



White Paper

Written by:



Hosted Exchange vs In-House

Information needed to make your own decision.

www.DNSnetworks.ca

DNSnetworks Corporation

1122 Wellington St West
Ottawa, Ontario, K1Y 2Y7, Canada.

Tel: 866.720.7162
Fax: 877.720.7163



Summary

The purpose of this document is to help you decide whether to outsource your email to a DNSnetworks' hosted exchange environment or to run your email infrastructure in house. This document has been created by DNSnetworks Corporation, which is one of the most respected hosting providers in Ottawa, Canada. We have been hosting Microsoft Exchange since 2002 and have 1000's of mailboxes, most of which were all customers migrated from in-house messaging environments.

We fully understand that there is no single answer and the success of your email solution, wherever it is managed, is dependent on it meeting your individual business needs.

You have many enemies when making this decision who will try to convince you, persuade you, demonstrate unequivocal TCO arguments and appeal to your own emotional responses. Your local IT advisor whether it be your in house expert or trusted advisor are not impartial, they both have a vested interest in your business deploying more and more technology. Your service provider will generally be single minded about why an "on premises" solution is going to be more expensive, difficult to maintain and less reliable, and the industry advisors, the analysts, commentators and press will be telling you about IT revolutions, SaaS, Cloud computing whatever the next buzzword is.

This document attempts to share some real world views of the challenges of managing your business communications in an ever changing fast paced business environment and help you make an informed decision to ensure you make the right choice.

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What others are saying about Hosted Exchange.

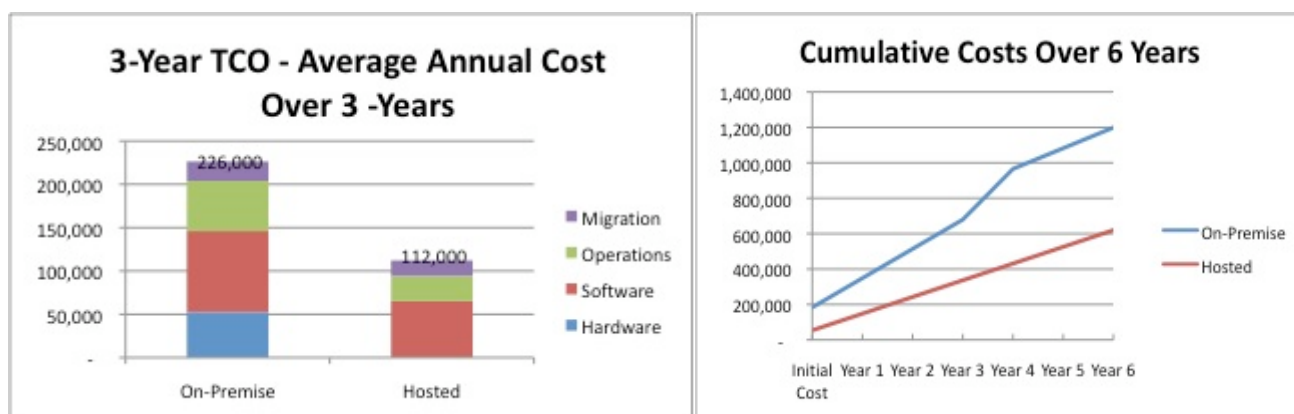
"The bottom line is we are able to do far more than most other companies at far less cost and with almost no in-house support. Frankly, we see the Market Web managed services as providing us a critical competitive edge. We are constantly recommending Market Web to other companies in every line of business and at the full range of sizes."

" We used to run our own Exchange 2003 server and we got sick and tired of the problems and the cost of maintaining it. Moving to your service has been a relief. Now we can focus on our business instead of worrying about lost e-mails from customers. Thank you! "

*"We chose Hosted Exchange to **save the initial overhead** of installation and maintenance of our own Server system as well as continual patching and spam monitoring. We chose DNSnetworks as at the initial point of contact **they took time to run through the service** and the facilities when other cheaper companies just seemed to say "check the website". As a startup business the **feeling of support and help was most critical.**"*

Measure your options.

Using a hosted email provider often does normally result in enormous cost savings, and as its cost becomes predictable, so does the fluctuation of IT budget spending. We can deliver improvements in feature sets, compliance, reliability and performance, especially if you're on an older, trouble-prone system, or if resources are hard to come by. Use our checklist at the end of this document to compare your internal solution to our Hosted Exchange solution. In the following sections we will come back to your costs and have provided some real world examples of comparisons.



In-house IT can cause cash-flow spike even if costs are the same over the year.

Technology changes quickly.

At DNSnetworks we have been through three versions of Microsoft Exchange and now fully supporting the latest version of Exchange 2010 SP1, Sharepoint 2010, and Citrix's EMS-Cortex Cloud hosting panel.

This means the complexity of configuration, management and support will continue to grow over shorter and shorter periods of time increasing the IT workloads for in-house staff or ever rising costs of IT support and consultancy.

Hidden cost. Don't ignore them.

Many companies do not understand the true, hard costs of their messaging systems and don't see them, for example this could be the cost of holiday cover or overtime for the email administrator, so if the system goes down at 8pm everyone will just have to wait until next day before it comes up again. Another example would be the provision of resource for a mission critical but normally not strategic service like email pulling that resource away from more important strategic IT initiatives that will drive revenue and innovation. By "resources" I mean people or cash and probably both.

Another hidden cost is the true cost of downtime. It is quite normal for an organization that has a TCO for their messaging system to have costs that are far below the industry average, and uptime that is far above the industry average! When talking to companies we find that it's blatantly obvious that most companies do not understand the true, hard costs of their messaging systems, nor do they accurately measure their downtime which is a very real cost. Getting down to the

detail is often the case that costs for management and monitoring software to make sure that the system stays up and running and to send alerts if it doesn't is not included and this can have disastrous consequences.

Some of the other areas to consider might be;

- Server and the amortization of that over its useful life
- Backup hardware and the amortization of that over its useful life
- Software licenses
- Maintenance /yr. If an in-house person wasn't doing this, what else would/could they be doing for your company (duties)?
- Disaster Recovery Plan – consultant fees
- Other software costs: backup software, Anti-Virus, Anti-Spam etc.
- Expect the unexpected and add in possible future "events" if it goes down, what are all of your **actual** downtime costs
- And add in IT firm support costs per incident this can add up quickly when someone's charging you real money to fix something.

Finally on this subject, if you are investing in new hardware, what about the cost of the capital expense. Could your company cash be used more effectively? To pay down debt, invest in revenue generating IT or perhaps a nice bonus?

Security and Compliance

DNSnetworks' infrastructure is currently hosted in a Tier 3 Datacenter in Ottawa, Ontario. Our network infrastructure is currently peered with 5 of the largest transit providers, providing over 3.8 Gbps of aggregated network bandwidth. Our servers are housed in a datacenter with biometric security enforced through IRIS scanning. The Datacenter entrances are also guarded and have security cameras to scan and digitally record the interior and exterior of the facility 24 hours a day.

Our senior storage administrators both hold Secret level government clearance and have also completed the Information Systems Security Officer (ISSO) training in Ottawa, Canada.

As you can see our IT security is multi layered;

1. The physical layer

Most small and medium businesses who manage their own Microsoft Exchange servers do so out of a corporate office. Servers are typically kept in a server closet or computer area, often not protected or by just a single locked door. While businesses often feel more comfortable keeping servers within reach inside their own offices. Every year, thousands of businesses experience theft, burglary or trespass, resulting in the damage or loss of computer hardware and ultimately their email server.

2. Logical Server Security

Emails are only as secure as the servers they reside on. To properly protect your sensitive data, the Exchange servers must be properly secured. This complicated, on-going continuous process includes:

- Proper Microsoft Windows server operating system installation and hardening configuration. Prompt testing and application of important security patches and updates to the operating system are crucial.
- Strict configuration of user and administrative accounts with roles and permissions.
- Proactive monitoring of the servers and services for viruses, intrusions, and any unexpected behaviors such as DoS attacks and intrusion attempts need to be implemented.

3. The Software layer

Software has got more robust in recent years, patching has become easier and vulnerabilities are well publicized and are able to be dealt with in a timely way; however that said it is still a nightmare to manage. Lots of businesses handle these workloads very well many more don't.

4. The Perimeter

Minimizing spam and eliminating inbound email born viruses is an essential part of any business communications strategy. The potential damage to a business, from a critical failure of IT systems to the time wasting element of spam. Businesses have a duty to

protect employees from unpleasant content and so good perimeter protection is a must. You cannot leave this to chance. DNSnetworks relies only on the most enterprise grade juniper firewalls to provide fine-grained access control that identifies, mitigates, and fully reports on the most sophisticated security threats.

Unfortunately, most small and medium businesses do not have the necessary experience or resources to allocate towards these tasks, thus creating exploitable vulnerabilities that compromise the security of their email and their environment.

Availability, mobility and accessibility.

More and more business are relying on new ways of working to become more competitive, I hear the expression “more from less” all the time now and having good IT systems can make the vision a reality. At DNSnetworks we take always available, access anywhere, on almost any device, for granted. Minimum levels expected include, ability to work from home or away from the office, free up your dead time (travelling, waiting for meetings etc.) and work securely on your device of choice, laptop, netbook, iPhone, Blackberry or Windows Mobile device. Deploying, supporting and securing these devices is normally beyond the realms of the small and medium business and the consequences of failing to offer flexible forms of working can be severe.

In Canada, a rising trend is “Bring your own laptop” which can make businesses more agile, it adds to the complexity to maintain security policies by local security administrators.

In addition, offering a full administrator and user support environment is normally impracticable for many businesses, so users are left to their own devices and can spend hours trying to get their IT to work.

Hosted Exchange is much more than just email.

Cloud, SaaS, Managed Services, Outsourcing, there is no doubt that the IT delivery models are changing. Pricing will drive business online as the IT giants slug it out in the cloud to maintain and win market share. All sizes of business will start to adopt a Cloud-first strategy but many won't be sure how to start, who to partner with and what services to pilot first. Often it won't be the obvious issues that will become a challenge. Drivers such as cost reduction, increased operating efficiencies, TCO, ROI, will ensure that the cloud computing delivery model is successful and businesses will need to adopt the model at some point.

Buying hardware and software licenses now is like buying a 20 year old car, it might be cheaper up front but in the long term it will be more expensive to maintain, more unreliable, less green and not upgradeable in the future.

We hope this document has giving you some good reasons why Hosted Exchange is a better alternative over hosting email in house. DNSnetworks hopes that you will consider your IT strategy in the light of some of the issues raised and be more informed to make the decisions that are right for your business.

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Product Comparison Chart

Primary Focus	Hosted Exchange
Years delivering Hosted Exchange	8
Customer References Available	Yes
Licensing Agreements	Microsoft SPLA Cisco Ironport
Microsoft Relationship	Microsoft SPLA
Cloud Service Architecture	Citrix EMS-Cortex
Replica Test Environment	Yes
Single Points of Failure	None
Server Configuration	Clustered Ironport Email Gateways CAS: Redundant Load Balanced HUB: Redundant Database Availability Group: Clustered Active: Passive
Data Storage Architecture	PillarData Axiom SAN - RAID 10 - Completely Redundant
Hardware Providers	HP, Vmware ESX 4.1, PillarData System, Juniper.
Hosting Location	Ottawa, Ontario, Canada
Redundant Internet Connectivity	13 Internet providers (3.8Gbps aggregate links) with Redundant Juniper Firewalls
Backup Schedule	Daily Snapshots
Backup & Restore Test Interval	bi-weekly
Where are Backups stored	On separate storage medium
Hot Fix & Patch Install Process	Managed through off-hours maintenance schedules
Anti-virus, Spam Protection Guarantee	In-house, Redundant Cisco Ironport appliances
Is Outlook Web Access Included as Standard	Yes
Are Windows Mobile Devices supported	Yes
Is Microsoft Direct Push supported	Yes
BlackBerry Enterprise Device support	Yes – Add-on Service
Tiered Service Offering	Yes, 3 Tiers
Is Outlook Included	Yes, Outlook 2010!
RPC over HTTPS Support	Yes
POP3/IMAP Access	Yes, POP3s, and IMAPs encryption.
Spam Customization	No, we provide full 97% kill-rate with no false positives
Are Public Folders Supported	No, Exchange 2010 no longer supports Public folders.
SLA Guarantee	Dedicated 99.9%
Money Back Service Guarantee	Yes
SLA Failures in Last Year	None
Business Continuity Plan	Yes, we are currently implementing a DR plan.
Financial Position	Profitable
Dedicated Setup Team	Yes
Migration Experience	Over 400 migrations from Exchange, Groupwise, & Google.

Hosted Exchange vs In-House – Information needed to make your own decision.

Web based Self Care Portal	Yes
Technical support hours	24 / 7
Customer Support Access	Telephone & Email
Customer support SLA	Yes
All software licenses Included	Yes
Future software upgrades included	Yes

About DNSnetworks Corporation

DNSnetworks was founded in 2002 by a senior systems engineer in Ottawa, Canada. His primary goal was to provide Managed IT services to small and medium sized businesses at an affordable cost. With many years of experience in IT, Shawn Ebbs took his business to a higher level, through partnerships and his new VP of Operations, Eric Veysey, the corporation has been growing at a rapid and steady pace.

Working in an exciting and vibrant market space, our experience enables us to make the most of the new trends and approaches and our profitability ensures we make the right investments in technology and infrastructure.

With **over 1000 Hosted Exchange Email customers, DNSnetworks Corporation** is Canada's rapidly approaching leading provider of Hosted Microsoft Exchange services. Since DNSnetworks Corp's launch as a business-to-business Hosted solutions provider in 2002, we have delivered business critical services to its customers and the experience gained over the past nine years underlines our capabilities to meet and **exceed our customer's needs and expectations.**

DNSnetworks' values are focused on delivering excellence in everything that we do. We have a clear vision to provide our customers with a competitive advantage through the use of Hosted Applications and services.

DNSnetworks has embarked on a series of industry best practice certification programs to provide our customers with further reassurance of our capabilities:

- RHCE – **Redhat Linux Engineer**
- CNE – **Novell Certified Engineer**

Our **close partnership with Microsoft** is critical to the success of our organization and services. As a member of Microsoft's service provider Agreement program, you can be assured that we are at the leading edge in understanding how to best deliver Managed Business Email services, both now and in the future.

In addition DNSnetworks has selected the best of breed partners to support our services delivery, HP, Pillar Data Systems, Citrix, Cisco Ironport and Juniper to name a few.

DNSnetworks Corp is a privately owned and funded business with significant equity investment with TD Canada Trust in North America.