

# Avaya Aura™ Communication Manager

# The Foundation of your Unified Communications Solution.

## Overview

Avaya Aura™ Communication Manager is a key component of Avaya Aura™. It delivers rich voice and video capabilities and provides for a resilient, distributed network of media gateways and analog, digital and IP-based communication devices. In addition, Communication Manager boasts robust PBX features, high reliability and scalability, and multi-protocol support. It includes advanced mobility features, built-in conference calling and contact center applications and E911 capabilities.

## Avaya Aura Communication Manager enables the virtual enterprise with:

- Robust voice and video call processing capabilities.
- Advanced workforce productivity and mobility features.
- Built-in conferencing and contact center applications.
- Centralized voicemail and attendant operations across multiple locations.
- Connectivity to a wide range of analog, digital, and IP-based communication devices.
- Support for SIP, H.323 and many industrystandard communications protocols over a variety of different networks.
- More than 700 powerful features in all.
- High availability, reliability and survivability.

## **Key Customer Benefits**

## Helping ensure business continuity

- Transparent server failover: If the primary server fails, the backup automatically takes over.
- Redundant interfaces: Minimizes the impact of local network failures.
- Geographically separated redundant servers: Provides redundancy across the IP telephony solution.
- Branch office survivability: Keeps branch offices and remote locations connected to the main data center.
- Voice quality monitoring and management:
   Checks for network conditions that adversely affect voice quality and automatically applies corrective action.



## Promoting enterprise security

- Secure by design: Avaya Aura
   Communication Manager telephony servers are isolated from the rest of the enterprise network to safeguard them from viruses, worms, DoS and other attacks.
- Secure by default: Avaya Aura
   Communication Manager uses the minimum number of services and access ports to reduce susceptibility to malicious attacks.
- Secure communications: Avaya Aura
   Communication Manager uses media encryption between servers, gateways and endpoints to secure the voice stream and signaling channels.

## **Enhancing workforce productivity**

- Handles incoming calls effectively: Multiple options for call routing, queuing and priority handling.
- Increases efficiency: Easy-to-use features save workers hours in setting up, dialing and routing calls.
- Improves collaboration: Workers enjoy increased collaboration with easy-tooperate conferencing and paging features.

#### **Open Standards**

- Support for open standards: Facilitates embedding communications into business processes, adding value to the enterprise.
- SIP support: SIP improves the connectivity
  and openness of Avaya Aura Communication
  Manager and associated end-user devices,
  resulting in reduced costs, faster deployment
  of new functions and enhanced options for
  linking communications with business processes. SIP based presence lets users inform
  others of their status, availability and how they
  may be contacted.

#### AVAYA AURA COMMUNICATION MANAGER DEPLOYMENT OPTIONS:

- **Traditional IP PBX:** all locations are connected via IP and features are deployed at an individual location level. Also you are able to connect to hybrid environments allowing the co-existence of Analog and Digital technologies in remote offices.
- Centrally located Feature Server: you can connect all your offices and SIP end-points to Session Manager via SIP to a centrally located instance of Communication Manager.
   This will allow you to deliver core features consistently across the enterprise; with no local PBX restrictions. In addition to that you will be able to deploy full application sequencing capabilities.
- Evolution Server: you will be able to provide features and benefits to a mix environment of both SIP and NON-SIP, such as H.323, Analog or Digital end points and support implicit application sequencing capabilities.

These last 2 options can be used singly or can appear together on multiple Communication Manager servers in the enterprise to provide cost savings on Communication Manager server deployment and a rich set of customer sequenced applications .

 End-to-end standards-based application integration: Linux-based Avaya Aura Communication Manager software provides integration of old (TSAPI, JTAPI, CSTA) and new (Web services and service-oriented architecture) standards.

## Simplified Network Management

- Avaya Integrated Management Suite:
   Provides a comprehensive set of tools that makes it easy to deploy, manage and maintain a complex, distributed Avaya Aura Communication Manager-based IP telephony network.
- Avaya Aura™ System Manager: Provides
   centralized administration of multiple
   instances of Communication Manager. It
   takes a solution level approach to network
   administration that allows IT departments
   to incorporate new components and
   applications under a common management
   umbrella over time, managing the elements
   of Avaya Aura together as a system.

## **Feature Summary**

- Telephony Features: Comprehensive end user telephony features (i.e. auto attendant, call transfer, call forward, etc.) facilitate effective communications among employees, customers and partners.
- Mobility Features: Extensive in-building or in/out building wireless choices and hot desking features like Extension to Cellular (EC500), Personal Station Access (PSA) and Automatic Customer Telephone Rearrangement (ACTR) extend Avaya Aura Communication Manager features to users no matter where they're working.
- Collaboration: Built-in features like Meet
   Me Conferencing (up to six parties) or the
   optional Expanded Meet Me Conferencing
   (up to 300) make it easy to collaborate with
   groups of peers, customers and partners.
- Integrated Messaging: Built-in messaging features and full capability for messaging integration with voice, fax and e-mail.

- Call Center Integration: Call center
  applications like Avaya Call Management
  System for real-time reporting and
  performance statistics, and Avaya
  Business Advocate for expert predictive
  routing based on incoming calls rather
  than historical data, are easily integrated.
- Telecommuting: Telecommuter capabilities route calls appropriately and give employees access to the full Avaya Aura Communication Manager feature set whether working at home, in the office or on the road.
- Application Integration: Lets IT application developers leverage Avaya Aura
   Communication Manager functionality via standard Web Services interfaces, enabling integration of business and communication applications with realtime telephony.
- SIP Support: Integrated SIP proxy/registrar server with SIP trunking support and duplicated server features to enable SIP interoperability and capabilities on Avaya Aura Communication Manager.
- Quality of Service: QoS features like
   Inter-Gateway Alternate Routing (IGAR) and Call Admission Control provide a no compromise approach to reliability and functionality on converged IP networks to assure Avaya Aura Communication
   Manager end users receive the same feature delivery over IP as when using circuit switched technologies.
- Reliability & Survivability: Supports a
  wide variety of servers, gateways and
  survivability features enabling 99.999%
  availability or better at highly competitive
  prices. The software is capable of mirroring
  processor functions, providing alternate



gatekeepers, supporting multiple network interfaces and ensuring survivability at remote and central locations.

- Intelligent Networking and Call Routing:
  Lets organizations create a virtual
  fabric of many switches that can pass
  information and calls, opening new
  revenue opportunities and higher levels of
  customer service. Call routing features are
  also designed to reduce networking costs
  through effective use of IP Trunking over
  WAN or LAN links.
- Security and Privacy: Security features
  for detecting probable breaches, taking
  measures to protect the system, notification
  and tracking activities. Also provides realtime media encryption for environments
  where enhanced voice privacy over a LAN/
  WAN is required.
- Safety and Disaster Recovery: Tools to help organizations manage and respond to unforeseen emergency situations.

 Integrated Management: Powerful built-in tools for administrators and network managers to maintain communication solutions and drive down total cost of ownership, including applications for network management, configuration management, and fault and performance monitoring.

## **Technical Specifications**

# Operating System and Supported Servers

- Servers: HP® ProLiant DL360 G7 and Dell® PowerEdge R610, Avaya S8800, S8510, S8300D
- Operating System:
   Red Hat Enterprise Linux

## Capacity

• Number of Stations: 36,000

• Total IP Station + Trunk capacity: 18,000

• SIP Endpoints: 18,000

• SIP Trunks: 7,000

## **Avaya Aura Communication Manager Features**

### **Employee Productivity**

- Call Coverage
- Send All Calls
- Priority Queuing
- Backup Alerting
- Timed Reminders
- · Attendant Vectoring
- Abbreviated Dialing
- Last Number Dialed
- Internal Automatic Answer
- Integrated Directory
- Universal Access Phone Status
- Intelligent Call Routing
- Multi-party Conferencing (up to 300)
- · Meet-Me Conferencing
- Group Paging
- Remote Call Coverage/ Forward Off-Net
- Personal Station Access
- Automatic Call Distribution (ACD)
- Enterprise Mobility User
- SIP Visiting User
- Team Button

## **Endpoint Devices**

- SIP Telephony Support with SIP Enablement Services (SES)
- Avaya one-X® Deskphone
- Avaya 9600 Series IP Deskphones
- · Avaya 1600 Series IP Deskphones
- Avaya 3600 Series IP Wireless Telephones
- Avaya IP Softphone
- Avaya one-X® Mobile
- · Avaya one-X® Desktop
- Avaya one-X® Speech
- Avaya one-X® Portal

## Networking

- Q.Sig Management
- 13-Digit dial plan
- T.38 fax over IP
- Modem over IP
- SIP Trunking

### Learn More

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

## **About Avaya**

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



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