IP Office Technical Bulletin

Bulletin no: **145**

Date: 16th July 2012

Title: General Availability (GA) of IP Office Release 8.1

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General Availability (GA) of IP Office Release 8.1

Avaya is pleased to announce the general availability of IP Office Release 8.1 (R8.1). IP Office R8.1 delivers the IP Office Server Edition that opens up access to new Mid-Market opportunities and simplifies installation and management. The Flare Communicator completes an industry leading UC offer alongside the IP Office one-X offerings. SME capabilities are enhanced through reduced cost of support with SSL/VPN remote access and also include support for more SIP Trunk implementation scenarios.

1   Product Overview

Avaya IP Office Release 8.1 is the latest advancement in converged voice, data and collaboration technology from Avaya allowing the smallest of businesses to deliver cutting-edge customer service.

IP Office R8.1 – Summary of New Features

IP Office platforms supported
- IP500
- IP500 V2

New Hardware Components
- Server Edition Hardware
  - HP DL360G7 SRVR IPO R8.1+ SE PRIMARY/EXP
  - HP DL120G7 SRVR IPO R8.1+ SE EXP

- IP500 VCM 32 V2 Base Card/IP500 VCM 64 V2 Base Card

IP Office Licensing Changes
- New upgrade and application licenses available

IP Office Server Edition (SE)
- Specifically designed to address up to 1000 users on a single site, and also accommodate companies with up to 1000 users across 32 locations

Endpoint Additions
- Avaya Flare Communicator for iPad and Windows
  - A collaboration software client that delivers an innovative interface for real time communications

IP Office Enhancements
- Web Manager Enhancements
  - Back-up and Restore
  - Upgrade
  - Additional configuration fields
  - On-Boarding

- Telephony features
  - Changeable RTP ports
  - Context sensitive conferencing
  - Context sensitive transfer
  - Auto intercom call controls

- Contact Center Enhancements
  - Scheduled Reports for the current day
  - CDR Answered event renaming
  - Changes to duration of events for CDR
  - Wallboard – Manual Layout and Font Sizing
  - Wallboard – Bookmark and Auto-Login
  - Wallboard – Statistics values on Leader Board
  - Wallboard – Configurable update interval
  - Wallboard – Monitor Table
  - CCR Support for the 96x1 Telephones
  - CCR Client Browsers on Windows 7
  - CCR DDI Report

- VoiceMail Pro Enhancements
  - Security enhancement
  - Primary/Backup Enhancements
  - TTS support on Linux

- SSL/VPN Remote Access
  - Secure tunnelling between the Avaya IP Office hardware installed at a customer site and an Avaya VPN Gateway (AVG) installed at a service provider site

- Audio Branding Experience Changes
  - Restricting the Avaya sound logo to only 2 interfaces
  - Restricting the number of times the sound logo is played to only once within 24 hours

- Improved event delivery mechanism (web-sockets) for Desktop Integrations

  o Removes requirements around opening firewall ports and giving administrative privileges

SIP Trunk Enhancements
- Caller ID from 'From' header
- Send 'From' in clear
- Set 'User-Agent' and 'Server' header information
- Use of 'UPDATE' supported

Interoperability
- Interoperability scenarios with other Avaya products have been tested and will be supported going forward that include:
  o IP Office 8.1 and Avaya Aura Communication Manager 6.2 via H.323
  o IP Office 8.1 and BCM 6.0 via SIP
  o IP Office 8.1, BCM 6.0 and CS1000 7.5 with NRS via SIP
- SIP Standard Call Feature Support
  o PSTN Toll Bypass
  o Conferencing
  o Call Redirection
  o Standard Call Features

End of Support for IP Office Release 7

With the GA of IP Office R8.1 Avaya will provide support for both IP Office R8.1 and IP Office R8.0. IP Office R7.0 will no longer be supported.

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2   Hardware Components

IP Office Release 8.1 introduces new hardware elements that include the Server Edition Hardware and IP500 VCM Base Cards.

2.1   Server Edition Hardware

The Primary Server running the Avaya IP Office R8.1+ Server Edition Linux Software is the main and the only mandatory component required for the IP Office Server Edition offer to work. A secondary Linux server can be added for additional scalability and/or resiliency. The IP Office 500v2 expansion system can also be added for additional scalability or for adding support for analog/digital stations and trunk ports.

There are two server platforms that will be available from Avaya.

- IP Office Server Edition - Primary/Secondary Server
    - HP DL 360G7
    - HP DL 120G7

- IP Office Server Edition - Expansion Server
    - HP DL120G7

- one-X Portal for IP Office Server
    - HP DL120G7

When used as the Primary Server the HP DL360G7 supports:

- 500 IP Phones
- 250 SIP/H.323 Trunks
- 100 Voicemail Pro Ports
- 200 concurrent one-X Portal for IP Office Users*
- 128 Conference Channels
- 10 Receptionists

When used as the Secondary Server the HP DL360G7 supports:

- 500 IP Phones
- 250 SIP/H.323 Trunks
- 100 Voicemail Pro Ports
- 128 Conference Channels

When used as the Primary Server the HP DL120G7 supports:

- 250 IP Phones
- 125 SIP/H.323 Trunks
- 40 Voicemail Pro Ports
- 100 concurrent one-X Portal for IP Office Users*
- 128 Conference Channels
- 10 Receptionists

When used as the Secondary Server the HP DL120G7 supports:

- o 250 IP Phones
- o 125 SIP/H.323 Trunks
- o 40 Voicemail Pro Ports
- o 128 Conference Channels

* Depending on which server platform is deployed if more one-X Portal users are required to be supported above the maximum the platform supports then a separate server must be deployed. The HP DL120G7 would be used for this and will support 500 concurrent one-X Portal users.

Note: When deploying a Primary and Secondary server both servers should use the same server model. E.g. both servers should be the DL 360G7 or the DL 120G7, they should not be mixed.

- IP Office Server Edition - Expansion Server
    - o HP DL120G7

    When used as a Linux Expansion System the HP DL120G7 supports:

    - o 500 IP Phones
    - o 125 SIP/H.323 Trunks
    - o 128 Conference Channels

Model #	Order Code	Description	Application	RAM	CPU	Power Supply	RAID
HP DL360G7	270393	DL360G7 SRVR IPO R8.1+ SE Primary	Primary or Secondary	12GB	Dual Quad Core	Hot Swap	Yes
HP DL120G7	270395	DL120G7 SRVR IPO 8.1+ SE EXP	Primary or Secondary or Expansion or one-X Portal	12GB	Single Quad Core	Single	N/A

2.2   IP500 VCM 32 V2 Base Card/IP500 VCM 64 V2 Base Card

These cards are functionally the same as the existing IP500 VCM 32 and IP500 VCM 64 base card respectively. However, they do not enable support for 12 Avaya IP endpoints when installed in an IP Office Essential Edition, IP Office Preferred Edition or IP Office Advanced Edition system.

Using VCM32v1 and VCM64v1 with R8.1
- SME editions
    - o The VCMs will work as-is and will include 12 IP endpoint licenses.
- Server Edition
    - o 12 IP endpoint licenses will be included locally on the IP500v2 expansion systems. These 12 IP endpoint licenses will not be available on the primary server for centralized management; they will need to be managed locally

Using VCM32v2 and VCM64v2 with R8.1
- SME editions

- o The VCMs will work as-is but will *NOT* add the 12 IP endpoint licenses
  - With Server edition
    - o The VCMs will work as-is but will *NOT* add the 12 IP endpoint licenses

Using VCM32v1 and VCM64v1 with R8.0
- No change

Using VCM32v2 and VCM64v2 with R8.0 or earlier
- A future service pack will be required for the SW to recognize the v2 versions of the card

3 IP Office Licensing Changes

3.1 Upgrade License 6

Existing systems being upgraded to Release 8.1 will require an appropriate upgrade license.

Note: An IP Office R8 system with Essential Edition functioning but not enabled with the required Essential Edition license key will have all telephony functionality disabled after the R8.1 upgrade.

It is important to verify the license information prior to upgrading. If Essential Edition is not visible in the license summary, then purchase and install an Essential Edition license prior to attempting the R8.1 upgrade.

3.2 Avaya Softphone License

This new license can be used to enable use of the Flare Communicator for IP Office application for a user who is otherwise not licensed for Flare Communicator for IP Office through their user profile. This allows the use of Flare Communicator for IP Office on IP Office Essential Edition mode systems and with user profiles other than Office Worker and Power User.

4 IP Office Server Edition

Solution Overview
 IP Office Server Edition has been specifically designed to address up-to a 1000 users on a single site, and also accommodate companies with up-to a 1000 users across 32 locations.

The top two requirements that the majority of the midsized enterprise customers are looking for in their unified communications solutions are TCO and simplicity. IP Office has show-cased the best total cost of ownership (TCO) advantage compared to competition including one of the simplest solutions to deploy, and manage.
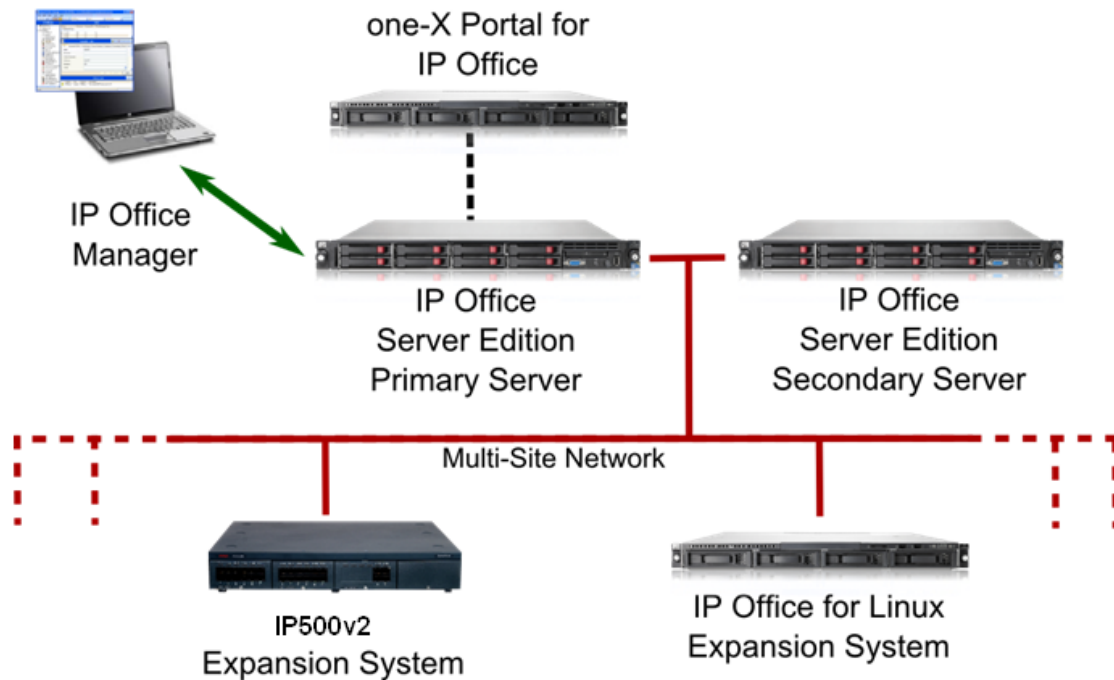
The Primary Server running the Avaya IP Office R8.1+ Server Edition Linux Software is the main and the only mandatory component required for the IP Office Server Edition to work. This server runs IP Office for Linux software as well as VoiceMail Pro and one-X Portal.

A secondary Linux server can be added for additional scalability and/or resiliency. Resiliency is the ability to provide backup for IP phones, Hunt Groups and Voicemail in the event that the Primary Server fails. There is no backup solution available for the one-X Portal.

The IP Office Linux expansion system can be added for additional scalability as can the IP500v2 expansion system, which can also be used to provide support for analog/digital stations and trunk ports.

A separate one-X Portal server must be deployed when there is a need to support more than 200 concurrent one-X Portal users.

Note: The Avaya IP Office Customer Call Reporter (CCR) is not supported with Server Edition.

Solution Capacities
A maximum of 32 systems are supported in the Server Edition Network:

- 2 Core Servers (Primary/Secondary), each up to 500 IP phones (+ 500 backup)
- 30 Expansion Systems (IP500v2 or Linux)
- Up to 1000 total users/phones (on servers and/or Expansion Systems)
- 200 one-X Portal users (500 when on separate server)
- 100 Voicemail channels
- 4096 Conference channels (128 per server or expansion system)
- 250 SIP trunks per Server, 125 SIP trunks per Expansion System

- Analogue/TDM trunks, Analogue & Digital extensions on IP500v2
- Up to 1000 Active VoIP calls (direct or non-direct media)
- 10 Receptionist users (SoftConsole application), attached to Primary server only

Solution Components – Primary Server

The Primary server is the essential solution component of Server Edition; it must always be present in the network.
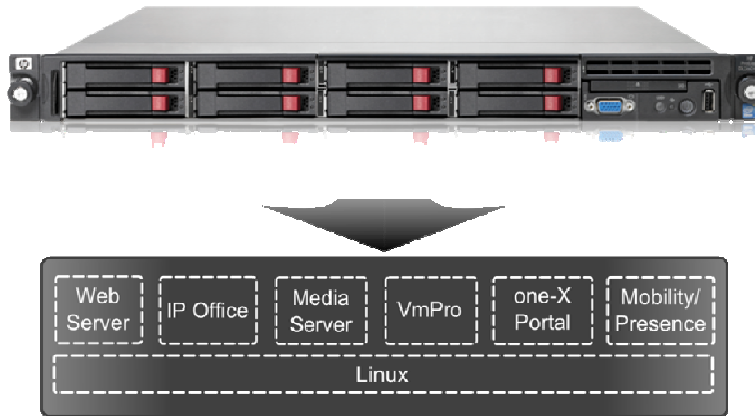
The Primary server provides:

- Integrated unified communications server:
    - Feature server (IP Office)
    - Media server (Jade)
    - Messaging (Voicemail Pro)
    - Productivity and Mobility (One-X Portal)
- Solution management web portal
- License server
- All native Linux applications

Note: Server Edition is not supported in a Virtual Environment in release 8.1. It is on the roadmap for a future release.

The Primary Server is supported on Avaya supplied platforms. It uses industry standard Commercial off the shelf, rack mount PC server hardware.

Two options are available, the HP DL360G7 and the HP DL120G7.

- HP DL360G7 with Dual Quad Core 2.4GHz CPU, 12 GB RAM, hot swap PSU & hard drives
- IP focused telephony capabilities (HP DL360):
    - 500 users/phones (H.323, SIP, IP DECT, Wi-Fi, SIP ATA)
    - 250 registered SIP trunks (also H.323)
    - 500 users/phones in failover (H.323)
- 100 Voicemail channels
- 200 active one-X Portal for IP Office users
- 128 Conference channels (ad-hoc and meet-me, 2 x 64)
- Solution management web portal

- HP DL120G7 with Single Quad Core 3.1Ghz CPU, 12 GB RAM, single PSU & hard drive
  - HP DL120 supports: 250 users, 40 Voicemail channels, 100 one-X Portal for IP Office users

Regardless of which server is used the maximum number of phones supported in the Server Edition network remains at 1000 users.

Solution Components – Secondary Server
It is also possible to have a secondary server as part of the solution. The secondary server can be used to increase the capacity and to provide solution resilience. It can be deployed at the same location as the Primary server or can be installed at a remote location.

When a Secondary Server is deployed it should be the same server platform as that used for the Primary Server.
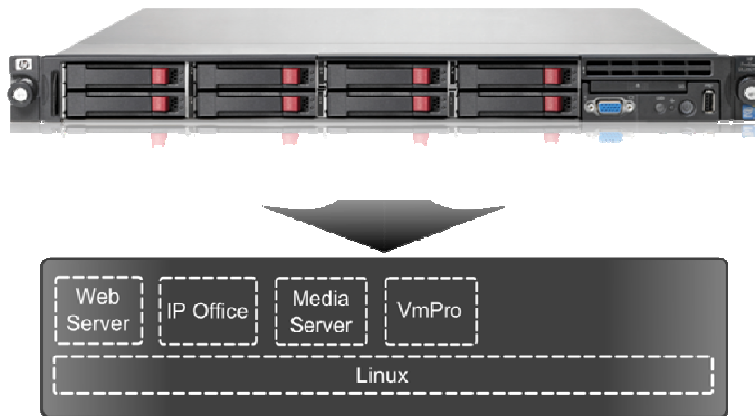

The Secondary will automatically backup the Primary server phones and in addition the Primary will back-up the Secondary's. It also provides backup for hunt groups and Voicemail Pro. There is no backup option for the one-x portal.

- Secondary Server – optional component that adds capacity and solution resilience
- New technology platform, same as Primary Server
- Automatically provides backup to Primary Server
- Local or remote location
- Additional 500 user/phone capacity, as well as backup for Primary or Expansion System phones/users*
- Additional 250 SIP/H.323 trunk capacity
- 128 Conference channels, 64 party maximum
- Redundant messaging – full capacity
- Reduced capacities for HP DL120G7 platform

Note: IP Phone backup is only supported for Avaya 16xx/96xx H.323 endpoints only.

Solution Components – IP Office for Linux Expansion System
The IP Office for Linux Expansion System is an optional component in the Server Edition network. It is primarily used to support remote locations but can be installed locally. It uses the same Server platform as the lower capacity Primary Server, the HP DL120G7.
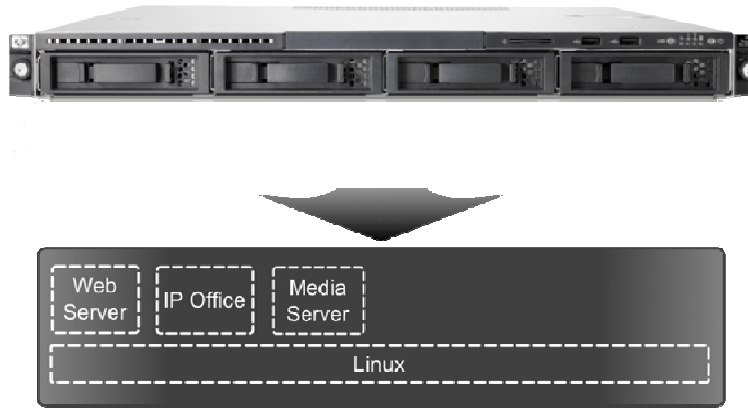
- IP Office for Linux Expansion System – optional component to support remote locations
  - Same as the smaller server platform: HP DL120G7 with single quad core CPU, 12 GB RAM, single PSU & hard drive
- Centrally managed
- Centrally licensed
- Comprehensive survivability
- IP focused telephony capabilities:
  - 500 users/phones (H.323, SIP, IP DECT, Wi-Fi, SIP ATA)
  - 125 registered SIP trunks (also H.323)
- 128 Conference channels, 64 party maximum
- Users/Phones* can be backed up to Primary or Secondary Server
- Local management access for 'rainy day'

Note: IP Phone backup is only supported for Avaya 16xx/96xx H.323 endpoints only

Solution Components – IP500v2 Expansion System
The IP500v2 Expansion system can be used to support remote locations or can be used as a gateway. For existing customers who already have IP500v2 and want to migrate to the Server Edition solution they can retain all of their current hardware.*

Note: UCM and ETR cards are not supported when the IP500v2 is used as an expansion system in a Server Edition network.

- IP500v2 Expansion System – optional component to support remote locations or gateway operation
- Utilizes the IP500 V2 platform, including expansion modules
- Adds to solution capacity if required
- Centrally managed/licensed
- Supports up to 384 IP, Analogue and Digital endpoints.
- Supports IP, Analogue and TDM trunks:
  - SIP and H.323 (up to 125)
  - T1/E1/PRI (up to 8)
  - S_o/T_o BRI (up to 16)
  - Analogue (up to 204)
- 128 Conference channels, 64 party maximum
- Users/Phones* can be backed up to Primary or Secondary Server

Note: IP Phone backup is only supported for Avaya 16xx/96xx H.323 endpoints only.

Solution Components – one-X Portal for IP Office Server
When more than 200 one-x portal users are required (more than 100 if using the HP DL120G7 as the Primary Server) then the one-X Portal must be installed on a separate server. The same HP DL120G7 platform used for the Primary or Linux Expansion systems is used.
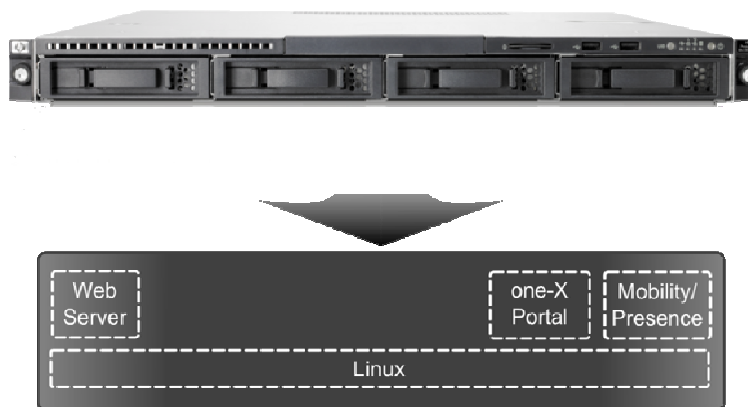

- one-X Portal for IP Office – optional component for increased one-X Portal user and call processing capacity
- Moves processing from Primary to separate server
- Up to 500 one-X Portal users

Administration
All administration is focused on the server management web portal, termed Web Control. Web control is secure so we only allow HTTPS connection.
There is a single user account "Administrator", the password can be changed (Administrator in default) but the username cannot be changed.

Please note that the "Administrator" password MUST be the same on all nodes on the network, otherwise any upgrade will fail.
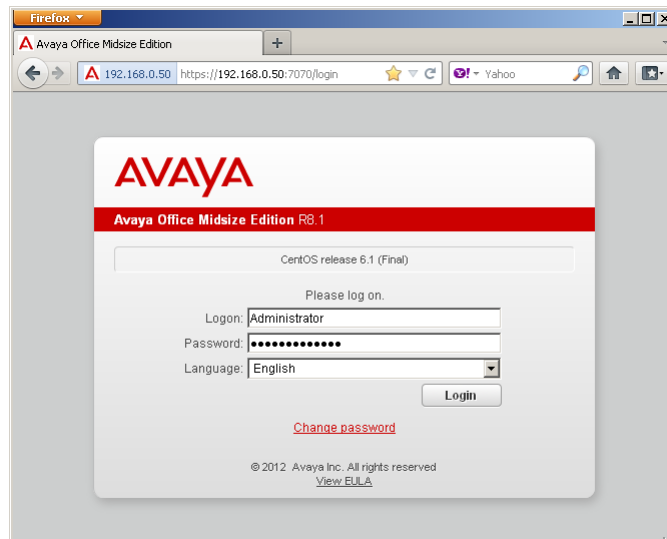
The interface is available in 9 languages:
* English, German, Italian, Spanish, French, Portuguese, Dutch, Chinese (simplified), Russian

From web control you can install, configure, upgrade, backup, get alarms and logs and download client application software.
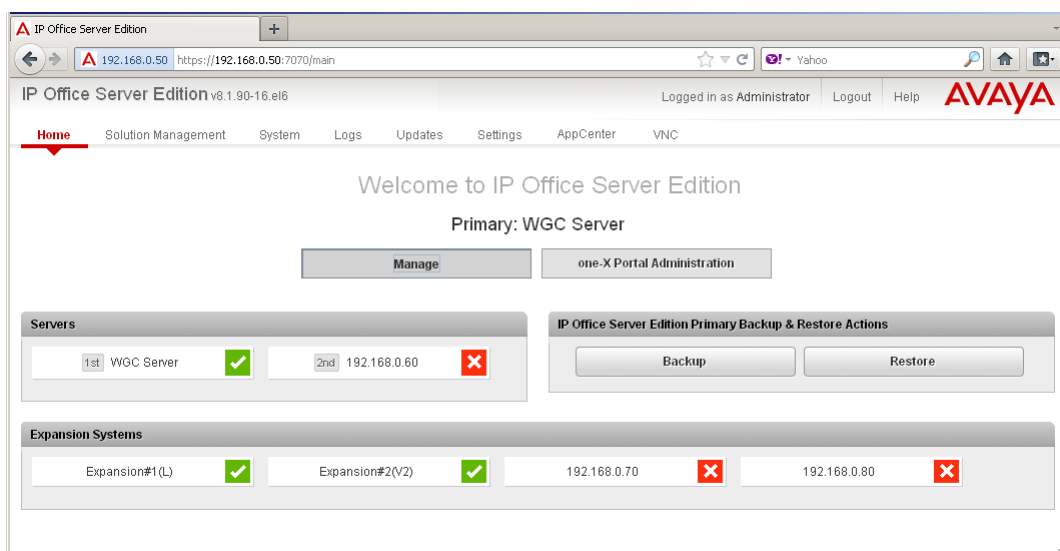
You can start and stop the IP Office, Voicemail Pro and one-x portal services as well as being able to shut down or reboot the server.

One-x portal Administration can be launched and backup and restore is available.

Web control provides solution administration on the Primary and the Secondary server.

IP Office Manager – Server Edition Mode
The Server Edition solution is managed using the Avaya IP Office Manager operating in a new enhanced mode of operation – Server Edition.

The solution is managed as a single entity; the Manager connects to the Primary server but will load the configurations of all systems that are part of the Server Edition network. Both online and offline operation is supported.

The Manager can either be launched from the management web portal or directly. When running the application directly it will start up in Standard Manager Mode and will automatically change to Server Edition Manager when connecting to a Server Edition network.

When you start to configure the systems you will see it is almost the same as managing a standard IP Office system. This reduces the training that is required and retains existing IP Office expertise, if you can manage an IP Office system then you can manage a Server Edition solution.
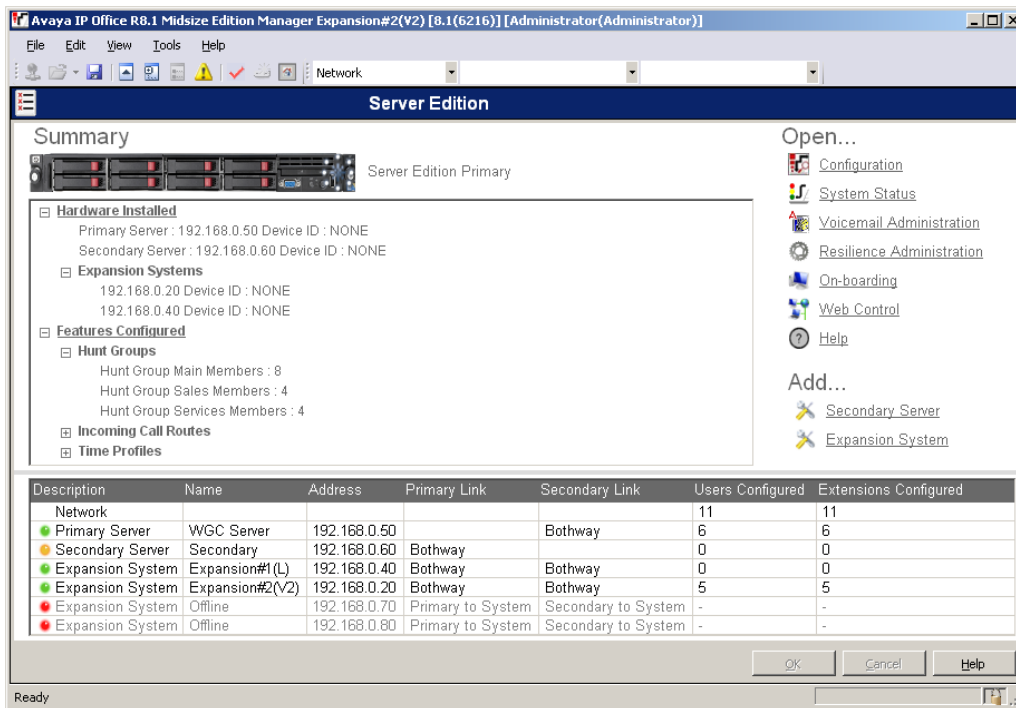
The solution view is the landing page on start up, it provides a high level inventory and management status. A coloured icon next to each system identifies its current status, green is device online, yellow means the configuration loaded is an offline configuration and red means there is no configuration for the system loaded even though the solution configuration includes an entry for that system. Red may also appear if the system is not currently contactable.

There may at times also be a grey icon to indicate that there is no current connection to the server, for example a configuration may have been loaded but the system is no longer detected on the network, perhaps caused by a system being rebooted.

From this page there are links to modify the configuration, launch the voicemail pro client and make changes to resilience settings.

You can also add and remove devices from the solution. All systems should be added to the solution from here, you cannot manually add systems in to the network.

From the Solution view page you can either click on Solution or an individual system in the list and then click on configuration, this will open up the navigation pane on the left hand side, this will be familiar to you as the same navigation pane that you see when administering a standard IP Office system.

The Navigation Pane is split into a number of areas. The top area is User, Hunt Groups, Short Code, Incoming Call Route, Directory, Time Profile, Account Code and User Rights, these are all solution wide. Any configuration that is created at this top level is shared across all systems in the network.

Note: Dial short codes are not shared across systems and will be unique to each device in the network.

Underneath this area you will see the configurations from all of the systems in the network. Any items configured at this level are unique to that device only and will not be shared. The tree structure is very similar to the existing Manager.

Hunt Groups can only exist on the Primary server and are created at the top level in Manager. They are all multi-site network groups and can contain users from any system in the network. Hunt Groups can be backed up on the Secondary server

The system directory is now centralized for ease of management. The secondary server and expansion systems use the Primary server as the source of the system directory. The overall directory capabilities and capacities remain unchanged.

When Server Edition Manager starts up and connects to the Primary server it loads all configurations that it can. If it cannot find a system online it will offer the user the option of loading the offline configuration for that system.

You can go through all the configurations making any changes and when you save your changes you will something like the picture below, where it shows you which configurations have been changed and what the next actions are.
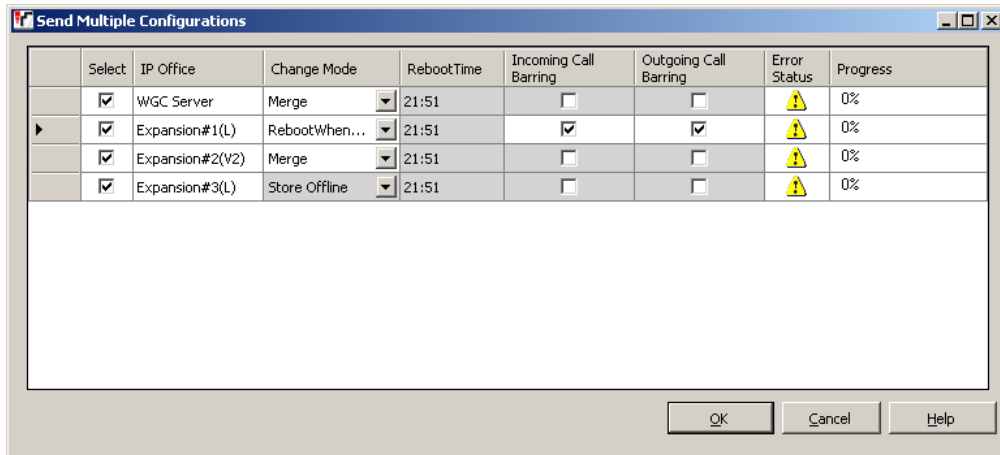
A complete configuration file set is saved on the Primary server so when a device that was offline is back online if changes were made to the offline configurations it will ask you if you want to update the configuration for that system.

You can either retain the configuration on that system or replace the configuration with the one that is stored on the Primary server. This would be the same mechanism that is used to resolve any local changes that have been made, for example changes made in a rainy day scenario.

The Server Edition Manager can also create/load/edit/save a complete offline 'file set'. Saving a file set creates a cfi index file plus a copy of all of the configuration files.

Please note that connectivity to each server and expansion system is required from the Server Edition Manager PC.

IP Office Manager Templates
A new feature in manager is Templates. They allow you to create a template from an existing configuration item to re-use at a later date. A good use of this is creating users.

By default all new systems in the Server Edition network, including IP500v2 expansion systems, have no users until you create them. Using a template you could create a user, add some button programming and other settings and then export this as a template. You can then create new users from this template, when you create the users you can either create a single user or you can create a range of users.
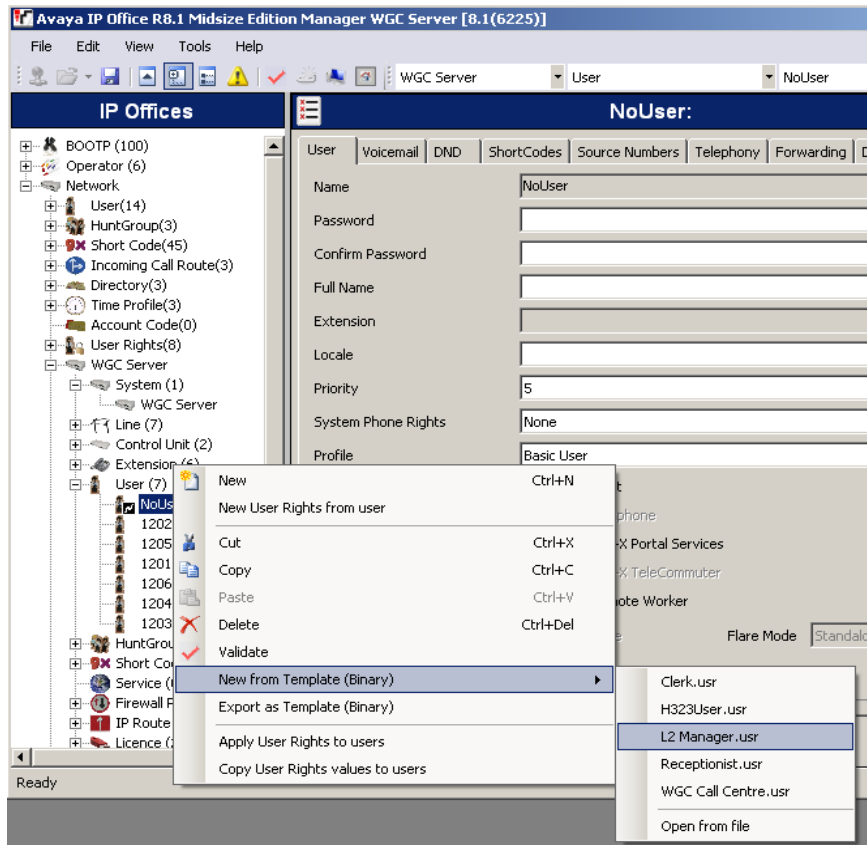
Once they are created you would need to change the name and extension number so that they are unique but you wouldn't need to make any other changes to the settings.

Templates are saved on the Primary server so they can be used from any PC that you are using, you do not need to worry about having to use the same PC you used to create the template.

Adding Devices to the Server Edition Network
Secondary server and expansions systems can be added at any time by clicking on the relevant Add option in the Server Edition Manager.
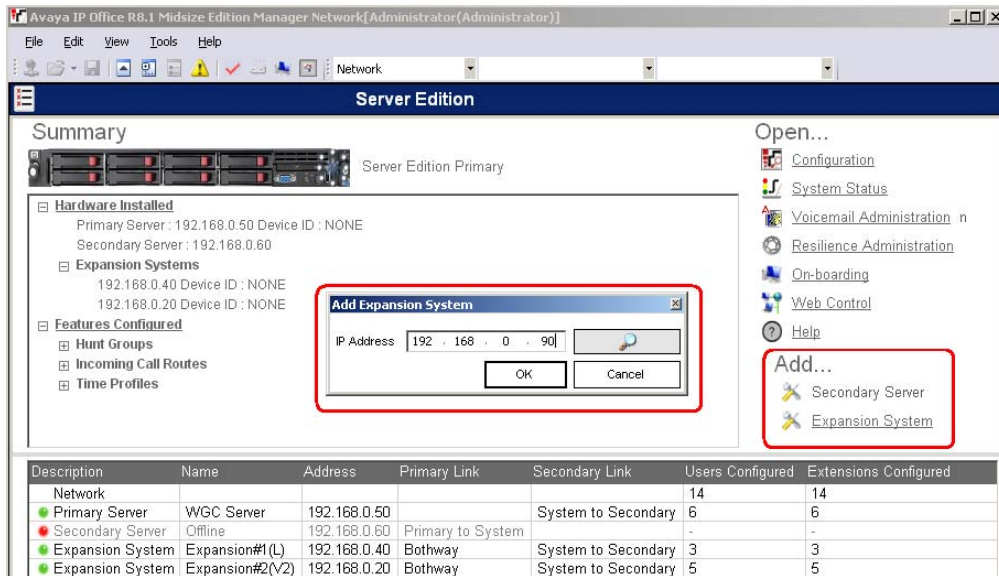
You can manually enter the IP address or can search on the network to discover the system. If it cannot find the system online it will give you the option of running the offline configuration tool to create a system.

The systems you add to the network do not have to be running in Server Edition mode but they must be running 8.1 software, any Branch, Norstar or Partner version systems are ignored.

You do not need to apply a software upgrade license if adding an IP500v2 as the system will obtain all licenses that it needs to operate from the Primary server once it is added to the network.

When adding an existing IP500v2 device to the network the configuration of that system would normally be defaulted, however there is also an option to retain the configuration when adding the device to the network.

Some changes will be made to the system, for example it will setup the Voicemail access, it will delete any existing SCN trunks and add a new trunk to the Primary and Secondary server if present, hunt groups will be deleted as these can only exist on the Primary server so will need to be added to the system again.

IP Office Manager Installation
IP Office Manager can be installed in two ways; using the traditional 8.1 Admin DVD or it can be installed using the Admin Lite package which can be downloaded from AppCenter in the Primary Server web control.

The Admin Lite package is around 100MB in size and has slightly reduced functionality over the full admin DVD installation. It does contain the binaries necessary to upgrade the IP500v2 and associated expansion modules but it does not contain any system files, these are things like the phone firmware packages.

Because of this the Admin Lite version of Manager cannot be used to re-create SD cards; this option will be greyed out in the Manager menu. Other than that it is a fully functioning version of Manager. Installing Admin Lite will also install the SSA and System Monitor applications.

Server Edition Resiliency
IP Office resiliency can be divided into three distinct categories. The primary server and secondary server can each support up-to 1000 users in resilient mode

Note: The Primary and Secondary servers can be co-located or can be on separate locations to support Geo-Redundancy.

1. **Hardware Resiliency**
   o RAID support
   o Dual PSU on Avaya sourced HP DL360G7
2. **Users and Application Resiliency**
   o VoiceMail Pro server – Primary + Backup in 1+1 redundant active/passive configuration. Manual or auto failback control (auto is new for R8.1)
   o IP Phones – 1:1 resilience to backup IP Office. Manual failback control (Phone reset). Avaya 16xx/96xx H.323 phones only. Note Expansion systems (gateways) cannot act as backup nodes for the Linux Servers
   o Hunt groups - 1:1 resilience to backup Server. Auto failback control (device rediscovery – idle group)
   o Inter IP Office device links – Multi-Site Network (SCN) backup. Double star. 1:1 resilience. Auto failback control (device rediscovery)
   o Inter IP Office device links – PSTN backup. M:N resilience via Alternate Route Selection (ARS). Auto failback control (link availability)
   o Trunks – M: N resilience via ARS. Auto failback control (trunk availability)
   o Incoming Call Routes – Incoming Call Routes are common to all devices hence persist on user failover

3. **Trunk Resiliency**
   o PSTN Back-up

By default resilience is setup between the Primary and Secondary server when it is present. The secondary will backup the Voicemail, Hunt groups and users from the Primary, and the Primary will backup the users from the Secondary.

Any IP phones on expansion systems are not backed up by default. Clicking on the Resilience option in Server Edition manager will allow you to setup the IP phone resilience options. Phones from each expansion system can be backed up by either the primary or the secondary, it is not possible to split them between servers.
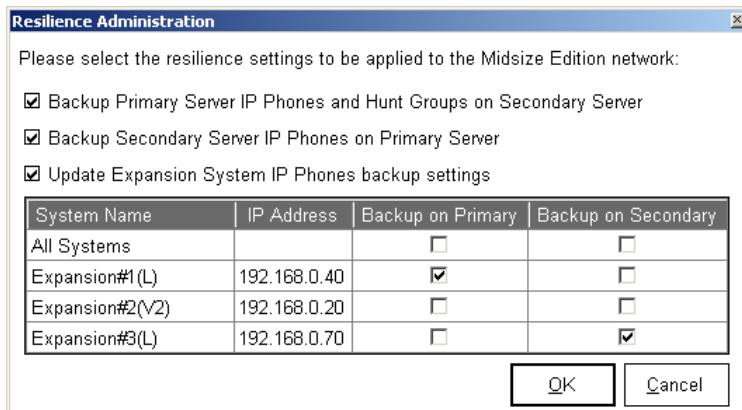
The messaging resilience is fixed and is only available when the Secondary server is present, no other Voicemail backup options are supported in this release.

To allow configuration of systems when in rainy day Standard IP Office Manager can be used. As the systems in the network will be under Server Edition control, and be secure, changes must be made to the security settings to change configuration access from being secure.

Licensing
A new system software license called Server Edition is required for each system (server or expansion) in the Server Edition network. Each instance of this license provides:

- Features from Essential Edition
- Features from Preferred Edition
- Centralized Voicemail Pro
- 2 ports of Voicemail Pro
- Unlimited SCN (multisite networking) channels

Note: Advanced Edition (Customer Call Reporter) is not supported on Server Edition.

The feature Key Serial Number (System ID) used by the Linux servers is derived from a combination of server hardware parameters and is a 40 character string.

IP Office Server Edition supports centralized licensing. All the user specific and system specific licenses can be managed from the Primary Server that also acts as the centralized licensing server.

License	Allocation	License Location
Server Edition	1 per server or expansion	On Primary server
Avaya IP Endpoint	1 per H323 or SIP extension	On Primary server [Note 2 & 7]
Third Party IP Endpoint	1 per H323 or SIP extension	On Primary server [Note 7]
Power User	1 per user	On Primary server [Note 7]
Office Worker	1 per user	On Primary server [Note 7]
Receptionist	10 per solution	On Primary server [Note 1]
SIP Trunk Channel	Per trunk channel	On Primary server [Note 7]
UMS Web Services	1 per Hunt Group	On Primary server [Note 4]
Additional Messaging Ports	1 per additional VM channel	On Primary or Secondary server [Note 5 & 6]
Messaging TTS Professional	1 per VM Pro port	On Primary or Secondary server [Note 6]
Additional PRI Channels	Per trunk channel	On IP500 V2 Expansion System

CTI Pro	1 per system (Server or expansion)	On associated device
CTI Wav users	1-40 per system	On IP500 V2 Expansion System [Note 3]
IPSec Tunnelling	1 per expansion	On IP500 V2 Expansion System [Note 3]

- Note 1 – SoftConsole could be attached to any system in the solution, but its SCN operation is limited. To aid simplification and reduce inconsistency, it is constrained to the Primary server only when used with Server Edition.
- Note 2 – The recognition of VCM-implied IP Phone licenses shall be supported for the existing VCM modules. The new VCM32v2 and VCM64v2 do not provide any IP Phone licenses.
- Note 3 – Feature not supported on Linux IP Office.
- Note 4 - UMS Web Services license is the only mechanism to enable UMS features for Hunt Groups (IMAP, Exchange Integrations). Hunt Groups cannot be made Power Users.
- Note 5 – The displayed license name shall not be changed: This currently indicates 'Preferred Edition Additional Voicemail Ports'.
- Note 6 – Voicemail Pro license allocation is unchanged from R8.0; all licenses required are to be administered on the local server. For Server Edition this will be the Primary and Secondary when it is used to provide Voicemail resilience.
- Note 7 – License can be also administered and used locally on the Secondary and Expansion. For customers who already have IP500v2 systems that they migrate to Server Edition expansion systems some of the existing licenses can stay on the IP500v2. The licenses on the IP500v2 cannot be added to the central pool of licenses on the Primary Server.

IP Office Server Edition Unsupported Licenses
The following is a list of licenses that are not applicable or supported with IP Office Server Edition:

- Advanced Edition-CCR Agent and Supervisor (CCR not supported on Server Edition)
- Teleworker, Mobile Worker and Avaya Softphone licenses
- Embedded Messaging Ports (Embedded messaging not supported on Server Edition)
- VoiceMail Pro TTS (Generic/Scansoft), Networked Messaging, Database interface, VB Script (Not supported on VoiceMail Pro for Linux)
- All Avaya Office Aura Edition (B5800) licenses
- Various legacy licenses (CCC, Phone Manager, VCM channels, Mobility)

Installations and Upgrades
When designing a Server Edition network the Primary server must always be present, any other component is optional. A Secondary server can be added at any time, this can be used just to provide resilience or can be used to increase capacity and provide resilience. The Secondary server can either be installed at the same location as the Primary or can be located in a remote location.

TDM/Analog and Digital capabilities can be added by using an IP500v2 as an Expansion system. Remote locations can use the IP500v2 or Linux Expansion systems.

The network topology is a star or a double star when the Secondary Server is present.

A single DVD distribution contains the software components for the whole solution, this is used to load the software on all of the different servers (Primary, Secondary, Expansion or separate one-x portal server). Avaya servers come with this software pre-installed.

The IP Office for Linux servers (Primary, Secondary, Expansion and one-X Portal) support a web based ignition process to personalize them for their intended use.

The Ignition process is a one-off web based wizard to set the server environment.
It consists of a number of screens for the End user license agreement, the server type, the network settings, time and companding settings and Linux root password.

The Ignition process will run automatically the first time that you connect to Web Control on a new server. This is only run once and cannot be re-run unless the software is installed again.

Each device in the Server Edition network must run the Initial Configuration Utility or ICU. The Initial Configuration Utility is contained within the 8.1 IP Office Manager (both lite and full installations). It runs automatically when adding a device to the Server Edition network but can also be run manually from Manager | File | Advanced menu. It makes a number of behind the scenes configuration changes to the system being added to the network to enable it to operate as a Server Edition device.

- Simple, single screen utility to get system ready for Server Edition (must be run on all devices)
- Designed for installers without detailed IP Office knowledge
- Requests basic LAN and Primary/Secondary server info
  - Pre-populates with existing data
- Behind the scenes configuration includes security, SCN trunks, users, extensions, voicemail, directory, time, ARS, short codes etc

Upgrades for Server Edition are expected to follow the normal IP Office release cycle. It will be a single iso distribution for the complete solution; it is a large file in excess of 2.5GB.

The Primary server is upgraded first, followed by the Secondary and then all expansion systems. The aim is to keep all of the components in the network on the same software level. Systems can also be upgraded and patched separately if required.

The Primary server can be upgraded in 2 ways:

1. Locally by booting the server with the latest DVD in the PC and then select the upgrade option.

2. Remotely the Primary server can download the iso from an ftp/http or https file server. This is done from the solution management page in Web control. The good thing with this method is that the upgrade package can be downloaded at any time as it has no impact on the server operation. Once the download is complete you then go back to the solution management page and select Update Primary, followed by Secondary and then expansion systems.

Remote upgrade via http proxy is not supported

- Local upgrade options:
  - Boot server from DVD and select upgrade option
  - No other options at present
- Remote upgrade options:

- o iso must reside on ftp/http/https file server
- o Use Web Control Solution Management tab to specify URL [(http|https|ftp)://<user>:<pwd>@server:port/path-to-iso-file]
- o Select 'Save File'
- o Once file is saved to server disk, select 'Upgrade Primary'
- On completion, Secondary and Expansions can be upgraded, again using Web Control Solution Management tab
- Secondary and Expansions can be upgraded at any time to bring a new system to the same software level

IP500v2 systems would normally be upgraded from the Solution Management page in Web Control but can also be upgraded using IP Office standard manager if required. This would require that the Manager application was installed from the full Admin DVD to ensure that all system files are present and can be uploaded.

Linux system components can be patched using the Web Control updates tab if necessary and in specific circumstances only.

Only Web Control on the Primary server has the Solution Management page.

Caveats
There are a number of things to be aware of when using IP Office for Linux components.

- There is no administrable firewall so if required an external firewall would be needed (for example connecting LAN2 onto a public network)
- There is no external Music On Hold input or Door Relay
- IP Office for Linux does not support IPSec, L2TP or PPP
- There is no T.38 fax or fax transport support, G.711 is recommended
- IP Office for Linux does not run in a Virtualized environment, this is something will look to address in a future build

There are also a couple of things to note with regards to running Voicemail Pro in a Linux environment, this is not specific to just the Server Edition solution, these same caveats exist when running Voicemail Pro on the UCM or Applications Server.

- There is a limit of 490 users when using Exchange Integration, this is due to a Microsoft MAPI connection limit
- There is no support for ContactStore, Networked Messaging, VB scripting, Database integration, UMS Web Voicemail, Web Campaigns and VRLA
- The UMS Web Services license is supported as this is the only mechanism to enable UMS features for Hunt Groups (IMAP, Exchange Integrations). Hunt Groups cannot be made Power Users

5   Endpoint Additions

The Avaya Flare Communicator is the only addition to the endpoint range. Support for all other endpoints remains the same as R8.0

5.1   Avaya Flare Communicator

The Avaya Flare Communicator for Windows and the iPad tablet are collaboration software clients that deliver an innovative interface for real time communications. It enables users to handle phone calls, instant messages, presence, enterprise contacts and launch e-mail, all from the same interface.

Flare Communicator delivers the intuitive graphical design of the Avaya Flare® Experience - spotlights, media menu, notification bar and contact cards that provides a new level of collaboration for users.

The Windows and iPad client provide a feature set derived from the menus outlined below and are dependent upon the mode and the availability of the one-X portal server.

Flare Communicator for Windows Feature Support

Flare Communicator for Windows will support the following real time communication and collaboration features for IP Office:

Contact management features
- Local Outlook, IP Office System and Personal contacts
- Index, scroll through contacts
- Filter contacts
- Click to add contact
- Search for enterprise contacts and click-to-call from search results

Voice call features
- Make, Receive, and Disconnect calls (2-party)
- Mute, Hold, and Resume calls
- Manage up to three concurrent voice calls
- DTMF mode
- Message Waiting Indicator
- Dial into a voice conference bridge

Collaboration features
- View telephony state and user presence of IP Office users
- Set your telephony and user presence
- IM between IP Office soft clients (2-party)
- Escalate from an IM message to a voice call
- Launch emails from a spotlight or contact card

Windows Feature Support Summary

Windows Feature	Flare- Full Mode	Flare- Lite Mode
Basic telephony	Yes	Yes
P2P Video Calling	No	No
IPO System contacts	Yes	Yes
IPO Personal Contacts	Yes	No
Enterprise contact Search	Yes	Yes
Call Logs	Yes(Stored at IPO)	Yes(Application Level)
Dialing Rules	Yes	Yes
MWI	Yes	Yes
Instant Messaging	Yes	No
Presence	Yes	No
Simultaneous Mode	Yes	No

Operating System and Device support
Flare Communicator for Windows will be supported on the following Windows versions:
- Microsoft® Windows® 7 Enterprise Edition
- Microsoft Windows 7 Ultimate Edition
- Microsoft Windows 7 Professional Edition
- Microsoft Windows XP Home Edition (32-bit) with Service Pack 3 or higher
- Microsoft Windows XP Professional Edition (32-bit) with Service Pack 3 or higher

For full system requirements please refer to the Flare Communicator User and Installation manuals available at support.avaya.com.

Flare Communicator for iPad Feature Support
Flare Communicator for iPad will support the following real-time communication and collaboration features for IP Office:

Contact management
- Local iPad contacts and IP Office System and Personal contacts
- Index, scroll through contacts
- Filter contacts
- Search for enterprise contacts and touch-to-call from search results

Voice calls
- Mute, Hold, Resume
- Manage up to two concurrent voice calls
- DTMF mode
- Dial into a voice conference bridge

Collaboration
- View telephony state and user presence of IP Office users
- Set your telephony and user presence
- IM between IP Office soft clients (2-party)
- Escalate from an IM message to a voice call
- Launch emails from a spotlight or contact card

iPad Feature Support Summary

| iPad Feature	Flare- Full Mode	Flare- Lite Mode
Basic Telephony	Yes	Yes
P2P Video Calling	No	No
IPO System Contacts	Yes	No
IPO Personal Contacts	Yes	No
Local iPad Contacts	Yes	Yes
Enterprise Contact Search	Yes	Yes
Call Logs	Yes (Local)	Yes(Local)
Dialing Rules	Yes	Yes
MWI	No	No
Instant Messaging	Yes	No
Presence	Yes	No
Simultaneous Mode	Yes	No

Operating System and Device support
Flare Communicator for iPad can be downloaded from the Apple iTunes store and is supported on the following Apple iPad tablets and Operating System versions:
- iPad 2 with iOS 5.0+

For full system requirements please refer to the Flare Communicator User and Installation manuals available at support.avaya.com.

5.1.1 Solution Architecture

The Flare Communicator for IP Office communicates with both IP Office and one-X Portal to provide communication and collaboration features. Telephony features such as make/receive calls, hold/un-hold, mute/un-mute, DTMF, MWI are provided by the IP Office and UC features such as IM and presence are provided by the one-X Portal server.
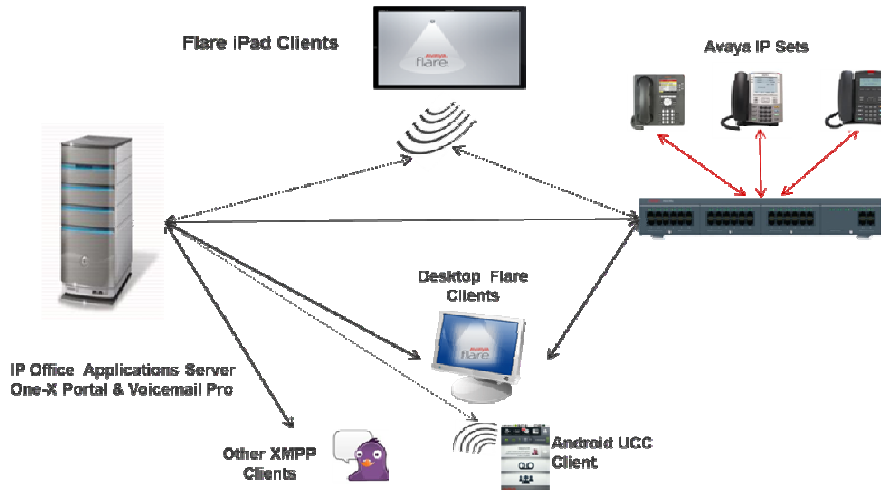
5.1.2 Licensing and Modes

| IP Office Edition	Add-on License	Feature-set
Essential Edition/ Preferred/Advanced	Avaya Softphone license	Lite Mode
Preferred/Advanced/Server Edition	Office Worker or Power User	Full Mode

6 IP Office Enhancements

6.1 IP Office Web Manager

The following additional features have been added to IP Office Web Manager:

System Backup and Restore
The Web Manager can now be used to backup and restore the contents of the
/system/primary folder on the System SD card. The backup and restore location can
be either a folder on the local PC or the **/system/ backup** folder on the System SD
card.

Note: The Backup feature will not be available until the next service pack release.
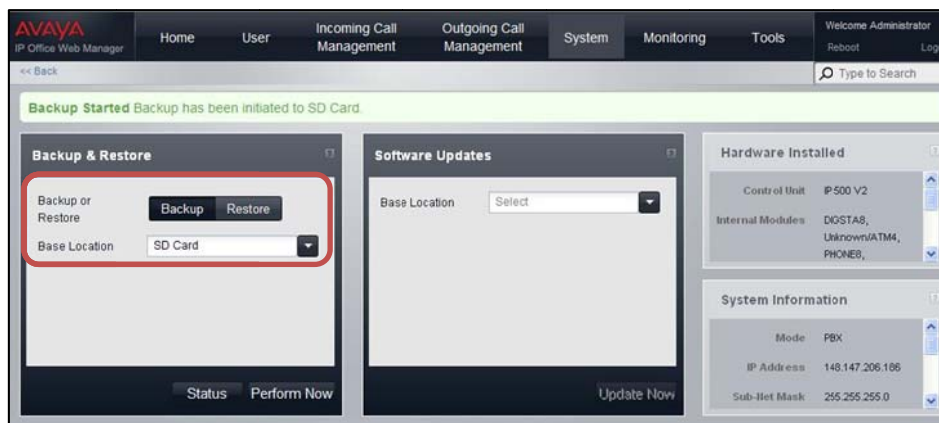
System Upgrade
The Web Manager can now be used to perform a software upgrade of a system,
including all the binary files for the system hardware, supported phones and files
used by web management itself. It can do this from the set of memory card files
installed with IP Office Manager.
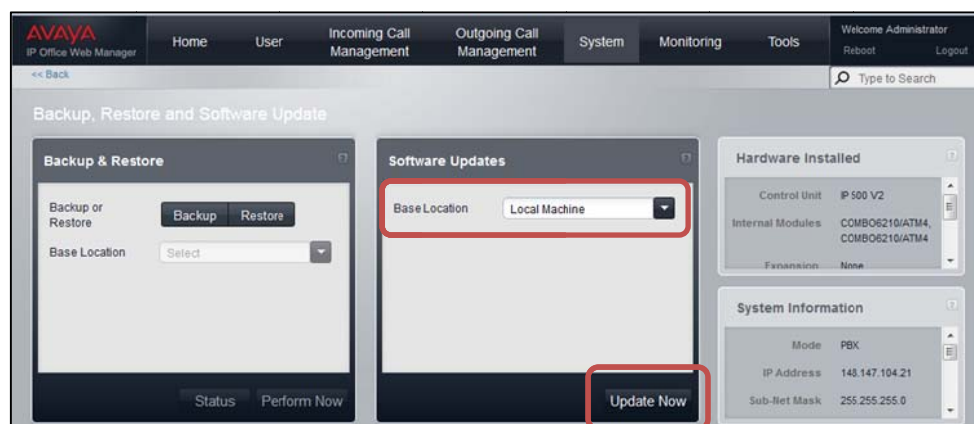
Additional Configuration Fields
Additional configuration fields have been added to IP Office Web Manager to align its
configuration capabilities with the fields offered by the traditional IP Office Manager.
A full summary of the fields supported by either application is included in the IP Office
Web Manager documentation.

On-Boarding - Supporting the introduction of the new Avaya IP Office Support Services maintenance services

IP Office Web Manager is used for the registration of systems for support services. It is also used to upload an on-boarding file to configure an Avaya SSL VPN link for remote support of the system. This feature is supported for all IP Office modes supported by IP500 V2 and Linux based IP Office systems except Avaya Aura Edition.
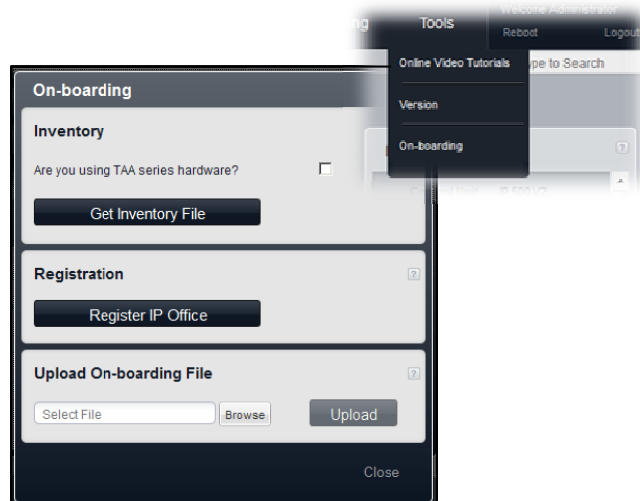
For further details see the SSL/VPN Remote Access section of this document.

Brower Support Changes

IE8 Support for Web Manager is best effort for Essential and Business Editions due to limitations in accessing large amounts of data. Basic Edition remains fully supported.

6.2   Telephony Features

For a full description of the new Telephony features and their configuration and use please refer to the IP Office R8.1 Manager (10.1) manual at support.avaya.com

Context Sensitive Conferencing

Enhancements have been made to the way calls are placed into conference when a 'Conference' button or 'Conf' option is pressed on a telephone. This new behaviour applies to 1400, 1600, 9500 and 9600 Series telephones.

Previously, pressing 'Conference' would put the user's current and all held calls into a conference. That included any calls that had been put on hold pending transfer by pressing 'Transfer'. The result of pressing 'Conference' on the telephone now depends on which call is currently highlighted on the phone display and whether there are or are not any calls held pending transfer.

Context Sensitive Call Transfer
Enhancements have been made to the way call transfers are handled. These new behaviours apply to 1400, 1600, 9500 and 9600 Series telephones.

- Calls and Button Status Indication - The status indication for a call on hold pending transfer has changed to differentiate such calls from standard held calls.

- Switching Between Calls - It is possible to switch between a connected call and a call on hold pending transfer without losing the context of the call being transferred. The transfer can then be completed or cancelled. Transfers can be initiated and completed without requiring any additional call appearance buttons. As part of this, when a user already has a call or calls on hold, they can now put their current call on hold pending transfer even if there are no free call appearances available.

RTP Port Number Range
The minimum gap between the minimum and maximum port numbers has been reduced from 1024 to 254.
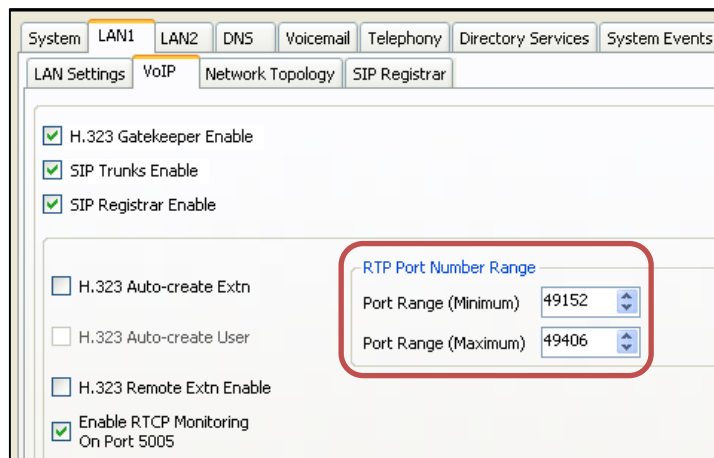

Log Stamp Function
Via either a programmable button or short code (default *55*), end users can now insert a line into any monitor trace. The line includes a 3 digit log stamp number that is also briefly displayed on the user's phone display. This allows users to indicate when a problem occurs and lets the system maintainer more easily locate the relevant section of the Monitor trace.

When a Logger Stamp is generated (defaulted short code of *55 will be set to Stamp Log on default 8.1+ systems) it inserts a stamped line in the Monitor and at the same time it issues a transient display "Log Stamped#nnn" on the invoker's phone display. If the feature was invoked via a programmable button, the button's LED (if present) will be flashed for approximately 1.25 seconds (not on SIP phone models).

The nnn is a rolling number 000 - 999 that starts at 000 on system start-up and increments each time a stamp occurs. It resets to 000 if the system is restarted.

Auto Intercom Call Controls
Many Avaya phones support the use of automatic intercom functions to alert an idle phone with 3 beeps and then automatically connect the call. For this release various controls have been added that allow the use of automatic intercom to be restricted on a per-user or system-wide basis. Where these controls are used, any attempted automatic intercom calls are turned into normal calls.
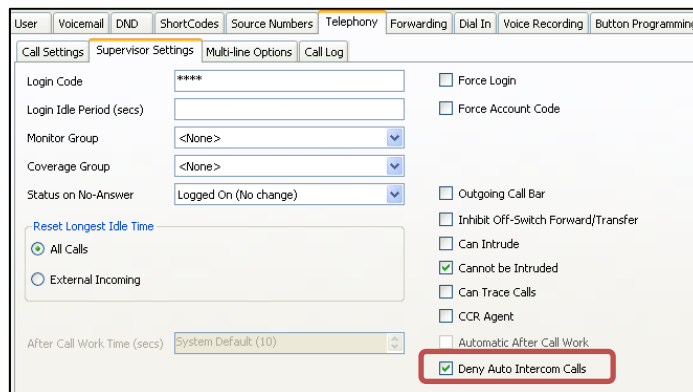

6.3   Customer Call Reporter (CCR) Enhancements

Scheduled Reports for the current day
Currently reports can only be scheduled to capture data up to the previous day. For example, a report to capture 1 day will report on data captured the previous day. A report to capture 2 weeks will report on data captured in the last 2 weeks up to the previous day. A report to capture 4 months will report on data captured in the last 4 full months.

To support the reporting of data captured up to the day the report is scheduled to run, the automatic reporting will now support offer the option to include the current day.
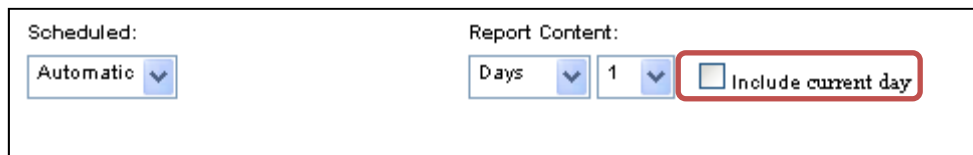
When 'Include current day' is selected the data collected will include the day the report is scheduled to run.

CDR Answered event renaming
The "Answered" event has been renamed "Connected". Everywhere the "Answered" event is shown in a CDR report it will be changed to "Connected". This includes:
- "Answered" event becomes "Connected" event
- "Answered" filter becomes "Connected" filter

The "Overflowed Answered" and "Enquiry Answered" events and filters are not affected by this change in naming.

To complete the changes around the naming and filtering associated with events in the CDR reports the following events previously not available as filters will now be selectable:

- Holding
- Enquiry Answered
- Not Answered

Changes to duration of events for CDR

Currently the "Answered" event in the CDR has an associated duration that shows the time left in the call at the moment the "Answered" event is received. The duration now represents the time the call was in the state represented by the event.

The duration of the call is a useful piece of information that would be lost if the duration of the "Answered" state just represented the time spent in that state so a new event has been added to capture a newly answered call. The new event is called "New Call" and it will replace the "Answered" event capturing the beginning of a new call. The Queue Time is included when a "New Call" event is reported.

The "New Call" line information is in bold to clearly show that important information in the CDR. The filter options for the CDR now include the "New Call" event. When this filter is selected, only the "New Call" events will be shown in the CDR.

The following Call Scenario shows an example of the changes:

1. Incoming call to Hunt Group rings for 7 seconds
2. Agent answered the call and talked for 6 seconds
3. Agent puts the call on hold for 8 seconds
4. Agent talks for 6 seconds
5. Agent puts the call on hold again for 6 seconds
6. Agent talks for 9 seconds
7. Caller hangs up

Previous CCR Releases				CCR 8.1			
Queue Time	Agent	Duration	Status	Queue Time	Agent	Duration	Status
00:00:07	Benoit	00:00:35	Answered	00:00:07	Maxime Thibault	00:00:35	New Call
	Benoit	00:00:08	Holding		Maxime Thibault	00:00:06	Connected
	Benoit	00:00:22	Answered		Maxime Thibault	00:00:08	Holding
	Benoit	00:00:06	Holding		Maxime Thibault	00:00:06	Connected
	Benoit	00:00:09	Answered		Maxime Thibault	00:00:06	Holding
					Maxime Thibault	00:00:09	Connected

Naming and statistic changes

- The Account Codes have been added in the fields selectable for the Calls Dataset for Custom Reports

- The "Call Interactions" statistics from CDR and CSR have been removed.

- Outbound calls in CSR and CDR have been renamed to "Initiated Outbound Calls"

- Outbound calls in ATC have been renamed to "Connected Outbound"

- Overflowed Answered and Overflowed Lost calls are shown as Answered and Lost calls when CSR is targeted at agents. Previously, those calls would never be reported against agents

CCR DDI Report

A new custom sample report will be available to customers who want to create a report that shows the same information that was captured in the CCC Incoming DDI Summary report.

The custom report will include variables that will allow the customer to change the range covered by the Answer times being reported on. The report interval will be set to "Daily". All statistics in the report will be for Incoming external calls only.

The template for this report will also include the interface to provide an Answer Threshold.

Support for the 96x1 Telephones
CCR will support agents using the new 96x1 sets. The following sets are part of the 96x1 family: 9608, 9611, 9621 and 9641.

Client Browsers on Windows 7
Browser access for IP Office Customer Call Reporter is now supported on Windows 7 (Windows 7 Professional, Enterprise and Ultimate - 32 and 64 bit).

Client Browser Support Changes
Safari is no longer supported as a browser for CCR.

Wallboard – Manual Layout and Font Sizing
A new configuration section has been introduced on the main Background and Content Settings dialog.
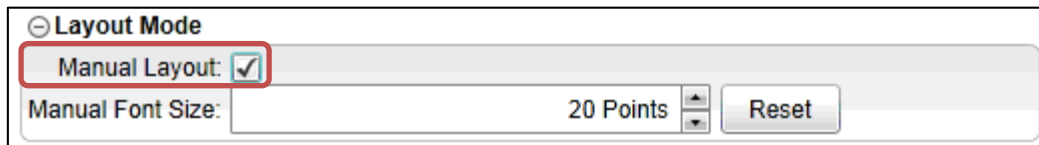
For new and existing wallboards, the checkbox is unchecked and the other controls are disabled. This means that the wallboard is in 'automatic' layout mode. Checking the checkbox enables 'manual' layout mode, which allows each wallboard cell to be manually placed and sized on the canvas, although there is no initial change of position or size for existing cells.

Cells are positioned via the existing striped grip bar at the top of the cell and resized using a 5px wide 'hot' border that is available around the sides and corners of the cell. These change the mouse cursor shape and allow the cell to be resized in one direction from the sides, or both directions from the corners, by dragging.

The size and position of each cell is recorded along with the wallboard definition for later reloading. The wallboard cells can overlap, the layering or z-indexing of the cells will also be recorded, so that they are shown in a front-to-back style according to the content.

Wallboard – Bookmark and Auto-Login

A new icon is available on the footer bar to enable the wallboard to automatically come back online after a power outage or a reboot.

This will allow the current wallboard to be added to the IE favourites or Firefox bookmarks in such a way that the login process can be avoided for that wallboard. When Safari or Chrome browsers are used, the icon will be greyed out. Firefox 4 is the minimum version required when using the "Add Favourite" feature of the Wallboard.

When clicked, the icon will show the browser's standard dialog that allows a URL to be added.
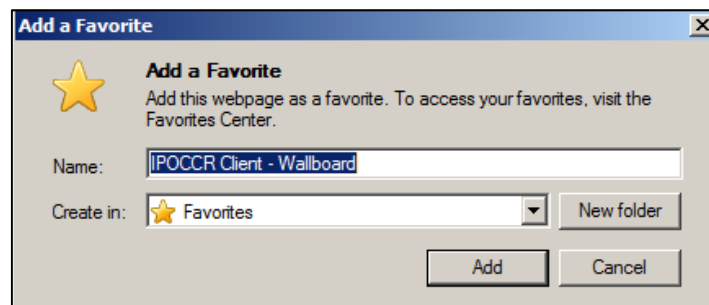
This URL will contain a GUID that is unique to that wallboard user. It will be named according to the wallboard name. Once the link is available, navigating to it will enter the wallboard without a login process.

This allows for the link, or a command file containing the link, to be added to the Windows Start-up folder so that the wallboard can automatically start when the system is rebooted (when combined with Windows auto-login) or the user logs in. That link can also be used as the "Home" location when the browser is launched.

Wallboard – Statistics values on Leader Board
The Leader Board table feature in the wallboard has been further enhanced by allowing you to show the actual value of the statistic associated with the agent.

A new configuration setting has been added to the Leader board. Two radio buttons will allow the wallboard user to show or hide the statistics data associated with the agents. By default, the statistics will be hidden when a new leader board is created or when upgrading leader boards.
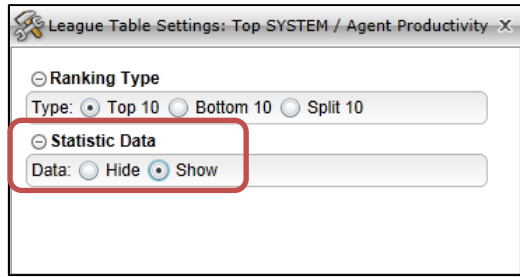
When configured to show statistics, at the right-hand side of the league table cell, agent statistic values will be displayed. This is an addition for the top, bottom or split modes of the league table.

Because the statistic is taking space on the leader board, the agent name will be truncated to 13 characters (from 15) when the statistics are displayed. The format of the statistics is the same as in the other feature cells showing the same data (for example, the answer time is in seconds with 1 decimal rounded to the nearest decimal).

Wallboard – Configurable update interval

A new control in the Animations Settings dialog controls the update interval for all statistics on the wallboard, in all different types of cells including the monitor table cell.
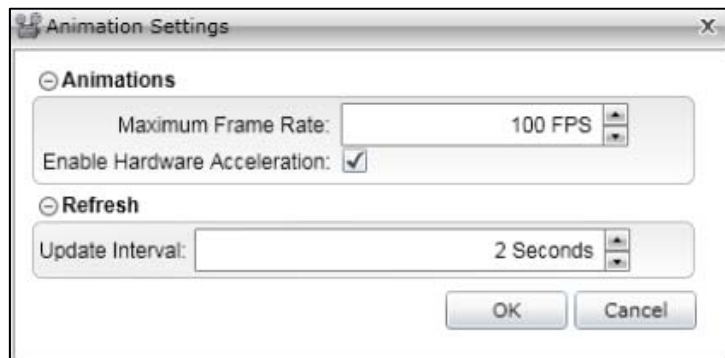
The range is 2 - 60 seconds, with a default of 2 seconds for new and existing wallboards. This matches the 2 second update currently used for all wallboards, so effectively the updates can only be slowed for systems with less available CPU.

This setting is saved on the PC hosting the browser session and not with the wallboard user.

Wallboard – Monitor Table
A new type of cell will be available in the Extras section of the wallboard configuration accordion.
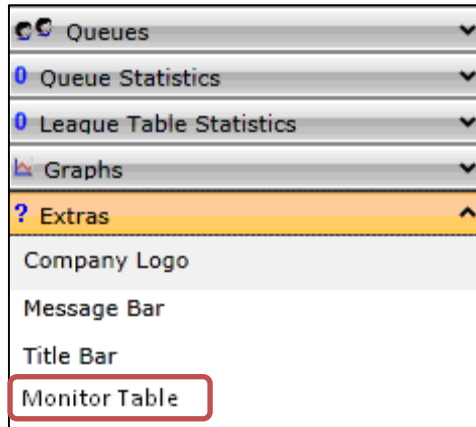
The Monitor Table option, when dragged onto the wallboard, creates an empty table structure with a header banner. Initially the dropped table will occupy one row and column and would be empty. Statistics and queues can then be dropped onto this cell. For each additional queue a new row will be created and for each additional statistic a new column will be created. The sizing of the table will follow the same rules as a cell group.

Queue	Agents Present	Average Ans %	Calls Waiting	Longest Wait Time
HG 862	77	73%	29	00:00:20
HG 863	23	93%	6	00:01:22
HG 864	96	25%	17	00:00:52
TOTAL	195	100%	52	00:01:22
SYSTEM	94	3%	57	00:00:52

Each intersection will show the statistic value, like in the Monitor views. Background colours for alarms, red, yellow and green will be applied, but value transition effects will not. If at least one non SYSTEM queue is added to the table, a TOTAL row will be added after the last non-SYSTEM queue.

The total for each statistic will be calculated the same was as for the Monitor views totals. When the last non-SYSTEM queue is removed, the TOTAL row is also removed. The values will be formatted according to the same rules as those in the Monitor, accounting for the language selected for the wallboard session.

6.4   VoiceMail Pro Enhancements

Security Enhancements
A new feature has been added in the VoiceMail Pro client to allow the administrator to enforce a minimum password length for mailboxes (Users or Hunt Groups).

Each TUI will have its own minimum password length. The IP Office TUI will have a range of 0-15 and the default will be 0. The Intuity TUI will have a range of 2-15 and the default will be 2.
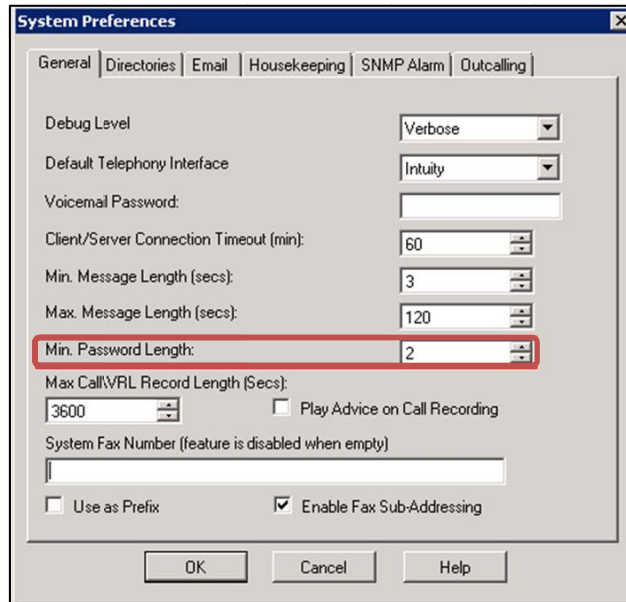
In addition to the existing reasons when a mailbox user must change their password, a user will be asked to changed their password when they attempt to login via the TUI when:
- The minimum length is changed to a value that makes the current password shorter than the configured value
- The password for the user is changed via Manager and has a length shorter than what is set in the VoiceMail Pro Client

If the VoiceMail Pro server is in Distributed Mode, then the option to set the password length will be grayed out, as the actual password length for mailboxes in this environment is controlled by the Centralized Voicemail.

If an 8.1 VoiceMail Pro Client is connected to a VoiceMail Pro Server that is running a previous version (8.0 or earlier), then the Minimum Password Length field will be grayed out in the General tab.

Primary/Backup Enhancements
Configurable Primary Server reinstatement methods
In previous releases, the only way an administrator had to reinstate a standby Primary Server was by manually shutting down the Backup Server that was active at the time. An administrator now has the option to configure the how the reinstatement will operate.

To configure the failback operation, an administrator connects to a Client and selects the configuration item from the File Menu.
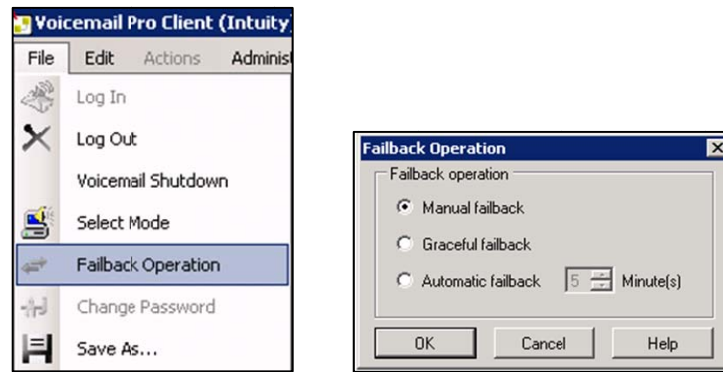
Three modes of failback operation are available: Manual, Graceful or Automatic

- The Manual failback is the default mode. A Primary Server will only become active when the Backup system becomes inactive.
- The Graceful failback will occur when there are no calls connected to Voicemail.
- The Automatic failback will occur when there are no calls connected to Voicemail or when the configurable timeout has expired (0 to 60 minutes).

Synchronization of Primary and Backup Servers
Registry/configuration settings, Variables, SMTP Mappings and Alarms are new items in the list of elements that can now be synchronized.

Still excluded from the synchronization are elements that are specific to the platform where the Voicemail Server is running such as directories, backup options (because it includes directories), IIS Port settings and Campaigns.

These variables and their content are synchronized every 30 seconds or sooner as long as all systems must are upgraded to 8.1.

Backup Sever Administration
It is no longer possible to configure a standby Voicemail Server with the Client. If a Voicemail Server is in standby mode, either a Backup system or a Primary system that is waiting for an active Backup Server to shut down, all configuration options will be greyed out when the Client is connected. The only exception to the above rule will be for elements that are not synchronized.

TTS support
UCM
In R8.0, TTS is only available in English on the UCM and is pre-installed. In 8.1 all the languages are supported on the UCM. English will still be the only pre-installed language but all other languages can be installed separately and are available via the new R8.1 TTS Language Pack DVDs.

Applications Server
In R8.0, TTS is available in all languages and are available via DVD packs (3). In 8.1 all the languages are still supported on the Application Server and there is no need to upgrade the languages when upgrading to R8.1.

A check will be in place to prevent the installation of 8.1 language packs which are needed for the UCM or Server Edition. The reason why the language packs for UCM

and Server Edition are not compatible with the Application Server is because the Application Server is currently running on an older CentOS version (5.7).

6.5   SSL/VPN Remote Access

The SSL VPN service provides secure tunnelling between the Avaya IP Office hardware installed at a customer site and an Avaya VPN Gateway (AVG) installed at a service provider site. This secure tunnel allows service providers to offer remote management services to customers, such as fault management, monitoring, and administration.
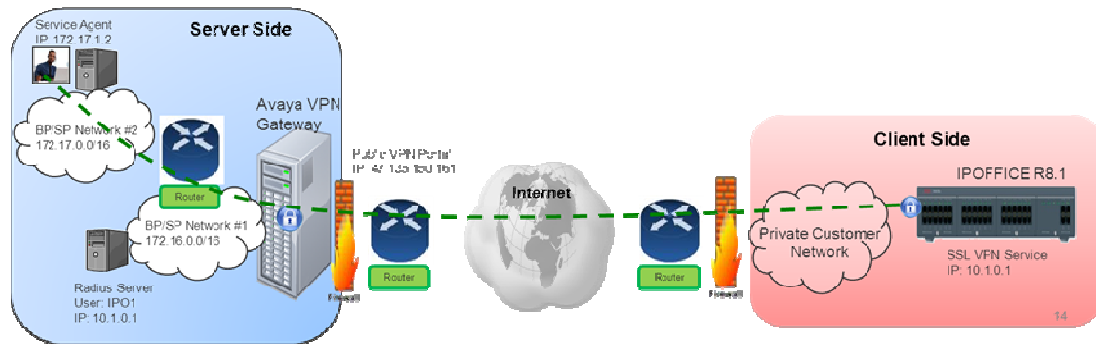
The SSL/VPN solution is a cornerstone element of the new IP Office Support Services maintenance offer, allowing Avaya to provide remote troubleshooting and technical support. Partners have the option of allowing Avaya to host the server side connection to the IP Office or they can choose to host the server side themselves, as part of their service delivery infrastructure.

Note: Please refer to the IP Office Support Services offer description and process training materials for details of the new IP Office Support Services maintenance offer.

Overview
The SSL VPN service provides an always-on connection to an AVG server. It provides administrators with the ability to:

- Forward traffic over the SSL VPN service using split tunneling routes and static routes

- Remotely monitor IP Office over SSL VPN service connected to an AVG server using System Status Application (SSA) or System Monitor

- Remotely manage IP Office systems using Avaya IP Office Manager or IP Office Manager for Server Edition

- Receive SNMP traps, syslog entries, and SMTP email alarms from IP Office over an SSL VPN service connected to an AVG server

- Enable and disable the tunnel using Manager or IP Office Manager for Server Edition

- Enable and disable the tunnel using short codes, auto-attendant, or set-based administration

- Run multiple instances of SSL VPN service concurrently

Operating modes

The SSL VPN service is supported on IP500v2 hardware operating in the following modes:

- IP Office Essential Edition

- Server Edition Expansion System
  - Server Edition Expansion System (V2), an IP500v2 expansion system
  - Server Edition Expansion System (L), a Linux expansion system

- IP Office Basic Edition

Further information

To install, configure, and administer the SSL VPN solution, you need to refer to the documentation for the Avaya IP Office system, the Avaya VPN Gateway (AVG, and the Avaya Identity Engines Ignition Server. In addition, you may need to refer to the documentation provided by other vendors to support the hardware and software used in your network infrastructure.

Avaya IP Office documentation
- *Avaya IP Office SSL VPN Solutions Guide*
- *Avaya IP Office Basic Edition – Web Manager*
- *Avaya IP Office Manager*
- *Voicemail Pro Administration*
- *Embedded Voicemail Installation Guide*

Avaya VPN Gateway documentation
- *Avaya VMware Getting Started Guide - Avaya VPN Gateway* (NN46120-302)
- *Avaya VPN Gateway User Guide* (NN46120-104)
- *Avaya VPN Gateway Administration Guide* (NN46120-105)
- *Avaya VPN Gateway BBI Application Guide* (NN46120-102)
- *Avaya VPN Gateway CLI Application Guide* (NN46120-101)

Avaya Identity Engines Ignition Server documentation
- *Avaya Identity Engines Ignition Server — Configuration Guide* (NN47280-500)

6.6   Audio Branding Experience Changes

The Avaya Sound Logo introduced with R8.0 was played on IP Office Management interfaces (IP Office Manager, VoiceMail Pro client etc.) and end-user UIs (one-X Portal, Outlook plugin etc.) each time they were started.

R8.1 incorporates changes to this experience for business partners and customers by:
- Restricting the Avaya sound logo to only 2 interfaces:
  - IP Office Manager (Administrator facing interface)
  - one-X Portal thin client (end-user facing interface)

- Restricting the number of times the sound logo is played to only once within 24 hours

> o For one-X Portal the sound logo will be played only once within 24 hours after a user successful logins. Any subsequent logins to the one-X Portal within 24 hrs will not replay the sound logo. Exception: Sound logo will be re-played within 24 hrs if one-X Portal server was re-started in that period.
> o Played only once within 24 hours at the start of the IPO Manager. Any subsequent restarts of the IPO Manager within the 24 hrs will not replay the sound.

6.7 Improved event delivery mechanism for Desktop Integrations

IP Office R8.0 introduced desktop integrations such as plugins for Microsoft Outlook and Salesforce.com. Due to the mechanism used (URL call-back) to deliver events from the one-X Portal server to the desktop plugins, these desktop integrations required opening firewall ports on the desktop side as well as giving administrative privileges to the plugins. This created supportability issues and troubleshooting problems.

In IP Office R8.1, the mechanism to deliver events from the one-X Portal server to the desktop integrations has been changed to use a WebSocket.

Avaya Flare Communicator/Avaya Call Assistant/Avaya IP Office Plug-In for Microsoft Outlook/Avaya IP Office Plug-In for Salesforce.com uses this WebSocket mechanism for communicating with one-X portal server over a TCP connection. This channel allows the clients to receive contact information, call logs, and presence information from the one-X Portal. The user must open port 8069 on the one-X Portal server for use by the WebSocket.

6.8 SIP Trunk Enhancements

The IP Office architecture brings the benefits of Session Initiated Protocol (SIP) to the enterprise customer through SIP Service Providers. To help enable the SIP Service Provider, Avaya offers a SIP Compliance Testing Program (GSSCP) that will validate the operation of the IP Office solution with the Service Provider's SIP trunk offering.

New SIP Trunk Capabilities

SIP From in Clear when privacy is requested
Many SIP Service Providers require that the 'From' field contain account information for outbound calls. IP Office will now send the Caller ID in the clear in the SIP 'From' header for outbound anonymous calls. The default of Send 'From' in Clear is disabled. This new capability is configurable on a per line basis.

SIP User-Agent and Server headers included to identify IPO in SIP trunk calls
An IP Office identifier will now be included in the SIP header. This addition will enhance troubleshooting capabilities when additional identification is required. The identifier will be configurable as the system administrator is permitted to enter identifying (User-Agent or Server) information into the SIP messages. User-Agent headers are generated for IP Office initiated messages such as INVITE, OPTIONS, CANCEL, etc. This feature will also support enhanced SIP Server header information in all 18x response messages such as Trying, Ringing, etc.

UPDATE without SDP for session refresh over SIP trunks
The addition of this new audit mechanism will validate that the connection is in place. If not, the IP Office will free the trunk, thereby improving network resource utilization. The IP Office can now negotiate RFC 4028 for session refresh over SIP Trunks. It can either be the refresher or will expect UPDATE messages from remote party, depending on negotiation. The session will be terminated if IP Office doesn't receive UPDATE/200 OK message for session refresh. In earlier IP Office releases, RE-INVITE messages were used as the refresher. IP Office 8.1 is now RFC 4028 compliant. By default, UPDATE Supported is not enabled and IP Office will send RE-INVITE messages for session refresh. If UPDATE Supported is Allow or Auto and the other party supports UPDATE (specified in the "Allow" header), IP Office will send UPDATE messages for session refresh.

From header shall be used by IP Office as calling identity whatever presence of P-Asserted-Identity (PAI)
Although Service Providers typically use PAI for Caller ID delivery, there can be situations where additional flexibility is required. IP Office provides an option to use the 'From' Header. The administrator will have the option of selecting which Caller ID information to use for displaying on the user equipment. By default, IP Office will display PAI Caller ID present in the sip / tel uri consistent with pre-R8.1 behavior. If the checkbox is set, the Caller ID present in 'From' sip uri will be used instead.

Line status mechanisms
Some Service Provider implementations utilize registration to maintain the status of lines instead of OPTIONS.
In IP Office 8.0, OPTIONS requests are sent to regularly check if the SIP Line is in service. With R8.1, it will now be possible to send frequent REGISTER requests to keep the line in service rather than using OPTIONS.

Fax G711 pass through mode including SG3
Super G3 fax machines utilize higher speeds than normal G3 or earlier fax machines. In order to broaden IP Office fax support, R8.1 will now support Super G3 fax transmission.
IP Office 7.0 added Fax Transport support for sending and receiving of faxes over G.711. IP Office, will now detect fax tones in G.711 calls between Super G3 fax machines.

Nonce caching for proactive inserting of SIP credentials in outgoing SIP requests
Currently, IP Office sends the Authorization/Proxy-Authorization only if the network specifically requests this for one IP Office request. In R8.1, IP Office will now cache the nonce received with the challenge or with the Authentication-Info header. IP Office will use the information for proactively inserting the SIP credentials in all the outgoing SIP messages.
The support of nonce caching will speed authentication, reduce network signaling traffic, and improve the efficiency of message handling by IP Office.

All outgoing SIP requests may be authenticated by SIP network with the exception of Cancel method
IP Office will now support additional levels of authentication by broadening the scope of message types that the IP Office will respond to.
All methods shall support presence of (proxy)-authorization headers except Cancel (RFC compliance). For short term, Invite, Re-Invite, Update, BYE shall support the presence of such headers. Before the introduction of these changes, IP Office did not support challenges for Update message.

Template support for new features included in SIP Trunk
Each of the new Manager configuration settings have been added to SIP Line templates in IPO 8.1.

7   Interoperability

With this release a number of interoperability scenarios with other Avaya products have been tested and will be supported going forward. The scenarios include:

1. IP Office 8.1 and Avaya Aura Communication Manager 6.2
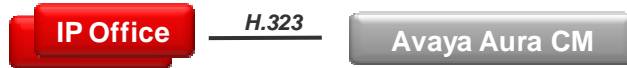
2. IP Office 8.1 and BCM 6.0

3. IP Office 8.1, BCM 6.0 and CS1000 7.5 with NRS
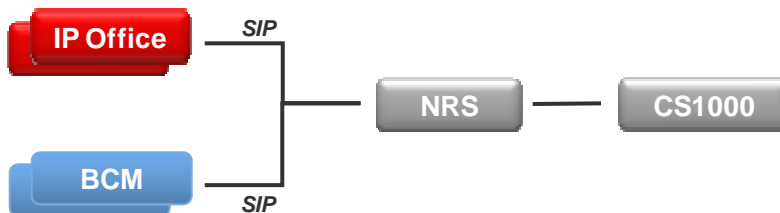
The IP Office 8.1 has not been tested in any configuration involving Avaya Aura Session Manager (SM).

IP Office & Communication Manager Interoperability
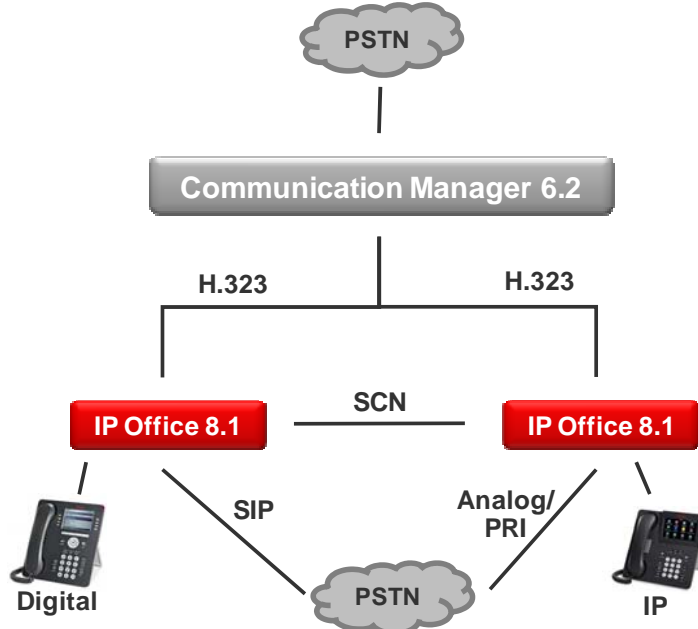
The H323 protocol is used for trunks between the IP Office nodes and the CM. The IP Offices are a network of SCNs and can use the advanced SCN feature set between each other.

- **Protocol Support:**
    - IP Office to CM: H.323
    - IP Office to IP Office: H323 - SCN Networking

- **Platform Requirements**
  - o IP Office
    - Release: IP Office 8.1
    - Edition: Essential, Preferred, Advanced and Server Edition
  - o Communication Manager
    - Release: CM 6.2
- **Centralized Voicemail**: Centralized Voicemail for all IP Office systems in the SCN network
- **Phones**: All phones supported on the individual call servers and releases including Avaya IP Phone(H323), Avaya Digital phones, BCM 7000 Series Digital phones, BCM1100/1200 Series IP Phones (SIP), DECT R4 and Analog phones.

The advanced feature set of SCN Networking is available between the IP Office nodes.

BCM and IP Office
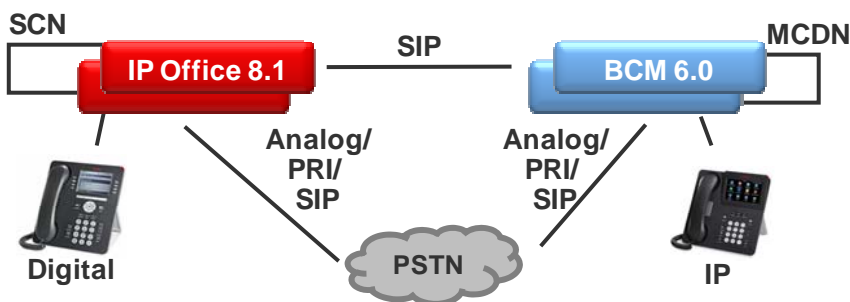
The SIP interoperability support between IP Office and BCM50/450 allows customers to migrate a network of BCM step by step to an IP Office SCN or Server Edition network.

- **Protocol Support:**
  - o IP Office to BCM: SIP
  - o BCM to BCM: SIP or SIP/MCDN
  - o IP Office to IP Office : H323 – SCN or SIP
  - o It is not possible to network IP Office and BCM via the MCDN or SCN protocols directly.
- **Platform Requirements**
  - o IP Office
    - Release: IP Office 8.1
    - Edition: Essential, Preferred, Advanced and Server Edition
  - o BCM
    - Release: BCM50 and BCM450 6.0
- **Centralized Voicemail**:
  - o The IP Office system may use a centralized Voicemail PRO system in the SCN network
  - o The BCM systems may use a centralized voicemail within the BCM MCDN network.
  - o Centralized Voicemail across IP Office and BCM systems is not supported.
- **Phones**: All phones supported on the individual call servers and releases including Avaya IP Phone(H323), Avaya Digital phones, BCM 7000 Series

Digital phones, BCM1100/1200 Series IP Phones (SIP), DECT R4 and Analog phones.

The advanced feature set of IP Office SCN Networking is available between the IP Office and BCM MCDN Networking features are available between BCM. Between the BCM and IP Office the standard SIP feature described below is supported.

IP Office, BCM and CS1000
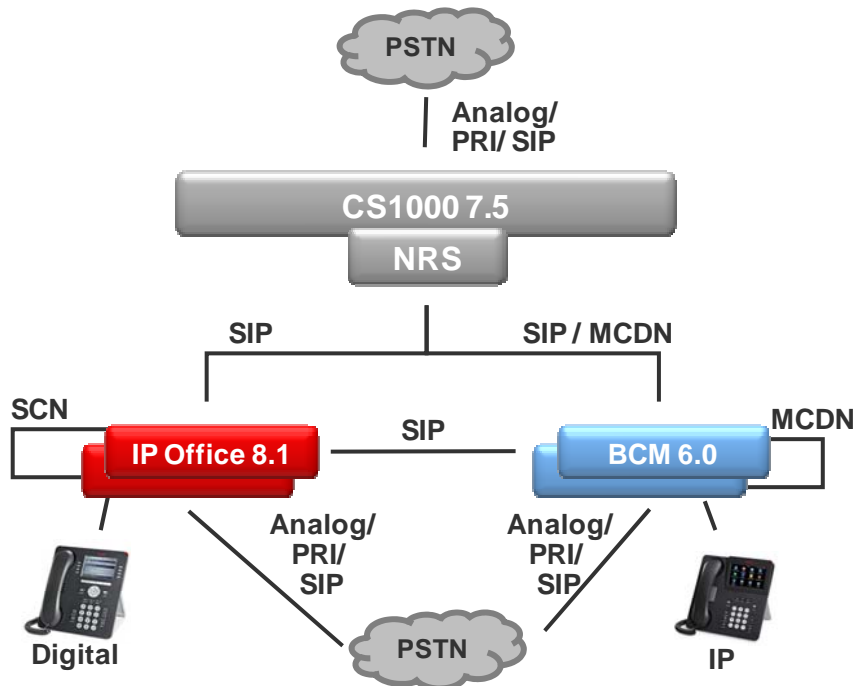
This configuration allows the migration of BCMs and CS1000s to the IP Office step by step by adding IP Office systems to it.

- **Protocol Support:**
    - IP Office to BCM: SIP
    - IP Office to CS1000: SIP
    - IP Office to IP Office: SIP or H323 - SCN Networking
    - BCM to BCM: SIP or SIP/MCDN
    - BCM to CS1000: SIP or SIP/MCDN
- **Platform Requirements**
    - IP Office
        - Release: IP Office 8.1
        - Edition: Essential, Preferred, Advanced and Server Edition
    - BCM
        - Release: BCM50 and BCM450 6.0
    - CS1000
        - Release: CS1000 7.5 with NRS
- **Centralized Voicemail:** Centralized Voicemail for all IP Office systems in the SCN network, BCM system may use centralized voicemail of the CS1000. IP Office system cannot use centralized voicemail of CS1000.
- **Phones:** All phones supported on the individual call servers and releases including Avaya IP Phone(H323), Avaya Digital phones, BCM 7000 Series

Digital phones, BCM1100/1200 Series IP Phones (SIP), DECT R4 and Analog phones.

8   Resolved in IP Office Release 8.1

These fixed issues will also be addressed in the R8.0 3Q12 Service Pack

Bug Ref	Component	Description of Issue
22631	CCR	ATC - Report returning error when run against customers database
20658	CCR	Call Summary Report in CCR 8.0.8.15 does not sort data in the ascending order of time intervals.
26437	Core Features	No response to a SIP "UPDATE" packet (MRDB00042077)
22123	Core Features	Transfer return over SCN not returning proper output for Hunt Groups
21199	Core Features	Calls transferred over scn dropped if the answering user transfers to another user with Announcements
25969	Core Features	Calls are disconnected for incoming calls to a T.38 Fax server after upgrade from R7 to R8
25722	Core Platform	FNE32 call to a busy extension causes a system reset
22932	DCP Terminals	DSS Module limit warnings when no DSS units are in use
27137	Manager	If you upload/change (with reboot) a pre 1Q12 config using the 1Q12 Manager CLI stops working.
25830	Manager	No "Voicemail Channel Reservation" options when a "R8+ Preferred Edition (VMPro)" license is present.
27141	One-X Portal	Unable to play vmails when user does not have a Trusted Source Number configured (i.e. "V202").
24326	One-X Portal	My buddy gadget: if I am logged in as user C I can initiate a call from extension B to extension A
23998	One-X Portal	The Outlook Plug-in does not display any Meeting information on a User's XMPP Presence
23973	One-X Portal	After 70 users had logged in additional users saw login errors then current users disconnected
22033	One-X Portal	One X portal outlook plugin is not tagging contact name to answered inbound calls or outbound calls
22239	VMPro	Exception in Talk Form causes application to stop when running on the Apps Server (8.0.8.62).

9   Known Issues

The following is a list of issues and workarounds, if available, that exists in this release of IP Office 8.1 software and where applicable will be addressed in a future release of software.

Bug Ref	Component	Description of Issue	Workaround (if available)
29126	Core Features	Call Listen audio is lost when second call comes into monitored extension and covers to voicemail	None
29127	Core Features	Teleworker configuration causes inconsistent results in certain configuration	Do not configure own extension as Teleworker number
29191	Core Platform	Locale for South Africa not accurate at all	Manually configure settings
29190	Manager	Server Edition Manager View options keep reverting back to default	Manually reconfigure settings
29188	Manager	8.1.39 Manager deletes id group settings in the SCN network if the network map is modified	The user should not use the Graphical Network view to change the layout, and make any changes if needed from the configuration only.
28675	Manager	Known Units discovery does not work	None
28401	Manager	Can't connect to an unsecure IP500v2 using secure Manager and connectivity to the unit is intermittently lost	Use unsecure option in Manager.
29480	Manager	Manager eventually stops responding when modifying 500+ ICR	When modifying the ICR then the configuration should be saved frequently and Manager restarted to avoid problem
28089	One-X Portal	Flare doesn't receive offline messages from one-X Portal	None
29198	Server Edition	Server Edition Primary reports of failure to upgrade using Web Control	Use Manager to complete upgrades of IP500 V2 Expansions
28963	Server Edition	NTP daemon needs restart when time correction exceeds the sanity limit(1000sec)	None
29259	Server Edition	ntp.conf doesn't contain the option 127.127.1.0 after fresh install	If a change is made to NTP options in Web Control, then the option 127.127.1.0 is added in ntp.conf
26661	Server Edition	The License Feature Key Grace Period Expired alarm is not cleared after putting back the original feature key	None
29235	Server Edition	Web Voicemail not working on SE if VM Provider IP address (127.0.0.1) is not set the same as LAN1	Set the one-X portal VMPro Provider IP address to LAN1 IP address of the VMPro server.

28805	Server Edition	Report of Certificate deleted from TCS after an upgrade	A workaround for this problem is to re-install the certificate via Manager->Security Settings->System->Certificates.
30820	SSL/VPN	The upload of the inventory file to the GRT site fails with a material code error	Open the inventory file in a text editor and manually delete the leading zeroes from element <Code>. For example <Code>000270393</Code> will be modified to <Code>270393</Code>. Save and redo the upload
27884	UCM	Web Control Home screen shows "Warning" about the password being default and should be changed.	None
28287	UCM, Apps DVD	Out of memory reported in IE8 after upgrading UCM Via Web Upgrade method	Restart browser or use IE9
29030	VMPro	Unable to modify the out-calling timeout using the VMPro GUI when the out-calling number is over 10 digits	Use TUI to set the timeout value
28939	VMPro	VMPro - Advice on Call Recording setting switched back on after upgrade	Turn off manually
28885	VMPro	Voicemail Pro Configuration Blank after upgrade	Re-import backed up modules manually
28755	VMPro	VM Pro upgrade fails if both WebVoicemail and Campaign Web Components aren't selected together"	Select both WebVoicemail and Campaign Web Components for installation
29161	Web Control Panel	If you uncheck the Enable Network Time Protocol option, hit save and then refresh the page, the option is checked again.	Uncheck Enable Network Time Protocol clears the NTP Servers field. This causes the NTP service to use local time instead.
29259	Web Control Panel	If you leave the Secondary Server with the default NTP settings and the NTP server is not contactable then the NTP service will not failover to use local time instead	To correct this fault, press the save button on the Data and Time section of Web Control-Settings.
28631	Web Mgmt	Fake path error displayed in Web Manager during on boarding	None

10   Technical and Upgrade Notes

The following notes provide upgrade summaries for each component affected by this release. Please refer to the relevant technical installation manuals for detailed upgrade steps and best practices for backup and restore facilities.

Before any upgrades of the IP Office commence the IP Office Release 8.1 Administration suite must be installed. Administration suite upgrades are supported from version 7.0, any version prior to this must be removed first before the Administration suite can be installed.

10.1   GA Software Versions

IP Office Core Switch 8.1(43)
IP Office Preferred Edition 8.1(0810) (also known as VoiceMail Pro)
Customer Call Reporter 8.1.8.16
One-X Portal 8.1.76(80)
IP Office Application Server 8.1.16(12)
Unified Communication Processor 8.1.80.9

10.2   Core Software Upgrade Summary

The IP500 & IP500v2 must be at version R7.0/R8.0 prior to upgrading to R8.1.

For example, if a system is at R6.0 then an R8.1 upgrade license needs to be applied and the system upgraded to R7.0 or R8.0. Once upgraded to R7.0 or R8.0 the system can then be upgraded to R8.1.

Note: No interim licenses are required for the upgrade other than the R8.1 upgrade license.

If running a software version older than 4.0 then please refer to Technical Bulletin 109.

10.2.1   Software Upgrade License Installation

To make for a smoother upgrade process it is recommended that you install your IP Office Release 8.1 Software Upgrade license (6) before you proceed any further. Although the key may not be recognized immediately by the system, dependent on the current software version you have, it will be recognized when you come to upgrade your system.

10.2.2   Unit Compatibility – Expansion Unit Interoperability

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

10.2.3 Phone Firmware Support

The table below lists the phone firmware versions that are supported by IP Office Release 8.1

Phone Type	Version
4610SW, 4620SW, 4621SW, 5610SW, 5620SW, 5621SW, 4625, 4601+, 4602+, 5601+, 5602+	2.9.1 (2.9 SP1)
4620 (Not 4620SW), 4601, 4602D, 4602SW, 5601, 5602D, 5602SW	2.3
4610SW, 4620SW, 4621SW, 5610SW, 5620SW & 5621SW VPN - Boot Code	2.3
4610SW, 4620SW, 4621SW, 5610SW, 5620SW & 5621SW VPN - App	2.5.2
1603, 1608, 1616	1.3100
1616 Button Module 32 App	1.1.0
9620,9630,9640,9650	3.1.04_S
9608 & 9611 & 9621 & 9641 Kernel	S96x1_UKR_V13r47_V13r47
9608 & 9611 Application	S9608_11HALBR6_2_1_19U_V452
9621 & 9641 Application	S9621_41HALBR6_2_1_19U_V452
9504, 9508 Application	R39
9504, 9508 Boot	R15
2410, 2420, 5410, 5420	6
1403 Application	04
1403 Boot	03
1408, 1416 Application	R16
1408, 1416 Boot	25
DCP Phone Languages	R10_v09_Pack01
DCP Phone Font File 14xx Chinese (GB)	R02_v01
SIP 1120	04.03.12.00
SIP 1140	04.03.12.00
SIP 1200	04.03.12.00

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 Firmware	3.3.16
Template	0.4
3725 Firmware	3.3.16
Template	0.4
374x Firmware	3.2.15
Template	0.1
IPBS1 Boot Firmware	5.0.11
IPBS1 Firmware	5.0.11
IPBS2 Boot Firmware	5.0.11
IPBS2 Firmware	5.0.11
IPBL (DECT Gateway) Boot Firmware	5.0.11
IPBL (DECT Gateway) Firmware	5.0.11
GRBS (ISDN RFP) Firmware	R5C 3/40
AIWS Firmware	2.73
AIWS2 Firmware	3.13
WinPDM (Windows Portable Device Manager)	3.8.2
Rack Charger Firmware	1.4.1
Advanced Charger Firmware	1.4.1
Avaya 3720 Translation Tool	25
Avaya 3725/3740/3749 Translation Tool	27
Avaya 3720 Downloadable Languages	25
Avaya 3725/3740/3749 Downloadable Languages	27
Company Phonebook Tool	8
Local Phonebook Tool	1

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

10.3   VoiceMail Pro Software Upgrade

The VoiceMail Pro must be running version 7.0/8.0 to upgrade directly to 8.1. Any previous versions must be upgraded to 7.0 before an upgrade to 8.1 is made. If running a software version older than 4.0 then please refer to Technical Bulletin 109.

Note: There has been an isolated report during field trials of the module configuration being lost after an upgrade (see known issues section). Please make sure that all configurations are Backed Up prior to the upgrade in order to Restore data in the event of any loss.
.

10.4   one-X Portal for IP Office Software Upgrade

The one-X Portal must be running version 7.0/8.0 to upgrade directly to 8.1. Any previous versions must be upgraded to 7.0 before an upgrade to 8.1 is made.

10.5   Customer Call Reporter Software Upgrade

The VoiceMail Pro must be running version 7.0/8.0 to upgrade directly to 8.1. Any previous versions must be upgraded to 7.0 before an upgrade to 8.1 is made.

To upgrade earlier versions of IP Office Customer Call Reporter, you must first upgrade your setup as documented in Technical Bulletin 133 to 7.0 before you upgrade to 8.1

Note: *Any versions of Customer Call Reporter earlier than 8.0 will not connect to an IP Office system running 8.1 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.*

10.6   IP Office Application Server Software Upgrade

The Application Server must be running version 7.0/8.0 to upgrade directly to 8.1. Any previous versions must be upgraded to 7.0 before an upgrade to 8.1 is made.

Note:
For new installs of R8.1 the Web Control panel default username/password has been changed to:
        User: Administrator
        Password: Administrator
Note: Upgrades will retain their existing credentials.

If Microsoft IE is used to access the Web Control panel then make sure that the Browser Mode is set to IE9 view not IE9 Compatibility view.

        To set this enter
        F12->change Browser Mode to IE9

10.7   Unified Communication processor (UCM) Upgrade

The UCM was released with 8.0 and different options exist to facilitate the upgrade of the UCM:
- ISO image – Full upgrade of OS and all applications/components and will need to backup and restore user data
- Collection of RPM's in a zip file - Upgrade of all applications/components and preserves user data
    - Separate .rpm files are available for voicemail language prompts and voicemail TTS languages that are not included in the zip file
- Individual RPM's – Upgrade of individual applications/components

Using the individual RPM's is the recommended method for upgrading specific applications between releases rather than a full ISO reinstallation   as it is both quicker and does not remove the current user data.

For upgrade from 8.0 to 8.1 use the ISO image or zip file in order to upgrade all the necessary applications and components. The ISO images, RPM's and ZIP files (8.1.80.9) and USB Initiator (2.0.3) are available via the Avaya support website http://support.avaya.com.

Please refer to the Unified Communications Module Installation and Maintenance manual for step by step instructions on both options

Note**:**
For R8.1 the Web Control panel defaults have been changed to
    User: Administrator
    Password: Administrator

If Microsoft IE is used to access the Web Control panel then make sure that the Browser Mode is set to IE9 view not IE9 Compatibility view.

    To set this enter
    F12->change Browser Mode to IE9

11   Logistics and Ordering

11.1 IP Office R8.1 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 set is available with Release 8.1 of IP Office:

Material Code	SAP Description	IP Office Basic, Essential, Preferred & Advanced Editions	IP Office Server Edition Controlled Introduction
700503230	IPO 8.1 USER/ADMIN SET DVD	✓	X
700503228	IPO R8.SERVER EDITION INSTL DVD	X	✓

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.

11.2 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 for Release 8.1 of IP Office:

Material Code	SAP Description
700503231	IPO 8.1 APPL SRVR DVD

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

11.3 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	SAP 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

11.4 IP Office Release License

To upgrade existing IP Office systems with any earlier release to Release 8.1 a release license is required. Upgrade licenses are sold separately. Ordering codes are summarized below.

Material Code	SAP Description
270680	IPO LIC UPG R8.1 SML
270399	IPO LIC UPG R8.1 LARGE

11.5 Web Availability

The IP Office R8.1 software will be available on the Avaya Support website by July 16th, 2012.

Upgrades to IP Office R8.1 require a valid Release 8.1 upgrade license. The software images may be downloaded from:

http://support.avaya.com

11.6 IP Office Software Applications and License Key Process

General Availability (GA) IP Office software applications are orderable by Avaya Partners from their Avaya Authorized Distributor. Avaya Partners must contact their respective distributors directly to purchase all IP Office Software applications. Each distributor implements a customized IP Office software purchasing and distribution process for its network of Avaya Partners. These distributor specific internal processes are not covered by this document.

Issued by:
Avaya SMEC New Product Introduction

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