Realizing the Value of Unified Communications
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Executive Summary

Unified communications and unified messaging are more than just buzz phrases. Unified messaging represents the strategic fulfillment of a long-standing goal of business decision makers and IT alike to consolidate and simplify the accessibility and manageability of email, voicemail, fax and other communication modes into a single inbox. Unified communications expands on that vision with a unified presence capability, integrated collaboration and more—to truly empower knowledge workers within organizations of all sizes.

MAXIMIZING THE BENEFIT OF UNIFIED MESSAGING

Unified messaging is the logical progression from the silos of communications technology used in most organizations today to a single data store and single interface that can make users and IT staff more productive and more efficient, and that can significantly reduce the cost of ownership for providing communication services. The synergy of Microsoft Exchange 2007’s robust unified messaging capabilities, coupled with the services and technologies provided by EMC, can assist businesses making the jump to Microsoft Exchange 2007 by realizing the maximum value from their investment.

Microsoft and EMC are spearheading a technology and services effort to help organizations realize the benefits of unified messaging, including:

- **Greater user productivity**
  Increased user productivity through easy access to critical communications modes.

- **Improved management**
  Better management decision-making and business process improvement facilitated by fast access to key and current information assets.

- **Lower costs**
  Reduced costs by consolidating separate silos of hardware and software into a centralized system, manageable by a smaller complement of IT personnel.

- **Efficiency and risk mitigation**
  Greater efficiency and reduced risk through the elimination of multiple messaging tools and their replacement by a service offering that is both easier to use and less complex to administer, maintain and protect.

The bottom line is that unified communications and unified messaging make business sense. The combination of EMC™ Microsoft-services capabilities and information management expertise and the function-rich products of Microsoft can make it a reality in your business today.

Why Should You Consider Unified Messaging?

OVERVIEW

A key theme in the history of technology is the integration of disparate functionality into a smaller set of offerings, finally resulting in a single product or interface that combines functions that were formerly available only in separate offerings. Examples include the integration of spell check software with word processing systems, the integration of desktop productivity applications into office suites, and the combination of contact and task management with email. This integration—made possible by improvements in underlying and enabling technologies—is driven by user demand for enhanced product functionality, ease of use and, ultimately, greater user productivity.

Unified messaging is the result of the same drivers: the greater availability of storage and bandwidth available in the enterprise today coincides with demands for increasing the physical and operational flexibility, as well as the
productivity, of the enterprise workforce. As a result, unified messaging results in:

- **Greater employee productivity**
  Users can be more productive if email, voicemail and fax functionality can be combined into a single interface. For example, a user who can receive voicemails and fax communications in his or her email client can process these communications in less time than if accessing voicemail messages via a cell phone or landline, and fax messages from a remote fax machine.

- **Faster decision-making**
  Unified messaging significantly enhances the ability for individuals and teams to make decisions more quickly and with better information because that information is available in one location through a centralized interface.

- **More efficient IT administration**
  Unified messaging permits email, voice and fax to be managed by a single group, making IT staff more efficient and more productive by achieving economies of scale that would not otherwise be possible.

Unified messaging, as available today, is a logical first (and major) step toward unified communication capabilities. By integrating the most common forms of communication in the workplace—email, voice and fax—unified messaging will pave the way for truly unified communications in the future.

**THE CHALLENGES THAT NEED TO BE ADDRESSED**

In order to properly design the architecture and develop a deployment plan for Microsoft Exchange 2007, it is critical to understand the business and technical drivers behind the deployment. The migration effort must include an in-depth analysis of:

- The current and planned physical locations of the enterprise
- Current and planned networks that will be in use
- The Active Directory environment
- The existing and planned messaging platform(s) in use
- Consideration of the scalability and performance requirements
- Required service levels
- Acceptable and ideal fault tolerance
- The manageability requirements of the system
- Needs for remote/mobile user access
- Interoperability requirements

These are just a few of the drivers and requirements that will help to determine the ideal design and configuration of the Microsoft Exchange 2007 environment. By planning a solid architecture and design, organizations will be able to avoid challenges related to anti-virus, anti-spam, and other security capabilities; and will be able to address the business needs related to storage, e-discovery, and business continuity/disaster recovery. The right planning and execution up front will create a sound foundation for a full unified messaging deployment.

**INFORMATION GROWTH**

Osterman Research has found in recent surveys that email storage is growing at an average rate of roughly 30% per year. Further, numerous Osterman Research surveys over the past three years have consistently found that growth in email-related storage is by far the most serious and vexing problem facing messaging decision makers—roughly three out of five decision makers view growth in email storage as a serious or very serious problem.

Unified messaging exacerbates today’s problems associated with storage growth and storage management. By storing voice and fax communications in a user’s...
mailbox—in addition to the growing quantity of email and attachments already sent and received—storage requirements will grow even more dramatically than they have over the past several years. While this is to be expected given the growth of email and the size of the typical voicemail and fax, it is a reality of the unified messaging world that decision makers must take into account.

However, storage growth in the unified messaging model of Microsoft Exchange 2007 is easily manageable given the right storage technology and the appropriate architectural planning to accommodate storage growth. The adoption of robust and scalable archiving technology, for example, is a critical best practice that will index unified messaging system content, offload it from ‘live’ storage on unified messaging servers, and migrate it automatically to archival storage where it can be easily accessed by individual users, compliance officers, legal counsel, and others who must have access to this content in a timely and efficient manner.

**DISCOVERY, ARCHIVING AND COMPLIANCE**

E-discovery is becoming an increasingly important consideration for enterprises of all sizes as a result of several factors, not least of which are the recently adopted amendments to the Federal Rules of Civil Procedure (FRCP) and the fact that today 75% of legal discovery requires email to be produced. These new FRCP amendments make electronic information—including the content of email inboxes—much more important in the context of discovery efforts.

Unified messaging will increase the challenge of e-discovery because voice and fax communication will also need to be searched and presented during the discovery phase of a legal action as email content is today. It will be critical for organizations of all sizes and in all industries, therefore, to implement a capability that can permit the content stored in the unified Microsoft Exchange 2007 message store to be searched quickly and efficiently. This will include the use of archiving capabilities that will index and allow individuals to search this content quickly and with a minimum of effort.

**PROBLEMS CITED AS SERIOUS OR VERY SERIOUS BY DECISION MANAGERS**

- Growth in e-mail storage requirements: 58%
- Inadequate e-mail archiving: 48%
- E-mail continuity/disaster recovery: 48%
- Spam—the amount that your organization receives: 45%
- Large attachments sent through e-mail: 43%
- Employees sending/receiving inappropriate content: 37%
- Storage of e-mail for compliance purposes, much of which may be spam: 36%
- Data loss from employees sending confidential info via e-mail: 35%
- Users complaining about mailbox quotas: 34%
- Employees sending confidential data via e-mail, IM, etc.: 34%
DATA MANAGEMENT AND DISASTER RECOVERY

The integration of an increasing number of data types into the unified Microsoft Exchange 2007 data store will require better data management—improved storage capabilities, better archiving capabilities, better search tools and other capabilities—to support requirements for e-discovery, regulatory compliance, data mining, business continuity/disaster recovery and other applications.

However, because unified messaging systems will store a larger proportion of an organization's critical information assets than email systems store today, planning for disaster recovery and business continuity will be a critical best practice. Organizations of all sizes must develop a continuity plan and deploy the appropriate technology to ensure that Microsoft Exchange 2007 operates as close to 100% of the time as possible, and that all business records in the unified message store are preserved.

Microsoft Exchange 2007 and Unified Messaging

MICROSOFT EXCHANGE: A CATALYST FOR UNIFIED MESSAGING

One of the most important catalyst for the growth of unified messaging over the next several years is Microsoft Exchange 2007. Already the leading messaging system in the workplace, Microsoft Exchange 2007 is making unified messaging a reality with a robust set of capabilities that include a state-of-the-art unified messaging server role. Unified messaging in Microsoft Exchange 2007 integrates voice and fax with email, giving users the tools they need within the context of the Microsoft Outlook® inbox with which they are already familiar. Microsoft Exchange 2007 provides additional capabilities, as well, including the ability to listen to email messages by telephone, and to change appointments in a calendar by using only voice commands.

THE CLIENT IS CRITICAL

The impact of Microsoft Outlook—currently used by more than three out of five email users in the workplace—should not be underestimated when attempting to determine the success of a unified messaging system. Osterman Research has found in numerous surveys that the email client is the primary determinant of success or failure of any new messaging system—our research has found in several separate studies that if the email client must be replaced in order for a new messaging system to be adopted, the success of the new messaging system will be unlikely. If, however, the email client can be retained, organizations will be much more likely to adopt a newer, better, faster or cheaper messaging system.

What this means for the adoption of Microsoft Exchange 2007 is that Microsoft Outlook, and its ability to allow users to retain the look-and-feel of the interface with which they have become familiar—but with enhanced capabilities from EMC—will be extremely important and help to ensure the rapid adoption of Exchange 2007. In short, the combination of Exchange 2007, with its robust unified messaging capabilities, in conjunction with the familiar interface of Microsoft Outlook, and EMC's storage infrastructure and global deployment services will enable organizations to migrate to unified messaging as seamlessly as possible with little negative impact on end users' productivity, IT efficiency and help desk costs.

What EMC Brings to the Table

Getting the most from Exchange 2007 requires a coordinate set of services focused on:

- Sound architectural planning
- Integration with existing systems
- Well-planned deployment efforts
- Ongoing support

EMC’s 10,000-consultant Global Services team, 1,000 of whom are Microsoft specialists, can help to ensure that enterprises migrate to Microsoft Exchange 2007 successfully. By providing all of the mission-critical services, technologies and other resources necessary to help enterprises migrate to Exchange 2007, EMC can help transition enterprises seamlessly to the many benefits of unified messaging provided by Microsoft Exchange 2007.

1 Results of Two End User Surveys on Messaging and Productivity Issues, Osterman Research, Inc., April 2008
EMC provides a complete range of services for Microsoft Exchange 2007, from infrastructure planning to deployment to ongoing support. However, EMC also provides the same level of expertise and support for other Microsoft technologies, including Microsoft Office SharePoint® Server 2007, Microsoft Office® 2007, Microsoft Windows® Vista® and other Microsoft technologies; permitting even greater synergies to be realized for those using a variety of Microsoft technologies.

**LEADING MICROSOFT CONSULTANCY**

A Microsoft Gold Certified and Global Alliance Partner, EMC Consulting staffs some of the industry’s most experienced professionals who clearly understand how to leverage and integrate Microsoft technologies to help businesses meet and exceed their goals. EMC’s Microsoft-certified consultants bring a unique mix of information infrastructure experience and strategic business focus to offer their clients a full range of consulting, design, implementation, and support services. In addition, EMC’s Assured Performance delivery methodology of proven practices and processes ensures predictable outcomes, minimizes risk, and delivers results on time and on budget.

EMC helps organizations plan, implement and support customers by leveraging best practices and reusable components, providing subject matter expertise, and transferring knowledge to its customers’ in-house implementation team via a documented, systematic, and pragmatic approach that breaks down complexity, reduces risk, accelerates delivery, and lowers costs.

**MISSION-CRITICAL INFORMATION INFRASTRUCTURE PORTFOLIO**

EMC is well positioned to aid organizations in addressing these strategic challenges and realize the full potential of unified messaging using Microsoft Exchange 2007. EMC’s combination of services and technologies include:

- **An Industry-Leading Portfolio of Enterprise Storage Technologies**
  Solving information growth challenges is easier when the infrastructure consists of highly reliable storage platforms that offer robust performance and scalability that will meet long term capacity requirements. This is clearly an area in which EMC has been a leader for many years.

Today, EMC systems offer five-nines availability, varied architectures and drive types for archiving and information lifecycle management, and integration with key Microsoft technologies like VSS for trusted replica creation. EMC’s tiered storage, for example, can help an enterprise manage its growing data stores, improve the availability of storage, and improve information management processes.

- **Advanced Archiving Solutions**
  EMC’s archiving solutions are among the most widely used among mid-sized and large organizations and ensure that an enterprise can comply with the growing number of regulatory, e-discovery and legal obligations it faces. While these capabilities are already critical for email, satisfying regulatory and legal obligations will become even more important in a unified messaging paradigm. EMC’s archiving technologies can support legal counsel, senior managers and others by archiving critical data that will be needed to support information needs for regulatory compliance and e-discovery, but they can also archive infrequently accessed data in order to drive down the overall cost of information management.

- **Business Continuity and Data Availability Capabilities**
  EMC’s integrated high availability and data protection solutions, spanning both hardware and software, can ensure rapid recovery from server hardware failures while maintaining the availability and integrity of Microsoft Exchange Server data. These solutions help to ensure rapid recovery from corrupted Exchange Server databases, hardware failures and other problems, while maintaining the availability and integrity of Microsoft Exchange Server data.

**STRATEGIC ADVISOR FOR MISSION-CRITICAL MESSAGING**

When organizations decide to take advantage of the capabilities available in unified messaging and Microsoft Exchange 2007, it becomes clear that EMC’s balanced
perspective and expertise on both Microsoft application needs and information management challenges sets itself apart from the pack. Few, if any, vendors can boast the combination of a massive Microsoft consultancy practice with the storage-related expertise that is so central to the success of unified messaging. This unique approach helps EMC to be a strategic advisor on migrations to Microsoft Exchange 2007 and unified messaging.

Summary

The unified messaging capabilities of Microsoft Exchange 2007 offer organizations of all sizes and their users a powerful set of productivity enhancements. By integrating email, voicemail and fax within a single client, users will realize significant productivity gains compared to the separate tools they use to access and process each of these message types. Further, technical staff will realize lower costs and greater efficiency by managing a single set of capabilities instead of separate islands of communication tools.

However, a successful migration to Microsoft Exchange 2007 doesn’t happen on its own. It requires careful and intelligent planning; the right set of technologies; and expertise in tying together the various storage, archiving, business continuity/disaster recovery and other systems necessary to migrate successfully to Microsoft Exchange 2007. EMC’s complete set of services and technologies bring together all of these capabilities and can make the migration to unified messaging with Microsoft Exchange 2007 a successful one.

For more information about EMC’s solutions for Microsoft Exchange Server and Unified Communications, go to www.emc.com/exchange. For more information on Microsoft Exchange and Unified Communications and Messaging go to www.microsoft.com.