

Should you Outsource your Email?

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According to a recent study by Symantec and Gartner ([http://www.itworld.com /Webcasts /bytopic/3/index.html](http://www.itworld.com/Webcasts/bytopic/3/index.html)), most companies consider email to be a mission critical application. In addition, the study stated, up to 75% of a company's intellectual property resides in email and other messaging applications. Likewise, 75% of fortune 500 litigation involves email related discovery, and at the time of the study, 79% of companies accepted email messages as confirmation of transactions.

As critical as email is to most companies though, it is important to remember that a company's mail servers are a part of the company's infrastructure, and are not usually directly related to the products or services that the company offers to its customers.

To be successful, it is important for a company to focus as many of its resources as possible on the business itself, and its core competencies. In any business, a portion of the company's financial and human resources are invested in establishing and maintaining the company's underlying infrastructure (such as email, telephone, electricity, etc.). In most cases, this infrastructure is necessary for doing business, but does not directly produce revenue. In essence, the infrastructure is a necessary expense.

The bottom line is that if a company can minimise the costs of doing business and maximise the focus of its resources on its core competency, then the company will be more profitable and successful. As such, it makes sense to examine infrastructure related expenses, and see if they can be reduced through outsourcing. Often times, an outsourcing company can provide a better service than what can be provided in house, but at a lower cost, and with less complexity. This not only reduces costs, but it also frees up staff to focus on the company's business objectives.

Outsourcing Exchange Server

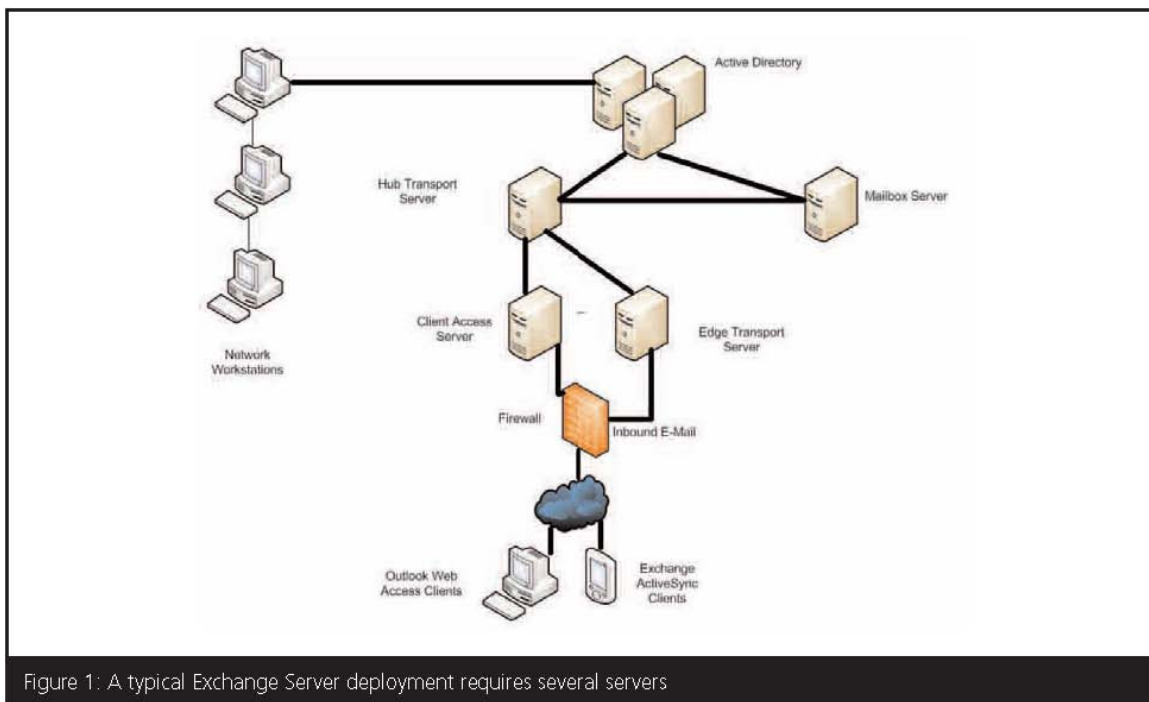
Of all of the components that make up a company's infrastructure, perhaps none makes more sense to outsource than the company's email solution. Although the reasons behind this choice are mostly financial, businesses find the ability to shift the responsibility of operations as well as the responsibility of complying with various federal regulations more to their benefit.

Reducing Complexity

There is a certain amount of technical complexity associated with any email server, but let's examine Microsoft Exchange Server, since that is the mail server platform that has been the most widely deployed.

Microsoft Exchange Server has a reputation for being one of the most complex products that Microsoft has ever created. In smaller organisations, it is possible to reduce some of this complexity by consolidating the entire Exchange Server organisation deployment into a single server. Even so, having a single server deployment is extremely risky from a security and reliability standpoint. Single server deployments are also prone to performance problems, lack of redundancy in case of failure and scalability issues.

In order to be secure, an Exchange Server 2007 deployment typically requires several different servers that must all work together, as shown in Figure 1.



As complicated as this diagram may initially appear, it actually represents a fairly simple Exchange Server 2007 deployment. In fact, the diagram does not provide for clustering or for any other redundancy that would keep the Exchange organisation functioning should a server failure occur. The diagram also assumes that the organisation has few enough end users that all of the user's mailboxes are able to fit on a single mailbox server. Likewise, the unified messaging components have also been omitted for simplicity's sake.

The point is that even a "simple" Exchange Server deployment is complicated, and with complexity comes cost. The first cost that you are likely to encounter is that of training your administrative staff to design, deploy and maintain an effective Exchange Server organisation. As expensive and time consuming as the training is though, the training quickly becomes obsolete. Microsoft released Exchange Server 2007 before the product was actually complete. As such, the first service pack will include many features that do not currently exist. The

service pack will also include a GUI interface to many features that are currently only configurable via the command line. When this service pack is released, administrators are going to need updated training so that they will know how to deal with the new features and management utilities. It is also likely that administrators will need additional training when Windows Server 2008 is released in the fall.

Another reason why increased complexity leads to increased costs is because of the number of servers required to host Exchange Server 2007 in a secure and reliable manner. The diagram shown in Figure A represents an Exchange deployment that is secure, but not reliable. More servers are needed to make this deployment more reliable, and yet several Exchange Servers are already being used.

Outsourcing as a Way of Reducing Costs

Each server comes with the initial hardware acquisition costs, and the cost of the Windows and Exchange Server licenses paid to Microsoft. There may also be costs related to antivirus software, anti spam software, and client access licenses (such as the recommended for Exchange Microsoft Outlook or Entourage). Additional costs come in the form of spare parts, overtime for the administrative staff, especially if you want 24x7 reliability, and other maintenance related expenses. In fact, the long term costs associated with server maintenance usually far outweigh the initial acquisition costs over the life of the server.

Outsourcing your mailboxes to a Mail Hosting company not only allows you to avoid the initial start up costs of deploying an Exchange Server organisation, the ongoing costs are usually less as well. The reason why this is possible is because Mail Hosting companies typically divide server resources among multiple clients. This means that several companies are sharing the expense of the hardware, software, as well as monitoring and maintenance costs, rather than your company having to cover the entire costs.

Although the primary benefit to outsourcing an Exchange Server deployment is often the cost, there are other benefits as well. One such benefit is reliability. Hosting companies typically use server clusters and other forms of redundant hardware to ensure that the hosted Exchange deployment is nearly always available. This availability is typically guaranteed in writing in the form of a service level agreement.

Another way in which Mail Hosting companies are typically more reliable than in-house Exchange Server deployments is that Mail Hosting companies are usually better equipped to recover from a disaster. Most companies back up their Exchange Servers, but few companies have the human and hardware resources to thoroughly test their backups on a regular basis. Most Mail Hosting companies not only test their backups, they even provide guarantees as to how quickly data can be restored should one of your users accidentally delete something.

Even if you meticulously backup your servers and test the backups on a regular basis, it may be worth switching to a hosted Exchange environment, as a way of shifting responsibility. What would happen if your company's Exchange Server were to fail, and you were unable to

restore a backup because of some unforeseen problem? You would probably lose your job if you lost the entire company's email. If your email solution were all maintained by a Mail Hosting company though, then they become responsible for ensuring that the data is backed up correctly, not you.

One final reason why it may be prudent to outsource your email solution is that many companies are subject to various federal regulations regarding the security, management, and retention of email. Complying with these regulations is as tedious as it is expensive. Furthermore, company executives and IT professionals may be subject to criminal penalties, including prison time, for non compliance. Depending on the specific regulations that apply to your company, you may be able to shift some of the compliance burden, while also reducing costs, by outsourcing your Exchange Server deployment.

Choosing a Hosting Company

If you are considering outsourcing your mail solution to a Mail Hosting company, then it is extremely important for you to ask certain questions prior to signing the contract. Some hosting companies may initially appear to be a bargain (not everything is price!), but sacrifice reliability and support. Some Mail Hosting companies have also been known to not have a redundant infrastructure, or not have robust backups, or to tack on various extra fees for service, or to use unscrupulous tactics to prevent customers from cancelling their contracts. As such, it is important to know the right questions to ask.

One of the most important questions to ask is whether or not the hosting company provides a managed hosting solution. In a managed hosting environment, the hosting company takes care of all of the server maintenance. They back up the data, apply security patches, handle any other maintenance and support issues that may arise. Many non managed hosts simply allow you to rent a server in their data centre, and the management and maintenance of that server is up to you. The reason why this is such an important question is because if you get stuck doing your own maintenance and support, it usually defeats the purpose of outsourcing Exchange Server in the first place.

Of course this is only one of several important issues to consider when choosing a hosting company. The sections below explain what other questions you should ask when shopping for a mail server hosting company, and why.

How is my Data Being Protected?

Any reputable Mail Hosting company should take the appropriate measures to make sure that their servers are secure. Even so, it is worth asking the hosting company that you are considering using, what steps they take to secure their servers. Don't be surprised though, if the hosting company refuses to answer this question. Many hosting companies are reluctant to provide specific information about their security measures.

Even if you can't get information about the hosting company's security standards, it is

important to ask the company what their policy is in regard to spam and virus prevention. Most, but not all, hosting companies provide a spam filtering and virus protection solution. In this subject, there are usually two options: the standard solution (offers basic performance) or the premium solution (guarantees the service and the filtering). However, you might have to pay extra for the premium solution.

Mail Hosting companies spam filtering policies vary much more widely. Some companies attempt to filter the most obvious spam, while others leave spam control to the end users out of fear of accidentally filtering legitimate messages. If the Mail Hosting company does filter spam, then it is important that they provide a method for you to retrieve messages that were filtered accidentally, or for you to adjust the filtering settings.

Data Recovery Policy

From time to time, a user is probably going to accidentally delete a message that they really need. If you are hosting your own Exchange Server, then you can recover messages on an as needed basis according to your own data retention policies. When your mailboxes are being outsourced, you are at the hosting company's mercy when it comes to data recovery. It is therefore very important to find out what the hosting company's recovery policy is. Specifically, you should ask how quickly data can be recovered and whether or not there is a fee for the recovery. If you have not signed a contract that specifically guarantees long term data archival, then it is also important to ask how long the backups are retained. This is an important consideration, because if you need to restore something that was deleted a month ago, but your hosting service only retains backups for two weeks, then the data may be lost forever.

What are the Costs?

If your primary motivation behind outsourcing your Exchange Server deployment is to reduce costs, then the first question that you will likely ask is what the service costs. Most Mail Hosting companies base the price on the number of "seats" or "mailboxes" that are being hosted. For example, a hosting company might charge you fifteen dollars per mailbox per month.

Although this pricing structure seems simple enough, it is important to remember that many Mail Hosting companies use a sliding price scale. For example, if you purchase additional mailboxes, you may qualify for a volume discount. At the same time though, some companies actually charge more per mailbox as the number of hosted mailboxes increases, because you are consuming more server resources. It is important to find out up front what will happen to the price as the number of hosted mailboxes changes.

Space Quotas

Most mail hosting contracts stipulate a maximum size for a user's mailbox. It is important to

inquire as to what happens if some users end up outgrowing the allotted space. Some hosting companies may implement a quota that prevents the maximum mailbox size from being exceeded (disabling the functionality to send and/or receive), while other hosting companies may charge you a fee for exceeding the allotted disk space. In all likelihood, at least a few users will eventually need additional disk space, so it is good to know upfront how this need will be met.

Do I get my Data Back?

Aside from pricing, the single most important question to ask a Mail Hosting company is what will happen to your data if you should cancel the service. Although not a common practice, there have been reports of hosting contracts stipulating that your data becomes the hosting company's property. What this means is that if you should cancel your hosting contract, the hosting company is free to delete your data. They are under no obligation to give you any future access to the data. It is therefore essential to confirm that you retain ownership of your data, and that the hosting company will assist you in migrating the data to your servers, or to another hosting company's servers should the need ever arise.

How Many Times Have You Been Down in the Last Year?

When considering a transition to a hosted Exchange Server environment, it is natural to focus your attention on the cost of the service in comparison with the cost of hosting your own mail servers. An equally important consideration though is down time.

Although not always a tangible cost, down time is typically very expensive. Down time has a direct impact on employee productivity, and fixing the problem requires the administrative staff to temporarily neglect other tasks and focus on fixing the problem. Additionally, there may be a direct loss of revenue because users are unable to receive time sensitive email messages. The repair may also incur more tangible costs such as server parts or support calls.

The most serious aspect of a mail server failure though is the potential for data loss. Depending on the type of failure, the chances of recovering mail server data are directly related to your IT staff's skills and to their diligence in backing up the mail server, and routinely testing the backups.

As you can see, down time can be very expensive, for a number of reasons. It is important to remember that outsourcing your mail server does not automatically eliminate the potential for down time or data loss. Hosting companies can have server failures just like anyone else. It is therefore critical to insist that the hosting company provide you with a service level agreement.

What is the Service Level Agreement?

A Service Level Agreement is a contractual obligation for the hosting company to provide a certain level of reliability. The higher the percentage, the more reliable the service should be. Generally, you should accept a service level agreement of no less than 99.9% availability; however, some hosting companies are able to provide 99.99% or even 100% availability. In addition to asking about the service level agreement, it is also important to ask about your remedies. In other words, what happens if the hosting company's service isn't as reliable as they claim? Most reputable hosting companies will offer you either a full or a partial refund for any time in which the hosting service was unavailable. Be sure to read the fine print. In some cases your service may have to be down for a full day before you are eligible for any type of compensation.

The Migration Process

Making the transition to a hosted mail server isn't a big deal if you are a start up company with no data to migrate. If you currently host your own Exchange Server environment, you will need to know how to migrate your existing data to the hosting company's servers. Most reputable hosting companies will assist you with the migration process. It is also worth asking how long the transition process will take, what items (calendar, tasks, notes, public folders) will be migrated, and whether or not e-mail will be accessible during the transition.

Additional Fees

Just as you need to be familiar with the hosting company's pricing structure, it is also important to ask about any additional fees that the hosting company may charge. Some hosting companies have been known to charge setup fees or an annual maintenance fee. It is also fairly common for Mail Hosting companies to charge a fee for restoring deleted mailboxes or messages.

Conclusion

Given the ever increasing complexity of Exchange Server and the various email related federal regulations that have gone into effect, it is becoming far too expensive and risky for companies to host their own mail servers. As such, the outsourcing of Exchange Server is quickly becoming an absolute necessity for any company that wants to free itself from the costs of deploying and maintaining an Exchange Server environment. Outsourcing is also essential to eliminating costly down time and to shifting the burdens associated with complying with the various regulatory issues.