Avaya Communication Server 1000

The foundation of your unified communications experience

Provide all your employees - whether they’re working from home, on the road, in a branch office or at headquarters – with access to productivity-enhancing applications from Avaya Aura™ unified communications solutions. Offer your customers elevated levels of service through improved employee contact, extended reach and always-on communications. Do it all with an open, simple, secure and resilient platform that enhances productivity, improves user accessibility and enables unified communications.

Communication Server 1000

The Avaya Communication Server 1000, which enables a simple evolutionary path to the award-winning Avaya Aura™ unified communications solution, is a full-featured, highly-scalable IP communications system that meets the needs of enterprises from small to large.

The Communication Server 1000 offers a comprehensive array of reliability and survivability mechanisms to ensure the integrity of your network, while enabling communications security through a full suite of security features and capabilities. The Communication Server 1000 supports a comprehensive array of business-critical telephony features and multimedia applications to any user that needs them — anywhere on the network.

<table>
<thead>
<tr>
<th>Communication Server 1000 Portfolio</th>
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<tbody>
<tr>
<td>Communication Server 1000M</td>
<td>Well suited for Meridian 1 customers that are TDM-centric and want to maintain investment in their existing infrastructure while evolving to enjoy the benefits of IP applications and services.</td>
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<tr>
<td>Communication Server 1000E</td>
<td>Ideal for new customers that are IP-centric and want a flexible, reliable and secure IP Telephony solution with a broad portfolio of productivity-enhancing applications and services.</td>
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Resilient to ensure business continuity

Ensuring the integrity of your telephony infrastructure is critical to business success, which is why the Avaya Communication Server 1000 was specially designed with no single point of failure. The platform can also be deployed with an array of reliability and redundancy mechanism to ensure that even in adverse conditions, business continues as usual.

Campus redundancy

The Avaya Communication Server 1000’s fault tolerance and operational resilience
Geographic redundancy
Since system failures are not always localized, enterprises must have broad-reaching failover mechanisms that provide continuity of service in the event of disasters or network failures. Implementing geographic redundancy enables networks to 'self-heal' in the event that the main call server is isolated from the rest of the network — allowing users to stay connected and business operations to continue.

Unified Communications Management
The Avaya Unified Communications Management (UCM) solution offers comprehensive management capabilities across voice, data, and multimedia applications, utilizing a set of common services that serve as building blocks of a Service Oriented Architecture (SOA) for unifying management applications. Subscriber Manager is a fully-integrated component of UCM and can be launched as a network management application from the centralized console, securely and from anywhere in the network.

Voice quality management
Equipment reliability doesn’t mean a thing if the network can’t provide high-quality service. The Avaya Communication Server 1000 supports real-time monitoring and reporting of network conditions during calls — enabling quicker resolution to network problems and ensuring continued high-quality service.

Proactive Voice Quality Management (PVQM) enables network managers to ensure the overall quality of their IP Telephony deployments. PVQM continuously and passively measures the user quality of experience (QoE) for IP Telephony communications, conducts system health checks for IP Telephony servers, and provides troubleshooting and resolution for any performance degradation or fault conditions to ensure the quality of VoIP communications.

Security
Increased user mobility combined with growing threats from legitimate and illegitimate users and devices represent a daunting challenge for companies who are trying to secure their networks. Fundamental to our architecture is a comprehensive layered defense approach that ensures the integrity and security of the network and its users. This offers numerous security capabilities that include firewall protection to secure against denial of service (DoS) attacks. The Avaya Communication Server 1000 supports a number of capabilities to ensure the security of its users, including the encryption of media and signaling traffic.
**Location-based emergency services**

The Avaya Communication Server 1000 employs intelligent emergency services globally (e.g., 911, 999, 112) that track the location of IP clients and direct calls to the appropriate emergency contact, even if that client is halfway around the world. Location-based emergency services are a core built-in capability of the Communication Server 1000, designed to ensure simple, effective and reliable service you can count on when you need it the most.

**IP Phones and Clients**

The Avaya Communication Server 1000 supports one of the most extensive portfolios of IP clients and devices in the industry — allowing customers to choose the right mix of devices that best supports their business, user and mobility requirements:

- IP phones for desktops include the award-winning 1100 Series IP Deskphones and the value-oriented 1200 Series IP Deskphones. Each series includes models tailored to specific customer environments, budgets and/or requirements.

- Mobile handsets including the 6100 Series WLAN Handsets and the 4000 Series DECT handsets for on-site mobility using enterprise-deployed wireless technologies. Handset choices span modern sleek designs through to specialized and rugged models designed to endure in harsh environments.

- Soft client options include the 3456 IP Softphone, 2050 IP Softphone for Windows PCs and PDAs, the MCS client supporting Unified Communications and the 3100 Mobile Communicator for mobile smart phones.

- Any cell phone can also be enhanced with the Communication Server 1000 features by using the Mobile Extension feature to pair it with the user’s office phone.

Collectively the client portfolio provides ideal solutions for all types of users including office workers, contact center agents, remote workers, road warriors or campus mobile workers — delivering more effective employee communications and improved customer responsiveness. The tight integration of IP clients with the Communication Server 1000 system delivers streamlined management and provisioning for site administrators.

Figure 1. Example of network deployment scenarios
Business-enhancing telephony and unified communications

The Avaya Communication Server 1000 leverages advances in technology, such as Session Initiation Protocol, to provide users the flexibility to choose the type of media or device they need to communicate most effectively. SIP, a powerful protocol for IP Telephony, supports a wide range of media sessions allowing users to engage in real-time, integrated business communications regardless of location, media type or device.

The Communication Server 1000 natively integrates Unified Communications capabilities for simple and cost-effective services, ideal for small to large organizations looking to take advantage of the latest productivity-enhancing applications.

Using the 3456 IP Softphone or the Instant Messaging (IM) Web Client, rich presence and instant messaging can be enabled for subscribers on a Communication Server 1000. Users can enjoy the benefits of presence capability extended to any device registered on a Communication Server 1000. The 3456 IP Softphone users also have integrated video telephony.

Communication Server 1000 users also have equal access to applications such as Avaya CallPilot unified messaging, Contact Center, Interactive Voice Response (IVR) and rich media services from the Avaya Multimedia Communication Server 5100. Together, the Multimedia Communication Server 5100 and Communication Server 1000 deliver presence-aware, multimedia collaborative sessions that enable employees to improve their productivity, stay connected and actively engaged.

Investment protection and freedom to evolve

As enterprises face increasingly tighter capital and IT budgets, replacement of old equipment with new isn’t a strategy that will resonate with most CFOs. Our investment protection philosophy ensures that when an enterprise is ready to implement the latest technology that Avaya Aura™ unified communications delivers, they can upgrade with minimal to no disruption — enabling users to remain productive and engaged with customers and colleagues regardless of time or distance.

Partnering to deliver unified communications

To deliver on the promise of unified communications, we are working closely with leading desktop vendors such as Microsoft and IBM to deliver integrated telephony across the entire enterprise.

The industry-unique Innovative Communications Alliance with Microsoft was formed to accelerate the transformation of today’s voice, video and data communications components into advanced unified communications solutions. As part of this alliance, enterprises can take advantage of Communication Server 1000 telephony features and capabilities integrated into Microsoft applications. These applications include Microsoft Office Communications Server 2007 (OCS) and Microsoft Exchange Unified Messaging.

An IBM alliance extends our rich telephony capabilities to Lotus Notes and Same time users, through the integration with the Avaya Communication Server 1000 and Multimedia Communication Server 5100. Additionally, through our DevConnect Developer Partner Program, innovation continues with ecosystem partners to accelerate the deployment of enhanced next-generation solutions.

Conclusion

Together with our partners, Avaya is delivering unified communications solutions that allow users to experience enhanced communications while leveraging their existing investments in telephony. The Avaya Communication Server 1000, with its tight integration with Avaya Aura™, is helping enterprises maximize each interaction, reinforce each relationship and deliver innovative new services.

Learn More

To learn more about Avaya solutions and products contact your Avaya Account Manager or Avaya Authorized Partner or 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.