

Key Considerations for Migrating to Exchange 2010

An Osterman Research White Paper

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Executive Summary

OVERVIEW

Microsoft Exchange is the leading email platform in use today. It is used in organizations of all sizes as the primary email system, but also as the foundation for unified messaging and unified communications capabilities, as well. Exchange 2010 will offer a number of enhancements, including native support for archiving, improved business continuity and disaster recovery capabilities, more efficient storage, and a number of other new features and functions. Further, Exchange 2010 will be a key component in Microsoft's unified communications strategy and will serve as a key element in many organizations' unified communications infrastructures. Exchange 2010 is also perceived by many decision makers as a means of lowering the overall cost of managing Exchange (even though that may not be an accurate perception) – an important consideration as organizations of all sizes attempt to drive down the cost of managing their messaging infrastructures.

KEY POINTS TO CONSIDER

However, Exchange 2010 needs to be well architected, the migration needs to be planned properly, and the migration effort needs to be carried out in the most efficient manner possible. For example, migration planners will need to:

- Architect the Exchange infrastructure in such a way that business requirements are fully satisfied. A failure to do so will result in an Exchange infrastructure that does not fully meet users' needs and that will end up costing more than it should.
- Determine the storage architecture they will use for each of the locations to which they will deploy the platform.
- Develop a backup architecture and determine how they can make the best and most appropriate use of the new storage capabilities in Exchange 2010.
- Plan their virtualization strategy and determine how to make the best use of it to drive down costs and improve flexibility and also system performance.
- Understand the archiving capabilities built into Exchange 2010 and determine the overall archiving strategy for e-discovery, regulatory compliance and storage management.
- Understand how Exchange 2010 fits into the long term plans for unified communications.
- Refresh their Active Directory infrastructure.
- Understand how external consultants can help speed the migration to Exchange 2010 and minimize the overall cost of the migration.

It is also critical to note that Exchange deployment is not a "one-size-fits-all" undertaking: based on an organization's size, geographic distribution, industries it serves, compliance obligations, storage requirements, mobility of its workforce and other factors, the server architecture,

storage architecture and other key elements of an Exchange deployment must be planned and deployed with specific requirements in mind.

ABOUT THIS WHITE PAPER

This white paper addresses the key issues that decision makers should consider as they plan their Exchange 2010 migration. It discusses the results of an in-depth primary research survey conducted by Osterman Researchⁱ that explores how decision makers are planning their migration to Exchange 2010, where they see potential problems in the migration, and how they plan to address these problems. Finally, the white paper offers a brief overview of EMC – the sponsor of this white paper – and their capabilities designed to help ease the migration to Exchange 2010 and simplify its operational management.

Organizations are Migrating to Exchange 2010

SOME HAVE ALREADY MIGRATED, MANY MORE WILL DO SO

Various Osterman Research surveys have found that many organizations have already begun the migration to Exchange 2010 as a pilot for some of their users. For example, an Osterman Research survey conducted in August 2009 found that 4% of users in mid-sized and large organizations in North America are already using Exchange 2010, but that 30% are expected to be using it by summer 2011ⁱⁱ.

Among the organizations surveyed for this white paper, 6% have already begun the migration to Exchange 2010, another 13% plan to begin the migration within three months after the platform's formal introduction, and 55% plan to begin migration within a year after its formal introduction. Further, the research found that only 23% of organizations plan to migrate to Exchange 2010 more than one year after it is formally introduced and only 3% are not sure of when they will migrate.

In short, Exchange-enabled organizations – as well as many organizations that are not yet using Exchange – are planning to migrate to Exchange 2010 at some point after its introduction.

WHY ARE THEY MIGRATING?

Given that Exchange 2007 was a significant improvement over Exchange 2003 and included a number of new features, such as unified messaging capabilities and new server roles, why do organizations want to migrate to Exchange 2010? There are a number of reasons offered for the planned migration, among which are those we discovered in our research:

- **Support for email functionality**
First and foremost, Exchange is an email system and many organizations are planning to migrate to Exchange 2010 for its email-focused features, including capabilities like support for larger mailboxes. Our research found that 76% of respondents to the survey indicated that a motivating factor in their migration to Exchange 2010 was to support email functionality within their organizations.
- **Unified communications**
The next most cited reason for migrating to Exchange 2010 is to support a push toward

unified communications, a reason cited by three in five organizations. Further, 24% of organizations today expect Exchange 2010 to be the foundation of their unified communications plans – that number will be significantly higher in the future. Given the significant growth that Osterman Research anticipates for unified communications moving forward, this is a logical and expected motivator for migrating to Exchange 2010.

- **To improve messaging-related storage**

More than one-half of respondents indicated that their reason for migrating to Exchange 2010 is to make storage more efficient and/or less costly. This is an important issue for most organizations given that numerous Osterman Research surveys have found that growth in messaging-related storage is the most serious problem in managing these systems. Many decision makers are clearly looking to Exchange 2010 to address some of the key issues in managing their messaging infrastructures (more on that later in this white paper).

- **Support for virtualization**

Virtualization is a hot topic for many decision makers because of its ability to simplify server management, reduce costs and reduce power requirements. Nearly one-half of those surveyed for this white paper indicated that the use of virtualization in the Exchange infrastructure was a driving factor in their planned migration to Exchange 2010.

- **Other reasons**

There were a variety of other reasons cited for migrating to Exchange 2010, including support for workflow processes like online transaction processing (cited by 38% of survey respondents) and driving down the overall cost of communications (33%).

THE COMPELLING BENEFITS OF MIGRATING TO EXCHANGE 2010

The survey conducted for this white paper also asked decision makers what features would be considered “compelling” in motivating them to migrate to Exchange 2010. The most important benefit, cited by 72% of respondents as a “motivator” or “key motivator”, is Exchange 2010’s disaster recovery capabilities (such as the Database Availability Groups discussed below) – clearly a critical issue for many firms. The next most important benefits cited as compelling in Exchange 2010 were a) the ability to reduce the overall cost of Exchange management, and b) reducing the cost of storage in Exchange (both cited by 66% as a motivator or key motivator). Other benefits of Exchange include reducing the cost of archiving Exchange content (61%), its built-in archiving (60%), its unified communications capabilities (57%), and reducing the cost of IT labor for managing Exchange (54%). These results indicate that Microsoft has been effective at gaining traction with its message. However, prospective customers need to fully understand their own costs and specific requirements when migrating to Exchange.

The survey also asked about decision makers’ expectations about the impact of Exchange 2010 on the overall cost of Exchange management. One-third of decision makers believe that the cost of Exchange management will go down “somewhat”, while another 12% believe that costs will go down significantly. While 44% believe that costs in Exchange 2010 will remain roughly the same as what they are spending now, only 7% believe that costs will go up. In short, roughly 60% of decision makers believe that the cost of Exchange 2010 will be the same or only modestly lower than their current environment.

Clearly, while there are many benefits of migrating to Exchange, the key benefits cited by decision makers as motivators for making the move to Exchange 2010 are those focused on business continuity, cost and archiving capabilities.

THE MOVE TO UNIFIED COMMUNICATIONS

A discussion of Exchange 2010 would be incomplete without noting one of the key reasons that many organizations are considering migrating to the platform: Exchange 2010, in conjunction with Office Communications Server, represents the cornerstone of Microsoft's unified communications strategy. Further, future deployments of Exchange will focus even more heavily on unified communications as more organizations adopt the technology.

Unified communications is an important capability that offers a number of benefits, including:

- The ability to integrate email, voice and instant messaging into a more cohesive communications system than most organizations have available to them today.
- The ability for users to launch a Web conference, audio conference or videoconference easily and from within another communications tool, thereby enhancing their productivity.
- Faster decision making because (at least theoretically) all of the data that users and organizations need is available through any access point and users can communicate with others inside and outside their organization more easily and more quickly.
- Lower overall IT and telecommunications costs, particularly for labor, because of the inherent economies of scale available with an integrated communications platform.

However, one of the key issues that organizations will need to resolve is where to start deploying unified communications. For example, should an organization use its existing PBX as the starting point and then add capabilities like video conferencing, email, mobility and presence into that infrastructure? Should it begin with its email system and then add voice, presence and audio conferencing into the mix? Should it choose a middle route and preserve its email and PBX infrastructures as they are now and simply "glue" them together to provide unified communications capabilities?

Obviously, Microsoft (and many other vendors) believes that email is the starting point for unified communications. Given that a very large proportion of Exchange-enabled organizations plans to migrate to Exchange 2010 largely because of its ability to help them migrate to unified communications, many decision makers agree.

It is also important to note that using Exchange 2010 as a unified communications platform requires even more expertise in getting things right, typically using outside consultants that understand the ramifications of unified communications on storage, archiving, e-discovery and overall architectural planning.

Key Issues To Consider in Migrating to Exchange 2010

GETTING MIGRATION RIGHT TAKES THE RIGHT EXPERTISE

While most Exchange-enabled organizations plan to migrate to Exchange 2010 at some point over the next couple of years, the migration needs to be done the right way. Many consider a move from one version of Exchange to another to be an “upgrade”, but in reality it is not. Unlike some messaging systems that allow an in-place upgrade from one version to another, moving from one Exchange version to another is not performed in-place – it truly is a migration and carries with it the need to architect and manage it the right way.

EXCHANGE MAY NOT PROVIDE EVERYTHING YOU NEED

Although Exchange 2010 is a comprehensive messaging platform and provides a significant number of features, new enhancements relative to previous versions of Exchange and the like, it will likely need augmentation for particular situations, existing environments, and so forth. As a result, Exchange is typically not a “plug-and-play” system that organizations can use right out of the box. Expertise will often be required to integrate Exchange with the rest of an existing infrastructure, workflows, applications, storage systems and other network elements, not to mention previous versions of Exchange that can date back two or more generations.

WHAT STORAGE ARCHITECTURE?

Business requirements drive architectural considerations for messaging systems of all types – this is a critical issue in selecting the right storage platform for Exchange 2010. For example, while Direct Attached Storage (DAS) may be the right choice for smaller organizations, Storage Area Networks (SAN) are generally better for larger ones. It will be important for organizations planning the migration to Exchange 2010 to consider their business and communication requirements; their remote office plans; their data center strategy; the use of standard policies across applications; power, cooling and space requirements; and then decide on DAS vs. SAN. For example, it might make sense to use SAN for a centralized, corporate headquarters location and use DAS for local offices.

THE COST OF MIGRATION

Just under one-half of decision makers anticipate that migrating to Exchange will be a difficult or very difficult problem. This is a particularly serious issue given that many IT budgets have been reduced in 2009 as a result of the economic recession, making it that much more difficult to get the migration completed properly. While Exchange 2010 will likely provide many organizations with the opportunity to reduce their overall cost of Exchange management over the longer term, justifying the not insignificant expense of migration may be difficult in many organizations.

BACKUPS ARE A KEY ISSUE

Backups are a top of mind issue for most Exchange administrators – our research finds that 83% of organizations back up their Exchange databases every night and another 12% back them up every other night. However, as discussed earlier, growth in messaging storage is the leading problem in managing email systems, resulting in a direct and critical impact on backup strategies. A problem arising from excessive growth in message stores is that backup windows lengthen, resulting in an inability to fully back up databases in the time available to perform them.

Further, a related problem is that enormous backups can take a substantial length of time to restore in the event of a server crash or other event that requires database restores.

Our research found that 46% of decision makers would be comfortable with online copies of their Exchange data instead of point-in-time backups, while only 15% indicated they would not be comfortable with them (39% are simply not sure). The fact that two in five decision makers has simply not made a decision about online backups indicates the need for more education about how online backups can be used effectively.

DATABASE AVAILABILITY GROUPS

To address problems with backups and also disaster recovery, Exchange 2010 now offers Database Availability Groups (DAGs) that allow up to 16 Exchange Mailbox servers to host a set of Exchange databases. DAGs provide automated recovery of databases if an individual server or database becomes corrupted or otherwise compromised. DAGs are clearly a strong benefit of Exchange – our research shows that 60% of decision makers plan on using DAGs in Exchange 2010, while only 4% do not plan to do so (36% are unsure at this point). The fact that three in five decision makers plan on using DAGs underscores their view that Exchange data is critical and how it needs to work with other industry-proven techniques.

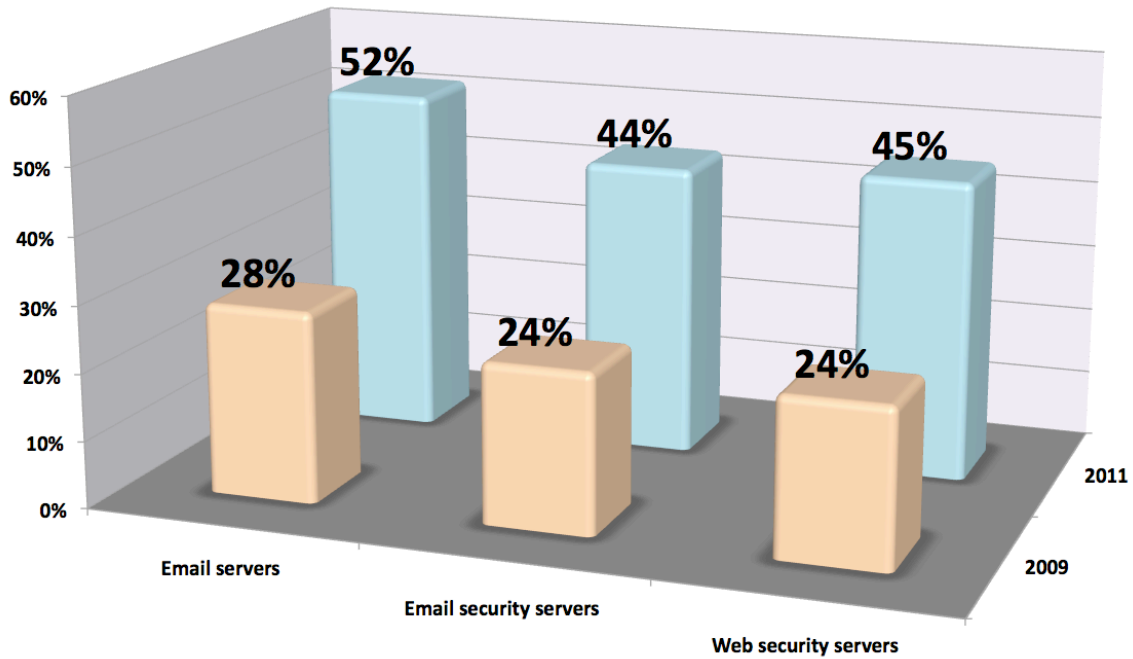
HOW LONG WILL IT TAKE TO MIGRATE?

Migration to Exchange 2010 will not be an overnight or a weekend event. The research conducted for this white paper found that the mean time required from the beginning of the requirements definition phase until all users have the platform available as a production system will be seven months. In some cases, the rollout for Exchange 2010 will be much longer. The research also found that only 54% of organizations' IT management would find this length of time to be "very acceptable", and only 48% of non-IT management would consider the rollout time to be this acceptable. Clearly, the length of time that many organizations expect the rollout of Exchange 2010 to require points out why they need help from an expert provider. A third party that can offer a faster and more reliable way of migrating to Exchange will yield a number of benefits, not least of which is the ability to realize the value of Exchange 2010 more quickly than will otherwise be possible.

THE GROWING USE OF VIRTUALIZATION

As shown in the following figure from a separate Osterman Research survey conducted in August 2009ⁱⁱⁱ, decision makers anticipate that their use of virtualization will increase significantly over the next couple of years for infrastructure elements like email servers, email security servers and Web security servers. The research conducted for this white paper found that 84% of organizations are pushing toward virtualization as part of a larger asset consolidation effort, and 59% believe that Exchange 2010 will be key in supporting their organization's virtualization efforts.

Distribution of Virtualized Servers by Type



E-DISCOVERY IS A CRITICAL ISSUE

Perhaps no other issue is more critical for decision makers to consider than e-discovery, particularly in the context of email management. E-discovery is becoming much more important in the context of civil litigation – for example, roughly three out of four discovery orders today require email to be produced as part of the discovery process. E-discovery today represents 35% of the total cost of litigation^{iv}, and companies that fail to produce emails in a timely or appropriate manner face the risk of paying millions of dollars in sanctions and fines, not to mention loss of corporate reputation, lost revenue and embarrassment.

Implementing an appropriate e-discovery capability is critical to the long-term viability of any organization, particularly larger ones that face a greater chance of being involved in civil litigation. E-discovery best practices include several key elements, starting with management recognition for the need to be ready for e-discovery to developing a set of corporate policies to implementing the right technologies that will manage corporate data properly.

Exchange 2010 will figure prominently into most organizations' plans for e-discovery by virtue of the fact that Exchange 2010 includes native archiving capabilities. However, despite the inclusion of archiving tools in Exchange 2010, Osterman Research anticipates that the majority of organizations migrating to Exchange 2010 will still use third-party archiving tools.

E-discovery is a key issue in Exchange 2010 if only because of the expense and difficulty associated with it. For example, the research conducted for this white paper found that the organizations surveyed go through a median of 10 e-discovery requests each year, and that the mean cost of e-discovery is \$72 per email user per year. Based on these averages, an organization of 1,500 users will spend an average of \$108,000 annually on e-discovery alone.

USING CONSULTANTS WILL BE KEY

Our research found that 49% of the organizations surveyed will use a combination of consultants and internal staff members for the requirements definition phase of their Exchange 2010 deployment. Further, 15% of decision makers believe that consultants will be critical in helping with the requirements definition process, while 11% believe that consultants will be critical for the deployment phase.

However – and this is a serious issue – 12% of decision makers told us that it would be very difficult to justify the use of consultants for requirements definition or deployment of Exchange, and another 38% told us that it would be somewhat difficult. Clearly, the use of external consultants in a down economy may be difficult, making the choice of the right external consultant that much more important – it will be critical to leverage proven expertise in order to get things done the right way.

THINKING BEYOND EXCHANGE

It is important to note that while organizations need to consider the role that Exchange plays in its business processes, Exchange does not live as a disconnected island in the overall network infrastructure. Further, Exchange may be only one application that supports a particular business process – several others may also be involved. As a result, it is important for organizations to implement infrastructure components (arguably storage being the most critical among them) that can support more than just Exchange. This requires organizations to simplify management across the various applications that support a particular process in order to reduce IT involvement in these processes and overall costs.

Summary

Exchange 2010 is an important platform for organizations that currently run some version of Exchange, as well as for those on competing platforms that plan to migrate to it at some point over the next couple of years. Exchange 2010's feature set will offer a number of compelling benefits, including significantly improved disaster recovery and business continuity capabilities, native archiving, unified communications tools, and the opportunity to significantly lower the total cost of ownership for Exchange management.

However, migration to Exchange 2010 will not be simple and straightforward. A large proportion of organizations that will migrate to Exchange 2010 will need to use external consultants to help them plan their backup strategies, their choice of storage platforms, how virtualization will be implemented, and other important issues. Given that external consultants will be key in helping organizations migrate to Exchange 2010, the choice of the right consultant is a critical one.

What EMC Brings to the Table

- EMC is an experienced Microsoft® Gold Certified Partner and Global Systems Integrator with vast experience in storing, protecting, optimizing, and virtualizing information in mission-critical Microsoft environments.
- EMC has consulting services that can make the migration to Exchange 2010 as fast, inefficient and inexpensive as possible. EMC is an active participant in Microsoft Technology adoption programs; has attained 11 competencies and recognized 20 times as Microsoft partner of the year.
- EMC has the expertise, technologies and Proven Solutions to optimize and efficiently manage Exchange 2010.
- EMC has the broadest range of tiered storage offerings to align with customer requirements for TCO, scalability and performance. With EMC, you can start with a DAS solution and then move to a SAN environment as your requirements change.
- The EMC portfolio of replication technologies spans host-based, network-based and SAN-based options to cost effectively match any requirement- ensuring the highest levels of protection.
- EMC offers comprehensive information governance solutions and expertise for archiving, compliance, and e-discovery

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ⁱ Osterman Research survey conducted for EMC, October 2009

ⁱⁱ *SaaS Messaging Market Trends, 2009-2012*; Osterman Research, Inc.

ⁱⁱⁱ *SaaS Messaging Market Trends, 2009-2012*; Osterman Research, Inc.

^{iv} Source: Pillsbury Winthrop Shaw Pittman LLP