AVAYA

IP Office Technical Bulletin

Bulletin no: 133

Date: 23rd March 2011

Title: General Availability (GA) of IP Office
Release 7.0

Table of Contents

IP Office Technical Bulletin

Bulletin No: 133

Date: 23rd March 2011

Region: GLOBAL

General Availability (GA) of IP Office Release 7.0 Software

Avaya is delighted to announce the launch and availability of IP Office Release 7.0. IP Office Release 7.0 enables existing Nortel BCM and Norstar users a cost effective migration path towards IP Office by keeping their existing IP, digital and digital mobility telephones. IP Office Release 7.0 enhances the offer for basic users and those in the Sub-20 user segment with simplified system management, and providing key system operation 'out-of-the-box.' A new range of IP and Digital telephones is also introduced.

1   Product Overview

Avaya IP Office Release 7.0 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 Release 7.0 will be supported on the following control units:

- IP500, IP500v2

Licensing In order to upgrade to Release 7.0 from a previous release, an Upgrade License must be purchased. There are two variants:

- Upgrade to 7.0 for sites with over 32 users or when expansion modules are used
- Upgrade to 7.0 for small sites up to 32 users where no external expansion modules are used.

For new installations, no upgrade license is required on the IP500v2 platform to run IP Office Release 7.0.

Material Code	Description
262645	IPO LIC UPG 7.0 SML
262644	IPO LIC UPG 7.0

IP Office Release 7.0 will NOT be supported on the following control units:

- IP401, IP403, IP406 (v1), IP406v2, IP412 and Small Office Edition

IP Office Release 7.0 is the entry-level software required to support the following new hardware:

- TCM8 Base Card (IP500v2 only)
- DS16A/DS30A Expansion Modules (IP500v2 only)
- 9500 Series Digital Telephones
- 96x1 Series IP Telephones
- BM12 Button Module
- Industrial DECT Handsets 3740 and 3749
- Nortel Digital Phone Support:
    - M-Series, T-Series
    - Digital Mobility Solution
    - T7406E Cordless Telephone
    - Audio Conferencing Unit (NACU)
- 18 Key LED KEM for 1200 Series SIP Telephones

IP Office Release 7.0 also supports the following new features:

IP Office Core Software: Version 7.0(5)

- IP Office Essential Edition – Quick Mode
- PARTNER Version, Norstar Version and Quick Mode Enhancements
    - Capacity Enhancements
    - Flexible Dial Plan
    - Decoupling Of Language And Locale
    - Message Alert Notification
    - Absent Message Inspect
    - Do Not Disturb Exceptions
    - Call Log Enhancements
    - Simplified Manager Enhancement
- Nortel M and T Series Digital Telephones
- Additional features for 11/12xx series Nortel SIP Phones
- Public SIP Trunk Enhancements
    - Multiple SIP Trunks Resolved To A Single IP Address
    - Transparent Fax Over G.711
    - Codec Lock-Down
- Template Provisioning for SIP and Analogue Trunks
- Installation and Management Simplification on DECT R4
- Enhanced Fault Management
- Modem Transfer for IP Office Mode
- Receptionist Licensing Change
- Optimization for CallerID Detection on Analogue trunks
- Analogue Trunk CLI Detection Method

- Appearance Button Programming
- Embedded Voicemail – Increased Storage Time (IP500v2 only)
- Embedded Voicemail – Outcalling Notification (IP500v2 only)

IP Office Preferred Edition (formerly VoiceMail Pro): Version 7.0.17

- Backup and Restore
- Authenticated Recording
- Status Change Event Notifications

one-X Portal for IP Office: Version 7.0.14.52

- World-clock Gadget
- CCR Agent Control Gadget
- Directory Gadget Enhancements
- Mobile Twinning Handover
- Telecommuter Mode and Mobile Twinning
- Google Chrome Support

Customer Call Reporter: Version 7.0.1.31

- New System Statistics
- Display Accuracy/Standardization
- User Interface Enhancements
- Wallboard Enhancements
- Additional Agent Device Support
- Customer Map Enhancement

Data Migration Manager: Version 2.0.20

End of Support for IP Office Release 5.0

With the GA of IP Office Release 7.0 systems running IP Office Release 5.0 will no longer be supported. Support will still be available for Customer Contact Center.

---

2   IP Office Core Software Enhancements

IP Office Release 7.0 introduces a number of new hardware elements, including a new IP500 Base Card and two new Expansion Modules to allow customers to migrate from a BCM or Norstar system while retaining their investment in phones.

2.1   TCM8 Base Card (IP500v2 only)

IP Office Release 7.0 provides support for a new base card, the TCM8. This card will provide connectivity for eight Nortel digital telephones as well as providing trunk connections, the same as the other IP500 base cards. This will allow customers who want to migrate their Norstar or BCM systems to an IP Office to retain their investment in their phones.

- The TCM8 card is only supported in the IP500v2 control unit
- The TCM8 card provides support for:
    - o Nortel Digital M and T Series Digital Phones
    - o Nortel Digital Mobility Solution
    - o Nortel Digital Conferencing Unit (NACU)
    - o Nortel T7406/T7406E Cordless Phone
- Avaya digital phones cannot be connected to the TCM8 card
- The TCM8 will support the IP500 Analog, BRI and PRI Trunk Cards
- A maximum of 4 TCM8 cards are supported in a system
- The TCM8 can be used in combination with all other IP500 base cards
- The TCM8 card is supported with PARTNER® Version, Norstar™ Version, Quick Mode and Standard Mode systems.

Material Code	Description
700500758	IPO IP500 EXTN CARD TCM-8 DGTL STA 8

2.2 DS16A and DS30A Expansion Modules (IP500v2 only)

To further support Norstar and BCM migrations where the TCM8 card will not support the number of telephones required, two new expansion modules are available with IP Office Release 7.0, the DS16A and DS30A, providing support for 16 and 30 telephones respectively.

These modules provide connectivity via one (DS16A) or two (DS30A) RJ21 connectors.

For ease of installation when migrating from a BCM the pin-outs of the connectors on these modules are consistent with that of the DSM16 and DSM32 BCM modules (as the DSM32 is a 32 port module the last 2 ports will need to be re-wired).

- The DS16A / DS30A expansion modules are only supported with the IP500v2 control unit

- The DS16A / DS30A expansion modules provides support for:
    - Nortel Digital M and T Series Digital Phones
    - Nortel Digital Mobility Solution
    - Nortel Digital Conferencing Unit (NACU)
    - Nortel T7406/T7406E Cordless Phone

- Avaya digital phones cannot be connected to the DS16A and DS30A expansion modules

- A maximum of 12 DS16A / DS30A expansion modules are supported

- The DS16A and DS30A can be used in any combination with other expansion modules, providing a future growth path with Avaya digital phones.

- The DS16A and DS30A expansion modules are supported with PARTNER® Version, Norstar™ Version, Quick Mode and Standard Mode systems.

Material Code	Description
700500699	IPO IP500 EXP MOD DS16A DGTL ST RJ21
700500698	IPO IP500 EXP MOD DS30A DGTL ST RJ21

2.3   Avaya 9500 Series Digital Telephones

IP Office Release 7.0 introduces support of the 9500 series of digital phones. With an appearance and functionality similar to that of the well-established Avaya 9600 Series IP telephones, the 9500 Series can be deployed in mixed digital/IP telephony environments and are an ideal choice for companies wanting to add digital endpoints with a consistent look and user experience to their existing portfolio.

Avaya 9504 Digital Telephone

Key Features of the 9504

- 4 line X 32 character display, white backlit for easy viewing
- 4 administrable feature buttons on three levels (total of 12 button positions), each with dual red-green LED to display status
- Fixed feature keys - Speaker, Headset, Mute, Volume, Avaya Menu, Phone, History, Contacts, Voicemail Message
- Context-sensitive interface, 4-way navigation cluster and 4 softkeys simplify and speed up operations
- Integrated, high quality speakerphone
- Headset jack supports wide array of wired and wireless Avaya headsets
- Dual position stand
- Wall-mountable

Material Code	Description
700500206	9504 TELSET FOR IPO

Avaya 9508 Digital Telephone

Key Features of the 9508

- 8 line X 32 character display, white backlit for easy viewing

- 8 administrable feature buttons on three levels (total of 24 button positions), each with dual red-green LED's to display status

- Fixed feature keys - Speaker, Headset, Mute, Volume, Avaya Menu, Phone, History, Contacts, Voicemail Message

- Context-sensitive interface, 4-way navigation cluster and 4 softkeys simplify and speed up operations

- Integrated, full duplex speakerphone *

- Supports up to 3 BM12 button modules **

- Headset jack supports wide array of wired and wireless Avaya headsets

- Dual position stand

- Wall-mountable

* Note: With the release of IP Office 7.0 the 9508 telephone will only offer two-way speakerphone functionality. Full duplex speakerphone functionality will be added with a later release of software.

** Note: Please note that power must be supplied to the phone, using an inline power module such as the 1151C or equivalent, when the BM12 button modules are used with the 9508 phone.

Material Code	Description
700500207	9508 TELSET FOR IPO

2.4   Avaya 96x1 Series IP Telephones

IP Office Release 7.0 also provides support for a new range of IP telephones, the 96x1 Series. This new line of IP phones consists of a button centric IP phone, the 9608, and the two new touch-screen phones the 9621G and 9641G.

Note: The 96x1 Series IP telephones are also supported with the IP Office 6.1 Q1 2011 Maintenance Release software.

Avaya 9608 IP Telephone

Key Features of the 9608

- 3.8 inch black and white LCD display (181*120) with backlight

- 8 administrable feature buttons on three levels (total of 24 button positions), each with dual red-green LED to display status

- Fixed-feature keys - Speaker, Headset, Mute, Volume, Avaya Menu, Phone, History, Contacts, Voicemail Message

- Context-sensitive interface, 4-way navigation cluster and 4 softkeys simplify and speed up operations

- Full duplex speakerphone

- Supports up to 3 BM12 button modules

- Headset support

- Dual position stand

- Wall-mountable

Material Code	Description
700480585	IP PHONE 9608

Avaya 9621G IP Telephone

Key Features of the 9621G

- 3.7 x 2.1 inch color touch screen display

- 4 position adjustable tilt display

- 24 programmable call appearance/feature buttons, displayed in pages of 6 buttons

- Fixed feature keys - Speaker, Headset, Mute, Volume, Home, Phone, Forward, History, Contacts, Voicemail Message

- Full duplex speakerphone

- Gigabit Ethernet

- Headset support

- Dual position stand

- Wall-mountable

Material Code	Description
700480601	IP PHONE 9621G

Avaya 9641G IP Telephone

Key Features of the 9641G

- 4.1 x 2.3 inch color touch screen display

- 4 position adjustable tilt display

- 24 programmable call appearance/feature buttons displayed in the scrollable main display along with icons for the status of the buttons

- Fixed feature keys - Speaker, Headset, Mute, Volume, Home, Phone, Forward, History, Contacts, Voicemail Message

- Full duplex speakerphone

- Supports up to 3 BM12 LCD button modules (module types cannot be mixed)

- Gigabit Ethernet

- Headset support

- Dual position stand

- Wall-mountable

Material Code	Description
700480627	IP PHONE 9641G

2.5 BM12 Button Module

Also introduced with IP Office Release 7.0 is the BM12 button module. The BM12 button modules are supported with the 9508, the 9608 and the 9641G

BM12 Button Module

Key Features of the BM12

- Supports an additional 24 programmable buttons per module, displayed in two pages of 12

- 12 dual red-green LEDs to display status

- Edit button

- Page left / right buttons for scrolling of display

- Supported with 9508, 9608 and 9641G

- Maximum of 3 BM12 modules per phone

** **Note:** Please note that power must be supplied to the phone, using an inline power module such as the 1151C or equivalent, when the BM12 button modules are used with the 9508 phone.*

Material Code	Description
700480643	BUTTON MOD 12B

2.6 Industrial DECT Handsets 3740 and 3749

For users of the DECT R4 mobility solution, two special handsets have been introduced that target workers in need of ruggedized handsets in areas with a high risk of explosion.

- 3740: Tough Industrial Handset
- Same feature set as 3720
- Monochrome Display
- Loudspeaker / handsfree
- Headset Socket
- Four-way navigation key
- Standby 150h, talk time 18h (optimal conditions)
- Ruggedized: Shockproof certification IEC60068-2-32, procedure 1 from 2 meters
- Operating temperature: -10°C to +55°C
- Liquid and dust protected (IP65)
- No Bluetooth support

- 3749: Intrinsically Safe Handset
- Same feature set as 3740
- Conforms to ATEX and IECEX for
    - Gas: II 2G Eex ib IIC T4
    - Dust: II 3D Ex ibD 22
- Color display
- Bluetooth support for headsets
- Position sensor (man down / no movement) for integration into security systems (requires AIWS server with OAP protocol and applicable alarming application)
- Limitations due to power constraints for intrinsically safe handsets:
    - Display brightness is lower
    - The keypad has no backlight for security reasons
    - The vibrator and sound are not activated simultaneously (Ringing and vibration alternate)
    - The ring signal/beeper volume is slightly lower
    - Loudspeaker volume is slightly lower

Material Code	Description
700479454	DECT 3740 HANDSET
700479462	DECT 3749 HANDSET

2.7   Nortel M and T Series Digital Phone Support

IP Office Release 7.0 introduces support for a large line of Norstar and BCM digital telephones on the newly introduced TCM8 base card and the DS16A and DS30A expansion modules. Support of these telephones is intended for migration of Norstar or BCM users and for upgrades of customers already using those telephones.

These telephones support the majority of the BCM/Norstar™ style feature keys and the major feature activation codes, while mapping those features to the enhanced feature set of IP Office.

The following Nortel M-Series telephones will be supported:

- M7000
- M7100, M7100N
- M7208, M7208N
- M7310, M7310N
- M7324, M7324N
- CAP (48 buttons)

The following Nortel T-Series telephones will be supported:

- T7000
- T7100
- T7208
- T7316
- T7316e
- T24 KIM

2.8   Digital Mobility Solution

The Digital Mobility Solution (DMS) is a modular wireless voice communication system that is based on the Digitally Enhanced Cordless Telephony (DECT) technology. Supported on all BCM and Norstar platforms, the Digital Mobility Solution scales from 1 to 64 users and covers an area up to 1.5-million square feet for true campus-wide mobility.

To protect the customer's investment in the Digital Mobility Solution (both in System Hardware and system deployment costs) the Digital Mobility solution is supported with IP Office Release 7.0. The DMS connects to the IP500v2 system using a TCM port for each handset. (TCM ports are provided with the TCM8 base card and the DS16A and DS30A expansion modules).

- All three of the Digital Mobility Solutions (2G4, 1G9 and 1G8) are supported.

- All 4100 Series (4135, 4145, 4145EX, 4136, 4146 and 4146EX) and 7400 Series (7420, 7430, 7440, 7439, 7449) telephones are supported including all country and signaling variations.

- The DMC080/081 can be connected to a TCM-8, DS16A or a DS30A.

- The DMC320/321 can be connected to a DS30A. *

- No changes to the wiring between the DMC and the Digital Mobility Solution (base stations, repeaters, antennas etc.) are required

- No changes to the deployment of the Digital Mobility Solution (base stations, repeaters, antennas etc.) are necessary when upgrading from Norstar or BCM to IP Office

- There is no change to the maximum configurations of the Digital Mobility Solution:

  o Maximum users: 64

  o 1.5 Million Square feet of Coverage.

- No reprogramming of the DMC is required when upgrading from Norstar or BCM to IP Office

Note: *Due to the limitation of the DS30A only having 30 ports and the DMC320/321 having 32 ports, re-wiring is required to realize the maximum capacity of 64 users.*

2.9 T7406E Cordless Telephone

The T7406E cordless telephones use a base station that can support multiple sets. The T7406E base station supports up to 4 T7406E handsets. Each supported handset requires a connection from the base station to a TCM port on the IP Office system. The T7406E is available in North America, Mexico and Caribbean countries excluding Jamaica and Trinidad. The T7406E replaces the discontinued T7406 Cordless Telephone.

- The T7406E cordless Telephone is supported on the TCM8, DS16A or DS30A
- The T7406E retains its commonality with the T-series telephones.
- The maximum solution size remains the same.
  o Maximum of 8 handsets per system
  o Maximum of 2 base stations per system

2.10 Audio Conferencing Unit (NACU)

The Audio Conferencing Unit (NACU) is a multiple microphone desktop conferencing unit that offers superior teleconferencing by using three microphones to provide 360 degrees of voice coverage. The Conferencing Unit is a full duplex hands free unit, which allows voice to be heard and picked up at the same time, providing faster response time and eliminating conversation "collisions" and losses.

- The Audio Conferencing Unit is supported on the TCM8, DS16A or DS30A

The Audio Conferencing unit only supports the following Feature codes:

- Speeddial: Feature 0 - This feature code can be used to dial a stored number.

  o If Feature 0 is followed by a 3-dight number in the range 000 to 255, the system directory entry with the matching index is dialed.

  o If Feature 0 is followed by * and a 2-digit number in the range 71 to 94, the personal directory entry with the matching index is dialed.

- Hold/Switch Calls: Feature 2 - This feature code will hold the current call. If there was already a call on hold, the feature code will switch between calls.

- Conference: Feature 3 - If the Audio Conferencing Unit has a call connected and another call on hold, using this feature code will conference the unit and those calls.

- Last Number Redial: Feature 5 - When the phone is idle, this feature code can be used to redial the last number dialed from the Audio Conferencing Unit.

• The Nortel Digital Audio Conferencing unit shall be supported on IP Office via the TCM-8, DS16A or DS30A H/W.
• Feature activation/deactivation and operation on this unit via the FEATURE key remains the same as feature activation/deactivation and operation on the T-series terminals.

2.11 18 Key LED KEM for 1200 Series SIP Telephones

IP Office 6.1 included support for the 12-Key LCD (Liquid Crystal Display) KEM with the 1220 and 1230 Nortel SIP phones. In IP Office Release 7.0 support has also been added for the 18-Key LED KEM that comes with paper labels.

2.12 Telephones Supported in IP Office Release 7.0

All telephones supported in IP Office 6.1 will also be supported in Release 7.0 with the exception of the 6400 series digital phones.

- 2400/5400 series digital phones
- 1400 series digital phones
- Select 4600 series IP phones (those supported on IP Office)
- 5600 series IP phones

- 1600 series selected IP phones
- 1600-I series IP phones
- 9620L / 9620C / 9630G / 9640 / 9650 / 9650C IP phones
- 4406, 4412, 4424D+ (not LD) phones (DS expansion modules only, no longer sold new)
- T3 digital: Compact, Classic, Comfort
- T3 IP: Compact, Classic, Comfort (no longer sold new)
- 3701/3711 (IP DECT)
- 3720/3725 (DECT R4)
- 3616/3620/3626/3641/3645 (Wi-Fi, 3616/3620/3626 no longer sold new)
- 3810 (900MHz)
- 6D / 18D / 34D ETR phones (Essential Edition – PARTNER® Version only)
- 3910/3920 (Essential Edition – PARTNER® Version only)
- Analog phones
- Associated DSS Units (EU24, BM32, DBM32, SBM24, DSS 4450, T3 DSS)
- SIP Phones: 1120E, 1140E, 1220, 1230
- Avaya 1010 and 1040 Video Conferencing Units

Note: Phones are pending regional availability, not all phones available for new sales

2.13   New Telephones Supported in IP Office Release 7.0

- New Digital phone series: 9504, 9508
- New IP phones: 9608, 9621G, 9641G
- BM12 LCD button module for selected 9500 and 9600 phones

2.14   Nortel Telephones Supported in IP Office Release 7.0

Please note that these phones are not sold new with IP Office but supported for migration purposes for existing customers only. TCM8, DS16A, and/or DS30A hardware is required.

- T7000, T7100, T7208, T7316, T7316e, T24 KIM
- M7000, M7100, M7100N, M7208, M7208N, M7310, M7310N, M7324, M7324N, CAP
- Digital Mobility 2.4 GHz: 7420, 7430, 7440 - North America and CALA
- Digital Mobility 1.9 GHz: 7439, 7449 - North America (1929-1930 MHz)
- Digital Mobility 1.8 GHz : 4135, 4145, 4145EX, 4136, 4146, 4146EX - Europe, Hong Kong, Australia, New Zealand (1880-1900MHz)
- Digital Mobility 1.8 GHz: 7434, 7444 - South America (1900-1930 MHz)
- T7406E wireless phone

Note: Phones are pending regional availability, not all phones available for new sales

3 IP Office Core Software Enhancements

3.1 Avaya IP Office Essential Edition – Quick Mode

IP Office systems with a µ-law or A-law SD card can now run in two different modes, Quick Mode and Standard Mode. Quick Mode is specifically designed to address the "Sub-20" user market. It is supported globally and is the default mode adopted by new and defaulted IP500v2 systems. Quick Mode is based on Essential Edition PARTNER Version and adds additional support for E1 and BRI trunks for systems outside of North America.

With simple out of the box operation, it automatically starts up in a basic phone system mode offering a key system or PBX configuration depending on the type of SD Card. (µ-law = key system, A-law = PBX). Those systems that have a PARTNER or Norstar Version SD card are unaffected by this change. Quick Mode is managed using the Simplified Manager application.

Standard Mode is identical to how IP Office Essential Edition works today. Quick Mode can easily be changed to Standard Mode using the Manager application without replacing hardware or adding additional licenses.

Depending on the Business Partners preference the Manager application can be set to automatically convert the configuration of a defaulted IP500v2 system to Standard Mode, by default this is set to off.
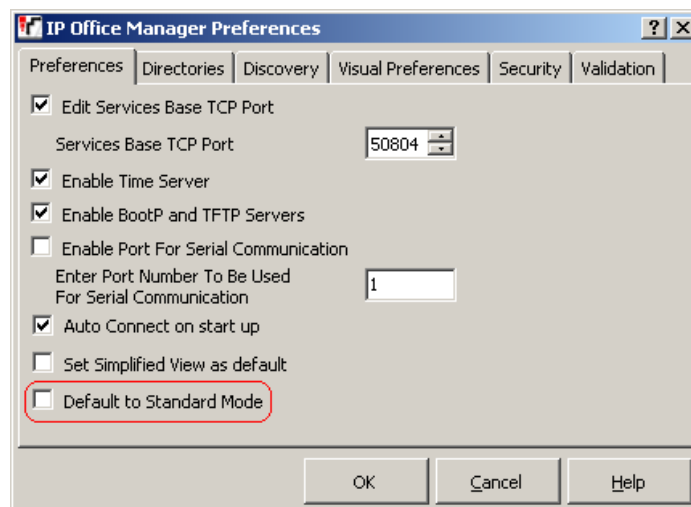
If set to on, when a configuration for a new or defaulted system running in IP Office Essential Edition - Quick Mode is loaded the Manager application will automatically convert the configuration to IP Office Standard Version mode. At this stage the system is still in Quick Mode until the configuration is saved and then sent back to the system. When the systems restarts it will permanently be in Standard Mode, however defaulting the configuration will make it start up in Quick Mode again.

To save time it is recommended that you make any programming changes to the configuration before you save it and send it back to the IP Office. You do not need to send the configuration back and restart the system first in Standard Mode before you start making any programming changes. Essentially the configuration file you are working with is an offline configuration.

Only select this Manager preference option if the majority of systems you expect to install are IP Office Standard Version mode systems.

This setting does NOT affect existing IP Office Essential Edition - Quick Mode systems with non-default configurations.

A system running in Quick Mode can easily be converted to a Standard Mode of operation at a later date if desired by using the Change Mode option in the Manager application (File | Advanced | Change Mode).

3.1.1   Quick Mode Default Operation

IP Office Essential Edition - Quick Mode systems can operate in one of two ways, as a key system or as a PBX system. The mode adopted by an IP Office Essential Edition - Quick Mode system depends on the System SD card. Systems with an IP Office μ-Law card default to Key system operation. Systems with an IP Office A-Law card default to PBX system operation.

- Key System – this will give the users the same experience as PARTNER Version i.e. line appearances assigned to all the phones etc.

- PBX System – this will give a PBX type experience i.e. line appearances not assigned to phones and the ability for users to make internal/external calls from an intercom button.

Four SD cards will exist with the IP Office 7.0 Release: IP Office μ-Law, IP Office A-Law, PARTNER Version and Norstar Version. All of these SD cards can have either a Key or PBX configuration when in Quick Mode.

The SD cards will default the system as follows:

- IP Office μ-Law – will default to Quick Mode with a Key System configuration
- IP Office A-Law – will default to Quick Mode with a PBX configuration
- PARTNER – will default to Quick Mode with a Key System configuration
- Norstar - will default to Quick Mode with a Key System configuration

The PARTNER Version and Norstar Version SD cards will be used in the regions currently targeted by these products. The IP Office μ-Law and A-Law SD cards will be used to target the global market.

If the default mode is not the desired mode of operation then a Key system configuration can be changed to a PBX configuration and vice versa using the Manager application or Phone Based Administration.

Phone Based Administration is done at either of the system administration telephones - the first two extensions on the system. When using Phone Based Administration this process can only be done with the 1408/1416/9504/9508 telephones.

Note: This process will restart the phone system and disconnect all currently connected calls.

Key Mode vs PBX Mode - Quick Summary
Key Mode
The first 2 programmable buttons are used as intercom buttons
Internal calls are made and answered using the intercom buttons
External calls are made and answered using line appearance buttons
The line used for outgoing external calls is determined by the line button pressed
Automatic line selection defaults to the analog lines present and then the 2 intercom buttons
PBX Mode
The first 3 programmable buttons (2 on ETR phones) are used as call appearance buttons
Internal calls are made and answered using the call appearance buttons
External calls are made and answered using the call appearance buttons
The line used for outgoing external calls is determined from the number dialled
Automatic line selection defaults to the 3 call appearance buttons (2 on ETR phones)

3.2 PARTNER Version, Norstar Version and Quick Mode Enhancements

IP Office Release 7.0 adds a number of other enhancements for Quick Mode, which therefore also apply to PARTNER and Norstar version systems.

3.2.1 Capacity Enhancements

IP Office Release 7.0 has increased capacity enhancements for PARTNER Version, Norstar Version and Quick Mode systems of up to 100 phones and 64 trunks (may not be attained simultaneously)

	IP Office Essential Edition - PARTNER Version	IP Office Essential Edition - Norstar Version	IP Office Essential Edition - Quick Mode	IP Office Standard Version
Maximum Extensions	100 [1]	100 [1]	100 [1]	384
Maximum Trunks	64	62	64	[5]
- Maximum Analog Trunks	32	32	32	208
- Maximum BRI Channels	-	12	12	32
- Maximum PRI Channels	24	30	30	120
- Maximum SIP Channels	20	20	20	[5]
- Maximum H323 IP Channels	-	-	-	[5]

1. 100 Extension capacity is available in 3-digit extension numbering mode only. 48 extensions in 2-digit extension numbering mode.

- In non-IP Office Standard Version mode the system assumes that the base control unit is always fully populated with up to 32 extensions, either real or

phantom or a mix, to which it assigns extension numbers in sequence. It does this before assigning extension numbers to any real extensions on attached external expansion modules up to the system extension limit. If the system extension limit has not been exceeded, any remaining extension numbers are assigned to additional phantom extensions.

2. Non-IP Office Standard Version mode systems support 3 SIP channels without licenses. Additional channels up to the limit require licenses. IP Office Standard Version mode systems require licenses for all channels. In all modes, voice compression hardware resources are also required for SIP support.

3. Non-IP Office Standard Version mode systems do not support both BRI and PRI trunks in the same system. IP Office Standard Version mode systems support both BRI and PRI trunks in the same system.

4. Non-IP Office Standard Version mode systems are restricted to 12 BRI channels regardless of the BRI hardware installed.

5. Capacity is dependent on licenses, voice compression resources and available bandwidth.

3.2.2   Flexible Dial Plan

The PARTNER Version, Norstar Version and Quick Mode systems now supports a fixed 2-Digit Dial Plan or a flexible 3-Digit Dial Plan.

The system defaults to a 2-Digit Dial plan. The 2-Digit Dial-plan is fixed from 10 to 57; however it can be renumbered to a 3-Digit flexible dial plan and can be expanded to 100 extensions.

- Individual extensions or blocks of extensions can be renumbered to an extension number in the range of 100-579.

- The default 3-Digit extension dial plan is 100-199.

- Configuration items associated with the original extension are moved to the new extension (e.g. hunt group membership, etc.).

- Voice mail messages stored against the original extension number are not accessible once renumbering has occurred. Users must retrieve/delete voice mail messages prior to renumbering.

- Lines, groups, or any dial plan entity other than extensions cannot be renumbered.

- Intercom Auto Dial buttons will automatically update with the new extension information.

- If the configuration contains modules that have been removed and the TUI is used to program this feature the system will not recover upon reboot as it checks the number of physical ports on the system. The configuration must be modified or defaulted to show accurate hardware configuration.

3.2.3   Decoupling of Language and Locale

With the introduction of a System Locale and System Language it is now possible to define a different language for the specified locale. If the language field is not populated, the default language for that locale is used.

PARTNER Version and Norstar Version SD cards will support the same locales as before:

- PARTNER Version – USA, Canada and Mexico
- Norstar Version – Default (MEA), Bahrain, Egypt, Kuwait, Morocco, Oman, Pakistan. Qatar, Saudi Arabia, South Africa, Turkey and United Arab Emirates.

Both the IP Office µ-Law and A-Law SD cards have access to all the locales currently supported in IP Office Standard mode.

3.2.4   Message Alert Notification

The Message Alert Notification feature allows users to quickly determine the status of an extension's Message Waiting Light.

Before using the Message Alert Notification feature, a user must: Program an Auto Dial – intercom button for each target extension to be monitored, and program a Message Alert Notification feature button onto a button with LEDs, or an LCD (for Nortel terminals).

When the feature is active, an LED/LCD pattern (red-winking) is presented at the Auto Dial - Intercom button to indicate that the MWL is illuminated. The target extensions may include Tip/Ring stations.

Message Alert Notification does not apply to phantom extensions as there is no physical extension and no message waiting lamp to update. Therefore, MWI status is not monitored for phantom extensions.

Note: While the Message Alert Notification feature is active, the Auto Dial – Intercom buttons track the target extension's state AND include its Message Waiting light status. All other status indications for the Auto Dial – intercom button take precedence over the indication of the Message Alert Notification.

3.2.5 Absent Message Inspect

The Absent Message Inspect feature allows one extension to inspect the status of another extension's Absent Message without initiating a call to it. This is an enhancement to the Absent Messaging feature, and requires no new administration or programming.

This feature can only be activated on phones with soft-keys:

- ETR-18D, ETR-34D, 1408, 1416, 9504, 9508, T7316, T7316E, M7310, and M7324.

A new Inspect soft-key, Insp, is added to the display while in Absent Message mode. Selecting the Insp soft-key transitions to a screen that prompts the user to enter the extension number to inspect, or to press an auto-dial intercom button for the extension.

The target extension and Absent Message are displayed if an Absent Message is active. If no Absent Message is active "No Absent Text" is displayed.

3.2.6 Do Not Disturb Exceptions

The Do Not Disturb Exceptions feature allows users to program numbers which will override their Do Not Disturb setting. Up to 20 numbers can be programmed as exceptions.

Numbers can be up to 31 digits long and may contain wildcard characters. Users may enter a wild card single-match character ("X") or a wildcard multiple-match character ("N") as a part of each number.

When the feature is active, the caller ID or extension number of the caller is used to match against the Do Not Disturb exceptions list. If a match is found, the call will audibly alert at the extension. The feature is considered active if an extension has Do Not Disturb activated and has at least one number programmed in the exceptions list.

TUI programming for this feature is performed via centralized or individual programming. The codes for ETR sets will be 700-719 (0700-0719 on Nortel sets).

1408, 1416, 9504 and 9508 users will use existing menus to store their own or other station's numbers.

3.2.7   Call Log Enhancements

Call Logging now includes calls that have been answered by Voicemail. This option is active by default and cannot be turned off.

3.2.8   Simplified Manager Enhancement

To aid in locating the module and port that each extension is connected to an enhancement has been made in Simplified Manager to display Base Card, Expansion Module and Port numbers.

This information is found in Admin Tasks | User Setup | Advanced Settings

3.3   Nortel M and T Series Digital Telephones

IP Office Release 7.0 introduced the ability to support the Nortel M and T Series digital phones, also known as Business Series Terminals or BST.

In general all IP Office Telephony Features that can be assigned to a button on any Avaya Digital or IP phone can also be programmed to a button/key on the M and T series phones. BCM or N* set. This represents a large number of features, many of which do not exist on BCM or Norstar today.

Features can be access in the following way:

- Single button access when a feature is assigned to a button

- You can use the "Feature" button and dial the feature code e.g. F85 do not disturb, F981 Voicemail access

- You can dial a short code from the intercom key (even when an active call is in progress, you can use a second intercom to access the feature.

Feature Button Programming and IP Office Feature Access

IP Office provides the ability for the administrator and the end-user (via self-admin) to program features on a telephones programmable buttons – including defaulting all programmable buttons on a phone to set model specific programming.

Programmable buttons on these telephones can be programmed to any IP Office feature available via IP Office Manager – not just those that are mapped to Fnnn access codes.

A valued subset of the BCM/Norstar legacy Fnnn feature access codes is supported from a BST telephone – many by mapping the feature request to the closest IP Office equivalent feature. It is important to note that once a feature that is mapped to an IP Office feature is programmed onto a button it is, and operates as, an IP Office feature.

A small subset of valued Fnnn features that do not have an IP Office equivalent feature are implemented on IP Office as new BST series specific features.

Using programmed feature buttons (or short codes), BST phones can access a broad selection of IP Office features – i.e., a "superset" of features that includes the Fnnn mapped, and any newly developed features.

Default Digital Telephone Features

Simply plug the telephone into a TCM port and the telephone will automatically power and configure itself similar to BCM/Norstar, but with the defaults relevant to the model type.

Feature *0, Feature *1, Feature *2, Feature *3 are all supported.

IP Office features can be mapped to a single key by the user (Feature *3) or by the administrator.

An IP Office feature can be activated by short code *xx. If desired, short codes can be modified by the administrator to correspond to familiar Feature nnn codes (e.g. DND could be short code *85).

Details of the button layouts and the default feature mapping for all of the M and T series digital telephones can be found in the Manager online help file.

Features Ported to IP Office Release 7.0

A full suite of feature codes are available in Release 7.0 for the BST telephones.

Feature	IP Office Standard Version	IP Office Quick Mode PARTNER Version Norstar Version
Personal Speed Dial	Feature 0, *00 to *99	#80 to #99 (also Feature *4, 80 to 99).
System Speed Dial	Feature 0, 001 to 999	Feature 0, 600 to 699
Ring Again/Ring Back	Feature 2 / Feature #2	Not supported
Conference	Feature 3	Feature 3
Forward All On/Off	Feature 4 / Feature #4	Feature 4 / Feature #4
Last Number Redial	Feature 5	Feature 5
Page	Feature 60	Dial * in front of extension/group number.
Retrieve Messages	Feature 65 or Feature 981	777 (own mailbox) or 778 (mailbox select)
Dial Voice Call	Feature 66	Dial * in front of extension/group number.
Priority Call	Feature 69	Not supported.
Transfer	Feature 70	Feature 70
Call Park	Feature 74	Transfer call to own extension number.
Call Unpark	Feature #74 <park slot ID>	6<extension number (whoever parked the call)>
Call Pickup Group	Feature 75	66<pickup group number>
Direct Call Pickup	Feature 76	6<extension number>
Call Timer	Feature 77	Not Supported
Do Not Disturb On/Off	Feature 85 / Feature #85	Feature 85 / Feature #85
Group Listen On/Off	Feature 802 / Feature #802	Not supported
Time of Day	Feature 803	Not Supported
Call Log	Feature 812	Feature 812
Button Inspect	Feature *0	Use button programming.
Auto Dial Button	Feature *1	Use button programming: Auto Dial - Other
Internal Auto Dial	Feature *2	Use button programming: Auto Dial - Intercom
Button Programming	Feature *3	Feature *3
Store a Personal Speed Dial	Feature *4	Feature *3, Feature *480 to *499.
Ringer Sound	Feature *6	System Admin function only
Contrast	Feature *7	Feature *7
Ring Volume	Feature *80	Feature *80
Enbloc Dialing On/Off	Feature *82	Not supported. Hot dial only.

Differences in Operation from BCM/Norstar

Some slight variations in call processing can be expected.

FEATURE *82 – Dial Mode Selection

If on, F*82, will allow you to pre-dial your number with softkey presentation for editing. The * key can be used for editing as well.

When the digit string is displayed as required, you need to select a line or call appearance key to make the call.

When off, F*82 functions the same as the automatic dial option on BCM/Norstar

FEATURE 74 – Call Park

Parks a call and enables you to answer the call from any telephone in your system. The display shows a retrieval code.

To retrieve a parked call: press an intercom button and dial FEATURE #74 followed by the retrieval code, or # for 1 line display models.

Parked calls can also be retrieved by the originator of the park action, by selecting FEATURE #74 followed by the "unpark" softkey.

FEATURE 0 – Speed dial

There are two types of speed dial codes: system (001 to 999) and personal (01 to 90). System speed dial codes can be used from any display telephone in the system.

System speed dial codes are assigned by your System Administrator.

FEATURE *4 – Personal Speed dial admin

Enter a two-digit code from 01 to 99 (optionally prefixed with *). Dial the telephone number you want to program (up to 24 digits). Press the <<< softkey or the Volume Down button to delete a digit to the left of the cursor.

Personal speed dial codes are used exclusively on your telephone, and are invoked using specific locations 01-99 or *01-*99.

FEATURE 3 – Conference

Feature maps to the IP Office feature Conference Add.

Contrary to the expected result on BCM/Norstar, Invoking the Conference feature (F3) while only 1 (or no) call exists on the telephone will have no effect.

Invoking F3 while one call is on hold and another connected will result in a conference add, with the appropriate confirmation tone.

Additional parties can be added by selecting a free call appearance and dialling the next party. Pressing F3 again will collapse all calls to a single call appearance indicating the ongoing conference.

The Conference Details screen is presented when the Details softkey is pressed while in a conference.

FEATURE 812 – Call Log

The Call Log feature is presented if the user presses the F812 feature sequence.

This can be initiated during an active call or when idle when calls are parked on this telephone.

The Call Log feature operates as it does on the 1408/1608

Unsupported Features

- Long tones
- Meet-me conferencing
- Messages
- Moving line buttons
- Pause
- Privacy
- Run/Stop.
- Saved Number redial
- Various Services features – Feature 87n
- Static time and date
- Trunk answer
- Voice call deny
- Wait for dial tone
- Autobumping
- Call Information
- Call log options
- Call log password
- Logit
- MCID
- Find Me/Follow Me
- Hold Exclusive
- Language choice
- Line Pools
- Line redirection
- Background Music F86
- Call Queuing
- Camp-On
- Class of Service

On telephones that do not have a Headset button, connect the headset and answer a call by pressing the Handsfree button on the phone.

Dedicated vs. Programmable Handsfree

The M7310, M7208, M7324, T7316, and T7208 sets do not have a dedicated Handsfree button.

On the Norstar and BCM platform the bottom-right button on these phones is programmable as a Handsfree button or as any other feature/appearance button if the use of the phone does not require a Handsfree button. This button has an LCD status indicator for showing Handsfree state on all of the applicable telephones.

Default programming on a Norstar/BCM system results in this button being programmed as a Handsfree button. IP Office does not have support for an administrable Handsfree button. To ensure these telephones on IP Office have a Handsfree button available, IP Office will dedicate the bottom-right button as a Handsfree button – it will never be available as a programmable button. This reduces the total programmable button count on each of these telephones by 1 (i.e. programmable button 1 becomes the 2nd from the bottom-right button on these telephones).

Note: The M7100/T7100 and T7000 sets have no buttons with state indicators and thus there will be no ability to have a Handsfree button. This is not a concern because they are not fully Handsfree capable sets (i.e., they have no microphone).

3.4   Additional features for 11/12xx series Nortel SIP Phones

IP Office Release 7.0 adds the second step of Nortel SIP phone migration (the first step was with IP Office Release 6.1)

Feature soft key support is added to the 11/12xx telephones, which aligns with the Unistim variant. This allows the user to invoke a feature using a predefined feature number, allows them to program buttons using the TUI and it allows them to check existing button programming.

Similar to the BST functionality, the legacy Fn codes are mapped to short codes.
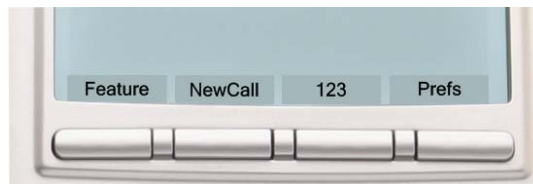
The following features can be invoked with the Feature key:

- F3 – Conference
- F4 – Call Forward, F#4 cancel
- F5 – Last Number Redial
- F60 – Page
- F66 – Dial Voice Call
- F74 – Call Park, F#74 Retrieve
- F75 – Call Pickup Group
- F76 – Call Pickup Extn *
- F85 – Do Not Disturb, F#85 cancel
- F981 – Voice Mail access
- F*3 – Self-admin button programming
- F*0 – button programming query
- F*1, *2 – program auto-dial, both feature codes invoke the same capability

* Note: F76 Call Pick up functionality is dependent on the user being defined as a member of the appropriate group.

Since the features are invoked using short codes (underlined in the list above), the required short codes must be provisioned on the IP Office for these features to work.

For example Last Number Redial (F5) is not one of the default short codes on IP Office. If the user attempted to use this feature it wouldn't work until a short code for this feature had been added to the system. It does not matter what short code number is assigned to this feature, when the user presses Feature and then 5 the system will search the list of short codes that exist in the configuration and if it finds a short code set with the Last Number Redial function it will use it to invoke the feature.

When a user wants to access a feature they press feature key, this will result in a momentary delay, coupled with a "please wait indication" (prior to accepting additional feature digit input), at which point the enter key located in the center of the navigation cluster must be depressed.

As an example to invoke Last Number Redial (F5) the button sequence flows as follows:

- Select feature button, please wait is displayed
- Input digit 5
- Press the enter key.

Feature F*3 allows the user to program buttons on the phone and on the attached Key Expansion Module (KEM) unit. The only exception is the BLF, this function can only be programmed via Manager

The following features can be programmed:

- F4 – Call Forward – pressing the programmed button will turn call forwarding ON and OFF
- F60 – Page
- F66 – Dial Voice Call
- F74 – Call Park *
- F75 – Call Pickup Group
- F76 – Call Pickup Extension
- F85 – Do Not Disturb - pressing programmed button will turn call forwarding ON and OFF

Note: On most other telephones on IP Office a programmed Park button acts as a toggle to Park and Un-Park the call. This is not the case with the 11/12xx telephones. The call can be parked by pressing a programmed Park button, but to pick up the call the user must use Feature #74.

It is worth noting that features do not move like on BCM/Norstar if a button is already assigned to a feature. As a result, if programming errors are made, the set could end up with two Call Forward keys for example. If this occurs, IP Office Manager can be used to remove duplication.

The following list shows the mapping of the programmable features to the features available in Manager.

FEATURE 4 – Call Forward
Manager: Emulation -> Call Forwarding All
SIP telephone logical label key: CFwd

FEATURE 60 - Page
Manager: Emulation -> Group Paging
SIP telephone logical label key: GrpPg

FEATURE 66 – Dial Voice Call
Manager: Emulation -> Automatic Intercom
SIP telephone logical label key: Iauto

FEATURE 74 – Call Park
Manager: Emulation -> Call Park
SIP telephone ogical label key: Cpark

FEATURE 75 – Call Pickup Group
Manager: Advanced->Call -> CallPickupGroup
SIP telephone logical label key: PickG

FEATURE 76 – Call Pickup Extension
Manager: Emulation -> Direct Call Pickup
SIP telephone logical label key: DPkUP

FEATURE 85 – Do Not Disturb
Manager: Emulation -> Do Not Disturb On
SIP telephone logical label key: DND

The SIP telephones have further enhanced BLF support with appropriate status indicators shown on the phone and add on modules.

The BLF allows users to monitor the state of another line. The User is notified (via icons and lamp status) if the associated line is busy.

The BLF monitoring function was available in IP Office Release 6.1, two states of the monitored line were supported: "Idle" and "Busy".

In IP Office Release 7.0 support has also been added for a 'Ringing' state of the monitored line. Call Pick Up support has also been added to the BLF.

It is important to note programming of BLF keys is supported via manager only. This is due to the requirement to add the appropriate user to the desired button.

The 11/12xx SIP telephones now also support the download of the 3 system directories to the telephone.

The 11/12xx SIP telephones can also be used with the one-X Portal for IP Office but there is no support for hold/talk when using the one-X Portal. These functions need to be used directly from the telephone.

Emergency Call Support has also been added, this allows an emergency number to be dialed from the telephone when no user is logged in.

3.5   Public SIP Trunk Enhancements

IP Office Release 7.0 adds a number of Public SIP Trunk enhancements.

### 3.5.1   Multiple SIP Trunks Resolved to a Single IP Address

IP Office 7.0 extends the current SIP Trunk provisioning such that SIP Trunks on IP Office can be provisioned with different SIP Domains that resolve through DNS to the same IP Address.

IP Office currently uses the source IP address of incoming SIP requests to associate the requests to one of the configured SIP lines. If the association can not be made the request is ignored. This means that in pre-IP Office 7.0 systems, each SIP line must have a unique IP address or fully qualified domain name that can be resolved to an address

With IP Office Release 7.0 it is now possible to make the association method configurable on a per-SIP line basis. The match criteria used for each line can be varied. The search for a line match for an incoming request is done against each line in turn using each lines Association Method.

The order of line matching uses the configured Line Number settings until a match occurs. If no match occurs the request is ignored. This method allows multiple SIP lines with the same address settings. This may be necessary for scenarios where it may be required to support multiple SIP lines to the same ITSP. For example when the same ITSP supports different call plans on separate lines or where all outgoing SIP lines are routed from the system via an additional on-site system.

There are 9 different association options in IP Office Release 7.0
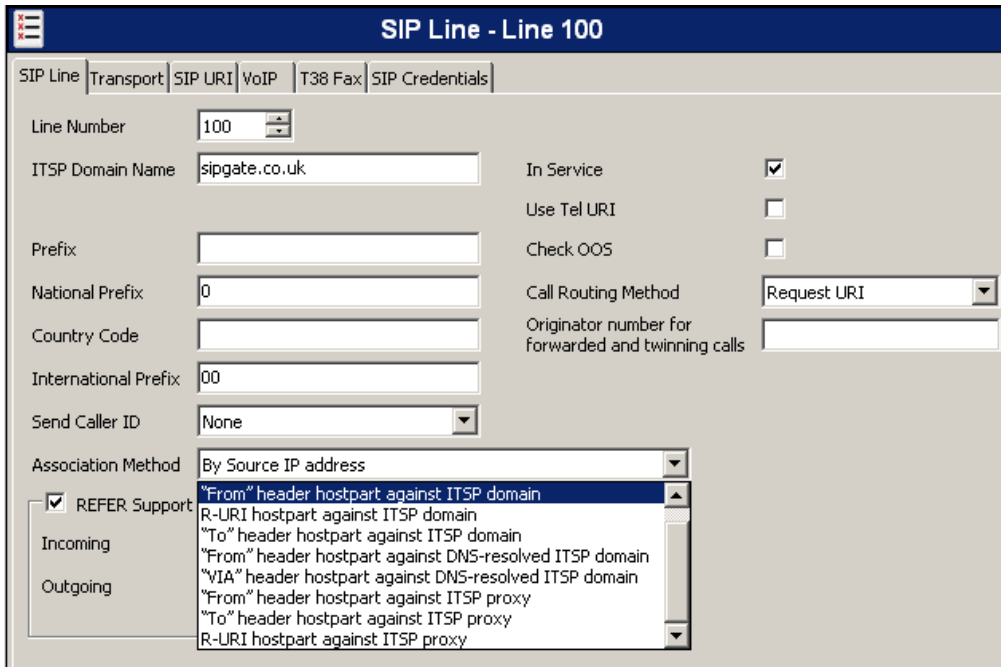
By Source IP Address - This option uses the source IP address and port of the incoming request for association. The match is against the configured remote end of

the SIP line, using either an IP address/port or the resolution of a fully qualified domain name. This matches the method used by pre-IP Office 7.0 systems.

"From" header hostpart against ITSP domain - This option uses the host part of the From header in the incoming SIP request for association. The match is against the ITSP Domain Name above.

R-URI hostpart against ITSP domain - This option uses the host part of the Request-URI header in the incoming SIP request for association. The match is against the ITSP Domain Name above.

"To" header hostpart against ITSP domain - This option uses the host part of the To header in the incoming SIP request for association. The match is against the ITSP Domain Name above.

"From" header hostpart against DNS-resolved ITSP domain - This option uses the host part of the FROM header in the incoming SIP request for association. The match is found by comparing the FROM header against a list of IP addresses resulting from resolution of the ITSP Domain Name above or, if set, the ITSP Proxy Address on the Transport tab.

"Via" header hostpart against DNS-resolved ITSP domain - This option uses the host part of the VIA header in the incoming SIP request for association. The match is found by comparing the VIA header against a list of IP addresses resulting from resolution of the ITSP Domain Name above or, if set, the ITSP Proxy Address on the Transport tab.

"From" header hostpart against ITSP proxy - This option uses the host part of the "From" header in the incoming SIP request for association. The match is against the ITSP Proxy Address on the Transport tab.

"To" header hostpart against ITSP proxy - This option uses the host part of the From header in the incoming SIP request for association. The match is against the ITSP Proxy Address on the Transport tab.

R-URI hostpart against ITSP proxy - This option uses the host part of the Request-URI in the incoming SIP request for association. The match is against the ITSP Proxy Address on the Transport tab.

3.5.2   Transparent Fax Over G.711

IP Office 6.x supports T.38 fax capability. If the fax feature is enabled on a given SIP line IP Office performs detection of fax tones on each call and if the tones are detected, IP Office renegotiates the call to T.38.

IP Office Release 7.0 implements transparent fax over G.711 in a manner very similar to the way T.38 fax is implemented. When the fax feature is enabled on a given SIP line a new configuration parameter allows the administrator to choose between T.38 vs. G.711 fax method. Once the fax is detected the fax method parameter is used to determine which codec to switch to.
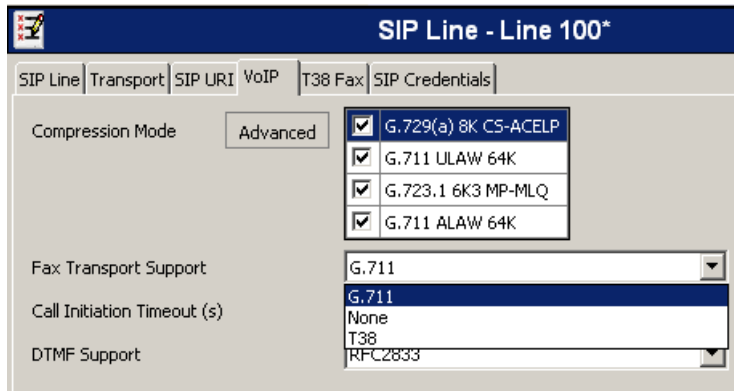
When setting up this option you will have to choose between T.38 or G.711, you can not do both on the same trunk.
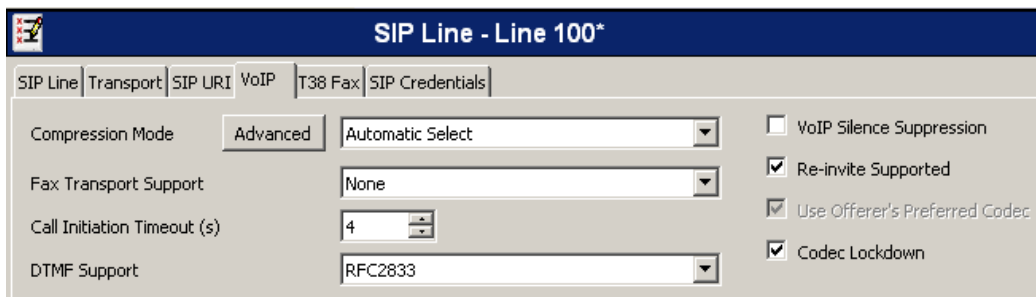
The option 'Re-invite Supported' must be selected to use Fax Transport Support.

The following are turned off during G.711 fax calls: silence suppression, echo cancelation and analogue jitter buffer.

3.5.3 Codec Lock-Down

IP Office Release 7.0 supports RFC 3264 Section 10.2 when RE-Invite Supported and Codec Lockdown are enabled. In response to a SIP offer with a list of Codecs supported, some SIP user agents supply an SDP answer that also lists multiple Codecs. This means that the user agent may switch to any of those Codecs during the session without further negotiation. The system does not support multiple concurrent Codecs for a session, so loss of speech path will occur if the codec is changed during the session.

If Codec Lockdown is enabled, when the system receives an SDP answer with more than one Codec from the list of offered Codecs, it sends an extra re-INVITE using just a single Codec from the list and resubmits a new SDP offer with just the single chosen Codec.

The Codec lockdown option is disabled by default and can only be selected if 'Re-invite Supported' is also selected.

3.6 Template Provisioning for SIP and Analogue Trunks

In order to address the complexity of configuring SIP trunks the concept of ITSP templates have been introduced in IP Office Release 7.0. Template-based configuration hides the complexity of the SIP trunk configuration from the IP Office administrator.

Templates can be developed outside of IP Office release cycles by Avaya, channel partners or by the ITSP. New templates can be imported into the IP Office after an IP Office version is released, without the need to issue patches or maintenance loads.

To enable the use of templates some changes have to be made to the Manager application preferences. The first step is to enable template options in the preferences area of Manager.
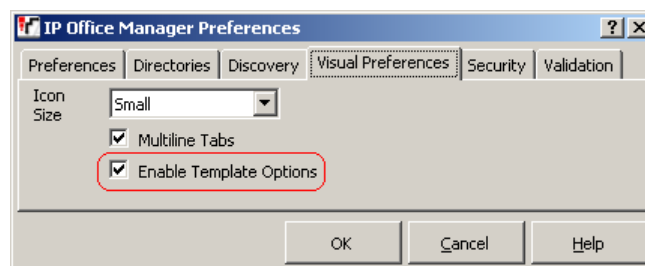
Setting this option allows you to be able to import templates into the Manager.
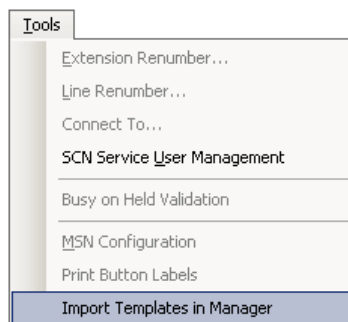
The templates need to be stored in a specific Manager sub-folder \Templates.

Some templates may be supplied with the Manager application and will be automatically installed to the correct location. This command can be used to select a folder containing other template files and will copy those files into the correct Manager sub-folder. The templates are stored as XML files.
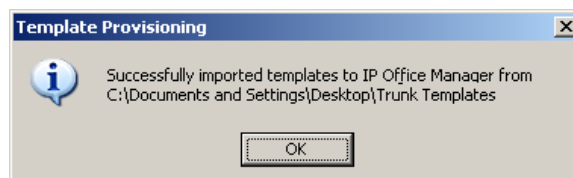
Once you have imported all of your templates you can create a new trunk from the templates. The templates have been imported into the Manager program on your PC, so as a technician or installer, you will have access to all of the imported templates

and it is not dependant on which customer you are working on. So as you work with more ITSP providers your list of templates could become quite extensive.

To create a new SIP trunk from a template right-click in the Line navigation or group pane and then choose New and you will see an option 'New SIP Trunk From Template".
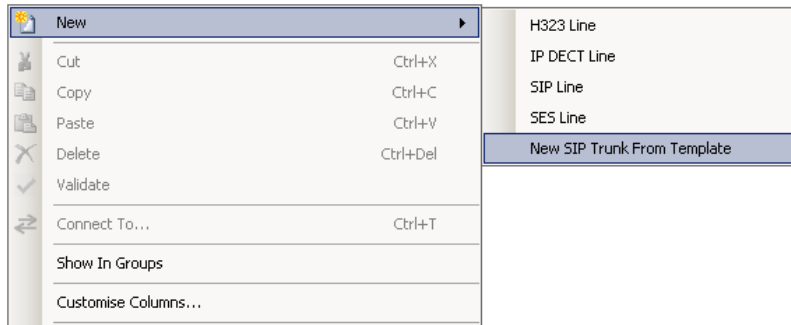
Selecting this option will present a list of all available SIP templates. The popup you will receive will allow you to select the template based on the Country and service provider. The 'Display All' option will allow you to see all templates for all countries in one list.

Simply choose the template you want to use and click on 'Create new SIP Trunk'.
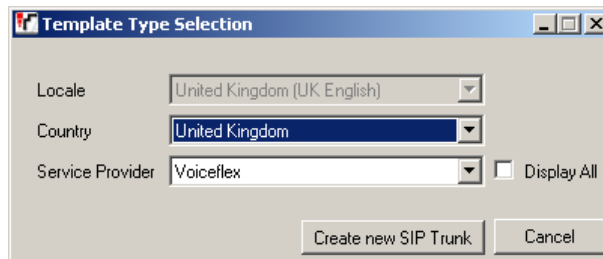
It is also possible to generate new SIP Trunk Templates from existing SIP Trunks in your configuration. To enable this option you need to modify the Registry on the PC running the Manager application and add a new Registry Key.

Go to: HKEY_CURRENT_USER\Software\Avaya\IP400\Manager and add a new DWORD Value "TemplateProvisioning" if it does not already exist and set its value to 1.

If the Manager application is open when you make this change you will need to close it down and restart it for this change to have an effect.

Once you have enabled this option right-clicking on an existing SIP trunk will give you the option to 'Generate SIP Trunk Template' from that SIP trunk.
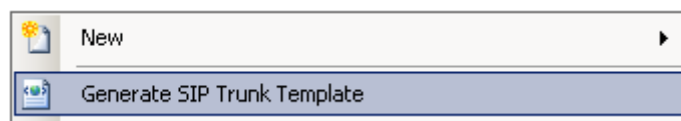
As you go through the template generation try to remember that this is a template and is not going to be used unmodified every time you connect to the specific ITSP.

The Descriptive name and ITSP Domain name are required fields before you can export the template
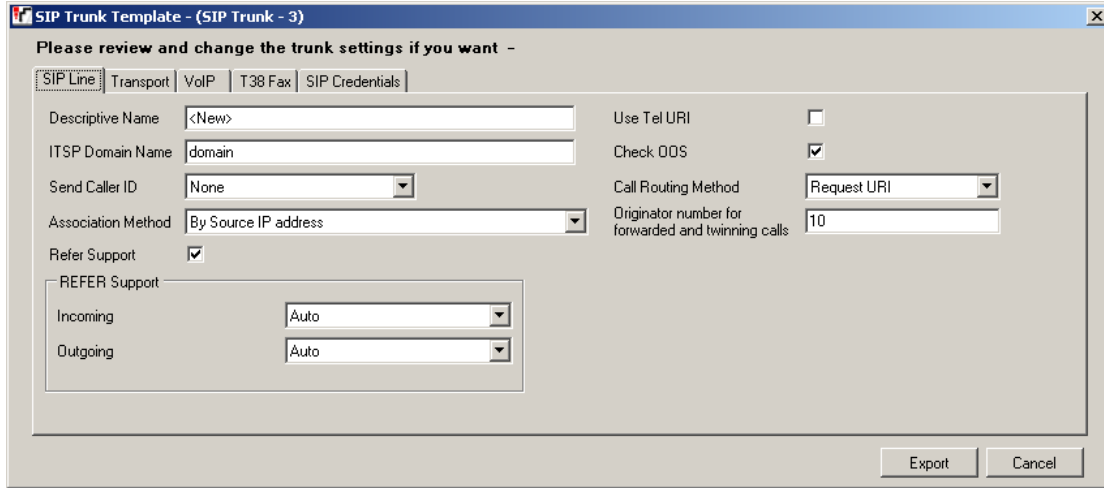
Finally when you export the template you can set the Country and Service Provider details for the template.

Note: *You cannot generate a template from a system that is not running IP Office Release 7.0.*

The same template based configuration has also been applied to analogue trunks. You can copy settings from an existing template to or you can generate a template from an existing trunk.
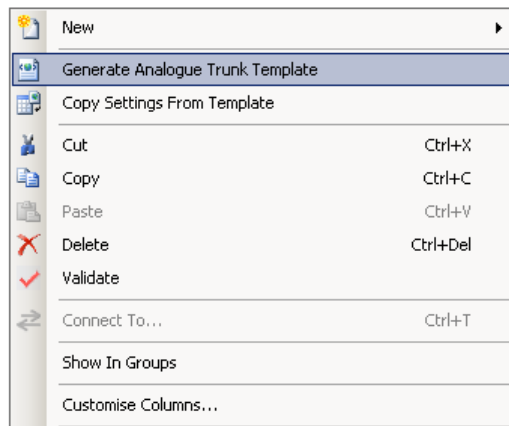
3.7   Installation and Management Simplification on DECT R4

With IP Office Release 7.0 the DECT R4 system can now be configured using a simpler method making the process faster and easier with less menus and information required to input into Manager and the Base Stations.

A new method of installation, referred to as 'provisioning', can be used with 3700 Series phones. When selected, the system automatically provides installation and

configuration settings to the DECT system. It also provides additional information to the handsets during normal operation.

The setup of the master base station is simplified as it uses data supplied by the system. The setup of slave base stations is simplified even further.

The need to configure an extension on both the master base station and the system is removed. DECT extensions are managed through the system configuration.

The 3700 Series handsets are automatically provided with additional information and system specific call services when idle and during calls, such as Status Characters indicating things like Group Membership and Forwarding.

The Provisioning process is as follows:

- In Manager - Create an IP DECT Line and enable Provisioning (there is a checkbox on the 'Gateway' form to allow this). Some other information will also be required here, such as the SARI/PARK key.

- Install the Master IPBS – there are 5 steps:

    o Select the master base station in DECT->Master->Mode=Active
    o Set a DECT Password in DECT->System->System Name->Password for future administration login.
    o Approve the master and slave radios in Device Overview->Radios->Add->OK
    o Enter IP address of the IP Office in General->Provisioning->PBX IP Address
    o Select provisioning mode in General->Provisioning->Enable

- Install any Slave IPBS - No administration is required from default other than to assign it's Network Address, Subnet & Gateway

- Subscribe the handsets - Just follow prompts on the handset screen to confirm/change extension number

Note: IPBS Base Stations and DECT 37xx Handsets must be upgraded to the current 7.0 software versions to support all of the new features

The use of provisioning requires the system security settings to include an 'IPDECT' Group.

- For a new of defaulted 7.0 system no further configuration should be required in Security Settings as the new IPDECT Group is configured to access the HTTP and HTTPS services automatically.

- If the system is upgraded to Release 7.0 from an earlier version you will need to go to into Security Settings and check the IPDECT Service User is enabled into the IPDECT Group.

Full details of the provisioning process can be found in the IP Office Release 7.0 DECT R4 Installation Manual.

3.8   Enhanced Fault Management

With IP Office Release 7.0 serviceability improvements have been made by making most of the alarms that are available to the System Status Application to also be output as system alarms (SNMP, email and Syslog outputs). This includes license, service, trunk, link and configuration alarms.

All alarms are available in SNMP, SysLog and Email format direct from the IP Office core software, and can be configured from Manager in the System Tab | System Events Form.

The alarms are arranged into 5 categories:

- QoS (Quality of Service on IP Telephony)
- Trunk (Trunk alarms and conditions)
- Link (Device info, LDAP, VoiceMailPro, SMTP Server Communications)
- Service (Feature Keys, Clock Source, Hold Music)
- Configuration (CCR, Installed Hardware failure, SCN Dial Plan)

A full listing and description of the available alarms can be seen in the IP Office Manager online help.

3.9   Modem Transfer for IP Office Standard Mode

The IP Office can support an "on board" modem which is an integral part of the IP500 ATM4 Card (Analogue Trunk Module). The modem is situated on the first port (Line 1 of the ATM4 card) and in IP Office versions prior to 7.0, the modem could only be connected using Analogue Line 1 on the same card.

In IP Office Release 6.0 PARTNER Version the ability to transfer a call to the IP500 ATM4U Trunk modem was introduced but the feature was not available for IP Office Standard mode. With IP Office Release 7.0 the option is now also available in IP Office Standard mode.

This feature is very flexible enabling almost any trunk (ISDN, Analogue, SIP) that can support modem transmission to connect to the modem leaving the trunk connected to analogue Line 1 free to make and receive calls if not used for modem connection. Internal connection via an extension transfer, or using a VoiceMail Menu/Transfer action, is also possible to route an incoming call to the modem. Only one modem call can be made to the system at any time, even if there are more than one ATM4 cards present in the IP Office control unit.

To setup this feature you can allocate a free number that is unused by any User/Extension, Group or Shortcode and enter the number into the "Extension" field in the RAS | DialIn form, in the example above we are using "250". The transfer to modem feature can be performed by dialling the extension number now defined in the Manager in the RAS | DialIn form, alternatively, the extension can be called as a DDI to the extension number, or via an Auto Attendant. The Incoming Call Route does not have to be defined as "Data", just set as "Voice". The 'Modem Enabled' checkbox on the analogue trunk 'Analogue Options' form does not need to be enabled for this feature to work.

3.10   Receptionist Licensing Change

In IP Office Release 7.0 there is a slight but important change to Receptionist Licensing. In previous releases, if a User was defined as a "Receptionist" by checking the Users 'Receptionist' box, they consumed one of the Receptionist licenses whether they had started SoftConsole or not. In IP Office Release 7.0 if the Receptionist box is checked against a User, they will only consume a Receptionist license key when the SoftConsole is started. The maximum of 4 concurrent SoftConsole sessions remains.

3.11   Optimization for CallerID Detection on Analogue trunks

In IP Office Release 7.0 the timings for Analogue Trunks in relation to CallerID detection have been optimized. There should be no noticeable changes except for faster responses to incoming calls, particularly where the trunk is configured for incoming callerID but none is presented.

3.12   Analogue Trunk CLI Detection Method

For IP Office 7.0 the system wide setting CLI Type (System | Telephony | Tones & Music) is used to set the incoming CLI detection method for all analogue trunks. Previously this setting was not visible and was driven by the system locale.
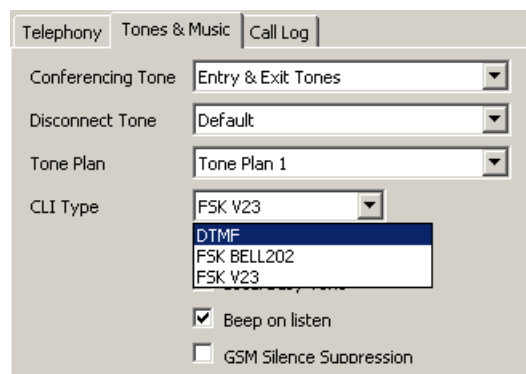
The available CLI Type options are DTMF, FSK V23 and FSK BELL202.

3.13   Appearance Button Programming

The requirement for Appearance buttons to be programmed as the first button onwards and as a continuous block before other button functions has now been removed.

3.14   Embedded Voicemail – Increased Storage Time (IP500v2 only)

This feature is only applies to Embedded Voicemail on the IP500v2 and is applicable to all IP Office modes.

- Using the default number of licensed voice mail ports (2), the default voice mail storage capacity remains at 15 hours only.

- With two additional voice mail ports licensed and activated (total 4), the storage capacity is increased by 5 hours to 20 hours.

- With four additional voice mail ports licensed and activated (total 6), the storage capacity is increased by an additional 5 hours to 25 hours.

3.15   Embedded Voicemail – Outcalling Notification (IP500v2 only)

Embedded Voicemail now has a new Outcalling feature, available in all IP Office modes, but only on the IP500v2 platform. The user is able to specify a single Outcalling telephone number that the Voicemail will call when the user receives a new voicemail message in their mailbox, no escalation capabilities are provided. When a message is left in the mailbox, Embedded VoiceMail calls the specified telephone number.

- If the user answers the Outcalling request, they can listen to the new message.

- If the user does not answer or does not listen to the new message, Voicemail will retry a maximum of 3 times, waiting 15 minutes between attempts.

The user needs to configure Outcalling using the Embedded Voicemail telephony user interface (TUI). No Manager configuration is available for this feature.

To configure Outcalling the user needs to access their mailbox:

- IP Office Standard mode Users will dial *17

- All other Users will dial 777 if dialling from their own extension or they will dial 778 if dialling from another extension.

- To access the Outcalling administration menu, the user needs to press *07 while in the mailbox menu. The first time the user accesses the Outcalling administration menu they will be played a "not configured" prompt with the following options available

  o Press 1 to configure Outcalling

  o Press 6 to turn off Outcalling

  o Press 9 to turn on Outcalling

  o Press 8 to return to the mailbox menu

4   IP Office Preferred Edition (formerly VoiceMail Pro)

IP Office Release 7.0 delivers the following Preferred Edition enhancements.

4.1   Backup and Restore

For VoiceMail Pro 7.0, the backup and restore process can be used to move data from a Windows based voicemail server to a Linux based voicemail server and vice versa. This allows migration from one server platform to another.

Note: Access to the Linux server using an SSH/SFTP client is required to access the folders used to store backups, refer to the IP Office Application Server Installation manual for further details.

For Voicemail Pro server running on the IP Office Application Server, the following Voicemail Pro features are not supported:

- VB Scripting
- TTS Text to Speech
- MAPI Email
- UMS Exchange Integration
- UMS Web Voicemail
- 3rd Party Database Integration
- VPNM
- ContactStore

When logged into the Linux VoiceMail Pro server using the VoiceMail Pro client, those features not supported are grayed out or hidden. If those features are present in an imported call flow, they will not function and calls attempting to use those features will be disconnected.

4.2   Authenticated Recording

For systems where Voicemail Pro is being used in conjunction with ContactStore, IP Office Release 7.0 delivers the capability to encode recordings. The recording file is encoded in such a way that any attempt to change or manipulate the file settings or its recording content will invalidate the file but will not prevent its playback.

Note: This feature is not supported on the Linux version of VoiceMail Pro, it is only supported on the Windows version.

Within the Manager application any of the manual and automatic recording destinations that could previously be set to Voice Recording Library can now also be set to Voice Recording Library Authenticated.
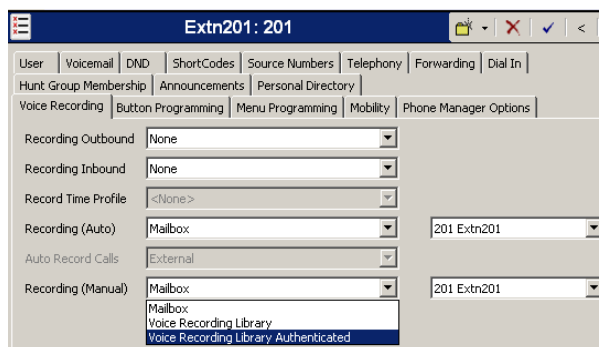
The VoiceMail Pro Client can then be used to display the recordings currently in the voicemail servers VRL folder. This is done using the option File | Validate Recordings

and then browsing to the VRL folder (by default C:\Program Files\Avaya\IP Office\Voicemail Pro\VM\VRL on a Windows based server).
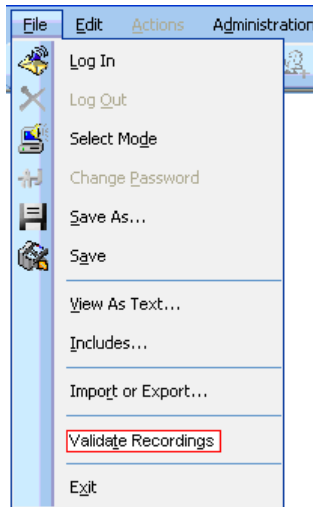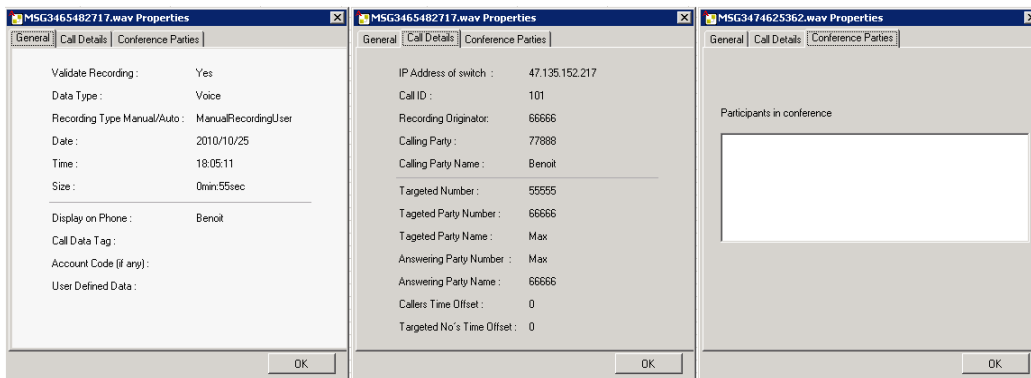

Details of the recordings are listed plus whether the recording authentication is verified or not.

The VoiceMail Pro Client will check for evidence of tampering by checking the recording and its properties.

**Note**: *ContactStore does not provide an interface to check if the recording has been tampered with*

4.3 Status Change Event Notifications

IP Office Release 7.0 delivers the Status Change Event Notification requirements that did not get addressed in the IP Office 6.1 release, these changes are purely for the one-X Portal.

At the moment the configuration changes made via the various mechanisms are not shown in the one-X Portal if the one-X Portal page is showing the configuration details, unless it is refreshed.
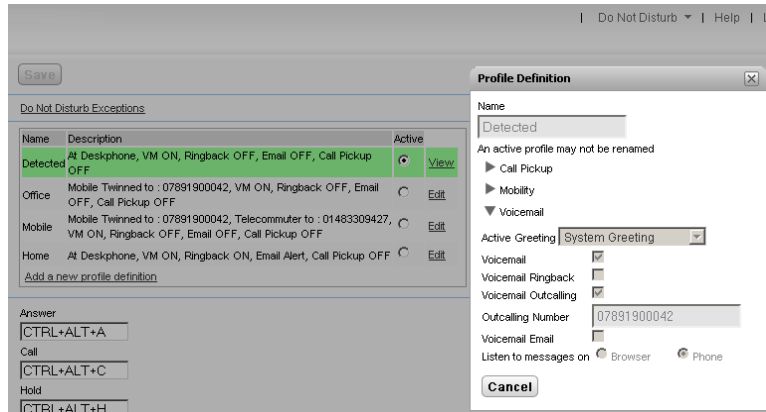
In Release 7.0 VoiceMail Pro will notify the one-X Portal when configuration items they are interested in change.
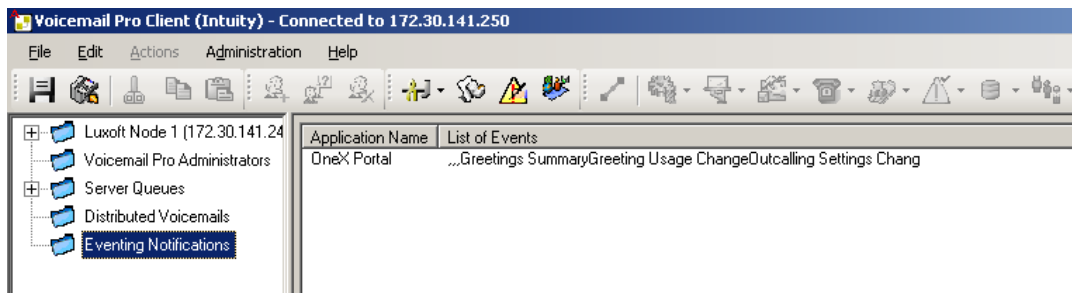
Within the VoiceMail Pro Client a new item is added called 'Eventing Notifications', selecting this option will display a list of applications that are using the VoiceMail Pro server to receive mailbox information. As previously stated this is only used by the one-X Portal, the type of notifications which the one-X Portal application has requested to be informed about are shown.

5 one-X Portal for IP Office

IP Office Release 7.0 delivers the following one-X Portal enhancements.

Note: With the 7.0 version of one-X Portal for IP Office usernames are now case sensitive. Please make sure that users are informed to use the correct case for their usernames. E.g. A user, Extn201, would have been able to enter their username as Extn201 or extn201 in previous versions of one-X Portal. With the 7.0 version their user credentials will only be valid if they use Extn201.

5.1 World Clock Gadget

The World Clock Gadget is a new gadget that shows you the current time in different time zones that you select. It can present this information in two ways, in a time zones clock view or a time zones band view.
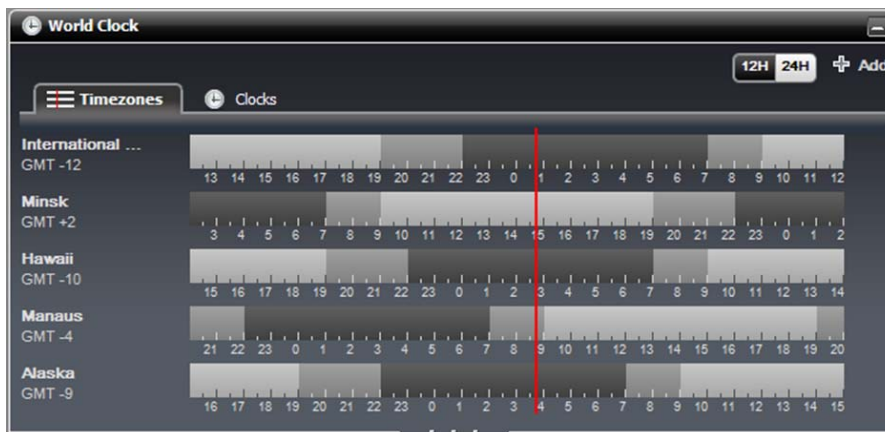
The time zones band view has an option to allow the user to set the time format to be displayed on the Bar as 12 or 24 hour. If this is set to 12 hour then the time will also indicate whether it is am or pm.

The red vertical bar on the display points to the current time across all displayed time zone bars.

It is possible to add up to 5 time zones to your world clock. Users can modify or delete these according to their needs.

Information about the time zones selected by the user in the World Clock Gadget will be persisted by the application and will be available on all subsequent logins.

5.1 CCR Agent Control Gadget

Another new gadget in one-X Portal is the Agent Control Gadget. This gadget is only available to those users that are enabled as CCR agents within the IP Office configuration.

It can be used to see your current agent state and also gives you the ability to change that state. You can also use it to change your membership status in the various Customer Call Reporter queues to which you belong. If these items are grayed out then it means you do not have permission to change your group status. The Manager application is used to set the permissions for the user to change their hunt group membership. This setting is found in User | Menu Programming | Huntgroup.
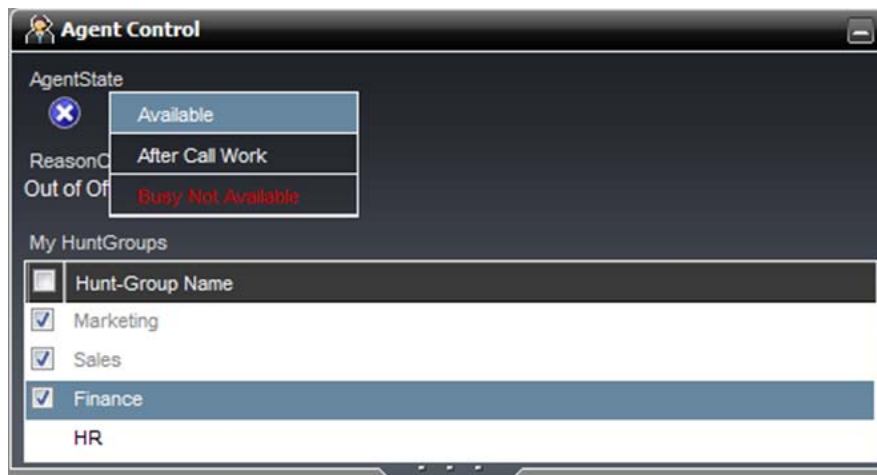
The Agent Control Gadget can also be used to set your reason codes when you change your status to Busy Not Available.
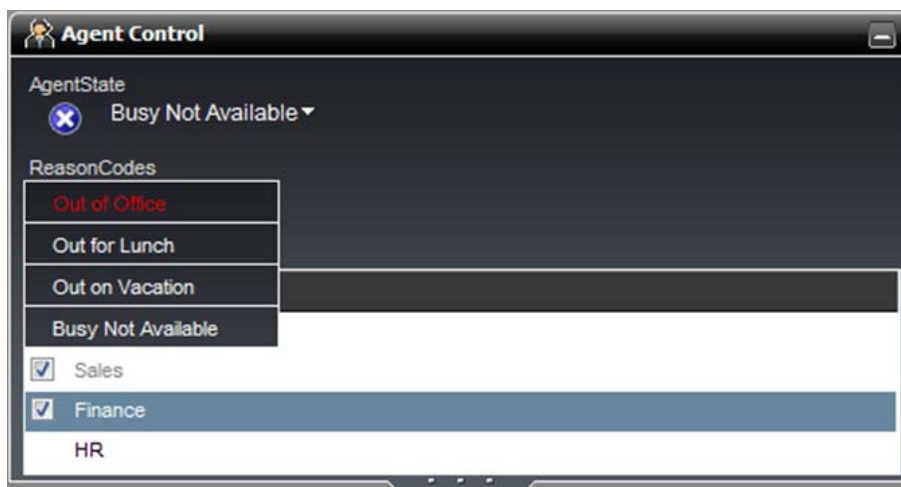
When Agents log out of their one-X Portal session they will be prompted with the option to log off their extension, if the Agent accepts this then they will be logged out of one-X Portal and their corresponding IP Office extension.

5.2   Directory Gadget Enhancements

Currently contacts can be filtered in the various directories (tabs) by name. This has been enhanced to now filter by phone number or part of the phone number. For example, if a user would like to see all contacts in the 408 area code, typing in 408 in the filter text input box will list all the contacts which have 408 in their phone number.

Also the search all directories option has been moved to its own tab which is used both for the search and the display of result.

5.3 Mobile Twinning Handover

Users with mobile twinning enabled have been able to use the one-X Portal to turn twinning on and off and to set the twinned number. Further enhancements in the one-X Portal now provide these users with some additional controls in their Calls gadget. These controls allow them to transfer calls between their primary extension and their twinned device.
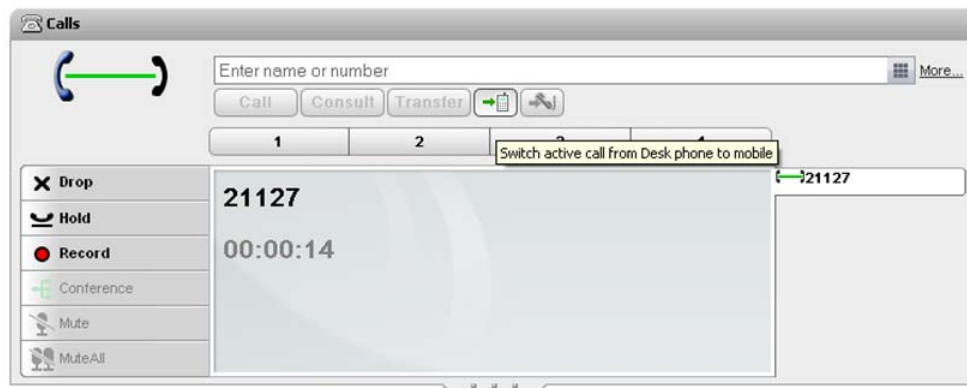
When the user is on an active call at their primary extension they can transfer it to their twinned device by clicking on the [button image] button.

The phone system will attempt to transfer the call to that number. If the call is not answered the call will return to your normal extension. It may also return if answered too quickly, such as the call going immediately to a cell phone's voicemail because the cell phone was busy or off.
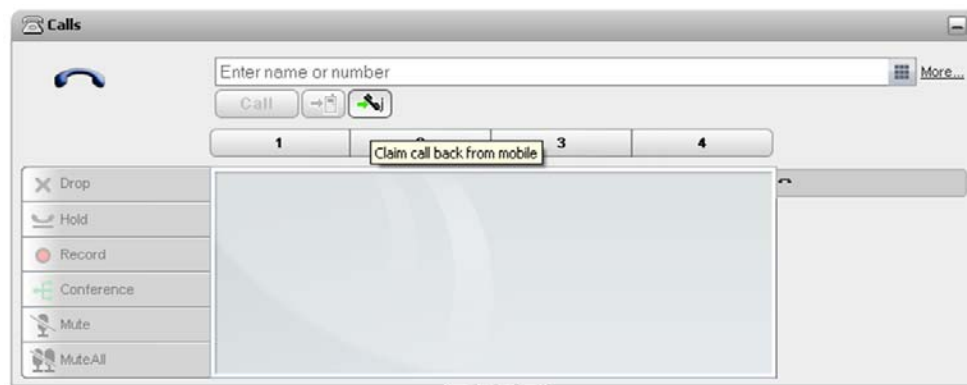
When the user has answered a call on their twinned device they can get the call transferred back to their primary extension by clicking on the [button image] button.

For the user to be able to take the call back to their primary extension the call must have originated from the IP Office and have been sent to the twinned device via the IP Office mobile twinning mechanism. A call that arrives directly at the twinned device cannot be reclaimed in this way.

5.4 Telecommuter Mode and Mobile Twinning

In previous versions of one-X Portal it was not possible to enable Telecommuter mode and mobile twinning, you could only set one or the other. With IP Office Release 7.0 it is now possible to enable both of these options at the same time.

This allows a Telecommuter to receive calls at their alternate location and on their mobile twinned device.

5.5 Google Chrome Support

The one-X Portal for IP Office is now tested and supported with the Google Chrome browser, version 5+.

6 Customer Call Reporter

IP Office Release 7.0 delivers the following Customer Call Reporter (CCR) enhancements.

Note: Any versions of Customer Call Reporter earlier than 7.0 will not connect to an IP Office system running 7.0 core software. This is due to a change in the data stream that connects the IP Office to the Customer Call Reporter. Therefore make sure that you upgrade your Customer Call Reporter immediately after upgrading your IP Office core software or your CCR will cease to work until it has been upgraded.

6.1 New SYSTEM Statistics

In addition to using statistics to display queue or agent values, for many statistics a SYSTEM statistic can also be displayed. The SYSTEM statistic accounts for CCR activity across the whole system. The value displayed will be the total or weighted average for all the IP Office Customer Call Reporter queues and agents.

Alarms and warning settings are not applied to SYSTEM statistics. SYSTEM statistics can also be selected in the dashboard and wallboard.

For most queue statistics, the system value is a total of all queues including those not in the current view.

For queue statistics that are averages, the system value is a weighted average for all queues. For the Current Wait Time and Longest Wait Time it is the largest values from all queues.

For those queue statistics that are not supported as system values, the value displayed is a – (or plotted as a zero value).

Note: The 'Talk' and' APF' statistics will be added in future release

6.2   Display Accuracy/Standardization

Many statistics were previously displayed to two decimal points. These are now rounded to a single decimal point. This change applies to statistics displayed in the dashboard, monitor, wallboard and reports. Time values are standardized as hours:minutes:seconds except average speed of answer, which is just seconds.

6.3   User Interface Enhancements

The user interface in the Supervisor screen for the Reports has been modified. When clicking on the Reports icon a new reports page will be displayed. Along the top there are tabs for each of the report types available in CCR.
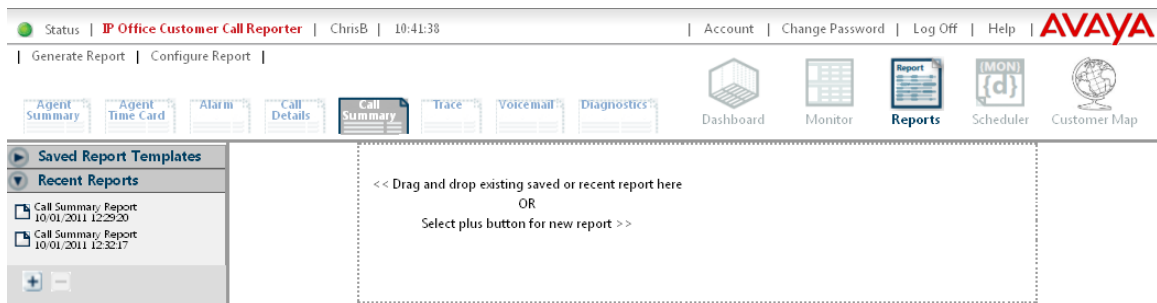
When manually viewing a report, the report results are displayed in the main IP Office Customer Call Reporter window rather than requiring a pop up window. Use of a separate popup window can be enabled if desired.
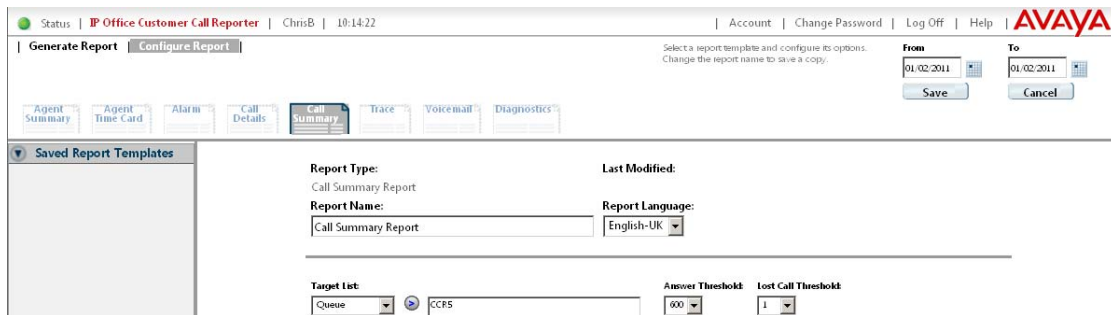
When reports are run manually, a copy of the report results are saved with a time and date stamp. These saved reports are kept for a period (up to 12 months), this time period is set in the supervisors account settings. The saved reports can be viewed again at any time without having to reprocess the data.

For automatic reports scheduled to run daily, an additional scheduling option is available to disable the running of a daily report at weekends.

There is also the option, when saving reports, to save the report under a different name instead of automatically overwriting them.

6.4   Wallboard Enhancements

The following enhancements have been made to the wallboards.

The wallboard display now includes a log out icon that can be used to return to the IP Office Customer Call Reporter login screen, and a help button.

The Wallboard Animation frame rate setting can be adjusted to reduce the frame rate that Silverlight uses by default to optimize CPU usage on PCs that are not dedicated to wallboard display only.

6.5   Additional Agent Device Support

The Customer Call Reporter now supports a number of new phones as Agent devices (with certain limitations):

The Avaya SIP Video Softphone can be used but with the following limitations:

- Cannot set DND reasons
- Agent can not be logged in using the CCR Control Panel

The Nortel M and T Series Digital phones can be used.

The 11xx and 12xx SIP phones can be used but with the following limitations:

- Cannot set DND reasons
- Agent can not be logged in using the CCR Control Panel

6.6   Customer Map Enhancements

The Customer Map now includes a help button.

7   Data Migration Manager

Data Migration Manager (DMM) is a time saving desktop tool used to migrate configuration and user data from one system type to another system type for which there is no traditional upgrade. The Data Migration Manager for IP Office allows users to move BCM or Norstar Mailbox data including Personal Greetings and voice messages to an IP Office system. The tool also converts Auto Attendant greetings and announcements to IP Office format so that they may be reused on the IP Office system.

Use of the DMM eliminates repetitive, error prone and time consuming manual configuration setup when migrating from one system to another.

DMM supports migrating data from:

- Norstar CICS/MICS 7.1

- BCM200/400/1000 Release 4.0

- BCM 50 Release 3.0/5.0/6.0 to IP Office systems

There are four steps to the conversion process.

Step 1 is **Data Extraction**: The Data extraction phase is used to populate Norstar or BCM data into the DMM tool. The data can be extracted from a Norstar or BCM device or it may be loaded from a file created during a previous extraction procedure.
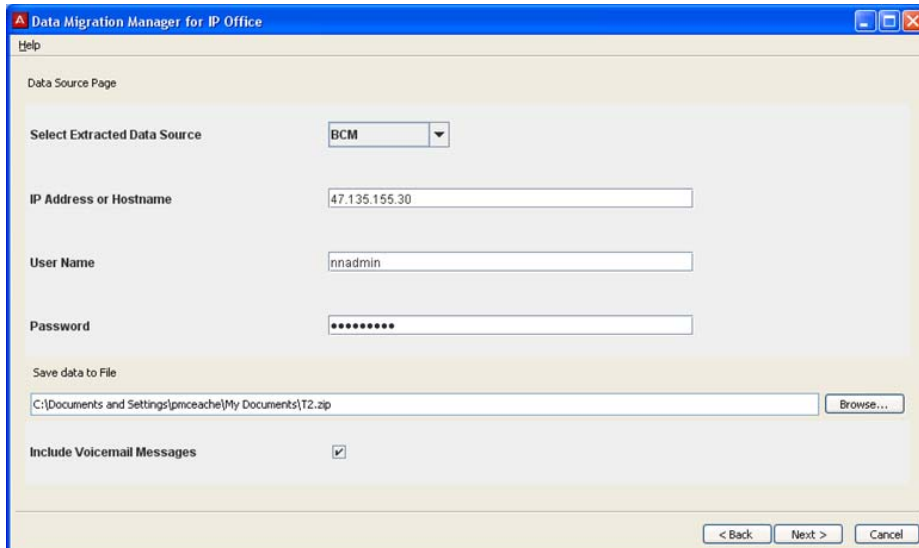
Step 2 is **Data Review**: Data review is a page that will display the data recovered from the Data Extraction. If extracted data is from a BCM 4.0 System, the user is required to input the true MBM Configuration from the BCM 4.0 System. This is so DMM can remove any extraneous data that may exist in the tool.
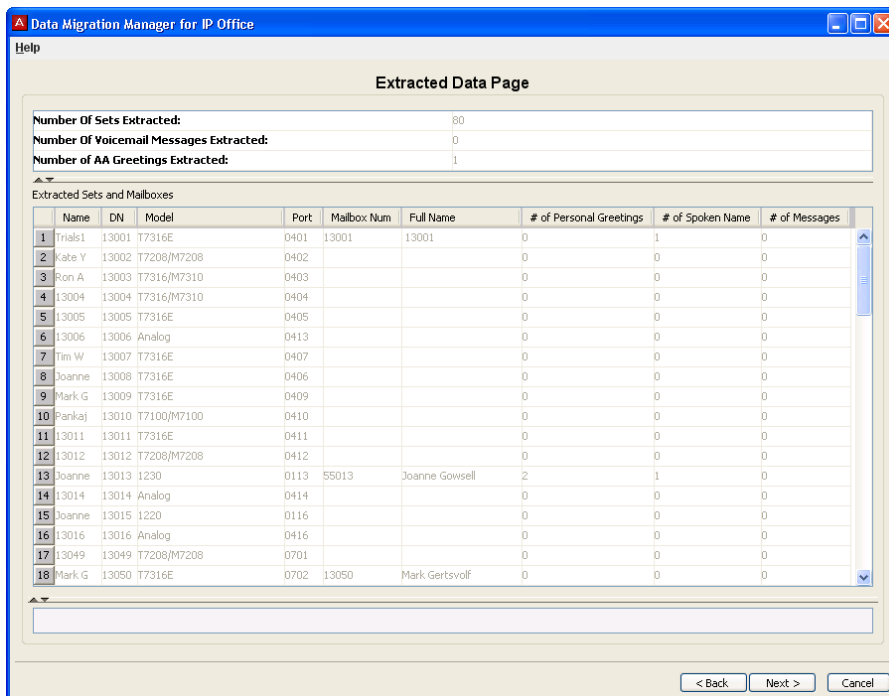
Step 3 is IP Office **Data Creation**: IP Office Data Creation happens after the extracted data has been reviewed and accepted by the user. During this phase the user can select which mode of operation the target IP Office is to be configured for (Standard, Quick Mode, Norstar, Partner) , which Voicemail system to use

(Embedded, VoiceMail Pro), the recommended target hardware configuration, which the user can change, and the system's IP Address.
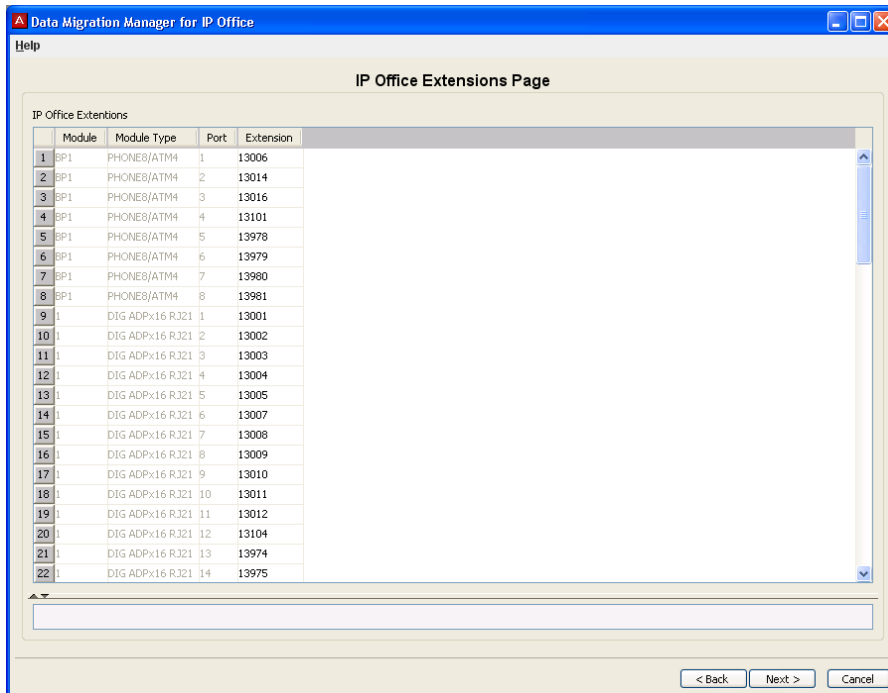
Once the IP office configuration is accepted the mapping of extensions to hardware is displayed. The user can move existing extensions to different modules or ports if so desired.

The final step is **Data Transfer** to the IP Office: When the final step in the data creation is complete, the data is transformed into an IP Office configuration file.

DMM creates an offline IP Office configuration file in the XML format, and stores it in the user\data folder where DMM is installed. When the initial configuration and extensions are finalized, the wizard launches the IP Office Manager application, and loads the newly created configuration file.

Note: The configuration file created by DMM is suitable for a new IP Office system. You cannot merge the file into an existing IP Office configuration.

If necessary further changes can be made to the offline configuration file before it is sent to the IP Office system

You can transfer the voicemail messages to the target voicemail system using instructions in the Embedded Voicemail and VoiceMail Pro guides to restore backed-up voicemail messages. The voicemail messages, greetings and the Auto attendant greetings are available in the folder selected during the IP Office Data Creation phase.

8   Windows Operating System Support

The following table gives a summary of the Windows Server & Client Operating Systems (OS) on which various IP Office applications are tested and supported for IP Office Release 7.0.

IP Office Application	Client Systems						Server Systems		
	XP Pro		Vista		Windows 7		2003	2008 / 2008 R2	
	32	64	32	64	32	64	32	32	64
Preferred Edition Server	✓	✗	✓	✗	✓	✓	✓	✓	✓
… plus UMS	✗	✗	✗	✗	✗	✗	✓	✓	✓
… plus campaigns	✗	✗	✗	✗	✗	✗	✓	✓	✓
Preferred Edition Client	✓	✓	✓	✓	✓	✓	✓	✓	✓
ContactStore	✗	✗	✓	✗	✗	✗	✓	✓	✗
one-X Portal for IP Office	✗	✗	✗	✗	✗	✗	✓	✓	✓
Customer Call Reporter	✗	✗	✗	✗	✗	✗	✓	✓	✓
SoftConsole	✓	✗	✓	✓	✓	✓	✗	✗	✗
IP Office Manager	✓	✓	✓	✓	✓	✓	✓	✓	✓
System Monitor	✓	✓	✓	✓	✓	✓	✓	✓	✓
System Status Application	✓	✓	✓	✓	✓	✓	✓	✓	✓
TAPI – 1st Party	✓	✓	✓	✓	✓	✓	✓	✓	✓
TAPI – 3rd Party	✓	✓	✓	✓	✓	✓	✓	✓	✓
Phone Manager Lite/Pro	✓	✗	✓	✗	✓	✓	✗	✗	✗
Phone Manager PC Softphone	✓	✗	✓	✗	✓	✓	✗	✗	✗

- Vista support is only on Business, Enterprise and Ultimate versions.
- Windows 7 support is only on Professional, Enterprise and Ultimate versions.

Virtual Server Support

For IP Office Release 7.0, all applications supported on Windows server operating systems are supported while running on the following virtual servers:

- VMWare
- Microsoft Virtual Server
- Microsoft Server Hyper-V.

Browser Application Support

The following applications are accessed using web browsers. The table below details the browsers tested by Avaya.

Application	Internet Explorer	Firefox	Opera	Chrome	Mac Safari
IP Office Application Server	✔ 7+	✔ 3+	✔ 2+	✘	✔ 3.2+
Voicemail Pro UMS	✔ 7+	✔ 3+	✔ 2+	✘	✔ 3.2+
one-X Portal for IP Office	✔ 7+	✔ 3+	✔ 2+	✔	✔ 3.2+
Customer Call Reporter	✔ 7+	✔ 3+	✔ 2+	✔	✔ 3.2+
ContactStore 7.8	✔ 7+	✘	✘	✘	✘
System Status Application	✔ 7+	✔ 3+	✘	✘	✘

9   Resolved in IP Office Release 7.0

IP Office Release 7.0 software has parity with the IP Office 6.1 Q1 2011 maintenance release.

For details of the issues resolved in the IP Office 6.1 Q1 2011 maintenance release please refer to Technical Bulletin 132.

10   Known Issues

The following is a list of issues that exist in this release of IP Office 7.0 software. These will be addressed in a future release of software.

<u>**Core Software**</u>

CQ Number	Description of Issue
116615	Call Waiting Indication on Hunt Group Calls not correct
116641	Rings on transfer to voicemail
116407	CCR Call Waiting statistic increments on outgoing call when using ARS
116706	Softphone doesn't show matching contact on incoming call
116606	Partner Version - Call restriction override from 95xx terminals
116657	Display not updating quick enough when toggling between "Answer" and "Hold" so call gets dropped at times
116499	96x1 Telephones do not report their firmware revision is Sysmon or SSA
115057	Supervised transfer to T3 IP phone with Internal Auto -Answer doesn't work
115404	Account Code not requested and User remains in Dialing state when using an Analog Line
122293	Disallowed list not working correctly in Quick Mode when digits dialed slowly

Manager Application

CQ Number	Description of Issue
123237	Manager installs to default location on upgrade (Does not detect installs on other drives)
116517	Translations : Spanish - Manager - User Rights - Timers
116603	Manager 9.0 editing 3.1(48) configs
116681	Italian Manager on Win7 Ultimate - Exception Error when opening older configs
116682	User Number swap not working correctly with Combo Card

Preferred Edition

CQ Number	Description of Issue
41875	disable message leave action broken
123092	French Translation missing

one-X Portal for IP Office

CQ Number	Description of Issue
122330	Call subject not sent by one-X client on transfer
123260	One-X shows 'Call Record' Indicator when play advice on call recording is turned off in voicemail

Customer Call Reporter

CQ Number	Description of Issue
46706	CORE: 116407 Call Waiting statistic increments on outgoing call when using ARS
116689	Outgoing unanswered calls show as answered in CDR with no call duration
122858	Voicemail reporting is not working for Queue messages

DECT R4

CQ Number	Description of Issue
116448	DECT 37xx handsets doe not get time from Master IPBS unless switched off/on

11   Known Issues with Workarounds

Core Software

CQ Number	Description of Issue
116628	IP500v2 does not default as a DHCP Client

116628 -IP500v2 does not default as a DHCP Client. When converting a Quick Mode configuration to a Standard Mode configuration the DHCP mode is set to DHCP Server. Normally when a system starts up the DHCP mode is automatic, that is if a DHCP address can be acquired then the system DHCP mode will be set to Client. If a DHCP address can not be acquired then the system DHCP mode will be set to Server. When a system is converted from Quick Mode to Standard mode the system DHCP setting is Server by default. If this is not the desired setting then it should be changed before the configuration is sent back to the system.

Customer Call Reporter

CQ Number	Description of Issue
122441	3D cube image will not update

122441 – 3D cube image will not update: An error is seen in the windows event log that indicates the problem is on the server. Other stats on the dashboard work without issue. If you experience this issue then you need to run a repair on the MS .NET 3.5 framework installation. This can be done either by the Prerequisite executable or through the Control Panel Add/Remove Programs. It is believed to be caused by an installation update to the .NET framework on some PCs.

CQ Number	Description of Issue
46418	System out of memory exception causes 2D graphic update issues

46418 - System out of memory exception causes 2D graphic update issues: Pie charts are not updating and cannot be configured for any new statistics. Event log indicates memory issue. If you experience this issue please make sure Microsoft KB967634 and KB967328 are installed on the CCR Server.

12   Technical Notes

Before any upgrades commence the IP Office Release 7.0 Administration suite must be installed. Administration suite upgrades are supported from version 4.2, any version prior to this must be removed first before the Administration suite can be installed.

IP Office Release 7.0 will be supported on the following control units:

- IP500, IP500v2

Note: If upgrading to Release 7.0 from a previous release an upgrade license is required. New installations using the IP500v2 platform will not require this license.

IP Office Release 7.0 will NOT be supported on the following control units:

- IP401, IP403, IP406 (v1), IP406v2, IP412, Small Office Edition

12.1   Core Software Upgrade Summary

The table below shows the necessary steps that must be taken to upgrade your IP Office system to Release 7.0 If running a software version older than 4.0 then please refer to Technical Bulletin 109.

Platform	Current Release	Upgrade Step 1	Upgrade Step 2
IP500	4.x /5.0/6.x	Load 7.0	--
IP500v2	6.x	Load 7.0	--
All modules	4.x/5.0/6.x	Load 7.0	--

12.2   Software Upgrade License Installation

To make for a smoother upgrade process it is recommended that you install your IP Office Release 7.0 Software Upgrade license before you proceed any further. Although the key may not be recognized immediately by the system, dependant on the current software version you have, it will be recognized when you come to upgrade your system.

12.3   Core Software Upgrade Instructions

1. Install the Admin Suite as normal.
2. Open the Manager application.
3. Before starting any upgrades ensure that you have received and made a backup copy of the latest IP Office configuration. If for any reason the upgrade fails, the current configuration may be erased, so a backup copy is essential.
4. In Manager select File | Advanced | Upgrade. This will start the UpgradeWiz application.
5. After a few seconds the upgrade wizard should show the 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.
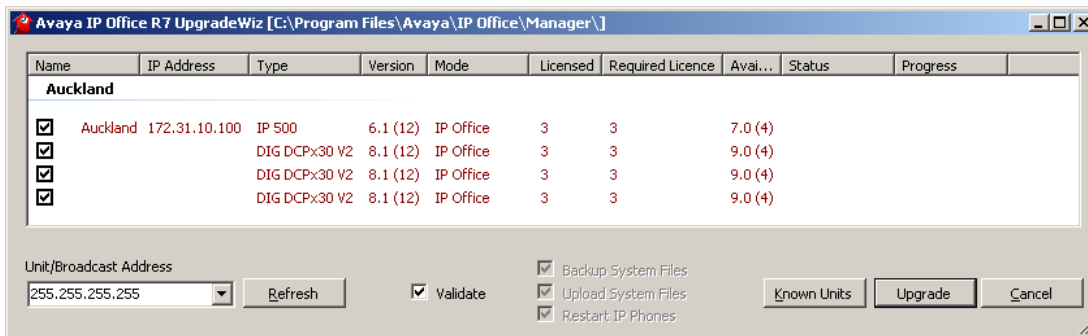
7. Tick the check box under Name if it is not already selected then click on Upgrade.

8. You will be asked to enter the system password to upgrade the system, enter this and then click on OK. The software will then start being transferred to the system.

9. Once the software has successfully been transferred click on Yes to proceed with the upgrade.

10. When the upgrade wizard informs you that all systems have been successfully upgraded click on OK and close down the upgrade wizard.

Note: *If you have not installed the IP Office Release 7.0 Software Upgrade license the upgrade wizard will present you with the following warning:*
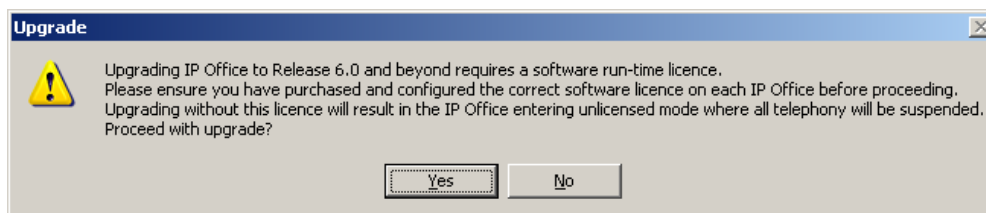
12.4 Unit Compatibility – Expansion Unit Interoperability

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

12.5 Phone Firmware Support

The table below lists the phone firmware versions that are supported by IP Office Release 7.0.

Phone Type	Version
4610SW, 4620SW, 4621SW, 5610SW, 5620SW, 5621SW, 4625, 4601+, 4602+, 5601+, 5602+	2.9.1 (SP1)
4620 (Not 4620SW), 4601, 4602D, 4602SW, 5601, 5602D, 5602SW	2.3
4610SW, 4620SW, 4621SW, 5610SW, 5620SW & 5621SW VPN	2.3 Boot 2.3.252 Application
1603, 1608, 1616	1.3 Boot 1.3 Application
1616 Button Module	1.0.9

9620,9630,9640,9650	3.1.1 Boot 3.1.1 Application
9608	R6_1r28 Kernel R6_1r28 Application
9621, 9641	R6_1r28 Kernel R6_1r28 Application
9504, 9508	9500BootR14.bin (vintage 29) Boot 9500R27.bin (vintage 26) Application R0_07 (vintage 07) Zarlink
2410, 2420, 5410, 5420	6
1403	03 Boot 03 Application
1408, 1416	25 Boot 1400R15.bin (vintage 15) Application
DCP Phone Languages	lng_R10_v09_Pack01.bin
DCP Phone Font File 14xx Chinese (GB)	R02_v01
Nortel 1120	SIP1120e04.01.13.00
Nortel 1140	SIP1140e04.01.13.00
Nortel 12xx	SIP12x004.01.13.00

Note: *When upgrading 5410 telephones to the R6 firmware version make sure that you have added the NoUser source number* **ALLOW_5410_UPGRADES** *to your configuration.*

IP DECT	Version
Avaya 3701	22.04.04
Avaya 3711	91.24.31.04
Avaya 3711 Global	91.24.36
Avaya 3711 USB Driver	0.8
ADMM	Version
ADMM	1.1.13
ADMM Java Configuration	1.1.13
Monitor	1.4

DECT R4		Version
3720	3720_v3.2.19.pkg is used in PDM	3.2.23
	Company Phonebook_v8.xls	X
	Downloadable_languages_3720_v21.zip	X
	Translation_Tool_3720_v21.zip	X
	Local_Phonebook_Tool_v1.zip	X

3725	3725_v3.2.19.pkg is used in PDM	3.2.23
	Company Phonebook_v8.xls	X
	Downloadable_languages_3725_3740_3749_v22.zip	X
	Translation_Tool_3725_3740_3749_v22.zip	X
	Local_Phonebook_Tool_v1.zip	X
374x	374_v3.0.11.pkg is used in PDM	3.0.16
	Company Phonebook_v8.xls	X
	Downloadable_languages_3725_3740_3749_v22.zip	X
	Translation_Tool_3725_3740_3749_v22.zip	X
	Local_Phonebook_Tool_v1.zip	X
IPBS Firmware		4.1.30
IPBS Boot Firmware		4.1.30
AIWS Firmware		2.73
WinPDM (Windows Portable Device Manager)		3.8.1
Charger Firmware		1.3.11

T3 IP Phone Firmware/Tools	Version
Firmware	T247
Admin Tool	3.08

12.5.1 96x1 HTTP Firmware Upgrades

Due to the size of the firmware files, IP Office upgrade from the internal memory card, or using the TFTP to HTTP relay via the IP Office Control Unit will not support HTTP services for these telephones. It is recommended that firmware upgrades for 9608, 9621 and 9641 telephones are performed using an external HTTP Service such as an IIS or alternative HTTP Server. This does not affect the current ability to upgrade other telephone types (4600, 5600, 1600, and 9600) directly from the control unit memory card or using HTTP relay.

For the current 96x1 telephones, the new default files to be provided by IP Office are:

- 96x1Hupgrade.txt
- 96x1 language files
- *ext*_96x1data.txt backup file (where *ext* is the User's extension number)
- 96x1 firmware files are labelled as S9608_11HALBR6_1r28_V4r52.tar and S9621_41HALBR6_1r28_V4r52.tar dependant of the current version

The mechanisms used to automatically generate the 96x1upgrade.txt file will be the same as for the 1600 phones generated by the core software in the IP Office. This will contain the valid list of boot and application firmware versions for the 96x1

phones supported by IP Office. These files will be included in the list of 'phone' files to load onto the embedded storage provided by IP500 and IP500v2.

12.6 Preferred Edition Software Upgrade

The table below shows the necessary steps that must be taken to upgrade your Preferred Edition Server (formerly VoiceMail Pro) to Release 7.0. If running a software version older than 4.0 then please refer to Technical Bulletin 109.

Product	Current Release	Upgrade Step
VoiceMail Pro	4.x / 5.x / 6.x	Upgrade Installation Available

It is important that the settings of an existing VoiceMail Pro are exported before any upgrade. Although folders that contain prompts and messages are not affected by the upgrade process it is good practice to make a backup just in case something goes wrong.

Upgrading from VoiceMail Pro 4.0 or later

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

1. Start the VoiceMail Pro GUI
2. From the File menu, select the option Import or Export
3. Select the option Export callflows and click **Next**
4. Enter a file path and file name ending in .mdb, e.g. C:\temp\backup.mdb
5. Click **Next**
6. Click **Finish** to start the export then click **Close** to complete the export procedure
7. Close the program
8. Insert the new VoiceMail Pro CD.   If the setup does not start automatically, right click the CD drive & select **AutoRun**. Alternatively run setup.exe
9. At the language prompt, make your selection and click **OK**
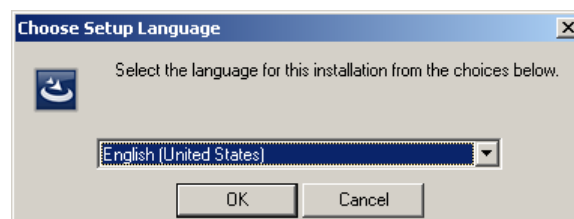
10. A prompt will appear informing you that there is an older version of VoiceMail Pro installed and will offer a major upgrade. A major upgrade looks very similar to a new installation
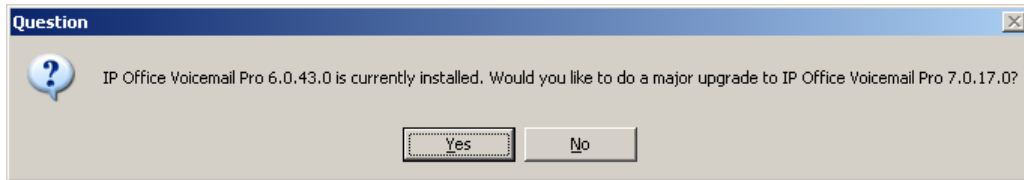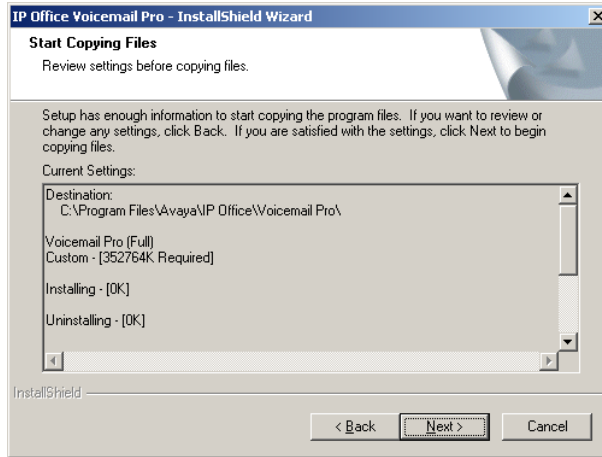
11. Select **Yes**. If the VoiceMail Pro service is currently running it will be stopped

12. At the Select Features screen make sure that the components you already have installed are selected then click on **Next**
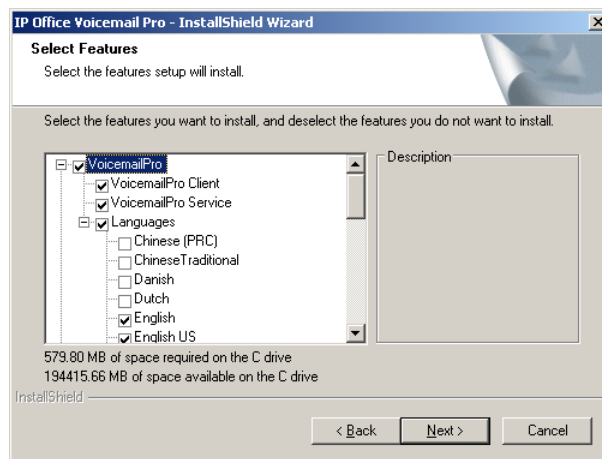
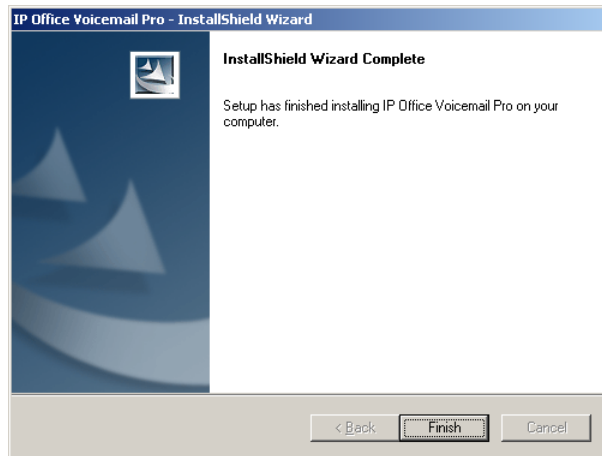13. At the Service Account name screen enter your service account details and then click on **Next**
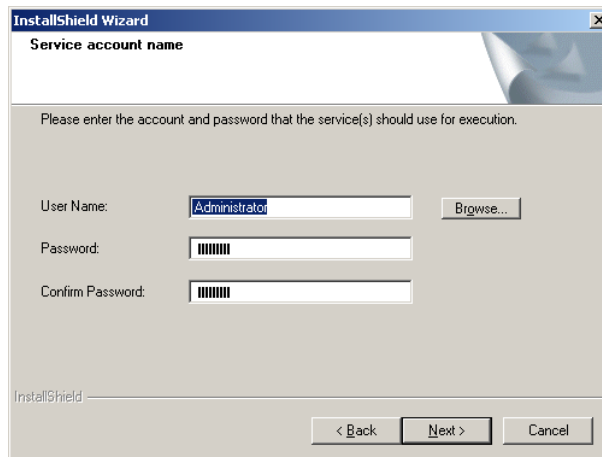
14. At the Start Copying files screen click on **Next**

15. The new version of IP Office software will now be installed

16. Finally click on **Finish** to complete the installation

.

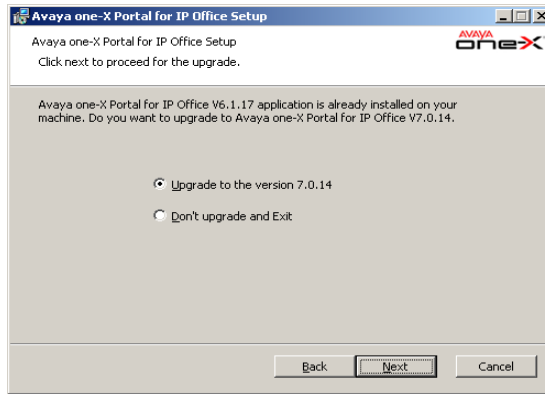## 12.7   one-X Portal for IP Office Software Upgrade

The table below shows the necessary steps that must be taken to upgrade the one-X Portal for IP Office.

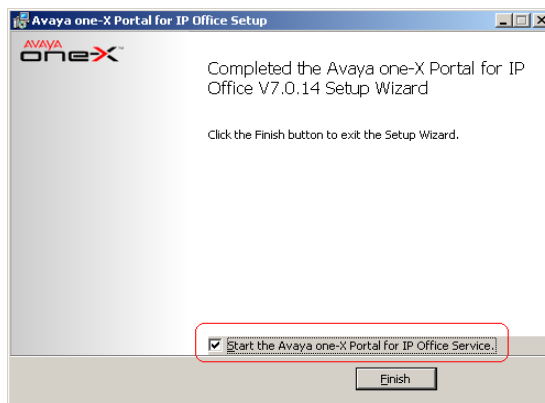| Product	Current Release	Upgrade Step
one-X Portal	5.0 / 6.x	Upgrade Installation Available

Note*: With the 7.0 version of one-X Portal for IP Office usernames are now case sensitive. Please make sure that users are informed to use the correct case for their usernames. E.g. A user, Extn201, would have been able to enter their username as Extn201 or extn201 in previous versions of one-X Portal. With the 7.0 version their user credentials will only be valid if they use Extn201.*

Upgrading from one-X Portal for IP Office 5.0 or later

1. Insert the new one-X Portal for IP Office CD.   If the setup does not start automatically, right click the CD drive & select **AutoRun**. Alternatively run one-Xportal.msi
2. At the Welcome screen click **Next**
3. At the Upgrade screen make sure the upgrade option is selected and click **Next**

4. At the Destination folder screen click **Next**
5. At the Ready to install screen click **Install**
6. When the upgrade has completed select the "Start the Avaya one-X Portal for IP Office Service" checkbox and click on **Finish**

12.8   Customer Call Reporter Software Upgrade

The table below shows the necessary steps that must be taken to upgrade your Customer Call Reporter to Release 7.0.

Product	Current Release	Upgrade Step
Customer Call Reporter	1.x / 6.1	Upgrade Installation Available

Note: Any versions of Customer Call Reporter earlier than 7.0 will not connect to an IP Office system running 7.0 core software. This is due to a change in the data stream that connects the IP Office to the Customer Call Reporter. Therefore make sure that you upgrade your Customer Call Reporter immediately after upgrading your IP Office core software or your CCR will cease to work until it has been upgraded.

Upgrading from IP Office Customer Call Reporter 1.0

Some IP Office Customer Call Reporter 1.0 SQL databases use a slightly different database structure that should be modified prior to upgrading the IP Office Customer Call Reporter software to a higher version. This applies to all databases that have the default US English collation of SQL_Latin1_General_CP1_CI_AS or other non-standard Latin collation (standard is Latin1_General_CI_AS).

Ensure that you backup the database before performing this process. Full details of how to backup the database can be found in the IP Office Customer Call Reporter Installation manual.

In the Prerequisite\Tools folder of the IP Office Customer Call Reporter installation files, locate and run the SQL script file UpgradeCollation.sql then proceed to step 1 below.

Upgrading from IP Office Customer Call Reporter 1.x / 6.1

Note: *Depending on which software version you upgrade from the following screens may appear in a different order or there may be additional screens displayed during your upgrade. Just keep moving on through the screens until the upgrade has been completed and then follow the steps to re-enter the IP Office system credentials.*

1. Insert the new Customer Call Reporter CD. If the setup does not start automatically, right click the CD drive & select **AutoRun**. Alternatively run IPOCCRsetup.exe

2. A prompt will appear informing you that there is an older version of Customer Call Reporter installed. Click on **Yes** and then **Next** at the resume installation screen
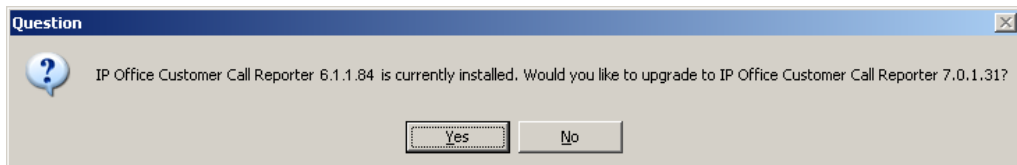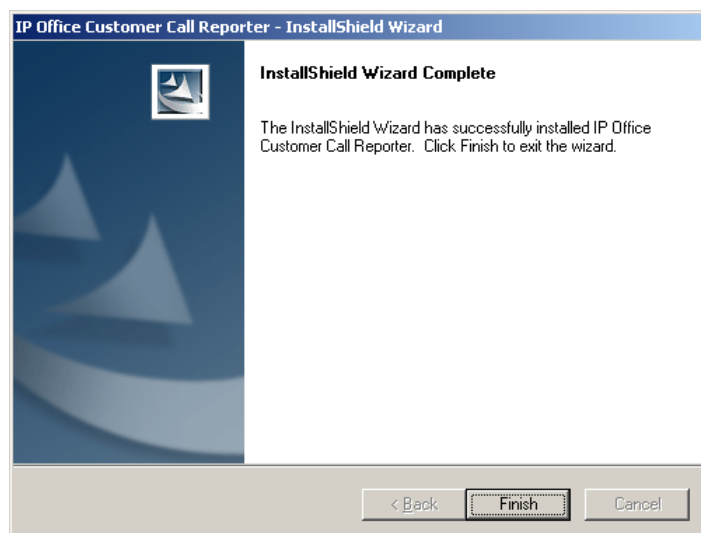

3. At the Database Server screen make sure the details are correct and click on **Next.**
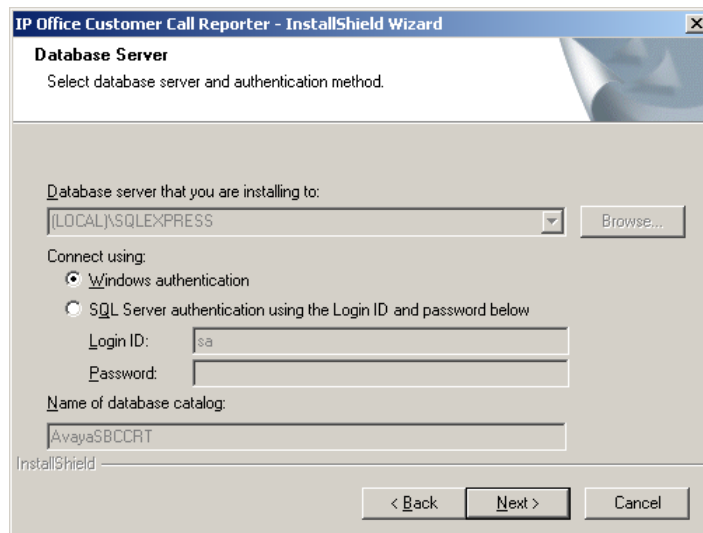
4. The installation will then proceed to upgrade the software

5. At the IIS reset popup click on **Yes**
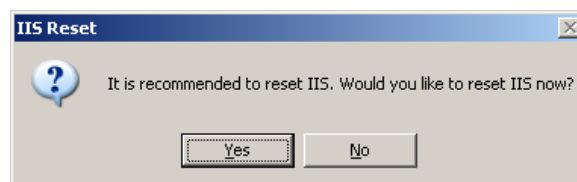
6. When the installation is complete the InstallShield Wizard Complete window opens. Click on **Finish**

7. To complete the installation it may be necessary to logon using the CCR Administrator account and re-enter the IP Office username and password to allow the CCR to connect to your IP Office system.
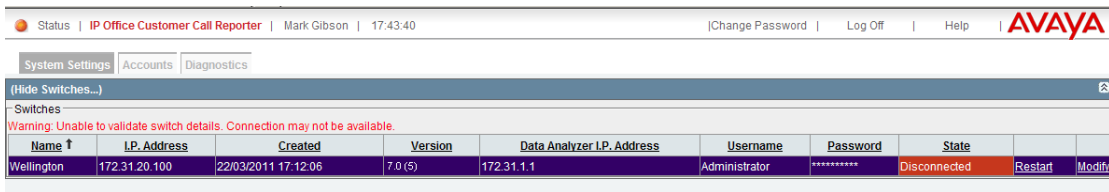
8. Click on **Modify** to update the details and after these have been entered click on **Update**

9. Finally click on **Restart**, and then click on **OK** to restart the service
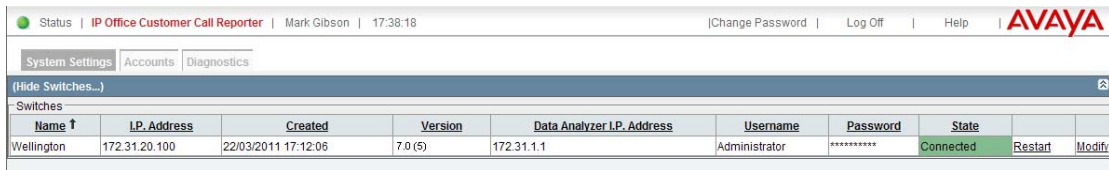
Note: After upgrading your CCR the Status indication displayed may be Red. If this is the case please stop the services, clear the Windows Application Event log on the PC and then restart the services.

12.9   IP Office Application Server Software Upgrade

The table below shows the necessary steps that must be taken to upgrade the IP Office Application Server.

Product	Current Release	Upgrade Step
Application Server	6.1	Upgrade Installation Available

Upgrading from Application Server 6.1

1. Insert the DVD into the PCs DVD drive and reboot the PC.

2. The PC should boot from the DVD and the display the IP Office Application Server installation screen.

   If the PC does not boot from the DVD and instead starts an existing operating system, this indicates that the boot order of the server PC needs to be changed. Follow the PC manufacturers instructions for accessing the PCs BIOS and setting it to boot from DVD before booting from hard disk.
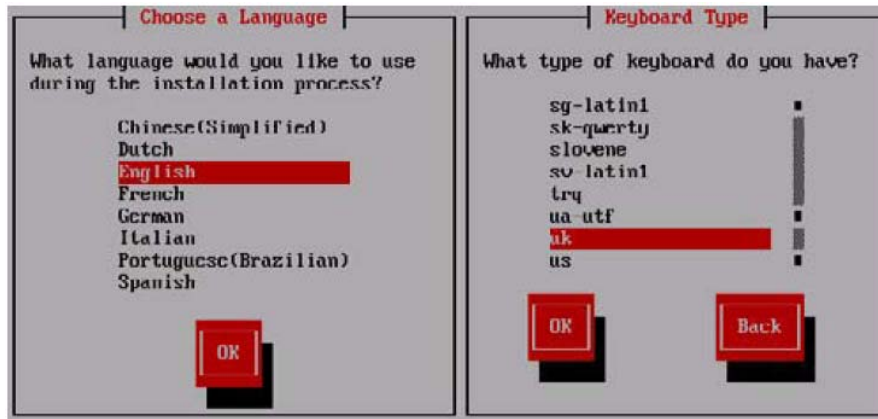
   If the server PC already has IP Office Application Server installed, options for upgrade, downgrade, reinstall or new install are presented. Note that a new install will reformat the hard disk, removing all existing files.

3. After loading installation software from the DVD, the installation menus will be displayed as follows:

Language/Keyboard

These initial steps apply just to the installation process, they do not affect the installed applications. However, they also allow you to familiarize yourself with how the text menus operate.

Use Tab to move the selector forwards, use Alt-Tab to move it backward. Press Space to select the currently highlighted item.

Test CD/DVD

If this is the first time that the DVD with the IP Office Application Server software has been used, it may be useful to check that the DVD has been written correctly before any changes to the server PC are made. The check process can take up to 30 minutes. If the DVD has already been used successfully for other installations, select Skip to continue.

End User License Agreement

Read through the end user license agreement. It is available in several languages, use the Change Language to select the one required. On the last page select I Accept if you want to continue with the installation.

Previous Installation Detected

If the IP Office Application Server is already installed on the server, an upgrade menu is displayed, detailing the existing installed options and the new options.
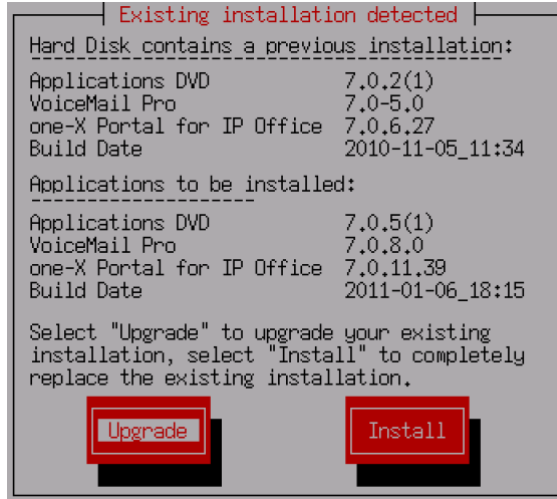
If Upgrade is selected the applications will be upgraded

If Install is selected, the existing installation is overwritten

4. Select **Upgrade** and continue through the installation screens until the upgrade is complete.

5. You will need to remove the IP Office Application Server DVD from the server PC. Then select the Reboot option.
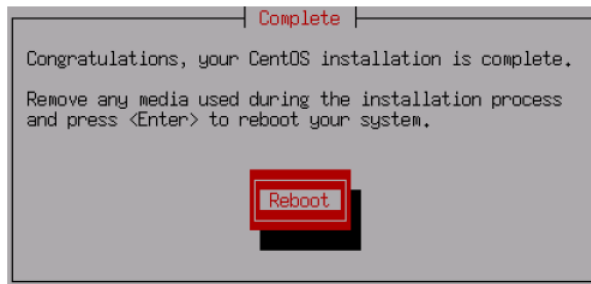
6. The following screen is shown after a successful restart of the IP Office Application Server.
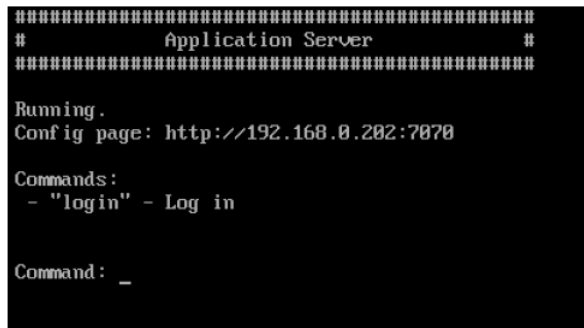
13   Assistance

13.1   Documentation

IP Office Release 7.0 Documentation can be found on http://support.avaya.com

      1. Select FIND DOCUMENTATION and DOWNLOADS by PRODUCT NAME.
      2. Select IP Office.
      3. Select the Software release required.
      4. Select the Documentation Categories required.

13.2   Software

13.2.1 IP Office 7.0 DVD Set

Avaya will supply DVD media to Avaya Authorized Distributors that have a current contract with Avaya. Avaya will not supply DVDs directly to reseller Partners. Partners are required to order DVD media from their respective Avaya Authorized Distributors.

Separate CDs are no longer available since Release 6.0. The USER/ADMIN SET and the VOICEMAIL PRO will be together on the DVD set.

The following DVD is available with Release 7.0 of IP Office:

Material Code	Description
700500928	IPO 7.0 USER/ADMIN SET DVD

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

13.2.2 IP Office Applications Server DVD

Avaya will supply DVD media to Avaya Authorized Distributors that have a current contract with Avaya. Avaya will not supply DVDs directly to reseller Partners. Partners are required to order DVD media from their respective Avaya Authorized Distributors.

The following Applications Server DVD is available with Release 7.0 of IP Office:

Material Code	Description
700501420	IPO 7.0 APPL SRVR DVD

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

13.2.3 IP Office System SD Cards

Avaya will supply SD card media to Avaya Authorized Distributors that have a current contract with Avaya. Avaya will not supply SD cards directly to reseller Partners. Partners are required to order SD card media from their respective Avaya Authorized Distributors.

System SD cards supplied by Avaya contain all the system software required for the IP500 v2, including expansion module and phone firmware binaries. An update to the latest IP Office software release may be required to have the latest software on the SD card for the installation. This can be done in IP Office Manager. Please check for the latest available software on http://support.avaya.com/.

The following System SD cards are available and are independent of a particular release of IP Office.

Material Code	Description
700479702	IPO IP500V2 SYSTEM SD CARD A-LAW
700479710	IPO IP500V2 SYSTEM SD CARD MU-LAW
700479728	IPO IP500V2 SYSTEM SD CARD PARTNER
700500948	IPO IP500V2 SYSTEM SD CARD NORSTAR

13.2.4 IP Office Release Licenses

To upgrade existing IP Office systems with any earlier release to Release 7.0 a release license is required. Depending on the number of extensions the following license material code is required per system:

Material Code	Description	
262645	IPO LIC UPG 7.0 SML	For systems with up to 32 extensions; applies only to IP500 and IP500 V2
262644	IPO LIC UPG 7.0	For systems with more than 32 extensions or for systems with expansion modules

13.2.5 Web Availability

The IP Office Release 7.0 binaries for the core platform and DVD images of IP Office Release 7.0 applications will be available on the Avaya Support website by March 23rd 2011.

Upgrades to IP Office Release 7.0 require the purchase of a valid Release 7.0 upgrade license. However, the software images may be downloaded without restriction:

1. Go to http://support.avaya.com
2. Click "Downloads" under "Resource Library"
3. Select "IP Office" under "Download by Product Name"
4. Select "7.0" under "Select a Release"

13.3   IP Office Credentials and Avaya University Training

Avaya Credentials (previously Product Authorizations) are designed to ensure our Avaya Channel Partners have the capabilities and skills to successfully sell, and implement and support Avaya IP Office products/solutions to exceed customer expectations.

The SMEC IP Office Credentials include:

- Avaya Certified Sales Specialist (APSS)
- Avaya Certified Implementation Specialist (ACIS)
- Avaya Certified Solutions Specialist (ACSS)

The requirements for these may be found at: http://www.avaya-learning.com

New and updated Classes available with IP Office Release 7.0

Training is one component that must be fulfilled prior to being an Authorized Avaya Channel Partner. The Avaya learning IP Office Technical curriculum is updated to reflect the new features of IP Office Release 7.0 through the addition of a new IP Office Product Delta course that covers the major enhancements and customer benefits associated with Release 7.0.

A new ACIS credential exam is also being launched to replace the Implement Product Authorization Assessment test.

Sales – APSS Credential

Take the APSS Selling IP Office class:

Course Code	Description	Duration	Modality
2S00040W	Selling IP Office	3.5	e-Learn
1S00041O	Selling IP Office – Update Release 7.0	0.5	e-Learn
ATC01973WEN			

Then:

Course Code	Description	Duration	Modality
2S00040A	Selling IP Office	1	Assessment

For Partners interested in selling IP Office Essential Edition – Norstar™ Version (offered only in Middle East Africa):

Course Code	Description	Duration	Modality
ATC01973WEN	IP Office Essential Edition - Norstar™ Version Installation Training	2	WBT

Implement - ACIS Credential

Take all of the below:

Course Code	Description	Duration	Modality
AVA00916WEN	IP Office Hardware and Data Components	6	WBT
5S00001W	IP Office Technical Delta Release 7.0	2	WBT
ATU02142WEN	IP Office Technical Delta Release 6.1 (including Release 6)	2	WBT
ATA01225IEN	IP Office Implementation Workshop	40	ILT (Classroom)
6401.1	Avaya IP Office Implementation Exam (ACIS)	2	Exam

Advanced Level - ACSS Credential

The above ACIS Classes plus:

Course Code	Description	Duration	Modality
ATI00484IEN	IP Office Advanced Applications and Troubleshooting Workshop	40	ILT (Classroom)
3000.2	ACSS Small and Medium Enterprise (SME) Communications Exam	2	Exam
5S00002O	ACSS Conversion Training Class	6	vILT (Virtualized)

To see a full listing of IP Office and related classes please visit:

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

For information on the courses and exams associated with product authorization, select: **Avaya Professional Credentials** and then **SMEC** or **Product Authorization**.

Issued by:
Avaya SMEC New Product Introduction

Contact details:-

EMEA/APAC
Tel: +44 1483 308 000

NA/CALA
Tel: +1 908 204 4686

Email: gsstier4@avaya.com

Email: iponacalat4@avaya.com

Internet: http://www.avaya.com
© 2011 Avaya Inc. All rights reserved.