IP Office Technical Bulletin

Bulletin no: **52**

Date: 7th November 2005

Title: General Availability (GA) of IP Office 3.1 Software

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General Availability (GA) of IP Office 3.1 Software

Avaya is delighted to announce the launch and availability of IP Office 3.1 software. IP Office is Avaya's Small and Medium Enterprise (SME) solution designed as a global solution for customers with up to 360 extensions and 120 trunks.

1 Product Overview

The Avaya IP Office 3.1 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 3.1 is the entry-level software to support the following new hardware:

- **Avaya T3 series Digital Telephones** *(EMEA – select regions only)*
- **Avaya IP DECT solution** *(EMEA, Australia and New Zealand only)*
- **4621SW IP Telephone Support**
- **EU24BL Expansion Module Support**
- **Avaya 3626 and 3616 programming cradle**
- **InterQuartz Analog 9281-AV** *(EMEA only)*
- **Kalika Communications Door Entry System** *(EMEA only)*

As well as increased reliability through improvements to the core system software, IP Office 3.1 also supports the following new features:

IP Office Core Software (Version 3.1.29)

- **Basic Interworking with Avaya-Tenovis Integral 55** *(EMEA only)*
- **2420, 6400 and 5400 series Terminal Enhancements**
- **Call Logging: Call Detail Records (CDR)**
- **Analog Telephone Message Waiting Indication Enhancements**
- **IP Trunk Fallback to Public Switched Telephony Network (PSTN)**
- **Extension Twinning** *(CALA, EMEA & APAC only)*
- **Manager Application Enhancements**
- **New IP Phone Firmware**

IP Office Applications

The IP Office 3.1 Applications release does not contain any new feature enhancements. However this release improves the performance and reliability of the product through various quality improvements in the associated applications.

- **IP Office VoiceMail Pro (Version 3.1.15)**
- **IP Office Conferencing Center (Version 3.1.10)**
- **PhoneManager (Version 3.1.12)**
- **SoftConsole (Version 3.1.11)**

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Note: IP Office 3.1 is not supported on the IP401 Compact Office and DT Expansion Modules. The software is supported on the IP403DT platform but the use of the in-built DT ports is not supported.

IP Office 3.1 will also be the last release of IP Office software to support the 4606, 4612 and 4624 IP handsets.

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2   IP Office Hardware

The following new hardware is supported with IP Office 3.1 software:

2.1   Avaya T3 series Digital Telephones *(EMEA – select regions only)*

With IP Office 3.1 Avaya is introducing the Avaya T3 series digital telephones. The T3 range of digital telephones consists of three telephones, offering high, intermediate and basic functionality.

IP Office 3.1 will support the Upn versions (2-wire interface, not 4-wire S0) of the following telephones and accessories:

- T3 Compact
- T3 Classic
- T3 Comfort
- T3 Headset Link
- T3 DSS module

The T3 digital telephones will be supported directly on IP403, IP406v2 and Small Office Edition variants with Digital Station (DS) ports and via DS16 and DS30 modules connected to the IP403, IP406v1, IP406v2 and IP412.

The T3 digital telephones will only be available in the following regions:

- Southern Europe
- Western Europe
- Eastern Europe

The T3 digital telephones will not be introduced in the UK, Russia, Middle East or Africa.

Note: *The T3 terminals will interoperate with the Avaya 46xx/56xx IP terminals, Analog Extensions with and without Caller ID and the IP Office PhoneManager PC Softphone. A mixture of Avaya T3 digital telephones and Avaya 24xx/54xx/64xx digital telephones on a system is not supported.*

T3 Compact

The entry-level Avaya T3 Telephone offers an economical entry point for users that need important digital telephone features at an entry level price point.

- Two colors: Graphite grey and polar white
- LCD one line alphanumeric display with 24 characters
- 1 accessory expansion port (e.g. Headset Link)
- Support for Direct Station Select (DSS) module
- 4 dedicated feature keys
- 2 dedicated feature keys for volume control
- 5 programmable feature keys, 3 with LED indicators
- Navigation Cursor control
- Handsfree speakerphone

T3 Compact

T3 Classic

This mid-range Avaya T3 Telephone offers the most frequently used features for the everyday user.

- Two colors: Graphite grey and polar white
- LCD display with 4 lines of 26 characters that can be adjusted for optimum viewing angle
- 2 accessory expansion port (e.g. Headset Link)
- Support for Direct Station Select (DSS) module
- 5 dedicated feature keys
- 2 dedicated feature keys for volume control
- 10 programmable feature keys, 6 with LED indicators
- Navigation Cursor control
- Handsfree speakerphone

T3 Classic

T3 Comfort

This high end Avaya T3 Telephone offers many features for the power user.

- Two colors: Graphite grey and polar white
- Two versions: One with a pre-printed alphanumeric keyboard and one with a blank keyboard with three different self-adhesive templates.
- LCD display with 17 lines of 40 characters that can be adjusted for optimum viewing angle
- 2 accessory expansion port (e.g. Headset Link)
- Support for Direct Station Select (DSS) module
- 5 dedicated feature keys
- 2 dedicated feature keys for volume control
- 12 programmable feature keys, 6 with LED indicators
- 10 programmable Softkeys
- Navigation Cursor control
- Integrated keyboard
- Handsfree speakerphone

T3 Comfort

T3 DSS Module

- Direct Station Select (DSS) Module
- Two colors: Graphite grey and polar white
- 36 keys with LEDs can be defined as:
    - Individual extensions or Speed Dials
    - Functions (e.g. Door Opener)
- Connects to T3 Compact, Classic and Comfort
- Three DSS modules can be connected to one telephone giving a total of 108 extra keys
- A T3_Link is not needed
- An External power supply is not needed

T3 DSS Module

T3 Headset Link

T3 Headset Link

- Pluggable Headset adapter
    - Connects wired headsets HSG 21, 22, 22NC, 23, 23NC and 24 multiset from Avaya
- Volume and mute-function adjustable via keys of the telephone

Notes:

- T3 Comfort and Classic support two Link devices, T3 Compact supports one.
- Phone Manager will interoperate with all new T3 telephones.
- The IP Office supports T3 telephones to a distance of 1km (1000 meters) when using standard 0.5mm diameter twisted pair telecoms cable (UK ref CW1308).
- The IP Office DS 30 Expansion Module can power thirty T3 terminals with a full compliment of Link and DSS modules.
- KonfTel Conferencing Speaker/Mic – T3 CTI/Audio-Link is not supported.
- DSS1 (Euro ISDN) telephone/TA – T3 S0-Link is not supported.
- Analog Telephone/Fax Machine – T3 Analog Link is not supported.
- Call tagging is not supported on T3 telephones.
- Account codes can only be input at the start of a call for T3 telephones. In combination with PhoneManager Pro an account code input is also possible during an incoming or outgoing call.
- SoftConsole text messaging is not supported on T3 telephones.
- T3 telephones do not support access to the IP Office internal directory (internal extension numbers) only access to the external (system) directory is supported currently.
- Not all IP Office features can be assigned to the programmable buttons on the T3 telephones. For a complete list of the features that are supported please refer to the "IP Office 3.1 Button Programming" manual.

Material Code	Description
700380264	IPO T3 TELSET COMPACT UPN DGTL BLK
700380272	IPO T3 TELSET CLASSIC UPN DGTL BLK
700380280	IPO T3 TELSET COMFORT UPN DGTL BLK
700380298	IPO T3 TELSET COMPACT UPN DGTL WH
700380306	IPO T3 TELSET CLASSIC UPN DGTL WH
700380314	IPO T3 TELSET COMFORT UPN DGTL WH
700383151	IPO T3 TELSET COMFORT TPLT DGTL BLK
700383169	IPO T3 TELSET COMPACT TPLT DGTL WH
700380322	IPO T3 TELSET DSS MOD DGTL BLK
700380330	IPO T3 TELSET DSS MOD DGTL WH
700380348	IPO T3 TELSET DSS EXP MOD DGTL BLK
700380355	IPO T3 TELSET DSS EXP MOD DGTL WH
700380363	IPO T3 HEADSET LINK

2.2 Avaya IP DECT Solution *(EMEA, Australia and New Zealand only)*

Note: *Due to radio frequency transmission regulations, this solution can only be deployed in EMEA, Australia and New Zealand.*

Currently IP Office supports an Analog DECT solution. A DECT base station attaches to the IP Office via Analog ports to provide a speech path and simple call signalling. More sophisticated integration is available when the IP Office is connected to a PC running DECT integration software. This PC is connected to the IP Office via an Ethernet cable and to the DECT equipment via a serial cable.

IP Office 3.1 introduces support for a new IP DECT solution. The solution consists of new handsets, base stations and a management system called the Avaya IP DECT Mobility Manager (ADMM).

The IP DECT base stations are connected to the LAN via an Ethernet cable and communicate to the IP Office using a variant of the H.323 protocol, the X-mobile protocol. One of the base stations runs the Avaya IP DECT Mobility Manager (ADMM), this is the controller for all of the base stations connected to the system. The IP DECT telephones communicate with the base stations using the standard DECT digital protocol with some proprietary extensions. The system can also be configured to support users in different offices connected via a WAN/IP infrastructure.

Note: *Due to the base stations being connected via H.323 to the IP Office a Voice Compression Module is required in the IP Office when using this solution.*

The Avaya IP DECT solution supports a network of up to 32, internal (RFP31) or external (RFP33), base stations (Radio Fixed Parts). Up to 120 DECT handsets (Portable Parts) can be registered on the system.

Each IP DECT base station is powered over the LAN using the Power over Ethernet (802.3af) standard. The internal base stations can also be powered using an external power adapter. This power adapter is only available in the EMEA region so any deployment of this system in the APAC region must be able to provide Power over Ethernet. External base stations only support Power over Ethernet.

The DECT handsets supported with the IP DECT solution are the new Avaya 3701 and 3711 telephones. The Avaya 20DT is supported but provides limited functionality. Calls can be made and received, but other features may not function, for example: Access to the system directory will not work on the 20DT telephone when used with this new solution.

Notes when using the 20DT:

- *The 20DT handset is supported for making and receiving calls, hunt groups, conferences etc. It can also roam in the same way as the 3701/3711.*
- *The 20DT display whilst active on a call is updated with the connected party name and any status updates (e.g. 'Enter Account Code', 'Held'). The active display content is similar to the Avaya 3701.*
- *20DT MWI works in a different way to how it does when used with the analog DECT solution. Active MWI is indicated by a missed call (CLIP) from the voicemail number. This is refreshed every time a call has finished, until voicemail is serviced.*

- *20DT versions that are known to work without issues: 4i, 4K, 4Nc*
- *20DT versions that work with basic GAP functionality: 4N, 6Ea*
- *20DT features that do not work with the IP DECT system:*
    - Change of idle screen title
    - Avaya menu
    - MWI feature (Replaced by missed call from voicemail number, see above)

Other GAP compliant handsets can also be used with this solution, but again they will only have limited functionality. Avaya recommends that for new deployments where full functionality is required the Avaya 3711 telephone should be used.

Note: *The AVAYA IP DECT solution will not be supported in Russia at this time due to regulatory requirements.*

Within the manager application an IP DECT line is configured along with the associated IP DECT extensions. All other programming of the system, such as defining base stations and handsets, is done using the Avaya IP DECT Mobility Manager (ADMM), which is an application that runs on one of the base stations, determined during boot up, and is programmed via a web browser interface.

The system does require a license key to operate which is programmed in the ADMM, not within the IP Office configuration. The license is created using the MAC addresses of some of the base stations connected in the system.
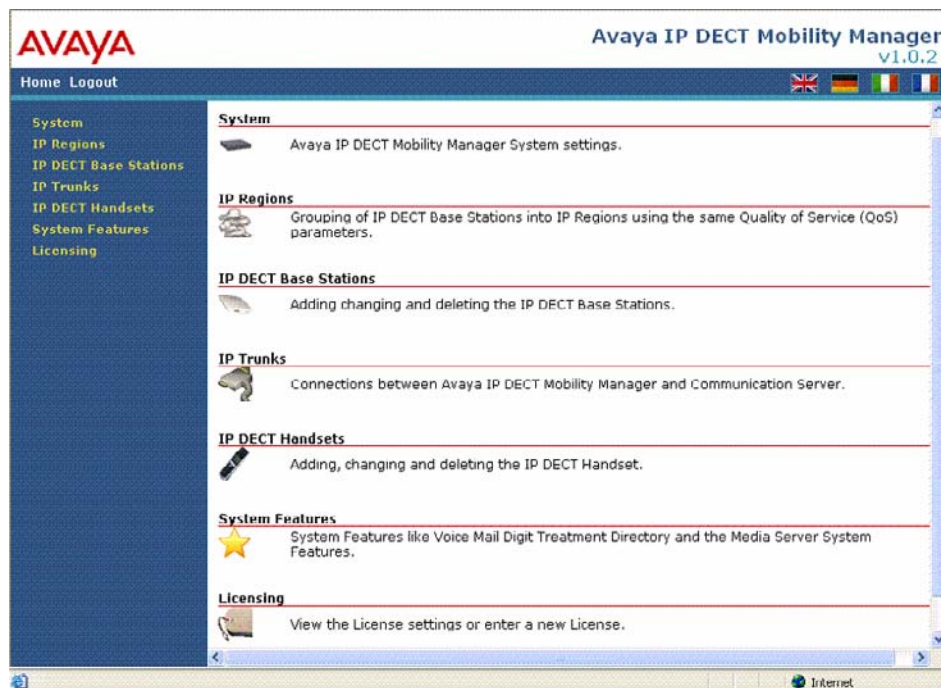
For the IP DECT system to boot a DHCP and TFTP server are required. The DHCP function can be provided by the IP Office or an external DHCP server. Alternatively the base stations can be statically configured using a Java configurator (needs Java Runtime Environment version 1.4 or higher) that is provided on the IP Office 3.1 admin CD. The TFTP function can be provided by the internal flash card on a Small Office Edition, a 406v2 or a separate TFTP server.

When a base station is powered up it does not have any firmware loaded onto it, only a small standalone application built into the flash. It will try to determine its IP address and other configuration settings from the internal flash, when no settings are available it starts a DHCP client to obtain the settings.

Once the settings have been determined the application firmware is loaded via TFTP and application is started. Each time a base station is powered up it needs to go through this process. If the DHCP client does not get an appropriate DHCP offer a new DHCP request is sent after 1 second. After 3 DHCP requests are sent the DHCP client will sleep for 60 seconds. During this time the booter will accept local configuration from the Java configurator.

The DHCP client requests the following options in the parameter request list:

- Subnet mask option (code 1)
- Router option (code 3)
- Public option 224 (code 224)
- Public option 225 (code 225)
- Public option 226 (code 226)

The DHCP client selects the DHCP server according to the following rule:

When the DHCP offer is made public option 224 should have a value equal to the string "OpenMobility". If this option is not present the DHCP offer is ignored. Public option 226 should also be set, this specifies the IP Address of the base station that will run the ADMM application. These two settings are mandatory.

There are also some optional settings that can be passed to the base station as part of the DHCP offer:

- DHCP Option 6: Domain Name Server
- DHCP Option 15: Domain Name
- DHCP Option 42: Network Time Protocol Servers. If this is not available each time the base stations are restarted the time will need to be set on the system.
- DHCP Option 66: This is the name of the PC running the TFTP Server.
- DHCP Option 67: This is the name of the boot file.

Note: The boot file is supplied on the 3.1 admin CD in the directory "IPDECT". The file is called "ADMM_RFP_1_0_2.tftp". If option 66/67 are not set the base station will attempt to send out a broadcast request for a file called "ip_rfp.bin".

- Public option 225: This is interpreted as VLAN ID. If this option is present the booter will start over and release the current lease and issue a new DHCP request, using the VLAN setting.
- Public option 227: This is interpreted as the IP address of the syslog server.
- Public option 228: This is interpreted as the port that the syslog server is listening on.

All of the above parameters can also be statically configured on the base station using the Java configurator.

Note: The TFTP server needs to support RFC 1350, TFTP Protocol (Revision 2), July 1992. The DHCP server needs to support RFC 2131, Dynamic Host Configuration Protocol, March 1997.

The system supports roaming, handover between synchronized IP DECT base stations and DECT Networking between Offices:

Roaming: While in motion the DECT handset performs ongoing measurements to determine which IP DECT base station has the strongest signal. The one that can be best received is defined as the active IP DECT base station. To prevent the DECT handset from rapidly switching back and forth between two IP DECT base stations that can are almost equally well received, certain threshold values are in effect.

Handover: A handover is similar to roaming, but occurs during an ongoing call. A handover normally takes place in the background without disrupting the call (seamless handover). As a caller moves from one base station coverage zone to the next the call must be transferred from one base station to the next. The base stations must be synchronised over the airwaves to support the handover of calls. For the base stations to synchronise to each other the signal strength cannot drop below −70 dBm. You must consider this requirement during the site survey.

DECT Networking: An IP DECT telephone can travel from one office to another which is connected over a wide area network (WAN) link and make and take calls. In this scenario the main IP DECT controller remains at one "headquarters" location.
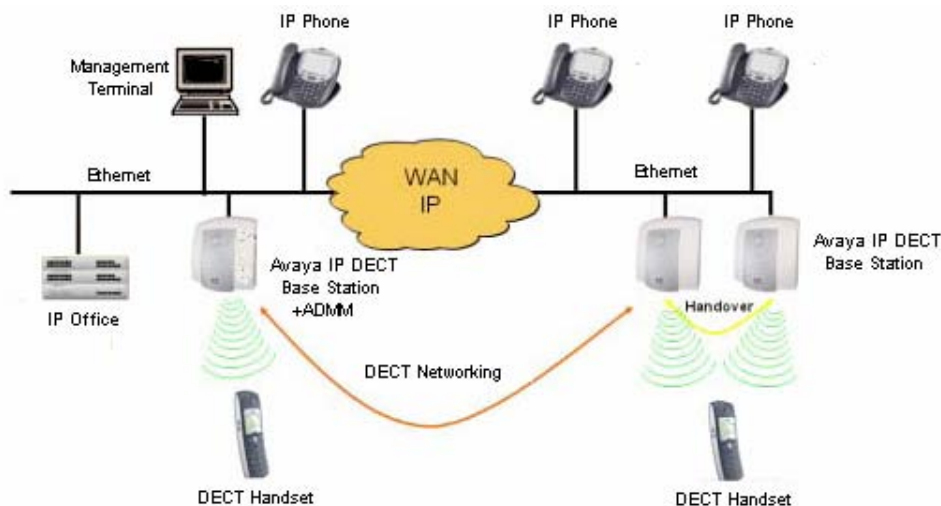
Each IP DECT base station has the following technical characteristics:

- 10/100 Mbit/s IEEE 802.3 Ethernet interface
- Power over LAN™ standard IEEE 802.3af
- Frequency range: approx. 1,880 – 1,900 GHz (approx. 20 MHz bandwidth)
- 10 carrier frequencies (1,728 MHz spacing) with 12 time slots each
- Voice coding using the ADPCM method
- Net data rate per channel of 32 kbit/s (for voice transmission using ADPCM)
- Maximum transmission power of 10mW
- 12 available airtime slots
    - o 8 simultaneous voice calls
    - o 4 slots for control signaling between the base stations and handsets
- Synchronisation via air interface
- Packet handling via RTP/RCTP
- Codecs supported: G.711, G.723, G.729a
- Support of QoS via DiffServ and 802.1pq
- Jitter compensation – Maximum 4 packets (80ms)
- Echo Cancellation
- Network Boot concept, SW download and update
- DHCP / TFTP
- IPv4, SNMPv1/v2c, MIB II, read only and Traps
- Voice Activity Detection with comfort noise
- DSAA Authentication of Base and PP (DECT Standard Authentication Algorithm)
- Connection Handover according to GAP-standard

RFP31
Indoor Base Station

RFP33
Outdoor Base Station

Material Code	Description
700346893	IP DECT Indoor IP DECT base station
700346927	IP DECT Outdoor IP DECT base station

3701 – IP DECT Telephone

This Telephone is only supported on the Avaya IP DECT system.

Avaya 3701 IP DECT Telephone features include:

- Basic Speakerphone
- Illuminated display (green)
- SOS (Emergency) key for speed dialing an emergency number
- Phone number lists and Voice Mail indication
- 50 phone book entries (no support for the IP Office system directory)
- Mute Capability
- 10 possible ring tones
- 4-level field strength display
- Adjustable Speaker and Telephone volume, 7-level
- Key lock
- Temporary ring tone muting
- Voice Mail indication
- Missed call indication
- Silent charging
- 12 menu languages:
    - Czech, Danish, Dutch, English, Finnish, French, German, Italian, Norwegian, Portuguese, Spanish and Swedish. However, in the Czech and Norwegian language mode some menu items may appear in the English language.

- Illuminated 3-line graphic display(96 x 33 pixels), variable 3-level contrast
- Stand-by time: up to 200 hrs
- Talk time: up to 20 hrs
- Batteries: 3 AAA (NiMH) included with phone
- Charge time: max. 6 hours for empty batteries
- Weight: 138g incl. batteries
- Dimensions (L x B X H): 146 x 55 x 28 mm

3711 – IP DECT Telephone

This Telephone is only supported on the Avaya IP DECT system.

Avaya 3711 IP DECT telephone features include:

- Speakerphone
- Illuminated keypad
- Serial connection (mini USB socket) for data transfer and managing local phone book (note that this hardware capability is not supported with IP Office R3.1)
- Headset connection (2.5 mm jack)
- Vibrating alarm
- SOS (emergency) key for speed dialing an emergency number
- Information key that can be used for phone number lists and voice mail indication (Information and speaker key flash when active)
- Personal phone book with 100 entries, independent of the system phone book
- Access to IP Office system Directories
- Mute Capability
- Voice Mail indication
- Missed call indication
- 60 possible ring tones
- Different ring tones for internal, external and priority calls
- 4-level connection field strength display
- Speaker and Telephone volume, 7-levels
- Automatic call pick-up
- Key lock
- Temporary ring tone muting
- Silent charging
- 10 menu languages:
    - Danish, Dutch, English, Finnish, French, German, Italian, Portuguese, Spanish and Swedish
- Illuminated 5-line graphic display, (96 x 60 pixels), variable 7-level contrast
- Stand-by time: up to 200 hrs
- Talk time: up to 20 hrs
- Batteries: 3 AAA (NiMH) included with phone
- Charging time: max. 6 hours for empty batteries
- Weight: 138g incl. batteries
- Dimensions (L x B X H): 146 x 55 x 28 mm

Material Code	Description
700346802	IP DECT 3701 Telephone
700346810	IP DECT 3711 Telephone

For a complete list of available system configurations and material codes please refer to the IP Office 3.1 Product Update.

IP DECT System Limits

Due to a limited amount of VCM channels available on certain versions of the IP Office Small Office Edition, the Avaya IP DECT system is only certified to work on the IP Office Small Office Edition 16 VCM version. Avaya does not support using the Avaya IP DECT system on a Small Office edition that does not have 16 VCM channels. The above constraint does not apply to any other version of IP Office.

Maximum IP DECT telephones registered	120
Maximum IP DECT telephones simultaneously active	100
Maximum concurrent calls between IP Office and each individual IP DECT base station	8
Maximum number of IP DECT base stations	32
Maximum number of concurrent calls into the IP DECT solution on an IP406v2	30
Maximum number of concurrent calls into the IP DECT solution on an IP412	60
Number of conferenced parties	1 per VCM port

The following gives some indication of maximum calls under a specific scenario:

- Direct media on (the default setting)
- 60 IP phones
- 60 DCP or Analog telephones
- 60 VCM channels
- At least 16 IP DECT base stations
- All 120 IP DECT Telephones in range

The maximum number of concurrent IP DECT calls in this scenario 100.

Note that the direct media setting has an effect, if this is set to on (usual setting):

1. Active calls between IP DECT Telephones and IP Phones will not take a VCM resource.

2. Active calls between IP DECT Telephones on differing IP DECT base stations will not use a VCM channel.

3. Calls between IP DECT telephones on the same IP DECT base station will only use a VCM channel for special system functions such as call waiting.

2.3   4621SW IP Telephone Support

IP Office 3.1 will increase the range of existing Avaya IP telephones supported to include the 4621SW. The 4621SW is very similar in form and function to the 4620SW but includes a backlit screen display.

2.4   EU24BL Expansion Module Support

This module can expand the Avaya 4620/5620/4621SW telephones with 24 additional backlit call appearance/feature buttons. The unit features a large display for button labels and a backlight. The 24 icons are on display all the time, while a local scroll button allows one of the two banks of 12 labels to be displayed at a time.

Note: The EU24BL does NOT work with either the 5420 or 2420. Also, the EU24BL does not support Cyrillic characters (neither does the EU24).

Material Code	Description
700345192	4621SW IP Telephone
700345275	EU24BL Expansion Module

4621SW and EU24BL

2.5   Avaya 3626 and 3616 programming cradle

The new Avaya AWTS Configuration Cradle, which allows programming of the 3626 and 3616 telephones, is supported with IP Office 3.1. The Configuration Cradle is an administration tool that reduces initial configuration time, provides rapid disaster recovery, and simplifies on-going rotation of security keys. The cradle itself is connected to a PC and uses a Windows based application to change and store all configurations and settings on the 3616 and 3626 Wireless Telephones.

System administrators can store multiple configurations to support different user profiles within the customer site. This cradle is only used to configure the telephones. It is not used to configure the Avaya Voice Processing server or any other component of the system. The cradle ships with a Quick Reference Guide which directs end users to the website for the windows based programming software.

Material Code	Description
700375934	AWTS Programming Cradle

2.6   Interquartz Analog 9281-AV *(EMEA only)*

Avaya have tested compatibility with the Interquartz 9281-AV phone for the hotel market. The 9281-AV offers a number of features that the hotel market demands including modem port for laptop connection and ten non-volatile memories for

personalized hotel facility direct dial access, E.g. reception, room service, health centre, garage, etc.

Facilities can be identified by the use of icons printed onto an inlay, which is protected by a see-through plastic overlay. There is also ample space for hotel branding to ensure a truly corporate look for the telephone. This phone is hearing aid compatible, wall mountable and meets the latest European standards for CE and EMC conformance.

- Removable inlay card for personalised logo printing.
- Message waiting light
- 10 non-volatile memories
- Ringer indicator light
- Ringer volume and pitch adjustment
- Last number redial
- Recall button (ELR/TBR switchable)
- Hearing aid compatible
- Wall mountable – no additional bracket required
- Tone Dialing

Ordering: To order these phones, please contact your local authorised Interquartz distributor or Interquartz.

Interquartz (UK) Ltd, Pennine House, Salford Street, Bury, Lancashire, BL9 6YA, United Kingdom. Tel: +44 (0)161 763 3122 Fax: +44 (0)161 763 4029
Email: avaya@interquartz.co.uk Web: www.interquartz.co.uk

2.7 Kalika Communications Door Entry System *(EMEA only)*

Avaya have tested and certified compatibility with the Kalika Communications "Door Entry System" (DES). This door entry system allows communication with people at your buildings door, company entry point or private house doorway. The basic DES is supplied with either no buttons or 1 and 2 preset buttons options that will dial a programmed number on the PBX system. The addition of 4 buttons modules can build the system up to a maximum of 64 calling buttons each calling a different extension on the switch. In turn any telephone on the system can dial a code to release 1 or 2 of the relays activating doors, lights or CCTV cameras.

For staff access the first 9 buttons can be used for entering a door code. For additional security a camera module can be inserted into the system operating on coax, IP or Wi-fi transmission. The frame assembly holding the modules has options for surface or flush mounting to walls with weather protection canopies.

The DES is connected to an IP Office analog extension port, the DES is in effect a speaker telephone powered by the extension line. It only requires a 12v Dc PSU to operate the backlights, the relays and the door lock mechanism. There are 2 relays in the control unit, which may activate 2 devices, either independently or simultaneously.

3   IP Office Software Enhancements

3.1   Basic Interworking with Avaya-Tenovis Integral 55 *(EMEA only)*

IP Office 3.1 will provide basic network integration with the Integral 55 using QSIG over PRI. QSIG over IP is not supported.

The list of supported QSIG features are:

- **Simple Telephony Call/Basic Call:** ETS300 171/172.
- **Circuit Switched Data Call/Basic Call:** ETS300 171/172.
- **Called/Calling Line ID Presentation:** ETS300 173.
- **Called/Calling Name Presentation:** (SS-CNIP, SS-CONP, SS-CNIR) ETS300 237/238.
- **Message Waiting:** (SS-MWI) EN301 260/255.
- **Transfer:** (SS-CT) ETS 300 260/261

The improvements to name presentation mean that names will be correctly sent on alerting and connection for basic calls. As an example this means that for a call to a Hunt Group across a QSIG connection while the phone is alerting the Hunt Group name will be presented, when a phone answers the User name will be sent. Names will be sent for QSIG supported features like Transfer - not for others.

Note: At this time QSIG name and number are not supported with Key system features on IP Office. A call into a telephone which has multiple call appearances will show the name and number on the primary call appearance key, but other call appearances will not show the name and number. Name display on the Avaya T3 telephones over QSIG is not supported – a user will only see the name display on Avaya 24/5400 and 46/5600 telephones.

IP Office supported QSIG Name and Number Display functionality:

QSIG Name Identification:

- The calling name is sent when the call is made (Setup).
- The called name is sent when the call is alerting at one or more endpoints. (Alerting)
- The connected name is sent to identify which endpoint answered the call. (Connect)

Any scenario that fits this pattern will have names displayed. This includes a basic call, a call to a hunt group which rings at many endpoints but is picked up at one, call-pickups, coverage etc.

Note: The above is for NAMES ONLY, not numbers. Numbers are supported in IP Office for Basic Calls and Call Transfers only.

QSIG Call Transfer and Name Display:

In addition to Name Identification, IP Office supports user initiated QSIG call transfer updates (not auto attendant transfer). This means that the names and numbers are updated once a call transfer has been completed. That is, each endpoint involved in

the transfer is told of the name and number of the other endpoint that they are connected to. This will not work when initiating a conference call.

QSIG Call Diversion (call forwarding) and Name Display:

Display of Caller ID Name or Number on call forwarding is not supported in IP Office.

Note: Centralised VoiceMail including support for message waiting indication is not supported in release 3.1 with the Integral 55 switch.

3.2 2420, 6400 and 5400 series Terminal Enhancements

IP Office 3.1 provides many new enhancements for the digital station telephones used on IP Office.

Cyrillic Support

Cyrillic support is offered with IP Office 3.1 on 2400, 4400, 5400 and 6400 digital station telephones as follows:

- Display of Cyrillic names (up to 31 characters, depending on number length, phone model and call state) on 2400, 4400, 5400 and 6400 digital telephones

- Russian menu display in Cyrillic on 4400 and 6400 digital telephones when the system locale is set to "rus".

- There is also an option to display English menus on the 4400 and 6400 series telephones while still displaying Cyrillic names. The system locale remains set to "rus" but the user locale is changed to "eng" or "enu".

- Setting and display of Cyrillic IP Office user names in the IP Office Manager Application.

Due to the limitations of the font used by the display module of these terminals all Cyrillic characters will be displayed as capital letters.

Note: Not all 6400 series digital telephones are supported with IP Office 3.1. Only 6408, 6416 and 6424 are supported with IP Office R3.1. The 2402 and 5402 will NOT support Cyrillic.

Extended length name display

This feature is activated by adding "LONGER_NAMES" as a source number to the "NoUser" configuration of the IP Office.

On DS phones the format of the display is changed to allow the maximum possible space for display of the called / calling names. Where possible the call status display is moved to allow the name to occupy the complete upper line, and wrap over onto the second line.

For all phones types the called/calling party display is also changed so that only a single name is displayed

- Basic calls: calling user's name indicated on called telephone and called user's name indicated on calling telephone.

- Diverted Calls: The name of the user to whom the call has been diverted is indicated on the calling telephone.

- Conference Call: The conference identifier is shown on all participating telephones.
- Call-Waiting: The name of the calling user is indicated when the call arrives during an existing call.
- Held Call: On-hold status indicated on telephone.

Hide Call State

This feature is activated by adding "HIDE_CALL_STATE" as a source number to the "NoUser" configuration of the IP Office.

On DS phones this makes more space available for display of the called / calling names by removing the call state, such as Call / Conn / Held, from the top line of the display.

This feature should only be used in conjunction with the extended length name display feature described above.

3.3 Call Logging: Call Detail Records (CDR)

IP Office 3.1 provides Call Detail Records (CDR) in a variety of Avaya Call Manager CDR formats and sends then directly to a centralised call logging application via TCP/IP.

The IP Office can locally cache a limited number (max 1500) of call records for later presentation to a centralised system incase the network connection is temporarily interrupted.

This feature is in addition to the current call logging information provided by the IP Office SMDR as the CDR records do not present all of the IP Office specific information. The configuration of CDR is facilitated by a new configuration form which has been added to the System Configuration within the Manager application.

3.4 Analog Telephone Message Waiting Indication Enhancements

IP Office 3.1 offers some alternate methods for indicating Message Waiting to analog telephones. The Message Waiting Lamp Indication Type for an analog extension in the Manager application can now offer the following:

- None
- On
- 101V
- 81V
- 51V Stepped
- Line Reversal A
- Line Reversal B

Note: The list of options above will only be shown for analog ports on the new Phone V2 expansion modules. All other analog ports will offer None, On, Line Reversal A and Line Reversal B only.

Option	Action	Availability
None	None	All
On	Existing operation	All
101V	101volts steady	Phone V2 only
81V	81 volts steady	Phone V2 only
51V Stepped	51 volts stepped	Phone V2 only
Line Reversal A	Line Reversal	All
Line Reversal B	Line Reversal (reversed)	All

With the enhancements within this release Message Waiting Indication on analog telephones will be supported on most analog telephones worldwide.

3.5 IP Trunk Fallback to Public Switched Telephone Network (PSTN)

IP Office 3.1 now allows calls that are routed on an IP trunk to fallback to the PSTN should the IP trunk not be available. The IP Office uses the Least Cost Routing (LCR) table to achieve this.

When a call is setup over an IP trunk the IP Office will wait for a response to the H.323 call setup message. The length of time the system will wait for a response is defined using the timeout field on the main route tab of the LCR form. If the remote PBX fails to respond within this timeout interval then an attempt is made to retarget the call using an alternate route. Setting the timeout value to zero disables fallback from IP trunks.

For IP trunks fallback occurs independently for each call, so that failure to setup one call will not effect the targeting of any other call. IP trunk fallback will not occur if the IP trunk is lost after the call has already been established, a new call will have to be initiated.

Fallback should only occur for two reasons:

1. Total failure of messaging between gateways, (e.g. failure of the trunk)

2. The local IP Office has insufficient VCM channels available to setup the call.

Please note that this feature is not available for calls that are routed using a Small Community Network.

3.6 Extension Twinning *(CALA, EMEA & APAC only)*

With IP Office 3.1 a new extension twinning capability has been added. Twinning is intended for users who have more than one phone, typically a user with both a desk phone and some form of wireless phone (for example DECT or WiFi).

Notes when using Extension Twinning:

- *Twinning is not supported for North American locales.*
- *Twinning is not supported for users with line appearance buttons.*

Twinning is an exclusive one to one arrangement. Only one phone may be twinned with another, with one acting as the primary phone and the other the secondary phone. With twinning in operation calls to the users' primary phone are also presented to their twinned secondary phone.

The primary phone is able to call the secondary phone but other users cannot dial the secondary phone directly.*

Note: *This is only possible if the maximum number of calls is set to 2. Please see below for further explanation of this feature.*

The twinning is setup using a new tab in the user configuration in Manager.

Twinned Handset
The drop-down list can be used to select an available user. Users not displayed in the list are already twinned with another user. If the list is greyed out then this user is the secondary phone of a twinned pair. The user with which this is twinned will be shown to the right of the Twinned Handset drop down list.

Maximum Number of Twinned Calls (1 or 2)
If set to one, when either the primary or secondary phone are in use, any additional incoming call receives busy treatment. If set to two, when either phone is in use it receives call waiting indication for the second call. Any further calls above two

receive busy treatment. When using Call Appearances together with Twinning this setting controls the number of calls that can be handled, not the amount of Call Appearances.

Twinned Phone Operation Notes

- Calls to and from the secondary phone are presented with the name and number settings of the primary.
- The twinning user can transfer calls between the primary and secondary phones.
- Calls will not ring at the secondary if the primary is logged off or set to do not disturb.
- Logging off or setting do not disturb at the secondary only affects the secondary.
- Depending on the secondary phone type, calls alerting at the secondary but then answered at the primary may still be logged in the secondarys' call log. This occurs if the call log is a function of the phone rather than the IP Office system.
- If the secondary is a Phone Manager PC Softphone, when the primary puts a call on hold, the secondary must go off hook in order to press Hold and retrieve the held call.
- All forwarding options for the secondary station are ignored.

Note: Twinning to a mobile/cell/GSM phone is not supported in IP Office 3.1. Only twinning to an extension defined in the local IP Office configuration.

3.7   Manager Application Enhancements

3.7.1   Extension Location

When looking at the Extension configuration in the IP Office System Manager you will now be able to see the hardware address of TDM extensions. These are displayed as Module and Port number.

On an IP403 and IP406v2 control unit the ports are indicated as BD for digital ports and BP for Phone (POT) ports.
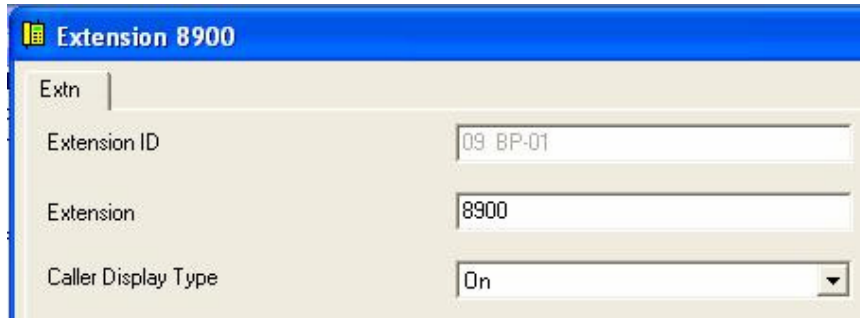
Id.	Extension	Module	Port
09	8900	BP	01
10	8901	BP	02
35	4632	BD	01
39	8903	BD	02

If the ports are on an expansion module the module number is displayed.

Id.	Extension	Module	Port
336	4116	01	14
337	4657	01	15
338	4776	01	16
355	4019	02	01
356	4529	02	02
357	4013	02	03

Note: IP and IP DECT extensions will show as Module 00 and Port 00.

The module and port information are also shown in the Extension ID field in the Extension configuration form.

3.7.2 Configuration Size

Also within IP Office 3.1 the Manager application has been modified to prevent uploading of IP Office system configuration files that are too large for the target system.

3.8 New IP Phone Firmware

IP Office 3.1 supports a new version of IP Phone firmware, version 2.2. This will automatically be installed in the manager directory when the new 3.1 administration suite is installed on your PC. This is the minimum version of software required to support the new 4621SW.

4   IP Office Applications

The IP Office 3.1 Applications release does not contain any new feature enhancements other than those listed below for IP Office Conferencing Center. However this release improves the performance and reliability of the product through various quality improvements in the associated applications.

4.1   IP Office Conferencing Center

The IP Office Conferencing Center GUI now supports the following languages:

- French
- German
- Italian
- Latin Spanish
- Swedish

5   CCC Compatibility

Also released with IP Office 3.1 is a new version of CCC, version 5.0.22. This version is fully supported on the following locales:

- English
- Dutch
- French (Canadian)
- French (France)
- German
- Italian
- Portuguese (Brazilian)
- Spanish

CCC is now also supported for installation on the following localised Windows operating systems, however application support is only provided in the English language:

Russian
Korean
Chinese (Simplified)

The CCC installation files for Russian, Korean and Chinese are not on the standard CCC CD but will be available on the IP Office 3.1 DVD. They can also be downloaded from the Avaya website: http://support.avaya.com

When using the CCC language specific downloads it is necessary to use the standard CCC CD for the installation of MSDE and Wallboard drivers, as these are not included within these versions.

6   Issues Resolved in IP Office 3.1 Software

IP Office 3.1 software has parity with the IP Office 3.0 August maintenance release. As well as containing all of the fixes in that release the following issues are also resolved.

6.1   Core Software
- Noise on auto-recorded calls that originate from a cell phone.
- System resets if it receives a Disconnect Code of 81 or 91 from the ISDN provider.
- Reboot when using L2TP with Microsoft Windows 2K as the client.
- Using call listen on a call that is already being recorded causes system to freeze.
- If a held call is hung up while the hold reminder is alerting at a phone then the hold reminder rings forever.
- System can crash when using Speed Dial of *32*Extn#.
- Problems detecting CLI on Analog Trunks in Denmark.
- POT user has to press the flash button twice to answer a waiting call.
- Any time the first user of a hunt group answers a call in Group mode, the second user has their ringing appearance button lockup.
- Bridge Appearance keys disconnect calls when used with E1R2 QSIG.

- Phantom Ringing calls - Call Appearance shows ringing call, but no call exists.
- Auto-recording started during ringing of a blind transfer call.
- Analog terminal cannot retrieve held calls with PhoneManager or SoftConsole.

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6.2   Manager

- Manager sending Malformed TFTP Packets

6.3   Upgrade Wizard

- Upgrade Wizard sending Malformed TFTP Packets

6.4   Call Status

- Call Status sending Malformed TFTP Packets

6.5   VoiceMail Pro

- Voicemail Pro sending Malformed TFTP Packets

7   Known Issues

The following is a list of issues that exist in this release of IP Office 3.1 software. All of these issues will be targeted for resolution in a future Maintenance Release:

7.1   Core Software

The following known issues have a known workaround and will be targeted for inclusion in a future Maintenance Release.

- If you are using the Embedded flash card for Voicemail in locales other than "eng" or "enu" Avaya recommend that you use IP Office binary, version 3.1(2901). The binary can be downloaded from the Avaya website or can be found on the IP Office 3.1 DVD in a directory called "Patch".
- When using the T3 DSS module if more than 30 users are programmed on the keys the system can reset. A patch is available to fix this problem, version 3.1(2901), which can be downloaded from the Avaya website or can be found on the IP Office 3.1 DVD in a directory called "Patch". If you have any T3 DSS modules it is recommended that you use this version in place of 3.1(29) regardless of how many keys you actually have programmed.

The following known issues currently have no known workaround and will be targeted for resolution in a future Maintenance Release.

- When Direct Media is selected on the IP DECT line, calls may receive one way speech in certain call transfer scenarios.
- Accented characters cannot be displayed on an EU24.
- Using an H.323 trunk to communicate with Intuity Audix may cause a problem with the greeting message. A user leaving a voice mail message is greeted with the "System Retrieve Message" rather that the User greeting. This is caused when the IP Line -> VoIP -> 450 Support is set to "None".   To return

the User greeting back to normal, set the IP Line -> VoIP -> 450 Support to "H450".

- Display on phone can be blank when first call is placed on hold while second call is alerting.

- In a twinned pair formed by a 54xx and either a 3701 or 3711, when the secondary station (3711/3701) is turned off and becomes unavailable, the first call presented to the master only rings once and then is no longer presented to the master. Any subsequent calls are ok.

- System directory entries that have been added using the Manager installed from the 3.1 admin CD (version 5.1.29) are not exported when attempting to export directory entries to a file. Any entries that already exist in the configuration are exported ok.

- Calls that arrive on BRI or PRI trunks are not logged in the Incoming call log on the 24/5400 phones.

7.2   Manager Application

- Using the Manager it is not possible to assign a Line Appearance ID to an analog trunk.

7.3   VoiceMail Pro

- When using a Windows XP SP2 Client for IMS, there are several configuration changes that need to be made. In the firewall exceptions you need to check\add the following settings to ensure full IMS functionality:

  o Ports to add: TCP port 135 & UDP Port 135.
  o Applications to add : Outlook.exe & UMSFORM.exe

- When using German language prompts one of the prompts is played twice. To fix this problem there is a file supplied on the VoiceMail Pro CD. There is a directory on the CD called "Patch", in this directory is a file called "de_intuity.nls". Copy this file to "C:\Program Files\Avaya\IP Office\Voicemail Pro\VM" and replace the existing file. After replacing the file the VoiceMail Pro service should be stopped and restarted.

7.4   Analog DECT

- DECT handset doesn't display the name of the number that is calling. The number is entered in the following way (01707)364xxx. The directory match is done on the switch and on the integration software but it is not displayed on the handset.

- A twinned pair formed by a 6408 and a 20DT(4I), call waiting is enabled for both of them. A message is left in the masters' mailbox. Both terminals are alerted that there is a new message. If the message is retrieved by the master and it is deleted, "Voice message" remains in the screen of the DECT handset until this goes off hook and then on hook.

- A twinned handset with Call Waiting enabled in the master as well as in the slave makes a call. The Name of the extension dialed is displayed, a second call is made to the master, the DECT is notified the name of the caller and waiting is displayed. When the second caller hangs up, the display on the DECT shows its own CLI, whereas the Name of the other end of the call should be displayed.

7.5   IP DECT

- If you go off hook before dialing a number this is not stored in the redial list on the phone.

7.6 CBC

- The installer screen for CBC on a French Operating System only offers French (Canadian) as a language option. When the CBC is started it is set to French (Canadian), at this point it is possible to set the language to French (Standard)
- When Italian has been selected as the installation language the CBC is set to English when it is first run. This can be changed back to Italian in the application but the Delta Server search page is always displayed in English.
- When Russian has been selected as the installation language the CBC is set to English when it is first run. This can be changed back to Russian in the application but the Delta Server search page is always displayed in English.

8   Technical Notes

8.1   Upgrade Installation Notes

The upgrade installation notes cover the procedures required when upgrading from IP Office 3.0 to IP Office 3.1. If you are upgrading from an earlier release of IP Office software please refer to IP Office Technical Bulletin 36.

Before any upgrade commences the old Admin Suite must be removed and the 3.1 Admin Suite must be installed.

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 3.1 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 3.1 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 you are already running the 2.1 or 3.0 admin suite .NET will already be installed.

- 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.

> **IMPORTANT INFORMATION – LOADER UPGRADES**
> **Due to the size of the IP Office 3.1 binary certain systems may not be able to load this version of software if using an un-validated upgrade or when loading the software after it has been erased from the system using the DTE port. If you are doing a validated upgrade then this will not stop you from upgrading to 3.1 as the loader is not used for this type of upgrade. It is strongly recommended that you do take the time to upgrade the loader when upgrading to IP Office 3.1.**

Early IP406V2 releases: PCS level 4, 5 and 6 had flash size of 3MBytes allocated for the code and 16Mbytes of RAM. These systems need to have their loader upgraded to V2.4. This can be achieved by upgrading to IP Office version 3.0(999) – a specific loader upgrade binary. The procedure need only ever by completed once for a given IP406V2. Once the upgrade to 3.0(999) has completed the IP Office can be upgraded to 3.1 as normal. This is necessary because the 3.1 IP406v2 binary doesn't fit into the 3MB available on the early versions of the IP406v2. The flash is extended from 3MB to 6MB by uploading to loader V2.4.

A similar issue exists for IP406v1 running extremely old versions of the loader (Branch 2 Loader 0.1) found with PCS level 03 and earlier, very few of these exist. To upgrade to 3.1 these variants should also have their loader upgraded to IP Office version 3.0(999). The procedure need only ever by completed once for a given IP406v1. Once the upgrade to 3.0(999) has completed the IP Office can be upgraded to 3.1 as normal.

Note: After following this process to update the loader previous versions of IP Office 2.x and 3.x can be reloaded if required.

8.2   Upgrade Instructions

Note: IP Office 3.1 is not supported on the IP401 Compact Office.

To upgrade the Control and Expansion units do the following:

If you do not need to upgrade your loader please go to step 3.

1. Install the Admin Suite as normal. Do not open the Manager application yet.

2. Using the Windows Explorer application on your PC open up one of the following folders:

    - IP406v1 - Program Files\Avaya\IP Office\Manager\IP406V1\V3_0_999
    - IP406v2 - Program Files\Avaya\IP Office\Manager\IP406V2\V3_0_999

    These folders contain a file called either IP406.bin (IP406v1) or IP406u.bin (IP406v2). These are version 3.0(999) of the IP Office firmware and must be used in place of the existing ip406/IP406u 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 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. 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.
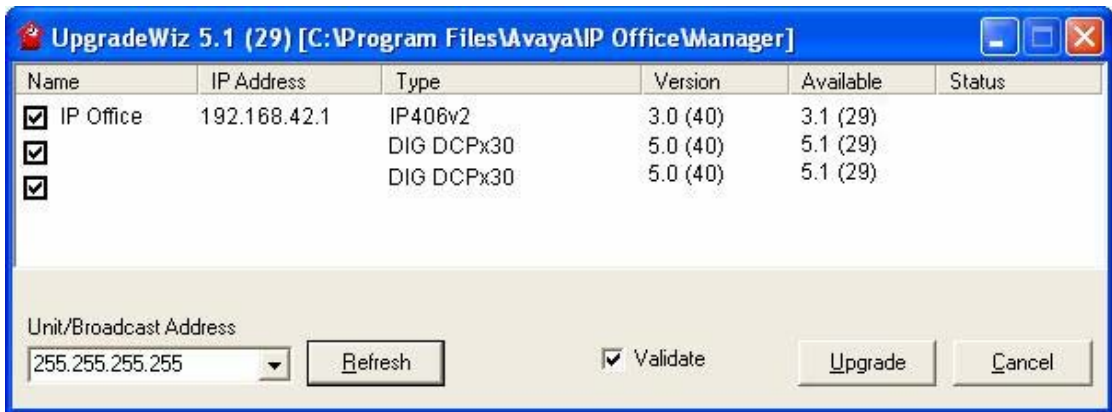
7. The current version and available versions are displayed. Tick the check box under Name if it is not already ticked then click on Upgrade.

   Note: If upgrading the loader the version shown will be 3.0 (999), at this stage only upgrade the main unit, do not upgrade the expansion modules as well.

8. Enter the password of the existing configuration (not the default). Click OK and the upgrade process will begin. When the upgrade wizard informs you that all units have been upgraded click on OK and close down the upgrade wizard.

9. If you have just upgraded the loader you now need to upgrade to version 3.1. Using the Windows Explorer application on your PC open up one of the following folders:

   - IP406v1 - Program Files\Avaya\IP Office\Manager\IP406V1\V3_1
   - IP406v2 - Program Files\Avaya\IP Office\Manager\IP406V2\V3_1

These folders contain a file called either IP406.bin (IP406v1) or IP406u.bin (IP406v2). These are version 3.1(29) of the 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 bin file.

10. Now follow steps 4-8 again to upgrade your system to IP Office 3.1.

8.3   Unit Compatibility - Expansion Unit Interoperability

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

8.4   Upgrade of systems with limited RAM

The binaries supplied for IP Office 3.1 have grown substantially in size, in most cases by almost 400 KB. Once your system is at 3.1 future validated upgrades may not be possible due to a lack of available space in RAM to store the binary during the upgrade.

To overcome this issue a new feature has been added to 3.1, if a system has insufficient RAM to hold the images then the administrator is presented the option to reboot the system into 'Offline Mode', which will free up enough memory to allow the upgrade to take place.

When the Upgrade Wizard runs you will notice that it will perform an "initial check", this is the stage at which it is checking for available RAM. When a system is in offline mode this is indicated by in the 'Type' column of the upgrade wizard. Offline Mode is only supported from IP Office release 3.1.

An offline system only provides the services required to perform the upgrade and will not provide full telephony functionality. Remote upgrades (dial up connections) are possible in offline mode.

If a unit is rebooted whilst in Offline mode it will restart in normal mode. If the IP Office unit receives no communication from the upgrade wizard for 15 minutes when in offline mode, the unit will reboot back into normal mode.

The Upgrade wizard does not automatically track the status of a unit entering Offline Mode. The 'Refresh' button should be used to determine when the system has rebooted into offline mode. When the upgrade wizard confirms the system is in offline mode the upgrade can proceed as normal.

Offline mode is not recommended for upgrading multiple IP Office systems in a single operation. Each system should be upgraded in turn.

Note: A problem has been observed when performing an Offline upgrade on a fully populated system that had a large config, was part of a big large SCN and had a lot of different expansion modules.

In this scenario there may still not be enough space in RAM when in Offline mode. If you have a system with a similar configuration it is recommended that you upgrade the Control Unit first and then upgrade the expansion modules afterwards. This will prevent the system going in to an offline upgrade loop.

8.5   Phone Firmware Support

The table below lists the phone firmware versions that are supported by IP Office 3.1 General Release software.

Phone Type	Firmware Version
2402/ 5402	2.0
2410/ 5410	2.0
2420/ 5420	4.0
4606	1.83
4612	1.83
4624	1.83
5601	1.810
5602	1.806
5602sw	1.806
4601	1.82
4602	1.82
4602sw	1.82
4610sw/ 5610sw	2.2.3
4620	2.2.3
4620sw/5620sw	2.2.3
4621sw	2.2.3

8.6 Upgrade Instructions for VoiceMail Pro

The upgrade instructions cover the procedure required when upgrading from VoiceMail Pro 3.0 to VoiceMail Pro 3.1. If you are upgrading from an earlier release of software please refer to IP Office Technical Bulletin 36.

When upgrading between versions of software upgrades are not supported so you must uninstall and reinstall to move between versions. This now also applies when moving between minor versions of software.

Upgrading from 3.0 VoiceMail Pro to 3.1 VoiceMail Pro

Backing Up the Existing VoiceMail Pro Database & Registry
Before removing VoiceMail Pro, you should create a backup copy of the callflow database. This will contain any customizations made to the default callflow. You should also backup the registry settings specific to VoiceMail Pro.

1. Start the VoiceMail Pro GUI.

2. From the File menu, select the option Import or Export.

3. Select the option Export callflows and click **Next**.

4. Enter a file path and file name ending in .mdb, e.g. C:\temp\backup.mdb. Click **Next**.

5. Click **Finish** to start the export then click **Close** to complete the export procedure.

6. Close the program.

7. Insert the VoiceMail Pro CD for the new VoiceMail Pro and cancel the install wizard that auto runs.

8. Right-click on the CD drive and select Open.

9. Locate the file Backupreg.bat and double-click it to run the application. This backs up any registry settings associated with VoiceMail Pro.

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

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

Uninstall VoiceMail Pro

Open the Windows Control Panel.

1. Select Add/Remove Programs.

2. Select IP Office VoiceMail Pro and click Add/Remove.

3. From the options offered select Remove and click **Next**.

4. Follow any prompts given during the removal process.

When the process has been completed select the option Yes, I want to restart my computer now and click **Finish**.

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

Restore the Registry

1. Right-click on the CD drive containing the VoiceMail Pro CD and select Open (reinsert the CD if necessary and cancel the install wizard).

2. Locate the file Restorereg.bat and double-click it to run the application. This restores the registry settings previously associated with VoiceMail Pro.

VoiceMail Pro 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:

- **ACM Gateway:** This mode is used to provide VoiceMail support for an Avaya G.150 unit being used as a branch office gateway to ACM with Modular Messaging. Documentation for the installation and setup for such a system, including the VoiceMail aspects, is covered in separate Avaya G.150 documentation.

- **Compact Install:** This mode installs the minimum components for basic VoiceMail operation, that is the VoiceMail Pro server or service, the VoiceMail Pro Client application and the prompts appropriate to the selected installation language.

- **Custom Install:** This mode allows full selection of which components are installed. The only exception is the selection of VoiceMail Pro server or service, which will be overridden to match the Windows version. This mode is used for installation of IMS and Networked Messaging.

- **Typical Install:** This mode install the components for basic VoiceMail operation plus those required for web campaigns. It requires a suitable web server to be pre-installed on the VoiceMail Pro Server PC.

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**.

Restore 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 Callflows 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.

8.7 Upgrade Instructions for IP Office User Applications

The upgrade instructions cover the procedure required when upgrading user applications from version 3.0 to version 3.1. If you are upgrading from an earlier release of software please refer to IP Office Technical Bulletin 36.

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. The settings for PBX configuration, Speed Dials, Calls In/Out/Missed tabs etc, are currently stored in the registry and will also remain.

To upgrade to any of the 3.1 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 PhoneManager 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**.

9   Assistance

9.1   Documentation & Software

Documentation and Software can be found on www.avaya.com/support

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

Software can also be ordered on CD/DVD if required.

With the IP Office 3.1 User, Administration and Documentation CD pack will be a five pack of CDs. A triple pack is no longer sufficient to hold the amount of information being generated with the release.

The new five pack CD consists of the following:

- One User CD
- One Admin CD
- One English documentation CD
- One German documentation CD
- One French documentation CD

In order to facilitate a more compact and flexible method of providing new software, IP Office 3.1 software (and all future releases) will be available in DVD format. Avaya intend to move to a DVD only media with the next release of IP Office. The IP Office CD Admin pack will no longer be offered with the next release (after R3.1) of IP Office.

The table below lists the new CDs/DVDs that are available with R3.1:

Description	Material Code
IP Office R3.1 Admin Five Pack CD	700380389
IP Office R3.1 Admin DVD	700380397
IP Office VM Pro R3.1 CD	700380405
IPO CD Conferencing Center R3.1	192226

9.2   IP Office Technical Training

Avaya University training courses have been updated to reflect the new features offered with the IP Office 3.1 release.

Updated courses include:

- AVA00140H00: IP Office Core Implementation Workshop
- AVA00484H00: IP Office Advanced Applications Workshop
- AVA00619WEN: IP Office Telephones End-User Training
- AVA00619H00: IP Office Telephones End-User Training
- New - AVA00755WEN: IP Office R3.1 Product Delta
- New – AVA00757WEN: IP DECT for EU Countries
- New - AVA00758H00: IP Office Maintenance and Troubleshooting Workshop

Details of the courses and their availability can be found at the Avaya Learning Centre:

http://www.avaya-learning.com

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Avaya SMBS New Product Introduction

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