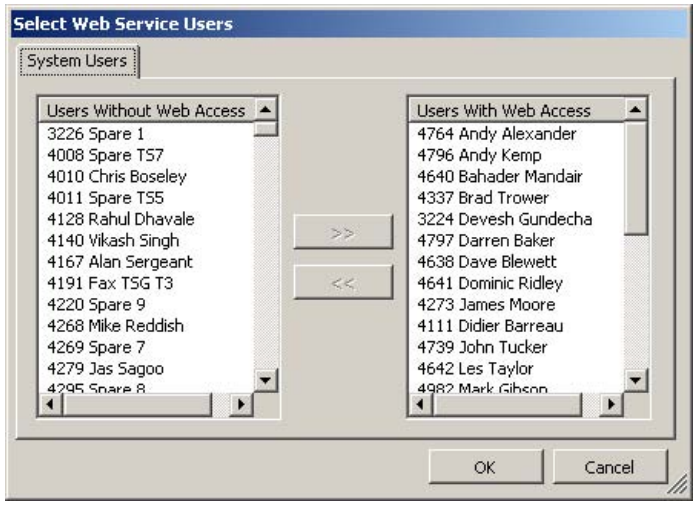
A UMS license is required per system; therefore in a Centralized VoiceMail SCN environment the IP Office configuration at the remote sites must also have a UMS license as well as the central system.

UMS Web Licenses can be ordered using the following code:

Material Code	Description
217880	IPO LIC VMPRO UMS 1 USER
217881	IPO LIC VMPRO UMS 5 USER
217882	IPO LIC VMPRO UMS 10 USER
217883	IPO LIC VMPRO UMS 20 USER
217884	IPO LIC VMPRO UMS 50 USER
217890	IPO TRIAL UMS 10 USER

4.3 IP Office Core UMS Setup

The IP Office Manager configures the UMS options (IMAP and Web Integration) available to Users. The Manager also ensures the selected number of users does not exceed the UMS license. The licenses will show the number of licenses configured and number available. Double Clicking on the Per Seat based license will show a list of users that have been provided the licensed service. The List view has the ability for users to be added or removed from the list.



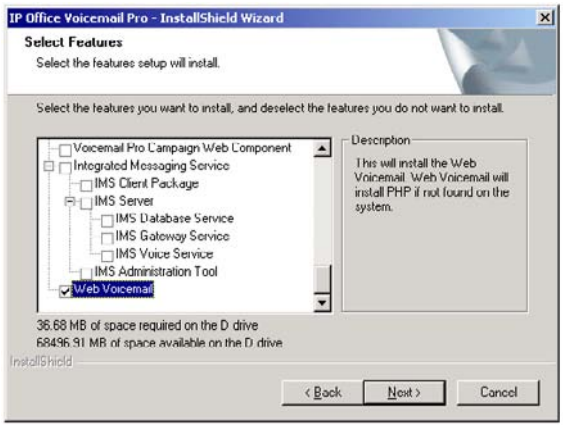
4.4 Browser Support - UMS Web Enhancements

The UMS Web service supports the ability for the following Internet Browsers to connect to the service for VoiceMail delivery:

- Internet Explorer V6, Service Pack 1 and V7
- Mozilla Firefox V2.0.0.2
- Opera V9.10

4.5 UMS Installation

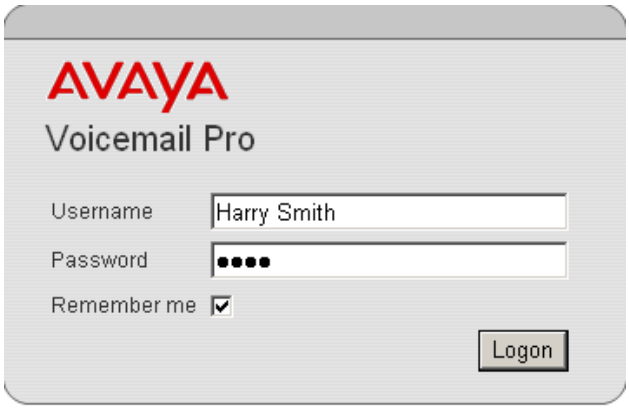
VoiceMail Pro by default will install the IMAP Server components. The Web VoiceMail must be selected from the install wizard. Selecting Web Voicemail will install PHP components allowing the VoiceMail Pro database to be read.



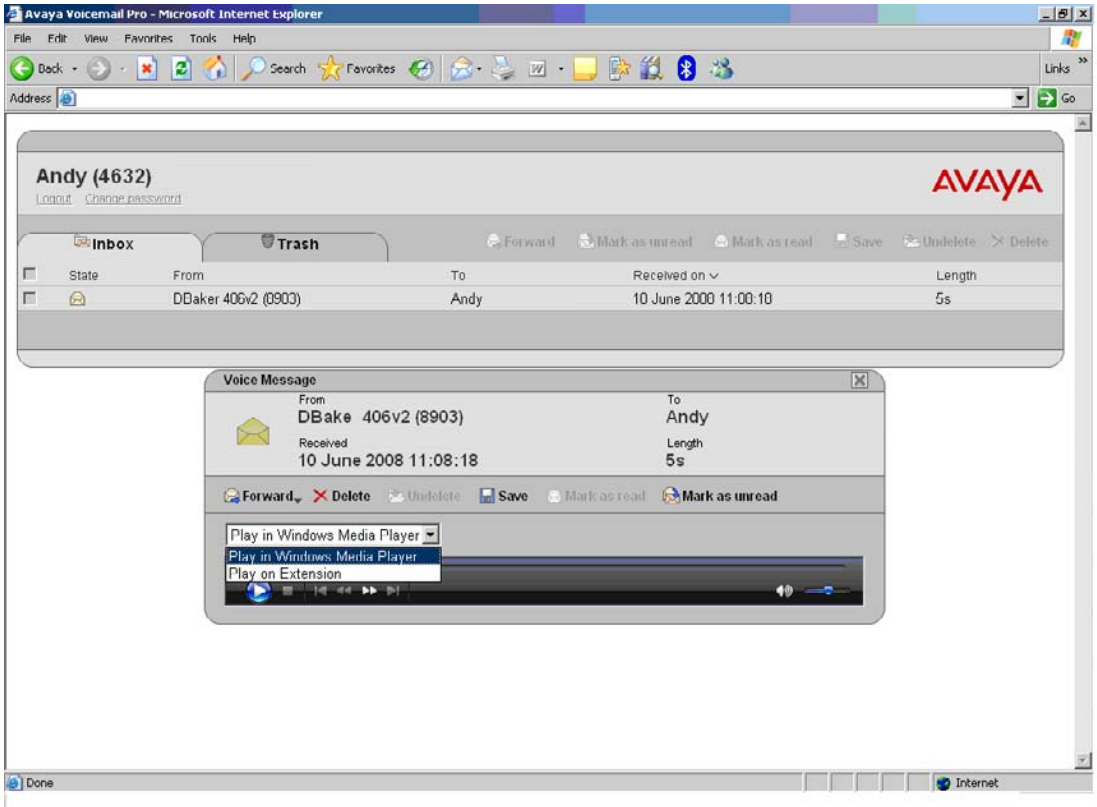
Note: *Microsoft IIS v6 (minimum) must be installed prior to the VoiceMail Pro installation allowing the Web Voicemail to installed. Please refer to the VoiceMail Pro 4.2 Installation Guide for further information.*

4.6 UMS Login

The UMS Web service presents the user with a login screen that requests a username and password. This is the User name taken from the IP Office User configuration and the associated VoiceMail password.



When logged in correctly the UMS Web client will offer the ability to select and listen to messages through the user's telephone or via multi media.



4.7 UMS Incorrect Login

If the User Name and the Password is correct but the user on the IP Office system is not UMS licensed, then that user will be informed that they are not licensed or authorized to use the service:

> Authentication Failed: Your session has been rejected by the voicemail server.

If the User Name or Password is incorrect, the user will be informed:

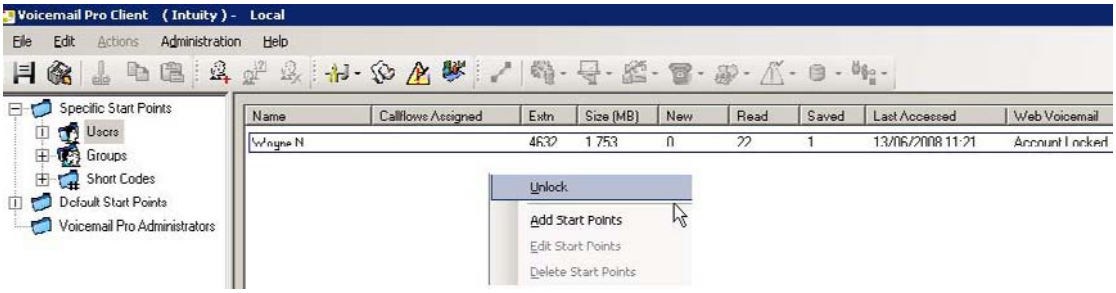
> Incorrect login, please try again.

If the User Name or Password is entered incorrectly 3 times the user is locked out from the VoiceMail server:

> Incorrect login, please try again. Please note, your account will be locked if you fail to login 3 times in a row.

> Third incorrect login. The account has been locked.

The VoiceMail Pro Administrator can unlock the user by right clicking on the account and selecting Unlock.



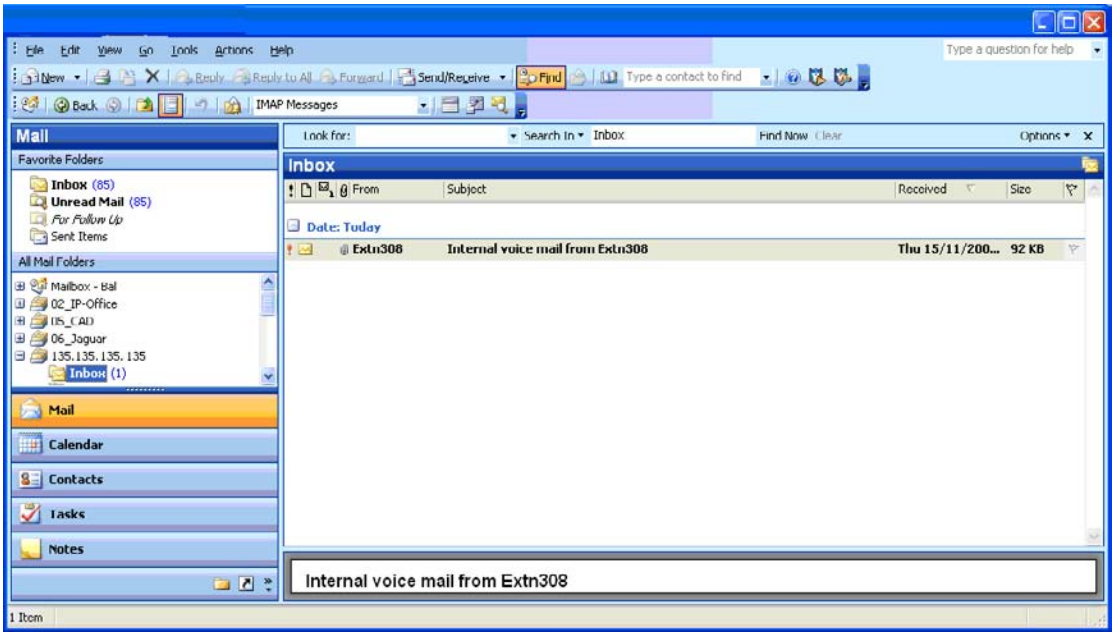
When selecting to unlock a User, a new window will prompt to enter a new password. When done the changes must be saved on the VoiceMail Pro Client.

4.8 Outlook IMAP Client

VoiceMail Pro 4.2 provides an IMAP server interface allowing the Microsoft Outlook IMAP client to connect and integrate to the VoiceMail Pro mail store without the need to distribute any Client Side software.

VoiceMails stored in the VoiceMail Pro Server will be presented to Outlook in the Selected Servers 'Inbox' folder

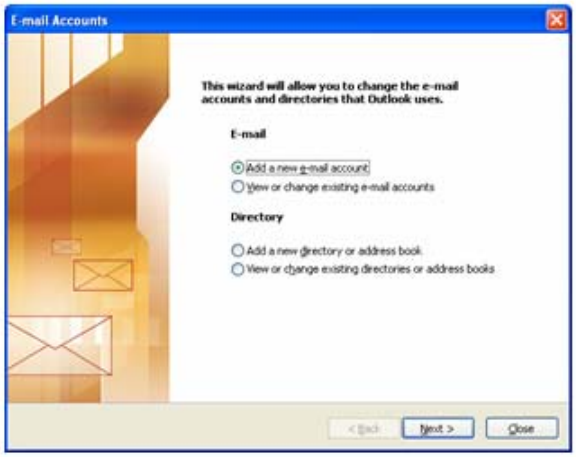
***TIP** - Outlook Rules can be manipulated to copy the IMAP Client Inbox to the common Inbox if required.*



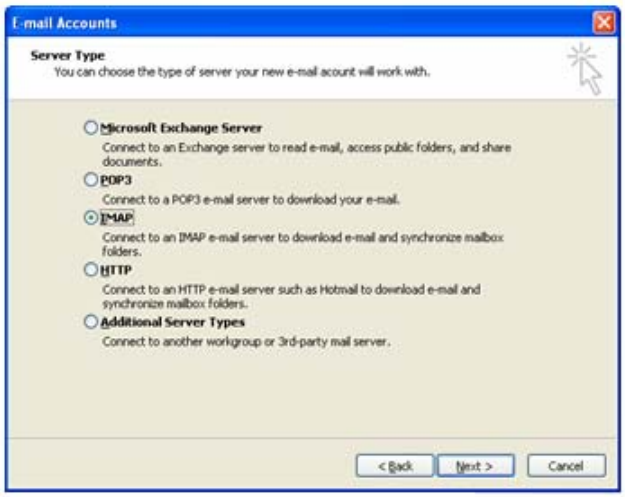
- New Messages will be presented with a closed envelope.
- Priority Messages will be presented with a leading exclamation mark.
- Read Messages will be presented with an open envelope

4.9 Configuring IMAP Client Connections

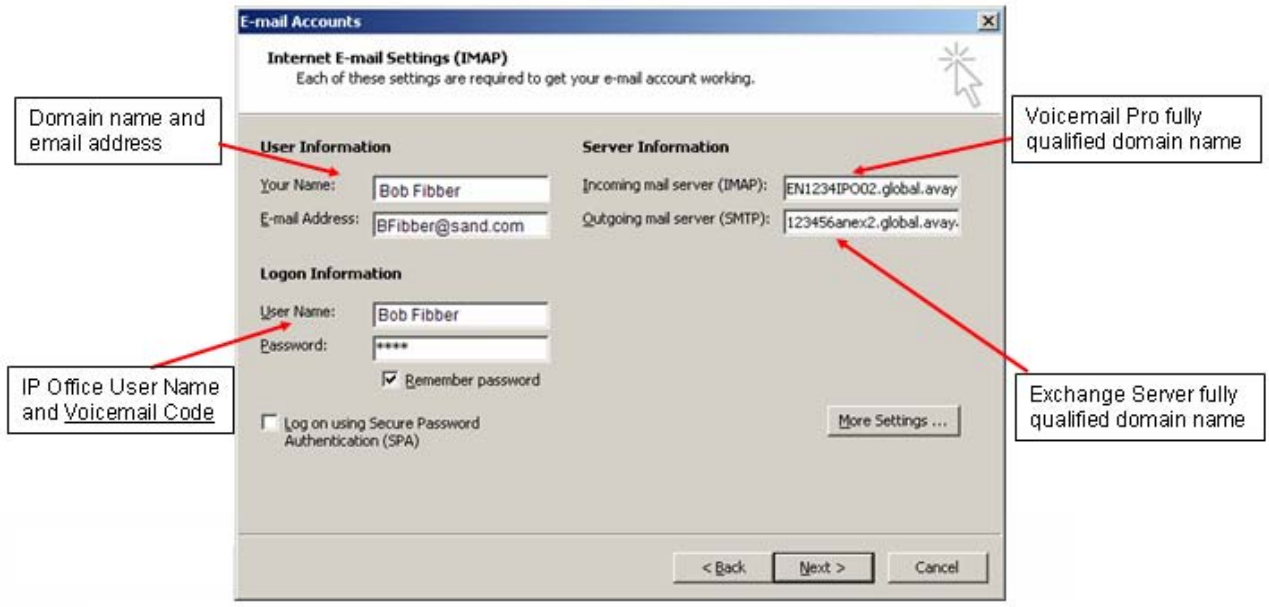
When adding the IMAP Server to Outlook, check 'add a new e-mail account' option and select next.



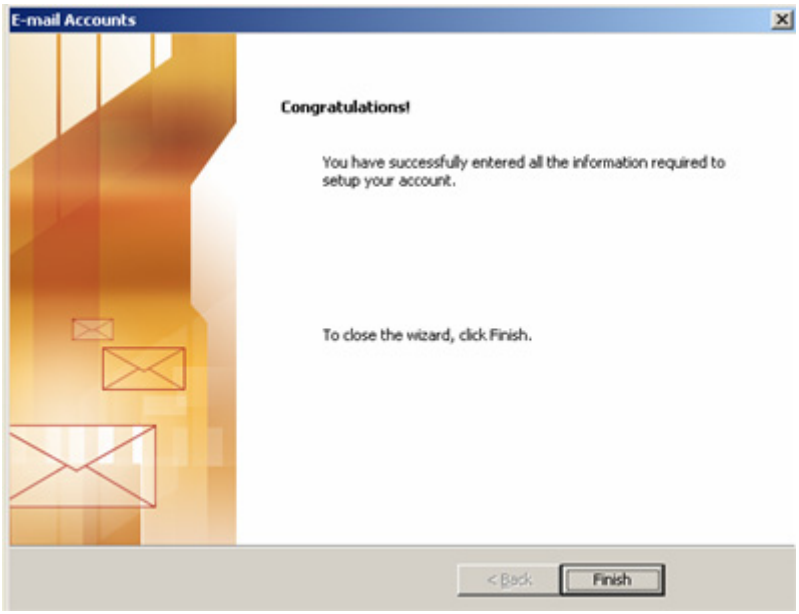
On the Server Type page check the IMAP option and select next



The Internet E-Mail Settings screen which requires the IMAP server information to be entered.



When finished the IMAP client wizard will display:



4.10 Test Variable Action

VoiceMail Pro 4.2 has enhanced the Test Variable Action (previously Check Digit Action) to support the ability for variables in the system to be validated against existing Extensions, Hunt Groups or Mailboxes. This is particularly important if constructing call flows that require unsupervised transfers to these targets. Therefore there is a need to provide the check facilities that can validate the existence of a target before committing a caller to that target.

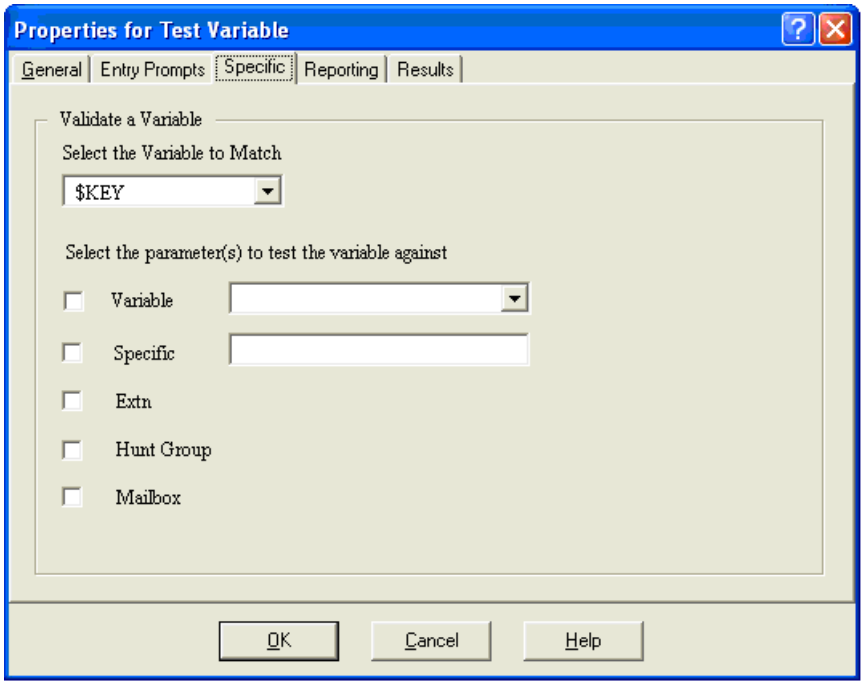
The enhanced Test Variable action will support the ability to:

- Check the variable against another variable.
- Check the selected variable against valid Extensions.
- Check the selected variable against valid Hunt Groups.
- Check the selected variable against valid Mailboxes.

The Test Variable supports the ability for the Administrator to select the Variable that will be used to carry out the validation test. The Specific parameter will be used to allow the Administrator to define a specific value to test against.

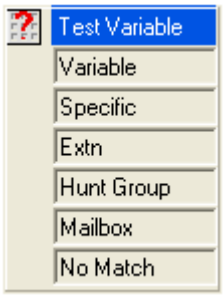
The Parameters selected on the 'Specific' tab are provided as exit conditions that will be followed if the parameter test is a success. In the instance where the Parameter test matches more than one of the values, it will be the order in which the values are listed that will dictate the route that the Action will determine.

The presentation of the Specific Tab of the Test Variable Action is as follows:



To provide backwards compatibility when interpreting previous VoiceMail Pro call-flows, the Test Variable action of VoiceMail Pro versions 3.2/4.0/4.1 is interpreted with Variable $KEY and the 'Specific' option checked and populated.

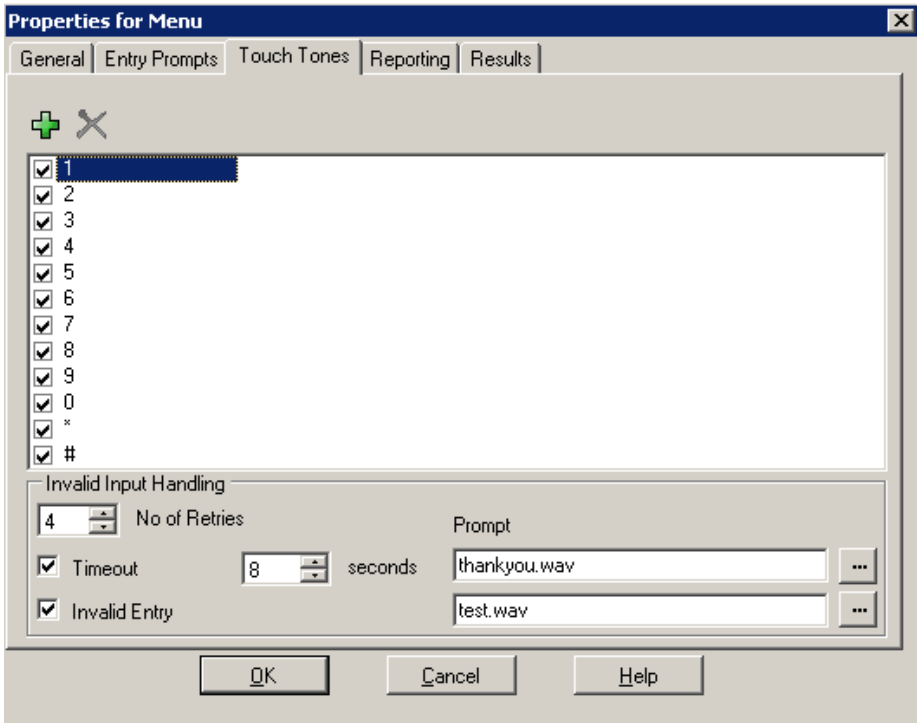
The presentation of the Test Variable action Icon in the call-flow is as follows (Assuming all of the Options were checked):



4.11 Menu Action Enhancements

The current Menu action implementation requires additional callflow elements to be constructed to accommodate Timeout, Invalid entries, and Retry Loops.

VoiceMail Pro 4.2 has simple enhancements to the Menu Action providing an easier and quicker way of accommodating this capability without the need for over complex solutions being forced upon the system administrators.



The Menu Action now accommodates:

- The number of retries a caller will be offered on timeout and / or invalid entries. The default is 0.
- The inclusion of a prompt to be played to callers who have made No Entry selection, prior to representing the Menu Options. Default entry is blank.
- The inclusion of a check box to facilitate the option to check for invalid entry. By default this is not checked.
- The inclusion of the prompt to be played to callers who have made an Invalid Entry (if the check box is checked) prior to representing the Menu Options. By Default this entry is blank.
- If the checkbox is checked, the Menu Action will also include an ‘Invalid’ option which will be followed if the last retry resulted in an invalid entry.
- The Menu Action will retain the ‘Timeout’ exit option, which is followed if the last retry attempt was presented with an incomplete or no entry.

If the number of retries option is zero, then the prompt field is ‘grayed’ out.

If the number of retries option is set to 0, then the prompt field of the ‘Timeout’ and / or ‘Invalid Entry’ is grayed out. When set to greater than 0 the ’Prompt’ field for the selected option is then made available.

The Menu action will repeat through the action, up-to the ‘No Of Retries’ set, before exiting the Menu Action.

If the Menu action exits due to a failure to respond with an expected input, the call will exit the Menu Action following the route defining the reason of the last failure (Timeout or Invalid entry)

The Menu action exit condition includes the ‘Timeout’ (if the Timeout option is checked) and ‘Invalid’ Entry (if the ‘Invalid Entry’ exit condition is checked) exit conditions.

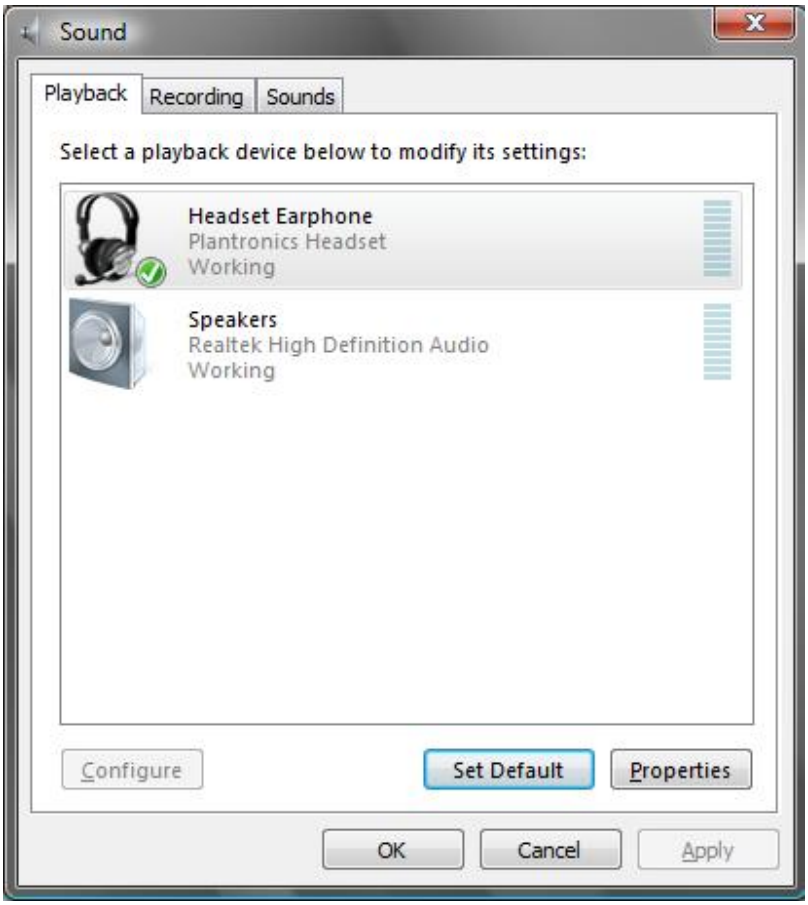
5 Phone Manager Enhancements

5.1 Phone Manager PC Softphone

Phone Manager PC Softphone has been enhanced with a new VoIP stack. This now allows Phone Manager PC Softphone to run on Windows Vista Business and Ultimate (Excluding Home Edition).

The codec cannot be selected using the Phone Manager PC Softphone and should be programmed within the 'Extn' field from the IP Office Manager application. Note that G723 is no longer supported on 4.2 Phone Manager PC Softphone.

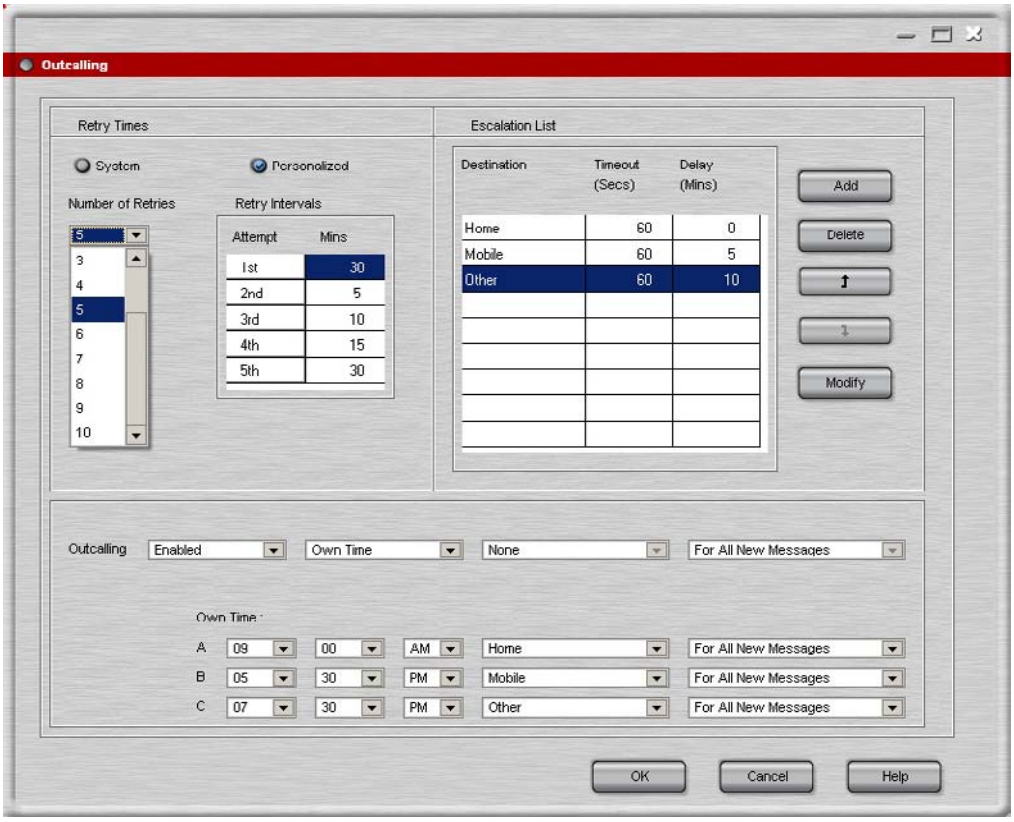
Note: *When installing Phone Manager PC Softphone onto Vista operating systems, the USB settings available through Phone Manager PC Softphone are disabled if no sound card drivers are installed on the PC. When sound card drivers are installed the USB settings can be changed, however will have no operation effect, and all calls ringing the PC Softphone through Vista will ring to the default sound device. Therefore the default sound device must be set to the Headset for correct operation. This will be addressed in the first 4.2 maintenance release.*



5.2 Outcalling

Phone Manager Pro 4.2 has been enhanced to provide easier setup a Users Outcalling. It also benefits by allowing the option to change the User password and also permits the ability to forward messages.

Phone Manager Pro and PC Softphone provide the ability for users to change their Outcalling options. The ability to set phone numbers and associated timeouts are also provided. The Outcalling information is passed between the 4.2 Phone Manager Pro and the 4.2 VoiceMail Pro.



The selection of the Outcalling options from the Phone Manager 'VoiceMail' tab presents the user with the Outcalling options that are available for change, dependent upon the selected mode of operation.

Retry Times

Allows the user to select whether to utilize the system defined settings or their personalized ones.

When the 'System' option is selected, the number of outcall attempts and the time period between attempts used will be those defined by the system administrators via the VoiceMail Pro Client on the Outcalling tab.

When the 'Personalized' option is selected, then the User is able to configure the number of retries and the interval between the retries as appropriate for them.

Escalation List

Allows the user to define the order in which their pre-defined destinations will be called, how long the call will be placed for ('Ring Time') and how long the system will 'delay' before calling the next number on the list.

Outcalling

The last panel allows the user to configure four main control elements.

The First control Element has two states:

- **Disabled**: When 'Disabled All' is set the other Outcalling elements will be greyed out, and the Outcalling capability will not be active for the user.
- **Enabled For**: When 'Enabled For' is set the second control element will be enabled providing the following options;
    - **Any Time**: When this option is selected the third and fourth control panel elements will be enabled, and the time band control elements (A, B and C) will be greyed out. When selected Outcalling will be enabled, to call the destination selected by the third control element for any messages left of the type defined by the forth control element.
    - **Prime Time**: When this option is selected the third and fourth control panel elements will be enabled, and the time band control elements (A, B and C) will be greyed out. When selected Outcalling will be enabled during the 'Prime Time' period, defined via the VoiceMail Pro Client, to call the destination selected by the third control element for any messages left of the type defined by the forth control element. Outside of this 'Prime Time' period, Outcalling will be disabled.
    - **Peak Time**: When this option is selected the third and fourth control panel elements will be enabled, and the time band control elements (A, B and C) will be greyed out. When selected Outcalling will be enabled during the 'Peak Time' period, defined via the VoiceMail Pro Client, to call the destination selected by the third control element for any messages left of the type defined by the forth control element. Outside of this 'Prime Time' period, Outcalling will be disabled.
    - **Own Time:** When his option is selected the third and fourth control panel elements will be greyed out and the time band control elements (A, B and C) will be enabled.

The Third Control Element, when enabled (When First Control Element is set to 'Enabled For' and the Second Control Element is not set to 'Own Time') allows the Outcalling target destination to be selected. The Outcalling destination may be a single location, such as Home or mobile etc, or the list of numbers defined in the 'Escalation List' Panel.

The Fourth Control Element, when enabled (When First Control Element is set to 'Enabled For' and the Second Control Element is not set to 'Own Time') allows the types of messages for which the Outcalling will be enabled:

- For All New Messages.
- For New Priority Messages.
- For New Private Messages.
- For New Priority Private Messages.

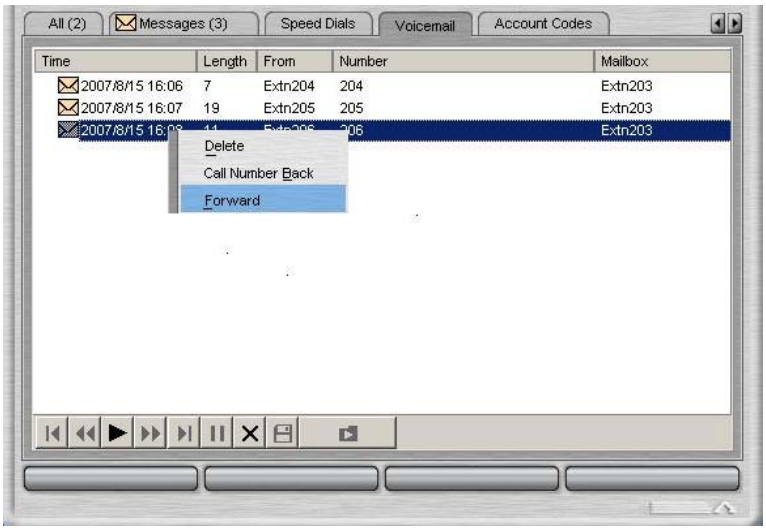
The Last section of this panel is enabled when the second control element is set to Own Time. When set to Own Time the user is presented with three Time bands A, B and C.

- Time band A is active from Time A to Time B
- Time band B is active from Time B to Time C
- Time band C is active from Time C to Time A

The Last two control elements for each Time Band are used to setup the target destination and the message type for which outcalls will be generated.

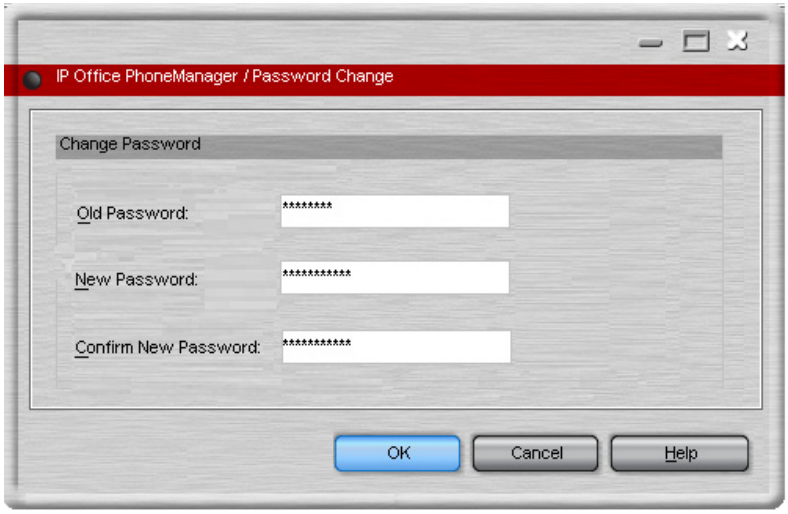
5.3 VoiceMail Forward

The Phone Manager Pro and PC Softphone provides capability for a user to forward their VoiceMail messages to other IP Office users.



5.4 Password Changing

Phone Manager Pro 4.2 can now interact with the IP Office to change the User password.



The User password is also used by the TAPI driver, if installed. The Phone Manager Password mechanism also accommodates the changing of the Avaya TAPI Driver password.

5.4.1 Password Change with TAPI First Party

If First Party Avaya TAPI driver is installed, the Phone Manager Pro will verify it has write access to the TAPI driver Registry area and present dialog “The Avaya TAPI driver, which uses the same password, will also be updated. Do you wish to continue?”

When confirmed from the User, the Phone Manager will send the change password request to the IP Office. If successful it will update the TAPI password and present the dialog “Password changed, to take effect on the TAPI driver reboot the PC “.

If not successful the TAPI password will not be updated and the user will be presented with a dialog indicating the cause of the failure.

If Phone Manager does not have write access to change the TAPI password in the registry, a Dialog: “If the Phone Manager Password is changed, the TAPI driver, which uses the same password, will need to be updated manually. Do you wish to continue?”

When confirmed from the User, the Phone Manager will send the change password request to the IP Office. If successful, the dialog “Phone Manager Password changed, the TAPI driver password will need to be changed manually“, will be displayed.

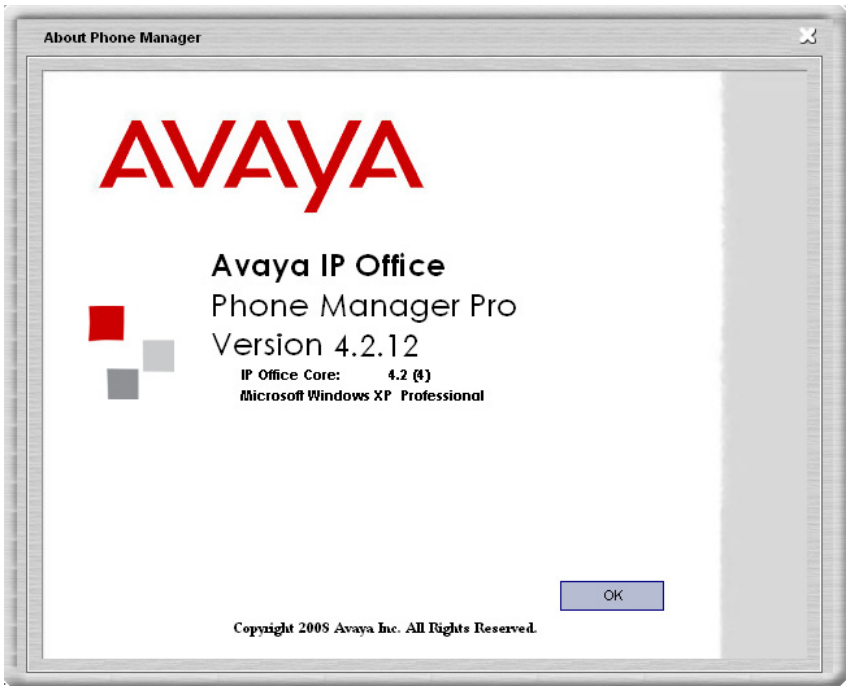
If not successful the user will be presented with a dialog indicating the cause of the failure.

5.4.2 Password Change with TAPI Third Party

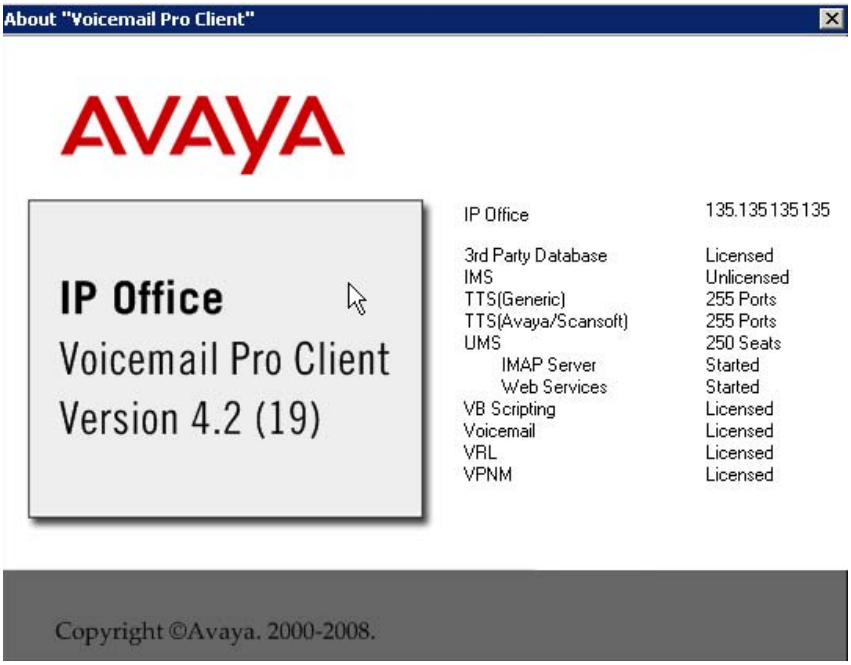
If Third Party Avaya TAPI is installed on the local system, Phone Manager will not change the TAPI password and proceed for normal password change between Phone Manager and IP Office.

6 Splash Screens

IP Office 4.2 Phone Manager has enhanced the Help -> About 'Splash Screen'. This will show the versions of the application, core system and operating system the application is installed on and connected to.



The VoiceMail Splash Screen shows the IP Office core IP Address and relevant VoiceMail Licenses it is connected to. If the IP Office is unavailable the detail will not shown.



7 Windows Operating System Support

Application	XP Pro	Vista	2003 Server	2008 Server
Call Status	✓	✓	✓	✗
CBC	✓	✓	✓	✗
CCC Server	✗	✗	✓	✗
• Standalone Delta Server	✓	✓	✓	✗
• Wallboard Server *	✓	✓	✓	✗
• Wallboard Client *	✓	✓	✗	✗
• PC Wallboard *	✓	✓	✗	✗
• Call Center View (CCC) *	✓	✓	✗	✗
• CCC Reporter *	✓	✓	✗	✗
Conferencing Center **	✗	✗	✓	✗
Contact Store ***	✓	✗	✓	✗
Feature Key Server	✓	✓	✓	✗
Manager	✓	✓	✓	✓
Microsoft CRM Integration	✓	✓	✓	✗
Monitor	✓	✓	✗	✓
Phone Manager Lite	✓	✓	✗	✗
Phone Manager Pro	✓	✓	✗	✗
Phone Manager PC Softphone	✓	✓	✗	✗
SoftConsole	✓	✓	✗	✗
System Status Application (SSA)	✓	✓	✓	✓
TAPI	✓	✓	✓	✗
VoiceMail Lite	✓	✓	✓	✗
VoiceMail Pro Server	✓	✓	✓	✓
• UMS and Web Campaigns ****	✗	✗	✓	✓
• IMS and Web Campaigns *****	✗	✗	✓	✗
• plus IVR and / or TTS	✓	✓	✓	✓

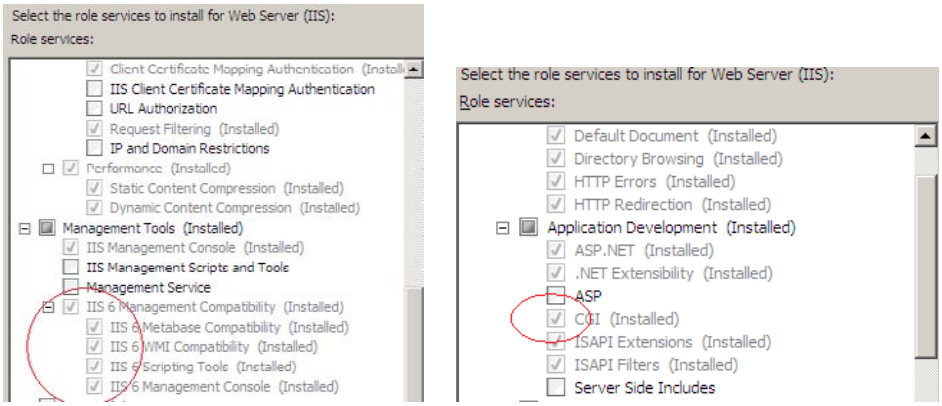
Note: *Vista support requires Microsoft Vista Business and Ultimate editions running Service Pack 1. It is not available on Microsoft Vista Home Basic and Home Premium editions. IP Office 4.2 applications are not supported on Microsoft 2000 Professional and 2000 Server.*

* CCC Wallboard server supports Vista SP1 & Windows 2003 SP2.
Wallboard Client, PC Wallboard, CCC Reporter and CCV all support Vista SP1.

** Conferencing Center full server Installation is not supported on Microsoft Vista. However, the Web Client Host application is supported.

*** ContactStore client supports IE7 but is not supported on Vista operating systems.

**** VoiceMail Pro installed on Microsoft Server 2008 should have the following Microsoft options enabled for Internet Information Services (IIS) and Common Gateway Interface (CGI).



***** Windows Server 2008 and Windows SBS 2008 (32 bit and 64 bit) will support VoiceMail Pro 4.2 however "IMS" is not supported when loading VoiceMail Pro 4.2 on Microsoft Server 2008.

Note: *Vista 64bit or XP64bit is not supported with any applications.*

8 Issues Resolved in IP Office Release 4.2 Software

IP Office Core Software

CQ Number	Description of Issue
CQ 33762	Intermittent issues with calls dropping/terminals resetting when IPO changes clock source.
CQ 35709	Least cost routing using ARS shows the LCR access code on the phone display
CQ 39242	DTE command Lanstatus Does not work on 406v2
CQ 39309	Choppy audio
CQ 39361	No speech path on complex IP network without SCN - Master slave determination appears to fail
CQ 39405	System upgrade fix for USA PRI.
CQ 39554	remote IP phones lose audio intermittently
CQ 39590	Abbreviated ring fails if user is on an outbound appearance while an inbound line appearance is ringing
CQ 39648	Inbound SIP calls fail
CQ 52400	Ability to fallback from SIP route to alternative route in ARS
CQ 54215	IP500 embedded vmail - Prompts are not audible when a user changes locale
CQ 55331	Unable to login PC Softphone when Login Code set in User configuration.
CQ 55865	SMDR to show the details of a User Forwarding off Switch details in the "Caller" field
CQ 56185	IP Phones 5610 - 5602 - Echo is audible to the IP Office user when analogue trunks are configured.
CQ 56768	Call logs show incorrect time - system time is correct. Need to restart system to sync time
CQ 56875	Non system phone users can set the date and time
CQ 57172	IP Office invokes partial routing when Forward No Answer is set.
CQ 57683	Out of memory due to SIP option message
CQ 57919	Calling name taking priority over directory name
CQ 57993	IP Office system restart during IP device registration
CQ 58088	External calls into PRI forwarded to remote SCN site drops after 90 seconds.
CQ 59013	Wrong Codec negotiation info sent when Call Pickup Any used and Trunk Codec and IP Extn Codec differ.
CQ 60499	4.0.10 Partial Redirect works - on 4.1 to the same provider it does not
CQ 60822	Unable to transfer calls when call waiting is enabled on the hunt-group
CQ 61061	Drop Key needs to be pressed twice to drop a call to Embedded VM
CQ 61575	Outbound Call from PMPro will display as HELD after precisely 1 min of the call being connected
CQ 61666	CFrwd soft key on 6408 doesn't allow forward number to be edited or viewed once set
CQ 61698	Directory entries containing Cyrillic characters not displayed when Dial By Name is off
CQ 61718	Remote SCAN license not checked when distributed group is set to ring mode other than collective.
CQ 62173	Unable to complete transfer, when second alerting call is forwarded.
CQ 62216	Transit calls from Asterisk system through IPO to analogue line are cut off after 90 seconds
CQ 62478	System restart when user enters an Account Code for I/c call as call is dropped by external originator.
CQ 62524	IP56xx - Calls disconnect after 90 seconds when program key Call Pickup Members is invoked.
CQ 62769	Call Recording stops when a conference call is invoked
CQ 63355	No speech path on conference call
CQ 63615	Call to Broadsoft SIP gateway - After 60 min calls revert to one way speech
CQ 64054	Forwarded extension alerts when forward destination presses drop
CQ 64316	Admin CD Installation, incorrect translation of Italian "Uninstall"
CQ 64317	Visual Voice TUI on 4621 etc - Italian Translations of Message Selection Options
CQ 64340	T3 Display scrolls for 8 seconds and then settles down, after specific selection from Menu
CQ 64414	Multiple system restarts following call park and un-park via Phone Manager
CQ 64464	IP406V2 System restart on Call targeted at Sequential Hunt Group
CQ 64611	Authorization codes configured with User Rights can no longer be used to bar calls
CQ 64841	CDR/SMDR - Call Mark Up gives incorrect record - no <CR> at end of record
CQ 65169	Select the 6408 voice button and the IPO restarts when VMail is not available

Core Software - Twinning

CQ Number	Description of Issue
CQ 39514	Mobile Twinning does not pass Original callers ID to twinned phone
CQ 51213	Cannot retrieve mobile twinned call back to user desk phone
CQ 56922	Twinned call clears off host system when receiving calls through SCN scenario

CQ 57368	IP Soft phone twinned external mobile does not ring the mobile if the IP Soft Phone is not running
CQ 62250	Call to Twinned IP DECT - Intermittent no speech on answer
CQ 64335	Mobile Twinning Mobile Answer Guard does not work

Core Software – IP DECT

CQ Number	Description of Issue
CQ 55294	No outgoing speech if IP DECT uses a SIP Trunk with Re-Invite selected
CQ 57823	Phone Manager / IP DECT integration. No speech path when far end party presses DROP after F2 transfer
CQ 58734	No speech path when B transfers A to IP DECT extn.
CQ 62600	No Speech path is audible on transferred calls across SCN to IP DECT user.
CQ 62646	VMPro supervised transfer to IP DECT takes 4 seconds to establish speech path on IP500
CQ 63674	No speech from IP DECT to DS / IP handsets across SCN. Speech OK to local IP Office
CQ 65475	IP DECT Mis-dials to ISDN line if number is dialed en-bloc and using ARS

Core Software – T3 Telephones

CQ Number	Description of Issue
CQ 62073	T3 Twinning Button Flashes when mobile twin answers. When mobile Twin clears, twinning button flashes
CQ 62078	T3 Twinning Display is not showing the full programmed Mobility Number - 4.2_1012
CQ 62069	LIST is not shown on the T3 buttons unless it is added to the default a=, b=, c= appearance keys
CQ 62598	T3 Call List LED should not flash until the phone has stopped ringing
CQ 63258	Unanswered blind transfer over SCN results in the wrong number in the T3 call list
CQ 63551	Voicemail Messages not showing on Idle display till refresh is forced
CQ 64518	T3 Comfort - Italian Translations required in Recording VM Messages

SSA

CQ Number	Description of Issue
CQ 62843	SSA and Licenses Issues when interpreting SOE configuration.
CQ 56493	SSA reports power failure incorrectly
CQ 56915	SSA Translation required for VPN phone
CQ 56923	SSA unable to open .slo file
CQ 57088	SSA Italian Translation required
CQ 38074	SSA Help Text/Documentation states that it can be used on IP403 and IP406v2 DT

TAPI

CQ Number	Description of Issue
CQ 63408	Call to a Free TAPI Wave user Hunt Group gives Busy
CQ 64524	TAPI / IP phones unable to connect a 3 party conference - TAPI party no speech

Phone Manager

CQ Number	Description of Issue
CQ 39459	Call tagging changes after calls placed on park
CQ 39565	Phone Manager Pro sending queries for all messages every 60 seconds
CQ 51741	User CD Installation for ALL Users - Multiple Admin users cannot add and remove features correctly.
CQ 56164	Double clicking BLF when a group call is waiting transfers caller and overrides off switch transfer setting
CQ 56166	Pop on Answer - pops outgoing call
CQ 56554	Problem when 2 identical contacts are in the directory
CQ 56601	The Directory filter for Phone Manager does not filter when more than one option checked on.
CQ 56810	Directory Name Matching does not work as expected
CQ 57415	Phone Manager "Reclaim" button does not work.
CQ 60824	Meaningless error message "300"
CQ 61164	A couple of Tool Tips contain "?" symbol

CQ 61263	SCN -Phone Manager requests VoiceMail updates and calls across the SCN experience jitter.
CQ 61314	Issues with new versions info in Phone Manager 'Help About' screen
CQ 61365	Agent Mode - Busy Wrapup button highlighted and cannot be cancelled when Fwd unconditional enabled
CQ 61421	Some speed dials cannot be dialed or edited - "list index out of bounds (5)" error
CQ 61922	Phone Manager Date displayed shows // instead of the date when the tab has 100 entries per tab
CQ 62151	PM Pro Strange screen pop mode if logon not completed
CQ 62231	Pressing help on account code screen when on a call takes you to the 'User List Window' help file
CQ 62344	Application menu bar not accessible when starting PM in compact mode.
CQ 62570	Phone Manager Pro - Telecommuter Mode, Internal Login window appears twice
CQ 62578	Problems occur when the User or Directory names are similar when the "Make call" option used.
CQ 64658	Phone Manager - Voicemail Temp Greetings, Italian locale, Time format incorrect
CQ 65034	Phone Manager - F1 Call - Name Matching does not show DSS Icon
CQ 65554	Phone Manager Pro - "Home" to enable transfer Complete does not work

IP SoftPhone

CQ Number	Description of Issue
CQ 35414	Speech Problem when dialing with PC Soft phone
CQ 60713	PM Soft Phone Registration Request packet does not send German special characters. Example - "ß"
CQ 49268	buttons selected remain blue after using them
CQ 63431	Soft phone when started VoIP broken first 15 secs. Park Call and Unpark to test
CQ 65717	IP Soft phone locks up on 2nd incoming call
CQ 62229	Soft Phone 2 calls presented - Answer the 2nd call - the call is held and cannot be answered
CQ 64315	SPServer.exe should contain copyright and version information
CQ 64453	Soft phone showing errors on startup on 2003 Server "Spserver EAccessViolation"
CQ 56549	Access Violation in Phone Manager PC Soft phone
CQ 57057	No speech on recorded call between two PM Soft phones

Soft Console

CQ Number	Description of Issue
CQ 63434	Soft console Login - Italian Translation Required for "Unit Type"

VoiceMail Pro

CQ Number	Description of Issue
CQ 39359	Voicemail Pro module rename no longer causes sorting of module list
CQ 39512	Change configuration not accepting password
CQ 39541	Voicemail Pro time stamps are following GMT, not the server time.
CQ 53180	Voicemail Pro Service Stops when call hangs up - VBScript causes errors
CQ 54808	Voicemail Upgrade Procedure improved
CQ 54997	Telecommuter - Deleting a voicemail message results in a call being made to your associated phone.
CQ 55009	Select System Prompt Language not translated - ok in 4.0
CQ 55951	Italian Translation incorrect for LIFO/FIFO
CQ 56759	Voicemail Pro Service Running, but temporarily unable to take calls
CQ 57850	Voicemail Pro - Module copied when renaming another module in a certain sequence
CQ 57855	Voicemail Pro - Random module entries are lost when Shift - Click is used to copy multiple Module entries
CQ 58095	Voicemail Pro Service Running, but unable to take calls
CQ 59648	Unable to customized Queued and Still Queued Waves via VOICEMAIL PRO Client
CQ 62303	Recording Name Option through Visual Voice goes into loop pressing # to confirm the name has been recorded
CQ 62736	'undefined variable' error given when unlicensed user tries to login to Web Voicemail
CQ 64259	German umlauts corrupt Web screens with? and Square symbols
CQ 64269	Voicemail Pro - Chinese Mandarin - Incorrect Characters in Splash Screen
CQ 64288	Chinese Translations. The layout of the Chinese graphics needs rearranging.
CQ 64447	Voicemail Pro Client - Import .mdb overwrites Client DB when do not save selected
CQ 64817	PRV: Client - Condition Editor/Week Planner - Saturday End time cannot be entered correctly
CQ 65550	Voicemail Pro - Various Actions / Specific / No "Start Point" choice available

9 Known Issues

CQ 65951 - IP Office system restart when a User transfers a call to a destination set with call forwarding to the originator of the transfer. A private build **6.2(49501)** is available for this specific issue (based on 4.2.4 GA)

Issues targeted for Q4 maintenance release

CQ Number	Description of Issue
CQ 39351	E' telephone number character no longer outputting extension number after 'S' character in short codes
CQ 39412	Restart on completion of transfer from AA - RAS Blocked messages
CQ 39578	Transfer return not functioning if user busy, call routes to VM instead
CQ 39617	Unable to transfer calls directly to VM using Visual Voice and User button
CQ 39627	Softconsole with 2 or more held calls, cannot transfer the Highlighted call using "Control + T"
CQ 39633	CCC - When playing HG announcements in SCN CCC reflects answered call as outgoing
CQ 49580	Out of Hours User Rights restrictions not being followed.
CQ 54514	Requirement to provide a delay before answering calls in embedded Auto Attendant
CQ 55783	Ringback tone not heard when making internal call to a Master IP DECT handset with a twinned DS slave.
CQ 58117	Multiple calls with different CLI appear the same on Phone Manager IP
CQ 58184	IP Hardphone – V.Voice messages. VM Pro Intuity or IP Office mode. Remote Hardphone - No Date/Time stamp
CQ 59002	Phone Manager logs a *30 call pickup as an outgoing call with no CLI
CQ 59563	Using ** to call back the Extn that left the message intermittently fails
CQ 59887	SCN - IP DECT Fwd on Busy - NU or Busy tones are not audible when the Fwd on B destination is not available.
CQ 61161	Out of Hours User Rights restrictions not being followed.
CQ 61470	CCC - CCV and PC Wallboard info for H/G Call Waiting and Incoming Presented calls are not incremented.
CQ 61522	CLI Restriction from T3 phone not suppressing CLI
CQ 61569	Audio and contrast settings are changed when using Follow Me Here
CQ 62519	When a transferred call is received sometimes the name of who transferred the call is not shown.
CQ 62902	PMPro connected to an IP DECT - Call placed on hold by PMPro gives NU back to the Duct
CQ 63966	Memory issue when synchronizing with LDAP server
CQ 64052	IP500 system restart when committing configuration with more than 37 SIP URI entries
CQ 64134	Park slots on phone display not updated when agent logs on
CQ 64408	VM messages for HG not updated on Phone Manger if User "Disabled from Group" and new message left for HG.
CQ 64759	Transfer return to call answered on twinned slave does not work. Works on twinned master.
CQ 65159	Force authorization code failing when dialing out via S08 line
CQ 65284	System hold timeout cannot be disabled by setting to 0 seconds
CQ 65615	Italian translations when WebClient login fails with incorrect password
CQ 65633	VM Pro Callflow - Wav file names with special characters such as umlauts / accents do not play
CQ 65883	French translations when WebClient login fails with incorrect password
CQ 65917	SIP CLI – VM Pro callflow. When carrying out CLI matching against CLI's from a SIP trunk, a complete number match will fail as the CLI field contains the domain information also.
CQ 65925	Web Voicemail unreliable when selecting to forward a message to a list several targets
CQ 65955	SIP CLI – VM Pro callflow. When the $CLI information is passed to the core on a transfer action via the Source field, the handset displays the field information from the right to left, therefore presenting the end of the domain name, rather than the start of the user CLI number.

10 Technical Notes

10.1 Upgrade Installation Notes

IMPORTANT INFORMATION

Please ignore this information if your IP Office system is already running version 4.2 software.

IP406v2, Small Office Edition and DSv2 Expansion Modules

IP406v2

Some early IP406v2 systems (typically pre PCS08) have not got enough memory to enable them to run IP Office 4.x software. If your IP406v2 system does not have enough memory there is a process in place to enable you to upgrade the system.

This process is covered in Technical Tip number 166.

Small Office Edition

Before loading IP Office 4.x software onto the Small Office Edition an interim release must first be loaded to upgrade the loader used by the system. If you do NOT follow the correct process for upgrading your system only 90% of the IP Office 4.x software will be loaded onto the unit causing a system restart.

The intermediate version, 3.2.999, can be found in the \bin\IP401ng\V3_2_999 directory of the admin CD or in the Manager\V3_2_999 directory on a PC with the 4.x admin suite installed. Once this has been loaded the actual 4.x software may be loaded as normal.

DSv2 Expansion Modules

A new loader has been provided for the DSv2 Expansion modules. When these modules are upgraded they normally restart twice at the end of the upgrade; this loader stops this behavior so that they will only restart once and so speed up future upgrades.

The intermediary image can be found in the \bin\nadcpv2\V3_2_999 directory of the admin CD or in the Manager\V3_2_999 directory on a PC with the 4.x admin suite installed. Once this has been loaded the actual 4.x software may be loaded as normal.

Identifying the amount of memory in the IP406v2

Early 406v2 units only have 16Mb of memory, later units have 64Mb. Although it is possible to check the PCS version of a 406v2 system by looking at the printed label on the unit there are some pre PCS08 systems in the field that do have 64Mb of memory.

The best way to check the memory is to run the System Monitor application; this means it is possible to check this remotely. You will need to make sure that the “Resource Status Print” option on the System tab is enabled to be able to check the memory. When you connect to the system you will see a similar entry in the System Monitor output as shown below:

RES: Fri 3/2/2007 13:43:29 **FreeMem=43346748**(16) CMMsg=6 (6) Buff=100 520 500 520 1 Links=4194

If you look at the "FreeMem" value you will be able to tell what memory configuration your IP406v2 unit has. In the example above there is 43Mb free, so this is a 64Mb system. If you have a 16Mb system this value will be below 10 Mb.

If you do attempt to upgrade a system that does not meet the minimum requirements the upgrade Wizard will show the following error:

10.2 IP Office 4.2 Admin Suite Upgrades

Before any upgrades commence the IP Office 4.2 Admin Suite must be installed. Admin Suite upgrades are supported from version 4.1; any version prior to this must be removed first before the latest Admin Suite can be installed.

Note: *For full upgrade instructions to 4.1 please refer to Technical Bulletin number 90.*

The Admin CD will perform a Major Upgrade rather than a Minor Upgrade when upgrading from 4.1. This looks similar to a new install but if you look closely during the installation, you will see that it removes the previous installation before installing the new one. This is necessary to ensure all components are correctly upgraded.

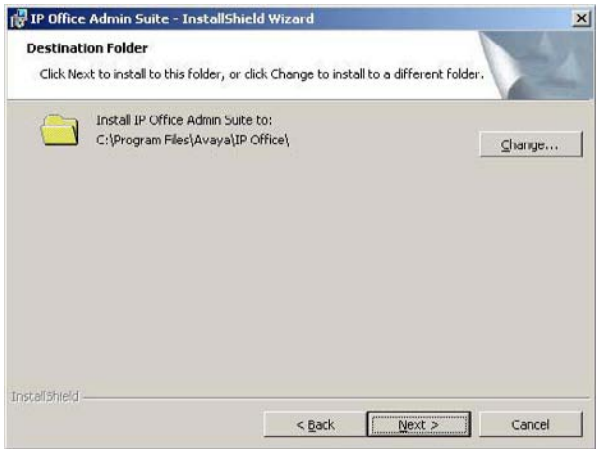
Upgrading from IP Office Admin Suite 4.1:

1) Insert the CD and if it does not auto-run browse to the CD and click on setup.exe.

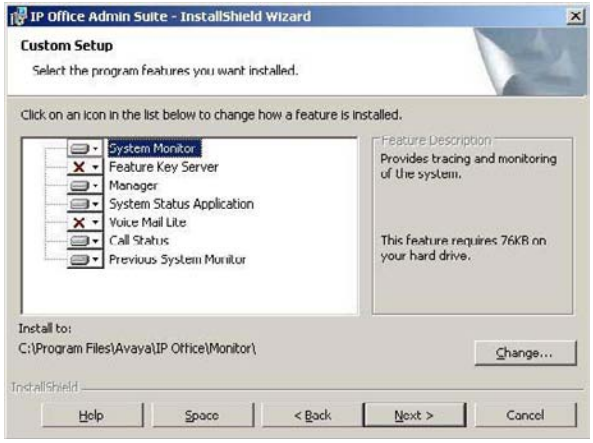
2) At the Choose Setup Language screen choose the required installation language and click on OK.

3) At the welcome screen click on Next.

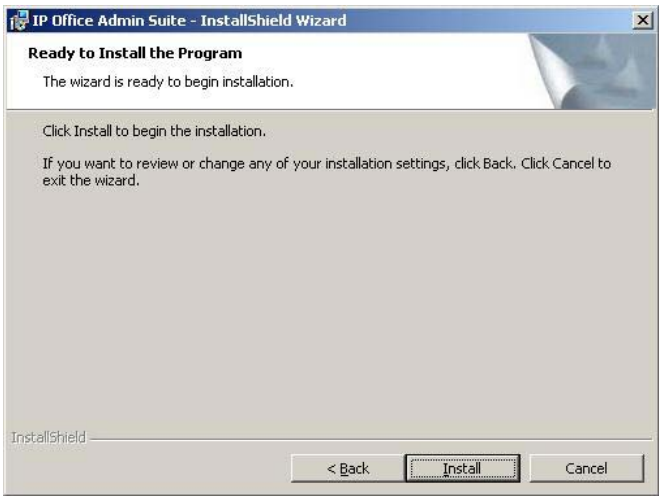
4) At the next screen either accept the default destination for the installation or change it to the required path. Click Next.



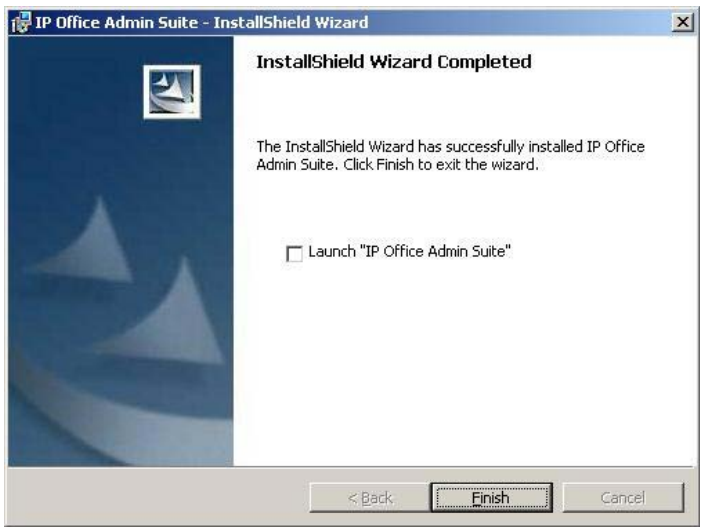
5) At the custom setup screen the components that are already installed are pre-selected. Click Next.



6) At the next screen click on Install to start the upgrade.



7) Once the installation is complete click on Finish. You can now upgrade your IP Office units.



Installation of Java Run Time

For Vista workstations with JRE versions prior to 1.5.0_11, JRE 1.5.0_11 will be installed automatically. For non Vista workstations with no JRE installed, or with JRE versions prior to 1.4.2_03, JRE 1.5.0_11 will be installed.

Feature Key server

If using the Feature Key Server on a Vista workstation, the 'Sentinel System Driver Installer' should be executed following the normal Admin Suite installation. This is found in the Sentinel System driver installer directory of the Admin CD.

10.3 Core Upgrade Path from Previous Releases

The table below shows the necessary steps that must be taken to upgrade to release 4.2:

Platform	Current Release	Upgrade Step 1	Upgrade Step 2
SOE	2.1	3.2(999) Loader	Load 4.2
SOE	3.0	3.2(999) Loader	Load 4.2
SOE	3.1	3.2(999) Loader	Load 4.2
SOE	3.2	3.2(999) Loader	Load 4.2
SOE	4.0 / 4.1	Load 4.2	
IP406v2	2.1(27)	Load 2.1(35) and higher	Load 4.2
IP406v2	2.1(35) and higher	Load 4.2	
IP406v2	3.0	Load 4.2	
IP406v2**	3.1(62) and lower	3.1.999 Loader **	Load 4.2
IP406v2	3.1(63) and higher	Load 4.2	
IP406v2	3.2	Load 4.2	
IP406v2	4.0 / 4.1	Load 4.2	
IP412	2.1	Load 4.2	
IP412	3.0	Load 4.2	
IP412	3.1	Load 4.2	
IP412	3.2	Load 4.2	
IP412	4.0 / 4.1	Load 4.2	
IP500***	4.0.0***	Load 4.2	
IP500	4.0 / 4.1	Load 4.2	
DSv2 module*	2.1	3.2(999) Loader*	Load 4.2
DSv2 module*	3.0	3.2(999) Loader*	Load 4.2
DSv2 module*	3.1	3.2(999) Loader*	Load 4.2
DSv2 module*	3.2	3.2(999) Loader*	Load 4.2
DSv2 module*	4.0 / 4.1	Load 4.2	
All other modules	2.1/3.0/3.1/3.2/4.0/4.1	Load 4.2	

**** Note:** When upgrading DSv2 modules to the 3.2(999) release an additional step may be needed. If the modules are attached to an IP406v2 system the Upgrade Wizard will report an error if there is not an IP406u.bin file in the V3_2_999 directory. Please copy the IP406u.bin file from the Manager directory to the V3_2_999 directory before attempting to upgrade the DSv2 expansion modules.*

***** Note:** The 3.1.999 loader can be found in the bin\IP406v2\V3_1_999 directory of the admin CD or in the Manager\V3_1_999.*

****** Note:** The IP Office 500 system is shipped from the factory with software version 4.0.0* installed. This is not a fully functioning version of software and MUST be upgraded to the IP Office 4.2 software.

To upgrade the Control and Expansion units do the following:

If you do not need to upgrade your loader (SOE, DSv2 modules and IP406v2 running early 3.1 releases) please go to step 11. (Please take note of the message that the Upgrade Wizard shows at the start of the upgrade, shown in step 9 below, before you start).

1. Install the Admin Suite as normal.

2. Open the Manager application.

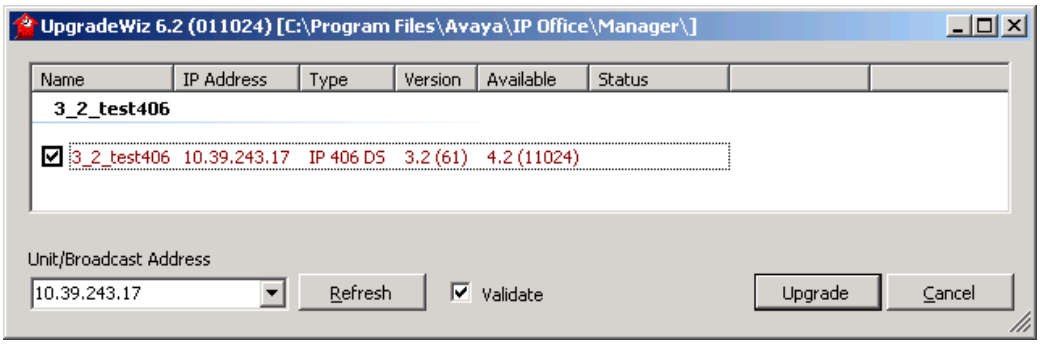
3. Before starting any upgrades ensure that you have received and made a backup copy of the latest IP Office configuration. If for any reason the upgrade fails, the current configuration may be erased, so a backup copy is essential.

4. From the file menu go to Change Working Directory and change the Binary Directory to C:\Program Files\Avaya\IP Office\Manager\V3_2_999.

5. In Manager select File | Advanced | Upgrade. This will start the UpgradeWiz application.

6. After a few seconds the upgrade wizard should show the units found.

7. A window similar to the one below is displayed. The list shows the current software levels of the units and the level of the appropriate bin file that is available in the Manager/Binary working directories.



8. The current version and available versions are displayed. Tick the check box under Name if it is not already ticked then click on Upgrade.

Note: *If you are upgrading the Small Office Edition loaders then the software version reported will be 3.2(999), or 3.1(999) in the case of the IP406v2 loader. For the DSv2 Expansion Module the version reported will be 5.2(999).*

9. Enter the password of the existing configuration (not the default) and click OK, the following warning will be shown:

10. After clicking on Yes the upgrade process will begin, follow any on screen prompts. When the upgrade wizard informs you that all units have been upgraded click on OK and close down the upgrade wizard.

11. Make sure that the Manager Working Directories are set to C:\Program Files\Avaya\IP Office\Manager.

12. Now follow steps 5-9 again to upgrade your system to IP Office 4.2.

10.4 Unit Compatibility - Expansion Unit Interoperability

All expansion units must be upgraded or downgraded to match the CPU software.

10.5 Phone Firmware Support

The table below lists the phone firmware versions that are supported by IP Office 4.2 General Release software:

Phone Type	Firmware Version
2402, 5402	2.0*
2410, 2420, 5410, 5420	5.0
4606, 4612, 4624	Not Supported
4601, 4602, 4620, 5601, 5602	2.3
4601+, 4602+, 5601+ and 5602+	2.824
4610, 4620SW, 4621, 4625, 5610, 5620, 5621	2.8.24
4610, 4620SW, 4621, 5610, 5620, 5621 VPN	2.3252

**** Note:** The firmware of the 2402/5402 cannot be upgraded.*

10.6 IP DECT Firmware Support

The table below lists the IP DECT firmware versions that are supported by IP Office 4.2 General Release software:

ADMM Firmware	ADMM_avaya_1_1_9.tftp	1.1.11
3701 Upgrade	Up_avaya_3701_22.04.04.exe	22.04.04
3711 US Upgrade	Up_avaya_3711_91_24_31_03.exe	91.24.31.04
3711 EU Upgrade	Avaya3711_70.24.11.exe	70.24.11
ADMM Java Configuration	ADM_Configurator_1_1_9.jar	1.1.11
ADMM Dect Monitor	DECTNetMonitor1.exe	1.4

10.7 VoiceMail Pro Software Upgrade Summary

The table below shows the necessary steps that must be taken to upgrade your VoiceMail Pro system to release 4.2. Once you have identified the steps involved please proceed to section 10.7 or 10.8:

Product	Current Release	Upgrade Step
VoiceMail Pro	2.1	Uninstall 2.1 and install 4.2
VoiceMail Pro	3.0	Uninstall 2.1 and install 4.2
VoiceMail Pro	3.1	Uninstall 3.1 and install 4.2
VoiceMail Pro	3.2	Upgrade Installation Available
VoiceMail Pro	4.0 / 4.1	Upgrade Installation Available

Upgrading from 2.1 / 3.0 / 3.1 VoiceMail Pro

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

10.8 Upgrading from a Pre-3.2 VoiceMail Pro System

VoiceMail Upgrades to 4.2 from pre 3.2 versions are not supported.

The following steps should be followed when going from pre 3.2 to 4.2

1. Export the VoiceMail Pro Database.

Before removing VoiceMail Pro, you should create a backup copy of the call flow database. This will contain any customizations made to the default call flow. **You should also backup the registry settings specific to VoiceMail Pro & IMS.**

1. Start the VoiceMail Pro GUI.
2. From the File menu, select the option Import or Export.
3. Select the option Export callflows and click **Next**.
4. Enter a file path and file name ending in .mdb, e.g. C:\temp\backup.mdb.
5. Click **Next**.
6. Click **Finish** to start the export then click **Close** to complete the export procedure.
7. Close the program.
8. Insert the new VoiceMail Pro CD and cancel the install wizard if it autoruns.
9. Right-click on the CD drive and select Open.
10. Locate the file Backupreg.bat and double-click it to run the application. This backs up any registry settings associated with VoiceMail Pro.

Note: *Before proceeding to the next step make sure that the registry entries have been backed up correctly. The batch file should have created 3 backup files in the Windows Temp directory. Make sure that the following 3 files exist in that location:*

- VMPro.arf
- NetAly.arf
- IMSGateway.arf

2. Uninstall VoiceMail Pro.

1. Open the Windows **Control** Panel.
2. Select **Add/Remove** Programs.
3. Select IP Office VoiceMail Pro and click **Add/Remove**.
4. From the options offered select **Remove** and click **Next**.
5. Follow any prompts given during the removal process.
6. When the process has been completed select the option **Yes**, I want to restart my computer now and click **Finish**.

Once the PC has restarted you need to restore the registry settings before installing the new version of software.

3. Restore the Registry.

1. Right-click on the CD drive containing the VoiceMail Pro CD and select Open
2. Locate the file Restorereg.bat and double-click it to run the application. This restores the registry settings previously associated with VoiceMail Pro.

4. Install the new VoiceMail.

1. Insert the new VoiceMail Pro CD. If the setup does not autorun, right click the CD drive & select **AutoRun**. Alternatively run setup.exe.
2. Install the VoiceMail Pro, as per the installation guide.

5. Import the VoiceMail Pro Callflows & Registry settings.

1. Start the VoiceMail Pro GUI.
2. From the File menu select the option **Import** or **Export.**
3. Select the option **"Import Call Flows"** and click **Next**.
4. Use the Browse button to locate the backup file then click **Next**.
5. Click **Finish** to start the import then click Close to complete the import procedure.
6. Click on Save and Make Live to save the Call flows.

10.9 Upgrading from VoiceMail Pro Systems 3.2 or Later

BACKUP MDB: It is recommended that you do back up the MDB file prior to performing any VoiceMail Pro upgrade.

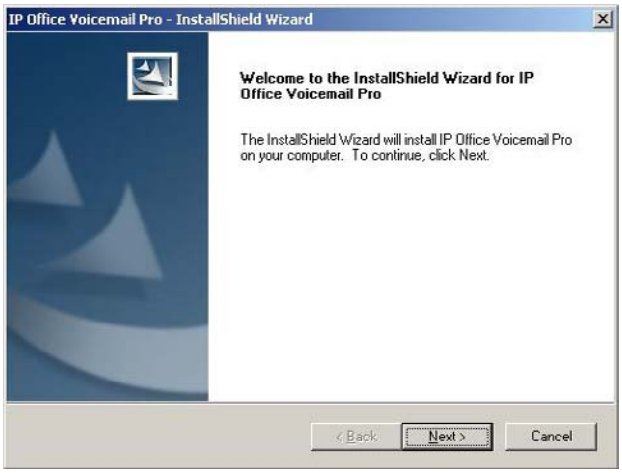
The following steps should be followed when upgrading from Version 3.2 or 4.1 VM Pro servers:

1. Insert the VoiceMail Pro CD, if it does not auto-run browse to the CD and click on setup.exe
2. At the language prompt, make your selection & Press OK.

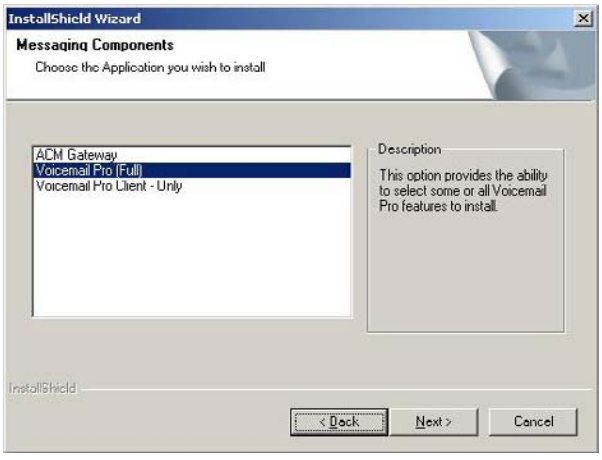
3. A prompt will appear informing you that there is an older version of VoiceMail Pro installed and will offer a major upgrade. A major upgrade looks very similar to a new installation.

4. Select Yes.

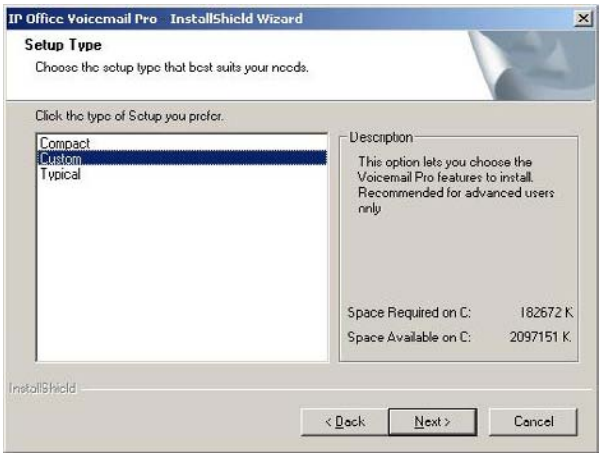
5. At the welcome screen click on Next.



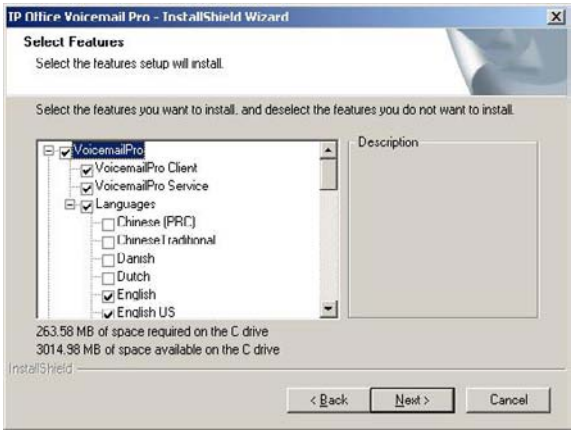
6. At the Messaging components screen select VoiceMail Pro (Full) and click on Next.



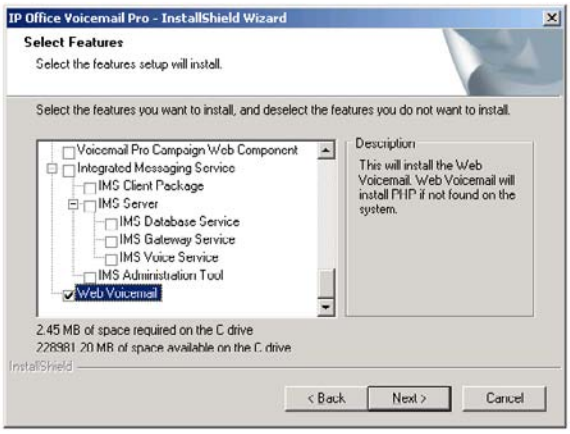
7. At the Setup Type screen select Custom and click on Next.



8. At the Select Features screen select the components that you already have installed.

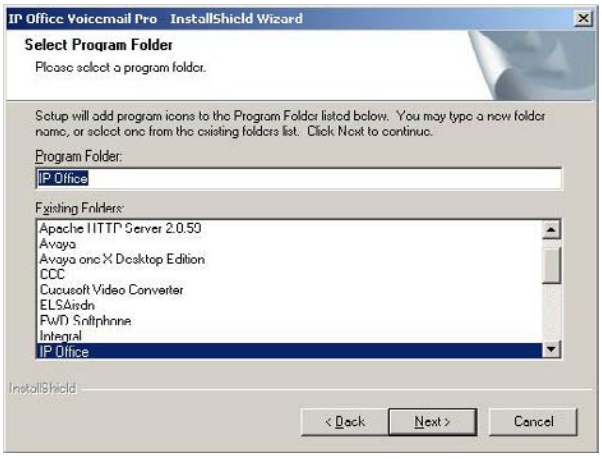


9. At the Select Features screen select Web Voicemail components option to install the new 4.2 Web Client integration to VoiceMail Pro then click on Next.

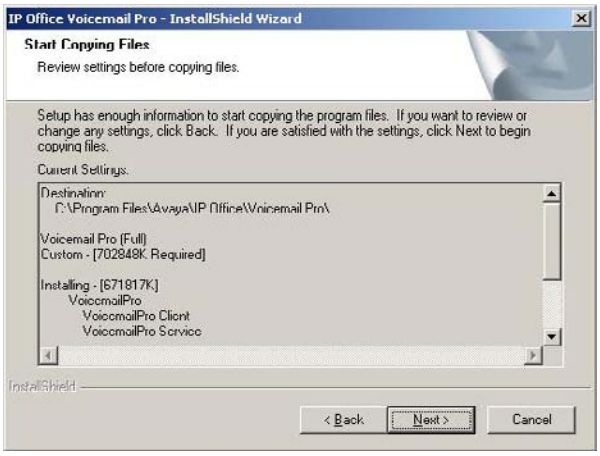


10. At the Service Account name screen enter your service account details and then click on Next.

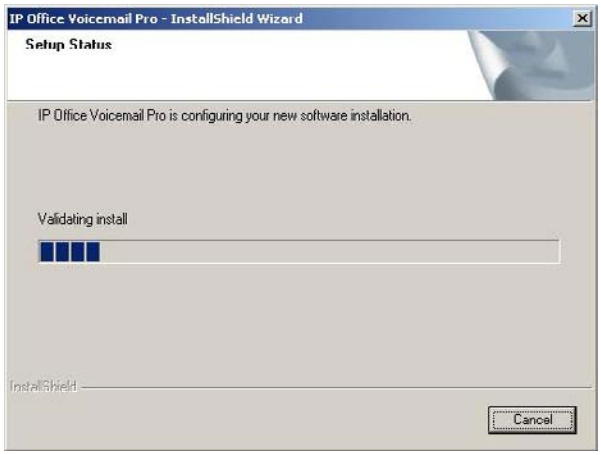
11. At the Select Program Folder screen click on Next.



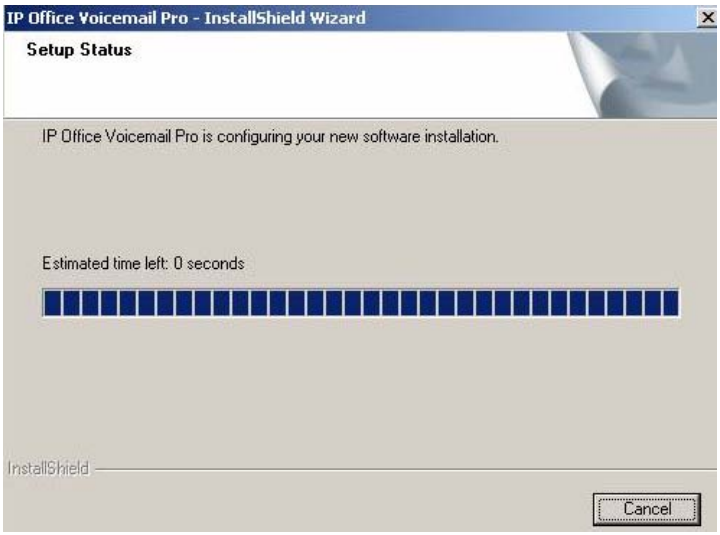
12. At the Start Copying files screen click on Next.



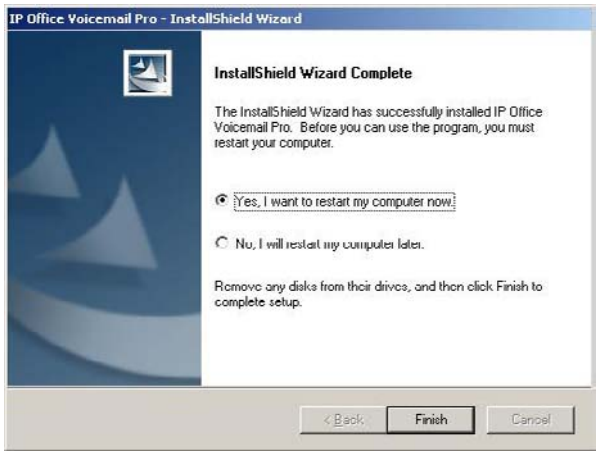
13. The new version of IP Office software will now be installed. PHP will also be installed during this process.



Note: *When the below screen is seen it states 0 seconds and indicates upgrade has almost finished installing the VoiceMail software. If a delay is experienced before the "Finish" screen is then populated, do not press Cancel. Wait for the Finish screen to be shown.*



14. Finally restart the PC to complete the installation.



- The .Net environment is a prerequisite. In case of absence of .net environment the installer will install the .Net 2.0 frameworks.
- IIS (v6) Admin Service is a prerequisite for Web Integration and Web Campaigns.
- Advice of record will be enabled by default in US.
- When using VPIM, an SMTP service is required on the VMPro Server.
- The backup utility would be stored at <VoiceMail Pro root directory>

10.10 IP Office User Applications Software Upgrade Summary

The table below shows the necessary steps that must be taken to upgrade your User Applications to release 4.2. Once you have identified the steps involved please proceed to section 10.10 or 10.11:

Product	Current Release	Upgrade Step
User Applications	2.1	Uninstall 2.1 and install 4.2
User Applications	3.0	Uninstall 2.1 and install 4.2
User Applications	3.1	Uninstall 3.1 and install 4.2
User Applications	3.2	Upgrade Installation Available
User Applications	4.0 / 4.1	Upgrade Installation Available

10.11 Upgrading from 2.1 / 3.0 / 3.1 User Applications

1. Uninstall User Applications

1. Open the Windows Control Panel.
2. Select Add/Remove Programs.
3. Select IP Office User Suite and click Change/Remove.
4. From the options offered select Remove and click Next.
5. Follow any prompts given during the removal process**.**

2. Install the New Software

1. Insert the User CD. The installation wizard should auto-start.
2. Select the installation language and click Next.
3. At the Welcome screen click Next.
4. In the Customer Information window, type a user name and the company name or use the default names that are proposed.
5. In the same window, choose the option that determines who should be able to use the User Applications when they have been installed. The recommended option is Anyone who uses this computer (all users).
6. Click Next. The Choose Destination Location window opens.
7. In the Choose Destination Location window, click Browse and locate the folder where the User Application files are to be installed. Otherwise, click Next to use the proposed folder.
8. From the Setup Type screen choose the type of setup you would like, Compact, Custom or Typical. For the purposes of this document we will choose Typical. For further details of the other types of installation please refer to the appropriate Applications Installation Manual.
9. Click Next to continue.

10. If there are multiple IP Office units detected on your network select your unit from the list and then click on OK.

11. At the next screen select the User name from the list that this installation is associated with and enter a password for that user if it has one setup in the IP Office configuration.

12. Click Next. A summary of the components that are about to be installed is shown. Check that this list is as expected. If for any reason the details are not what you expect, click Back and make the necessary changes. When you are satisfied that the details are correct, click Next to start copying the files.

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

14. When the installation is complete you are prompted to restart the computer. Choose Yes I want to restart my computer now and click Finish.

10.12 Upgrading from 3.2 / 4.1 User Applications

You can upgrade from IP Office 3.2 / 4.1 User Applications to IP Office 4.2 User Applications without having to uninstall the previous version of software.

1. Insert the User CD. The installation wizard should auto-start.

2. At the Welcome screen click **Next**.

3. At the Upgrade Features screen make sure that the applications to be upgraded are selected and click **Next**. The upgrade will now proceed.

4. At the Update Complete screen click **Finish**.

11 Assistance

11.1 Documentation

IP Office 4.2 Documentation can be found on http://support.avaya.com

1. Go to http://support.avaya.com
2. Select FIND DOCUMENTATION and DOWNLOADS by PRODUCT NAME.
3. Select IP Office.
4. Select the Software release required.
5. Select the Documentation Categories required.

11.2 Software

Avaya will supply CD and DVD media to Avaya Authorized Distributors that have a current contract with Avaya. Avaya will not supply CDs or DVDs directly to Business Partners. Business Partners are required to order CD/DVD media from their respective Avaya Authorized Distributors. The following CD/DVDs are available with the release of 4.2 IP Office:

Material Code	Description
700459332	IPO CD 4.2 USER/ADMIN SET
700459340	IPO DVD 4.2 USER/ADMIN SET
700459357	IPO CD 4.2 VOICEMAIL PRO CD

Note: *It may be acceptable to duplicate this media (CD/DVD) but your contract with Avaya needs to be reviewed in the first instance. If permitted, copies may then be made which must contain an Avaya Proprietary Notice on the CD/DVD.*

The IP Office Release 4.2 software CD images (not DVD) will be available on the Avaya Support website from August 1st 2008.

IP Office Release 4.2 will be downloadable and usable free of charge. However, please note that Avaya reserves the right to charge for future software releases at its discretion.

1. Go to http://support.avaya.com
2. Select FIND DOCUMENTATION and DOWNLOADS by PRODUCT NAME.
3. Select IP Office.
4. Select the Software release required.
5. Select Downloads from the Document Categories.

11.3 IP Office Technical Training

Training is one component that must be fulfilled prior to being an Authorized Avaya Channel Partner. The Avaya University IP Office Technical curriculum is updated to reflect IP Office Release 4.2 through the addition of a new IP Office Product Delta course that covers the major enhancements and customer benefits associated with R4.2.

New online course:

- **ACT00992WEN**: IP Office R4.2 Delta Training course
- **ACT00992AEN** : R4.2 Assessment

To see a full listing of IP Office classes please visit http://www.avaya-learning.com.

For information on the courses and assessments associated with product authorization, select Product Authorization under Curriculum Maps.

Issued by:
Avaya SMBD New Product Introduction

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