Avaya Aura® 7
Overview Presentation

Name
Title
Date
Agenda

- Era of Engagement
- Avaya Aura® Platform Overview
- Introducing Avaya Aura 7.0
- Support and Upgrade Advantage
- Questions
- Wrap Up
The Era of Engagement
Key Market Trends

NEW CUSTOMERS WITH NEW NEEDS

FOCUS ON CUSTOMER EXPERIENCE

RISE OF THE MOBILE WORKFORCE

From Collaboration to Engagement
What is Engagement?

**ACTIVE PARTICIPATION**
- People are dynamically interacting with one another in conversations, whether through listening, speaking, watching or sharing.
- These all provide cues into the meaning being conveyed and are critical to getting a positive outcome.

**PERVASIVE COLLABORATION**
- All parties are participating in a conversation with one another, sharing ideals, challenging one another and providing feedback.
- It is reliant on open channels of communication between all stakeholders in an ecosystem.

**QUALITY EXPERIENCES**
- People have access to contextually aware reliable mediums that cross channels and allow for deeper, more meaningful conversations.
Engagement Drives Positive Business Outcomes

**BENEFITS**

**Productivity**
Increased availability & responsiveness

**Collaboration**
Increased innovation | improved decision making

**Employee satisfaction**
Increased engagement & retention

**Network efficiency**
Minimal bandwidth | lower TCO

**Reduced costs**
Lower network | real-estate expenses

When organizations successfully engage their customers and their employees, they experience a **240%** boost in performance-related business outcomes compared to an organization with neither engaged employees nor engaged customers.*

Engagement: Quantifiable Business Impacts

- **Increased Productivity**: 18% higher productivity and 12% higher profitability experienced by the most engaged workplaces\(^1\)
  - Higher productivity increases efficiency of production

- **Higher Retention**: Highly engaged employees are 87% less likely to leave, saving up to 150% of the employee’s salary\(^2\)
  - Higher retention reduces costs & maintains institutional knowledge

- **Enhanced Innovation**: 52% of engaged employees say that work brings out their most creative ideas, against 3% of the less engaged\(^3\)
  - Increased innovation drives new ideas and future growth

- **Cost Reduction**: Average cost of business travel $1,000+ domestic, $2,500+ international\(^4\)
  - 9-12 payback for bringing conferencing in house\(^5\)
  - Mobile network services ~50% of telecom spend\(^6\)... use enterprise networks instead of roaming and long distance

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\(^1\) Meta-Analysis: The Relationship Between Engagement at Work and Organizational Outcomes, Gallup Organization (2012)
\(^2\) Driving Performance and Retention Through Employee Engagement, Corporate Executive Board (2004)
\(^3\) The Innovation Equation, Gallup Business Journal (2007)
\(^4\) Business Travel News Q3 2014
\(^5\) Avaya Research (2014)
\(^6\) Gartner Technology Forecasts: The Story of Your Market, John Lovelock, October 2014
Avaya Aura® Platform Overview
The Foundation for Engagement: The Avaya Aura® Platform

ACTIVE PARTICIPATION
- User simplicity across voice, video, conferencing, presence / IM
- Location and device agnostic
- Dynamic bandwidth allocation

PERVASIVE COLLABORATION
- Simplified deployment of engagement applications
- Integration into business applications and processes

QUALITY EXPERIENCES
- Single user experience from HQ to branch to mobile
- Intuitive, cross-enterprise management and security
- Complete Redundancy and Virtualization options
- Scalable to 250,000 users
Avaya Aura® Platform Elements

- Session Manager
  - Session (SIP) Management
  - Bandwidth Management
  - Network Normalization
- Communication Manager
  - Collaboration Services (Video, Telephony, Conferencing)
- Presence Services
  - Collaboration Services (Presence, Instant Messaging, Federation)
- Application Enablement Services
  - Application Creation and Integration Services
- System Manager
  - Intuitive, enterprise-wide management services

Scalability
Survivability
Security
Avaya Aura® Session Manager

SIP routing and integration tool to unite all locations into a single enterprise network providing:

- Simplified network-wide feature deployment
- User Relationship management: Registers / Authenticates Users, Devices, “Cloud” Elements and “Binds” Users to Devices and Applications
- Centralized routing, SIP trunking and user profiles including device registrar
- Cost-effective scalability (from small to very large deployments) and High availability with geographic redundancy
- Secure environment that conforms to specific SIP standards and practices
Avaya Aura® Communication Manager

- Organizes and routes voice, data, image and video transmissions
- Delivers rich voice and video capabilities
- Provides a resilient, distributed network for gateways, analog, digital and IP-based communication devices, including features to SIP devices
- Delivers robust collaboration features, high reliability and scalability, and multi-protocol support

Services Provided:

- Collaboration Services (Video, Telephony, Conferencing)
- Centralization
- Security
- Survivability
Avaya Aura® Presence Services

- Robust, aggregated presence information from telephony, desktop and other applications
- Multi-vendor presence integration and federation
- Enables presence – aware applications, extending to a wide array of business communications applications
- Supports a wide variety of UC and CC endpoints such as Avaya Communicator clients, and Avaya desk phones

Services Provided:

- Collaboration Services (Presence, IM, Federation)
- Centralization
- Security
- Survivability
Avaya Aura® System Manager

- Central management of enterprise-wide dial plans and feature profiles for end users
- Delivers set of shared management services and a common console
- Provides comprehensive tools for VoIP, UC and Contact Center deployments
- Enables user data to be entered once (which can be used by all the Avaya applications and/or systems)
- Is tightly integrated with the enterprise IT infrastructure
Avaya Aura® Application Enablement Services

- Enables application creation and the integration of communications and business applications
- Modular building blocks for developing advanced communication solutions
- Secure with encryption & authentications with high availability / scalability
- Enables hundreds of Avaya DevConnect partner integrations
Avaya Aura® Platform Deployment Options: Software, Appliances, and Full Turn Key Solutions

Virtual Appliances running inside your VMWare Infrastructure

Pre-built Appliances deployed in your network in your design

Ready to Go Solutions with UC, compute, storage, and networking

AVAYA VIRTUAL APPLIANCE

AVAYA AURA® VIRTUALIZED ENVIRONMENT

COLLABORATION POD
Avaya Aura® Platform: Deployable in a way that suits your needs

- **CAPEX, OPEX**
- **FLEXIBLE PURCHASE**
- **FLEXIBLE LOCATION**
- **FLEXIBLE MANAGEMENT**
- **Internal, Partner, Avaya**
- **Your Facilities, Partner or Avaya Hosted**
# Simple to Buy: Avaya Aura® Suites Licenses

<table>
<thead>
<tr>
<th>License</th>
<th>Core Suite</th>
<th>Power Suite</th>
<th>Customer Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avaya Aura CM, System Manager, Session Manager, IM/Presence, Survivability, CM Messaging</td>
<td></td>
<td></td>
<td>Complete Avaya Aura core platform including voice and video call control, session management, IM/presence, survivability options and basic messaging</td>
</tr>
<tr>
<td>AES Unified Desktop</td>
<td></td>
<td></td>
<td>Integration with MS OCS/Lync Server and IBM® Sametime®.</td>
</tr>
<tr>
<td>Avaya/1-X Communicator for Desktop and Mobile clients, EC500</td>
<td></td>
<td></td>
<td>Full access to Avaya Communicator and EC500 for desktop and mobility requirements</td>
</tr>
<tr>
<td>Desktop P2P Video</td>
<td></td>
<td></td>
<td>Integrated point to point video for ad hoc engagement</td>
</tr>
<tr>
<td>Avaya Communicator for Lync</td>
<td></td>
<td></td>
<td>Avaya call / video control and apps from Microsoft Lync client</td>
</tr>
<tr>
<td>SBCE Remote Access (7:1, HA)</td>
<td></td>
<td></td>
<td>Secure VPN-less remote access</td>
</tr>
<tr>
<td>SBCE SIP Session (7:1, HA)</td>
<td></td>
<td></td>
<td>Secure SIP trunking via Session Boarder Controller for Enterprise</td>
</tr>
<tr>
<td>Engagement Development Platform</td>
<td></td>
<td></td>
<td>User access to Engagement Development Platform based applications</td>
</tr>
<tr>
<td>Avaya Aura Messaging</td>
<td>Basic</td>
<td>Mainstream</td>
<td>Complete voice and unified messaging</td>
</tr>
<tr>
<td>Avaya Multimedia Messaging</td>
<td>Basic</td>
<td>Enhanced</td>
<td>Multipoint, threaded, device agnostic multimedia messaging for work groups</td>
</tr>
<tr>
<td>AvayaLive Video: right to 25% discount</td>
<td></td>
<td></td>
<td>Cloud based Scopia video</td>
</tr>
<tr>
<td>Avaya Aura Conferencing</td>
<td></td>
<td></td>
<td>Audio, video and web based enterprise grade conferencing</td>
</tr>
<tr>
<td>Scopia Desktop &amp; Mobile per Port</td>
<td></td>
<td></td>
<td>Premises based Avaya Scopia</td>
</tr>
</tbody>
</table>

- Included
- A-la carte
Introducing Avaya Aura® 7.0
Introducing Avaya Aura 7.0

**LOWER TCO**
- Software based Avaya Aura Media Server for Communication Manager
- Flexible virtualized deployments on Avaya provided servers
- Supportability enhancements

**SCALABILITY**
- Up to 28 Session Managers in a single enterprise network
- 250,000 SIP users and 350,000 SIP devices
- Growth to 500 Branch Session Managers*

**SECURITY**
- TLS secured gateway links
- AES 256 bit encryption
- End user encryption indicator
- Improved certificate management

**APPLICATIONS ENABLEMENT**
- Presence Services now an Engagement Development Platform Snap-in
- Increased AES Capacities
- Lync Integration simplification

* Timing TBD
**Avaya Aura® Media Server Adoption by Communication Manager**

<table>
<thead>
<tr>
<th><strong>FROM</strong></th>
<th><strong>TO</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>13 G450 Gateways, 4160 channels: 39U of rack space</td>
<td>1 Server (dedicated) up to 4000 AAMS channels: 1 U of rack space</td>
</tr>
</tbody>
</table>
Avaya Aura® Media Server Adoption by Communication Manager

- Smaller footprint
- Replace existing G650/G450 DSP resources
- Same, centrally deployed voice announcements
- Reduced costs for call recording
- AAMS provides virtualization, high channel density, additional codecs, with no limit to playback announcements channels
## Avaya Aura Media Server verses Gateways

<table>
<thead>
<tr>
<th>Media Function</th>
<th>Avaya Aura® Media Server</th>
<th>G Series Gateway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic media resource capabilities: connections, conferences, tones, play and record announcements, digit collection</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Announcement Total Recording Time Limits</td>
<td>None (up to size of HDD)</td>
<td>45 min or 250 min (G450) depending on memory kit used. 60 min per VAL board.</td>
</tr>
<tr>
<td>Announcement Channel Capacity</td>
<td>Unlimited (up to # purchased channels)</td>
<td>31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gateway Function</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TDM interfaces for digital, analog stations and trunks</td>
<td>N/A</td>
</tr>
<tr>
<td>V.150.1 (Modem-over-IP)</td>
<td>N/A</td>
</tr>
<tr>
<td>T.38 Fax</td>
<td>N/A</td>
</tr>
<tr>
<td>Codecs: G711, G729, G726</td>
<td>✓</td>
</tr>
<tr>
<td>Codecs: G722 (ad hoc conferencing)</td>
<td>✓</td>
</tr>
<tr>
<td>Codecs: OPUS</td>
<td>✓ (future support on CM)</td>
</tr>
<tr>
<td>Maximum DSP/channel count per instance</td>
<td>4000*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other capabilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share with multiple CM's</td>
<td>✓</td>
</tr>
<tr>
<td>Multiple instances can service one CM</td>
<td>✓</td>
</tr>
<tr>
<td>Survivability in CM environment</td>
<td>✓</td>
</tr>
<tr>
<td>Virtualization</td>
<td>✓</td>
</tr>
<tr>
<td>Redundancy</td>
<td>✓</td>
</tr>
<tr>
<td>Capacity</td>
<td>250 AAMSs</td>
</tr>
</tbody>
</table>
Avaya Aura® Media Server Adoption by Communication Manager: **Use Cases**

**Best fit for AAMS with Communication Manager**

- Call center requiring significant DSP resources for call recording, announcements or IVR applications (digit collection)
- Customers with MCC or G650 cabinets looking to reduce their footprint as they upgrade and transition to IP
- All IP construct (H.323 or SIP endpoints) with high DSP/media channel requirements

**Best fit for Gateways with Communication Manager**

- Still require TDM and T.38 fax
- Customers with existing G450s who want to keep their investment but may add AAMS if doing a major addition
Avaya Aura® 7.0 Virtualization Flexibility

6.X

System Platform
Avaya Supplied Server, Avaya System Platform, Fixed Templates

Virtualized Environment
Customer Supplied VMware and Servers

Collaboration Pod
Avaya Supplied VMware, Servers, networking, storage pre-installed applications

7.0

NEW

Virtual Appliance
Avaya Supplied Server, Appliance Virtualization Platform, Flexible Application Choices

Virtualized Environment
Customer Supplied VMware and Servers

Collaboration Pod
Avaya Supplied VMware, Servers, networking, storage pre-installed applications

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Appliance Virtualization Platform (AVP)

**OVERVIEW**

- Extends VMware to Avaya’s appliance model
- At Avaya Aura 7.0 all existing platform offers, plus Session Manager will move to AVP
- VMware Knowledge / Training NOT required
  - Based on a customized OEM version of VMware (ESXi 5.5)
  - AVP management will be via System Manager (vCenter is not provided or supported AVP)
- NOTE: SYSTEM MANAGER IS REQUIRED FOR AVAYA AURA 7.0

**System Platform templates replaced with customer selected applications**

- Customers are free to run any combination of supported applications on Avaya servers provided the server has sufficient resources
- Sales tools and installation tools will be able to size solutions to server hardware

**Supported Hardware**

- Avaya Common Server Releases 1 and 2 (Including migration path for Midsized Enterprise)
- S8300D and S8300E
Flexible Virtualization in the Appliance Model

**Data Center**

Single application per server for maximum scale.

*Example:*

- Communication Manager
- Session Manager
- System Manager
- Application Enablement Services

**Regional Office**

Multiple applications on multiple servers to balance scale with hardware footprint.

*Example:*

- Communication Manager
- Application Enablement Services
- Session Manager
- System Manager

**Branch Office**

Multiple applications on a single server to minimize hardware footprint.

*Example:*

- Communication Manager (LSP)
- Branch Session Manager (BSM)
- Utility Services
- Media Server
- Application Enablement Services
## Avaya Aura Deployment Comparisons

<table>
<thead>
<tr>
<th>Offer Element</th>
<th>Virtual Appliance</th>
<th>Virtualized Environment</th>
<th>Collaboration Pod</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server Provided By:</td>
<td>Avaya</td>
<td>Customer</td>
<td>Avaya</td>
</tr>
<tr>
<td>Hypervisor</td>
<td>Avaya Provided Appliance Virtualization Platform (AVP)</td>
<td>Customer Provided VMware</td>
<td>Avaya provided VMware-based hypervisor</td>
</tr>
<tr>
<td>VMware Licenses</td>
<td>Included in Virtual Appliance offer from Avaya</td>
<td>Customer Provided</td>
<td>Included in offer from Avaya</td>
</tr>
<tr>
<td>Server and Virtualization Management</td>
<td>Solution Deployment Manager (System Manager)</td>
<td>VMware vCenter and Solution Deployment Manager</td>
<td>Pod Orchestration Suite, vCenter and System Manager</td>
</tr>
<tr>
<td>VMware Training required</td>
<td>none</td>
<td>VMware Certification</td>
<td>Recommended but not mandatory</td>
</tr>
</tbody>
</table>

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New Virtual Appliance Order Options for Avaya Common Servers

- Customer selects:
  - Required Applications
  - Capacity Requirements

- ASD will determine how many servers/server size that are required to support these applications for the specified number of users, devices, etc.

SMALL
MEDIUM
LARGE
SPECIAL LARGE for High Capacity Duplex for CM
Embedded Servers (S8300) Overview

Two supported deployment options:

**Embedded Main**
- Communication Manager
- Communication Manager Messaging\(^2\)
- Secure Access Layer\(^1\)
- Utility Services

**Embedded Survivable Remote**
- Communication Manager
- Branch Session Manager\(^2\)
- Secure Access Layer
- Utility Services

CONSIDERATIONS

- Both S8300D and S8300E servers will be supported with Avaya Aura® 7.0
- Although S8300 servers are virtualized with AVP, limited server resources limit deployment options to the two configurations outlined above.
- Local Survivable Processor (LSP) functionality remains unchanged

---

\(^1\) Resource requirements of Release 7.0 mean that the S8300D does not have sufficient resources to run the applications and SAL. If required, SAL should be moved to a separate server.

\(^2\) CMM and BSM are optional and included only if user selects them in ASD.
Avaya Aura 7.0: Continuing to Build In Enterprise Redundancy and Reliability

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>Avaya Aura® 6.2 Feature Pack 4</th>
<th>Avaya Aura® 7.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNICATION MANAGER</td>
<td>Software Duplication for Local transparent instantaneous failover</td>
<td>Survivable Core for Geo Redundancy</td>
</tr>
<tr>
<td>SESSION MANAGER</td>
<td>Geo Redundant Active-Active clustering</td>
<td>N+M routing</td>
</tr>
<tr>
<td>SYSTEM MANAGER</td>
<td>• System Manager High Availability (based on System Platform FRHA)*</td>
<td>• SMGR HA Not supported in 7.0</td>
</tr>
<tr>
<td></td>
<td>• System Manager Geo Redundancy</td>
<td>• System Manager Geo Redundancy IS supported</td>
</tr>
<tr>
<td>PRESENCE</td>
<td>• N+1 Active Standby</td>
<td>• N+1 Active/Active High Availability.</td>
</tr>
<tr>
<td>AES</td>
<td>• AES HA (based on System Platform FRHA) *</td>
<td>• Equivalent functionality available from AES Geographic Redundancy</td>
</tr>
<tr>
<td></td>
<td>• AES MPHA (based on System Platform) *</td>
<td>• AES MPHA not supported in 7.0</td>
</tr>
<tr>
<td></td>
<td>• AES Geographic Redundancy</td>
<td>• AES Geographic Redundancy</td>
</tr>
<tr>
<td>MIDSIZE ENTERPRISE</td>
<td>• Platform Level HA supported (System Platform FRHA)</td>
<td>• FRHA not supported in 7.0</td>
</tr>
<tr>
<td></td>
<td>• Application level availability features are NOT supported</td>
<td>+ Application level availability features will be supported (similar to VE configuration)</td>
</tr>
</tbody>
</table>
Avaya Aura® 7 enables growth beyond the ME boundaries to create fit for purpose configurations for both existing ME customers and new “ME” like customers.

<table>
<thead>
<tr>
<th>Feature</th>
<th>6.0X</th>
<th>7.0X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple applications on a single server</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Flexible choice of applications</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Grow beyond 2400 users/1000 CC Elite agents*</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Support for High Availability</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Application level resiliency options /geo-redundancy</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Leverage off board servers like AES and SM</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Re-deploy for application segmentation &amp; choice</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Full Avaya Aura® roadmap alignment</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

*May require additional servers
Avaya Aura® Solution for Midsize Enterprise (ME) Upgrade & Migration to Avaya Aura® 7.0

ME Value Proposition Remains Unchanged:

- Solution focused for Midsize Enterprise
- Lightweight footprint with multiple applications
- Pre-installed for deployment simplification

Template split into individual product applications
- Existing Avaya Common Server Release 1 and 2 platforms can be re-used
- Configuration Data maintained
- Rls 6.X upgradable to 7.0 but ME fixed templates will not supported in Rls 7.0
System Manager Enhancement: Solution Deployment Manager

- System Manager with embedded SDM is the primary management solution for Avaya Aura® 7.0.
- Consolidates disparate tools into a single centralized solution deployment manager
- Allows System Manager to be deployed in new installations for remote sites / pre-staging systems
- Deploys Application Software
  - Helps optimize resource use
  - Manage application lifecycle
- Keeps Applications Current
  - Identifies needed updates
  - Patches applications/platform
- Streamlines Upgrade Process
  - Console driven upgrades
- Sequences commands together
Solution Deployment Manager (SDM) – Client Version

A Windows PC based version for use when System Manager is not accessible

Provides a subset of the functionality available on SMGR / SDM

- Can be used to deploy SMGR in a new installation
- Can be used to install the application OVAs in either Virtualized Environment, or Virtual Appliance deployments
- Also Enables: Deployment Sizing, Hypervisor IP Address Changes, Hypervisor Patching, System Manager Patching, Lifecycle Management (status, start, stop of Virtual machines)
Solution Deployment Manager: Simpler Upgrades, Reduced TCO

FROM

Manual
All platforms done by hand.

More Time Consuming
Waiting for next step.

Open to Human Error
Manual readiness assessment.

TO

Automatic
After upgrade to AVP, drive application upgrade from anywhere

Faster
Sequence events and have them run in the background.

More Reliable
Integrated checks to confirm upgrade readiness.

Today for Communication Manager, Session Manager, Branch Session Manager; More Apps to Come
Presence Services 7.0 (PS) Moving to the Engagement Development Platform (EDP)

Avaya Aura Presence Services is now an Engagement Development Platform Snap-in

Presence Services remains an entitlement under both the Core and Power Licenses

PROVIDES THE FOLLOWING BENEFITS:

- Increase Scalability to 250,000 users
- Improved reliability with Active-Active High Availability
- Rapid application development in a robust, scalable environment which improves time-to-market by extending the Presence and IM messaging capabilities to 3rd party developers through the EDP environment.
# Reduce Administration Time and Resources

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>DESCRIPTION</th>
<th>BENEFIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDAP Sync of Admin Roles</td>
<td>Sync, through LDAP, of Enterprise Directory Admin roles with SMGR Admin roles.</td>
<td>Speeds / simplifies the central administration of System Manager Administrators</td>
</tr>
<tr>
<td>SMGR Navigation &amp; Usability UI</td>
<td>User Profile Manager will only expose admin fields for apps that are part of the customer’s solution.</td>
<td>Streamlines interface to provide faster access to relevant fields</td>
</tr>
<tr>
<td>CM List, Display Measurement, Status Reports</td>
<td>Extends ASA/MSA reports into System Manager to support customer migrations and adds new report types</td>
<td>Continued access to typical ASA/MSA reports in use today in addition to new reporting types</td>
</tr>
<tr>
<td>Support for “+” Digit on Call Type Analysis Form</td>
<td>By recognizing the + digit, the CTA from can transform the + digit to the correct international access.</td>
<td>Simplifies routing table creation as customers migrate to E.164</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
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<th>DESCRIPTION</th>
<th>BENEFIT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Avaya Aura® Session Manager SIP Message Compaction</strong></td>
<td>SM Adaptation Modules can now remove proprietary headers / parameters before forwarding SIP messages</td>
<td>Improves the simplicity and interoperability of solutions with 3rd party elements</td>
</tr>
<tr>
<td><strong>Avaya Aura® Session Manager Lync Integration Enhancements</strong></td>
<td>On prior releases, Lync integration required the users presence handle to be entered for both XMPP &amp; SIP</td>
<td>Single entry reduces implementation and administration time</td>
</tr>
<tr>
<td><strong>Avaya Aura® Session Manager Enhanced Route Pattern Admin</strong></td>
<td>Added routing option on ‘station’ and ‘off-pbx-telephone station-mapping’ forms in System Manager</td>
<td>Simplifies and optimizes route pattern preferences to reflect users primary and secondary Session Manager</td>
</tr>
</tbody>
</table>
## Reliable Quality Experiences

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>DESCRIPTION</th>
<th>BENEFIT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alarming Individual DSP Failures on G Series Gateways</strong></td>
<td>Gateways will now generate alarm when any of the four DSP cores on the DSP board is out of service.</td>
<td>Granular understanding of complete unit status for repair / replacement decisions</td>
</tr>
<tr>
<td><strong>Automatic Alarm Clearing for Session Manager Alarms</strong></td>
<td>When a SM alarm is cleared, a simultaneous notification will also be sent out via SNMP.</td>
<td>Removes the need to manually clear the alarm and improves reporting accuracy.</td>
</tr>
<tr>
<td><strong>New SNMP Engine for CM</strong></td>
<td>New CM Master Agent based on NET-SNM (Red Hat Linux) with a new set of subagents.</td>
<td>CM will provide separate IDs for each maintenance object: Major / Minor Alarm, Warning, and Resolved.</td>
</tr>
<tr>
<td>FEATURE</td>
<td>DESCRIPTION</td>
<td>BENEFIT</td>
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<tr>
<td>Out of Band Management</td>
<td>Places management traffic on an separate LAN from the general traffic.</td>
<td>Enhanced security for admin traffic and better bandwidth management of both traffic streams</td>
</tr>
<tr>
<td>TLS Secured Gateway Links</td>
<td>Extends TLS to the control link between CM and media gateways.</td>
<td>All CM to gateway and CM to AMS trunk links are TLS secure.</td>
</tr>
<tr>
<td>Advanced Encryption Standard (AES) 256-Bit</td>
<td>Provides support for the AES-256 Bit symmetric encryption algorithm on Avaya Aura® 7.0 elements</td>
<td>Enhanced security with AES-256 encryption for audio / video / data bearer streams.</td>
</tr>
<tr>
<td>Improved Certificate Management (SMGR)</td>
<td>New Certificate Authority Generation Utility including SRVname option, remove obsolete / auto renew Certs.</td>
<td>Improved security and management of certificates</td>
</tr>
</tbody>
</table>
## Keeping Engagement Secure (Cont’d)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Improved Certificate Management (Gateways)</td>
<td>G430/450 support of SHA2-signed certs, Online Cert Status Protocol (OCSP) and Time Zone Cert Expiration</td>
<td>Enhanced cert flexibility and the ability to treat gateways in the same class as phones</td>
</tr>
<tr>
<td>End-to-end Encryption Indicator</td>
<td>SIP end-points/client display that shows the user whether signaling / media are end-to-end secure*</td>
<td>Real-time indication of security for end-users</td>
</tr>
</tbody>
</table>

* The initial offer will only support SIP endpoint/clients on intra-enterprise point to point calls.
## Enhancements for Active Participation

<table>
<thead>
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</thead>
<tbody>
<tr>
<td><strong>Triple tone for call pickup on H.323 Devices</strong></td>
<td>A call to a member of a call pickup group can now generate a triple tone if not answered in 15 seconds.</td>
<td>Heightened triple tone alert improves the response rate of call pickup group members to incoming calls.</td>
</tr>
<tr>
<td><strong>Emergency Call Adjunct Interface Update for MDA</strong></td>
<td>The SM AELS (Adjunct Emergency Location Server) interface has been enhanced to support Multidevice Access</td>
<td>Improved accuracy of the originating location of E911 calls from users with multiple devices</td>
</tr>
<tr>
<td><strong>Single Button Press for Call Park Pickup</strong></td>
<td>Call Park can now be configured to allow parked calls to be picked up with the press of a single button.</td>
<td>Call management in closely aligned work groups can be streamlined for faster responses to parked calls.</td>
</tr>
<tr>
<td><strong>Admin-able Group Page Delay</strong></td>
<td>The 7 second group page delay applied when one or more paging members is not available can now be varied.</td>
<td>Customers have the flexibility to vary or remove the Group Page Delay depending on their preferences.</td>
</tr>
</tbody>
</table>
## Scalability to Support Pervasive Collaboration Across the Enterprise

<table>
<thead>
<tr>
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<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Increased SIP Capacity</td>
<td>Increased SIP Capacity to support 250K SIP Users and 350K SIP Devices on up to 28 Session Managers</td>
<td>Full Avaya Aura® Platform capacity for SIP users with extended capacity for users with multiple devices</td>
</tr>
<tr>
<td>Increased Domain Control Associations in AES*</td>
<td>Increase the maximum number of domain control associations from the current limit of 4 to 8.</td>
<td>Supports the need for more domain control associations, particularly in large scale CCaaS implementations</td>
</tr>
<tr>
<td>Increased DMCC Registrations in AES*</td>
<td>Increase the maximum Device Media Call Control (DMCC) instances from 4000 to 8000</td>
<td>Increases the capacity of AES for full time call recording from 4000 to 8000 agents</td>
</tr>
</tbody>
</table>

* Avaya Aura Application Enablement Services
## Scalability to Support Pervasive Collaboration Across the Enterprise (Cont’d)

<table>
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<tbody>
<tr>
<td><strong>PS to PS Federation with clustered PS solutions</strong></td>
<td>Allows the exchange of presence and instant messages between two or more Avaya Aura systems</td>
<td>Allows UC solutions to scale beyond the limits of a single Presence server and/or a single Avaya Aura system</td>
</tr>
<tr>
<td><strong>Block Instant Messages between UCaaS tenants</strong></td>
<td>Allows administrators to restrict the exchange of IMs between users on the same presence server.</td>
<td>Supports multi-tenant deployments of Avaya Aura for UCaaS implementations</td>
</tr>
<tr>
<td><strong>Enhanced control of Information between Presence domains</strong></td>
<td>Allows control of the flow of presence information and Instant Messaging across presence domains</td>
<td>Supports multi-tenant / large enterprise configurations where granular control may be needed</td>
</tr>
</tbody>
</table>
Avaya Aura® 7.0 Summary

**Security**
- TLS secured gateway links
- AES 256 bit encryption
- End user encryption indicator
- Enhanced certificate management
- Out of Band Management
- Encryption of bearer control channel(SRTCP)

**Supportability**
- Alarming Individual DSP Core Failures (BGW)
- New SNMP Engine for CM
- Automatic Alarm Clearing for Session Manager Alarms
- CP Overload Mitigation Feature
- Presence Services Active/Active High Availability

**Scalability**
- Increased SIP Capacity to support 250K SIP Users and 350K SIP Devices on up to 28 Session Managers
- Increase AES max Domain Control Associations from 4 to 8
- Increase AES max Device Media Call Control (DMCC) Scale from 4k to 8K

**Media Server**
- Communication Manager Adoption of Avaya Aura Media Server

**Virtualization**
- Flexible virtualization on Avaya supplied servers with Appliance Virtualization Platform (AVP)
- Branch Session Manager (BSM) on VMware for the Virtualized Environment

**Management Simplification**
- Centralized Management and Simplified Upgrades with Solution Deployment Manager(SDM)
- LDAP Sync of Enterprise Directory Admin Roles with SMGR Admin Roles
- SMGR Navigation and Usability UI Improvements
- CM List and Display Measurement and Status Reports
- Allow direct input of Route Pattern for SIP station routing (OPTIM) (CM)
- Lync Integration Enhancements (SM)

**Call Center Enablement**
- Logout Unreachable SIP Agents / Detect Unreachable SIP Endpoints

**Other Feature Enhancements**
- Support for PS to PS Federation with clustered PS solutions
- Block IM between UCaaS tenants (PS)
- Enhanced control of Information flow between Presence domains (PS)
- SIP Message Compaction (SM)
- Emergency Call Adjunct Interface Update for MDA (SM)
- Single Button Press for Call Park Pickup (CM)
- Triple tone for call pickup on H.323 Devices(CM)
- Support for “+” Digit on Call Type Analysis (CTA) Form (CM)
- Group Page Delay(CM)
- Inter PBX toll Compliance between IPO and CM (CM)
- Deny PRI / H.323 Trunk Call Based on Calling Line ID (CM)
- Location Based Routing with EC500 (CM)
Support Advantage Preferred and Upgrade Advantage
Customers Are Demanding a Proactive Support Experience

Forrester has noted proactive support as a key trend in both 2014 and 2015*

Customers will expect personalized, proactive service

Insights from connected devices will trigger this preemptive service


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What Is Proactive Support?

**REACTIVE**
- Respond to **events** that have **already occurred**
- Minimize downtime from the current issue

**PREVENTIVE**
- Implement **best practices** for known problems
- Help prevent **reoccurrence** of previous outages

**PROACTIVE**
- Analyze, identify, and **address** hazardous conditions **preemptively**
- Help optimize your **solution** & **improve performance**
Avaya believes that all customers should have access to its award-winning support to move customers from reactive to proactive support.

- **Support Advantage Preferred** becomes the standard remote support offer for all new major releases* launching on or after August 10, 2015 (planned).

- Enabling Avaya solutions with **consistent, high quality, proactive support** to maximize our customers' business outcomes.

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**DISCLAIMER:** Future improvements described in this presentation are intended features, functionality and other improvements that Avaya is considering implementing in our Systems and Tools. These future improvements and timeline are provided for informational purposes only and may not be implemented, or may be implemented in different timeframes, in Avaya’s sole discretion. Avaya is under no obligation to provide any of the future improvements in this presentation. All prices shown in this presentation are for informational purposes and are subject to change at Avaya’s sole discretion. Final prices will be communicated via Avaya’s standard price notification process.

* Major release is designated as a change in the digit(s) to the left of the first decimal point (e.g. \([n].y.z\) in the release number.*
Support Advantage Preferred Delivers Results

15 minute response time SLO* via the web – 2 times faster than the nearest competitor*

5X faster resolution and 73% more likely to avoid an outage with world-class automated diagnostics and restoration capabilities**

90% auto-resolution of alarm generated service requests without human intervention**

Unprecedented network visibility to help optimize network performance

Sources: *Avaya: Based on competitive analysis conducted in July 2014; **Avaya internal analysis.
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<tr>
<td>EXPERT Systems℠ Alarm Monitoring &amp; Resolution</td>
<td>Proactive correlation, filtering, resolution of alarms without human intervention. Proactive alert of network issues (PSTN &amp; IP).</td>
<td>5X faster resolution, 90% auto-resolution of alarm generated service requests, 73% more likely to avoid an outage.</td>
</tr>
<tr>
<td>Avaya Diagnostic Server with SLA Mon™ Technology</td>
<td>Client controlled diagnostic tools providing End to End Network Performance, Hop by Hop QoS testing, Endpoint Diagnostics.</td>
<td>Prevent future issues, reduce costs, self-diagnose network errors, faster issue resolution.</td>
</tr>
<tr>
<td>Multi-Vendor Collaborative Support</td>
<td>Enables Avaya Global Support Services to collaborate with select vendors to diagnose interoperability issues across mixed environments.</td>
<td>Isolate the root cause faster for rapid issue resolution without finger pointing.</td>
</tr>
</tbody>
</table>
### SAL Policy Server

**Description:** Centrally manage policies that are enforced by SAL Gateway Servers that control access to Avaya products deployed within the network (who, when, protocols, etc).

**Benefit:** Increased security and ease of managing authentication policies.

### Global License Portability

**Description:** Simplifies the administrative changes required to modify the support coverage from one location to another when moving licenses.

**Benefit:** Simple and automated movement of licenses globally.
Don’t Roll the Dice - Upgrading and Staying Current Can Lower Your Outage Risk

$1.8K OF REVENUE IS LOST EVERY MINUTE OF AN OUTAGE*

80% OF OUTAGES HANDLED BY THE AVAYA ER TEAM ARE ON LEGACY EQUIPMENT**

36% CHANCE YOUR SYSTEM WILL FAIL IN THE NEXT 24 MONTHS IF IT IS >11 YEARS OLD**

Upgrade Advantage

- **Experience approximately up to 40% savings*** in a predictable opex model - no more continuously asking for additional budget to upgrade your systems.

- **Stay competitive** and drive your business outcomes by deploying the latest innovative technologies quickly
  - Regular opportunity for IT to demonstrate value to the enterprise

- **Maximize your uptime** and stay current – 69% of outages caused by software bugs are preventable by staying current.**

- **Flexible options:** available in 1 year pre-paid, 3 year annual or pre-paid and 5 year pre-paid options.
  - Required for sales of and upgrades to new major releases launching on or after August 10, 2015.***

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*Based on internal comparison analysis for 3 year annual Avaya Aura® Core user license list pricing vs one time software upgrade fee.

**Based on analysis of Avaya customer data.

***Applies for every enterprise software application. E.g. Avaya Aura® platform(including all products in Suite licenses), Contact Center, Scopia® portfolios, etc. except for those associated with Fabric Networking products.
Upgrade Advantage Policy Change

Avaya wants all customers to have access to our latest innovative solutions to help drive their business outcomes

- Upgrade Advantage will be required for all new major releases* launching on or after August 10, 2015 (planned).

- Upgrade Advantage provides approximately up to **40% savings** in a predictable operating expense model.

- Ability to upgrade without continuous requests for additional budget.

*Major release is designated as a change in the digit(s) to the left of the first decimal point (e.g. [n].y.z) in the release number.

**Based on internal comparison analysis for 3 year annual Avaya Aura® Core user license list pricing vs one time software upgrade fee.

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