



The Power of We™

Avaya on Avaya

Enabling “people-centric” communications, reducing costs and optimizing business capabilities.

Key highlights

- Achieved ROI <6 months
- Reduced costs
 - Internal travel 48%
 - Servers 44%
- Projected savings
 - Telecom (PSTN) 30%
 - International mobile 70%
- Simplification
- Centralized management
- Business agility
- Improved customer service
- Improving employee productivity and work-life balance

CIO’s and business leaders are constantly looking at ways to reduce cost, optimize business capability and improve customer service. The Avaya Unified Communications and Collaboration (UCC) solution is capable of delivering all these benefits.

Using a Session Initiation Protocol (SIP) based Avaya Aura® platform is enabling Avaya to deliver these benefits in Europe, Middle East and Africa (EMEA) and consolidate onto a single platform creating a seamless user experience whilst reducing costs.

Background

Avaya IT, like many of our Customers’ IT organizations, wanted to reduce our overall total cost of ownership (TCO) associated with delivering UCC capabilities whilst ensuring employees gained in productivity. Within the EMEA region we had 46 sites, spanning 23 countries using multiple instances and versions of Avaya UCC products.

A major goal within IT was to improve communications across the enterprise whilst remaining cost conscious at the same time. A key strategy to achieve this goal was in the area of consolidation and simplification of the UCC infrastructure. Migrating to a single UCC platform, eliminating duplicate voice infrastructure (multiple instances and versions of UCC products) and moving from H323 to SIP end points throughout the region to enable additional UCC functionality to end users.

Whilst cost was a key consideration, there was a requirement to balance that with the need to deliver a true “people-centric” communications solution. Integrating voice, video and data on an open standards platform, to enable our users to communicate in real-time, working anywhere on device of their choice. A common goal for many IT organizations.

“Aura allowed me to reduce the amount of phones and voice mailboxes down to one.

My business home phone is now leveraging Session Border Controller without the need for creating a VPN tunnel and provides better voice quality.

I regularly leverage One-X Communicator on my iPhone to switch transparently from desk phone to mobile when attending conference calls late in the day. This allows me to still be productive whilst commuting back home and helped improve my work-life balance.

Finally, with one-X Mobile, I can place International calls “on-Net” from anywhere at the cost of a local call to mobile.”

Snr Director, Global IT Operator Centre (ITOC)

Delivering on these goals was a joint, collaborative effort; Avaya IT acting as the primary customer / stakeholder of the solution with the design and implementation support delivered by the Avaya Professional Services and Technical Operations teams in EMEA. Attention to the design and implementation is an important foundation to realizing the benefits, but strong user adoption of the UCC capabilities across the region would drive a quicker return in cost savings and increased productivity.

This document and the benefits described are specific to our internal deployment of the Avaya Aura UCC / SIP solution for the EMEA Region which is part of a Global deployment spanning North America, APAC and CALA.

Design

The Avaya Aura UCC / SIP solution is delivered on Avaya Aura® Session Manager (SM), providing optimization and centralized control of communication sessions, implemented in conjunction with session border controllers (providing security between internal & external communications). When combined together it lays the foundation for the next step in our UCC journey, namely SIP trunking, which represents further potential for significant cost saving. Our EMEA deployment installed SM in our EMEA Data Centre located in Frankfurt, with a secondary back-up SM in our Guildford location, all other sites being connected via survivable remote gateways. The solution incorporated a new messaging platform which consolidated several Voice Mail/Unified Messaging systems; Presence Services; Session Border Controller for Enterprise offering true support of virtual office workers (using desk phones or device of their choice) without the administrative overhead of a VPN solution; and upgrades to many UCC applications providing features previously not available to all EMEA users. all working on user platform of choice. (see figs 1 & 2 on next page for architecture design and full list of core infrastructure and user applications)

Why SIP?

Quite simply put, SIP better enables collaboration both within and outside the enterprise. SIP is an open signaling protocol widely used for establishing and controlling any real-time communication session such as voice and video calls over Internet Protocol (IP). Sessions may consist of one or several media streams and can take place on one of many devices that associates use for communicating e.g. laptop computer, smartphone, mobile phone, instant messaging client, IP phone, and so on. Over and above technological advantages, Avaya Aura UCC / SIP can provide a number of business advantages to an enterprise both in the reduction of cost and the enablement of exciting new innovations in communications capabilities. All of these benefits can be deployed using a “self-funding model” to ensure that the payback of the Avaya Aura UCC / SIP investment is achieved in a short time frame.

Architecture design overview

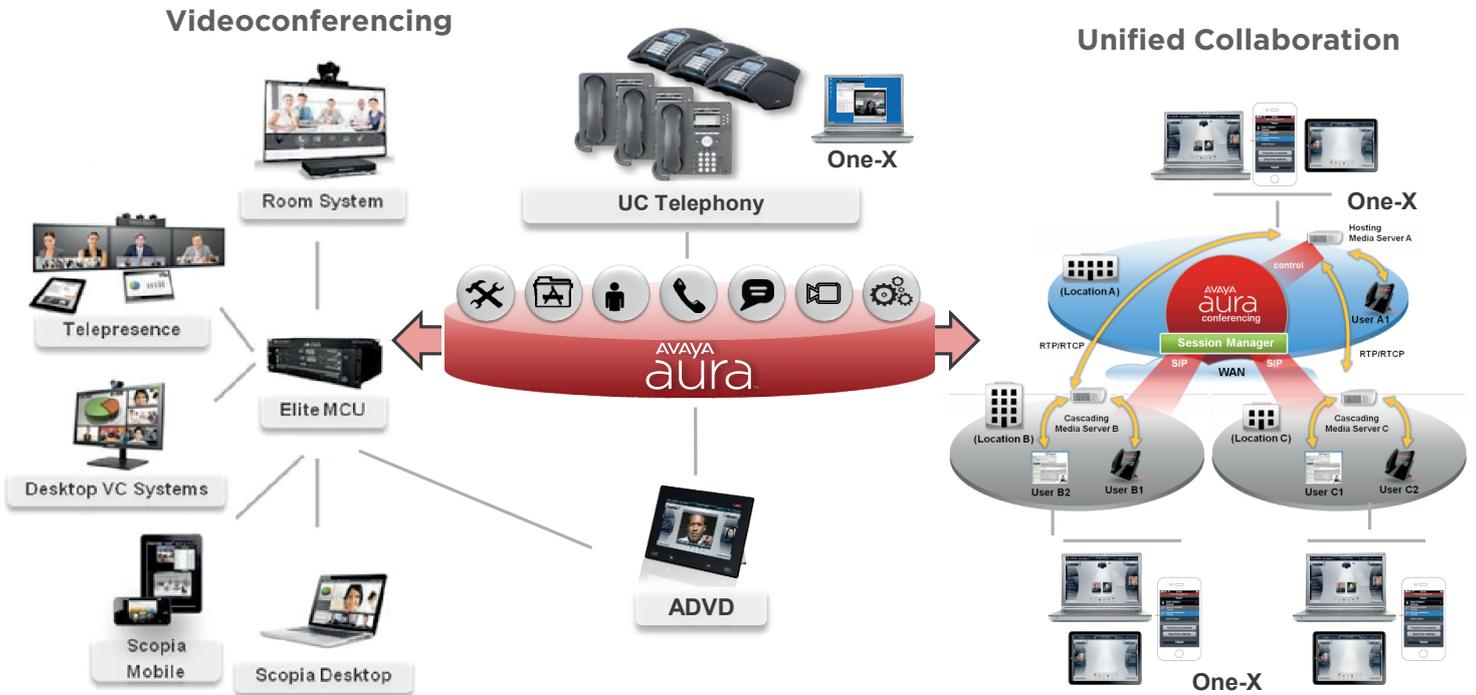


Fig 1.

Key components

	Component	Avaya product
Core Applications	Session Manager	Avaya Aura® Session Manager
	Communication Manager	Avaya Aura® Communication Manager
	Messaging	Avaya Aura® Messaging
	Conferencing	Avaya Aura® Conferencing
	Enterprise mobility server	One-X® Client enablement Services
	Session Border Control	Avaya Session Border Controller for Enterprise
	Video	Scopia MCU
	Click-to-Call	Avaya Agile Communication Environment™ (ACE)
User Experience	Softphone	Avaya one-X® Communicator
	Enterprise mobility client	Avaya one-X® Mobile
	Desktop & mobile video	Scopia Desktop & Scopia Mobile
	Collaboration client	Avaya Flare® Experience
	Operator console	Avaya one-X® Attendant

Fig 2.

See Appendix for detailed Global Architecture

Intelligent Communications

Whether working in the office, a remote office or out on the road a full range of new end-user applications, features and functionality have been made available to our users on both existing and next-generation user interfaces and endpoints. Some of these new features and functions are based on capabilities such as session/caller ID and the ability to encompass other media types such as video. All of which have improved employee productivity and accessibility.



Fig 3.

Flare Experience (fig.3) is as an example of a next-generation collaboration user interface working as a SIP endpoint that combines, voice, video, IM, email & social networking into a single collaboration environment for the user. Avaya Flare Experience is used extensively by our mobile workforce (on their iPads) and is also available for Windows desktops.

Softphones are heavily utilised both in the office and remotely in various audio path modes, where the user selects the most appropriate mode depending upon location and personal preference. providing flexibility how the user makes and receives calls.

Enterprise mobility clients enable users who have a company provided / expensed mobile device to have access to their enterprise communications platform and features from a broad range of mobile devices including smartphones and tablets. Amongst other benefits this helps reduce international call charges on mobile devices whether in their home country or roaming.

Desktop Click-to-Call provides users with the ability to auto-dial from a variety of desktop applications e.g. Salesforce.com and Microsoft office clients

Session Border Controller, delivers UCC security targeted for SIP applications and trunking. The initial implementation is primarily used for SIP applications, providing remote users with the ability to use their SIP endpoints remotely without the need for a VPN. SIP trunking is planned in future phases.

Desktop and Mobile Video (fig.4) – all EMEA employees now have global desktop video capability which is used extensively across the organization whether conducting internal or external customer meetings. This same capability is extended to our mobile workforce and is used widely on the iPad, iPhone and Android devices.



Fig 4.

“The move to SIP has opened up a number of additional client and endpoint options for users. On a personal level this change has allowed me to take advantage of the advanced collaboration features available via the Flare Experience, and importantly for myself across multiple devices. In addition I’ve been able to adopt one-X Mobile sip for iOS on my iPhone, the simplest of enterprise mobility clients to use, enabling me as an individual to proactively contribute to cost management by avoiding unnecessary cellular minutes on my iPhone..“

Snr Manager, Cloud G2M Strategy

Conferencing - having completed the deployment of our Avaya Aura / SIP platform, we were then able to deploy our latest audio and web conferencing capabilities which will further improve employee productivity and accessibility. We are enriching the user experience regardless of location or endpoints, leading to faster and smarter decision making. Further integration and enhancements of our desktop and room based multi-media conferencing solutions will occur as we look to optimize how resources are consumed based on user preferences or environmental constraints, ensuring maximum efficiencies are achieved from the platform and the network regardless of media (video, web, audio).

Messaging - all users, from senior executives to functional team leads are now able to seamlessly broadcast voice messages to all users across the EMEA region. All users have the option of full integration with email client / desktop depending upon user preference.

“User Centricity” vs. “Device Bound”

For Avaya, “user centricity” is simply the ability to consistently use features and functionality across multiple devices and networks. As a result, users avoid a key “guessing game” when they want to communicate with an individual. Most of us now have many communications devices from which to choose - the office phone, home phone, Smartphone, personal computer, tablet/iPad, etc. In addition to voice and more recently video communications, many of these have the ability to text message, send/receive email and operate instant messaging plus the growing world of Social Networking applications. In this increasingly complex environment, SIP becomes the common denominator for connection and feature consistency across all SIP endpoints and clients.

So with SIP being the binding technology in the background it gives the user the same features they would have on the desktop set on their mobile, it signals presence, messaging and gives the user that added flexibility to be where they need to be and still in contact with those who need it.

Presence

Presence provides a scalable, high performance presence aggregation service that collects and disseminates rich presence information between Avaya and other third party endpoints. This allows users to locate colleagues and experts to address customer enquiries including the ability to communicate with an individual without the “caller” having to know where the individual is located.

Business benefits explained

Communication Network Simplification – consolidation of platforms with optimized dial plan and call routing

With minor adjustments to our internal MPLS network in order to accommodate additional voice and video traffic, we anticipate telecoms (PSTN) expense savings in the region of 30%. Using a centralized Session Manager platform, we have been able to efficiently and seamlessly achieve the following:

- Internal voice traffic (Avaya site to Avaya site) is now re-directed On Net over the Data (WAN) network
- External voice traffic (Avaya site to non-Avaya site / number) is now managed via Least Cost Call Routing and local break-out where permissible
- Increased availability and usage of mobile client to improve “one number” reachability and reduce mobile costs

Centralized Management – Reducing administration burden and cost

Dial plan simplification is a key benefit of SIP. By having the Avaya Aura Session Manager(s) controlling media channels, dial plans can now be coordinated in our central location rather than at each local site. This reduces the overhead of managing the dial plan and reduces the support requirements at disperse locations. We have achieved significant efficiency gains in our ability to administer, manage and support the environment leveraging our virtual team of resources to support our global infrastructure.

SIP enables direct dialing to all extensions. It makes it possible to assign Direct Inward Dialing numbers for every extension thus minimizing the need for attendant (auto or manual) support across all of EMEA. Consequently we now have only one installation of operator console in EMEA (Guildford, UK).

We have dramatically decreased our Voice / UCC server footprint across the EMEA region, bringing further savings in support costs, space and power in addition to the associated environmental gains. In total we have de-commissioned 44% of servers, and with standardization across the region we are now able to maintain infrastructure supporting both office and virtual office users within a matter of minutes.

- 30% PSTN expense savings

- Significant system administration and management efficiency gains

- 44% server reduction

“To me the greatest benefit is the flexibility. I can log on from any desk, any location and it’s like being at your normal work location.

It’s really easy to remain contactable at all times, removes “excuses” that people cannot get hold of you”.

Snr Manager, Go To Market

Channel Operations

Business Agility – Fast deployment of new / upgraded communication applications to a larger community

Our end user UCC environment is transparently kept up to date with minimal IT support. A single “push” to our user community keeps them current with the latest releases of UCC applications. Also, core upgrades are now to ONE single platform vs. 46 disparate installations.

Our users are able to logon to their SIP extension at any Avaya office throughout the EMEA / Global region, making full use of hot desks and enjoying user-specific feature configuration regardless of location: the extension and preferences all follow the user.

Number portability is also now possible. If a branch office is closing or being moved, it is possible to retain important direct dial numbers even if the physical location of the extension is changing. With this, a user continues to enjoy a local telephone number and avoids customer disruption/confusion .

Desktop / mobile video solutions enable disparate teams to collaborate with full content share, and in many cases avoiding the need for travel. For example our recent EMEA Sales Kick-off event was conducted entirely over video (room based and desktop) avoiding the associated travel costs for over 600 Sales staff.

The investment in video capabilities combined with the self-service scheduling/booking environment has driven, around 70% of virtual meetings to be conducted over video ensuring a much higher level of engagement compared to traditional voice only meetings. In turn, we were able to reduce internal travel expenditure by 48% across the EMEA region.

Better Customer Service – through improved access to data and people

IT operational transparency delivered via our Session Manager platform provides our IT operational team a view into the location / end point and UCC feature environment of any user.

By centralizing our UCC applications in our regional data centre they become services available to the entire user community. This decreases operational cost and improves the reach and support level (SLA's) of those services, regardless of location (e.g. Office, Remote or Virtual).

- One Single Platform
 - 23 countries
 - 46 sites
- Zero to over 470,000 video minutes per month
- More than 47,000 video meetings in 1 qtr

Conclusion

The Avaya Aura UCC / SIP migration project is delivering on the main objectives of reducing cost whilst providing users with the collaboration tools to increase productivity. Deploying a SIP based solution has simplified communications and expanded real time collaboration features and functionality beyond the boundaries of the company.

The cost savings, both realized and projected will enable us to follow a self-funding approach to continue to further enhance the capabilities for users. Key benefits and cost savings realized and projected so far include

- 48% reduction in internal travel expenditure cost
- 44% reduction in servers required
- Projected 30% telecom (PSTN) cost reduction
- Projected 70% international mobile cost reduction
- Projected 25% WAN bandwidth savings for voice
- Significant system administration and management efficiency gains

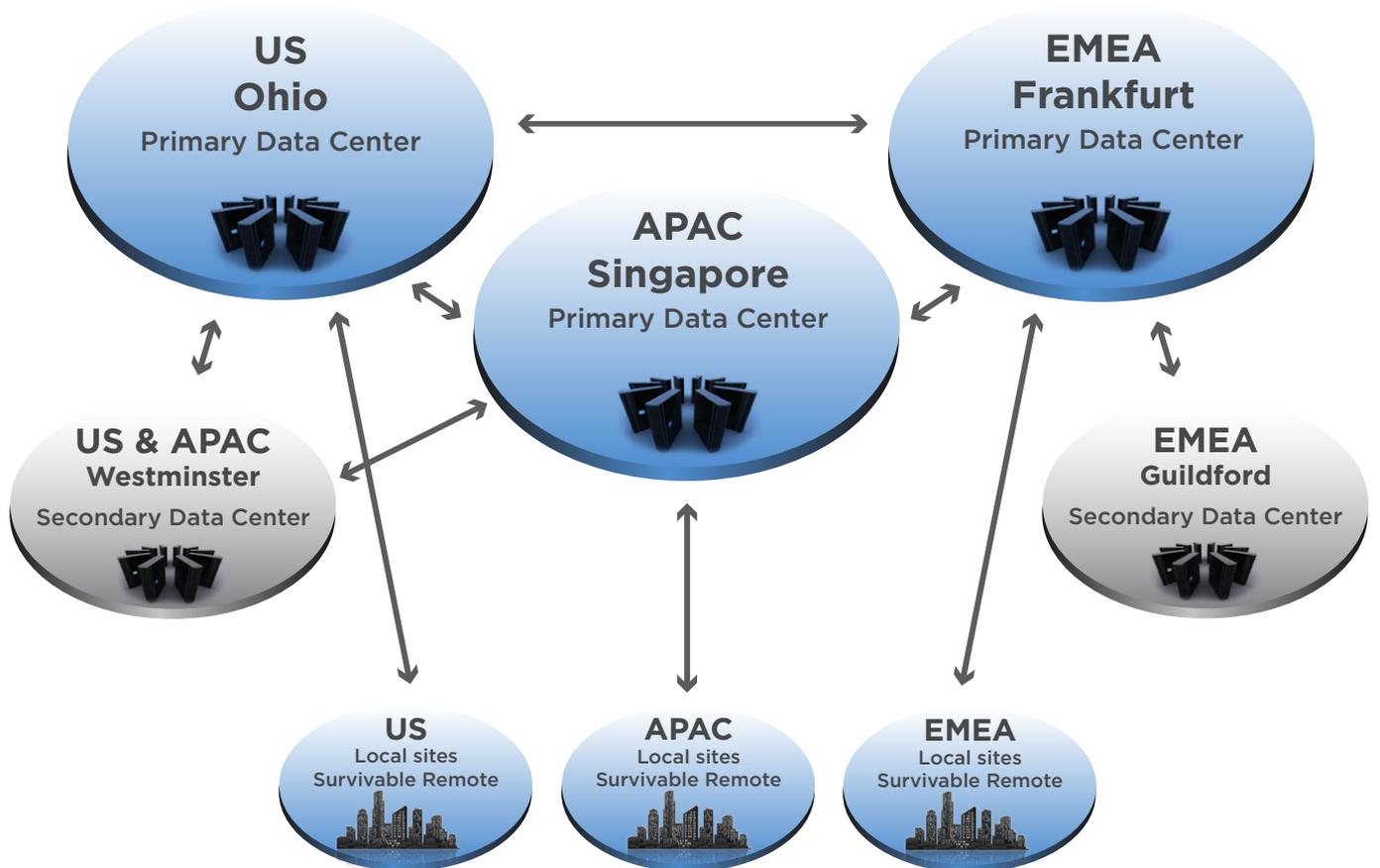
A key element in fully realizing the cost and efficiency benefits available is user adoption. The Avaya users have embraced the collaboration technologies available to them as evidenced by the increased utilisation rates, over 47,000 video meetings in one quarter and over 470,000 video minutes per month. The successful migration and adoption plans put in place for users to get up to speed quickly on using the capabilities has helped drive a shorter time to realize the savings and improve their collaboration effectiveness.

Deploying Avaya Aura with a SIP based topology has changed the game for IT, any new or updated Avaya communication service can now be delivered simply by deploying software in our regional datacenter. This decreases operational cost and increases the availability of these services to the entire user community, meaning all users in EMEA now have comprehensive access to all UCC applications.

For more information on the design, deployment methodology and updated business benefits contact your Avaya representative who will be happy to arrange a meeting with our Avaya EMEA IT organization.

Appendix

Global Architecture



About Avaya

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

Learn More

To learn more and to obtain additional information about the implementation please contact your Avaya Account Manager or Authorized Partner or visit us at www.avaya.com