Avaya IP Office Deployment Options & Client Integrations

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Solutions Architect

June 2014
Mission Statement:
To be an innovative, knowledgeable, responsive partner with our customers in the design, implementation and support of all their network communication solutions.
Agenda

- Avaya IP Office Overview
- Avaya IP Office Branch
- Integrating IP Office with Lync
- Client Integration Demonstrations
Avaya IP Office Overview
The Avaya IP Office™ Platform

- Integrated call recording and playback
- Full Site Resiliency without additional Licensing
- Up to 2000 Users
- Up to 32 Locations w/Centralized Licensing
- Includes up to 256 ports of meet-me audio conferencing
- Mobile access using PSTN and VoIP (3G/4G & WiFi)
- Virtualization
- Integrated Video Conferencing
- Work from home with single # reach, IM, directory, and conference browser control
- Web-based Management

“Simple, Powerful Collaboration Solution”
Differences Between IP Office Server Edition and IP Office Preferred/Advanced Edition

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>32 locations</td>
<td>32 locations</td>
<td>Restricted topology allows many optimizations. Other H.323 trunk types still allowed</td>
</tr>
<tr>
<td></td>
<td>1000 users total</td>
<td>1500 users total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7200 BHCC</td>
<td>14400 BHCC (Max)</td>
<td></td>
</tr>
<tr>
<td>Multi-Site (SCN)</td>
<td>Freeform Star, mesh, chain</td>
<td>Single or double star</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SCN trunks anywhere</td>
<td>No additional SCN trunks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SCN trunk channels licensed</td>
<td>Unlimited SCN trunk</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>channel licenses</td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>Limited centralized (Multi-</td>
<td>Fully centralized</td>
<td>Consolidated mode for full centralization. Non-consolidated mode for freeform per device</td>
</tr>
<tr>
<td></td>
<td>site (SCN) Manager)</td>
<td>(Server Edition Manager)</td>
<td>configuration</td>
</tr>
<tr>
<td>Licensing</td>
<td>Distributed</td>
<td>Central pool</td>
<td>All common licenses centralized. Some still distributed. All administered centrally</td>
</tr>
</tbody>
</table>
IP500V2

- Protecting customer’s investments – support for Merlin, Integral, Partner, Aura, BCM & Norstar phones
- Pay as you grow & evolve – simultaneous support for SIP, H.323 IP, digital & analog sets
- No moving parts in 500v2 chassis
- 68 years MTBF
- Network of up to 32 sites with up to 1,000 users
- 128 conference ports built-in & enabled
- Unlimited mailboxes, no licenses to purchase
- Voice mail to email free for every user
- Twinning free for every user
- 4 MOH sources
- Resiliency of IP phones, hunt groups, etc. in SCN
Avaya IP Office Server Edition

Powerful Resiliency, and Voice Messaging Redundancy

Resilience for all IP Phones in the network

Digital/Analog Primary Server

Secondary Server

Expansion System

Voice Messaging

Multi-Site Network

Hunt Groups

Messaging

Either Primary or Secondary

96xx/16xx IP Phones

Expansion System

96xx/16xx IP Phones

Analog

Digital
IP Office Branch
Target Branch Customer Profile

- **Size:**
  - 10-2000 branch locations
  - Branch size 5-50 users (sweet spot)

- **Lead Verticals**
  - Finance, Healthcare, Retail, Hospitality (restaurant chains), Government, Education

- **Key IT and Business Drivers:**
  - Tech Refresh for old key systems
  - Improve customer experience
  - Reduce TCO by centralizing applications
  - Evolution to centralized architecture at their pace.
Branch Criteria to assist Product Positioning

3 key criteria drive the type of branch solution

Cost

Need for Collaboration
Voice, Data, Video

High communication with core

Low communication with core

Number of Users within the Branch

Small (5-50) users

Large (50- to 450) users

3 key criteria drive the type of branch solution

- **Small (5-50) users**
  - High communication with core
  - Low communication with core

- **Large (50- to 450) users**
  - High communication with core
  - Low communication with core

**IP Office Branch**

**Aura with G430/G450**
Leverage... What You Already Have

Your Network
Centralized networks reduce costs and simplify administration

Your Phones
Reuse your existing phones for greater savings

Your Applications
Use centralized applications for real collaboration between locations

Your Experts
Make your experts available to remote locations for better service

How and when you leverage them is up to you!
**IP Office 9.0 Branch Deployment Options**

**Standalone**
- Need local apps and local presence
- Few changes once installed, so central management is not that important
- Example customer: Retail stores

**Distributed**
- WAN is not VOIP ready so can’t rely on centralized architecture
- Want to leverage cost savings with centralized apps and management
- May have legacy endpoints
- Example customer: Rental Car Company

**Centralized**
- WAN is VOIP ready
- May have call center agents at the branch
- Want to leverage a core solution for user experience during sunny and rainy day
- Example company: Branch Bank
Standalone Branch – IP Office

Customer Drivers

• Branch operates autonomously
• No need for a high bandwidth WAN infrastructure
• Applications and IT resources reside locally
• Not as much collaboration between Branch and HQ
• Cost-effective turnkey solution

Customer Benefits

• No dependency on WAN
• Reduced TCO with IP Office Manager centrally managing individual IP Office Systems
• Investment protection by reusing endpoints from BCM, Partner, analog

Diagram:
- Centralized management with Avaya Aura® System Manager
- Local Applications: Messaging, Conferencing, Auto-attendant, Mobility
- SIP and PSTN connections
- Standalone Branches with Digital, IP, Analog, and mobile phones
Distributed Branch – IP Office

Customer Drivers

• Some collaboration between the branch and headquarters
• Want to leverage core Aura applications
• Cost-effective turnkey solution
• Optional voice ready WAN infrastructure

Customer Benefits

• Protects customer investment by leveraging Avaya Aura Core
• Reduced TCO and easier administration
• Key system features at branch for increased productivity (i.e. Park n Page)
Avaya CS 1000, SM and IP Office Distributed Branch

CS1000 and IP Office as peers
BCM branch Migration to IP Office
Requires re-assignment of SSG to support SM Interoperability

BCM digital & IP phones
BCM digital & IP phones & 11xx/12xx SIP phones

PSTN

CS 1000 digital & IP phones

MCDN SIP

IP Office

Migrate with phone Investment Protection

“SM Line” interface

BCM digital phones & 11xx/12xx SIP phones and/or other IP Office phones

PSTN

SM

SSG

UCM SMGR BEM/NCM

Messaging

Call Pilot

Avaya Aura Messaging

Management

PSTN

CS1000

PSTN
IP Office in CS 1000 Deployments

- IP Office can be deployed as a distributed branch in a CS 1000 environment
  - IP Office and CS1000 operate as peers
- IP Office supports SIP interoperability with the CS 1000 R7.6 via the Avaya Aura Session Manager (SM), to which IP Office connects through a ‘SM Line’ type of interface
  - Standard SIP interoperability only. IP Office does not support MCDN
- Used for new branches, and for migration of Business Communication Manager (BCM) branches to IP Office with phone investment protection
  - Data Migration Manager (DMM) tool can ease porting existing BCM system configuration and users info to IP Office
- Interop with BCM 6.0 in other branches via the SM
- Support for CallPilot voice mail solution with MWI
Centralized Branch – IP Office

**Customer Drivers**

- Need for collaboration with HQ and Branch
- Cost effective solution with protection from WAN outages
- Want to leverage core Aura applications
- WAN infrastructure voice enabled

**Customer Benefits**

- Protects customer investment by leveraging Avaya Aura Core
- Easily support analog devices with terminal adapter
- Guaranteed business continuity for improved productivity
IP Office 9.0 Interoperability List

- Avaya Aura Session Manager 6.2 FP2, aka 6.3.2
- Avaya Aura System Manager 6.2 FP2, aka 6.3.2 (including WebLM)
- Avaya Aura Communication Manager 6.2 FP2, aka 6.3, via SM
- Communications Server 1000 7.6 via SM (Distributed Branch)
- BCM 6.0 via SM
- Secure Access Link (SAL) Gateway 2.2
- Avaya Aura Messaging 6.2 via SM
- Modular Messaging 5.2 FP1 via SM
- Call Pilot 5.1 via SM and CS 1000
- Avaya Aura Conferencing (AAC) 7.2 via SM (IP Office users can join conf bridge; no conference control)
- CC-Elite 6.3 (no control by CC-Elite of IP Office users)
- Avaya Aura Experience Portal 6.0
- Voice Portal 5.1
- SBC R6.2 FP1 Sipera
- Lync integration client plugin via one-X Portal (for IP Office users, not for Centralized users; Requires 1XP in each branch on UCM or external server)

- 96x1 SIP 6.3, including 9601 (Centralized User)
- 96x0 SIP 2.6.x (Centralized User)
- Avaya One-X Communicator SIP 6.2 (Centralized user)
- 96x1 H.323 6.3 (IP Office user)
- 96x0 H.323 3.1.x (IP Office user)
- Avaya 11xx & 12xx SIP 4.3 (IP Office user)
- Avaya Flare® Experience 1.1 Windows (IP Office user)
- Avaya Flare® Experience 1.1 iOS (IP Office user)
- Radvision 8.1 (IP Office user)
- B179 R2.3 Konftel conference phones (IP Office user)

You can find the full list in the support webpage: https://support.avaya.com/
$50 Gift Certificate
Drawing
IP Office Lync Integration
Avaya Microsoft Lync Integration for IP Office Solution Architecture

Notes
1. Microsoft Lync Standard CAL (end User License) required.
2. The Avaya Microsoft Lync integration plug-in operates in “Phone mode” in that it utilizes CTI control over the end user's desk phone. The plug-in does not incorporate any soft-client functionality.
# Avaya Microsoft Lync Integration for IP Office

## Product Line Up

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>RELEASE/DEVICE/LICENSING</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP Office</td>
<td>IP Office 8.1 Feature Pack 1 (supports both IP Office 500v2 and IP Office Server Edition)</td>
<td>Leverages the Web Services APIs exposed by the Avaya one-X Portal for IP Office</td>
</tr>
<tr>
<td></td>
<td>Power User, Office Worker, or Teleworker user packages required</td>
<td></td>
</tr>
<tr>
<td>Lync 2010</td>
<td>Release 2010 R4.0.7577.4103 or above</td>
<td>Can be deployed with premise or cloud (Office 365) Lync Server 2010 deployments</td>
</tr>
<tr>
<td>OCS / Lync Licensing</td>
<td>OCS/ Lync Standard CAL</td>
<td>Minimum requirement</td>
</tr>
<tr>
<td>Windows</td>
<td>XP SP3 or later</td>
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<tr>
<td></td>
<td>7</td>
<td></td>
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<tr>
<td></td>
<td>.Net 4, or later</td>
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THANK YOU