

Avaya Agile Communication Environment™

Delivering Communications-Enabled
Business Applications and Processes
Easily and Rapidly



AVAYA

INTELLIGENT COMMUNICATIONS

Avaya Agile Communication Environment™

Delivering Communications-Enabled Business Applications and Processes Easily and Rapidly

Avaya Agile Communication Environment™ (ACE) delivers communications-enabled applications (CEA) and business processes (CEBP) rapidly and simply through a suite of packaged applications and developer toolkits. Applications that would have taken weeks or months to develop by

specialist telecommunications developers can now be created easily by IT developers in a matter of days. Organizations can improve business agility and competitiveness by using Avaya ACE™ to integrate communications with people-dependent business applications and processes.

Packaged applications can provide fast return on investment through integration with business applications, such as Microsoft Office, Microsoft Office Communications Server 2007, and IBM Lotus Notes and Sametime. Avaya ACE also targets the large IT developer community through powerful toolkits consisting of over fifty Web service application programming interfaces (APIs) and a Foundation Toolkit for fine-tuned control of call flows throughout the network leveraging the power of SIP and Avaya Aura™ Session Manager. Avaya ACE also abstracts and controls Avaya Aura™ and multi-vendor network and communication services using a set of pre-written adapters. Avaya ACE appeals to any enterprise seeking to accelerate business processes through streamlined communications and collaboration. It adheres to a customer-driven agile development process that delivers new functionality every few months based on lead customer demand.

Key Features and Benefits

Create custom applications in days instead of months

The IT developer community can build communications-enabled custom applications in a multi-vendor environment up to five times faster than before using a broad range of Web services APIs and packaged, multi-platform CTI adapters. Expertise with different communication system protocols is not necessary. Organizations have seen development time fall from months to a few days for projects that involve integration of communications with business applications. See the Avaya ACE Toolkits Fact Sheet for more details.

Packaged applications deliver immediate value

Avaya ACE packaged applications provide plug-and-play functionality with immediate business benefits that drive fast return on investment.

Packaged applications include Avaya ACE™ Web Browser Add-in, Microsoft Office Add-in, Microsoft Communicator Add-in, IBM Lotus Sametime Integration, Hot Desking, and Mobile Cost Optimizer. See these Fact Sheets for more detailed information.

Avoid rip-and-replace by leveraging existing communications infrastructure

Avaya ACE packaged adapters interface with a variety of multi-vendor network and communications infrastructures for abstraction and control at the business applications layer. Organizations, therefore, can leverage their existing infrastructures and reduce the costs of replacing equipment. Avaya ACE also acts as a single integration point so that applications do not need to be rewritten each time a piece of communications infrastructure is upgraded.

Avaya ACE™ Architecture

Avaya ACE™ is a software-based middleware solution, architecturally sitting between the business application and network communication layers. The application layer comprises the set of SOA-based web services available for business software integration. The network communications layer includes a wide range of Avaya and multi-vendor communications servers and systems. Avaya ACE integrates to the network communications layer through a range of open and vendor proprietary adapters.

Avaya ACE™ Services

Avaya ACE leverages a SOA programming style to offer communications services as separate, modular and open Web service building blocks. These Web services are built on open standards such as SOAP, with most being compliant with Parlay X specifications. Application developers use Web services to integrate communications with business applications without having

to acquire in-depth telecommunications programming knowledge. Avaya ACE services include communications capabilities, such as click-to-call, audio call, video call, location and presence. Avaya ACE also offers the ability to combine Web services with logic to meet specific business needs: for example, supply management, web portals, and alerts/notifications. Clients invoke Avaya ACE enabled features through Web-based applications and processes. Avaya ACE requests from the application network are mapped to a specific Web Services Description Language (WSDL). This design enables simple and rapid integration in the customer's existing infrastructure to create communications-enabled applications and business processes.

Avaya ACE Foundation Toolkit contains the runtime services engine and software developer kit consisting of JAVA APIs, documentation and templates, to enable the creation of sequenced applications leveraging the power of SIP and Avaya Aura Session Manager. JAVA developers can create custom call treatment applications (e.g. call route modification based on user

presence status checks) without needing to become SIP experts. Avaya Media Server is also available to create any media services required (e.g. simple Interactive Voice Response).

Avaya ACE™ Application Integration Engine (AIE)

The Avaya ACE™ Application Integration Engine (AIE) is software that hosts Avaya ACE packaged applications and supporting software components. Avaya ACE AIE exposes Avaya ACE Web services through simple APIs built on REpresentational State Transfer (REST) design principles. Web application developers can invoke RESTful API operations to communications-enable Web applications or business processes within their environment without requiring detailed knowledge of underlying communication network implementation or protocols. Avaya ACE AIE provides a single point of access for Avaya ACE packaged applications.

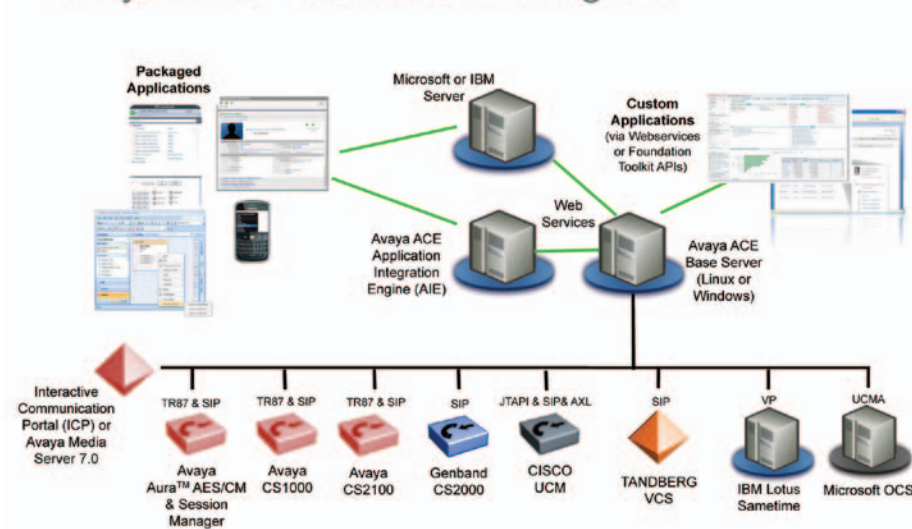
Supported Protocols

- Web service APIs - SOAP, REST
- Transport - HTTP, HTTPS, SSL
- JAVA APIs for Avaya Aura custom call treatment applications
- Signaling control - SIP, TR-87, JTAPI, H.323, Avaya CS 1000 MLS, IBM Virtual Places

Supported Systems

- Avaya Aura™ Communication Manager (via AES for CM 5.2.1 or via AES or Session Manager for CM 6.0)
- Avaya Communication Server 1000 from R5.5
- Avaya Communication Server 2100
- Avaya Media Server 7.0

Avaya ACE™ Architecture Diagram



Network Diagram

- Avaya Interactive Communications Portal (1.0.1)
- Cisco Unified Communications Manager (6.0, 7.0)
- Microsoft Office Communications Server (2007 R2 SE and EE and BPOS hosted)
- IBM Lotus Sametime 8.5.1 and Lotus Notes 8.5.2/8.5.1 with embedded Sametime 8.5.1
- TANDBERG Videoconferencing Server (server: X2.0 or X4.1, client: F7.0 NTSC)

Scalability

- Up to 15,000 users per system

Resiliency

- For high availability, ACE architecture supports the option of deploying a redundant standby server. In the event of a failure condition on the active server, a failover to the standby server occurs.

Specifications

Avaya ACE™ Software Platform Requirements

Software

Avaya ACE™ Base software is supported on a choice of Linux and Windows operating systems. Avaya ACE Application Integration Engine (AIE) is supported on Windows O.S. only

Hardware

Avaya ACE Base and ACE Application Integration Environment (AIE) software is supported on the server platforms below. For 1+1 resiliency, two servers are required. For high availability of ACE Base software, the IBM 3550 server must be deployed.

Learn More

For more information on how Avaya Agile Communication Environment™ can help your organization gain competitive advantage by integrating business processes with existing communications systems, contact your Avaya Account Manager or Avaya Authorized Partner, or visit www.avaya.com.

Avaya Media Server

Minimum Requirements

2 processors 4 GB
CentOS (32/64 bit)

Recommended Requirements

2 x quad-core processors
4 GB
RedHat 5.x Linux (32/64 bit)

Avaya ACE Base/AIE Servers

Minimum Requirements

Server type: IBM 3550 or HP Proliant DL360
2 x quad core processors
8 GB on-board memory
2 x 146 GB Hard drive
RAID 1, Dual Power supply, 2 NIC Cards. DVD drive
RedHat Linux O/S 64 bit or Microsoft Windows 2008 R2 O/S 64 Bit

About Avaya

Avaya is a global leader in business communications and collaboration systems, providing unified communications, contact centers, data solutions and related services to organizations of all sizes around the world. For more information please visit www.avaya.com.

© 2011 Avaya Inc. All Rights Reserved.

Avaya and the Avaya Logo are trademarks of Avaya Inc. and are registered in the United States and other countries. All trademarks identified by ®, ™, or SM are registered marks, trademarks, and service marks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. Avaya may also have trademark rights in other terms used herein. References to Avaya include the Nortel Enterprise business, which was acquired as of December 18, 2009.

04/11 • UC5082-02