Extending Avaya Aura application development and customization capabilities to corporate application developers, third party independent software vendors. authorized business partners, and systems integrators.





# Avaya Aura® Application **Enablement Services**

# Overview

Active participation, pervasive collaboration and quality experiences define the new Era of Engagement for today's enterprises. Getting together with customers, coworkers, and suppliers is no longer enough. Employees need tools to take an active role in creating value, delighting customers and engaging colleagues in flexible interactions that deliver business results. To enable this transformative, peoplecentric engagement, Avaya has developed the Avaya Aura® Platform - a set of seamless components that mesh together to provide comprehensive team and customer engagement solutions that deliver a meaningful impact to your business.

Avaya Aura® Application Enablement Services extends the value of the Avaya Aura Platform by providing application programing interfaces (APIs) that leverage the powerful call processing, media, and administrative features available in Avaya Aura® Communication Manager. This makes fullfunctionality customization capabilities accessible to corporate application developers, third party independent software vendors (ISVs), authorized business partners, and systems integrators.

Avaya Aura Application Enablement Services provides an enhanced set of telephony application programming interfaces (APIs), protocols, Web Services, and direct IP access to media that expose Avaya Aura® Communication Manager features. It supports standards such as Computer Supported Telecommunications Applications (CSTA), Java Telephony API (JTAPI) and Telephony Server API (TSAPI) and makes the full-functionality customization capabilities of Avaya communication solutions accessible to corporate application developers, third-party independent software vendors (ISVs),

authorized partners, and systems integrators. All of these services are integrated into a single, scalable, software application with management, redundancy and fail-over capabilities to support mission-critical business needs.

Using Avaya Aura Application Enablement Services, software developers can write client applications in the programming language or protocol of their choice — enabling customers and DevConnect partners to integrate the Avaya Aura infrastructure with hundreds of communications and business applications.



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Avaya Aura Application Enablement Services provides a server-based software solution that enables IBM Lotus Sametime or Microsoft Communicator to leverage the capabilities of Avaya Aura Communication Manager software. By integrating the Avaya Aura **Application Enablement Services** platform in the customer's enterprise network, end users can access the set of "click to communicate" features provided by Avaya with seamless integration into their chosen desktop environment.

Avaya Aura Application Enablement Services also integrates Avaya Aura Communication Manager with Avaya's Contact Center products including Avaya Aura Contact Center, Avaya Interaction Center, Avaya Proactive Contact, Avaya Voice Portal, and Avaya Contact Center Express to deliver best in class Contact Center solutions. Using Avaya Aura Application Enablement Services, software developers can deliver added value by developing their own complementary Contact Center applications.

# **Key Customer Benefits**

- · Improve worker efficiency and productivity by eliminating manual dialing and driving all communication operations to a single desktop interface (i.e., Microsoft Communicator or IBM Sametime client).
- · More efficiently develop and integrate applications for business solutions by leveraging Web Services interfaces.
- Favorably impact Total Cost of Ownership with the latest IP-based call recording solutions.

- Increase uptime for critical applications and lessen disruptions utilizing a load-balanced and redundant communication link to Avaya Aura Communication Manager.
- Enterprises can create their own applications using Software Development Kits (SDKs), training, tools, documentation, and developer support from Avaya.

## **Feature Summary**

**Redundancy:** Application Enablement Services supports a Geographic Redundant High Availability option which can be deployed on standalone servers or servers deployed in a virtual environment. This feature also provides resiliency equivalent to Fast Reboot High Availability. This capability provides a hot standby server, connected via the LAN or WAN, that automatically replaces the primary server in the event of failure. In addition, to further manage system resiliency, Application Enablement Services offers Software Duplication capability with Avaya Aura Communication Manager creating a quicker synchronization between applications.

#### **Integration with IBM Sametime:**

Provides click-to-call, click-toconference, and telephony presence capabilities from IBM Lotus clients. With the Avaya integrated telephony presence feature, Sametime users can see who is on the phone even when that user is not logged into Sametime.

## Integration with Microsoft **Communicator and Microsoft Lync:**

Which makes possible numerous desktop telephony features such as click-to-call and exchanging Avaya telephony presence with other Microsoft Communicator and Microsoft Lync users. These features improve the

efficiency and productivity of the enterprise worker by eliminating the manual aspect of dialing numbers and driving all their communication operations to a single desktop interface.

#### Integration with IBM Websphere

**CEA:** Integrates with IBM Websphere Application Server (WAS) Communications Enabled Applications (CEA) to allow Websphere IT developers to easily and rapidly add Avaya communications capabilities to their applications.

**Third-Party Call Control:** Provides adjunct control of telephone calls (e.g. third-party call control) through its call control APIs (TSAPI, JTAPI, CallVisor LAN (CVLAN) and DEFINITY LAN Gateway (DLG)) to complete adjunct routing of incoming calls, report various events to an adjunct, provide notification/control for a specific station/ call, perform adjunct invocation of switch features and respond to adjunct queries for information.

TSAPI/JTAPI Service: Avaya Aura Application Enablement Services with Avaya Aura Communication Manager and Avava Aura Session Manager provides the ability to control Avaya SIP endpoints via TSAPI/JTAPI.

### **Device and Media Control/ Fundamental Third-Party Call Control:**

Device, Media and Call Control (DMCC) exposes the powerful feature set of your Avaya telephony server through an open, standards based, Java and Extensible Markup Language (XML) programming interface.

Web Services: Provides the ability for traditional IT application developers to interface with Avaya Aura Communication Manager through standard Web services via Simple Object Access Protocol (SOAP)/XML

methods. This provides developers with a familiar way of implementing new and innovative solutions.

**Telephony Web Service:** Allows telephony functions such as click-todial to be incorporated into the customer's current web applications.

#### **System Management Service:**

Provides a way for applications to programmatically access and administer a subset of administration objects on Avaya Aura Communication Manager. This enables a wide range of applications that can provide value by manipulating Avaya Aura Communication Manager features. System Management Service (SMS) also supports vectors, allowing thirdparty developers to create SMS applications to administer vectors.

#### Additional Features

#### **Computer Telephony Integration:**

Exposes multiple computer telephony integration (CTI) server platforms onto a single server while supporting the leading industry APIs including TSAPI, JTAPI, Avaya CVLAN API, DMCC API and DLG. Complete backwards compatibility for all of these APIs helps ensure the Avaya Aura Application Enablement Services platform will serve legacy, as well as current and future application needs.

**Software Development Kits:** Consists of client API libraries, XML Schema Definitions (XSDs), Web Service Definition Language (WSDL), Java/ XML programmer guides, extensive sample applications, and other development tools. There are five SDKs: IP Communications SDKs (DMCC). DMCC Dashboard, TSAPI SDK, JTAPI SDK, and Web Services SDK. In addition, there is a .NET SDK for DMCC. as well as the JAVA and XML SDKs.

#### **Simple Network Management**

**Protocol Support:** Provides a standard interface allowing data to be collected by the customer's SNMP Management application, allowing the customer to view performance data from multiple Avaya Aura Application **Enablement Services instances along** with data from other elements in the customer's network.

#### Security and High Availability:

Provides transport between Avaya Aura Communication Manager and the Avaya Aura Application Enablement Services platform. This application link improves network security and reliability by providing link encryption, redundancy, automatic load balancing and transparent link failover. The application link capabilities are standard with Avaya Aura Application Enablement Services. This greatly enhances end-to-end solution reliability by adding link resiliency to preserve application session continuity during link outages of up to 30 seconds.

# **Technical Specifications Deployment Options**

- **Software Only:** Includes the various APIs but does not support High Availability or Machine Preservation.
- Bundled Server (Upgrade Only): **Existing Application Enablement** Services customers on Avaya Common Servers Release 1 and 2 can upgrade to Release 7.0 on their existing servers. In some cases a RAM upgrade may be required.

- Application Enablement Services on Appliance Virtualization Platform: Includes the Avaya Aura Application Enablement Services software and operating system deployed Avaya Common Server platforms from HP and Dell.
- Application Enablement Services on VMware: Includes the OVA file for installation on VMware hypervisor. See the "Avaya Aura Application Enablement Services using VMware" in the Virtualized Environment Deployment Guide for resource specifications and options.

#### **Requirements and Supported Systems**

- Server: Avaya Common Servers Release 1 and 2.
- Operating System: Red Hat Enterprise Linux 6
- Third-Party Integration:
  - IBM Lotus Sametime 8.0 and 8.5
  - Microsoft Office Communicator 2007 RIs 1 and RIs 2 (also continues to support Microsoft Live Communication Server 2005)
  - Microsoft Lync Server 2012/2013 (Remote Call Control interface)

#### Capacity

- 2,000 CTI messages per second
- 8.000 Device Media Call Control (DMCC) clients
- 8 Domain Control Associations
- Microsoft Office Communicator: 20,000 concurrent client applications at 24,000 BHCC (with dedicated Avaya Aura Application Enablement Services server)
- IBM Lotus Sametime: 10,000 concurrent client applications at 12,000 BHCC (with dedicated Avaya Aura® Application Enablement Services server)

#### **Learn More**

To learn more about Avaya Aura Application Enablement Services, talk to your Avaya Account Manager or Authorized Partner. Also, visit us at www.avaya.com.

# About Avaya

Avaya is a leading, global provider of customer and team engagement solutions and services available in a variety of flexible on-premise and cloud deployment options. Avaya's fabricbased networking solutions help simplify and accelerate the deployment of business critical applications and services. For more information, please visit www.avaya.com.

