

# Avaya Aura<sup>™</sup> Application Enablement Services

Simplified integration with hundreds of communications and business applications.

#### Overview

Avaya Aura Application Enablement Services provides developer interfaces for both off-the-shelf and custom integrations with hundreds of communications and business applications such as Microsoft Office Communicator and IBM Lotus Sametime, as well as a broad range of contact center, call recording and click-to-dial applications.

It includes an enhanced set of telephony application programming interfaces (APIs), protocols, Web Services, and direct IP access to media, and supports standards such as Computer Supported Telecommunications Applications (CSTA), Java Telephony API (JTAPI) and Telephony Server API (TSAPI) that expose Avaya Aura™ Communication Manager features. This makes the full-functionality customization capabilities of Avaya communication solutions accessible to corporate application developers, third-party independent software vendors (ISVs), authorized BusinessPartners, and systems integrators. All of these services are integrated into a single, secure, 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 Avaya Aura with hundreds of communications and business applications.

Avaya Aura Application Enablement Services provides a server-based software solution that enables IBM Lotus Sametime or Microsoft Office 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 our own Contact Center products including 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 OC 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 secure, loadbalanced, 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**

**Automatic Failover:** Eliminates Avaya Aura Application Enablement Services (AES) as a single point of failure by ensuring that if one Avaya Aura AES server fails, the second Avaya Aura AES server automatically takes over. Integration with IBM Sametime: Avaya Aura Application Enablement Services integrates with IBM Lotus Sametime. The enterprise-class integration provides click-to-call, click-to-conference, and telephony presence capabilities from IBM Lotus clients. With Avaya's 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 Office Communicator: Avaya Aura Application Enablement Services makes possible numerous desktop telephony features such as click-to-call, click-to-conference and exchanging Avaya telephony presence with other Microsoft Office Communicator 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: Avaya Aura Application Enablement Services 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: Avaya Aura Application Enablement Services 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 Avaya Aura™ SIP
Enablement Services 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: Avaya Aura Application
Enablement 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-to-dial 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 third-party 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 secure transport between Avaya Aura Communication Manager and the Avaya Aura Application Enablement Services platform. This application link greatly 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 Automatic Failover.
- Avaya Aura AES on System Platform: Includes the Avaya Aura AES software and operating system deployed on Avaya S8800 Server with Avaya Aura™ System Platform.
- Upgrades: Avaya Aura Application
   Enablement Services 3.x and 4.x currently
   deployed on S8500C and S8510 servers can
   be upgraded to the latest 5.2 release, but
   does not support automatic failover; nor does
   the S8500 support capacity increases.
- Avaya Aura Mid-size Enterprise Single
   Server: A package of four key Avaya Aura
   applications—Communication Manager, Avaya
   Aura Application Enablement Services, SIP
   Enablement Services, Media Services (media
   gateway)—on one S8800 Server.

# **Requirements and Supported Systems**

- · Servers:
  - S8800 (new deployments)
  - S8500C & S8510 (upgrades only, no automatic failover and no capacity increases for S8500)
- Operating System: Red Hat Enterprise Linux 5 Update 3
- Third-Party Integration:
  - IBM Lotus Sametime 8.0 & 8.5
  - Microsoft Office Communicator 2007 R1 and R2 (also continues to support Microsoft Live Communication Server 2005)

## Capacity

- 1,000 CTI messages per second on S8800 and S8510
- 4,000 DMCC clients for \$8800 and \$8510
- Microsoft Office Communicator: 20,000 concurrent client applications at 24,000 BHCC (with dedicated Avaya Aura Application Enablement Services server) on S8800 and S8510
- IBM Lotus Sametime: 10,000 concurrent client applications at 12,000 BHCC (with dedicated Avaya Aura Application Enablement Services server) on S8800 and S8510

## 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 global leader in enterprise communications systems. The company provides unified communications, contact centers, and related services directly and through its channel partners to leading businesses and organizations around the world. Enterprises of all sizes depend on Avaya for state-of-the-art communications that improve efficiency, collaboration, customer service and competitiveness. For more information please visit www.avaya.com.



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