# Avaya Aura™

Unified, Real-time Communications

Avaya Aura is a breakthrough in business communications — Avaya's core communications platform supporting mid to large enterprises, enabling unified communications, on-demand collaboration and customer service — faster, with less complexity and at lower cost — anywhere in the world. Avaya Aura brings together award- winning Avaya real-time communications performance and reliability with a revolutionary, enterprise-wide SIP architecture, plus the instant detection of each user's presence across devices and applications. Communications applications and services are implemented once and made available across the business. Simpler deployment and streamlined provisioning, plus leaner hardware and enterprise-wide dial plans, all drive down costs and complexity. And Avaya Aura is easy to acquire with two pre-packaged software editions, each one based on simple, per user licensing.
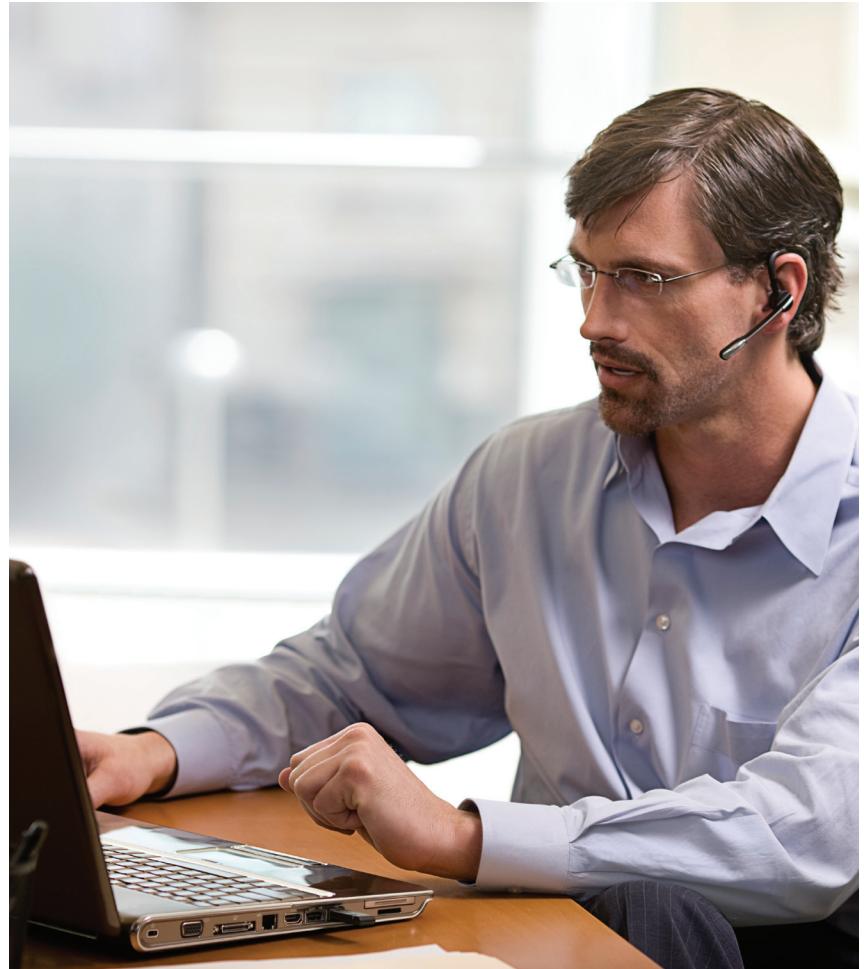
Avaya Aura redefines and simplifies existing voice and video communications architectures — including multi- vendor networks — delivering a new value equation in business communications: more capabilities with less cost and complexity.

A milestone for Avaya and business communications broadly, Avaya Aura goes beyond existing telephony and data communications networks and introduces a platform that unifies all forms of communication (voice, messaging, e-mail, voice mail, and more), without sacrificing any of the resiliency, security and performance that Avaya communications systems have always been known for.

Avaya Aura includes five core applications.

- Avaya Aura™ Communication Manager, the highly-reliable and extensible communication software;
- Avaya Aura™ Session Manager, a revolutionary SIP-based Session Manager capability;

- Avaya Aura™ Application Enablement Services, an integration capability to extend communications to business applications;

- Avaya Aura™ Presence Services, a presence aggregation solution and Avaya Aura™ System Manager, a centralized management solution;

- Avaya Aura System Manager, a common management framework that optimizes centralized management functions for provisioning, operations and fault/performance monitoring.

This powerful combination of applications makes it possible to unify media, modes, networks, devices, applications and real-time, actionable presence across a common infrastructure, creating the web-style, on-demand access to services and applications that users increasingly expect from their enterprise communications solution.

Avaya Aura also incorporates two new technologies:

- Avaya Aura™ System Platform, a technology that allows you to consolidate applications in a single server, decreasing your hardware footprint, cooling and energy costs. Because of this consolidation, you may need fewer servers for the same configuration than with other competitors.

- Avaya Aura™ Session Border Controller, powered by Acme Packet, a security technology for UC and CC applications that provides features required by SIP trunking & remote worker applications.

The result is a platform for fully exploiting the value of converged communications, satisfying the needs of employees and

customers, quickly distributing the enhanced applications that deliver improved performance while driving down overall costs and simplifying system management.

Avaya Aura™: Radically Simple Communications

As converged networks have increasingly become the norm in business communications, the competitiveness of many enterprises today depends on how quickly they can use these powerful, multi-faceted infrastructures to disseminate new functionality across the enterprise:

- Customers increasingly take their business to companies that use communications capabilities to transact business efficiently and provide high levels of service at any time, from any location across the enterprise.

- Employees increasingly require their communications system to give them the same experience they get on the web — fast connection by any user to any application on any system, regardless of vendor, anywhere in the enterprise.

- IT and Telecom managers want to use their current infrastructures to meet these customer and employee demands, but without making these infrastructures more costly to operate and complex to maintain.

By combining a secure, reliable core infrastructure — the proven Avaya Communication Manager software — with industry-leading SIP and Presence capabilities, Avaya Aura addresses these challenges and delivers:

Enterprise-wide – On-demand Unified Communications: Instead of slow, expensive, system-by-system configurations, capabilities implemented in Avaya Aura are instantly

available to employees across the business. Services and applications are deployed to users based on their needs and individual profiles, not the systems they are connected to, in a fraction of the time it takes today.

Aggregated, Enterprise-wide Presence: Getting value from multiple modes of communication — voice, e-mail, IM, video, etc — depends in today's world on presence: the instant indication of a user's availability and current activity. Avaya Aura provides any user, anywhere on the network, with an actionable, aggregated view of all users across devices and multi-vendor applications, including IBM and Microsoft desktop applications.

True Multi-vendor Interoperability: Avaya Aura provides flexible SIP routing across Cisco, and other vendor PBXs, new and old – integrating legacy TDM systems with cost-effective SIP gateways – allowing new, leading-edge capabilities to interoperate with legacy systems.

True Enterprise-wide Dial Plans: Avaya Aura delivers true enterprise-wide dial plans across multi-vendor PBX environments. Businesses now have maximum control of how calls use their corporate network, share external services, and when and where calls "hop off" the network and on to the local PSTN.

Implementation and Acquisition: Avaya Aura also provides enterprises with a simplified approach to implementation and acquisition: through two software Editions — Standard and Enterprise — each one bringing together all the functionality needed for common customer situations. With simple per user licensing, Avaya Aura provides packaging and pricing that are attractive to the broadest range of organizations.

Proven IP Performance with Avaya Aura™ Communication Manager

Avaya Aura Communication Manager is the industry leading IP Telephony solution that thousands of businesses rely on for reliable, robust, intelligent communications that:

- Delivers rich voice and video call control for a resilient, distributed network of media gateways and a wide range of analog, digital, and IP-based communication devices.

Avaya Aura™: The Benefits of Unified Communications Across the Enterprise	
Enterprise Goal	**How Avaya Aura Delivers**
Cost Savings	Simpler centralized management allowing continuous optimization of the communications network. Reduced PSTN usage through a single enterprise-wide dial plan, sharing trunks and applications. Reduced server and hardware footprints.
Leverage Existing Investments	Avaya Aura incorporates the latest release of Communication Manager software, providing a seamless upgrade for existing customers.
Business Continuity	Extensive high availability capabilities including: a globally deployable active/active SIP core; fully redundant servers; redundant media and network paths; and regional, local and small office survivability.
Increased Productivity	Faster deployment of the right Unified Communications applications to the right users everywhere. Services deployed on-demand to users based on who needs them, not the systems they are connected to, in a fraction of the time it takes today.
Increased Customer Satisfaction	Enhanced abilities to connect people and accelerate processes in real-time across the "customer ready" enterprise.
Evolve at Your Pace	Avaya Aura allows you to maintain existing features and systems while incrementally adding new technologies.
Interoperability	Open standards and multi-vendor interoperability eliminate vendor lock-in. Rich integration with Microsoft, IBM and other business applications.

- Provides a real-time foundation for all sizes and types of customer solution, scaling from less than 100 users to as many as 36,000 users on a single system and to over a million users on a single network.

- Continues the feature-functionality that has drawn businesses to Communication Manager for years — over 700 robust, market-leading communication features built on decades of customer collaboration and software refinement.

- Includes built-in applications for mobility, contact center, messaging and auto attendant, advanced conference calling, and E911 emergency calls.

- Makes video as easy as a phone call by integrating desktop and conference video including Avaya one-X® Communicator, Polycom group video systems and video-bridges, and standards based video phones including Polycom and Tandberg.

Communication Manager enhancements include increased user and trunk capacity per system, new media gateways and IP deskphones, and simpler connection choices that significantly reduce hardware footprints.

Communication Manager can be deployed in three ways: as a traditional IP PBX, or in combination with Session Manager as a centralized "feature server" providing capabilities to individual SIP users and devices anywhere on the network, or as "evolution server" providing features and benefits to a mix environment of both SIP and NON-SIP, like H.323, Analog or Digital end points. The straight-forward evolution from existing systems to new SIP- based capabilities ensures that existing investments are protected.

Avaya Aura™ Session Manager

Avaya Aura Session Manager is a revolutionary SIP Session Manager capability that expands scale and control, while enabling exciting user capabilities. Session Manager makes it possible to use Avaya Aura to integrate and simplify existing infrastructure, combining existing PBXs and other communications systems, regardless of vendor, into a cohesive, centrally managed communications network.

Avaya Aura Session Manager transforms any existing infrastructure into an on-demand service that provides any user in any location with access to a set of real-time communications services. Users can take their communications "profile" wherever they go, logging in from remote locations and getting access to their full set of preprogrammed user capabilities, from speed dials to buddy lists.

This enhanced architectural flexibility allows enterprises to more rapidly deploy appropriate communications capabilities to different user groups wherever they are. Because information now flows easily with the call, Avaya Aura Session Manager eliminates the extra cost and complexity of additional Computer Telephony Integration (CTI).

Through its flexible SIP capabilities, Avaya Aura provides a range of scalability and deployment options, providing for a smooth migration path from TDM and/or H.323 to SIP, allowing enterprises to deploy SIP telephony alongside existing analog, digital (DCP), and IP telephones.

The overall result is increased business agility and significantly reduced telecommunications and management costs.

Avaya Aura™ Presence Services

Avaya Aura breaks new ground in communications by integrating and disseminating rich presence capabilities across diverse business environments – including Avaya and third party sources; from voice calls and instant messaging to customer service and business processes. Users throughout the network can reach the people they need, with the multiple channels of communications available to them.

Already widely used for instant messaging, presence has the potential to drive new levels of business user productivity and customer care by more easily making expert resources readily available to customers and workers.

Presence Services works in concert with other presence-based applications, including Microsoft Office Communication Server,
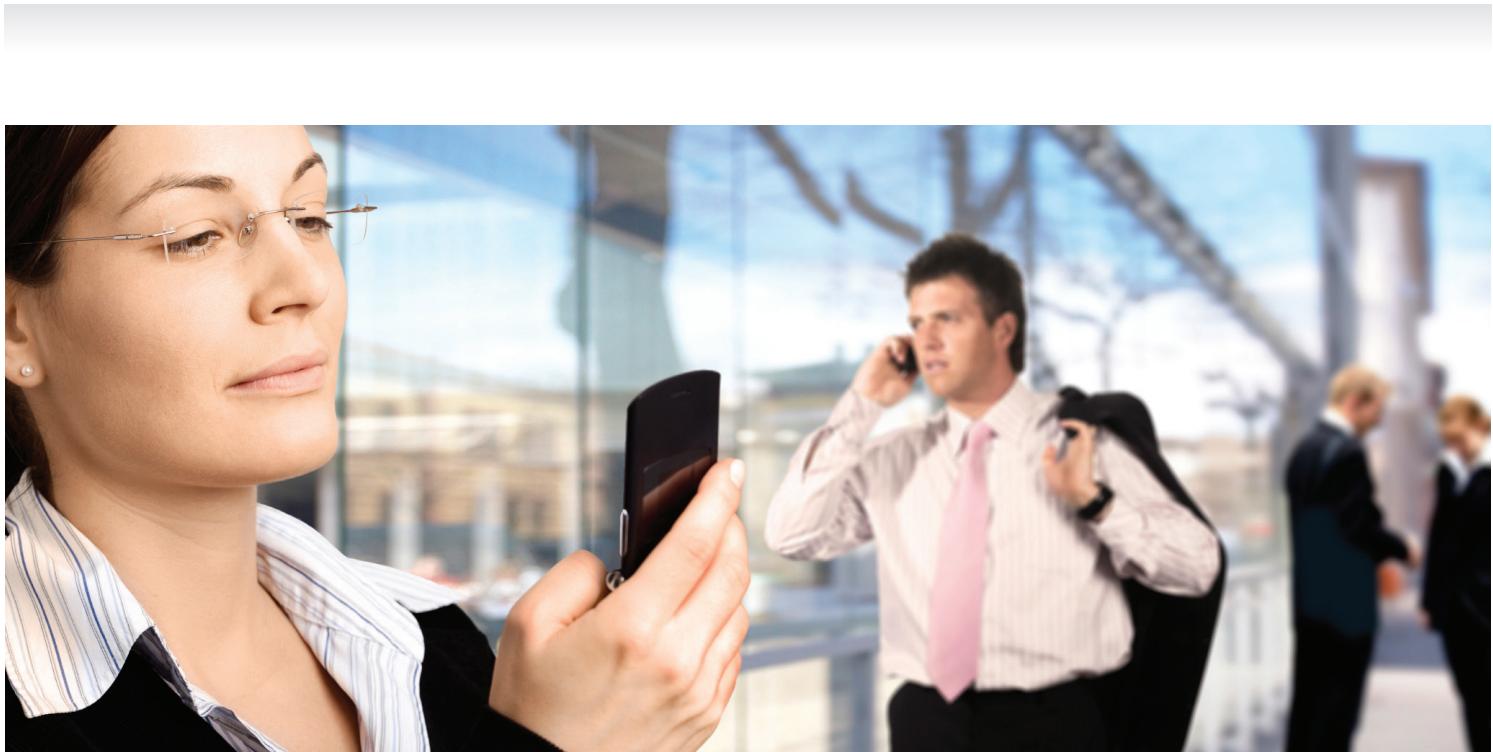
AVAYA AURA™ SYSTEM PLATFORM

Avaya Aura System Platform technology delivers simplified deployment of unified communications and contact center applications. This framework leverages virtualization technology, pre-defined templates, common installation, licensing, and support infrastructure. Avaya Aura System Platform is designed to give customers many of the benefits of virtualization without compromising performance.

An Aura System Platform implementation immediately provides the benefits of cost savings through server consolidation, high availability, and hardware abstraction from the OS. Additionally, the benefits of test and development, dynamic resource scheduling, tiering, and management and deployment of applications can be achieved within a certified UC server and application pool. Upgrades and updates are simplified by simply updating the virtual machine image instead of having to deal with independent applications.

Avaya Aura System Platform technology gives developers the flexibility, test and development environments to deploy UC without disrupting other applications. The platform currently supports Avaya UC applications. It also allows for customized application development using Avaya APIs.

IBM Lotus Sametime, and other third-party applications using open SIP/SIMPLE and XMPP standards. This allows consistent presence visibility and use of a wide array of business communications applications:

• Full aggregated presence is provided in Avaya one-X® UC clients

• On-the-phone status can be seen in Microsoft Office Communicator and applications such as Outlook and SharePoint that use Smart Tags.

• Phone status is also viewable in IBM Lotus Sametime and applications using Live Names, such as Lotus Notes and others.

• When client software from Avaya, Microsoft, IBM Lotus, and Adobe is integrated with Avaya Meeting Exchange for an audio and web conference call, a roster of call participants and the active speaker is shown.

• Avaya video applications utilize presence to highlight the active speaker in a video call when multiple video participants are visible simultaneously.

Avaya Aura™ Application Enablement Services

Avaya Aura Application Enablement Services is a set of software interfaces that provide connectivity between external applications and Avaya Aura. Using 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, including Microsoft

Office Communicator and IBM Lotus Sametime, as well as a broad range of collaboration, contact center, call recording and click-to-dial applications.

Application Enablement Services include high-level Web Services, direct IP access to media, and deep feature access through industry standard APIs including CSTA, JTAPI and TSAPI. All these services are integrated into a single secure, scalable software application with management, redundancy and fail-over capabilities to support mission-critical business needs.

Avaya Aura™ System Manager

A major focus of Avaya Aura is to simplify and reduce management complexity and solution servicing.

Avaya Aura System Manager provides a new common management framework that optimizes centralized management functions for provisioning, operations and fault/performance monitoring. Avaya Aura System Manager provides an extensible, browser-based console for managing all users and system connectivity enterprise-wide. This provides one place for accessing all System Manager capabilities including user profile administration, dial plans, network routing policies and security.

Over time, System Manager will become the common enterprise-wide management framework for administering users and capabilities across Avaya applications, leveraging an extensible management framework with pluggable services that make it easy to extend management to other

products, applications and vendor solutions. This results in better data consistency, faster deployment, lower total-cost-of-ownership and less training.

Avaya Aura also includes appropriate capabilities of the Avaya Integrated Management suite, which provides a comprehensive set of tools and web-based user interfaces for managing existing systems and networks.

Unified Communications (UC) for Business Users

With Avaya Aura, companies can deploy multiple applications to their end users. Applications such as:

• Avaya Aura™ Conferencing, a carrier grade conferencing and collaboration solution

• Avaya Aura™ Messaging, a solid messaging platform

• Avaya Aura™ Video, leveraging video solutions across the enterprise

• An extensive array of third party applications through Avaya DevConnect.

Avaya Aura allows users to take advantage of the widest possible array of end user devices — whatever meets their needs most effectively depending on whether they are in office, on the road, at home or another location. This includes deskphones, wireless phones, on-screen softphones, home phones with VPN, conference phones, headsets and more — designed to exploit all the communications and collaboration capabilities that Avaya Aura delivers.

Avaya Deskphones feature a sleek design, rich user ergonomics, flexibility, and broadband voice quality with models designed for specific user profiles. Avaya has maximized the modularity of these phones by incorporating USB and plug-in modules for Gigabit Ethernet, Bluetooth and WiFi. User interfaces feature crisp color or grayscale screens, context sensitive displays and a WML web browser to simplify access to applications.

Avaya Aura works with the full range of Avaya one-X® clients, including Avaya one-X® Communicator, Avaya one-X® Portal and Avaya one-X® Mobile. Licenses for these software applications, as well as Microsoft and IBM desktop integration, are included with Avaya Aura Enterprise Edition, or available for a fee with Standard Edition.

Business Continuity and Security

Business Continuity Planning is a critical challenge for any organization today — and communications is a mission-critical capability, especially during unexpected events and emergencies. Avaya Aura makes it possible for organizations to use their communications infrastructure to quickly redirect and redeploy resources, giving people full access to the tools they need — their personal numbers, communications profile, conferencing capabilities and more — wherever they are.

The active/active Avaya Aura Session Manager SIP redundancy across global locations, married with the redundancy and survivability features of Avaya Communication Manager, provide rapid fail-over and call continuity. Underlying technologies including survivable processing, hardware duplication, dual power supplies, UPS and data center deployment, and PSTN fail-over when there are IP network outages, all provide increased communications continuity.

In addition, Avaya provides extensive remote monitoring, support and maintenance services to provide up to 99.999% availability. Avaya EXPERT Systems℠, with a database of over 30,000 intelligent rules, ensure that up to 96% of alarms can be cleared remotely, maximizing availability.

Security defenses, encryption, authentication and certificate use are embedded at all levels across Avaya Aura to ensure secure continuous communications between all endpoints without sacrificing performance. Robust trust management and strong authentication capabilities can be added at remote sites without requiring special software to be loaded into individual devices, dramatically simplifying costs to multi-office, multi-branch organizations. With Avaya Aura™ Session Border Controller protection can be put in place to block malicious content and denial of service attacks.

Acquiring Avaya Aura

Avaya makes it simple to acquire Avaya Aura and adapt it to the unique needs of your enterprise by offering two editions: Standard Edition and Enterprise Edition. Each of these software Editions brings together all the functionality needed for common customer situations with a simple per user licensing fee. Specific hardware topology depends on the redundancy, scalability and geographic distribution needs for each customer. The software Editions and their functionality remain the same regardless of hardware choices.

Standard Edition: For mid-to-large enterprises requiring comprehensive voice, video, messaging, SIP, and Presence communications capabilities with standard survivability at remote locations. Standard Edition has the option to easily add licensing for enterprise-wide SIP session management and Unified Communications applications for targeted users, including Microsoft and IBM integration, and mobile worker and teleworker support.

Enterprise Edition: For highly distributed enterprises requiring the same comprehensive communications capabilities as Standard Edition with increased high availability options, including 100% feature survivability at remote locations. Enterprise Edition also includes, with no additional licensing, enterprise-wide SIP session management and Unified Communications applications for all users, including Microsoft and IBM integration, and mobile worker and teleworker support.

Additional Avaya applications for messaging, conferencing, collaboration, video communications, customer service and contact centers can all be incrementally added to Avaya Aura Editions. An extensive array of certified third-party products is also available through the Avaya DevConnect partner ecosystem (**www.avaya.com/devconnect**).

Global Services That Support Your Investment

Avaya Global Services offers a single point of accountability to design, build, implement and manage multi-vendor, converged communications solutions worldwide. Avaya can help you align Avaya Aura capabilities with your business imperatives, with professional services experts who translate executive business strategies into a business case and a communications blueprint for success. Avaya support services ensure communications networks and applications operate at peak performance with proactive monitoring, software update management, problem resolution, and continuous optimization to maximize the value of your investment. Avaya managed services can also complement, supplement, or completely outsource communications operations, so you can focus on business.

Services That Maximize Your Investment

Avaya Global Services offers a full range of services to help you plan, design, implement and support your converged communications needs worldwide. We can help you align Avaya Aura capabilities with your business imperatives. Our professional services experts help you translate your business strategies into a business case and provide self funding roadmaps for your success. Avaya's support services ensure your communications networks and applications operate at peak performance with proactive monitoring, software update management, problem resolution, and continuous optimization to maximize the value of your investment. And Avaya managed services can help you outsource your communications operations, so you can focus on your strategic initiatives.

Learn More

To learn more about Avaya Aura, our other award-winning solutions and Avaya Global 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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