



Best Practices for Migrating to Microsoft Office 365

A White Paper by
Osterman Research, Inc.

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EXECUTIVE SUMMARY

Microsoft Office 365 is a significant move forward for Microsoft as it attempts to migrate its user base—and new customers from other platforms—to the cloud. Office 365 integrates a variety of applications, including email, instant messaging, user productivity tools, document management, and project management, into a single offering. Unlike previous Microsoft cloud-based capabilities, Office 365 is designed from the ground up to be a highly scalable, cloud-based system, representing Microsoft's continuing push into the cloud-focused enterprise space.



Key Takeaways

As decision makers consider Office 365 for deployment within their organizations, they must answer a variety of questions:

- What is the value in migrating to Office 365 relative to maintaining the current environment, whether it's Lotus Notes, GroupWise, Gmail or on-premises Exchange and SharePoint?
- Will the improvements in Office 365 compared to Microsoft's Business Productivity Online Suite (BPOS) be worth the effort to migrate?
- What are the key issues to consider in the migration process relative to directory, email, calendars, archives of current email content and legacy applications?
- What are the best practice considerations for choosing native vs. third-party tools; determining if and how bandwidth/capacity improvements will be required; accomplishing coexistence between on-premises applications/services and Office 365; and archiving existing content?
- How will Office 365 be integrated with key infrastructure elements that must remain on-premises, such as high-volume email processing or applications that must remain on-premises because of regulatory requirements?

About This White Paper

This white paper outlines the key benefits of hosted messaging and collaboration, and explains what Office 365 is and how it differs from earlier Microsoft offerings in the cloud space. Then it discusses key considerations for migrating to Office 365 from various legacy platforms, including Lotus Notes and GroupWise.

WHY SHOULD YOU BE INTERESTED IN HOSTED MESSAGING AND COLLABORATION?

Lower Costs

Many decision makers believe that an internally managed messaging and collaboration system is less expensive to deploy and operate than hosted systems. While in some cases that

perception is accurate, very often it is not.

For example, Osterman Research's cost models have demonstrated that an on-premises, 100-seat Exchange deployment costs \$40 per seat per month over a three-year system lifetime, while a 1,000-seat Exchange deployment costs just over \$24 per seat per month. Hosted messaging offerings are priced substantially less than either of these. Moreover, leading providers of hosted messaging and collaboration capabilities also include the licensing costs as part of their service, further reducing the cost of cloud-based solutions as compared to on-premises messaging and collaboration systems.

More Predictable Costs

Further, a hosted messaging and collaboration offering provides more predictable costs than on-premises deployments because the cost per seat is fixed over the lifetime of the contract with the hosting provider. This predictability of costs manifests itself in two important ways:

- Unforeseen problems, such as natural disasters, power outages, and moves to new facilities, can add to the cost of managing on-premises systems in a somewhat unpredictable manner.
- An organization that continually adds users will, at some point, reach the maximum number of users that its infrastructure will support and will then have to add servers and other infrastructure to support new users. This can dramatically drive up the total cost of ownership for a messaging and collaboration environment.

Shift From CAPEX To OPEX

Another important advantage of hosted messaging and collaboration is that it shifts expenditures from a capital expenditure (CAPEX) model to an operating expenditure (OPEX) model. Not only does this almost entirely eliminate the substantial up-front hardware, software and labor costs associated with deploying on-premises capabilities, it may also provide tax advantages for many organizations. This is because capital expenditures are depreciated only over several years, resulting in smaller tax advantages in the actual year of deployment. However, operating expenditures are almost always deductible in the year they are incurred, resulting in potentially greater tax savings, at least in the near term.

Reduced Opportunity Costs

Organizations should also consider the opportunity costs of the IT staff members or other individuals charged with maintaining on-premises systems. Most decision makers understand that finding and retaining qualified IT staff is not particularly easy. Therefore, in-house IT staff members should be employed in a

¹ Source: Osterman Research cost models; these costs include IT labor to manage the Exchange infrastructure.

manner that allows them to provide maximum benefit to their employer while also giving them a satisfying work experience that will motivate them not to go elsewhere. Using hosted messaging and collaboration does exactly this: by freeing IT staff members from constantly monitoring servers to ensure continuous uptime, it enables them to take on work that is not only more interesting to them, but also more valuable for the business.

For example, an IT staff member who manages a messaging capability very well provides some level of value to the organization. However, if that staff member spent the same amount of time implementing new CRM capabilities that could convert a higher proportion of prospects into customers, much greater value could very likely be realized from the same level of effort, and the staff member might find the work more challenging and satisfying.

Enables Employees To Be More Mobile

Another important benefit of hosted messaging and collaboration is that it gives users access to all of their communication tools regardless of their location—from their desktop at work, a home computer, or a laptop in an airport or at a client meeting at a Starbucks. This provides both employers and employees with tremendous flexibility on a number of levels. For example, companies no longer have to provide office space for every employee, but can instead have employees work primarily from home and then come to the office on an as-needed basis, saving substantially on both real estate costs and taxes. Many companies are using this approach; more than 40% of IBM's employees, for example, work from home and reserve conference rooms or other office resources only when needed. Eliminating potentially lengthy commutes results in improved employee morale and greater job satisfaction, not to mention the significant cost savings from reduced gasoline consumption and other automobile costs. This "hoteling" concept can also lead to improved employee retention because of the overall lifestyle improvement it affords.

WHAT EXACTLY IS OFFICE 365?

Key Features

Microsoft Office 365 is an integrated suite of four offerings that are already available as on-premises offerings:

- **Microsoft Exchange Online**

Email, calendaring and task management, including built-in archiving services. The basic Office 365 package includes 25 GB of storage per user.

- **Microsoft SharePoint Online**

Document management and collaboration services, Web site development, project management and the ability to develop intranets and extranets.

- **Microsoft Office**

Office Web Apps are lighter versions of Word, PowerPoint, Excel and OneNote designed to meet the needs of basic users of these applications, and/or to supplement the rich desktop experience of Office Professional Plus that may be required by some users.

- **Microsoft Lync Online**

Real-time communications that includes IP-based telephony, video conferencing, Web conferencing, instant messaging and presence capabilities. Lync replaces the existing Office Communications Online and LiveMeeting tools that have been offered by Microsoft for some time.

Office 365 is designed to be a completely hosted environment for organizations regardless of their size, replacing the core functionality of on-premises systems focused on managing email, collaboration, real-time communications and desktop productivity. In essence, Office 365 is the next generation—and the integration—of today's separate BPOS, Office Live Small Business and Live@edu offerings.

How Is Office 365 Different Than BPOS?

BPOS was introduced in late 2008 and has had some degree of success with customers, with an estimated user base of one million customers. BPOS has also been somewhat controversial with Microsoft's large base of hosted Exchange providers because Microsoft's per-seat pricing for BPOS is much lower than many providers' per-seat pricing for hosted Exchange.

There are a number of important differences in features, function and design between BPOS and Office 365:

- The most obvious change is the inclusion of a desktop productivity suite, Office Professional Plus, something that was not included in any way in BPOS. This is Microsoft's foray into the space that to date has been dominated by Google Apps and, to a lesser extent, a number of other providers.
- BPOS was built on the 2007 versions of its three key components, Exchange, SharePoint and Office Communications Server (now Lync Server), while Office 365 is built on the 2010 versions of all three products. The difference is important because the 2010 versions were designed with the cloud as a delivery model while the 2007 versions were not.
- Whereas BPOS was designed primarily for smaller businesses, Office 365 has been designed for organizations of all sizes. Office 365 clearly represents Microsoft's push into the large-enterprise market for cloud-based applications.
- Office 365 includes a variety of enhancements to BPOS, the most notable of which is the Service Connector designed to simplify desktop management, manage updates and patches, and manage the overall login process.

- SharePoint Online, originally considered to be just a shared document repository, has now evolved into a true collaboration platform in which enterprises can run enterprise-wide applications. This is particularly important for organizations that rely heavily on their messaging platform to run business applications, such as Lotus Notes customers.
- Office 365 will also include the option of adding Microsoft Dynamics CRM Online capabilities, most likely late in 2011.

Why Office 365 Is An Improvement Over Previous Offerings

Office 365 is an improvement over Microsoft's other, similar offerings in three key respects:

- Whereas offerings like BPOS have previously been designed to include cloud functionality, Office 365 has been designed from the ground up to be a cloud-based offering. Because Office 365 is based on the cloud-centric versions of Exchange, SharePoint and Lync Server, it scales nicely for large enterprises.
- Microsoft's traditional focus has been on on-premises solutions. This has resulted in updates first to the on-premises products, followed by updates to offerings in the cloud. However, a fundamental change is occurring within Microsoft: now customers are likely to see changes first in the cloud, followed by changes to on-premises solutions.
- The inclusion of word processing, spreadsheet development and presentation development in the Office 365 offering means that Microsoft users can operate on any Windows computer without local applications installed—a major improvement for mobile workers.

MIGRATION TO OFFICE 365 NEEDS TO BE CONSIDERED AND EXECUTED CAREFULLY

What Is Involved In The Migration Process?

Whether you are migrating from Lotus Notes, GroupWise, Gmail or on-premises Exchange and SharePoint, it's important to note at the outset that the transition to Office 365 is not simply a matter of flipping a switch—making the transition to the cloud as seamless as possible requires careful planning and the right tools. Getting the migration wrong can result in significant downtime for end users, increased IT labor cost associated with migration, and even data loss.

Migrating Key Elements Of The Infrastructure To Office 365

Six key elements of an on-premises infrastructure must be carefully migrated to Office 365: Active Directory (AD) content, "live" email, calendars and tasks, address books, archived email and other content, and legacy applications such as those on

Lotus Notes. It is important to carefully consider the various options that are available in migrating each of these, including the limitations of the native migration tools. Some of the most important considerations include:

- **Active Directory.** Microsoft's native AD synchronization works from the on-premises environment to the cloud, but not the other way. If an organization intends to maintain both an on-premises and a cloud-based AD system, changes made in the cloud will be overwritten by the local AD sync process.
- **Email.** Migrating email properly is absolutely crucial. Email is the primary communications tool for most users and the chief method for sending files between users, and a number of applications depend on the email backbone for transport services. Therefore, even short disruptions in email can create significant disruptions in workflows and overall user productivity. Because most migrations do not happen overnight, extended coexistence with the existing infrastructure and Office 365 is often necessary.

Important issues to consider in migrating email to Office 365 include the following:

- Email routing must be planned carefully because of its potential impact on how attachments are handled. This has important implications for message delivery times and the amount of storage required in the network.
- Because the Exchange MAPI stack is not supported in Office 365, applications that rely on it will need to be modified, swapped out for other applications, or remain on-premises.
- Security is another important issue in the migration process, since most organizations have some sort of on-premises anti-spam, anti-virus or anti-malware capabilities that will need to be migrated.
- Users' Outlook profiles will need to be migrated to ensure a consistent user experience and to minimize calls to the help desk during and after the migration.
- Office 365 does not work with versions of Outlook earlier than Outlook 2007, so users of older versions (still a substantial portion of the Outlook user base) will need to be migrated to a newer platform.
- **Calendars and tasks.** It's critical that a migration to Office 365 include all of the calendar data that users require, such as recurring meetings and all calendar history.
- **Address books.** All content from personal address books, personal distribution lists, etc. must be migrated to the Office 365 environment.

- **Archived email and other content.** Users' archived content can be migrated to local PST files so that users can access them within Outlook; however, this may present compliance or other problems, since the content is not archived in a central location. A good alternative is to migrate content to Exchange 2010 Personal Archives. Third-party tools often deliver a more satisfactory migration of archived content to a cloud-based archiving system.

A potentially more difficult issue for many companies is that the BPOS email archiving capability may not offer the same level of compliance capabilities as the Exchange Hosted Archiving capability that it replaces. Organizations may want to carefully evaluate the archiving capabilities in Office 365.

- **Legacy applications.** This is an important consideration for organizations that are running legacy applications in Notes environments. Given that SharePoint Online is now a more robust platform from which to host applications than was BPOS Standard, migrating applications is now more feasible than it once was.

Best Practices and Considerations

There are a number of important best practices that decision makers should consider, regardless of their organization's size, as they contemplate a migration to Office 365:

- **Tools.** First consider native Microsoft capabilities versus third-party capabilities. While third-party tools can add significant cost to the migration project, that added cost is most certainly justified. In particular, native solutions are not available for migrating from Lotus Notes or GroupWise to Exchange 2010 or Office 365, so third-party tools are necessary.
- **Bandwidth.** Microsoft acknowledges the importance of considering the bandwidth requirements for migrating to Office 365 by providing a bandwidth performance test. In addition to evaluating the raw speed of the connection over which Office 365 will be accessed, it is also important to consider the total number of hops between the local network and the Office 365 data centers, average packet loss, latency and changes in capacity at peak times and over long periods. For some customers, a bandwidth upgrade will be required to effectively migrate to Office 365. Some of the bandwidth concerns can be mitigated by third-party tools that include a multi-threaded migration engine to accelerate the transition of mailboxes. With these tools, you can also install multiple migration consoles as needed to increase scalability.
- **Coexistence.** It is also important to consider if and how coexistence between Office 365 and legacy email and applications will be managed. For example, will users in both systems be able to share a common directory, view free/busy

information and properly schedule meetings throughout the transition or coexistence period?

In addition, many organizations maintain a large number of Lotus Notes applications, on-premises SharePoint deployments, CRM systems and various online repositories and databases, and SharePoint Online is now a more viable choice for migrating these applications. Decision makers must determine if they will a) maintain these on-premises systems alongside Office 365, b) migrate the on-premises applications to Office 365, or c) migrate to completely new solutions. Third-party tools are available that can migrate some or all legacy applications to Office 365 securely with no loss in data fidelity.

- **Email integrity.** Another important best practice is ensuring the integrity of email content during the migration. It is vital to ensure that past email content—and email access itself—is continually available to users during the migration. This applies to any email platform from which users are migrated, including Lotus Notes, Novell GroupWise or legacy Exchange environments.

Integration With Key Infrastructure Elements That Need To Remain On-Premises

Decision makers must also determine which elements of the infrastructure can be migrated to Office 365 and which need to remain on-premises. Some companies find that not every aspect of their infrastructure will successfully migrate to the cloud; examples include the following:

- Very high volume email broadcasting capabilities, such as emails sent each weekday by brokerage houses. A large brokerage can send two to three million emails each morning, all of which must be sent within a short time window. This type of application may not migrate well to Office 365 or any other cloud-based application.
- Some organizations and public sector institutions are bound by regulatory considerations not to use providers whose data centers are located outside of their country, so they must maintain email and other capabilities in-house.
- Some organizations may have decision makers that are adamantly opposed to the use of hosted or other cloud-based services, so they will be required to maintain on-premises capabilities that coexist with Office 365. This will require the use of third-party tools that will enable management and coexistence of Office 365 and legacy on-premises environments with as little IT intervention and cost as possible.

² <http://SPEEDTEST.MICROSOFTONLINE.COM/>

SUMMARY

Office 365 represents a major leap forward for Microsoft's move into the cloud: it integrates various Microsoft technologies into a cohesive bundle of services that will enable organizations to effectively migrate their users to cloud-based email, collaboration, instant messaging, Web conferencing, telephony and other services. But migrating to the new platform involves challenges, such as deciding where to use third-party tools, how to maintain on-premises Notes or GroupWise in coexistence with Office 365, and how to manage the variety of tasks associated with an effective migration—all while maintaining 24x7 access to email and the other tools that users currently have available to them.

ABOUT QUEST SOFTWARE'S SOLUTIONS FOR OFFICE 365

Quest Software mitigates risk and minimizes IT and end-user impact with solutions for a simple, secure and on-schedule migration to Office 365 from Lotus Notes, GroupWise, Google Gmail, or on-premises Exchange and SharePoint. With Quest you can perform pre-migration assessments to determine transition requirements, ensure coexistence to maintain business productivity, and centrally manage your Office 365 or hybrid environment to reduce IT burden.

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