


IP Office Release 8.1

Product Update

Update Number: Version 1.4

Date: July 11th, 2012

Document Definition:

	Product Update	This is a communication that summarizes “what’s new” within a given release regarding any changes or enhancements to an existing GA (Generally Available) product.
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Revision History

Date	Revision	Page(s)	Description
2 nd May	1	All	First Release
22 nd May	1.1	13	VCM v2 details
20 th June	1.2	8,15,16, 22,23	Updated licensing changes; Added comparison table; Removed Video support from Flare Communicator on Windows Added DevConnect Partners for Server Edition Contact Center support
10 th July	1.3	6,7	Updated GA dates
11 th July	1.4	8,23	Notice of cessation of entitlement period for software upgrades

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1 IP Office Release 8.1 Summary

IP Office R8.1 enhances the IP Office portfolio by delivering solutions targeted for the Midsize Enterprise customer.

1.1 Key Messages

Release 8.1	Resellers/Partners	Customers
<ul style="list-style-type: none"> ▶ IP Office Server Edition 	<ul style="list-style-type: none"> • Access to new Mid-market opportunities • Simplified installation & management. 	<ul style="list-style-type: none"> • Cost effective growth - up 1000 users at a single site or across 32 locations
<ul style="list-style-type: none"> ▶ Avaya IP Office Support Services 	<ul style="list-style-type: none"> • Multiple service delivery options • Industry standard support model at a fixed price 	<ul style="list-style-type: none"> • Enhanced reseller/partner service offerings backed by Avaya's industry standard support model
<ul style="list-style-type: none"> ▶ Flare Communicator 	<ul style="list-style-type: none"> • Complete an industry leading UC offer (Flare Communicator, one-X Portal, one-X Mobile essential & one-X Mobile preferred). 	<ul style="list-style-type: none"> • Complimentary UC rich Softphone to the mobility solution.
<ul style="list-style-type: none"> ▶ SME Capabilities 	<ul style="list-style-type: none"> • Reduced cost of support with SSL/VPN remote access • Supporting more SIP trunk implementation scenarios 	<ul style="list-style-type: none"> • Enhanced UC at the desktop and extending to mobile devices • Faster support for reduced service interruption • Broader selection of SIP trunk service providers

1.2 IP Office R8.1 – Summary of New Features

IP Office platforms supported

- IP500
- IP500 V2
- IP Office for Linux

IP Office Server Edition

- Centralized Licensing
- Centralized Management
- Simplified Installation & Deployment

New Hardware Components

- IP Office Server Edition – Primary/Secondary Servers
 - HP DL 360 G7
 - HP DL120 G7
- IP Office Server Edition – Expansion Server
 - HP DL120 G7

IP Office Licensing Changes

- New Licensees for Server Edition
- Remote worker seats included with Essential edition is increased from 2 seats to 4.
- User Profiles licenses (Teleworker, Office Worker, Mobile User, Power User) running on a pre 8.0 Essential Edition will be valid if the system is upgraded to 8.1 with an upgrade license or if the system is upgraded during the entitlement period without an upgrade license. Only IP Office 500v2 system have entitlement period.
- Behavior not changing but listed for completeness:
 - New systems started at the new R8.1 will require Preferred Edition license in order for the User Profile licenses to be valid
- The automatic trial licenses available during the entitlement period with release 8.0.16 and associated alarms will be removed and not available

End-point additions

- Flare Communicator for Windows
- Flare Communicator for iPad

IP Office Enhancements

- SIP Trunks
- one-X[®] Mobile Preferred for IP Office enhancements
- Web Manager Enhancement supporting Upgrade, Back-up & restore
- Changeable RTP ports
- Contact Center Enhancements
 - CCR DDI Report
 - Scheduled Reports for the current day
 - CDR Answered event renamed
 - 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 96x1 Phones
- CCR Client Browser on Windows 7
- VoiceMail Pro Password length configuration
- Security Documentation
- Avaya Audio Branding change
- one-X® Portal for IP Office websockets
- Debug enhancement – Logger stamp support
- SSL/VPN Remote Access
- On-Boarding automation to support the introduction of the new Avaya IP Office Support Services

IP Office Demo Kits

- Power Demo Kit
- IP Office Anywhere

Note: Features listed are available worldwide unless otherwise specified. Not all of the features in IP Office Release 8.1 are supported on all platforms and phones - please see each feature's description for details.

2 General Availability Milestones

2.1 General availability

2.2 Availability for Avaya Distributors

May 7, 2012 – new Avaya material codes are added to Price List Administration Tool (PLAT) files

May 7, 2012 – new Avaya material codes and solutions are added to the Enterprise Configurator quoting tool (EC Voice)

May 7, 2012 – new License material codes are added to Avaya Direct International (ADI)

June 4, 2012 – new Avaya material codes and solutions are added to the EZ Quote quoting tool.

July 16th 2012 – IP Office R8.1 software and documentation is available for download from support.avaya.com

July 29th 2012- IP Office R8.1 Linux servers available to ship from Avaya to Distributors.

Note: The above dated are subject to change.

2.3 Availability for Avaya Authorized Partners

July 16th, 2012 (*Planned*) – IP Office R8.1 software and documentation available for download from support.avaya.com

July 16th 2012 - New IP Office R8.1 codes are available for purchase from Avaya Distributors

July 29th 2012 - IP Office R8.1 Linux servers available for purchase from Avaya to Distributors

3 Platform Support

3.1 IP Office R8.1 will support the following platforms

- IP500
- IP500 V2
- IP Office for Linux

However, some of the features are only supported on the IP500 V2 platform, as summarized in the following table:

	IP500	IP500 V2	IP Office for Linux
Basic Edition – PARTNER® Mode	X	✓	X
Basic Edition – Norstar™ Mode	X	✓	X
Combination cards	X	✓	X
SD cards	X	✓	X
Essential Edition additional ports license	X	✓	X
Norstar™/BCM Digital phones on IP Office	X	✓	X
TCM8	X	✓	X
DS16A / DS30A	X	✓	X
Avaya IP Office Unified Communications Processor	X	✓	X
SSL/VPN	X	✓	✓
On-Boarding Automation	X	✓	✓

All other Release 8.1 features are supported on both platforms.

Note that IP Office R8.1 software cannot be used on IP401, IP403, IP406, IP406 V2, IP412, or Small Office Edition.

4 Release Documentation

Detailed release information can be found in the following documents available with the Avaya IP Office R8.1 software pack available on DVD media or downloadable from support.avaya.com

- Product Description (Release 8.1)
- Technical Bulletin (Release 8.1)
- IP Office Knowledgebase - Contains all the technical and user documentation for the IP Office - <http://marketingtools.avaya.com/knowledgebase>

The Technical Bulletin and Release 8.1 Documentation will be available by GA:

- Go to support.avaya.com
- Select **Find Documentation and Technical Information by Product Name** under “Resource Library”
- Select IP Office
- Select the Software Release as 8.1
- Select the Documentation Categories required

The latest version of the IP Office Product Description Document, which defines the IP Office product in more detail, is found on the Avaya Partner Portal (<https://partner.avaya.com/>), and will require a valid user name and password to view it online. It is also available from support.avaya.com.

Note: Always refer to the Avaya websites for the latest versions of product documentation.

Along with the new software and hardware components, there are also a range of services, training courses and bundled solutions to enable channel Partners to support IP Office R8.1 and more effectively address market requirements.

5 IP Office Licensing Changes

5.1 Entitlement Period

Effective April 19, 2012, the entitlement policy is being updated as follows and all prior entitlements to an IP Office upgrade are superseded no effect.

The “Entitlement Period” is defined as the period within 90 days after the Customer places their first call (intercom or outside) on the system. This is targeted to those newer users who may have just purchased a new system, and Avaya brings out a newer release

Any upgrade must be completed within 60 days of a GA release of Release 8.1. In no event shall the entitlement period extend beyond September 1, 2012.

For example:

- An IP Office system brought into service March 31st could upgrade to 8.1 on June 29th, the day of release, but could not upgrade the day after (90 day limit reached)
- A system Brought in to service May 1st would have until July 30th to upgrade to 8.1 (90 days from May 1st and within the 60 day post GA)
- A system Brought in to service June 18th would have until September 1st to upgrade (75 days as it is 60 days post GA)
- A system brought into service August 23rd, if still at R8.0 will only have until September 1st 2012 to upgrade (8 days)

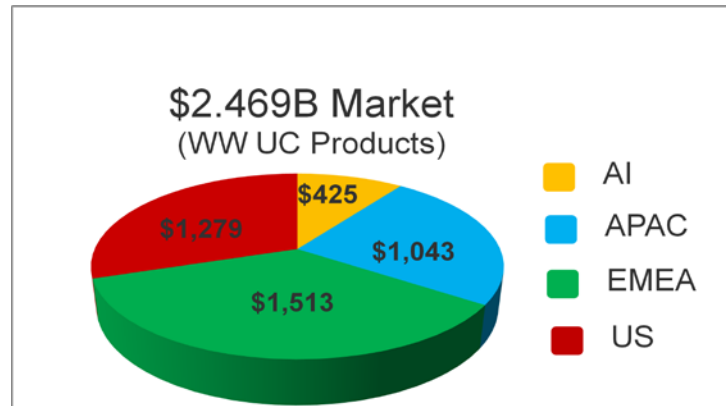
Customers are entitled to an upgrade to release R8.1 of IP Office software during the Entitlement Period, as defined. After the Entitlement Period, Customers must pay for an upgrade to R8.1. Customers must be at the current, R8.1 release, to be eligible for IP Office Support Services.

The entitlement period will cease for any future software after 15th September 2012

6 IP Office Server Edition – Addressing Midsize Enterprises

6.1 Mid-market Overview

Mid-market is defined as companies with 250 to 1000 users. The total addressable market is about a ~\$2.5B market on the products side and additional \$4.6B for services.



Source: RDA June 2011

6.2 IP Office 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 mid-sized 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.

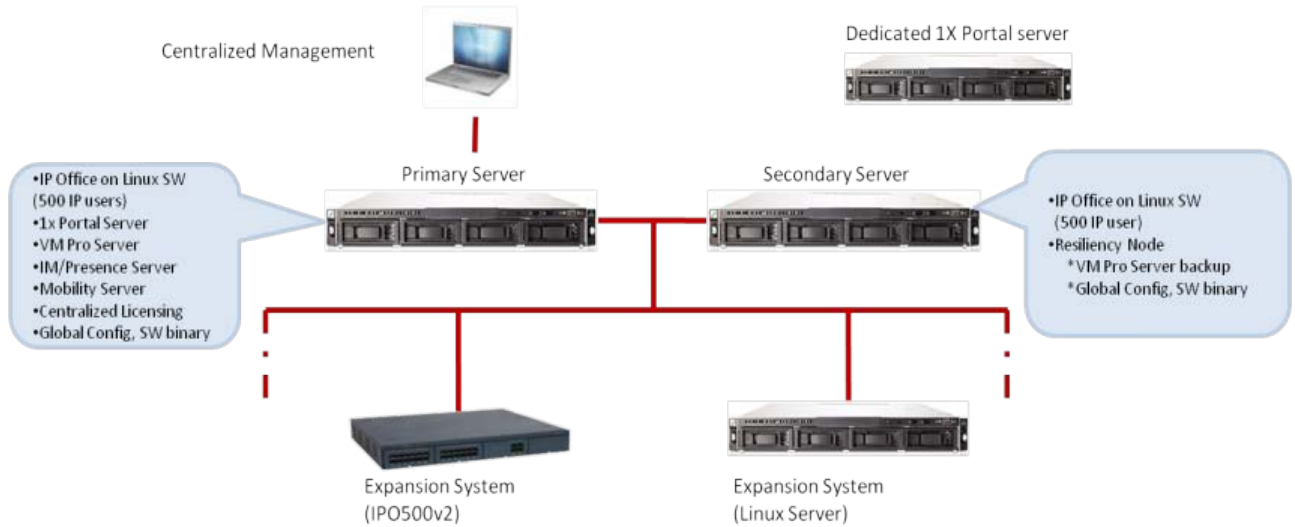
6.3 IP Office Key Components

IP Office constitutes three key components to address Mid-market

1. IP Office software running on a Linux server (required).
2. IP Office software running on the IP500v2 (optional).
3. IP Office Server Edition license (required for each component)

Note: IP500v1 chassis is not supported with IP Office Server Edition.

The software running on both Linux server and IP Office 500v2 is identical and hence the feature set delivered by the two components are the same (except as listed below) and co-exist as part of a single solution.



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 Mid-market 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.

Following are the server models that Avaya will source.

Model #	Order Code	Description	Application	RAM	CPU	Power Supply	RAID
HP DL360G7	270393	DL360G7 SRVR IPO R8.1+SE PRIMARY	Primary or Secondary	12 GB	Dual Quad-Core	Hot Swap	Yes
HP DL120G6	270395	DL120G7 SRVR IPO R8.1+SE EXP	Primary or Secondary or Expansion	12 GB	Single Quad-core	Single	N/A

6.4 IP Office deployment options

Increasingly, companies have started adopting a pure IP model with SIP trunking. However, many companies still prefer a hybrid solution with a mix of analog, digital and IP stations as well as TDM trunking options.

IP Office has been designed keeping in mind these different solution requirements for different customer needs. The flexibility and choices of deployment options make the IP Office solution a very versatile solution and caters to different product needs.

There are 2 deployment scenarios for IP Office.

1. **Server Edition with pure IP deployment:**
 - a. All IP phones with SIP trunking everywhere.
 - b. Use Avaya sourced server for Applications, IP phones and SIP trunks.
2. **Server Edition with hybrid deployment:**
 - a. A mix of Analog, Digital or IP phones everywhere.
 - b. Use Avaya sourced server for Applications, IP phones and SIP trunks.
 - c. Use IP500v2 for TDM stations and trunking

Avaya Server, All IP



Avaya Server, Hybrid



6.5 IP Office Scalability

IP Office is designed to scale up-to a 1000 users on a single site or across a maximum of 32 sites. The table below lists servers and capacities.

	Primary Server	Secondary Server	IP500v2 Expansion System	Linux Expansion System	Dedicated 1X Portal Server	Comments
Avaya Tested and Sourced	HP DL 360 G7 HP DL120 G7	HP DL 360 G7 HP DL 120 G7	IP 500 v2	HP DL 120 G7	HP DL 120 G7	HP Servers tested and sourced by Avaya
Avaya Tested but NOT Sourced	Dell R610	Dell R610	N/A	Dell R210	Dell R210	Dell servers tested by Avaya
User Scalability	DL360: 500 DL120: 250	DL360: 500 DL120: 250	384	500	N/A	
1x Portal Scalability	DL360: 200 DL120: 100	N/A	N/A	N/A	500	
VMP Pro Port Scalability	DL360: 100 DL120: 40	DL360: 100 DL120: 40	N/A	N/A	N/A	Centralized deployment only with voicemail resiliency on secondary.
Receptionists	10	N/A	N/A	N/A	N/A	
Conference Channels	128			128		
SIP/H.323 Trunks	DL360: 250 DL120: 125	DL360: 250 DL120: 125	125	125	N/A	
Phones	DL360: 500 IP Phones DL120: 250 IP Phones	DL360: 500 IP Phones DL120: 250 IP Phones	384 Analog, Digital, H.323, or SIP. IP-DECT* or Wi-Fi	500	N/A	* 120 IP DECT endpoints maximum **Avaya 16xx/96xx H.323 endpoints only
VCM Channels	N/A	N/A	148	N/A	N/A	G.711, G729, G.723, G.722, T.38

6.6 IP Office Centralized Licensing

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.

6.6.1 New Licenses

The only new license for the IP Office is the new system software license called Server Edition. The feature Key Serial Number (System ID) derived from platform hardware.

License Name	Order Code	License Type	License Description	Comments
Server Edition	270397	System SW	IPO R8.1+ SERVER EDITION LIC	<p>Required per node (Linux server or IP500v2)</p> <p>Bundles in:</p> <ol style="list-style-type: none"> 1. Features from Essential Edition 2. Features from Preferred Edition 3. Centralized VMPro 4. 2 ports of VMPro 5. Unlimited SCN(multisite networking) channels <p>Enables meet-me conferencing, advanced messaging, automated attendant, call recording, conditional call routing, queue announcements, mobile twinning, call control and call-back.</p> <p>Note: Advanced Edition is not supported on Server Edition</p>

6.6.2 IP Office centrally residing licenses

1. Server Edition (includes aggregation of VMPro ports from all nodes).
2. Avaya and 3rd Party Endpoints
3. SIP trunk channels
4. Office Worker
5. Power User
6. Receptionist (for SoftConsole)
7. UMS Web Services (for hunt groups)

6.6.3 Voice Compression Module (VCM) v2

The current versions of the VCM32 and VCM64 modules include 12 IP endpoint license.

The new VCM32v2 and VCM64v2 does not include the 12 IP endpoint licenses. This allows all IP endpoint licenses to be centrally managed by the server edition.

Material Code	Description
700504031	VCM 32 V2 NEW
700504032	VCM 64 V2 NEW

Using VCM32v1 and VCM64v1 with R8.1

1. With SME editions
 - a. The VCMs will work as-is and will include 12 IP endpoint licenses.

2. With Server edition
 - a. The 12 IP-end point 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. These licenses will need to be managed locally.

Using VCM32v2 and VCM64v2 with R8.1

1. With SME editions
 - a. The VCMs will work as-is but will ***NOT*** add the 12 IP endpoint licenses.
2. With Server edition
 - a. The VCMs will work as-is but will ***NOT*** add the 12 IP endpoint licenses.

Using VCM32v1 and VCM64v1 with R8.0

1. No change.

Using VCM32v2 and VCM64v2 with R8.0 or earlier.

1. A service pack will be required for the SW to recognize the v2 versions of the card.

6.6.4 IP Office locally residing licenses

License Name	Primary Server	Secondary Server	IP500v2
Additional PRI Channels			✓
IPSec Tunnelling			✓
CTI Link Pro	✓	✓	✓
TAPI Wav			✓
Additional Messaging Ports	✓	✓	
Messaging TTS Pro	✓	✓	
Messaging Recordings Administrators	✓	✓	

Note:

- All locally residing licenses are still managed centrally using the Manager tool.
- The Locally residing licenses need to be provisioned separately based on the table above.
- For Voicemail resiliency, separate VMPro Ports on the secondary are required to support more than the 2 ports.

6.6.5 IP Office Server Edition Unsupported Licenses

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

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

6.6.5.1 Differences between Server and Preferred/Advanced Edition

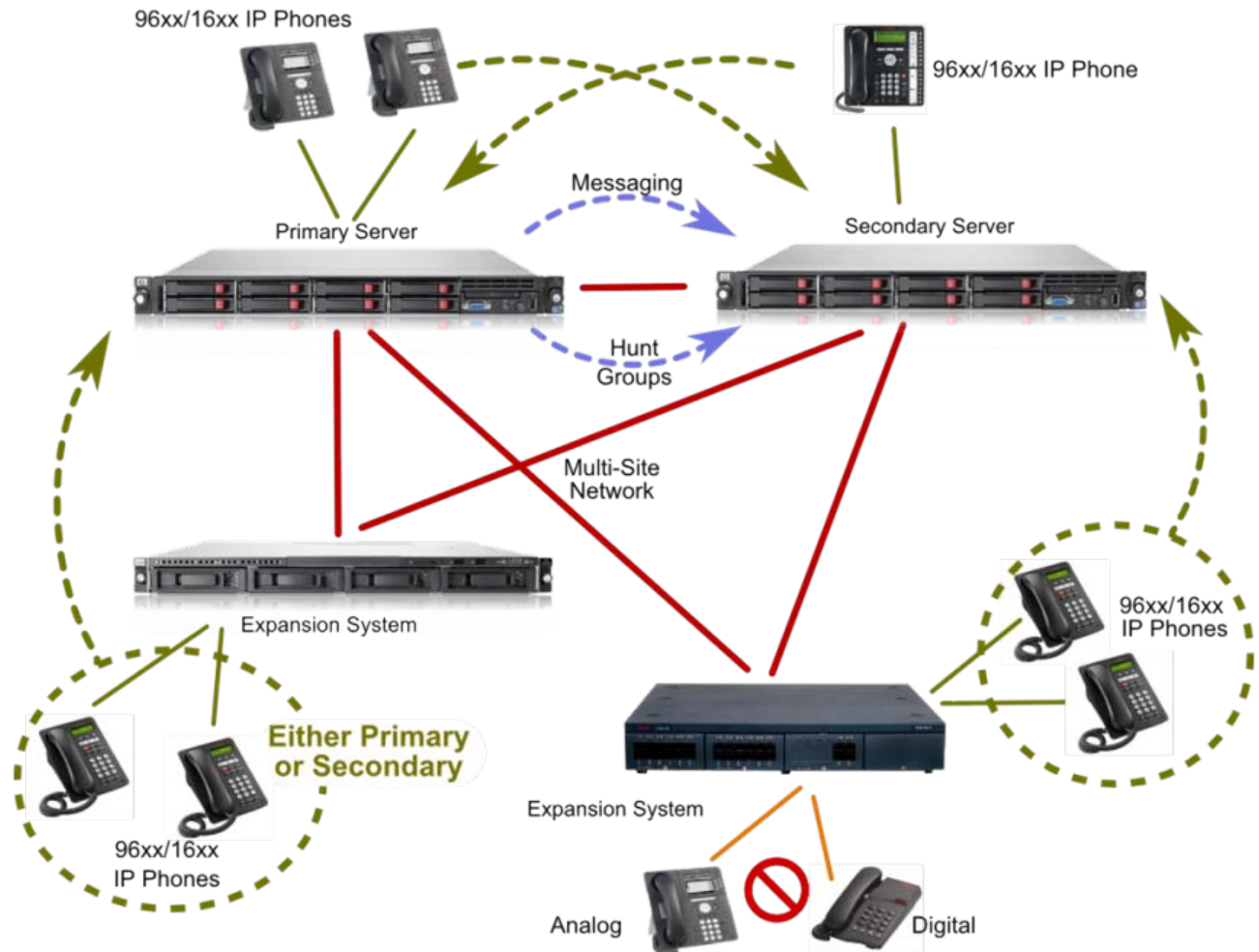
Feature	Preferred/Advanced Edition	Server Edition	Server Edition Comments
Capacity	32 locations 1000 users total 384 per IP Office 500	32 locations 1000 users total 500 users per Linux Server	
Multi-Site (SCN)	Freeform Star, mesh, chain SCN trunks anywhere Multi-site licenses	Single or double star No additional SCN trunks Unlimited SCN trunk channel licenses	Restricted topology allows many optimizations Other H.323 trunk types still allowed
Administration	Centralized, per location administration	Fully centralized, consolidated view	Consolidated view for full centralization. Non-consolidated view for freeform per device configuration
Licensing	Distributed	All common licenses Centrally pooled (on Primary Server)	Some license are distributed (See section 6.6.4 for a complete list) All administered centrally
User Profile Licenses	Receptionist Telecommuter Mobile Worker Office Worker Power User Call Center Agent Call Center Supervisor	Receptionist Office Worker Power User	
O/G Call Routing	no default assistance	Simplified	SE Manager and default routes allow simpler O/G call routing
I/C Call Routing	no default assistance	Simplified	Common ICRs allow simpler I/C call routing and resilience
Time	Freeform	Simplified by default, can still be freeform	Primary Server acts as solution time server by default
System directory	Freeform	Simplified by default, can still be freeform	Primary Server acts as solution directory server by default
Fax transport	IP Office T.38 fax transport	G.711 fax transport	No need to configure codec sets to enforce; G.711 fax transport used automatically
SIP Trunk Direct Media to remote device across SCN	None	Direct media supported to remote H.323 and IP DECT endpoints	Includes SIP Info and RFC 2833 support
Hunt Groups	Freeform	Hunt groups only on primary	Performance optimized for VMPro location (also on Primary) Automatic resilience when secondary present. Overcomes SoftConsole limitations
Receptionist (SoftConsole)	Up to 4 per IP Office	Up to 10 on Primary	Overcomes SoftConsole IP connectivity and SCN limitations
Add/remove device	Manual	Integrated via SE Manager	Auto population of Multi-Site links and common configuration
Device Status/connectivity	Not checked	Access and interconnects checked by SE Manager	Immediate indication if device offline or incorrectly networked
IP Office Initial configuration	Manual	Automated with Initial Configuration Utility (ICU)	Remote install technician without IP Office knowledge

Feature	Preferred/Advanced Edition	Server Edition	Server Edition Comments
Upgrades	Individual	Centralized	
Backup/restore	Individual per IP Office and per application	Centralized	Security settings not backed up
Voicemail Pro VRL, VRLA, VBA, Database access	Supported on Windows VMPPro server	Not supported	
Advanced Edition (CCR & Contact Store)	Supported	Not supported	See DevConnect Partners for Contact Center applications
Software distribution	Admin DVD + Apps DVD	Single ISO distribution	
Software Only Solution	No	Yes (Controlled introduction at present)	
Single management portal	No	Yes	
Embedded VM/AA	Supported	Not supported	Central VMPPro only
Voicemail Pro Ports	40	100	

6.7 IP Office 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 c-located or can be on separate locations to support Geo-Redundancy.



1. Hardware Resiliency

- a. RAID support
- b. Dual PSU on Avaya sourced HP DL360 G7

2. Users and Application Resiliency

- a. VMPro server – Primary + Backup in 1+1 redundant active/passive configuration. Manual or auto failback control (auto is new for R8.1)
- b. IP Phones – 1:1 resiliency to backup IP Office. Manual failback control (Phone reset). Avaya H.323 phones only. Note Expansion systems (gateways) cannot act as backup nodes for the Linux Servers.
- c. Hunt groups - 1:1 resiliency to backup Server. Auto failback control (device rediscovery – idle group).
- d. Inter IP Office device links – Multi-Site Network (SCN) backup. Double star. 1:1 resiliency. Auto failback control (device rediscovery)
- e. Inter IP Office device links – PSTN backup. M:N resiliency via Alternate Route Selection (ARS). Auto failback control (link availability)

- f. Trunks – M:N resilience via ARS. Auto failback control (trunk availability)
 - g. Incoming Call Routes – Incoming Call Routes are common to all devices hence persist on user failover.
- 3. Trunk Resiliency**
- a. PSTN Back-up

6.8 IP Office Centralized Management

6.8.1 Management

The IP Office Server Edition management framework includes a Web Control GUI that acts as key element for centralized management and provides solution wide status and control. From this control GUI page, the installers can manage and control the different Linux sub-systems and various global controls like back-up and restore, software upgrades, inventory management and more.

This web control GUI also acts as a central repository for other management tools including the IP Office manager, VMPro manager and one-X Portal manager, SSA, system monitor as well as security and password and inventory management.



The IP Office Manager can be launched directly from the web control GUI. If the manager tool does not exist, the web control GUI automatically downloads and installs the latest version of the manager tool. Following functions of the PBX are solution wide at a multi-site level.

1. Users
2. Hunt Groups
3. Short Codes
4. Incoming Call Routes
5. Directory
6. Time Profiles
7. Account Codes

8. User Rights

6.8.2 Templates

Several templates are supported and can be created from the IP Office Manager in the Server Edition mode.

1. Line, User
2. Extension
3. Hunt Group
4. Time Profile
5. Firewall
6. IP Route
7. ARS entries

Note: IP Office Manager supports both online as well as offline configuration modes.

6.8.3 Backup and Restore

IP Office Server Edition has several backup and restore options:

1. Automated 24 hour local backup of firmware, configuration and security settings (not Linux packages)
2. Manual backup/restore commands from Phone, SSA, Manager
3. Automated use of backup copy on restart errors
4. IP Office Manager for Server Edition saves a complete set of configuration files on Primary Server and can optionally save to local PC directory
5. VMPro and one-X Portal can be administered to save periodic backup sets on Primary Server (manual or automatic)
6. Primary Server has manual Backup/Restore commands on Web Control that copies all backup file sets
 - a. No automated options
 - b. No application packages

6.8.4 Installation and Upgrades

License Name	Order Code	License Type	License Description	Comments
Installation DVD	700503228	System SW DVD	IPO R8.1 SERVER EDITION INSTL DVD	

1. A single distribution contains the software components for the whole solution that includes the server and user applications, as well as phone and Avaya Office 500 firmware
2. Avaya servers come with distribution preinstalled
3. Linux servers support a web based 'Ignition' process to personalise them for their intended use:
 - a. Primary,
 - b. Secondary,
 - c. Linux Expansion
 - d. one-X Portal server
4. A simple, single screen utility (Initial Configuration Utility) is run automatically to allow an Avaya Office device to be centrally detected and administered as part of the solution.
5. Upgrades are automated, solution-wide and centrally managed

6.8.5 Ignition Process

IP Office Ignition process is a simple utility to seamlessly add/install expansion systems such that they can become part of a single logical Server Edition multisite network. This utility is designed for installers without



detailed IP Office knowledge. The installer needs to know some basic LAN and Primary/Secondary server info and pre-populates most fields with existing data. A lot of configuration is handled behind the scene and includes security settings, multi-site networking (SCN) trunks, users, extensions, voicemail, directory, time, ARS, short codes etc.



6.9 Documentation, Training and Localization

6.9.1 Documentation

IP Office documentation will be available in the following languages:

- US English
- French
- LA Spanish
- German
- Italian

6.9.2 Training

A 4-hour web-based training will be available that will cover the IP Office Mid-market content for this release. Training will be available in English only.

6.9.3 Localization

Application		EFIGS	Simplified Chinese (Simp CH)	Russian (RUS)	Brazilian Portuguese (PTB)	Korean (KOR)	Japan (JPN)	Netherlands (NLD)	Denmark (DAN)	Finland (FIN)	Greece (ELL)	Hungary (HUN)	Norway (NOR)	Poland (PLK)	Portugal (PTG)	Spain (ESP)	Swedeb (SVE)
CCR	GUI	Y		Y	Y			Y									
	Installer	Y		Y	Y												
	Admin docs	Y		Y													
	User docs	Y		Y	Y												
Manager	GUI	Y	Y		Y			Y									
	Admin docs	Y	Y	Y	Y												
	Install docs	Y	Y	Y													
Quick manager	Install docs	Y		Y													
Video Softphone	GUI	Y	Y	Y	Y		Y	Y									
	User doc	Y	Y		Y												
	Install doc	Y		Y													
one-X Portal	GUI	Y	Y	Y	Y			Y									
	Docs	Y	Y	Y	Y			Y									
SSA	GUI	Y	Y		Y			Y									
	Admin doc	Y	Y	Y	Y		Y										
VmPRO	GUI	Y	Y	Y	Y	Y		Y	Y	y			y		y	y	y
	Prompts	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Admin Doc	Y		Y													
	User Doc	*ESL A	Y														

Embedded Voicemail	Prompts	Y	Y	Y	Y	Y		Y	Y	Y			Y		Y	Y	Y
	Docs	Y															
Phones	GUI	Y	Y	Y	Y			Y	Y	Y			Y		Y	Y	Y
	9500 doc	Y	Y	Y	Y												
	BST doc	Y															
	B100 doc	Y			Y												
	4600/5600 doc	E, Fr	Y					Y									
	1100/1200 doc	Y			Y												
	1600 doc	Y	Y	Y													
Softconsole	GUI	Y	Y	Y	Y	Y		Y	Y	Y			Y		Y	Y	Y
	Docs	E, Fr	Y	Y													

6.10 Serviceability

IP Office supports serviceability via SSL-VPN technology. The SSL-VPN client is embedded in the IP Office SW (both for IP500v2 and Linux). The server side is the Avaya VPN Gateway (AVG). AVG is a virtualized SW and can be loaded on any server (see server HW requirements).

Note: Please refer to SSL-VPN section for more details on Serviceability.

6.11 DevConnect Partners

Server Edition does not currently support Advanced Edition, therefore does not support Call Center Reporting or Call Recording.

Four DevConnect Partners have been certified to support customers who have Contact Center requirements

6.11.1 Datel Software Solutions



Call SWEET! Live - real-time and historical contact center management providing interactive agent, queue management, wallboards and historical reporting capabilities. Call SWEET! Live includes Voice Recording, CRM Integration, Click-to-Dial and Outbound Dialer and easily migrates to Avaya Aura assuring investment protection

Contact SWEET! is cloud hosted, integrating web chat, email, voice and more into one, browser-based interface. As a remotely hosted solution it is simply 'switched-on' with zero installation required, and recurring revenue stream for Business Partners. Contact SWEET! lowers IT infrastructure and costs, increases mobility and allows businesses to organize, monitor and report on both voice and text based communications. .

<http://www.datel-group.com/>

6.11.2 Resource Software International Ltd. (RSI)



Adaptive Contact Center Suite - The RSI portfolio encompasses a wide range of product types including: call accounting, hotel/motel billing, healthcare management, real-time and contact center reporting, switch administration, wireless/mobile tracking, CTI applications and cloud based telecom management services. Integration to hotel property management systems, emergency notification and professional accounting packages are also provided

<http://www.telecost.com/index.htm>

6.11.3 BBX Technologies



Vuesion Blended Multimedia Contact Center- The Vuesion software portfolio delivers a complete contact center solution with applications tailored for small to medium-sized enterprises from five to 250 agents.

<http://bbxtechnologies.com/index.htm>

6.11.4 Xima Technologies



Chronicall Real time reporting for agents, groups, trunks, and extensions, Cradle to Grave can expand any call to see exact details about each and every event during its progression. Historical reports include over 80 standard reports, charts, and graphs which show detailed information about calls, events, conferences, agents, groups, queues, and trunks.

<http://www.ximasoftware.com/chronicall/>

7 Upgrading

In this section the upgrade impact when customers upgrade to the R8.1 is described. The following are the changes that will be implemented.

To allow customers from pre-8.1 system to preserve the essential functionality when upgrading to 8.1 the system will recognize 2 upgrade paths and provide the system with Essential functionality:

Upgrading to 8.1 outside the Entitlement Period

These systems require the Software Upgrade license to run 8.1.

Upgrade to 8.1 during the 90 day entitlement

These systems can be upgraded according to the normal upgrade procedure documented in the IP Office KnowledgeBase or Technical Bulletin following the stipulations of entitlement upgrade as defined in section 5.2.

The entitlement period will cease for any future software after 15th September 2012

7.1 Trial Licenses

The trial licenses that were available during the entitlement period with IP Office 8.0(16) are removed along with the alarm generation. No automatic trial license will appear on the system. All other stand-alone trial licenses will not be affected and will still be available for download.

8 End Points

The following table provides an overview about the Avaya phones supported on the IP Office 8.0 and IP Office 8.1 release.

	8.0		8.1		
	IP Office Standard Mode	IP Office Basic Mode	IP Office Standard Mode	IP Office Basic Mode	IP Office for Linux (Server Edition running all IP)
General Available Phones					
Analogue Desk Phones					
POTS	✓	✓	✓	✓	-
Avaya 1000 Series Video Phones					
1010 (Lifesize)	✓	-	✓	-	✓
1020 (Lifesize)	✓	-	✓	-	✓
1030 (Lifesize)	✓	-	✓	-	✓
1040 (Lifesize)	✓	-	✓	-	✓
1400 Series - Digital (DS) - CM and IP Office					
1403	✓	✓	✓	✓	-
1408	✓	✓	✓	✓	-
1416	✓	✓	✓	✓	-
DBM32	✓	✓	✓	✓	-
1600 Series - IP (H323) - CM and IP Office					
1603	✓	-	✓	-	✓
1603SW	✓	-	✓	-	✓
1608	✓	-	✓	-	✓
1616	✓	-	✓	-	✓
1603SW-i	✓	-	✓	-	✓
1608-i	✓	-	✓	-	✓
1616-i	✓	-	✓	-	✓
BM32 (DSS)	✓	-	✓	-	✓
2400 Series - Digital (DS) - CM and IP Office					
2402D	✓	✓	✓	✓	-
2410D	✓	✓	✓	✓	-
2420	✓	✓	✓	✓	-
EU24	✓	✓	✓	✓	-

3600 Series - WiFi (H323) - CM and IP Office					
3616, 3620, 3626	✓	-	✓	-	-
3641, 3645	✓	-	✓	-	✓
3700 Series - DECT - CM and IP Office					
3701, 3711	✓	-	✓	-	✓
3720, 3725	✓	-	✓	-	✓
3740, 3749	✓	-	✓	-	✓
3900 Series - ETR DECT Cordless					
3910, 3920	-	✓	-	✓	-
9400 Series - Digital DS, CM and IP Office					
9404, 9408	Not Supported on IP Office				
9500 Series - Digital DS, IP Office Only					
9504	✓	✓	✓	✓	-
9508	✓	✓	✓	✓	-
BM12	✓	✓	✓	✓	-
9600 Series - IP H323 CM and IP Office					
9620L, 9620C	✓	-	✓	-	✓
9630	✓	-	✓	-	✓
9640G	✓	-	✓	-	✓
9650, 9650C	✓	-	✓	-	✓
9670	-	-	-	-	-
SBM24 with 96x0	✓	-	✓	-	✓
96x1 Series - IP H323 CM and IP Office					
9601	-	-	-	-	-
9608	✓	-	✓	-	✓
9611	✓	-	✓	-	✓
9621	✓	-	✓	-	✓
9641	✓	-	✓	-	✓
BM12	✓	-	✓	-	✓
SMB24 with 96x1	-	-	-	-	-
B100 Series - Conference Phones					
B149, B159	✓	✓	✓	✓	-
B179 SIP	✓	-	✓	-	✓
Softphones					
Phone Manager Softphone (H323)	✓	-	✓	-	-
IP Office Video Softphone (SIP)	✓	-	✓	-	✓
Flare Communicator Windows	✓	-	✓	-	✓
Flare Communicator iPad	✓	-	✓	-	✓
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Norstar / BCM Phones - General Available and End of Sale					

1100 Series - SIP Phone (Unistim Migration)					
1110E, 1165E	-	-	-	-	-
1120E, 1140E	✓	-	✓	-	✓
BM LED & Paper Labels	✓	-	✓	-	✓
BM LCD	✓	-	✓	-	✓
1200 Series - SIP Phone (BCM Unistim Migration)					
1210	-	-	-	-	-
1220, 1230	✓	-	✓	-	✓
BM paper	✓	-	✓	-	✓
BM LCD	✓	-	✓	-	✓
Norstar/BCM Digital Phones					
T7000, T7100, T7208, T7316, T7316E	✓	✓	✓	✓	-
T24 Key Module	✓	✓	✓	✓	-
M7100[N], M7208(N), M73100(N), M7310BLF, M7324[N]	✓	✓	✓	✓	-
Note: Only the Global Version of the M7000 Series Sets is supported on the IP Office. The Non-Global version is not supported and can be identified through the contrast levels. The Global Version has 9 Contrast Levels while the Non-Global has only 4 Contrast Levels.					
CAP Key Module	✓	✓	✓	✓	-
BCM Door Phone	-	-	-	-	-
Norstar/BCM Digital Conference Phone	✓	✓	✓	✓	-
ATA-2	-	-	-	-	-
Nortel Digital Mobility					
T7406 & T7406E	✓	✓	✓	✓	-
7420, 7430, 7434, 7439, 7440, 7449	✓	✓	✓	✓	-
4135, 4136, 4145, 4146, 4145EX, 4146EX	✓	✓	✓	✓	-
Legacy Avaya Phones - No longer available for sale					
3800 Series - Digital Cordless					
3810	✓	-	✓	-	-
4400 Series - Digital, Magix and IP Office					
4406D, 4412D, 4424D	✓	-	✓	-	-
4424LD	-	-	-	-	-
4450 DSS unit	✓	-	✓	-	-
4600 Series - IP H323 - CM and IP Office					
4601	✓	-	✓	-	✓
4602IP	✓	-	✓	-	✓
4602SW	✓	-	✓	-	✓
4606	-	-	-	-	-
4610IP	✓	-	✓	-	✓

4610SW	✓	-	✓	-	✓
4612	-	-	-	-	-
4620	✓	-	✓	-	✓
4621	✓	-	✓	-	✓
4624	-	-	-	-	-
4625	✓	-	✓	-	✓
5400 Series - DS Digital, IP Office only					
5402	✓	✓	✓	✓	-
5410	✓	✓	✓	✓	-
5420	✓	✓	✓	✓	-
EU24	✓	✓	✓	✓	-
5600 Series - IP H323, IP Office only					
5601	✓	-	✓	✓	✓
5602IP	✓	-	✓	✓	✓
5602SW	✓	-	✓	✓	✓
5610IP	✓	-	✓	✓	✓
5610SW	✓	-	✓	✓	✓
5620	✓	-	✓	✓	✓
5621	✓	-	✓	✓	✓
EU24	✓	-	✓	✓	✓
6400 Series - DS Digital, CM and IP Office					
6408D+, 6416D+, 6424D+, XM24 (DSS)	No longer supported, but likely to work.				
9000 Series - Digital, Cordless - Magix & IP Office					
9040	No longer supported, but likely to work.				
ETR Phones - Analogue Feature Phone, PARTNER and IP Office					
"Refreshed" 34, 18 & 6 Button Display	-	✓	-	✓	-
"Euro" 34 & 18 Button Display	-	✓	-	✓	-
"Euro" 18 & 6 Button non-Display	-	✓	-	✓	-
T3 & T3 IP Series					
T3 Compact, Classic, Comfort, DSS	✓	-	✓	-	-
T3 IP Compact, Classic, Comfort	✓	-	✓	-	✓

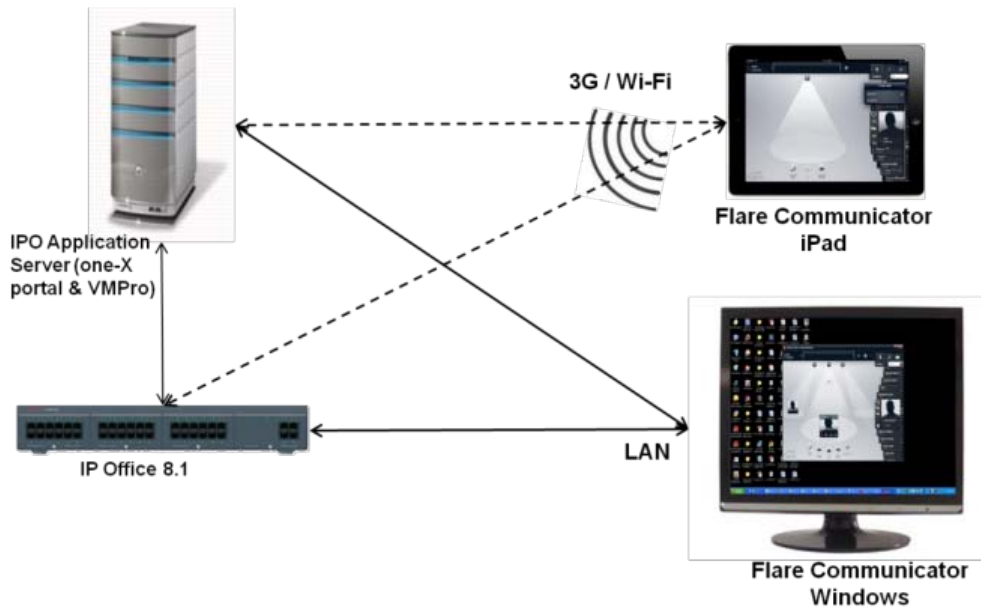
8.1 Flare Communicator

Avaya Flare Communicator is a collaboration software client that delivers 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 an intuitive graphical design of the Avaya Flare® Experience —“spotlights,” media menu, notification bar and contact cards - providing a new level of collaboration for users.

Avaya Flare Communicator for Windows and iPad tablets will be supported on IP Office Release 8.1. With its contextual, people-centric design, the Avaya Flare Communicator for IP Office will make communications and collaboration easier and more convenient than ever before for SME and mid-market customers.

Flare Communicator solution architecture

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 etc. are provided by IP Office 500v2 and UC features such as IM, presence, enterprise contacts are provided by the one-X Portal server.



If one-X Portal server is unavailable either due to licensing restriction or connectivity issues, the Flare Communicator client will work in a telephony-only mode providing only telephony features.

8.1.1 Flare Communicator for Windows

Flare Communicator for Windows integrates voice, presence, IM, directories into one unified offering for Windows laptops and desktops over a LAN connection. It allows users to gain integrated access to communications modes—move among drag-and-drop voice, IM, email, call history, and more.



8.1.1.1 Real-time Communication and Collaboration Features

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

Contact management features

- IP Office System and Personal contacts
- Index, scroll through contacts
- Filter contacts
- Touch to add contact
- Search for enterprise contacts and touch-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 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

8.1.1.2 Installation and Configuration

For installation of Flare Communicator for Windows:

- Download and install the application from Avaya support site

- Configure the application settings by providing the IP Office 500v2 IP address and port, domain, dialing rules (optional) enterprise directory settings (optional) on the Settings tab.

8.1.1.3 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

8.1.2 Flare Communicator for iPad

Flare Communicator for iPad integrates voice, presence, IM, directories into one unified offering for IP Office customers over Wi-Fi or 3G cellular and VPN connections.

Flare Communicator for iPad brings enterprise communication capabilities to the iPad tablets for IP Office customers. It is a software-only solution that can be easily downloaded (from the Apple App Store), and is the first step in extending the Avaya Flare Experience to non-Avaya devices.

With Flare Communicator, IP Office customers can use iPad devices for:

- Easy, ubiquitous access to the real time communications tools they rely on every day: phone, presence, IM, etc.
- Blending real time communications and business processes, such as mobile sales.
- Taking advantage of Wi-Fi and 3G connectivity for cost-saving VoIP.

8.1.2.1 Real-time Communication and Collaboration Features

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
- Touch to add contact
- 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
- Message Waiting Indicator
- Dial into a voice conference bridge

Collaboration

- View telephony 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

8.1.2.2 Installation and Configuration

For installation of Flare Communicator for iPad:

- Download and install the application from the Apple iTunes store
- Configure the application settings by providing the IP Office 500v2 IP address and port, domain, dialing rules (optional) enterprise directory settings (optional) on the Settings tab.

8.1.2.3 Localization

Flare Communicator iPad for IP Office will be localized for the following languages: English, Chinese, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish

Flare Communicator Windows for IP Office will be available only in English language at GA.

8.1.2.4 Operating System and Device support

Flare Communicator for iPad will be supported on the following Apple iPad tablets and Operating System versions:

- iPad 2 with iOS 4.3.5+
- iPad 2 with iOS 5.0 & 5.1

8.1.3 Flare Communicator Licensing

The Flare Communicator collaboration software client will be available on the following IP Office editions with the following add-on license:

IP Office Edition	Add-on License	Feature-set
Essential Edition	Avaya Softphone license	<ul style="list-style-type: none"> • Telephony functions, IP Office system contacts, call logs (application-side) • Flare Communicator for Windows and iPad
Preferred/Advanced/Server Edition	Office Worker or Power User	<ul style="list-style-type: none"> • Telephony functions, IP Office system contacts, one-X Portal personal contacts and call logs, Presence, 2-party IM, 2-party video (win only) • Flare Communicator for Windows and iPad

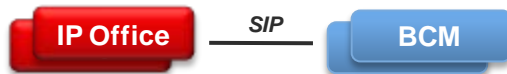
9 IP Office 8.1 Interoperability

With the IP Office 8.1 release a number of interoperability scenarios with other Avaya products have been tested and will be supported going forward. The scenarios include:

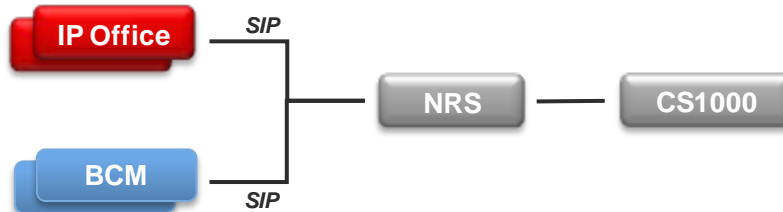
1. IP Office 8.1 and Avaya Aura Communication Manager 6.2



2. IP Office 8.1 and BCM 6.0

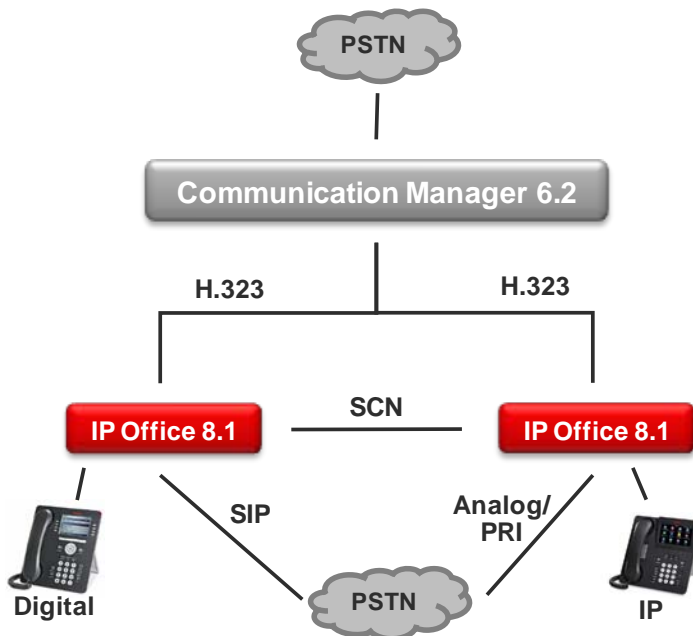


3. IP Office 8.1, BCM 6.0 and CS1000 7.5 with NRS



The IP Office 8.1 has not been tested in any configuration involving Avaya Aura Session Manager (SM). Avaya recommends partners and customers who need a small to medium branch solution networked to an Avaya Aura Core, including a SM, to position the Avaya B5800 product. The B5800 is based on the IP Office platform but provides advanced SIP interoperability and functionality with Avaya Aura Core product including Session Manager, Communication Manager and legacy Nortel products such as BCM, CS1000 and Call Pilot.

9.1 IP Office & Communication Manager Interop



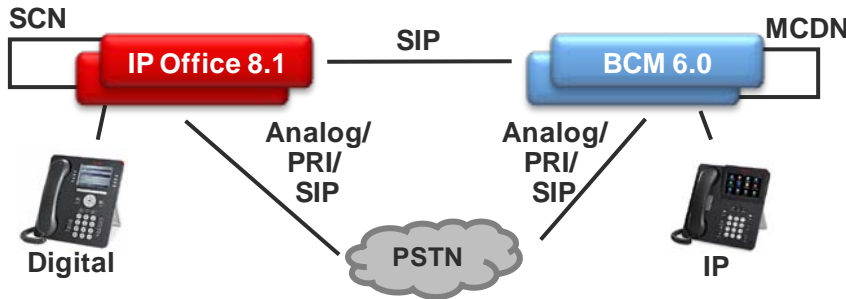
The H323 protocol is used for trunks between the IP Office nodes and the CM. The IP Offices are a network of SCNs and can use advanced SCN feature set between each other.

- **Protocol Support:**
 - IP Office to CM: H.323
 - IP Office to IP Office: H323 - SCN Networking
- **Platform Requirements**
 - **IP Office**
 - **Release:** IP Office 8.1
 - **Edition:** Essential, Preferred, Advanced and Server Edition
 - **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.

9.2 BCM and IP Office

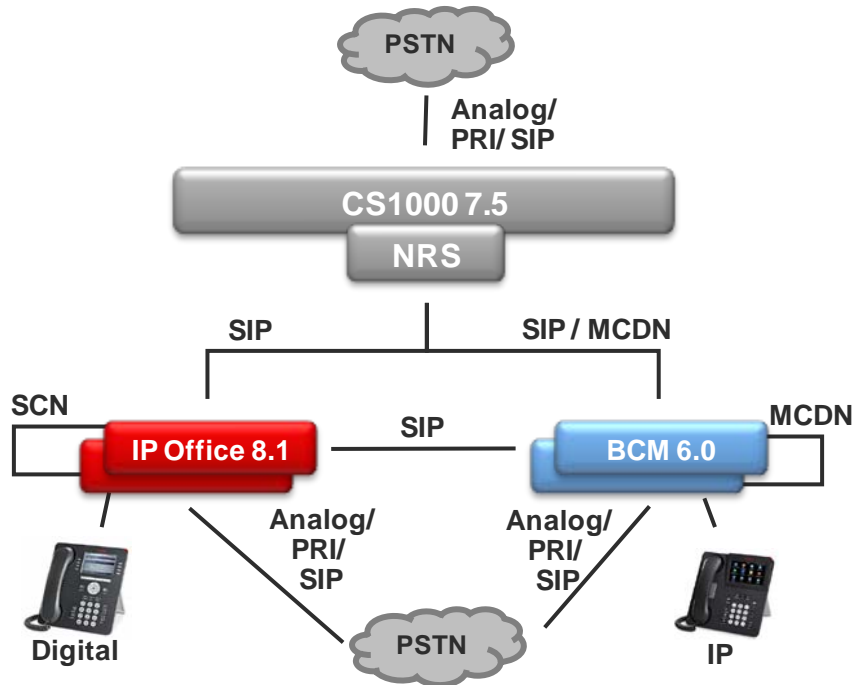


The SIP interoperability support between IP Office and BCM50/450 allows customers to migrate a network of BCM step by step to an IP Office SCN or Server Edition network.

- **Protocol Support:**
 - IP Office to BCM: SIP
 - BCM to BCM: SIP or SIP/MCDN
 - IP Office to IP Office : H323 – SCN or SIP
 - It is not possible to network IP Office and BCM via the MCDN or SCN protocol directly.
- **Platform Requirements**
 - **IP Office**
 - **Release:** IP Office 8.1
 - **Edition:** Essential, Preferred, Advanced and Server Edition
 - **BCM**
 - **Release:** BCM50 and BCM450 6.0
- **Centralized Voicemail:**
 - The IP Office system may use a centralized Voicemail PRO system in the SCN network
 - The BCM systems may use a centralized voicemail within the BCM MCDN network.
 - 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.

9.3 IP Office, BCM and CS1000



This configuration allows migrating a network of BCM and CS1000 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

NOTE: IP Office to CS1000 using H.323 or PRI trunks is not supported.

- **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 system 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.

10 SIP Standard Call Feature Support

For the standard SIP Networking connections described above the following call features are supported:

- **Standard Call Features**
 - Basic Call Completion
 - Handling of busy called party
 - DTMF and ring-back tone
 - Hold and Retrieve
 - Call Waiting presentation
 - Called Number display
 - Calling number and name display
 - Abandoned call
- **Call Redirection**
 - Call Forward (Forward ALL, Forward Busy, Forward No Answer)
 - Call Transfer (Attended and Unattended)
 - Call Redirection (To PSTN, Abandoned, Busy)
- **Conferencing**
 - AdHoc and MeetMe conferencing
- **PSTN Toll Bypass** – Toll Bypass allows each system to leverage the trunk connections of the other system in the network to avoid international and long distance charges.

11 IP Office Enhancements

The following enhancements are introduced with IP Office R8.1:

11.1 Web Manager Enhancement supporting Back-up, Restore and Upgrade

Web Manager has been enhanced to include new Back-Up, Restore and Upgrade functionality

Back-Up: Back-up image from the system/primary directory on the SD card can be sent to the SD Card system back-up or to the local machine that is running the browser. In the latter case, Web Manager will download a JAVA applet to interact with the local file system

Restore: Existing back up files can be restored to the "system/primary" directory of the SD card. Restores can be made from the "system/backup" to the "system/primary" of the SD card or from the local machine that is running the browser. Web Manager downloads a JAVA applet to interact with the local system. All restores will require a system reboot.

Upgrade: The upgrade package will be installed on the machine that is running the browser. Web Manager will interact with the IP Office to install the upgrade. The system will require a re-boot after the system upgrade.

11.2 Changeable RTP ports

For each VoIP call, a receive port for incoming Real Time Protocol (RTP) traffic is selected from a defined range of possible ports, using the even numbers in that range. The Real Time Control Protocol (RTCP) traffic for the same call uses the RTP port number plus 1; that is the odd numbers. For control units and Avaya H.323 IP phones, the default port range used is 49152 to 53246. On some installations, it may be a requirement to change or restrict the port range used. It is recommended that only port numbers between 49152 and 65535 are used; that being the range defined by the Internet Assigned Numbers Authority (IANA) for dynamic usage.

The minimum and maximum settings of the port range should only be adjusted after careful consideration of the customer network configuration and existing port usage. For pre-Release 8.1 systems, the gap between the minimum and maximum port values must be at least 1024.

For Release 8.1 and higher, the gap between the minimum and maximum port values must be at least 254. Choosing a range of less than 1024 should only be done after careful analysis of the overall configuration

- Port Range (minimum): *Default = 49152. Pre-Release 8.1: Range = 1024 to 64510. Release 8.1+: 1024 to 65280.*
This sets the lower limit for the RTP port numbers used by the system.
- Port Range (maximum): *Default = 53246. Pre-Release 8.1: Range = 2048 to 65534. Release 8.1+: 1278 to 65534.*
This sets the upper limit for the RTP port numbers used by the system.

11.3 Contact Center Enhancements

11.3.1 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.

Scheduled: Report Content: Include current day

When Include current day is selected, it means that the data collected will be for up to the day the report is scheduled to run.

11.3.2 CDR Answered event renaming

The "Answered" event reported in the CDR doesn't truly represent what is the actual change of state and is typically misinterpreted as the number of answered calls when the CDR is run with the "Answered" filter.

To better represent the actual state change, the "Answered" event will be renamed "Connected". Everywhere the "Answered" event is shown in a CDR report it will be changed to "Connected". That 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 filters:

- Holding
- Enquiry Answered
- Not Answered

11.3.3 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. This is counter intuitive and does not match the definition of the duration associated with other events. The duration should simply represent the time the call was in the state represented by the event.

Because 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, a new event will be 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 will be included when a "New Call" event is reported.

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

11.3.4 Wallboard – Manual Layout and Font Sizing

There have been many requests by customers to have the ability to manually design the wallboard layout instead of having it done automatically. Part of that requirement also included the setting of the font used in the wallboard elements.

A new configuration section has been introduced on the main Background and Content Settings dialog.

☯ Layout Mode

Manual Layout:	<input checked="" type="checkbox"/>
Manual Font Size:	<input type="text" value="20 Points"/> <input type="button" value="Reset"/>

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.

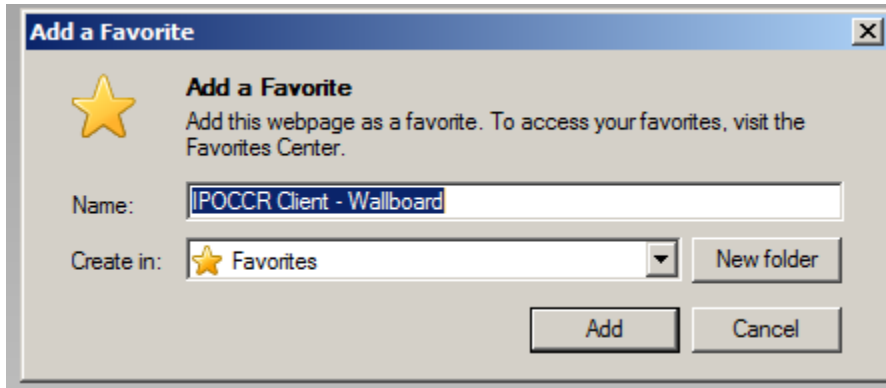
11.3.5 Wallboard – Bookmark and Auto-Login

There have been requests for how we could get a Wallboard to automatically come back online after a power outage or a reboot. The main issue with that is the fact that a wallboard requires a login before being opened. To help address this, a new icon is available on the footer bar.



This will allow the current wallboard to be added to the IE favorites 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 grayed out.

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 cannot be guessed and that is unique to that wallboard user. It will be named according to the wallboard name.

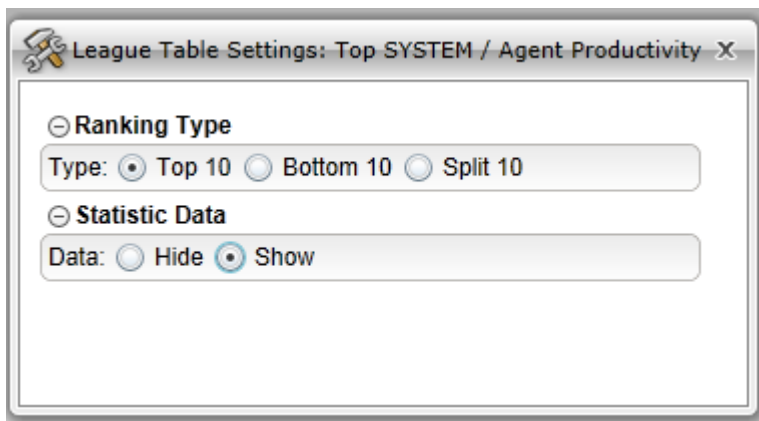
Clearly there is a security implication with this, but to access the URL the user must first have logged into the wallboard successfully. Once the link is available, navigating to it will enter the wallboard without a login process.

This allows for the link, or a command file containing the link, to be added to the Windows "Startup" 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 use as the "Home" location when the browser is launched.

11.3.6 Wallboard – Statistics values on Leader Board

The Leaderboard 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.



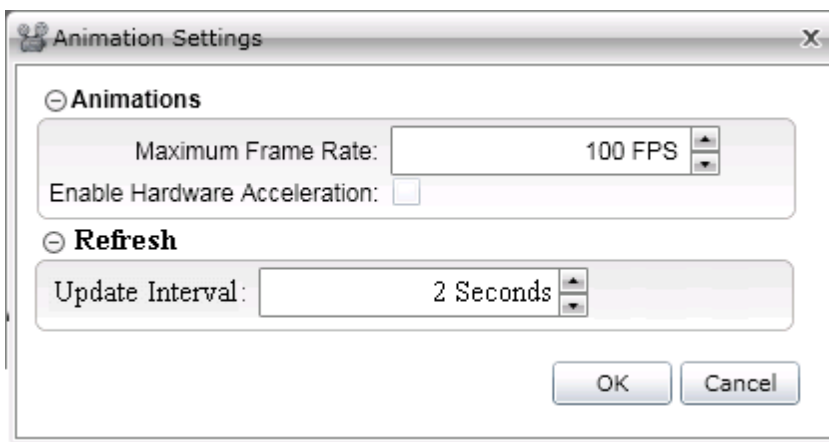
When configured to show statistics, at the right-hand side of the league table cell, agent statistic values will be displayed. This is an addition for the top, bottom or split modes of the league table.

Top SYSTEM		
/ Average Ans %		
1	▶ Robert H	88.9%
2	▲ ⁺² Tofaye M	75.8%
3	▼ ⁻¹ John G	72.0%
4	▼ ⁻¹ Michelle C	70.2%
5	▲ ⁺⁹ Fretzie M	59.9%
6	▼ ⁻¹ Lou P	56.0%
7	▼ ⁻¹ Damian J	51.2%
8	▼ ⁻¹ Nathan R	50.2%
9	▼ ⁻¹ Muhammed C	48.9%
10	▼ ⁻¹ Saifur K	48.4%

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).

11.3.7 Wallboard – Configurable update interval

There is a new control in the Animations Settings dialog that controls the update interval for all statistics on the wallboard, in all different types of cells including the monitor table cell.

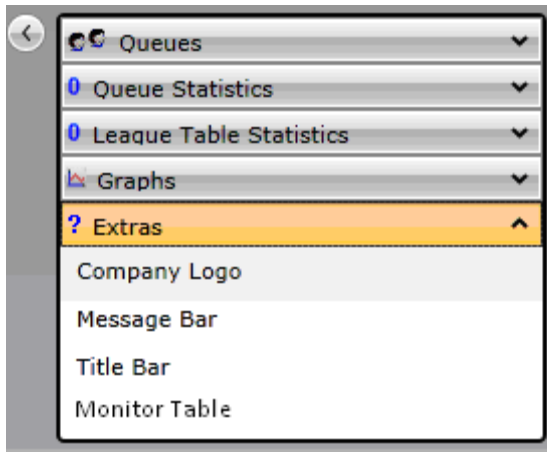


The range is 2 - 60 seconds, with a default of 2 seconds for new and existing wallboards. This matches the 2 second update currently used for all wallboards, so effectively the updates can only be slowed for systems with less available CPU.

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

11.3.8 Wallboard – Monitor Table

There has been a long standing request to have the Monitor View type of format available in the Wallboard. 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 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.

Drag a column header and drop it here to group by that column				
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 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.

11.3.9 CCR 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.

11.3.10 CCR Client Browsers on Windows 7

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



11.3.11 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 (shown below).

Last Refresh: 1/09/2011 User: Viewer

Incoming DID Summary

From: 1/08/2011 5:40:13AM To: 31/08/2011 11:51:37PM 12:00:00AM To: 11:59:00PM

DID Number(s): 0390186832; 0390186867; 0390186868; 0390186881; 0390186882; 0390186883; 0390186884; 0390186885; 0390186889; 0390186931

PCA: 20

Date / Time	I/C Presented	I/C Answered	I/C Lost	Incoming Answered (%)	Incoming Lost (%)	Average Incoming Duration	Average Wait Answered	Average Wait Lost	Calls Ans Within 20	Calls Ans Within 60	Calls Ans Within 120	Calls Ans Within 999	Calls Ans Within 999	Call Ans + 999	Longest Waiting Answered	PCA
0390186832																
1/08/2011 12:00:00AM	4	3	1	75.00%	25.00%	0:03:57	0:01:00	0:00:02	2	0	0	1	0	0	0:02:57	66.67%
2/08/2011 12:00:00AM	9	9	0	100.00%	0.00%	0:04:08	0:02:46	0:00:00	4	1	1	3	0	0	0:11:36	44.44%
3/08/2011 12:00:00AM	6	6	0	100.00%	0.00%	0:03:32	0:01:54	0:00:00	4	0	1	1	0	0	0:09:48	66.67%
4/08/2011 12:00:00AM	15	15	0	100.00%	0.00%	0:04:14	0:00:45	0:00:00	13	0	0	2	0	0	0:07:58	86.67%

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 only for Incoming external calls.

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

DDI Report - Daily - December 2011 01/12/2011 - 07/12/2011 00:00 - 23:59

Custom Report Name: Sample DDI Report Supervisor Name: Supervisor

AVAYA Sample Report - CCC DID Report

Answer Call Threshold (seconds): 20

DDI Number(s): 00390186867 0390186800 0390186824 0390186832 0390186867 0390186868 0390186881 0390186882 0390186883 0390186884 0390186885

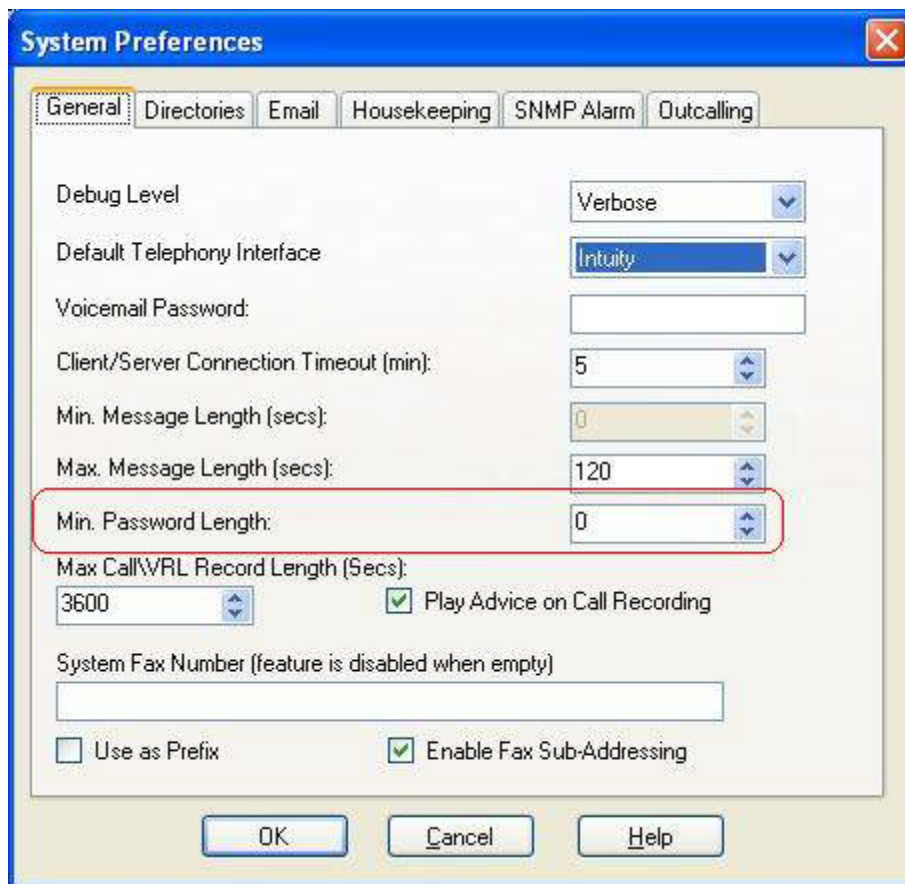
DDI	Date / Time Hour	Presented	Answered	Lost	Answered %	Lost %	Average Duration	Average Answered Wait	Average Lost Wait	Answered <= 20 s	20 s < Answered <= 60 s	60 s < Answered <= 120 s	120 s < Answered <= 999 s	Answered > 999 s	Longest Answered Wait	ASA %
00390186867	01/12/2011	1	0	1	0.00%	100.00%	00:00:00	00:00:00	00:00:17	0	0	0	0	0	0 00:00:00	0.00%
		1	0	1	0.00%	100.00%	00:00:00	00:00:00	00:00:17	0	0	0	0	0	0 00:00:00	0.00%
0390186800	01/12/2011	1	0	1	0.00%	100.00%	00:00:00	00:00:00	00:00:51	0	0	0	0	0	0 00:00:00	0.00%
	02/12/2011	1	0	1	0.00%	100.00%	00:00:00	00:00:00	00:00:36	0	0	0	0	0	0 00:00:00	0.00%
0390186824		2	0	2	0.00%	100.00%	00:00:00	00:00:00	00:00:44	0	0	0	0	0	0 00:00:00	0.00%
	01/12/2011	10	10	0	100.00%	0.00%	00:05:39	00:00:14	00:00:00	7	3	0	0	0	0 00:00:36	70.00%
	02/12/2011	4	3	1	75.00%	25.00%	00:01:04	00:01:05	00:02:57	1	1	0	1	0	0 00:02:34	33.33%
		14	13	1	92.86%	7.14%	00:04:21	00:00:26	00:02:57	8	4	0	1	0	0 00:02:34	61.54%

11.4 VoiceMail Pro Enhancements

11.4.1 VoiceMail Pro Password length configuration

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).

The minimum password length is configurable via the VoiceMail Pro Client System Preferences General tab. 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.



On top of 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 less), then the Minimum Password Length field will be grayed out in the General tab.

11.5 Security Documentation

New security documentation will provide updated guidelines and recommendations on how to install and maintain the IP Office in the most secure manner. The guidelines will cover all editions of IP Office, including the new Server Edition being introduced in R8.1.

11.6 Avaya Audio Branding Improved Experience

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

R8.1 offers a better user 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
 - 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.
 - 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.

11.7 Improved event delivery mechanism (websockets) 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 callback) 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 delivery events from the one-X Portal server to the desktop integrations has been changed to use websockets. This new event delivery mechanism removes requirements around opening firewall ports and giving administrative privileges and hence eases the deployment of the desktop integrations.

11.8 Debug enhancement – Logger stamp support

Log Stamping was a valuable debugging aid in legacy BCM during lab testing, trials and customer issues. Its primary use is: someone on a phone experiences a problem (previously known or new) and invokes the LogStamp feature, then reports the problem to trials, support, etc. with a reference to the log stamp. This log stamp provides a reference point in the captured Monitor logs to quickly zero in on the activities that occurred around the issue.

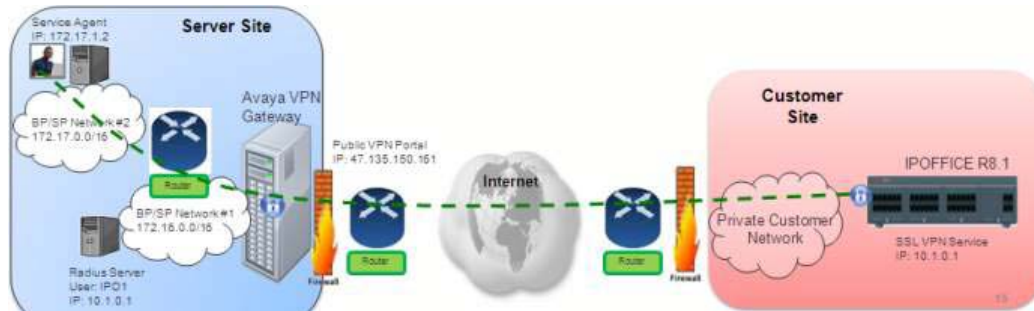
When a Logger Stamp is generated (defaulted short code of "*55" "" will be set to Stamp Log on default 8.1+ systems) it inserts a stamped line in the Monitor and at the same time it issues a transient display "Log Stamped#nnn" on the invoker's phone display. If the feature was invoked via a programmable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

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

11.9 SSL/VPN Remote Access

The IP Office SSL-VPN remote access solution is a fast and easy way to set up a secure remote access at broadband speeds. The solution is designed to provide Avaya and Avaya partners with reliable remote access that enhances service delivery while reducing the cost associated with truck rolls. The solution

enables partners of any size, to create an infrastructure that automates management and maintenance of IP Office systems.



The IP Office SSL/VPN Solution

The IP Office SSL-VPN solution offers secure remote accessibility to the IP Office devices with minimum networking expertise required to set up the CPE at the customer site. The IP Office can be pre-configured with SSL-VPN configuration before installing on the customer’s site.

The SSL/VPN solution is a cornerstone element of the new IP Office Support Services maintenance offer, allowing Avaya to provide industry leading 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. When Avaya hosts the server side solution, partners will benefit from a reduction in their infrastructure investment and training requirements plus they will leverage a simplified, automated On-Boarding process that is described in a later section of this document.

Advantages of IP Office SSL-VPN Solution

- Secure remote access at broadband speeds for enhanced support
- Simple to configure and deploy
- Scales to accommodate future growth requirements
- Does not require networking expert at the customer site (No IT admin required at the customer site)
- No requirement to open holes in the firewall (Firewall agnostic as the connection is initiated from the customers’ site to the Gateway)
- Connection can be “Always-ON” or can be initiated via Dial-Up or Phone.
- Facilitates remote configuration, management, monitoring, diagnostics and upgrades.

How does it work?

IP Office R8.1 software includes an embedded SSL-VPN client. On the server site, should the partner decide to host the server side, the partner will need to install a server (VM) and install the Avaya VPN Gateway (AVG) software. The Partner will establish the SSL-VPN Gateway configuration on the IP Office so that the IP Office can trigger a secure tunnel back to the Gateway. A username/password is setup during the configuration step for security purposes. A second level of security is also provided with a server side certificate authentication. A radius server will then validate the username/password upon connection request initiated from the IP Office. Once the credentials are validated, the secure remote access is established.

Solution Requirements

At a minimum, the partner needs to ensure that a broadband connection is available at the customer site. A partner deciding to host the server side can purchase (scale as you go) the SSL-VPN licenses based on how many simultaneous connections are required. The AVG software is installed on a VM server software

(partner can chose the server of their choice) and set up a radius server for username/password authentication. The same VM server can also act as a radius server or the partner can use a separate radius server or reuse an existing radius server based on their IT department’s recommendations and security policy.

Partners wanting to host the server side gateway should refer to the URL below for more detailed information about the Avaya VPN gateway solution

: <https://enterpriseportal.avaya.com/ptlWeb/gs/products/P0623/AllCollateral>

Note: Some exceptions and conditions apply to the SSL/VPN solution described above:

- Not supported on the IP Office 500v1 system.
- Not supported with the Unified Communications Module or with the external expansion applications server (Material Code – 269810) used with the IP Office.
- When the partner hosts the server side, configuration of the solution is performed using IP Office Manager. As a result, the IP Office Basic Edition is not supported with the SSL/VPN solution.

11.10 On-Boarding Automation

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

The new Avaya IP Office Support Services maintenance offer requires the completion of some simple administrative steps to facilitate service delivery. On-boarding of the specific IP Office system is required to create an installed base inventory record in the Global Registration Tool (GRT) and where supported and requested, the establishment of SSL/VPN remote connectivity into the Avaya support infrastructure, termed technical registration.

To create a more streamlined and integrated process, R8.1 introduces several automation elements to the On-Boarding process within Web Manager (illustrations below) and available for use with IP Office Basic, Standard and Server Editions. The “On-Boarding” option in the Tools drop down opens up the On-Boarding page.



The On-boarding menu below guides the user through the required steps:

- The “Get Inventory File” extracts the IP Office inventory from the configured IP Office into an inventory .xml file which is stored on the users laptop or system.
- From the users browser, a direct URL link is provided into the IP Office Global Registration Tool landing page by clicking on the “Register IP Office” button.
- The user logs into GRT with their SSO log-in credentials, entering the specific customer Sold To and other site specific information.
- The IP Office inventory file is then uploaded into GRT and then GRT will then use this information to create the installed base inventory record.
- If the user has requested remote access into Avaya, then GRT will automatically generate an SSL/VPN Onboarding.xml file which is downloaded to the machine running the web browser.

- The Onboarding.xml file is uploaded to the IP Office by clicking on the “Upload” button located in the Upload On-Boarding file area



After completion of the steps outlined above, the inventory installed base creation and the technical registration to establish SSL/VPN connection into the Avaya services infrastructure is now completed.

Note: Some exceptions and conditions apply to the On-Boarding Automation tools described above:

- Not supported on the IP Office 500v1 system.
- Not supported on the external expansion applications server (Material Code – 269810 used with the IP Office, as no core processing runs on this server. To facilitate completion of necessary GRT registration, the Web Control contains the material code for quick reference.
- Telephone inventory information required for optional telephone APR coverage is not available in the automatically extracted inventory file
- To ensure the most accurate inventory file, the system should be fully configured before starting the registration process in GRT.
- The automatically extracted inventory file utilizes a “best match” approach to identify the corresponding hardware material code. GRT provides users an opportunity to review and make adjustments to the final installed base inventory record in cases where the “best match” does not accurately reflect the actual site installation configuration.
- After completing the initial on-boarding process, the extracted inventory file can be generated again in the future to capture any changes to the system configuration. This can be useful for on-going service or troubleshooting.

Always refer to the IP Office Support Services offer description and process training materials for the most current details of these and other process requirements required for maintenance coverage.

11.11 SIP Trunks

Service Providers continue to broaden their SIP trunk offerings and SME customers are increasingly evaluating and adopting SIP trunks. IP Office R8.1 responds to these market trends, with several new SIP trunk capabilities, designed to simplify and address a wider set of implementation scenarios.

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.

For more information about Avaya's SIP Compliance Testing Program (GSSCP), please refer to the following link:

<https://enterpriseportal.avaya.com/ptWeb/bp/so/CS201172610238111040>

11.11.1 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. SIP Lines will now support the Send From in Clear field. 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 header included to identify IPO in SIP trunk calls

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) information into the SIP messages. User-Agent headers are generated for IP Office initiative 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.

IP Office can send 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.

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), IPOffice will send UPDATE messages for session refresh.

From header shall be used by IPO 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 answers this need, by providing 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.

Turn off OPTIONS if registration can do keep-alive

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.

IP Office should support nonce caching for proactive inserting 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.

11.12 Avaya Session Border Controller for Enterprise

The Avaya Session Border Controller for Enterprise is a flexible, fit-for-purpose solution that includes a set of standard security features. This SBC provides all of the functionality required for Small-Medium enterprises to terminate SIP trunks without the complexity and higher price associated with typical SBCs. The Avaya SBCE scales up to 150 simultaneous sessions per Portwell server (2,000 per Dell server) and is fully supported within Avaya IP Office 8.1.

Enterprise-Class functionality at SME Pricing

- Blocks toll fraud
- Blocks DoS, DDos and Call Walking attacks
- GUI driven
- Scalable to largest IPO environments
- A fraction of the overall solution cost

Easily upgradable to the Avaya Session Border Controller for Advanced (for future releases)

- VPN-less SIP remote worker protection
- Enhanced Toll Fraud and DoS protection

The Avaya Session Border Controller for Enterprise will be included in the GSSCP reference architecture for IP Office, as a recommended option to complement the base reference architecture, where appropriate to the specific customer requirements.

For more information about Avaya's Session Border Controller for Enterprise, please navigate to the following URL's.

<https://enterpriseportal.avaya.com/ptlWeb/gs/products/P0996> (Avaya SBCE)

<https://enterpriseportal.avaya.com/ptlWeb/gs/products/P0997> (Avaya SBCE)

11.13 one-X ® Mobile Preferred for IP Office

one-X ® Mobile Preferred for IP Office is a mobile application available for smartphones on Android and iOS platforms. It provides rich unified communications capabilities for mobile workforce and is designed to give mobile users quick access to various forms of communications and help users conduct normal business while on the move. The application relies on permanent data connection with the communications server and is designed to provide an “always-on” experience delivering asynchronous events of interest to the user as they arrive from the communications server.

The application utilizes rich user interface available on the mobile platform and makes use of advanced capabilities and hardware commonly available on mobile devices including streaming audio for visual voicemail, speech recognition to issue audible commands and geo-location presence using on-board GPS.

The application provides unified communications capabilities with the following capabilities:

- Presence and Instant Messaging with server-side buddy lists and server-managed user groups and client side IM history.
- Visual voicemail with ability to play voicemail messages and ability to manage voicemail messages from the mobile application.
- Rich conference controls with click-to-conference for users and groups, entry and exit notifications, ability to view and manage conference participants (mute/un-mute/disconnect/isolate).
- Advanced user presence monitoring and reporting including geo-location presence and tracking, calendar and on-the-phone presence, following user’s presence and availability.
- Asynchronous voicemail deposit events with ability to listen and intercept voicemail deposits
- Ability to issue commands to the communications server including call, conference, set location, and view-missed calls, and listen/pickup.
- Enterprise dialing, which is an ability to intercept calls made via standard phone dialer and turn them into enterprise calls (3rd party call control by the server).
- Ability to define dial plan rules to select which calls to intercept and ability to post-process the dialed numbers to normalize them to the enterprise dialing plan to make the intercept seamless
- Android home screen widget with summary of outstanding events asynchronously notifies mobile users about events of interest such as – outstanding IM messages, new deposited VM messages, conference participants entry/exits, VM deposit in progress

11.13.1 one-X Mobile Preferred and one-X Mobile Essential Platform Support

IP Office Release 8.0 supported the one-X Mobile Preferred client for smartphones with the Android OS versions 2.1, 2.2, and 2.3. IP Office 8.0 Q1 Maintenance Release has extended that support to the Apple iOS version 5,0 for iPhone 4/4S smart-phones.

IP Office 8.0 Q1 Maintenance Release has also extended the support for the one-X Mobile Essential client to the following smart-phone OS platforms:

- Android OS versions 2.2, 2.3.3
- Blackberry platform version 5.0 and above



12 Power Demo Kits

Describe the available demo kits or demo capabilities (and demo scripts).

- Power Demo Kit
- IP Office Anywhere

13 Logistics and Ordering

13.1 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	✓	✗
700503228	IPO R8.SERVER EDITION INSTL DVD	✗	✓

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

13.2 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 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.

The IP Office Applications Server DVD installs selected IP Office Applications onto a general purpose computer that is compatible with CentOS Linux.

The DVD consists of the following:

- Linux (CentOS)
- VoiceMail Pro Server
- Avaya one-X[®] Portal for IP Office Server

IP Office Applications Server DVD simplifies the end user applications installation experience and reduces the overall solution total cost of ownership by removing the need for Microsoft Windows Server licenses. Server Specification

Minimum:

- Intel Core 2 Duo 2.0 Hz, 2 GB RAM, 30GB Hard Disk

Recommended:

- Intel Pentium Quad Core 2.4 GHz, 4GB RAM, 30GB Hard Disk

Hardware must be compatible with the CentOS Linux version specified.

The installation is performed by booting the server with the DVD in the drive. Follow the installation instructions, enter "root" password and the installer does the rest. At the end of the installation the server will reboot and then the installation is complete.

Once the Applications Server is up and running, any additional applications can be installed and run, using the standard CentOS Linux administrative tools. Hardware resources are the only thing which limits what can be run on the server, to ensure performance of all applications.

13.3 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

13.4 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

13.5 Web Availability

The IP Office R8.1 software will be available on the Avaya Support website by June 29, 2012.

Upgrades to IP Office R8.1 require a valid Release 8.1 upgrade license available with the purchase of an Avaya IP Office Support Services maintenance contract. The software images may be downloaded from Avaya support.

1. Go to <http://support.avaya.com>
2. Click "Downloads" under "Resource Library"
3. Select "IP Office" under "Download by Product Name"
4. Select "8.1" under "Select a Release"

Please refer to the "Avaya Global Services" Section for additional details on the new IP Office Support Services offering and software access.

13.6 Software Upgrade Process

The process for upgrading the different IP Office platforms from previous releases to Release 8.1 is described in the Release 8.1 Technical Bulletin where all software upgrades are addressed.

To find the latest IP Office technical bulletin after the release is available:

1. Go to <http://support.avaya.com/>
2. If not previously selected, select IP Office, Select "products" or "change product" from the left menu and type IP Office.

3. Click “Technical Tips” under “Documentation”
4. Select “IP Office”
5. Select “8.1” under “Select a Release”

13.7 Software Pricing

New versions and releases of IP Office core and applications software are subject to two charges:

- A nominal charge for the delivery of media and the associated handling costs
- A license fee for the activation of specific new features introduced with this version of IP Office software

13.8 IP Office Software Applications and License Key Process

General Available (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.

14 Avaya Global Services

Introducing Avaya IP Office Support Services

With the introduction of IP Office R8.1, Avaya is launching a new service offering. Avaya IP Office Support Services provides service options designed to maintain and support Customers' IP Office.

The charts below provide a brief overview of the new service offering.

For additional details of the new Avaya IP Office Support Services offering, please refer to the Global Offer Definition document and other launch materials located at the following URL

<http://portal.avaya.com/ptlWeb/qs/services/SV0578>

New Global Offer from Avaya

IP Office Support Services are consistent, flexible and simple

- ▶ Single fee per node*
- ▶ Base offer includes:
 - Remote Technical Support (Hardware and Software)
 - Business Hour Support – 8x5x5
 - Major Software Upgrades
 - Software Patches and Updates
 - Enhanced Remote Connectivity
 - 1, 3 or 5 year prepaid terms

Optional Add-Ons

**Any Time / Any Day Support
24x7x365**

**Parts Replacement
NBD or 4 hour
or On-site (US)**

Terminal Replacement

Consistent
Same offer elements for
SME and Mid Market

Flexible
Multiple service delivery
options available

Simple
Industry standard support
model at a fixed price

IP Office Support Services Key Offer Benefits

Partners protect their customers with a Maintenance Support offer upfront at point of sale

<p>Consistent Same offer elements for SME and Mid Market</p>	<ul style="list-style-type: none"> ▶ Remote Technical Support (Hardware and Software) ▶ Major Software Upgrades ▶ Software Patches and Updates ▶ One low service rate, regardless of product complexity or number of calls
<p>Flexible Multiple service delivery options available</p>	<ul style="list-style-type: none"> ▶ Wholesale and Co-Delivery options ▶ Business Hour Support (8x5x5) or Any Time / Any Day Support (24x7x365) ▶ Enhanced remote connectivity (SSL / VPN) for faster resolution ▶ Partner or customer can call Avaya ▶ 1, 3 or 5 year prepaid terms ▶ No required attach
<p>Simple Industry standard support model</p>	<ul style="list-style-type: none"> ▶ Easy to quote – use Price Catalog, Distributor Tools, EZ Quote or EC Voice ▶ Easy to order – use existing SME order forms ▶ Tools and Process enhancements delivered with launch ▶ Limited material codes

Applies to IP Office 8.1+ and is available through authorized partners and 2-Tier Distribution (older releases remain on BOH)

Note:

IP Office Support Services will be the only Manufacturers Support Offer available on IP Office Release 8.1 and future releases. The Block of Hours offer (SME Technical Support for Partners) will remain available on

legacy products (including IP Office Release 8.0 and earlier versions). IP Office Support Services is the manufacturers support offer for IP Office Release 8.1 but it is not mandatory.

IP Office Software Availability

Avaya recognizes that Software Assets are intellectual property that provides value to customers and Authorized Channel Partners. With the introduction of IP Office R8.1, all software and firmware downloads are being placed behind the Avaya Firewall.

Access to IP Office software and firmware downloads

IP Office R8.1 and earlier software:

- Single Sign-on (SSO) log-in will be required for access
- Access to major Software Updates, minor Software Updates, Service Packs and Firmware Updates will be available through the Avaya self-help web site (support@avaya.com).

Obtaining an SSO Log-In

An SSO Log-in can be obtained by registering at the Avaya Support website <http://support.avaya.com>

Avaya Maintenance, Lifecycle and Warranty Information

Avaya IP Office Support Services complement standard Avaya maintenance, lifecycle and warranty policies which are posted on support@avaya.com

Additional Avaya IP Office Support Services Information

For additional details of the new Avaya IP Office Support Services offering, please refer to the Global Offer Definition document and other launch materials located at the following URL <http://portal.avaya.com/ptlWeb/gs/services/SV0578>

15 IP Office Credentials and Avaya University Training

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

The SMEC IP Office Credentials include:

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

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

New and current Classes available with IP Office 8.1

Training is one component that must be fulfilled prior to being an Authorized Avaya Channel Partner. The Avaya learning IP Office Technical curriculum is updated to reflect the new features of IP Office Release 8.1 through the addition of two new courses:

- IP Office Release 8.1, Mid-Market and Linux -Technical Overview
Web Based training, 4S00006W – 4hr duration
Availability: June 1, 2012

- IP Office R8.1 Delta course that covers the major enhancements and customer benefits associated with Release 8.1. (Approximately 20 slides)
Availability: June 1, 2012

A new ACIS credential exam remains unchanged from release 8.0.

Sales – APSS Credential

Take the APSS Selling IP Office class:

Course Code	Description	Duration hours	Modality
2S00005W	Selling IP Office	3	WBT

And:

T.B.D	Selling IP Office – Update Release 8.1	0.5	uConnect
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Then:

2S00005A	Selling IP Office	1	Assessment
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16 List of New and Updated IP Office R8.1 Material Codes

All pricing of IP Office Release 8.1 material codes will be notified to distribution partners through the normal Price List Administration Tool (PLAT) procedure.

Material code	Description	Applicable to Basic Edition, PARTNER® / Norstar™ Modes	Applicable to Essential Edition, Preferred Edition & Advanced Edition	Applicable to Server Edition
270397	IPO R8.1+ SERVER EDITION LIC	X	X	✓
t.b.d	IPO R8.1+ SW ONLY SERVER EDITION LIC	X	X	✓
270393	DL360G7 SRVR IPO R8.1+ BE PRIMARY	X	X	✓
270395	DL120G7 SRVR IPO R8.1+ BE EXP	X	X	✓
700503228	IPO R8.1 SERVER EDITION INSTL DVD	X	X	✓
270398	IPO R8.1+ SOFTPHONE RFA LIC	X	✓	✓
700504031	IP OFFICE MC VCM 32 V2	X	✓	✓
700504032	IP OFFICE MC VCM 64 V2	X	✓	✓
270680	IPO LIC UPG R8.1 SML	✓	✓	X
270399	IPO UPG R8.1+ LIC	✓	✓	X
700503230	IPO R8.1 USER/ADMIN SET DVD	✓	✓	X
700503231	IPO R8.1 APPL SRVR DVD	✓	✓	X

16.1 New or changed configuration rules

Material code	Description	Pre-requisite material code	Comments
270397	IPO R8.1+ SERVER EDITION LIC	270393 DL360G7 SRVR IPO R8.1+ SE OR 270395 DL120G7 SRVR IPO R8.1+ SE	Required per node (Linux server or IP500v2) Bundles in: 6. Features from Essential Edition 7. Features from Preferred Edition 8. Centralized VMPro 9. 2 ports of VMPro 10. Unlimited SCN(multisite networking) channels Enables meet-me conferencing, advanced messaging, automated attendant, call recording, conditional call routing, queue announcements, mobile twinning, call control and call-back.
t.b.d	IPO R8.1+ SW ONLY SERVER EDITION LIC	None	Controlled Introduction
270398	IPO R8.1+ SOFTPHONE RFA LIC	267786 IPO R8+ ESSNTL EDITION+ LIC	Enables one softphone seat. Supported Softphone: - Flare Communicator (windows/iPad) - Avaya Video Softphone

17 GRIP requests delivered in IP Office Release 8.1

The Global Requirements Integration Process, otherwise known as GRIP, was introduced at Avaya as a mechanism to capture the voice of Avaya's customers, partners, and employees to accelerate innovation which ultimately helps Avaya become a more responsive solution provider. GRIP is a partnership between Sales, Services, Product Management and Development groups so that Avaya can design, develop and deliver what our customers and the marketplace demands. GRIP is the only formal process at Avaya, where our customer and partner feature / function requests are documented in one location via the centralized GRIP tool and driven through an automated workflow process.

GRIP requests are often entered by Avaya associates on behalf of the business partner or customer or can be entered directly by the business partner. Entering a GRIP feature request ensures that the request is handled according to the defined GRIP workflow, ultimately resulting in a decision by the Avaya business unit responsible for the specific product.

To arrive at a decision on a GRIP request, the responsible Avaya business unit will assess the merits of the request in conjunction with the broader Avaya roadmap planning process. GRIP's that are approved for implementation are done so at the sole discretion of the Avaya business unit after reviewing the information provided in the GRIP. Submitting a GRIP should not in any way be interpreted as an indication or an expectation that the feature request will be accepted for implementation. Only a subset of submitted GRIPs are approved for implementation. The number of GRIP requests included in any product release will vary according to the business objectives of the specific release and the merits of GRIPs reviewed for potential inclusion into the release.

Please refer to the following URL for additional information regarding the GRIP process or contact your Avaya sales representative for assistance.

<http://spark4.avaya.com/Grip/index.asp>

The GRIP request table below summarizes GRIP requests that have been implemented in the IP Office R8.1 program. It is provided as a quick reference for the reader to identify whether a specific GRIP has been included in this product release. It is not meant to replace the use of the GRIP tool which always provides the most up to date status information on any GRIP request.

Please note that Avaya business partners will only be able to view GRIP requests entered against their specific Partner Link ID. If a GRIP was entered by an Avaya associate on behalf of a business partner or customer, please contact the Avaya associate for more details about the GRIP.

GRIP #	GRIP Request Title
3589	No option within the Wallboard Set-up to change the format display of the Wallboard e.g. Tabular
3590	No option to layout the Wallboard horizontally
3593	No option to resize Fonts on Queue Headings
4287	CCR Reports to be scheduled for the same day
4333	CCR need to be able to hide the last XXXX digits in dialed numbers
4556	CCR DDI Reports
6257	Adjustable fonts for CCR Wallboard
6715	CCR Reports to be scheduled for the same day
6785	Changeable RTP Port difference
7038	CCR DDI Reports
7265	CCR Reports to be scheduled for the same day
7273	Security Documentation
7911	One-X Portal Telecommuter Mode