



IP Office Technical Bulletin

Bulletin No: 24
Date: 31 May 2004
Region: GLOBAL

General Availability (GA) of IP Office 2.1 Software

Avaya is delighted to announce the launch and availability of IP Office 2.1 software. IP Office is Avaya's Small and Medium Business (SMB) solution designed as a global solution for customers with up to 360 extensions and 120 trunks.

1 Product Overview

The Avaya IP Office 2.1 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 2.1 is the entry-level software to support the following new hardware:

- 3810 Wireless Handset (North America only)

The following new hardware has also been tested for compatibility with IP Office 2.0 and 2.1 software:

- Interquartz 9330-AV and 9335-AV Analog Handsets (UK only)
- 4620SW IP Handset

As well as increased reliability through improvements to the core system software, IP Office 2.1 also supports the following new features:

IP Office Core Software (Version 2.1.15)

- Hunt Group and User Merge
- Remote Upgrade
- Removal of IP403 digital card restrictions
- T1 Support for Small Office Edition (applicable for North America)
- PIN restricted terminals
- Paging over IP Phones
- Integral CSU support (applicable for North America)

- Email reading changes
- VPN Connectivity
- Fax over IP Enhancements (Extended Field Trial)
- Embedded Voicemail Enhancements (Small Office Edition)
- Product Tour and Video Tutorials

VoiceMail Pro (Version 2.1.5)

- Call Data Tagging
- VoiceMail Pro Fax Detection
- VB Scripting
- VoiceMail Pro Networked Messaging (previously known as VPIM)
- Email forwarding via MAPI or SMTP
- SMTP User ID Sending
- Provision for Unreliable Disconnect Capability
- Product Tour and Video Tutorials

User Applications (Version 2.1.9)

- PhoneManager enhancements
- Product Tour and Animated Tutorials (PhoneManager & SoftConsole)

Installation Wizards (Version 2.1.14)

- Installation and Administration Wizard
- IP Office - Small Office Edition Wizard
- Moves, Adds and Changes Wizard

Conferencing (Version 2.1.2)

- IP Office Conferencing Center (formerly known as Power Conferencing)

Compact Business Center (Version 2.1.21)

- Alarms
- Key Performance Indicators
- Trunk Utilization Graph
- Email Notification
- New languages
- Operating System Support

2 IP Office Hardware

The following new hardware is supported with IP Office 2.1 software:

2.1 3810 Wireless Handset



The Avaya 3810 Wireless Telephone is a digital telephone designed to work with IP Office systems. It offers the mobility inherent in a wireless telephone plus access to the features and functionality of the communications system. The Avaya 3810 telephone uses long-range 900MHz digital technology and provides the following features:

- 2-line, 32 character handset Liquid Crystal Display (LCD)
- 4 displayed operation modes indicating Talk, Ringer On/Off, Battery Low, and Message Waiting
- Single button access to fixed features Hold, Transfer, Conference, and Redial
- 4 programmable buttons to access features on the communications system
- 10 channels, supporting up to 10 simultaneous conversations
- Headset jack
- Ringer and Handset volume control
- Vibrate alert
- Base Unit and Charger Unit
- Nickel cadmium rechargeable battery that provides 10 hours of talk time (fully charged)

2.2 Interquartz 9330-AV and 9335-AV Analog Handsets

Avaya SMBS have tested the new generation Interquartz Gemini analog handsets with IP Office to ensure compatibility. The Gemini range offers a whole host of benefits to business users and home workers, including Caller ID, hands-free operation, and headset compatibility. Units are built to the highest standards using high-impact plastic casing, double injection moulded buttons, and non-slip rubber feet. The Gemini offers incredible value for money without compromising on quality. The stylish new design and rugged build quality are sure to make it a popular choice for buyers on a limited budget.

Basic Telephone 9330-AV



Key Features:

- Visual Message Waiting Indication
- Locking mute button with LED indicator
- Last number redial
- Recall button
- Ringer volume adjust
- Ringer indicator light
- Wall mountable – no additional bracket required
- Hearing aid compatible

CLI Feature Phone 9335-AV



The CLI Feature Phone 9335-AV has all the features of the Basic Telephone 9330-AV with the following additions:

- Caller ID with 80 memories (shows date, time & new / repeat / answered / unanswered calls)
- Large 3 line LCD display
- 100 name and number personal directory
- 20 protectable direct access memories
- Full hands-free working
- Headset port
- Data port
- Switchable Time Break Recall 100 / 200 / 300 / 600 ms
- Call timer
- Alphanumeric keypad
- Last number redial with 5 memories

2.3 4620SW IP Handset

The original 4620 IP Handset has recently been replaced by an updated model, the 4620SW. This phone is identical in form and function to the 4620, the difference being the LAN ports on the phone are now switched. This handset does not support the existing 1.8 IP Hardphone firmware and comes shipped with 2.01 firmware pre-loaded. This build has been tested for compatibility with IP Office 2.0 and 2.1 and is now shipped on the IP Office 2.1 Administration CD. It is installed into the Manager directory by default. This build is now also used for the original 4620 IP Hardphone.

3 IP Office Software Enhancements

3.1 Hunt Group and User Merge

IP Office 2.1 software now provides full merge capability for all Hunt Group and User configuration data. This includes the following items:

- Addition of new users
- Deletion of users
- Changing of user name
- Changing of user extension
- Changing of user restrictions group

Newly created users are automatically logged into their handsets provided that the Forced Login user configuration parameter is disabled. Any calls in progress on completion of the merge now belong to the new user. If this is not the behaviour required then the Forced Login parameter should be enabled, and the new user must log into their phone manually.

When a user is deleted, any calls in progress with this user continue without interruption. The owner of the call is transferred to the No User system user. When the call drops, the call is reported in the call log event stream as originating/terminating at No User. The handset reports NOT LOGGED IN when the user is deleted.

NOTE: PhoneManager and SoftConsole will stop working correctly as soon as a user configuration is deleted. The user must terminate and restart these applications manually utilizing the new user configuration.

The following related configuration items are automatically updated on changing a user extension:

- Hunt group membership
- Coverage lists containing this user
- Incoming call routes to this destination
- Diverts to this user
- Internal AA transfer targets
- Dial-in source numbers for access to own user's voicemail

Merging the deletion of a user causes all references to that user to be removed from the system. This includes:

- DSS keys set to user
- Presence of a coverage list
- Diverts to this user
- Incoming call routes to this target
- Hunt group membership
- Internal auto-attendant transfers

The following are automatically updated on a user name change:

- All DSS user BLF configurations
- The existing voicemail account folder is automatically renamed providing that the Voicemail is running. If the Voicemail is not running then when it is next started a new account folder will be created

NOTE: If you reboot the IP Office after making a name change a new mailbox account folder is created for the new user name.

All hunt group configuration data can now be fully merged. Additionally, the merging of hunt group configuration data allows for:

- Addition of new groups
- Deletion of groups
- Changing the 'ACD queuing' capability of a group
- Changing the name of a group
- Changing the number of a group

When a hunt group is deleted all references to the group will be removed including:

- Entry in Incoming call routing table
- Transfer target in internal auto-attendant
- Overflow, Night Service or Fallback Service on other groups
- DSS keys monitoring group status

NOTE: The group will not be deleted until all calls that were established through calling the hunt group are cleared. In the meantime the group is set to out of service and any new calls to that group will not be processed. The group is now set in a deleting state. Whilst in this state, updating any setting on the group using the Manager application or the installation wizard will reinstate the group, i.e. the deleting state is lost and the group will not be deleted.

Changing the name of a hunt group has the following consequences:

- A new empty mailbox is created on voicemail with the new name
- Entries in other groups' Overflow list will be updated
- Out-of-Service and Night-Service fallback references are updated

Modifying the Extension number of a Hunt Group updates the following:

- DSS queue monitoring configurations
- Incoming call routing entries
- Transfer target in auto-attendant (Embedded Voicemail)

NOTE: Deleted hunt group or renamed hunt group voicemail mailboxes are not deleted from the voicemail server. By default, messages left in these mailboxes that are marked as new remain. Those messages that have been

saved or are marked as read are treated to the configurable voicemail housekeeping mechanisms.

The following configuration items can also be fully merged:

- Short Codes
- User Restrictions
- Incoming Call Routes
- Least Cost Routes
- Account Codes
- Licences

The following IP Office configuration items cannot be fully merged:

- Extensions
- Trunks
- System/telephony
- Data router infrastructure

NOTE: Configuration merge intelligence is improved with the use of the latest Manager software, version 4.1, provided on the IP Office 2.1 Administration CD. Using any previous release of Manager will not support full merging of Users and Hunt Groups.

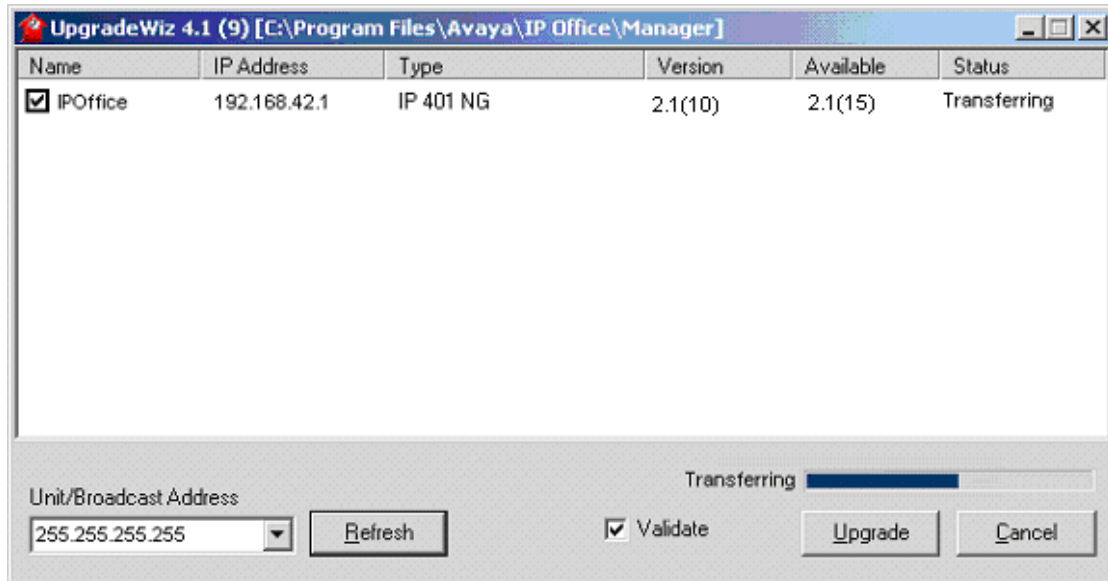
3.2 Remote Upgrade

NOTE: Remote upgrade is only supported once the system has been upgraded to 2.1 locally. Once this build is loaded, any future software builds can be loaded remotely.

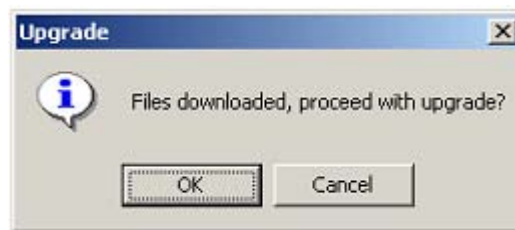
IP Office 2.1 software will support the ability to perform an upgrade to the IP Office and Expansion module core software, either locally or remotely.

The current mechanism, known as local upgrade, works by effectively deleting the firmware in a given module of a system and then rebooting that module. This applies to both IP Office base and expansion modules. The module then broadcasts for a TFTP capable server containing the requisite firmware and downloads this new firmware from the identified server. For a multiple module system, each unit is upgraded in turn.

By first establishing an IP connection to an IP Office, over LAN, WAN or dial up link, a remote upgrade can be carried out. The remote upgrade operates by first contacting the system and then sending all relevant firmware images to each selected unit in turn.



When the files have all been received they are verified by use of a checksum. When the files have been verified, the user is presented with an option to either proceed with the upgrade or to cancel the operation.



NOTE: The Validate checkbox at the bottom of the UpgradeWiz window ensures that the user is informed of a successful transfer of the software. If this option is not selected then the upgrade proceeds as soon as the files have finished being transferred, even if the transfer has not been successful, and can therefore fail to upgrade the system and may leave it unserviceable.

If the option to proceed is selected then the remote system software is erased and the transferred binaries are uploaded. If the cancel upgrade option is selected then the upgrade is rolled back to its original state and the binaries are removed from RAM.

For a system with expansion modules, all modules to be upgraded are rebooted and upgraded simultaneously. Once the expansion module upgrade has been completed the base module image, if originally selected by the user for upgrade, is committed to FLASH and the base unit is rebooted automatically.

NOTE: During the transfer process the binaries are stored in RAM and the operation of the system is not affected until the upgrade is performed.

3.3 Removal of IP403 Digital Card Restrictions

A need for increased trunk support has been identified with the IP 403 platform for which previous versions of the core firmware have been restricted to allow a maximum of one digital trunk interface per system.

With this release of core firmware that restriction has been lifted. Any supported digital trunk card can be fitted to any or both of the trunk interface slots available in an IP 403 system. As for previous versions of firmware there is no restriction on the fitting and use of analog trunk interfaces.

On an IP 403 there are 8 pairs of yellow and green LEDs, each pair built in to the handset interface ports on the front left of the unit. The green LEDs are used for the phone status indications. Viewing the IP 403 unit from front left, the first yellow LEDs are used to indicate that phone expansion modules are connected to the IP 403 TDM expansion ports. The next four yellow LEDs are used to indicate the status of the first four trunk lines of a trunk interface card in slot B. The last yellow LED is used to indicate the status of the WAN port. Thus there are no yellow LED's left to indicate the status of the slot A trunk interface cards.

NOTE: Dual Trunk interface cards are still only supported in the IP 412.

3.4 T1 Support for Small Office Edition (Applicable for North America)

IP Office 2.1 software will extend the use of the T1 trunk interface card in IP Office Small Office Edition to voice trunks. This offers an additional connectivity option for IP Office Small Office Edition beyond the current limit of 4 analog trunks.

3.5 PIN Restricted Terminals

IP Office currently supports forced accounts codes as enabled on the users telephony settings. If enabled, a user has to enter an account code that is verified against a system account code list before being able to make a call. The PIN restricted terminals functionality enhances the use of the current feature to provide a refined mechanism with which to control a user's ability to place outbound calls. The PIN restriction operates in an identical way with the exception that this feature is invoked via a short code. A forced account code tick box has been added to the short code form.

On dialling a number, which matches a short code, the user will be prompted to enter an account by a recurring beep. Upon entering a valid account code the call will be placed.

Shortcode 00xxxxxxxxxx

Short Code	00xxxxxxxxxx
Telephone Number	00N
Line Group ID	0
Feature	Dial
Locale	
Force Account Code	<input checked="" type="checkbox"/>

OK Cancel Help

Wildcards are used when defining the restricted number, so that PIN codes are not requested in the middle of dialling a number. Thus, a matching number of 00 would request the PIN code in the middle of dialling the number, as it would be matched after just 2 digits, whereas a matching number of 00xxxxxxxxxxx would request the PIN code after the entire number had been dialled.

If the PIN code is entered before the number is dialled, using the SetAccountCode short code, the call information is simply updated, and dial tone is supplied to the terminal to indicate that the line is ready. Handsets of any type can access this feature.

There is also a system wide setting which will determine if account codes are to be hidden. Applications such as PhoneManager are able to retrieve and display a list of the system shortcodes. If the "Show Account Code" option is not enabled then the account code will appear as a series of asterisks on the user's handset and in PhoneManager.

The outputs to other applications, such as CCC and SMDR, are not hidden. Redial and call histories do not remember the PIN associated with the original call. The user will be prompted to re-enter this if redialling a number. Off switch diverts will also fail if a PIN is required.

The screenshot shows the 'System Configuration : IP Office' window with the 'Telephony' tab selected. The 'Default Outside Call Sequence' is set to 'RingNormal', 'Default Inside Call Sequence' is 'RingType1', and 'Default Ring Back Sequence' is 'RingType2'. The 'Dial Delay Time (ms)' is 1000, 'Dial Delay Count' is 4, 'Default No Answer Time (secs)' is 15, 'Hold Timeout (secs)' is 15, and 'Park Timeout (secs)' is 300. The 'Companding' section has 'ALAW' and 'ALAW Line' selected. The 'Busy Tone Detection' section has 'Mode' set to 'System', 'Single Freq. [10Hz]' at 0, 'Dual Freq. [10Hz]' at 0, and 'On'/'Off' widths at 0. The 'Show Account Code' checkbox is checked and circled in red. Other checkboxes include 'Local Dial Tone', 'Local Busy Tone', 'Conferencing Tone', 'Inhibit Off-Switch Calls', and 'Dial By Name'. The 'OK', 'Cancel', and 'Help' buttons are at the bottom right.

3.6 Paging Over IP Phones

IP Office 2.1 software provides the ability for the Avaya range of IP hard phones (46nn series) to participate in page groups and therefore receive calls. Third-party IP Phones and all IP soft phones do not support this functionality.

Avaya IP hard phones and the normal range of IP Office supported digital terminals that can receive page calls may be mixed in a page group. There is no arbitrary limit to the number of IP phones that may participate in a receiving page group other than the normal resource constraints and the ultimate limit of IP phones supported on a single IP Office system.

Implementation of this feature has the added benefit of more economic use of valuable VCM resources within an IP Office system. Current software requires the availability of a VCM channel when instigating and placing an IP handset call, whatever the destination of the call.

The current implementation requires a VCM be used to generate call tones to any given IP phone, for instance, dial tone, ring tone etc. The IP Office paging solution however lifts this restriction by introducing software generated tones whenever possible whatever the media channel type required. This allows VCM channels to remain more available for use in necessary CODEC conversion and non-direct media conversations. This will help to cut down the number of no-talk-path voice calls that can occur when VCM resources become constrained in a heavily used system.

NOTE: VCM channels are still used when a page call occurs and the destination for the page call includes groups that contain IP hard phones. The maximum number of channels used will depend on the IP hard phone media settings for each of the IP phones that may be paged; this includes combinations of CODEC and companding types. For example, four IP Phones in a page group, each one set to the following media parameters: G711 a-law, G711 u-law, G729 a-law, and G729 u-law, will require four VCM channels. This is unlikely to occur as these phones would normally be set to the same configurations.

Please see section 10 - Known Issues, for more information on current limitations.

3.7 Integral CSU Support (Applicable for North America)

IP Office now performs some of the functions of a typical CSU, such as line loop-backs and periodic performance reports. It will also be possible to apply an automatic loop-back when the CSU recognizes a D4 or ESF framed or unframed Line Loop back (LLB) pattern.

Manual loop-backs are activated using the System Monitor application. The loop-back control has been added to the T1 monitoring tab under the Filters menu item. The lines on which the loop-back is to be applied are selected using tick boxes for each required line.

All Settings

ATM	Call	DTE	EConf	Frame Relay	GOD	H.323	Interface	ISDN
LDAP	PPP	R2	Routing	SNMP	System	T1	VPN	WAN

Events

☐ CAS

☒ Channel

☐ Dialler

☐ DSP

☒ Line

Loop-back Type

☒ Line Loop-back

☐ Payload Loop-back

☐ Loop-back Off

Loop-back Line Selection

☐ Line 1

☐ Line 2

☒ Line 5

☐ Line 6

Default All Clear All Tab Clear All Tab Set All OK Cancel

Manual loop-back requests override automatic requests. The switch will not respond to automatic activation or deactivation requests while a manual loop-back is active. Also, automatic loop-back requests can be deactivated by overriding them with a manual request and subsequently removing it.

Selecting the "Loop-back Off" radio button will subsequently terminate the loop-back. Clicking on the OK button on the form activates the changes. When applied, the manual line/payload loop-back loops back the entire signal received from the line back to the line, that is, all 1.544 Mb/s.

NOTE: While the line/payload loop-back is operational, the line is taken out of service. No incoming calls can be received from the line and the line cannot be used for outgoing calls.

Automatic line loop-back can be requested remotely either by the CO or by a test engineer, using either in-band signalling or FDL messages. In order to enable this feature, the CSU Operation tick-box must be selected on the Advanced tab of the T1 line configuration screen using the Manager application.

PRI 24 Line

Line | Advanced

Test Number:

Framing:

Zero Suppression:

Clock Quality:

CSU Operation: ☒

Haul Length:

Line Signalling:

Incoming Routing Digits:

CRC Checking: ☒

OK Cancel Help

The in-band activation code for a line loop-back is a framed DS1 signal consisting of repetitions of four zero bits followed by a single one bit, lasting for five seconds.

The in-band deactivation code for a line loop-back is a framed DS1 signal consisting of repetitions of two zero bits followed by a single one bit, lasting for a least five seconds.

The FDL activation code for a line loop-back is a data link message with the following format:

```
00001110 11111111
```

The FDL deactivation code for a line loop-back is a data link message with the following format:

```
00111000 11111111
```

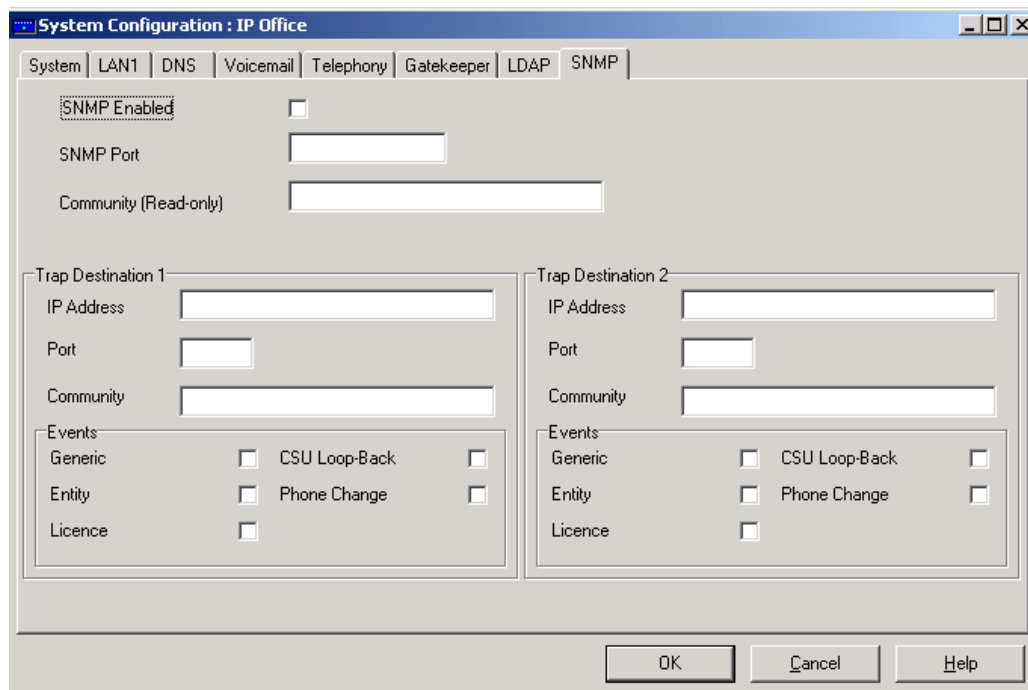
The automatic payload loop-back cannot be activated by In-band signalling, it can only be activated through data-link activation with a data-link message in the following format:

```
00010100 11111111
```

The deactivation code for a payload loop-back is a data-link message with the following format:

```
00110010 11111111
```

New SNMP traps have also been defined to reflect the CSU loop-back functionality.



System Configuration : IP Office

System | LAN1 | DNS | Voicemail | Telephony | Gatekeeper | LDAP | **SNMP**

☐ **SNMP Enabled**

SNMP Port:

Community (Read-only):

Trap Destination 1

IP Address:

Port:

Community:

Events:

Generic	<input type="checkbox"/>	CSU Loop-Back	<input type="checkbox"/>
Entity	<input type="checkbox"/>	Phone Change	<input type="checkbox"/>
Licence	<input type="checkbox"/>		

Trap Destination 2

IP Address:

Port:

Community:

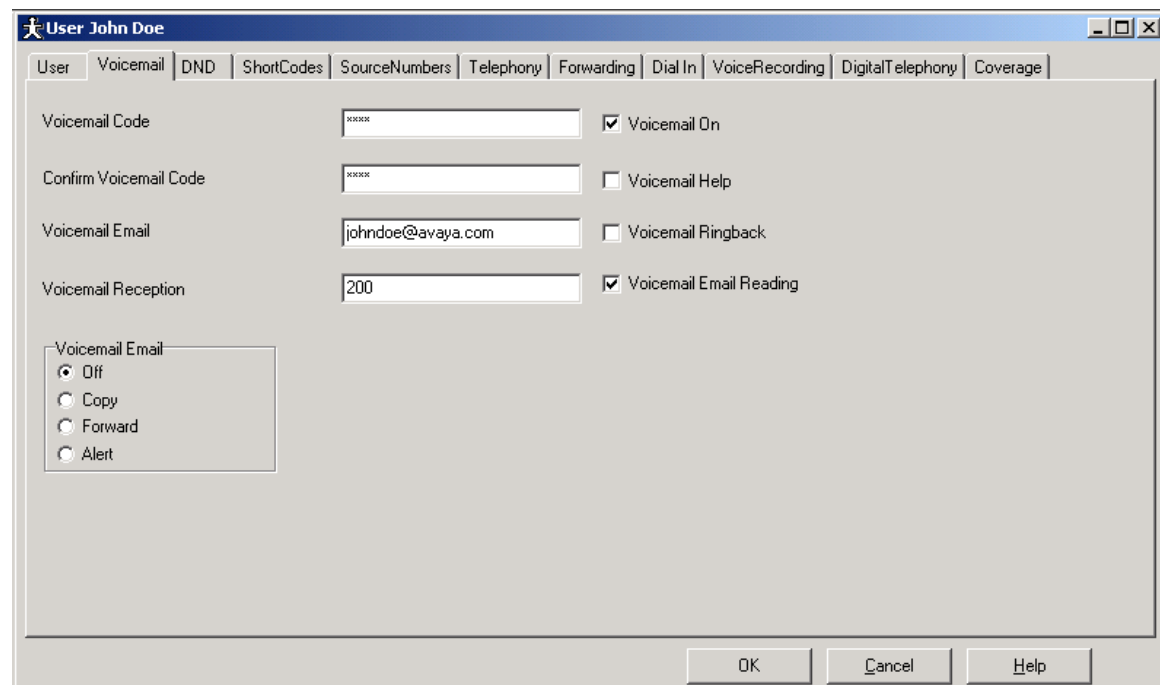
Events:

Generic	<input type="checkbox"/>	CSU Loop-Back	<input type="checkbox"/>
Entity	<input type="checkbox"/>	Phone Change	<input type="checkbox"/>
Licence	<input type="checkbox"/>		

OK Cancel Help

3.8 Email reading

To facilitate email reading the Voicemail tab within a User's configuration settings now has a new check box to indicate that the user will be using email reading. In IP Office 2.0 this facility was activated by prefixing the email address with a "+" sign.



User John Doe

User | **Voicemail** | DND | ShortCodes | SourceNumbers | Telephony | Forwarding | Dial In | VoiceRecording | DigitalTelephony | Coverage

Voicemail Code: ☒ **Voicemail On**

Confirm Voicemail Code: ☐ **Voicemail Help**

Voicemail Email: ☐ **Voicemail Ringback**

Voicemail Reception: ☒ **Voicemail Email Reading**

Voicemail Email:

- ☒ Off
- ☐ Copy
- ☐ Forward
- ☐ Alert

OK Cancel Help

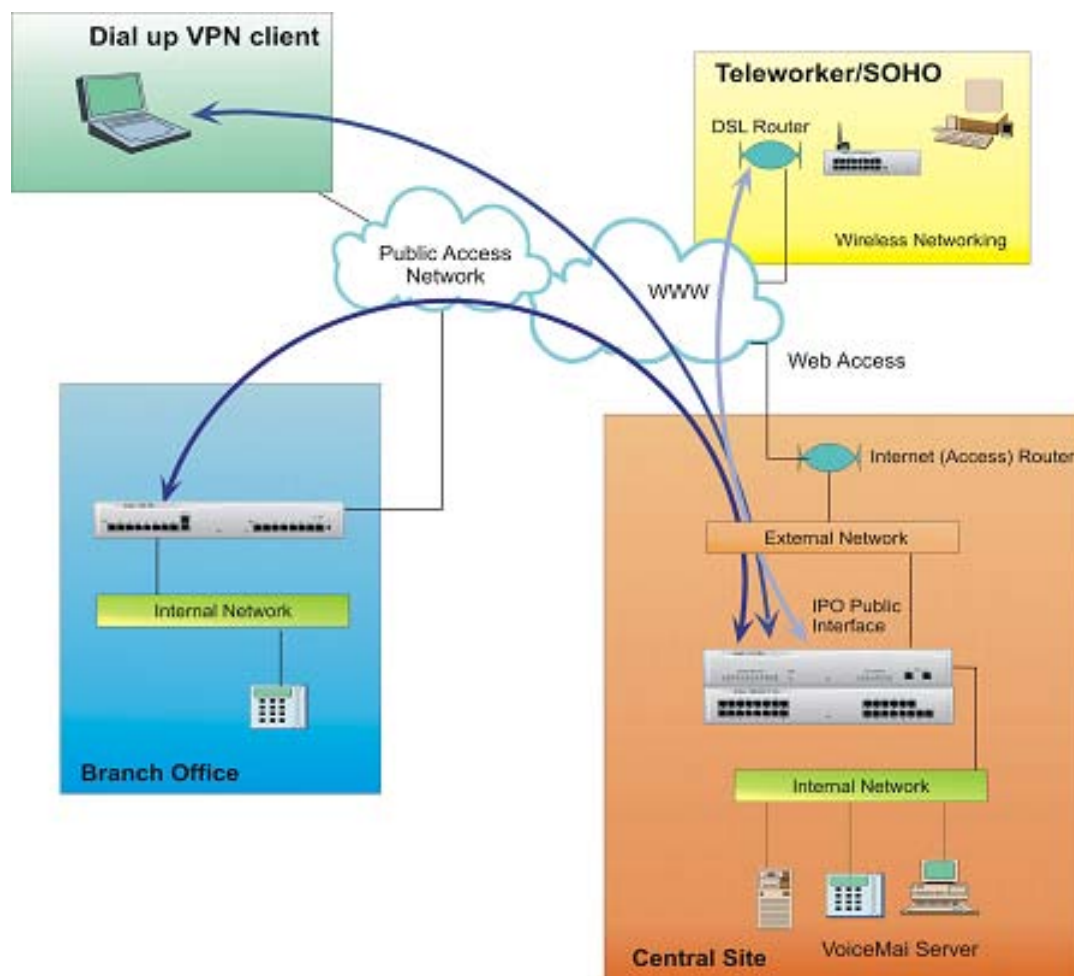
3.9 VPN Connectivity

The Avaya IP Office VPN solution uses the IPSec protocol and L2TP to meet the security requirements of customers. VPN solutions securely connect two or more subnets over the internet or intranets. For each subnet there is a security gateway, built into the IP Office, which is linked over a cryptographically secured tunnel to the security gateway, IP Office, of the other subnet.

IPSec provides network-layer cryptographic services because IP does not inherently provide any protection to transferred data, nor does it authenticate the sender. IP Office supports third party interoperability to Cisco PIX (6.2) and Cisco Router (12.2) using pre-shared mode only. Also supported are access VPN clients including Cisco and NetScreen as well as Layer 2 Tunnelling Protocol clients in Microsoft Windows operating systems.

IP Office encrypts data using 56-bit Data Encryption Standard (DES) or 168-bit Triple DES (3DES), using pre-shared mode only.

The diagram below shows typical IP Office VPN Networking deployment using the Internet and other public access network.



Secure Data Transmission Over Public Networks (VPN)

IP Office to IP Office VPN

VPN capability is integrated into the IP Office server delivering a single box communications solution, with the ease of common management, and lower total cost of ownership than a multi box solution. The VPN capability in Avaya IP Office gives a cost effective alternative to private leased line or Frame Relay (FR) services for interconnecting IP Office systems. It also allows customers to avoid the high costs associated with teleworkers and the mobile workforce using ISDN or dial-up based Remote Access Servers (RAS). Instead they can leverage the ubiquity and low cost of the public internet, yet retain the security of private circuits. IP Office supports IPSec and L2TP Compulsory/Voluntary technologies to deliver VPN functionality. The implementation is such that IP Office concurrently performs the functions of a NAT enabled gateway, as well as terminating and originating VPN tunnels. This allows IP Office to be used for both secure networking between branch offices, as well as for NAT access to Internet services.

Client VPN

IP Office interoperates with the NetScreen-Remote VPN client. This client application is used to initiate secure VPN tunnels from a personal computer to a secure gateway and can be used, for example, to secure remote dial up connection over the internet to the company office. Once the remote client connection to IP Office is established, the PC has secure access to company IT resources.

Third-Party Interoperability

IP Office VPN can interoperate with selected third-party equipment such as Cisco Routers and PIX access devices. We support IPSec inter-working between IP Office and Cisco IOS™ version 12.2 and later, using pre-shared mode only. The level of inter-working includes QoS for VoIP through TOS settings within IP packets for voice streams routed through the secure tunnel.

VPN Specification

Capacity		
Description	IP412	IP406, IP403, SOE
Maximum throughput for all traffic types	1Mbps	1Mbps
Maximum bandwidth for VPN	1Mbps	1Mbps
Maximum bandwidth for VoIP	512kbps	256kbps
Maximum number of Tunnels, any type	10	4

IPSec	
Security Protocols	ESP
IPSec Modes	Tunnel Mode
Encryption	DES, 3DES
Integrity	Hash Algorithms: MD5, SHA-1
Authentication	Pre-Shared Secret
Key Management	IKE: DH Group 1,2
ISAKMP SA Establishment	Main Mode, Aggressive Mode
IPSec SA Establishment	Quick Mode

Supported Clients
NetScreen-Remote VPN Client 10.0.0 or later
Cisco
Microsoft VPN Client

NOTE: The Microsoft client works in Transport Mode by default, which the IP Office does not support. To change this to use Tunnel Mode requires some changes to the registry. Full details of this can be found on the Microsoft website.

L2TP
Optional Authentication: Pre-Shared Secret

Management
The VPN tunnels are set up through the IP Office Manager application

VPN Connection Types
Frame Relay
DSL (with external DSL device)
PPP WAN
Dial up ISDN data connection

NOTE: For details of the configurations that have been tested, please refer to the IP Office VPN Manual available from the Avaya support website.

3.10 Fax-Over-IP Enhancements

Enhanced fax-over-IP functionality is in an extended Field Trial phase and is not a supported part of this release. If you have any fax-over-IP applications that may be suitable for Field Trial please email newprodintro@avaya.com in the first instance with full details of the proposed application.

IP Office has the ability to send fax messages over a network that uses IP trunking to another IP Office system. The local IP Office automatically detects fax tones in a call, decodes these tones into the fax image data, and sends this data across the IP network to a remote IP Office system. The remote system receives the image data and re-transmits the fax as tones so that it can be received by the remote station (fax machine) as a fax call.

With this release of IP Office software, we are extending this capability for IP Office to interwork fax with ACM gateways.



3.11 Embedded Voicemail

The embedded voicemail system has been enhanced to provide the following time limits on all embedded voicemail sessions, that is, leaving voicemail, collecting voicemail and auto-attendant sessions. These limits are as follows:

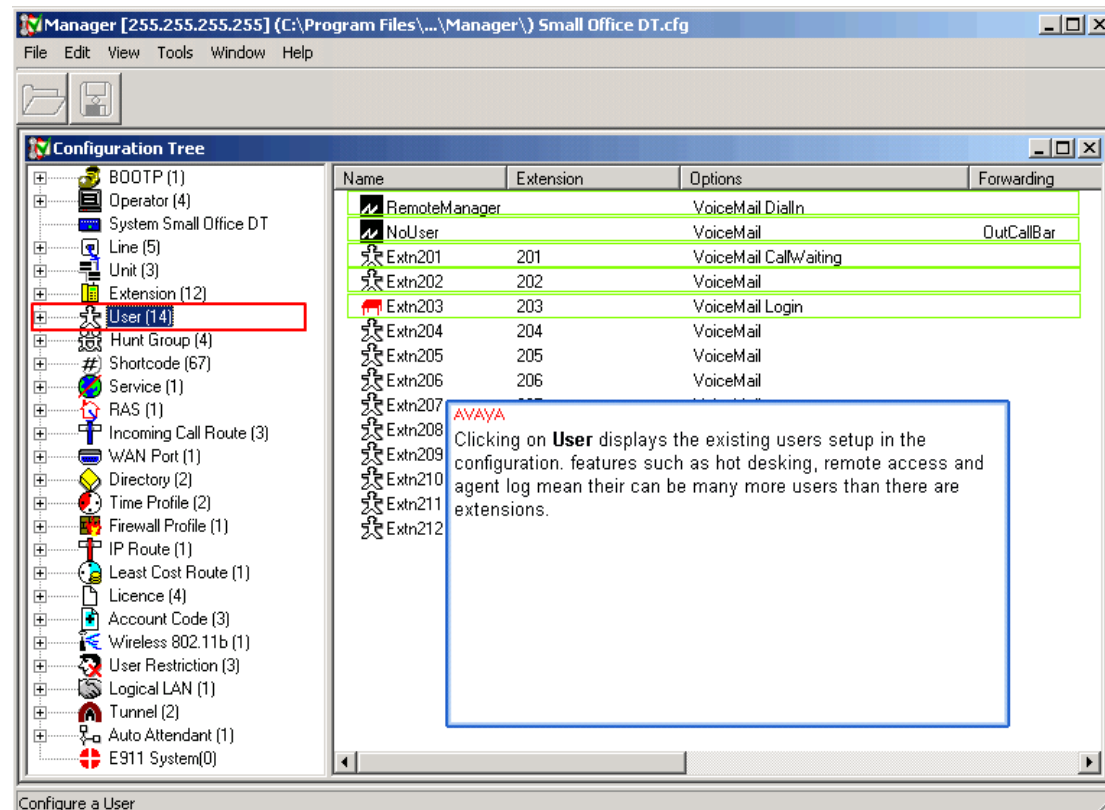
- An overall time limit of 1 hour is applied to all sessions, after which the session will be terminated by the voicemail system.
- A time limit of 5 minutes of inactivity, that is, no speech or DTMF detected, is applied to all sessions, after which the session will be terminated by the voicemail system.
- For calls that have a line that does not have a reliable disconnect, i.e. analog trunks connected to exchanges that do not provide Disconnect Clear, or T1 Loop Start lines, the above inactivity time limit is reduced to 30 seconds.
- A time limit of 10 seconds of inactivity, that is, no speech or DTMF detected, is applied to voicemail messages being left, after which the voicemail system plays the "Thank You for leaving a message..." prompt prior to disconnecting the call.

When terminating voicemail collection or the auto attendant, the voicemail system simply disconnects the call when the time limit has been reached.

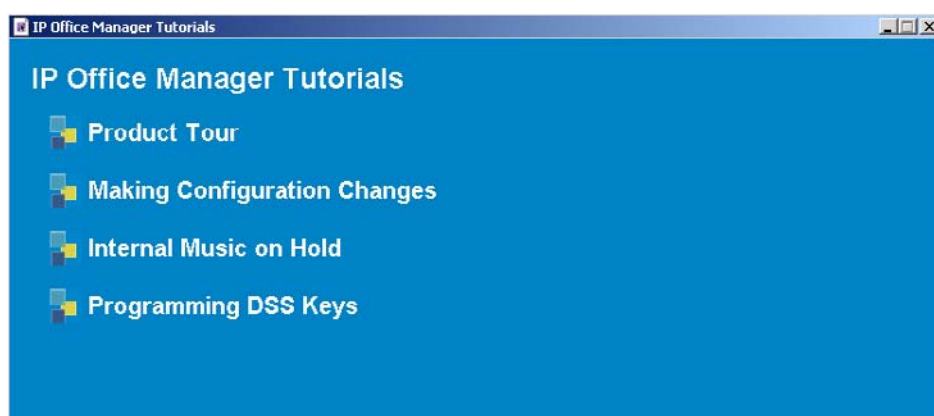
3.12 Product Tour and Video Tutorials

Two new items have been added to the toolbar of the Manager Application's help menu to launch the product tours and animated tutorials.

The product tour takes you through the controls and configuration options within the Manager application. This is navigated by simply clicking on the required menu items within the configuration tree.



The video tutorials take you through some of the more common tasks.



4 IP Office VoiceMail Pro

4.1 Call Data Tagging

The IP Office supports a TAPI mechanism to get and set a data tag associated with a call. VoiceMail Pro has been enhanced so that it can set the data tag associated with a call record with any single system or user defined variable data. Call data tagging allows calls answered by auto-attendant and transferred to an agent, via the Assisted Transfer action, to be provided with a selectable system variable that may be passed into the IP Office system maintained call information data area.

This data area is accessible by third party TAPI applications, allowing these to generate pop-up information that may be presented to agents or users. System variables are those variables available from within configured voicemail call-flows and may encompass data such as CLI.

This feature also allows further integration with Microsoft CRM by using a special tag identifying that the call data tag contains a Microsoft CRM Account number. The tag can also indicate which Microsoft CRM field to use in the query, to support custom fields.

This enables customers to capture account code type data from a customer via an IVR callflow and have the Avaya Microsoft CRM integration application use this information to more accurately target Accounts or Contacts from the Microsoft CRM system to screen pop the call.

The screenshot shows a Windows-style dialog box titled "Properties for Assisted Transfer". It has five tabs: "General", "Entry Prompts", "Specific", "Reporting", and "Results". The "General" tab is selected. Inside the dialog, there is a section labeled "Assisted transfer to". Below this label are four fields: "Mailbox" with the value "200", "Source of transfer (displayed on phone)" which is empty, "Description (displayed on phone)" with the value "<MSCRM-ACT>\$KEY", and "No answer timeout" with a value of "30" and a spin button. At the bottom of the dialog are three buttons: "OK", "Cancel", and "Help".

In the example above the "<MSCRM-ACT>" tag informs the screen pop application that an Account lookup is required. The "\$key" at the end of the tag captures DTMF input from the caller and uses this as the Account number.

To support Contacts, which do not inherently have Account number fields, a custom field can be specified. The tag would have the format "<MSCRM-ACT=CFCustomAccount>\$key" where the custom field in the Contact form is called "CFCustomAccount". This would then take the user input and search for a match in that field on the Contact form. To add custom fields to the Contact form within Microsoft CRM you declare a new field through use of the Deployment Manager (Schema-"Contact"-Attributes). The forms designer is used to add the field on to the Contact form.

4.2 VoiceMail Pro Fax Detection

VoiceMail Pro 2.0 provided fax detection from within callflows when routed through a Menu action. This feature has been extended in this release to include calls delivered to a user's mailbox. To provide the ability to route these calls to a fax device the VoiceMail Pro client will store a default fax number. If no default number has been entered then this facility will not work. When working in Intuity mode a user will also have the option of entering/deleting an alternative fax number, which will be used in preference to the default number.

NOTE: Fax extensions should be set to DTMFB through the Manager application in order for DTMF to be sent through with the faxes.

4.3 VB Scripting

The 'GetDTMF' and 'RecFile' functions will now present a beep to indicate the start of recording of DTMF entries.

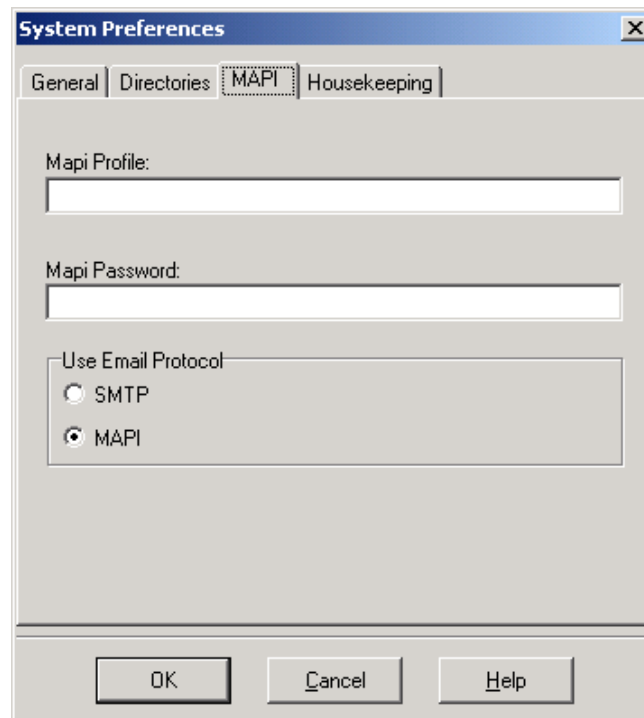
4.4 VoiceMail Pro Networked Messaging (previously known as VPIM)

By linking messaging systems together a business can record messages at any location and have them delivered to the appropriate messaging server automatically. Although messages may be taken at any point in the virtual network, message notification will still be provided as if the message had been taken locally.

Any IP Office system supporting Networked Messaging can record and forward a message to any configured mailbox on another IP Office system supporting Networked Messaging. Furthermore, the Avaya Interchange or S3210 messaging servers will provide the ability to have any appropriate messages forwarded onto other messaging systems that may be connected to them.

4.5 Email forwarding via MAPI or SMTP

VoiceMail Pro now offers the choice of either MAPI or SMTP for the email forwarding/copy/alert functionality. The VoiceMail Pro administrator can toggle between MAPI and SMTP through the VoiceMail Pro client application. The MAPI tab of the System Preferences now has a new section call "Use Email Protocol."



NOTE: IMS will still use MAPI even if these settings are set to SMTP.

4.6 SMTP User ID Sending

A majority of mail servers are now being locked down to prevent the sending and relay of spam email. If using SMTP the VoiceMail Pro can be configured to send the SMTP User ID. This is configured in the MAPI tab shown above, where the SMTP ID is entered into the MAPI Profile field.

4.7 Provision for Unreliable Disconnect Capability

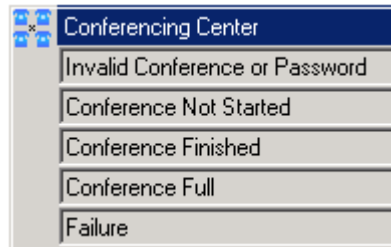
VoiceMail Pro, in tandem with IP Office, has been enhanced to better cope with those field situations encountered when deploying against certain types of unreliable analog trunks. That is, those trunks where disconnect clear signaling is either absent or cannot be guaranteed to arrive from the central office within acceptable limits. Generally this kind of installation is not recommended when utilizing VoiceMail.

The 'Disconnect Clear' tick box, found on the Analog tab of the Analog Trunk Form, is left unchecked when the incoming line provides no disconnect clear signal. This allows IP Office to inform VoiceMail when passing on an incoming call that the call has arrived over a trunk interface that may have unreliable disconnect clear indication. The Voicemail then reacts more aggressively in reducing the instances of phantom calls. The IP Office, when hearing no voice or tones for around seven seconds will pass this info to the VoiceMail so that it may try and clear the call.

NOTE: This is primarily used in the USA and Canada where no tones are provided when the call has cleared (dependant on service provider), as opposed to Europe which will provide an NU or busy tone when no disconnect clear signal is present. This will not work in countries that provide some form of tone when the call has cleared.

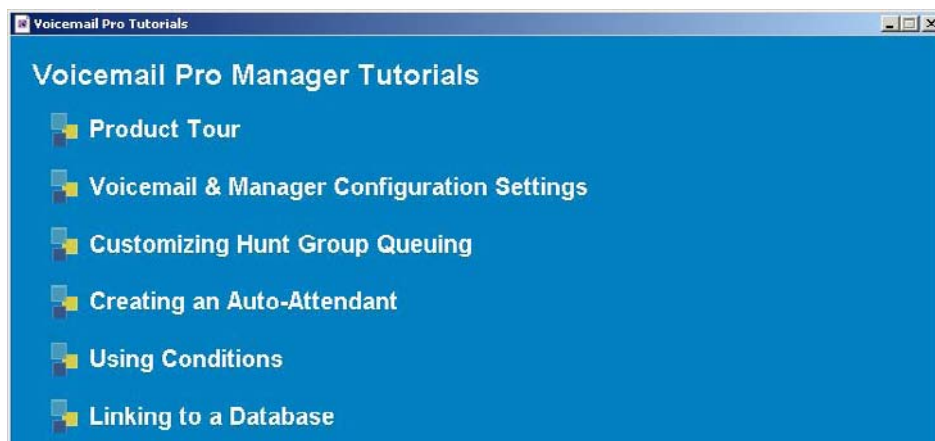
4.8 Renaming of Callflow Action

In line with the name change for Power Conferencing the Power Conferencing callflow action has also been renamed to Conferencing Center.



4.9 Product Tour and Video Tutorials

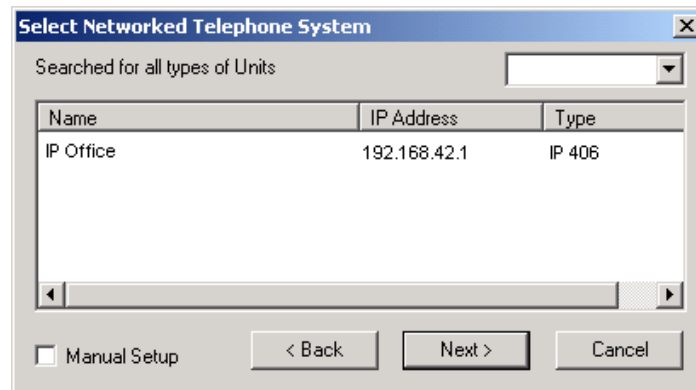
The relevant menu items have been added to the VoiceMail Pro client help menu to allow the product tour and the animated tutorials to be run.



5 IP Office User Applications

5.1 Phone Manager

The Installation Wizard browses the network for the IP Offices available, and the user is prompted to select an IP Office from the list. The user list of the selected IP Offices is then retrieved and the user is then prompted to select the username to use with the applications on the CD.



5.1.1 Support of the PIN Dialing Feature

PIN-restricted terminal support is provided via the Phone Manager application. After appropriate configuration on the IP Office system, Phone Manager allows a user to enter PIN codes for appropriately restricted terminals.

Phone Manager itself requires no configuration to support the ability or enforce the need to enter PIN codes. All configuration to enable this feature is performed on the IP Office system by use of the Manager Application.

Typically, an IP Office system would be configured to have Show Account Codes disabled and Force Account Code enabled for the relevant shortcode-based dial destinations that require restrictions. System account codes must also be added to the IP Office system configuration to be used as PIN codes.

Dialing PIN-restricted numbers can be performed from:

- Make Call dialogue box
- Programmed speed-dials
- Programmed account code details

In the Make Call dialogue box the user enters the number to be dialed and this information is passed to the IP Office system. If the switch needs to restrict this number via the use of a PIN code, Phone Manager will pop up a new dialogue box to allow the user to enter a PIN. If an invalid PIN is entered Phone Manager will display an error message indicating that an account code is required.



Speed Dials can be used to dial telephone numbers that may be PIN-restricted. Each speed dial properties dialogue box can now have a PIN configured. Invoking the speed dial utilizes the configured PIN code when making a call. The same process occurs as the Make Call set-up, whereby if a PIN is not configured a dialogue box will prompt for a PIN.

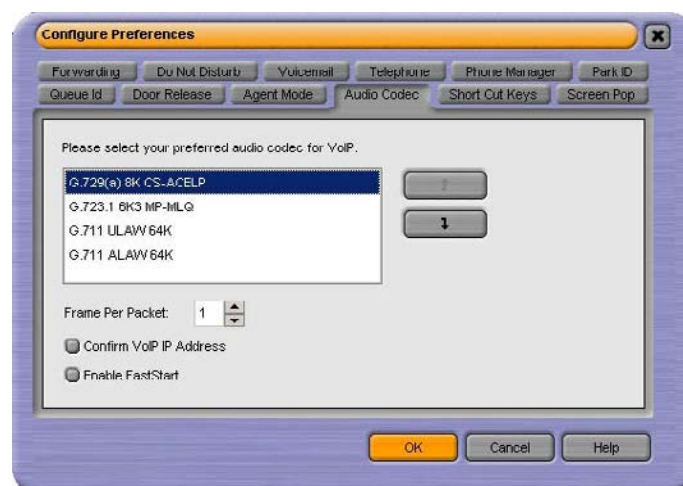


The PIN property is also available in account code speed dial properties dialogue boxes. Account codes are ignored if PIN restrictions are configured on the IP Office system. Behaviour of PIN code usage for account code speed dials is the same for normal speed dials. Again, failure to enter account codes correctly either through a handset or through Phone Manager will cause the limits of dialling on the previous slide to apply.



5.1.2 User Selection of IP Address to use with Phone Manager

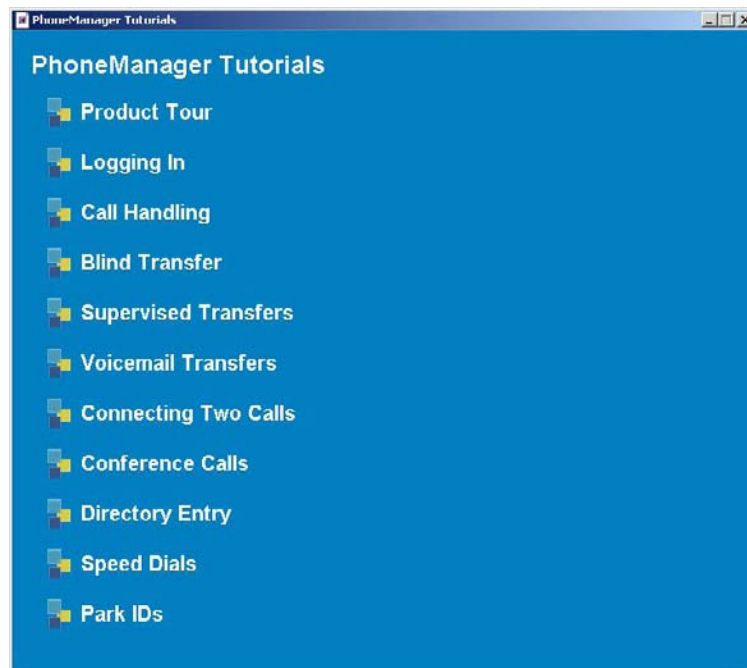
A new option 'Confirm VoIP IP Address' has been added to the 'Audio Codec' tab. When this option is enabled Phone Manager will display all the IP addresses that are available on the PC, and allow the user to select which one to use with Phone Manager VoIP.



This forces Phone Manager to perform RAS with the IP Office on the selected interface only, and only the selected IP address is passed in the registration message to the IP Office.

5.1.3 Product Tour and Video Tutorials

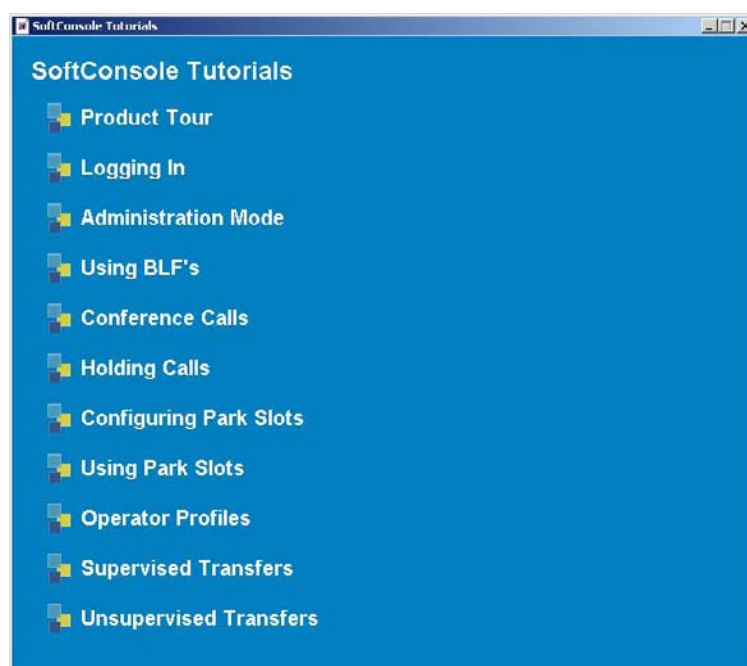
The relevant menu items have been added to the Phone Manager help menu to allow the product tour and the animated tutorials to be run.



5.2 SoftConsole

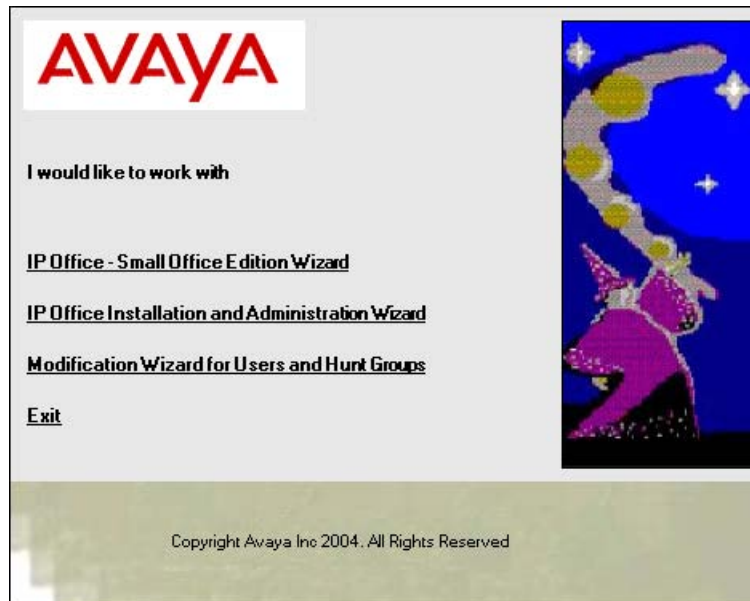
5.2.1 Product Tour and Video Tutorials

The relevant menu items have been added to the SoftConsole help menu to allow the product tour and the animated tutorials to be run.



6 IP Office Installation Wizards

When the IP Office Wizard is launched there are now three different wizards available within the application.



6.1 IP Office - Small Office Edition Wizard

This Wizard is only intended for the setup of the Small Office Edition and has a subset of the options available from the Installation and Administration Wizard. It is only intended to be used for standalone sites and not for use in multi-site networks.

6.2 IP Office Installation and Administration Wizard

The existing Wizard has been enhanced so that it is possible to navigate through the minimum number of screens to complete a configuration. This will be done through decisions based on available hardware. It is now also possible to configure Least Cost Routes using this wizard.

6.3 Modification Wizard for Users and Hunt Groups

This Wizard is used to make changes to the setup of Users and Hunt Groups only.

7 IP Office Conferencing Center

NOTE: IP Office Conferencing Center was formerly called Power Conferencing.

The integrated conferencing functionality of IP Office can be greatly enhanced by adding the IP Office Conferencing Center. This optional application is a web-based software package that consists of two parts: A “Conferencing Center Scheduler” (to book and reserve conferences) and a “Conferencing Center Web client” (to complement an audio conference with a web interface). The scheduler can be used independently of the web client. IP Office Conferencing Center also interacts with SoftConsole and Phone Manager.

7.1 IP Office Conferencing Center Scheduler

The Web Scheduler allows registered users to create and book conferences online using a web client interface. The scheduler offers secure conferencing while being very easy to set up. Users simply enter the date, time, duration, and number of delegates required. The conference is then created if the resources are available for that specific time. Once reserved, the conference resources are allocated to that conference call for the specified number of delegates at the selected time and date. Additionally, Music-On-Hold (if available) can be played while waiting for a conference to start.

CONFERENCING CENTER SCHEDULER

Conferences My Profile Users Reports Configure Database Help Exit

Create New Conference Pending Conferences In-Progress Conferences View Conference Resources

Create New Conference

Name : Sales Meeting

Date :  

Start Time (H:MM) : 14 :00

Duration (Mins) : 45

Participant Count : 10

Music On Hold : 5 Mins Duration

Book Conference View Resources Cancel

CURRENT USER : SAOFFTREN3000

Access to the web scheduler requires a user to be set up by the administrator and have Microsoft Internet Explorer (version 6.0 or above) installed on their PC. No other software is required.

Once registered, users can review the system resources before booking a new conference, book a conference, and list pending conferences that they have previously set up.

The user setting up the conference can then add delegate details, including email address and phone number. This allows email notification to participants to confirm the conference call details, including the conference name, description, bridge number, conference ID, and their unique participant PIN code (if PIN checking has been selected).

Voice Conferencing Notification (VCN) can also be activated for selected participants. This allows VoiceMail Pro to dial out to delegates when the conference is about to start and bring them to the conference bridge if they are available.

CONFERENCE CENTER SCHEDULER

Conferences | My Profile | Users | Reports | Configure | Database | Help | Exit

Create New Conference | Pending Conferences | In-Progress Conferences | View Conference Resources

Add Conference Participants

Conference ID : 987756
 Date : 24/05/2004 Start Time (HH:MM) : 11:30
 Duration (Mins) : 45 Participant Count : 5
[Show Conference Details](#)

Name	Email	Phone	Status	VCN	Email	PIN
John	John@abc.com	555 832 1563	Host	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	825407
Peter	Peter@xyz.com	555 752 7685	Speak And Listen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	184910
Sarah	Sarah@abc.com	555 513 6298	Speak And Listen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	501184
Maria	Maria@xyz.com	555 393 5454	Speak And Listen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	435184
			Speak And Listen	<input type="checkbox"/>	<input type="checkbox"/>	846123

Update Send Emails Cancel

CURRENT USER : SAOFFTRIEN3000

Participants' details can be amended prior to the start of the conference. Advanced security is available by generating a unique PIN for every participant, allowing them to be recognized by the system and displayed on the IP Office Conferencing Center web client (if selected – see below). If announcements are required, VoiceMail Pro will announce each participant by playing their name (if internal user) or asking them for their name (if external participant).

At the end of the conference, each participant leaving the conference will be announced. Users with administrator privilege can generate reports regarding conference usage and individual conference reports.

CONFERENCE CENTER SCHEDULER

Conferences | My Profile | Users | Reports | Configure | Database | Help | Exit

List of Conferences for Reporting | General Report

Individual Conference Report

Conference Details

Conference ID : 185985
 Type : Planned
 Name : test
 Description : test
 Started : 30/04/2004 11:36:23
 Ended : 30/04/2004 11:58:22
 Bridge No : 555 555 1234
 Created By : saoffttrien3000

Participant Details

Name	Status	Joined	Left
andy waddle	Host	30/04/2004 11:39:16	30/04/2004 11:51:34
Chris Boseley	Speak And Listen	30/04/2004 11:40:25	30/04/2004 11:51:17
aw	Speak And Listen	30/04/2004 11:39:58	30/04/2004 11:51:23

[Return to List of Conferences](#)

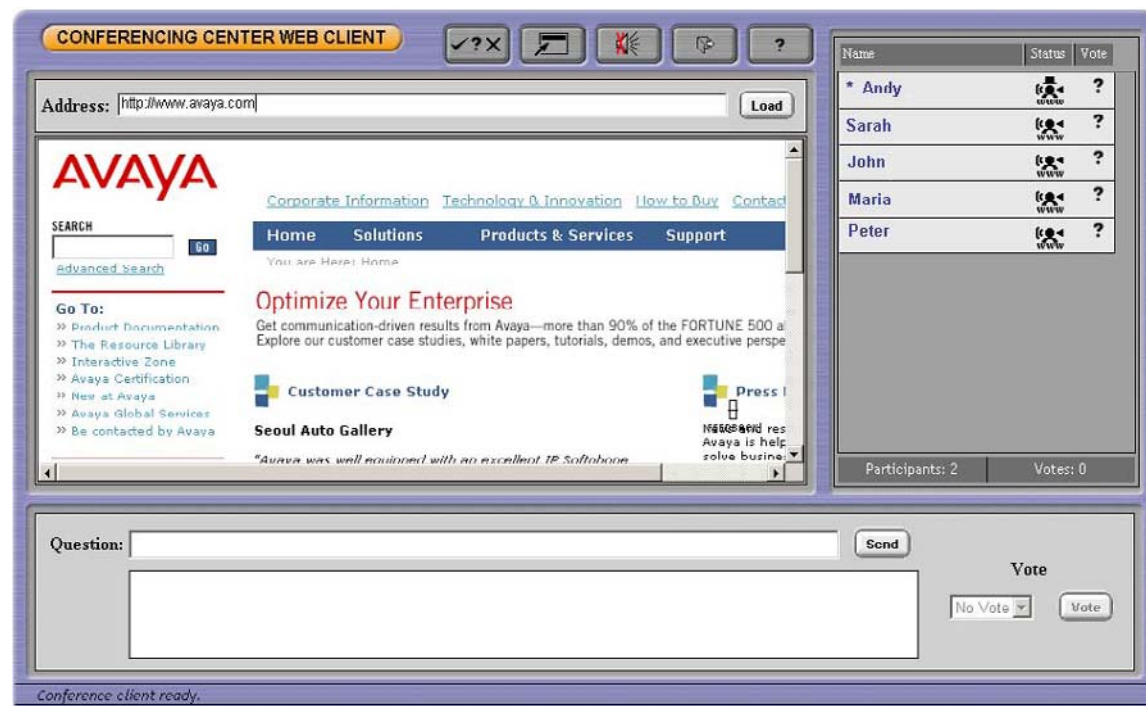
CURRENT USER : SAOFFTRIEN3000

This will detail the conference name and ID, the start date and time, duration, and number of participants. Individual reports can also be run listing delegate details and when they joined/left the conference. Additionally, if voting was being used using the IP Office Conferencing Center web client, voting results for each delegate would be shown for each question asked during the conference call.

7.2 IP Office Conferencing Center Web Client

To complement the audio-conference, the host has the ability to set up web support. This offers a web interface where the host and delegates can see which participants have joined the conference and whether they joined as audio-only, or both audio and web.

Privileges for a web client are limited to voting purposes only. A host to the conference has the ability to pose questions, modify delegate contact details, and “whisper” to a single participant connected into the conference.



The host can also publish a document for review on the web client. This would need to be a document saved in html format (such as a PowerPoint presentation or an Excel spreadsheet) or may simply be a website URL. When presenting the document, the host has the ability to synchronize the document to all participants (e.g. change slide) as long as he resides within the same domain as the IP Office Conferencing Center server (this is a Microsoft networking attribute). Delegates can be located anywhere on the internet or across an extranet.

Access to the IP Office Conferencing Center web client simply requires the participant to have Microsoft Internet Explorer (version 6.0 or above) installed on their PC. No download is required. There can be as many web clients as there are participants on the conference call (i.e. 64 maximum). Access to the web client requires the participant to logon using the Conference ID and their unique PIN. This offers security and allows the system to recognize who joined the conference and display the correct name on the right-hand side of the screen.

7.3 SoftConsole Integration

An operator equipped with the SoftConsole PC-based application can set up ad-hoc conferences via drag and drop if the delegates are internal, using the Busy Lamp Field (BLF). VoiceMail Pro will then contact the delegates and bring them to the conference. External delegates are called by the operator and transferred to the conference. The operator can also transfer a call to a simple or IP Office Conferencing Center conference via the SoftConsole application.

7.4 PhoneManager Integration

Phone Manager users can join an IP Office Conferencing Center conference and book an IP Office Conferencing Center simply by clicking on the relevant icons within Phone Manager. This will launch the IP Office Conferencing Center web client and the IP Office Conferencing Center Scheduler respectively.

NOTE: This feature is only available if permission is specified by your system administrator and if the IP Office Conferencing Center system is available. This is set via the user's telephony settings within the IP Office Manager application.

7.5 System Requirements

- IP Office version 2.1 or higher
- VoiceMail Pro version 2.1 or higher

IP Office Conferencing Center Server:

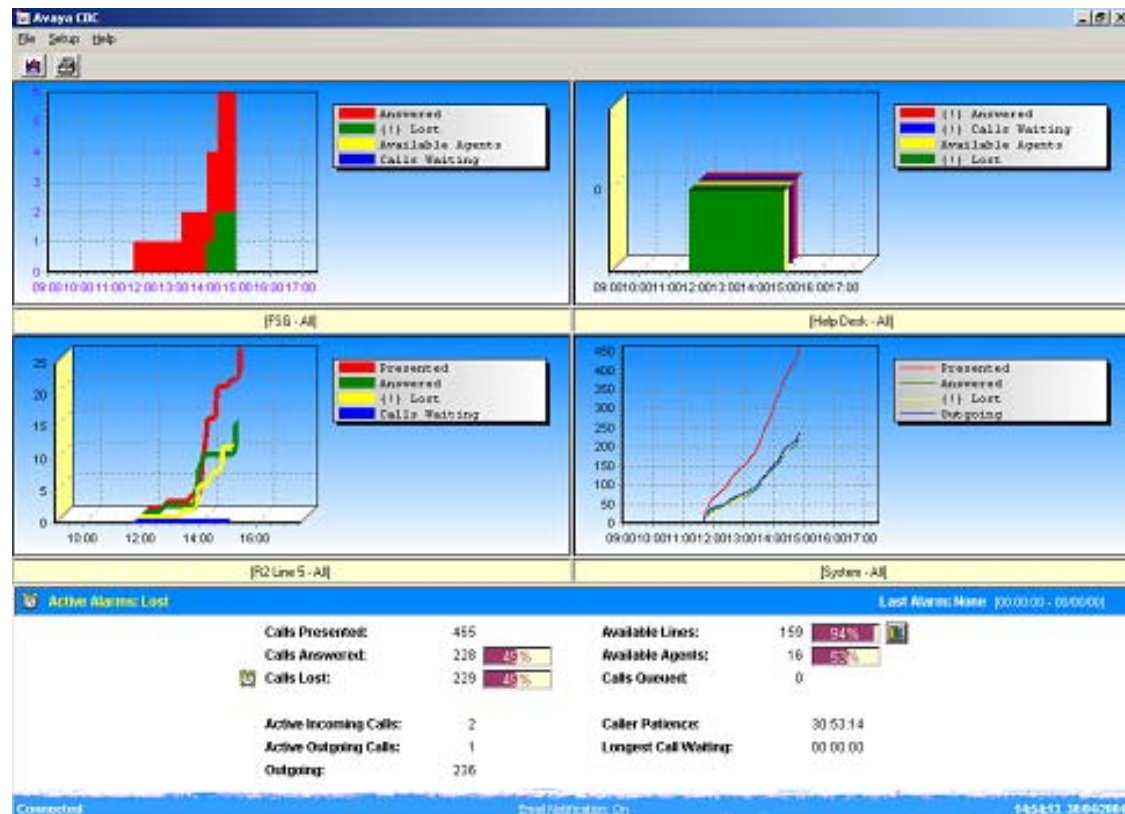
- Pentium 450MHz (1.4GHz recommended) or above with 256MB RAM (512MB +recommended)
- Windows 2000 Server or Windows 2003 Server (Windows XP Professional, Windows 2000 Professional could be used but would typically support a maximum of 10 web clients)
- 80MB of free disk space
- Microsoft Internet Information Service (IIS) installed, capable of supporting as many web clients as required (please refer to Microsoft for licensing)
- Microsoft Internet Explorer version 6.0 or higher

IP Office Conferencing Center Web Client:

- Microsoft Internet Explorer version 6.0 or higher
- PhoneManager version 2.1 or higher (optional)
- SoftConsole version 2.1 or higher (optional)

8 IP Office Compact Business Center Version 2.1.21

IP Office Compact Business Center (CBC) is an entry-level management tool for small customer-facing departments, typically handling from 2 to 15 agents. This release improves the general look and feel of the application and introduces alarms that can be sent to the system maintainer, via email, when threshold alarms associated with Key Performance Indicators have been exceeded.



8.1 Alarms

There are a variety of new alarms that have been added to this version.

- **Lost Calls Alarm** – The CBC will provide an alarm when the lost call threshold has exceeded 10% of calls presented. This threshold is fixed and cannot be changed.
- **Trunk Utilization Alarm** – The CBC will provide an alarm when the system trunk utilization (available lines) has exceeded 75% of the total available voice trunks. This threshold is fixed and cannot be changed.
- **Calls Queued Alarm** – The CBC will provide an alarm when the number of calls in the queue is greater than four. This threshold is fixed and cannot be changed.
- **Available Agents Alarm** – The CBC will provide an alarm when the number of available agents is less than 10% of the currently logged in agents. This threshold is fixed and cannot be changed.

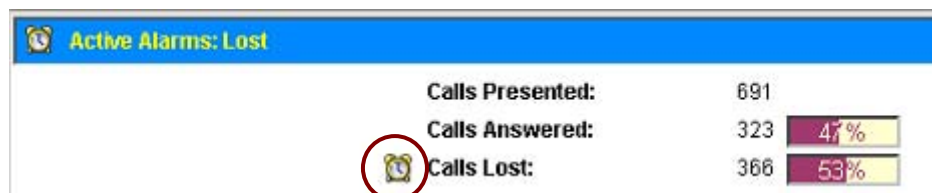
Alarm Notification

When an alarm is triggered the CBC will indicate the alarm in several ways:

- In each of the graphs the current alarm condition will be prefixed with “(!)”:



- An Alarm icon will appear in the Key Performance Indicators area next to the value currently being alarmed:



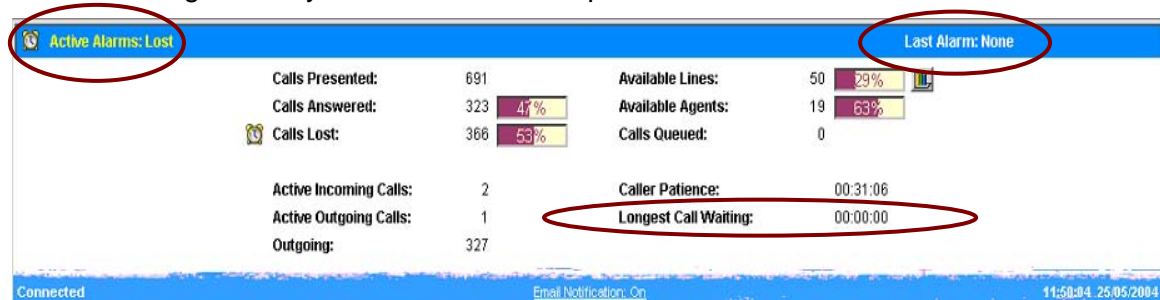
- If email notification is enabled an email will be sent to a pre-defined email address. (Please see section 8.4 for details of email notification.)

NOTE: An email is only sent once a day at midnight. This will summarise the alarms that have occurred for the previous day.

8.2 Key Performance Indicators

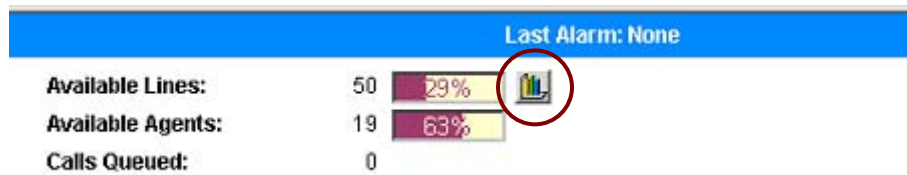
The following new fields have been added to the Key Performance Indicators screen:

- Active Alarm** – A new text field has been added to the Key Performance Indicators screen named “Active Alarm”. This will display any alarm state that is currently occurring within the system. In the case of multiple alarms the display will read “Multiple”.
- Last Alarm** – A new text field has been added to the Key Performance Indicators screen named “Last Alarm”. This will display the most recent alarm state that has occurred and since cleared.
- Longest Call Waiting** - A new field has been added to the Key Performance Indicators screen named “Longest Call Waiting”. This will display the longest waiting currently active call and will update in real time.

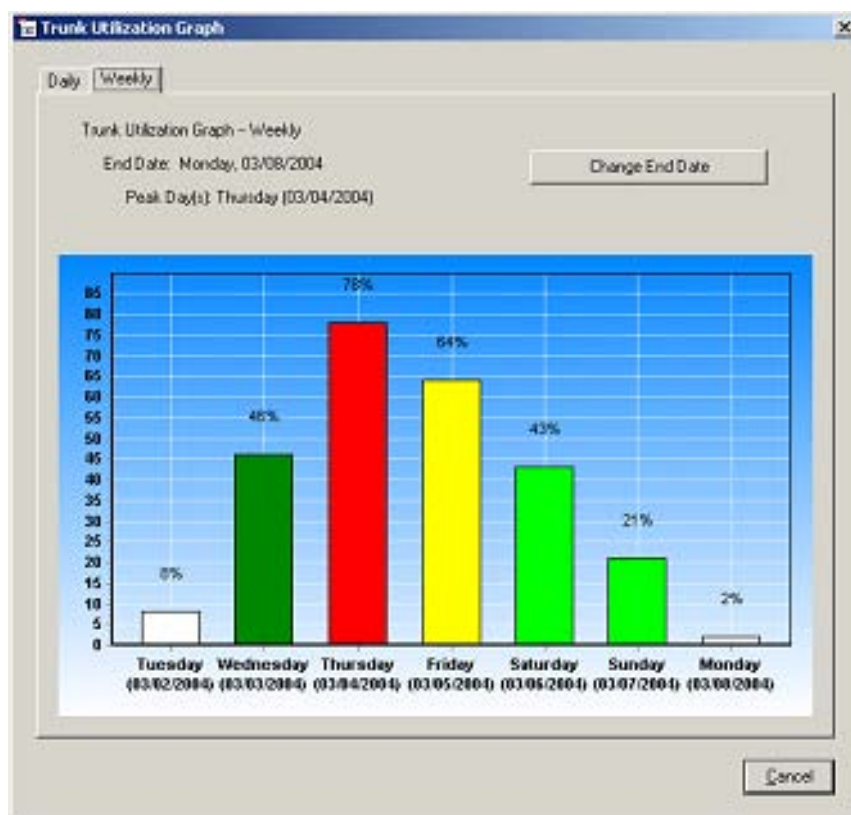


8.3 Trunk Utilization Graph

In the Key Performance Indicators screen, located adjacent to the “Available Lines” parameter, there is an icon that links to a new graph known as the “Trunk Utilization Graph.”



The graph has two display modes, Daily (representing a 24 hour clock) and Weekly (representing the days of the week). The graphs show Average Trunk Utilization and Peak Utilization by hour or day. The weekly chart can also be configured to represent a 5 or 7-day week.



The graph columns are colour coded according to the level of trunk utilization:

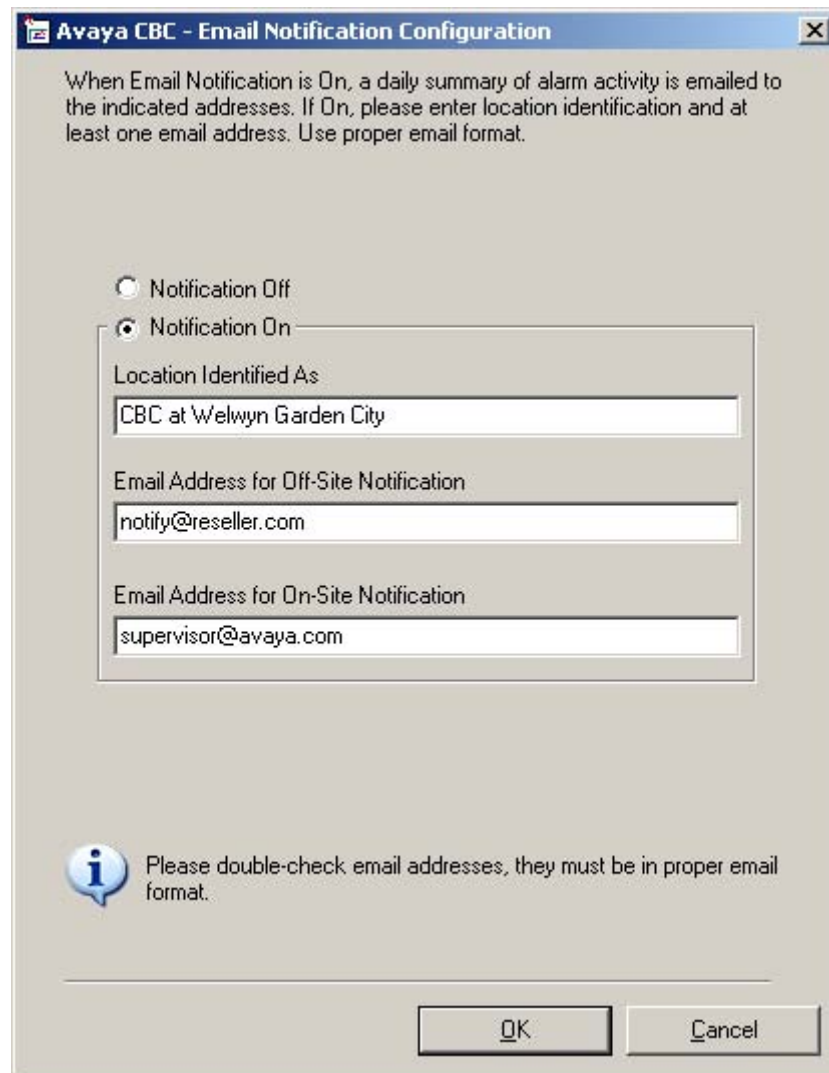
Level of Utilization	Colour
2% - 20%	White
21% - 45%	Light Green
46% - 60%	Dark Green
61% - 75%	Yellow
> 75%	Red

8.4 Email Notification

The Compact Business Center provides a new feature that allows it to automatically send an email notification of defined system parameters.

The parameters available for this feature are Trunk Utilization Alarms, Lost Call Alarms, Available Agent Alarms, and Calls Queued Alarms.

Once these have been selected the CBC can be set to send out a list of all of the alarms that have occurred for the previous business day.



The dialog box is titled "Avaya CBC - Email Notification Configuration". It contains a text area with instructions: "When Email Notification is On, a daily summary of alarm activity is emailed to the indicated addresses. If On, please enter location identification and at least one email address. Use proper email format." Below this are two radio buttons: "Notification Off" and "Notification On" (which is selected). Under "Notification On", there are three text input fields: "Location Identified As" (containing "CBC at Welwyn Garden City"), "Email Address for Off-Site Notification" (containing "notify@reseller.com"), and "Email Address for On-Site Notification" (containing "supervisor@avaya.com"). At the bottom left is an information icon with the text "Please double-check email addresses, they must be in proper email format." At the bottom right are "OK" and "Cancel" buttons.

NOTE: The email is sent once a day at midnight only, not after each alarm. This setting cannot be changed.

8.5 New languages

CBC now supports Italian and Russian as new languages.

8.6 Operating System Support

Compact Business Center version 2.1 is supported on the following operating systems:

- Microsoft Windows NT Server / Workstation
- Microsoft Windows 2000 Server / Professional
- Microsoft Windows XP Professional
- Microsoft Windows 2003 Server

8.7 System Requirements

The minimum recommended PC specification for CBC is:

- Pentium II 400MHz or higher
- Minimum 128 Mbytes of RAM
- 2 GB Hard disk space

9 Issues Resolved in IP Office 2.1 Software

The following issues have been resolved in this release of IP Office 2.1 software:

9.1 Core Software

- Called party information is now passed to an IP600 when using H.323 trunks.
- It is now possible to return to a caller that has been transferred to a busy extension via a DSS key, by pressing the hold button.
- It is now possible to leave a message for a hot-desk user who has DND set, by pressing the 'vmail' softkey on an internal call.
- The maximum called party number length for a 5ESS switch has been changed from 15 to 17.
- Multiple, repeated tromboning on unconditionally forwarded calls does not now result in loss of speech path or call dropping.
- Calls that have already been answered can now be successfully transferred to extensions that are unconditionally forwarded off switch.
- The speech path will not now be interrupted on a call to a user who has call waiting enabled and is being monitored, when a new call is presented.
- Blind transfers direct to a DECT terminal that should have been to the twinned number do not now result in call cut-off.
- Blind transfers direct to a DECT terminal that has no twinned number, or is part of a coverage group do not now result in call cut-off.
- Callers do not now get cut off when using the 'call steal' feature if the call is in the process of being queued.
- An extension which is paged whilst having a call on hold will now no longer experience one-way speech upon retrieving the held call.
- The use of the feature 'Inhibit Off Switch Calls' now prevents trunk-to-trunk transfers.
- DHCP will now provide an IP address for Dial-in users.
- The IP Office Small Office Edition running version 2.1 software includes enhancements for DHCP client mode operation. The new DHCP client mode functionality now includes:
 - IP address / mask assignment for LAN2 interface
 - Automatic Default IP Route configuration
 - Automatic NAT enablement on the LAN2 interface

The new DHCP enhancements allow the IP Office Small Office Edition to be used in conjunction with xDSL lines that use DHCP to allocate necessary IP parameters and typically operate in Bridging Mode. The IP Office Small Office Edition cannot be used with ADSL router devices that are configured for single address working with NAT.

- The Merge of IP Routes into configurations has been fixed.
- DT modules no longer reset due to messaging problems between the DT module and PhoneManager applications.
- The Korean trunk transmit volume has been increased.

- Problems with conferencing in a cell phone before it has been answered have been fixed.
- CLI information no longer disappears when a group member answers a call that has been transferred from another extension.
- DSS Button configured for a Hunt Group no longer flashes continually indicating a call still in the queue when there was no actual call.
- When working as an agent with a headset, the Wrap Up Timer was not in effect if using the Drop button to disconnect the call.
- DS modules no longer reset or lose connection with IP Office 412 when Call Recording was active.
- Upgrading across a LAN with different subnets no longer fails.
- The DS30 Module no longer reboots if more than fifteen 2420 phones on that module had Dial Page buttons programmed.
- When receiving a call with no CLI when "frc" is the configured locale, the word "Refusé" has been changed to "Inconnu".
- Issue causing one-way speech path to sometimes occur over T1 lines has been addressed.
- The Frame Relay help file for "Frame Management Type" no longer incorrectly lists "Ausi Annex D" instead of "Ansi Annex D".
- An error message no longer appears when adding an overflow group in the Manager Application, although the group would still be created.
- Special characters, such as some foreign characters, will now display correctly, or will display their nearest equivalents where the character set cannot be displayed entirely on 44xx and 64xx terminals.
- If the regional setting on a PC was set to any locale where there is not a specific IP Office help file, then the Help About did not work. This has now been resolved.
- If you created a custom operator with the ability to edit, view, delete, and create for the user section, but who had no permissions for the extensions section, attempts to make changes under the user tab no longer result in an access violation.
- Inability to input group entries into the Fallback option within an Incoming Call Route if there was a space used within the group name has been resolved.

9.2 VoiceMail Pro

- If a disconnect action was programmed in a VoiceMail "queued" or "still queued" node the call did not disconnect. This has been resolved.
- When using VoiceMail Pro and Danish locale you no longer sometimes hear certain prompts in German.
- When using \$LOC variable in VoiceMail Pro, the issue with not playing .wav files if configured on the specific tab of a "voice question" action has been resolved.
- Chinese translations used on VB scripts in VoiceMail PRO have been corrected.

- The correct French .wav file is now played when accessing your mailbox to record a greeting message.
- The DTMF algorithm has been improved to cope better with calls from analog trunks.
- The VoiceMail Pro Service would occasionally stop, but this issue has now been resolved.

9.3 User Applications

9.3.1 PhoneManager

- PhoneManager Pro running in Agent mode no longer generates an Access Violation if users have logged out then in again while calls were queuing against a group of which they were a member.
- If PhoneManager is resized so that park slots are not visible and then a call is made, upon maximizing the application again the park slots do now re-appear.
- If Voicemail Ringback call was missed, the CLI displayed in the PhoneManager under the "Missed Calls" field was that of the number of messages in the mailbox, i.e. 00000001. This has been resolved.
- If using PhoneManager Pro in Agent mode and Busy Wrap-Up was set, making changes to PhoneManager preferences no longer takes the agent out of Busy Wrap-Up.
- Duplicate extensions are no longer listed in the logon field in PhoneManager if PBX addresses are entered using cut and paste.

9.3.2 SoftConsole

- SoftConsole user no longer drops a held call after paging to a group.
- The display in the SoftConsole application would freeze when a mix of 46xx and 20xx phones used in same Hunt Group. This has been resolved.
- Enhancements have been made to the sorting of list views in the SoftConsole application.
- Absent messages are now correctly updated in the SoftConsole application.
- If a large number of BLF speed dials were configured in the SoftConsole it would cause the BLF display to flicker. This has been resolved.
- The SoftConsole now does displays the "Called Name" for incoming external calls.
- After a period of operation the SoftConsole would sometimes crash and generate access violation errors. This has been resolved.
- Enabling "off-hook" operation via the login form in the SoftConsole application did not actually set the station to off hook operation. This has been resolved.

9.3.3 TAPI

- Hold music does now start when putting a call on hold by using TAPI.
- When a call is taken off hold using TAPI, the hold music would sometimes continue to play. This has been resolved.
- During a call the hold music sometimes starts with the sending of a DTMF tone. This has been resolved.
- A memory leak in TAPI has been fixed.

10 Known Issues

10.1 Core Software

- There is a problem in the operation of Hunt Group Overflow. If an incoming call rings to a Hunt Group (Group A), each terminal will be rung for the "No Answer Time" until the "Overflow Time" expires, the call will then transfer to the designated Overflow Group (Group B) set in the Hunt Group Form. This is expected operation and correct. However, the call will ring in the Overflow Group B for Group A's "No Answer" timeout on one terminal only according to the group ringing pattern (Group, Hunt, Rotary, Idle) before transferring back to Group A. It will not ring around the Overflow group according to the Group A "No Answer" and "Overflow" Timers as expected and stated in the current help files.

Once the call has reverted to Group A, if Group A has Group Voicemail set to "on", the call will immediately go to the Group A Mailbox, if Group Voicemail is set to "off", the call will ring according to the timers set in the Hunt Group Form before transferring once again to the Overflow Group B.

- At this time the "Mute All Participants" feature of the IP Office Conferencing Center, available from the Host Web Client, should not be used. The operation of this could impact the reconnection to the TDM conference matrix causing a permanent listen-only environment to all registered conference participants. This can only be rectified with a reset of the IP Office.
- There has been a change in functionality from 2.0 in the way that an IP line must be configured if using LAN2 on an IP Office Small Office Edition or IP 412.

Normally when setting up VoIP the IP Line gateway address must be set to the LAN1 address of the remote system, e.g. LAN1 IP line via WAN link. The exception to this rule is when the IP trunk is terminated on LAN2 of a dual LAN system, in this case the LAN2 address must be used as the gateway. This functionality has been enhanced to allow H323 connections to be established on LAN2 without the need for a VPN tunnel.

- In a Small Community Network if a User has BLF buttons programmed to monitor users on a remote system the programming for these buttons is lost if the remote systems connection is lost or the remote system is rebooted.
- Fax over VoIP on a frame relay connection running RFC1490-FRF12 does not work. Fax over VoIP over any other connection type is unaffected.
- When IP Office commences an IP page it will allocate a VCM resource for each IP end point page destination. This consequently limits the number of IP end points that may receive a page to the number of VCM channels available within the system minus the number being utilised for CODEC work. The phone display will change to indicate that it is receiving a page call but Audio may not be received. This also means that during a page call there may be no VCM resources available for IP Phone users to make calls.
- When creating an IPSEC tunnel, Phase 1 negotiation can fail if the name of the tunnel includes a space.

- After upgrading a system that has a paging port configured, the paging port is no longer operational unless you cold restart the module that has the paging extension configured.
- PIN code dialling should hide the PIN from the phone display unless the "Show Account Codes" option has been configured. When an extension receives a call and then transfers the call to an external number, when the external party answers the call the account code is shown on the display.
- The in-built call log of the 2420 phone remembers the PIN codes entered when making PIN restricted calls. When redialling they are not directly applied and it is necessary to enter the PIN manually, but they can be seen in the call log. This is actually an issue with the phone, not the IP Office core software.
- The message waiting lights of the Interquartz 9330-AV and 9335-AV Analog Handsets do not work correctly when the system locale is set to anything other than "eng". In these locales the message waiting light will not indicate a message until the phone state changes, e.g. the phone goes off and on hook.

10.2 VoiceMail Pro

- VoiceMail Pro is not supported on Microsoft Windows 2003. Support for this operating system will be introduced in a future release.
- Dial by Name is not responding to User extension number or name changes. A restart of the VoiceMail service rectifies this.
- Merging the name of a Hunt Group and User have dissimilar effects. The User name change will cause a rename of the mailbox account folder, provided that the VoiceMail service is running, whereas the Hunt Group name change will cause a new mailbox account folder to be created. If the IP Office is rebooted after making a User name change a new mailbox account folder will be created.
- Problems may be encountered sending email if you have configured VoiceMail Pro to send email using SMTP and you also have IMS installed. This is due to a configuration issue and can be resolved as follows:

In Control Panel open the item called "IP Office Voicemail Pro". Under the Email Settings tab make sure that the Account Details show the full SMTP email address - if it does not there will be problems sending email.

For example, if the account is entered is using the mailbox display name, such as "John Doe", this will cause this name to be sent as the SMTP user ID and will stop the mail from being sent since display name to SMTP resolution is not currently supported. The name needs to be entered in full SMTP format, such as johndoe@avaya.com.

This does mean that the same user ID will be used to send both IMS and SMTP email messages so it is recommended that a generic name should be used.

- If you try to export a module which has a space in its name, the module will not be exported, it will actually export the next module in the list.
- If you import a configuration into the VoiceMail Pro Client and then quit the application without saving, when you re-open the VoiceMail Pro Client the

configuration is still present. You are not asked if you want to save the configuration.

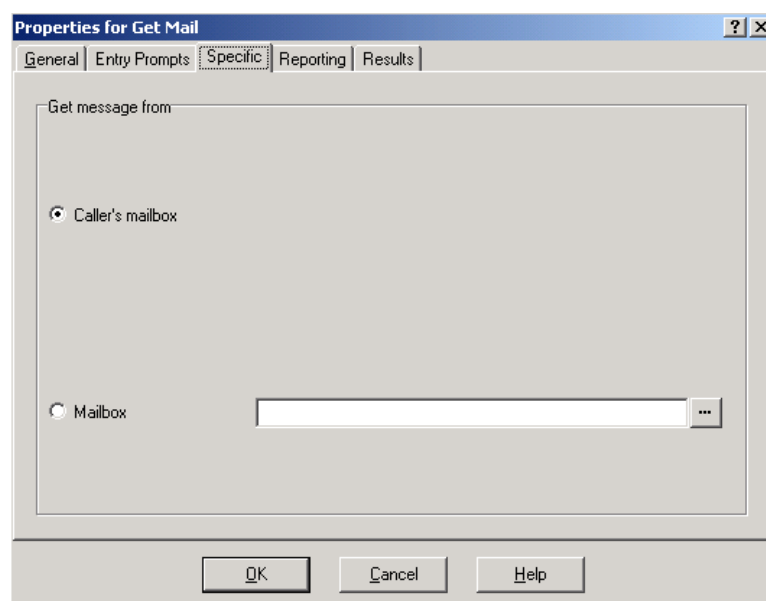
- If you make a change to a configuration in the VoiceMail Pro Client and then quit the application without saving when you re-open the VoiceMail Pro Client the modified configuration is still present. At no time are you asked if you want to save the configuration.
- Voicemail Pro in Intuity mode will provide automatic access to a subscriber's mailbox if they have an external number set as a trusted number, but does not allow the user's local extension to have direct access when set as a trusted number. This can be enabled by creating a collect start point for a user or by modifying the default collect start point if you want to enable this for all users.

John Doe > Collect

Default Start Points > Collect



The specific tab in the Get Mail action would be setup to get the message from the "Caller's Mailbox".



- When browsing for the Integrated Messaging server from the IMS admin tool both the IMS Server PC and IMS Client PCs can be seen.
- If VoiceMail is installed and you then choose to modify the components by adding VPNM and IMS the install can throw up error messages complaining about invalid or non-existent account names. To overcome this the components should be uninstalled first and the re-installed choosing all of the relevant options.
- If modifying a VoiceMail Pro server installation to add VPNM and IMS, during the install you are asked for the service account for the added components. The installation populates the username field with "BUILTIN", not the account used by VoiceMail Pro

- When upgrading from 2.0.x VoiceMail Pro to 2.1.x VoiceMail Pro, if the files are installed to the D: drive some of the Registry entries may not be correctly updated and will be changed back to the C drive, particularly the entry for the Services, which means the Voicemail Service will not start correctly.

To overcome this you must manually go in and change the drive location at the following registry key:

HKEY_LOCAL_MACHINE\System\ControlSet001\Services\VoicemailProService.exe

- If installing VoiceMail Pro on a windows PC with an Italian locale set the service will not start. If you check in the event viewer you'll see "2:0:0 is not a valid time" message. The workaround is to change the time separator (from the Regional Options in Control Panel) from "." to ":". The service can then be started.
- After upgrading a VoiceMail Pro system, when a user dials in to their mailbox they may be asked to enter a new password.

10.3 Manager

- It is not possible to delete the Fallback Extension entry within the Incoming Call Route form.
- When using the Export Option in Manager to export Configuration entities, the default is to export to the manager directory with file name "Config.exp". If the default file name is changed the file is still exported to "Config.exp". The file can be renamed once it has been exported.

10.4 Wizards

- When administering IP addresses on an IP 412 or IP Office Small Office Edition, if bits 17-24 of the LAN1 and LAN2 IP Address are the same the Wizard will say that the 2 addresses are the same.

For example, it will say that 111.111.123.111 is the same as 222.222.123.222

The error message displayed is:

"Control unit LAN2 address can not be the same as LAN1/Main address"

10.5 User Applications

PhoneManager

- PhoneManager will always start up in English no matter what the locale of the PC is set to. Once PhoneManager is running the required language can be set and PhoneManager will then always start in the required language.

SoftConsole

- The first time SoftConsole is started the Login screen will be displayed in the same language that is configured as the PC locale. Once SoftConsole is connected the screen is displayed in English. The desired language must then be selected and that template saved. The SoftConsole will then always start in the required language.

10.6 CCC\Delta Server

- The existing Delta Server (version 4.0.27 and earlier) is not compatible with IP Office systems running 2.1 core software and as such will not connect to the system. This needs to be upgraded to the latest version, 4.0.29, which can be found on the IP Office Administration CD. Full details of the installation procedure can be found in section 11.7.
- When the Delta Server reads names of agents the routine does a case insensitive match, i.e. "HAT" = "Hat", but it also removes spaces from names, thus "Black Hat" is equal to "BLACKHAT". If this happens only one of the agents will be reported on.
- The latest Delta Server, version 4.0.29, supports the merging of name changes for Agents and Hunt Groups but does not fully support number changes.

Example: Changing a Hunt Group to a new number

Hunt Group Name: **Main** Number: **500**

is changed to

Hunt Group Name: **Main** Number: **501**

In this instance the CCV will list both hunt groups in the setup screens and as such these are available for display on the CCV although the stats will not work for the old group. The same is also true if an agent is given a new number. Obviously the group can be removed from the CCV display but the only way to get around this completely is to restart the Delta Server.

Example: Swapping two Hunt Group numbers

Hunt Group Name: **Group1** Number: **500**

swaps numbers with

Hunt Group Name: **Group2** Number: **501**

If these two groups swap their numbers around, the CCV updates correctly and shows the number swap. The same is true if agents swap around numbers.

10.7 Compact Business Center

Compact Business Center version 2.1 will not allow the selection of Russian as a language even though it is a new supported language. To get around this, the entry "language_11=#Russian#" must be added to the end of the "Lang.ini" file, which can be found at:

C:\Program Files\AVAYA\IP Office\CCC\CBC\Language

Once this has been added Russian can be selected as a language.

11 Technical Notes

11.1 Upgrade Installation Notes

When upgrading from a version of software prior to 2.1 the following procedures must be observed and the instructions followed to achieve a successful upgrade.

NOTE: It is recommended that any units not running 2.0 software should be upgraded to this version first before upgrading to 2.1. If this process is not followed Avaya cannot guarantee that the configuration will be upgraded as intended.

Before any upgrade commences the old Admin Suite must be removed and the 2.1 Admin Suite must be installed. The IP Office 2.1 Admin CD is fronted by the Microsoft installer, which behaves differently to the InstallShield package used on releases prior to 2.0.

The following points should be noted:

- In all cases the old version of the Admin suite must be uninstalled using add/remove programs before the 2.1 Admin Suite is installed. The install will not occur unless the previous software has been removed. The same applies if moving between versions of the 2.1 Admin Suite.
- Microsoft .NET is required to support some of the applications. It is recommended that .NET is installed. This may take several minutes to complete.
- If installing on a PC with .NET Framework version 1.0 installed, this must be un-installed before installing 1.1. This can be done by going into Control Panel, selecting Add/Remove Programs and then selecting the 1.0 Microsoft .NET Framework.

NOTE: If upgrading the system software from a Windows 2000 PC directly connected to the IP Office, ensure that the IP address is set as static for the duration of the upgrade. When in client mode, Windows 2000 can lose its IP address settings immediately if it detects a disconnection from the LAN (this occurs as the unit reboots during the upgrade process). This can cause the upgrade to fail and the unit to be left with no software.



IMPORTANT INFORMATION – IP 403 UPGRADE ONLY

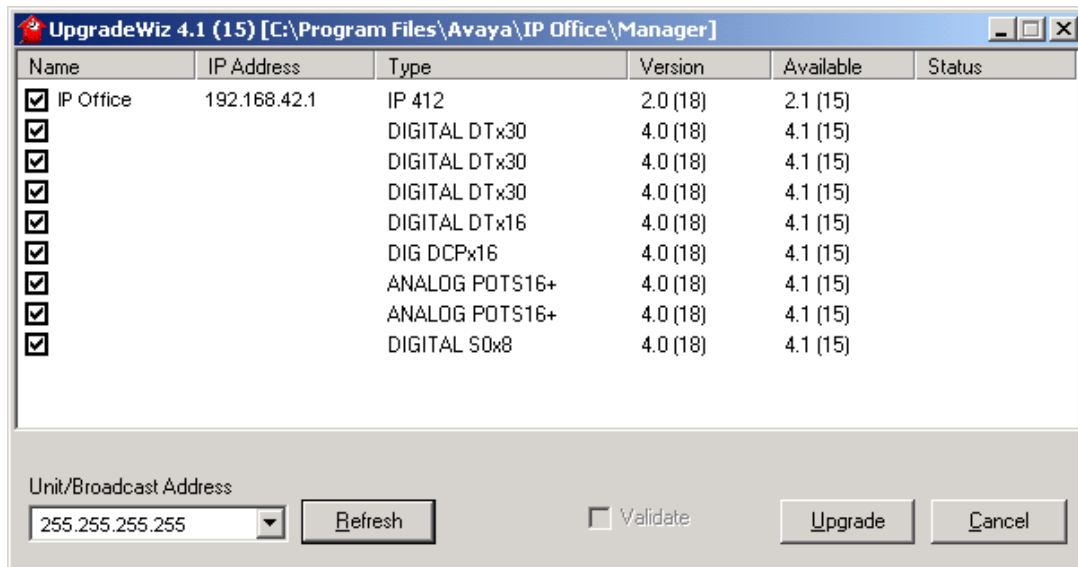
If upgrading from software version 1.x you must follow the instructions in section 11.3 to upgrade the software loader on the IP 403. If the IP 403 is already at 2.0 you can follow the instructions in section 11.2.

There are two IP 403 binaries in this release: one for updating the loader, version 1.99(1003) and the real binary, version 2.1(15). The loader upgrade must be done first and is required to create additional space in the area of Flash memory used for storing the operating software. These binaries exist in subdirectories of the main Manager directories. The loader version can be found in the Manager\IP403V1_99 directory and the real binary is in the Manager\IP403V2_1 directory. When upgrading an IP 403, copy the required binary file into the Manager or Binary working directories. Failure to follow these instructions will result in a failure of the upgrade to your system.

11.2 IP401, IP406, IP412, and Small Office Edition Upgrade Instructions

To upgrade the Control and Expansion units do the following:

- 1 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.
- 2 In Manager select File | Advanced | Upgrade. This will start the UpgradeWiz application.
- 3 After a few seconds the upgrade wizard should show the Control and Expansion units found.
- 4 If no units are found using the broadcast address 255.255.255.255 this implies that the Manager PC is not on the same LAN as the IP Office. You should not continue in this case until you identify a Manager PC on the same LAN as the IP Office.
- 5 A window similar to the following 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.



- 6 The current version and available versions are displayed. Tick the check box under Name if it is not already ticked then click on Upgrade.
- 7 Enter the password of the existing configuration (not the default). Click OK and IP Office will reboot and undergo the upgrade cycle. This takes around a minute to complete. Click OK to finish once the upgrade has completed. This will close the UpgradeWiz window.

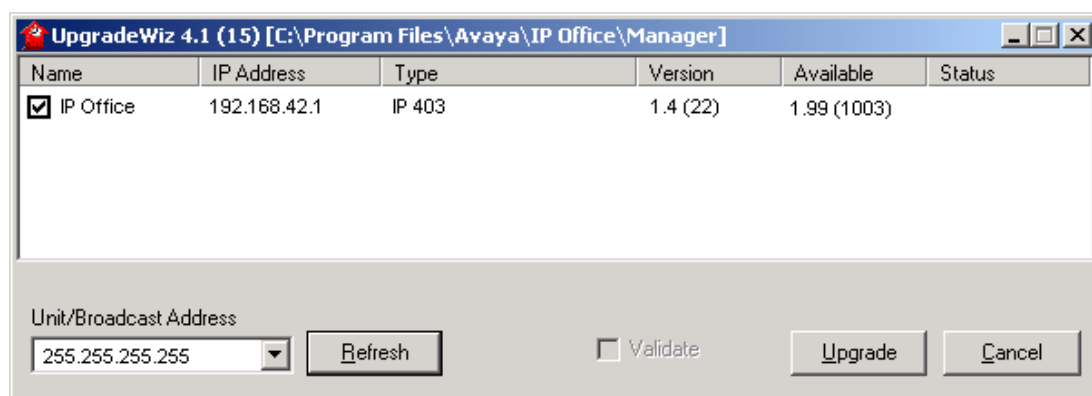
11.3 IP403 Upgrade Instructions

NOTE: Please read all of the following instructions before upgrading an IP 403.

The following procedure is applicable to the IP 403 only when running 1.x software. Any IP 403 already running 2.0 software can be upgraded using the standard upgrade procedure described in the previous section.

Upgrading the IP 403 from 1.x to 2.x requires an upgrade of the loader software to version 0.81. The upgrade procedure for this is as follows:

1. Install the Admin Suite as normal. Do not open the Manager application.
2. Using the Windows Explorer application on your PC open up the Program Files | Avaya | IP Office | Manager | IP403V1_99 folder. This will contain a file called ip403.bin. This file is level 1.99 of the IP Office 403 firmware and contains the loader that is necessary to be able to upgrade from 1.x to 2.x, and must be used in place of the existing ip403.bin file. Copy this file to the Manager folder within the IP Office suite on your PC, that is, Program Files | Avaya | IP Office | Manager, to overwrite the existing ip403.bin file.
3. Open the Manager and 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. In Manager select File | Advanced | Upgrade. This will start the UpgradeWiz application.
5. After a few seconds the upgrade wizard should show the Control and Expansion units found.
6. If no units are found using the broadcast address 255.255.255.255, this implies that the Manager PC is not on the same LAN as the IP Office. You should not continue in this case until you identify a Manager PC on the same LAN as the IP Office.
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.
9. Enter the password of the existing configuration (not the default). Click OK and IP Office will reboot and undergo the upgrade cycle. This takes around a minute to complete. Click OK to finish once the upgrade has completed. This will close the UpgradeWiz window.

10. When version 1.99 firmware is installed in the IP Office 403 system the front panel LEDs will flash a pattern, indicating that another version of the IP Office firmware must be loaded into the IP Office 403 base unit in order to make it fully functional. When version 1.99 firmware is installed, the functionality of the IP Office system is very much reduced - there is no trunk support; there is no telephone handset support; there is no support for VoIP functionality, etc. There is also no support for expansion units, so consequently these will not be visible in the upgrade wizard when the CPU is running version 1.99.
11. Using the Windows Explorer application on your PC open up the Program Files | Avaya | IP Office | Manager | IP403V2_1 folder. This will contain a file called ip403.bin. This is the 2.1 IP Office firmware. Copy this file to the Manager folder within the IP Office suite on your PC, that is, Program Files | Avaya | IP Office | Manager, to overwrite the existing ip403.bin file.
12. Repeat steps 4 – 9 of the above procedure.
13. The IP Office 403 system will now be at version 2.1.
14. Now that version 2.1 is on the CPU the expansion units can be upgraded in the normal way using the upgrade wizard.

NOTE: If you attempt to put 2.1 software directly onto an IP 403 system running 1.x software without installing the new loader version first the upgrade will fail and the system will have to be recovered via the DTE maintenance port. Full details of this procedure can be found in the IP Office Job Aid “DTE Port Maintenance”, which is available from the Job Aids section at the following website:

<https://emea-businesspartner.avaya.com/Support/TechnicalDatabase.html>

You can also access the Job Aid by following the link given in section 12.1.

The above procedure does not need to be performed if the IP Office 403 base unit is already running version 2.0 or later firmware.

- The above procedure need only ever be completed once.
- Once the above procedure has been completed all previous versions of IP Office 403 firmware may be freely loaded into the system.
- Inadvertently repeating the above procedure will do no harm. Version 1.99 firmware for the IP Office 403 system detects whether or not the loader needs upgrading automatically and will only ever perform the modification once.
- Confirmation of the activities outlined above may be obtained by connecting a PC serial port terminal to the DTE port on the back of the IP Office 403 and monitoring the session. An indication that the loader has been upgraded is provided.
- The AT-X4 command has been added to the new IP 403 loader to erase the extra configuration space now available. This should be used in conjunction with AT-X2 and AT-X3 when defaulting an IP 403 unit via the DTE port.

11.4 Unit Compatibility - Expansion Unit Interoperability

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

11.5 Upgrade Instructions for VoiceMail Pro

Upgrading from 2.0 VoiceMail Pro

1. Insert the VoiceMail Pro CD. The Installation wizard should auto-start.
2. Select the language to be used during the installation. Click OK.
3. The installation will automatically detect that version 2.0 is already installed and ask if you want to perform an upgrade of VoiceMail Pro. Click on Yes to begin the upgrade.
4. At the InstallShield Wizard screen click on Next.
5. When the installation is complete click Finish.

Upgrading from 1.x VoiceMail Pro

When upgrading from one software level to another the original software needs to be uninstalled. The uninstallation process only removes those files installed during the application's original installation. Any other files added since are not removed, such as VoiceMail messages. Any callflows that have been created will still operate, but they will not be editable after the upgrade. To make sure that the callflows can be edited they need to be exported before the upgrade process and then imported into the new software version.

NOTE: After uninstalling any existing VoiceMail server, always reboot the PC. Uninstalling does not remove any existing messages and greetings.

Backing-Up the VoiceMail Pro Database

Before removing VoiceMail Pro, you should create a backup copy of the callflow database. This will contain any customizations made to the default callflow.

NOTE: The Root.vmp file contains the compiled callflow (created using Save & Make Live). This type of file cannot be loaded back into the VoiceMail Pro Client for editing. The editable version of the callflow is stored in the file VMData.mdb.

1. Start the VoiceMail Pro Client.
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. Click Next.
5. Click Finish to start the export then click Close to complete the export procedure.
6. Close the program.

Uninstall VoiceMail Pro

1. Open the Windows Control Panel.
2. Select Add/Remove Programs.
3. Select IP Office VoiceMail Pro and click Change/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.

Upgrade Installation

1. Insert the VoiceMail Pro CD. The Installation wizard should auto-start.
2. Select the language to be used during the installation. Click OK.
3. At the Welcome screen click Next.
4. At the customer information screen accept the defaults and click Next.
5. Select the type of installation required:
Note: On Windows NT/2000/XP, VoiceMail Pro Server is automatically installed as a service.
 - **Typical Install:** Installs all the components of VoiceMail Pro including campaigns and the Campaign Web component.
 - **Compact Install:** Installs all the components of VoiceMail Pro including campaigns.
 - **Custom Install:** Allows selection of which components to install. The default selection before any changes is the same as the Typical selection.
6. At the Choose Destination Location screen accept the default locations, click Next to continue.
7. Depending on the type of installation some or all of the following options will appear:
 - If the Campaign Web Component is being installed, the web server type, location of the web server's HTML root, and the CGI bin directories will be prompted for.
 - On Windows NT/2000/XP, if installing the VoiceMail Pro Server, the user account that the VoiceMail Pro service should use needs to be entered.
8. Unless there are specific reasons to do otherwise, accept the displayed program folder.
9. A summary of those items about to be installed is displayed. You can use Back to return to the previous screens and alter the selection if required. Click Next to begin the installation.
10. When the installation is complete select the option "Yes, I want to restart my computer now" and click Finish.

Restoring the VoiceMail Pro Database

1. Start the VoiceMail Pro Client.
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.

Note: After upgrading to VoiceMail Pro 2.x from 1.x the system will default to Intuity mode and Advice of Call Recording will be enabled. To change these options, start the VoiceMail Pro Client and change these settings from Administration | Preferences | General. Users of VoiceMail Pro running in IP Office mode will be asked to record their name when they first dial into VoiceMail Pro after the upgrade.

11.6 Upgrade Installation Notes for User Applications

When upgrading from one software level to another the original software needs to be uninstalled first. The un-installation process only removes those files installed during the application's original installation. Any other files added since are not removed, such as PhoneManagerDirectory.txt (the file in which directory entries are stored). The settings for PBX configuration, Speed Dials, Calls In/Out/Missed tabs etc., are stored in the registry and will also remain.

To upgrade to any of the 2.1 User applications do the following:

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.

Upgrade Installation

1. Insert the User CD. The installation wizard should auto-start.
2. At the Welcome screen click Next.
3. If there are multiple IP Office units detected on your network select your unit and then click on OK
4. At the next screen select the User name from the list that this installation is associated with.
5. Click on Next and then Finish.
6. At the InstallShield Wizard welcome screen click on Next.
7. At the Choose Destination Location screen accept the default locations, or choose a different installation directory, click Next to continue.

8. At the Select Components screen select the applications you want to install and click Next to continue.
9. If you are using Phone Manager in Agent Mode enter the Agent number at the next screen, or leave this blank and click Next.
10. Click Next to accept the Program Folder.
11. When the installation is complete click on Finish.

Keeping eConsole and eBLF Applications

As the eConsole and eBLF have been replaced by the SoftConsole, some users may wish to upgrade their Phone Manager installation but still continue to run either of these applications. This can be accomplished by following the following instructions:

Uninstall User Applications

1. To make sure that the eConsole and eBLF are not removed you **MUST** rename the directory in which the programs reside before uninstalling any applications. By default the programs can be found at C:\Program Files\Avaya\IP Office\eConsole.
2. After you have renamed the directory open the Windows Control Panel.
3. Select Add/Remove Programs.
4. Select IP Office User Suite and click Change/Remove.
5. From the options offered select Remove and click Next.
6. Click on OK to confirm that you want to remove all applications.
7. When the removal process is complete click on Finish.
8. Once the old applications have been removed, insert the 2.1 User CD. The installation wizard should auto-start.
9. At the Welcome screen click Next.
10. At the next screen select from the list the User name with which this installation is associated.
11. Click on Next and then Finish.
12. At the InstallShield Wizard Welcome screen click on Next.
13. At the Choose Destination Location screen accept the default locations, or choose a different installation directory, click Next to continue.
14. At the Select Components screen select the applications you want to install and click Next to continue.
15. If you are using Phone Manager in Agent Mode enter the Agent number at the next screen or leave this blank and click Next.
16. Click Next to accept the Program Folder.
17. When the installation is complete click on Finish.
18. The program shortcuts for eConsole and eBLF will have been removed but the programs will not. Set these shortcuts up again and you will be able to run the eConsole and eBLF applications as before.

11.7 Delta Server Upgrade Instructions

Any sites that are using the Delta Server, either for CCC, SMDR or CBC will have to upgrade to a new version of Delta Server, 4.0.29, for compatibility with IP Office 2.1 software. Older versions of Delta Server are unable to connect to an IP Office system running 2.1 software.

The latest Delta Server can be found on the IP Office 2.1 Administration CD. Before upgrading the Delta Server application must be closed down. Explore the CD and go to the CBC directory and then into the Delta Server directory. From here run the setup.exe program to install the Delta Server. This will upgrade your existing version of Delta Server.

NOTE: By default in this version of Delta Server the Diagnostics tab is no longer available. To enable it you must add a new string to the registry called "AllowDiagnostics" and set its value to 1. This string should be entered at the following registry location:

HKEY_LOCAL_MACHINE\SOFTWARE\Avaya\CCCServer\Setup

11.8 Upgrade Installation Notes for SMDR

If you are running the existing standalone SMDR application (version 3.x) with an IP Office running version 1.x software, it is not compatible with IP Office version 2.x and is no longer available in its present format.

CCC version 4 incorporated the SMDR output into its Delta Server and it is a version of this that will be used going forward. First of all uninstall the existing SMDR application. Once this has been done, using the Admin CD go to the CBC directory and then into the Delta Server directory. From here run the setup.exe program to install the Delta Server.

Once installed this program can be found from the start menu at Programs | CCC | Delta Server, not Programs | IP Office | IP Office SMDR as it was before. From the start menu select Programs | CCC | Delta Server and run this program, if required to do so in the "Select Server" screen tick the check box next to the IP Office system that you want to connect to.

From the event viewer screen click on the SMDR icon, the output file location should be the same as it was when the standalone SMDR application was installed (C:\Program Files\Avaya\IP Office\SMDR\SMDR_Output\SMDR.csv). If it is not the same then you can either change the location or leave it as it is. If you do make a change to this location make sure that the application reading the SMDR output file is changed to point to the new file location. Select the check box next to the output file location; SMDR output is now running again.

NOTE: If SMDR was not installed before, the default output file location will be:

C:\Program Files\Avaya\IP Office\CCC\DeltaServer\SMDR_Output\SMDR.csv

12 Assistance

12.1 Manuals & CD's

The latest IP Office manuals and CD's can be downloaded from:

<http://support.avaya.com>

From the list of options presented on the left hand side of the web page click on "Systems for Small and Medium Businesses" and then from the "Media Gateways and Media Servers" heading select IP Office | R2.1 English.

12.2 Job Aids

A number of Job Aids are now available to complement the technical manuals and offer a step-by-step "how to do" approach. These Job Aids can be found at:

<http://support.avaya.com>

From the list of options presented on the left hand side of the web page click on "Systems for Small and Medium Businesses" and then from the "Media Gateways and Media Servers" heading select IP Office | General Info.

12.3 IP Office Technical Training

Avaya University training courses have been updated to reflect the new features offered with the IP Office 2.1 release. Details of the courses and their availability can be found at the Avaya Learning Centre:

<http://www.avaya-learning.com>

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