

# UC Architecture and Network Planning and Design Services

Turning the Potential of Unified Communications into Business Results



**Unified Communications (UC) is a powerful set of tools and capabilities which can be leveraged to unlock significant benefits for your enterprise. These may come in the form of individual and workgroup productivity benefits, as well as business process improvements that drive significant top and bottom-line results.**

As with any introduction of new technology capabilities into an enterprise, there are a wide variety of key considerations that must be addressed to deliver the desired results while minimizing risk. This is especially true in the case of technologies that support communications and collaboration across your enterprise. It is critical to understand the dynamics of the technologies, their impact on your current environment, and how to deliver the performance, resiliency, consistency, scalability, and integration your enterprise demands.

Aspect® Professional Services has the expertise and experience to deliver the results you need. The UC Architecture and Network Planning and Design Services from Aspect will help you design a complete UC architecture and network to support your implementation of Microsoft® UC solutions, such as presence, instant messaging, audio/video conferencing, web conferencing, voice over IP (VoIP), and unified messaging.

- Understand the technical and architectural alternatives for deploying UC.
- Assess current network and technical architecture to determine required changes.
- Assess existing WAN carrier contracts.
- Define the appropriate end-state network design and overall UC architecture.
- Refine costs and timeline.
- Develop a realistic implementation plan/roadmap to support business requirements.

Through Aspect's own internal deployment of Microsoft® Office Communications Server 2007 to nearly 2,000 employees in 20 countries, as well as its many years of leadership and experience in deploying mission critical communications for its customers, Aspect Professional Services has gained unique insight into the many important business and technical considerations that must be addressed to successfully turn the potential of unified communications into real business results.

Aspect's experienced architects and consultants will work with you to define how unified communications capabilities fit into your existing environment, to develop the optimal architecture topology, and to design voice and data network architecture to support your business and technical strategy and requirements. Working with your key stakeholders, Aspect will lead you through the design for the infrastructure, hardware and software components of your UC architecture for Office Communications Server 2007, Microsoft Office Communicator 2007, and Microsoft® Exchange Server 2007 unified messaging. Aspect will evaluate your requirements for performance, high-availability, security, and other key architectural design factors, and balance these with your budgetary objectives. Aspect will present alternatives, work with you to determine the final direction, create a detailed architecture and network design, and ultimately provide you with an implementation plan that enables a successful deployment throughout your enterprise.

In addition to the broad architectural considerations, Aspect also performs a detailed evaluation of your local and wide-area networks. These components are critical to the delivery of the key business and technical requirements of your UC strategy, and any changes must be carefully incorporated into your overall planning effort.

Aspect will work with you to review details of your network infrastructure and scope anticipated future state network volumes, and, depending on the projected demand, will perform capacity and performance testing on your network. These efforts help identify factors that could lead to potential performance and scalability problems later.

The goal of UC Architecture and Network Planning and Design Services from Aspect is a future state architecture and network design, along with a plan for implementing the required technologies and upgrades into your current environment to ensure a smooth deployment of Microsoft UC solutions.

#### **UC Architecture and Network Planning and Design Service Overview:**

Aspect customers typically begin their UC journey with Aspect's UC Strategy and Business Case Service to establish the business objectives for UC, and define the capabilities to be deployed to each user group in your enterprise. These business requirements then serve as input to the Aspect Architecture Network Planning and Design Service. This service provides you with a complete technical blueprint for deploying Microsoft UC solutions: Office Communication Server 2007, Office Communicator 2007 and Exchange Server 2007 unified messaging throughout your enterprise. Unified communications technologies are still evolving, as are the ways in which organizations use them. By choosing the right partner to work with, you can address, or avoid, many of the issues that could cause delays or introduce risks into your implementation. As a result of Aspect's experience working with customers and from its own internal deployment, Aspect is well-positioned to help you develop a comprehensive and realistic architecture and network design and plan that accommodates many of the key considerations and decisions you need to address for a successful delivery of your UC strategy.

#### **Related Services**

- Unified Communications RapidStart.
- Unified Communications Strategy and Business Case Services.
- Unified Communications Implementation, Integration, and User Adoption Services.
- Unified Communications Business Processes Consulting Services.

As part of the Architecture and Network Planning and Design Service, Aspect will facilitate discussions and analysis efforts with your IT stakeholders responsible for UC technology to review key UC considerations, design concepts, and implementation approaches, as well as detailed reviews of the UC product architecture, UC capability roadmap, and infrastructure and network considerations. Examples of areas addressed as part of this service offering include:

- Detailed architecture and network requirements analysis including performance, high availability, site survivability, disaster recovery, security, storage capacity, scalability, and operations and management.
- Hardware and software configurations and topology for all UC server roles (Mediation, Edge, gateways, etc.).
- Design and configuration for desktop hardware and software components.
- Local and wide-area network analysis and testing (volume, capacity, performance, etc.), and recommended design changes to support voice, data, and video based on business requirements.
- Analysis of telecom carrier contracts to identify constraints, minimum commitments, or impacts resulting from shift of VoIP and video.
- Impacts and required changes to Microsoft® Active Directory™ or Microsoft® Exchange Server.
- Private Branch Exchange (PBX) integration and Session Initiation Protocol (SIP) trunking.
- Requirements, compatibility, and impacts related to integration or coexistence with other enterprise or departmental applications.
- Site-specific network design to support survivability and dial plan requirements.
- Design and configuration to support monitoring, logging, and recording of communications.

The goal of Aspect's collaborative efforts with your team is to produce a document that describes a complete UC architecture and network design based on the business and technology requirements of your enterprise. Given the number of moving parts, design alternatives, and interdependencies in the overall architecture and network, it is critical to have a comprehensive and realistic plan that incorporates the timeline, activities, dependencies, and costs for the overall enterprise implementation. It is also critical that the plan align with and support the strategies and expectations of your business. To maintain alignment during the planning and design phases of your UC journey, Aspect recommends that UC architecture design efforts overlap with Aspect's overall UC Strategy and Business Case Service. This enables the appropriate input, collaboration, feedback, and iteration to ensure that the end results of these efforts are in alignment. Once the designs are agreed to and any implications on the business strategy or business case are accounted for, the overall enterprise plan will be revised to reflect any changes in schedule, budget, or resources. The final alignment of the plan is the key to moving forward with a successful implementation of unified communications throughout your enterprise.

Aspect is widely recognized for its proven ability to unify disparate communications applications and to successfully deploy complex mission-critical voice technologies. This experience, combined with a strategic alliance with Microsoft®, enables Aspect to provide its customers with an unparalleled level of expertise. The comprehensive set of professional services offerings from Aspect range from business and IT strategy to implementation and integration of UC into key business processes and applications, to developing user adoption strategies and deploying UC capabilities throughout your enterprise. Aspect services offer customers the opportunity to minimize project risk and to start experiencing the power of unified communications today. The Architecture and Network Planning and Design Service provides you with the detailed blueprint needed to pave the way to realization of unified communications benefits.

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**About Aspect**

Aspect provides software and consulting services that turn the potential of unified communications into real business results across the enterprise and in the contact center. Applying 35 years of insight and experience, Aspect helps more than two-thirds of the FORTUNE Global 100, as well as small and medium enterprises, power their business processes with communications. For more information, [visit www.aspect.com](http://www.aspect.com).

