

TECHNOLOGY AUDIT

Unified Communications







Avaya



BUTLER GROUP VIEW

ABSTRACT

The Avaya Unified Communications portfolio brings together real-time and near-time communication mechanisms in a secure, intuitive, reliable environment, which enables employees to communicate more effectively using speech, IM, video, e-mail, voicemail, mobile, and portal. Butler Group particularly likes the industry-standard approach which is crucial in this area, along with the scalability and robustness of the solution, enabling the solution to exploit the existing IT landscape, as well as integrate with existing desktop environments and enterprise applications. Whilst ideally the telephony environment should be Avaya's to deliver a feature rich environment it is possible to deploy some aspects of the solution's capabilities using other telephony environments. Unified Communications can benefit any size of company, with the offering scaling from 20 employees upwards. A key strength is the scalability and resilience of Avaya's products, which make them particularly suitable for organisations that require enterprise-class solutions.

KEY FINDINGS

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|  Use of industry standards. |  Scalable and resilient solution. |
|  Collection, analysis, and distribution of presence information to and from numerous sources. |  Communications expertise and knowledge. |
|  Avaya one-X Speech only available in English. |  To gain full functionality and integration an Avaya telephony environment is preferred, although it is not a dependency. |

Key:  Product Strength  Product Weakness  Point of Information

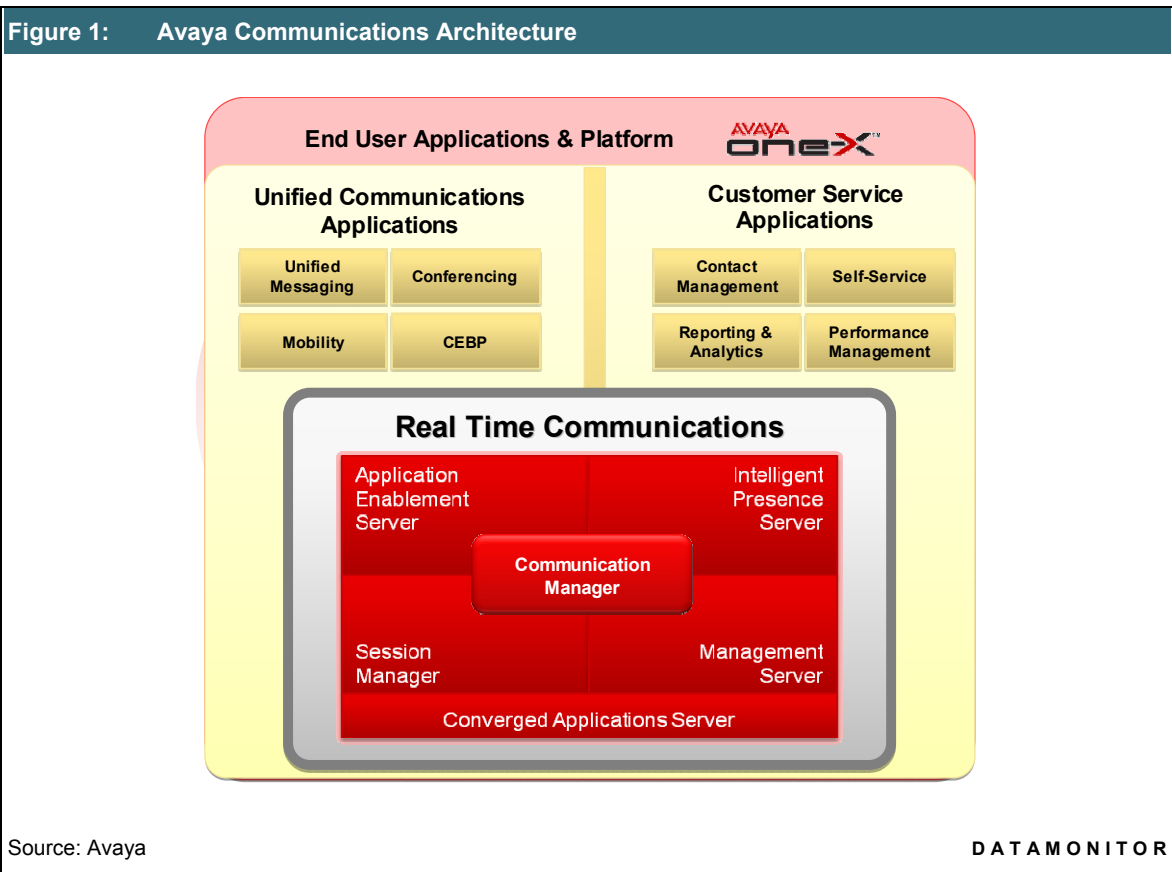
LOOK AHEAD

The next 12 months will see the solution cater for more mobile devices, and the adding of multi-vendor support to the Unified Messaging product, as well as further increasing its scale and storage options. In the longer term the ability to federate presence across all clients will be added.

FUNCTIONALITY

Product Analysis

Moving away from proprietary solutions and making use of industry standards to integrate hardware, common services, and administration elements enables Unified Communication components to be easily integrated with the existing IT landscape. This industry-standard approach increases flexibility, enabling services to be deployed independently of the equipment. By basing all of the components of the Unified Communication portfolio on industry standards Avaya is able to add communication capabilities to most IT environments. As an example Session Initiation Protocol (SIP) allows Avaya to integrate with third-party communications environments and open Application Programming Interfaces (APIs) enable the solution to integrate into desktop environments, such as Microsoft and IBM.



The basic component of the solution is the communications platform which handles the real-time voice communications. On top of this a series of communication components are layered, not all of which will be applicable to each customer. The central most important element is the Avaya Application Enablement Server (AES) which exposes Avaya communication capabilities to other applications. Other Avaya provided software components could be mobility, unified messaging, conferencing, Web/portal, and speech servers, depending on the customer’s particular needs and environment.

Presence is the dial tone of the future, being an enabler of real-time communication and ensuring that time is not wasted calling or e-mailing colleagues who are unavailable. Presence servers provide end users with unified presence information gathered from various sources. However, interoperability can be an issue in this area; the Avaya Intelligent Presence Server allows the collection, analysis, and distribution of presence information to and from many sources. The open design enables it to collect presence information from numerous sources and distribute it to communication and business applications. The presence aggregator can collect and disseminate SIP/SIMPLE and XMPP in the same platform. In addition some server-to-server protocols have been developed to lessen the impact of this type of service on the network.

Avaya one-X, short for Avaya one eXperience, is the user interface that a worker navigates to gain access to all of their communication tools. The single user interface is available on Avaya's IP desk phones, thick clients (one-X Communicator), thin clients (one-X Portal), mobile device (one-X Mobile), and speech access portal (one-X Speech). Meaning that no matter what device a worker is using they only have to learn the user interface and feature set once. The Avaya one-X Mobile application brings Avaya Unified Communications capabilities to 500+ types of mobile device. The architecture of one-X Mobile also allows for rapid deployment on new handsets as they come available, as demonstrated by the fact that Avaya was able to integrate the Apple iPhone before the Software Development Kit (SDK) was released by Apple.

Any organisation considering deploying a multi-channel communications strategy will be concerned about security and performance. Avaya has taken great care with the design of its solutions, which have been architected to provide an environment that is not compromised by events elsewhere, and offers a high level of protection. Important considerations in the Unified Communications environment are scalability and performance. Avaya has traditionally addressed these well, with the solution having a number of fault tolerant and reliability features. Attaining high availability is a matter of design for Avaya. One of the company's key strengths lies in the scalability and resilience of its products, which make them particularly suitable for organisations that require enterprise-class solutions, with up to 36,000 endpoints able to use one instance of Communication Manager. If larger numbers are required multiple implementations can cater for hundreds of thousands of users.

Product Operation

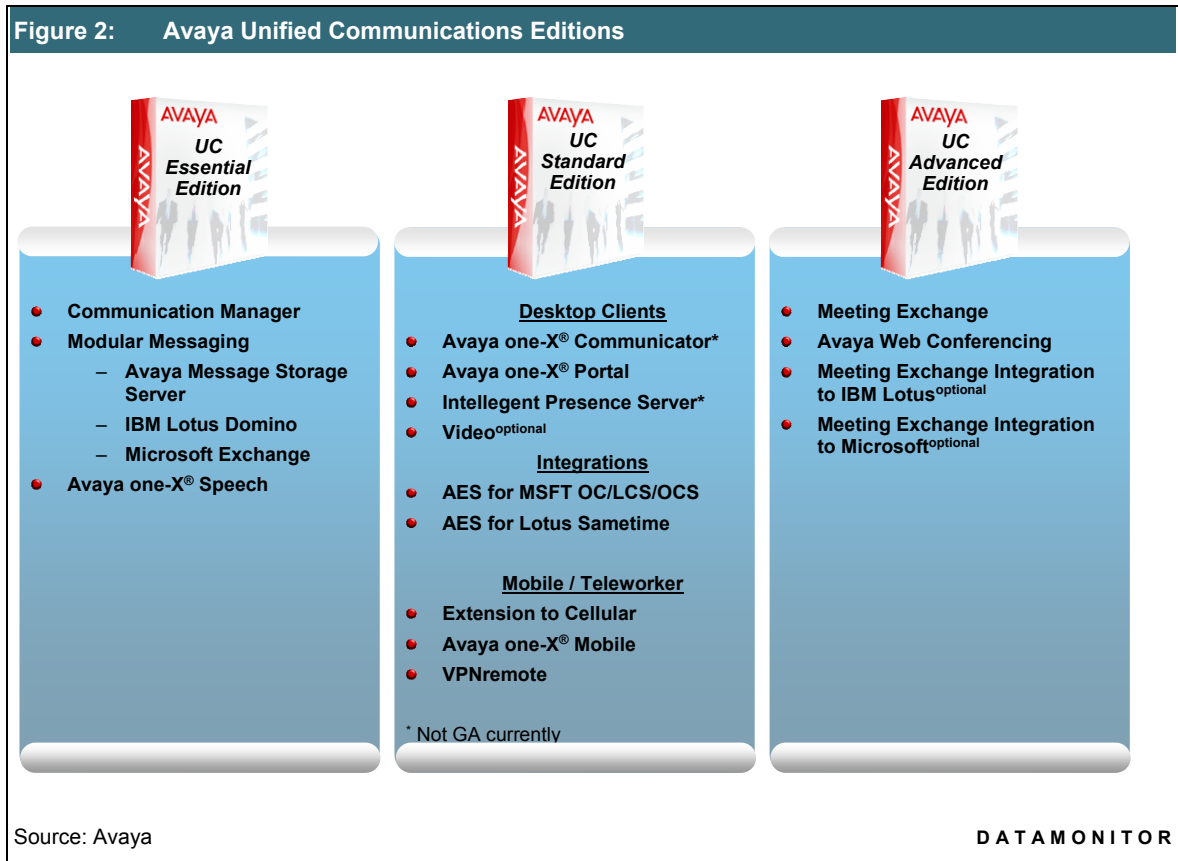
Avaya's Unified Communications portfolio consists of tools that assist desk workers, teleworkers, roaming workers, and road warriors, allowing each employee access to the functionality they need to interact most effectively. Avaya, however, understands that a member of staff very rarely spends 100% of their time in a single role or location, so the company has designed a user interface that allows users to 'move' conversations mid-call to whatever device is the most appropriate at that moment in time, whilst still maintaining control and the ability to access telephony functions in a consistent fashion regardless of the device type.

Unified Communications is offered in three 'editions':

Unified Communications Essential Edition: includes IP Telephony, basic audio conferencing and unified messaging. This first step to Unified Communications is targeted at non-Avaya customers.

Unified Communications Standard Edition: includes click to communicate integration to Microsoft and IBM Lotus, seamless mobility (SoftPhone, portal phone, mobile phone integration, and VPN). Video communication can also be added as an optional component to this package.

Unified Communications Advanced Edition: includes integrated voice/Web conferencing with IBM, and Adobe (Microsoft to follow), as well as the ability to see who is talking, white boarding, document sharing, and recording voice and Web together.



By bundling the offering in this way Avaya is not only able to reduce the cost of implementing Unified Communications, but also to remove the risk to the customer. For example, in the standard edition the customer is entitled to click to communicate integration into a Microsoft and IBM environments, so should the desktop strategy change from one to the other, there is no need to invest in additional licences. Likewise, if the mix of mobile and non-mobile workers changes at any time, the customer will have the licences in place already to implement this change quickly at no additional cost.

Product Emphasis

The Avaya Unified Communications solution brings together multi-vendor real-time and near-time communications in a secure, intuitive, reliable environment, enabling workers access to the tools they need to communicate more efficiently via speech, IM, video, e-mail, voicemail, mobile, and portals. The objective is a seamless user experience regardless of location, network, or device.

DEPLOYMENT

The Avaya Global Services division has created a separate Unified Communications practice to ensure the successful implementation of projects. This dedicated team has the expertise to support the deployment of Unified Communications with a customer. However, where customers are already working with an existing Systems Integrator (SI) and business partner then Avaya will work alongside these resources. The implementation time for the solution depends on the customer's existing systems and infrastructure. For an existing Avaya IP telephony customer adding Unified Communications the implementation time would typically be two to three weeks (including pre-staging, testing, roll-out, and hand over). For a green field site with no Avaya IP telephony in place the typical implementation time is around six to eight weeks.

Most customers prefer to deploy the solution in a modular fashion. A full Unified Communication implementation encompasses so many components that it is unusual for a customer to deploy in a 'big bang' approach. Once the foundation of IP Telephony (IPT) and the integration services (AES) are in place further components can be added with little or no disruption to existing elements. Due to the modularity of the solution components can be upgraded or migrated from one environment to another without wholesale disruption to existing services. For example, moving from an IBM Lotus environment to Microsoft, or a Tandberg video environment to Polycom. This flexibility not only lowers the risks in deploying Unified Communications, but also allows customers to add or change capabilities at their own pace.

Avaya Global Services can provide any level of support, from a fully managed service to a simple maintenance contract, or they can be engaged on a 'time and materials' basis to manage the system. Avaya's remote monitoring capabilities offer the ability to spot potential issues on a customer site before they affect the service. Should a customer choose to perform their own system administration then maintenance features, such as SNMP alarming and self healing, reduce the load on the administrator.

Technical support can be provided either directly by Avaya through a 24-hour telephone help line or from an authorised Avaya business partner, with Avaya providing support to the partner. Customers taking out a maintenance contract have access to the in-site knowledge base, which is a constantly updated database of known issues and fixes. This is the same database that Avaya engineers access to resolve customer issues.

The complexity of the customer's installation will dictate the level of training required. Training is essentially split into two categories – end user and system administrator. For the end user a number of delivery options are available, but Avaya's preferred method is on-site classroom-based training. The company also recommends the use of 'floor walkers' on go-live day to assist users in the event they get into difficulty in using the new system. For the administrators – CBT, classroom, on-site and Web-based training are all available.

Due to its open standards nature, customers are able to deploy an Avaya Unified Communications solution on multiple hardware and software platforms. The 'transport layer' (LAN/WAN) could be from any network equipment provider, including Extreme, Juniper, Cisco, HP, and Nortel, as long as certain criteria, such as Quality of Service (QoS) are met. Whilst ideally, the telephony environment should be Avaya's to deliver a feature-rich environment it is possible to deploy some aspects of the solution's capabilities using other telephony environments such as mobility, conferencing, and unified messaging. Unified Communications capabilities can be integrated with legacy Avaya TDM environments, so protecting existing investment.

PRODUCT STRATEGY

Unified Communications can benefit any size of company, in any vertical. Avaya develops different value propositions for different verticals and also partners with third-party vendors that have well established expertise and products in specific verticals. For example, Avaya partners with IBM in the financial and Motorola in the retail sectors. Avaya Unified Communications offering scales to any size of organisation, from 20 employees upwards.

The measurement of Return On Investment (ROI) for Unified Communications can be very complex and depends on the customer's existing infrastructure and business processes. However, to help a customer build a compelling ROI Avaya has partnered with independent analysts to develop an ROI calculator that an Avaya consultant can work through with the customer. Avaya also has a dedicated 'ROI team' that can assist the customer in creating an ROI model.

Avaya's route to market for Unified Communications is either direct for global/multinational accounts, through the channel with a two-tier VAD/VAR model, or through SIs and Service Providers. Each route to market has dedicated sales, presales, marketing, and support teams. Avaya's business partner model works on an accreditation system where a partner cannot sell or support a solution until they meet a set of criteria. The accreditation levels are constantly reviewed to ensure the partner delivers the correct level of support to the customer. An example of a Platinum business partner would be BT. Key technology partners include Polycom, Extreme Networks, Juniper, Microsoft, and IBM.

The Unified Communications solution is a combination of hardware and software. The cost for hardware is a one-off cost and a single server and/or gateway may support many thousands of users. The software is licensed on a per-user basis on a tiered model so that the more licences a customer purchases the lower the cost per licence. The licence cost is a one-off licence fee and does not need to be renewed yearly. Maintenance and support costs are included and priced as a percentage of the software licences. A customer may choose a support-only contract, or a support contract with three years of upgrades included. Both types of contract allow customers direct access to Avaya's technical support, online ticketing, and service pack releases. Avaya generally has one major and one minor release per year.

COMPANY PROFILE

Avaya has its corporate headquarters in Basking Ridge, New Jersey, USA, and has presence in over 90 countries worldwide. The European headquarters are in Frankfurt, Germany. Avaya was first incorporated in October 2000, when it was spun off from Lucent Technologies. For more than a century prior to that Avaya was a part of Western Electric, AT&T, and Lucent. In October 2007 Avaya entered into a definitive merger agreement with Silver Lake and TPG Capital who took the company into private ownership. The company employs approximately 18,000 people worldwide: around half are based in North America, a third in Europe Middle East and Africa (EMEA), 4% in Central and Latin America (CALA), and 10% in Asia Pacific (APAC).

Table 1: Financial Details			
Year ending	2007	2006	2005
Revenue (US\$ Million)	5,279	5,148	4,902
Change on Previous Year (%)	2.5	5.0	20.5
Total Net Income/(Loss) (US\$ Million)	218	201	921

Source: Avaya **DATAMONITOR**

More than one million businesses worldwide use Avaya solutions, including nearly 90% of the FORTUNE 500. Key clients include ABN Amro, AOL, BMW, CommerceBank, The Home Depot, Hyatt Hotels, Morgan Stanley, and Whirlpool. The installations at these customer sites are at least regional and in most cases global with hundreds and thousands of users. Many have standardised on Avaya as their communications platform of choice across the world. In the key areas of Unified Communications such as enterprise telephony, enterprise messaging, and audio conferencing, Avaya is the number one vendor worldwide by revenue.

SUMMARY

Avaya has a solid background in telephony and communications, which it has also translated into a credible Unified Communications offering. Butler Group particularly likes the industry-standard approach, which is crucial in this area, and the scalability and robustness of the solution. This enables the solution to easily utilise and exploit the existing IT landscape, as well as integrate with existing desktop environments and enterprise applications. These strengths have enabled the company to gain a leading position in the Unified Communications market and for the offering to be one that IT managers should short-list, especially those already utilising Avaya telephony equipment. The company is also able to provide support to customers along the entire lifecycle of the solution. A high proportion of Avaya's revenues come from services, which indicates it has expertise and a strong position in the deployment of Unified Communications.

Table 2: Contact Details	
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Source: Avaya **DATAMONITOR**

