



Engage **The Power of We™**

Avaya Aura® Session Manager is a comprehensive SIP routing core for real time voice, video and collaborative engagement.

Its scalability, reliability and openness create the foundation for the Era of Enterprise Engagement.

Avaya Aura® Session Manager

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, people-centric 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® Session Manager is the core of Avaya's Session Initiated Protocol (SIP) based architecture. The Session Manager platform makes it possible to unify media, networks, devices, applications and real-time, actionable presence across a common infrastructure, creating the on-demand access to services and applications that define the engagement experience.

Avaya Aura Session Manager enables the engaged enterprise with:

- Lower total cost of ownership through centralized infrastructure and management
- Reduced operational costs with single routing and dial plan control
- Complete integration with Avaya Aura® Communication Manager or Avaya Communication Server 1000
- Support for third-party equipment integration through comprehensive adaptation modules
- True converged multimedia Call Admission Control (CAC) with configurable video "down-speeding" for bandwidth management
- Rapid application deployments to users based on need, not location

- Comprehensive support for SIP devices and trunking
- Scale to 250,000 users on a single enterprise network

Key Customer Benefits

Quality Experiences

- Business agility driven through a holistic enterprise architecture for connecting users, applications and multi-vendor solutions.
- New cost savings from SIP connectivity and reduced PSTN usage through centralized, enterprise-wide routing and trunking.
- Increased customer satisfaction by more efficiently and effectively connecting people and accelerating processes in real-time across the engaged enterprise.





- Access to advanced SIP-based collaboration and customer contact solutions
- Lower total cost of ownership
- Centralized infrastructure and management
- Reduced operational costs with single routing and dial plan control

- Lower total cost of ownership with a centralized, easy to use management interface plus the ability to efficiently deploy enterprise-wide centralized applications.
- Unprecedented enterprise wide scalability with support for truly global deployments of up to 250,000 total users, 250,000 SIP users, 350,000 SIP devices, 2,000 Communication Managers, and 25,000 locations with a single point of management.
- Solid reliability and redundancy through simultaneous endpoint registrations at up to two core Session Managers and a third Survivable Remote Branch Session Manager/IP Office Branch.
- Outstanding geo-redundancy with up to 28 “active-active” Session Manager instances that safely tolerate network delays up to 1 second.
- Enterprise wide centralized dial plan management including integration and management of third party solutions.

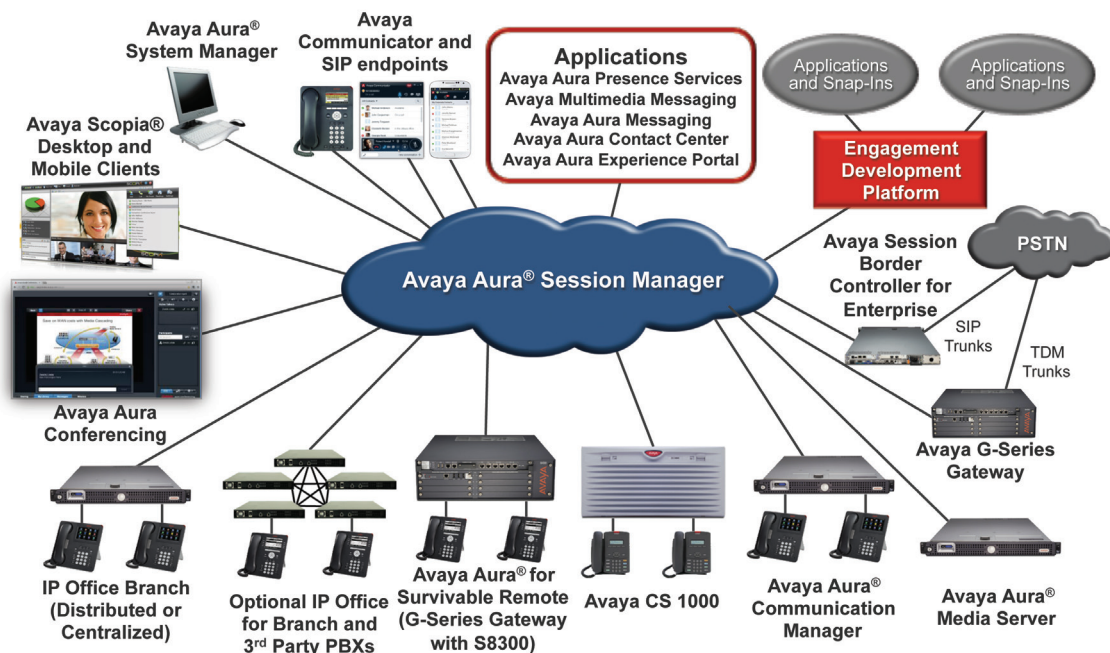
Feature Summary

Scale and Capacity

Session Manager supports up to 25,000 locations with more than 3 Million Busy Hour Call Completions (BHCC). A single instance of Session Manager is now certified for over 400,000 BHCC of trunk and inter-location calling with support for 23,300 SIP devices, 150 sessions per second and 160,000 simultaneous sessions. With capacity for up to 28 Session Managers in a single enterprise environment, 250,000 total users including 250,000 SIP users can now be supported on a global Avaya Aura Platform.

Reliability and Redundancy

The Avaya Aura® Platform employs the Internet Engineering Task Force (IETF) standard RFC 5626 to deliver multiple, simultaneous registrations to endpoints. Avaya and RFC compliant endpoints can register with multiple core Session Managers and with a local branch Avaya Aura® Survivable Remote Session Manager or IP Office branch instance for a total of three simultaneous registrations. As a result,



A Next-generation Architecture for the Era of Engagement

calls can be placed during network outages without dropping, and with only a delay of two seconds or less.

Session Manager also supports Network Interface Card (NIC) bonding and up to 28 geo-redundant Session Manager instances. It can tolerate up to 1,000 msec of network round trip delay providing true global coverage and resiliency for larger enterprise networks. Session Manager also supports Call Preservation in the event of a network or Session Manager failure in the core. This capability allows calls in queue in a contact center to be processed in the normal way without any interruption or loss in service.

Third-Party PBX Support

Session Manager supports connectivity to Cisco, Siemens, Alcatel Lucent, and other third-party PBXs as well as legacy Avaya H.323, analog and digital endpoints, providing a forward migration path for customers with heterogeneous networks.

Endpoint Support

Session Manager provides extensive endpoint support including the Avaya 9600 Series IP Deskphones, Avaya Communicator, Avaya Video Conferencing Systems Avaya Scopia desktop clients and third party SIP endpoints provided by Avaya's DevConnect partners.

Advanced Administration

Avaya Aura® System Manager's new tab-based administration interface allows faster Session Manager configuration and administration. In addition, System Manager simultaneously supports multiple Session Manager Releases for flawless system upgrades.

Converged Call Admission Control

Session Manager supports truly converged voice and video bandwidth management with

Avaya Aura® Quick Reference Specifications	
Item	Release 7.0
Total Enterprise SIP Users	250,000
Total Enterprise Users	250,000
Total Enterprise SIP Devices	350,000
Total Enterprise Presence Users	250,000
SIP Users/Communication Manager	36,000
SIP Trunks per Communications Manager	24,000
Survivable Remotes/Communication Manager	250
Survivable Remotes per Enterprise Network	500
Locations/Adaptations/SIP Entities	25,000
SIP Domains	1000
Dial Patterns/Routing Policies	300,000

centralized administration and control. In a converged network, each SIP entity link can be administered for fixed allocations handling voice, and video with the remainder allocated for data traffic. Flexible options allow voice to utilize unused bandwidth from video allocations, and Avaya's video down-speeding capability allows video calls to be completed when the full bandwidth requested is not available, without affecting the quality of existing calls.

Enhanced Emergency Calling

Through integration with Avaya DevConnect Partner solutions, SIP endpoints can now report their exact location down to the specific IP phone jack including devices supported under Multi-device Access (MDA).

Security

Session Manager can now connect SIP entities and every endpoint in the enterprise with encrypted Transport Layer Security connections using a new software-based technology that no longer requires Transport Layer Security acceleration hardware. In addition, the System Manager Trust Management interface is easy to use, and makes sending and applying unique third-party security

certificates to any SIP entity simple to accomplish.

SIP Connectivity

Supports SIP connections (but is not limited) to:

- Avaya Aura® Communication Manager and Avaya Communication Server 1000
- Avaya Aura® Messaging and Avaya Modular Messaging
- Avaya Aura® Conferencing
- Avaya Voice Portal Avaya Experience Portal, and Intelligent Call Routing
- Avaya Aura® Contact Center
- Avaya SIP Endpoints including Video Capable Endpoints
- Avaya G860 Media Gateway and AudioCodes M3000
- Avaya IP Office
- Avaya Session Boarder Controller for Enterprise

Dial Plan

Session Manager allows central enterprise-wide dial plans across multi-vendor PBX environments. It implements a uniform dial plan where required, or binds together multiple length dial plans in one centralized,

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 fabric-based networking solutions help simplify and accelerate the deployment of business critical applications and services. For more information, please visit www.avaya.com.

easy-to-manage database so users do not have to change the way they dial.

Network Routing

It supports creating system-wide network routing rules to cost-effectively route calls using an enterprise's IP network, including:

- Enterprise-wide least cost routing
- Enterprise-wide alternate routing including routing around failures, following customer-provided priorities, and dynamically avoiding routes with bandwidth limits
- Enterprise-wide time of day routing
- Tail end hop off
- Toll avoidance

Application Agility

Avaya Aura enhances user productivity while increasing business agility by enabling faster, and easier deployment of applications targeted to unique users and workgroups. Each application can be added to an enterprise without any modifications or upgrades to the other applications in the enterprise cloud including Communication Manager.

Call Detail Recording

Each instance of Session Manager provides a third-party Call Detail Recording (CDR) interface, allowing enterprise-wide CDR data to be recorded and saved. New video bandwidth parameters for multimedia calls are also included in the CDR output.

Secure Centralized Trunking

Avaya Aura® Session Manager can provide redundant connections to a SIP service provider via a variety of Session Boarder Controllers. To facilitate these

connections, Session Manager provides the location based Automatic Number Identification (ANI) information needed by service providers as well as new "From" and "To" header manipulations that make multiple service provider SIP integration simple to implement.

Centralized Messaging

The load balancing and star connectivity capabilities of Session Manager allows a single Avaya Aura Messaging or Modular Messaging instance to provide service (including lighting message waiting indicator lamps) for Avaya, Cisco and other SIP-compliant PBX systems.

Centralized Conferencing

Common Avaya Aura® Conferencing capabilities can be "shared" across a Session Manager network with up to three systems providing the scale necessary for large conferencing needs while still providing local access to conferencing resources. This avoids mesh conferencing connections that waste bandwidth across large multi-data center enterprise configurations.

Multi-Device Access (MDA)

Improves worker productivity in a multi-device world by allowing a user to register up to 10 SIP devices to the same extension. All devices are alerted when an incoming call arrives, and the user can answer the call on any device. Once the call is answered, all devices stop ringing.

Learn More

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



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