

The TCO of Enterprise Email

An Osterman Research White Paper

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EXECUTIVE SUMMARY

Email is an essential communications, file-sharing and collaboration tool in virtually all organizations: the average user sends or receives 130 emails on a typical workday, spends about 160 minutes each workday in their email client, and uses email more than all other modes of communication combined. In fact, although many believe that email is becoming less important over time and will be phased out in favor of newer forms of communication like social media, email is actually becoming more important: an Osterman Research survey conducted during March 2014 found 52% of email users report that they are using email more than they were during the previous 12 months, compared to only 3% who report lower usage over the same periodⁱ; an Osterman Research surveyⁱⁱ from 2011 found that these figures were 42% and 10%, respectively, indicating the growing importance of email for most users.

The bottom line is that email has become a utility: like electricity, it is critically important for every information worker, it must operate with very high levels of reliability, and it should be as economical as possible.

KEY TAKEAWAYS

The goal of this white paper is to present an Osterman Research analysis of the Total Cost of Ownership (TCO) for several of the leading email systems that are delivered via on-premises infrastructure and/or using a cloud-based model. Our analysis revealed that:

- On-premises Zimbra email provides significantly lower TCO than other leading on-premises email solutions in organizations ranging from 500 to 20,000 users, with the most significant, per-user savings at higher user counts.
- The per-user price for all of the email systems and services we examined drops as user counts increase, but Zimbra's price per user drops more rapidly than other on-premises solutions.
- Google Apps is the least expensive solution considered in this analysis, but cloud-based Zimbra is very close on a per-user basis.

ABOUT THIS WHITE PAPER

This white paper offers an unbiased analysis of the TCO for leading email systems. It also provides a brief overview of Zimbra's email solution. The paper was sponsored by Zimbra.

UNDERSTANDING THE TCO OF LEADING SOLUTIONS

The purpose of this study was to understand the TCO of four leading on-premises email systems (IBM Lotus Notes Domino, Microsoft Exchange, Novell GroupWise and Zimbra) and three cloud-based email offerings (Google Apps, Microsoft Office 365 and hosted Zimbra).

Our methodology for developing the TCO model used in this white paper consisted of developing two sets of data:

- Osterman Research used its primary research data to develop a cost model that analyzed the IT effort involved in managing the on-premises and cloud-based email solutions considered in this analysis. Osterman Research surveyed organizations, most of which are in North America, to quantify the IT effort required to manage each system.
- The second part of the analysis used secondary data, including publicly available prices for server hardware, server licenses, client access licenses (CALs), client

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software, security appliances, hosting fees, support charges, etc. We also made assumptions about IT labor rates and IT wage increases over the next three years.

Using the primary research data, we estimated the amount of IT labor required to manage each system at various user counts: 500; 1,000; 5,000; 10,000 and 20,000 users. While the amount of IT labor involved in managing any email system will vary based on a variety of factors, we believe our estimates accurately reflect the bulk of organizations that would deploy any of the systems considered in this analysis.

The primary and secondary data were then used to develop a cost model that calculated for each user count:

- The number of servers required for each on-premises system
- The IT staffing requirements for each platform
- The annual hosting fees (where applicable)

TCO FOR LEADING EMAIL SYSTEMS

For obvious reasons, our research found that the TCO of both on-premises email systems and cloud-based solutions is dependent to a large degree on the number of users that are supported. For example, we found that:

- The TCO of some solutions is quite sensitive to user volumes (i.e., increasing user volumes will have a significant impact on overall TCO per user), while other solutions are less sensitive in this regard.
- Cloud-based solutions tend to have the least variability in TCO across user volumes because in-house labor represents such a small component of their overall TCO.

The monthly TCO for each of the solutions we analyzed is shown in the following figure and table.

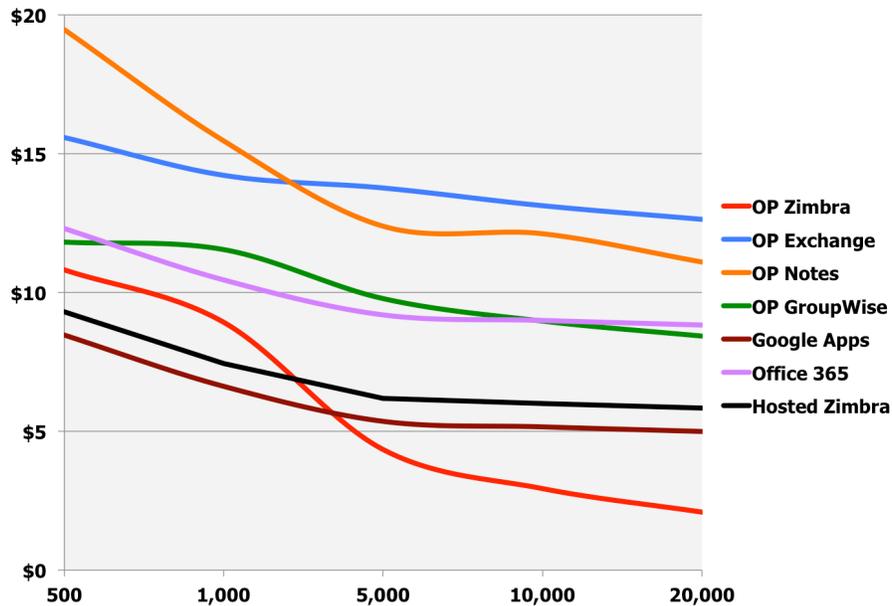
Figure 1
Monthly, Per User TCO for Various Email Solutions

System	500 Users	1,000 Users	5,000 Users	10,000 Users	20,000 Users
On-Premises Exchange	\$15.59	\$14.22	\$13.76	\$13.13	\$12.63
On-Premises GroupWise	\$11.82	\$11.55	\$9.78	\$8.97	\$8.43
On-Premises Notes	\$19.48	\$15.46	\$12.39	\$12.12	\$11.10
On-Premises Zimbra	\$10.82	\$8.93	\$4.34	\$2.94	\$2.09
Google Apps	\$8.46	\$6.62	\$5.36	\$5.16	\$4.99
Microsoft Office 365	\$12.29	\$10.45	\$9.19	\$8.99	\$8.83
Hosted Zimbra	\$9.29	\$7.45	\$6.19	\$5.99	\$5.83

Source: Osterman Research, Inc.

The TCO of some solutions is quite sensitive to user volumes (i.e., increasing user volumes will have a significant impact on overall TCO per user), while other solutions are less sensitive in this regard.

Figure 2
Monthly, Per User TCO for Various Email Solutions



Source: Osterman Research, Inc.

KEY ISSUES TO CONSIDER

There are a number of issues to consider when evaluating the TCO for any email solution. For example, some components that comprise TCO can have minor impacts on overall costs, while some will have much more significant impacts:

- **Labor requirements**

Unlike the cost of server hardware and software, the amount of IT labor required to manage an on-premises solution can have a significant impact on the overall TCO of an email system. For example, if on-premises Exchange required 25% more IT staff time to manage, the monthly cost of Exchange for 500 users would increase from \$15.59 to \$17.24 (an increase of 10.6%), and for 20,000 users the monthly cost would increase from \$12.63 to \$13.60 (an increase of 7.7%).

Clearly, minor changes in the amount of IT labor required to manage an email system can have much more impact than major changes in the cost of server hardware or software.

- **Labor rates in various geographies**

Our analysis assumed a fully burdened annual labor rate of \$100,000 per year for an email administrator, a relatively conservative assumption for many labor markets. However, if we were to use a fully burdened salary of \$130,000 – a more reasonable figure for a region like the San Francisco Bay Area or Manhattan in which employees are paid much more than the national average, the impact on TCO would have been substantial. For example, again using Exchange, the cost per user per month for on-premises Microsoft Exchange would increase from \$15.59 to \$17.57 for 500 users (an increase of 12.7%), and from \$12.63 to \$13.79 for 20,000 users (an increase of 9.2%).

- **Server hardware and software**

Server hardware and software typically have a minor impact on the overall TCO for email systems that are managed on-premises. The server hardware that we assumed in this analysis was a Dell PowerEdge 720 priced at \$4,259 per unit.

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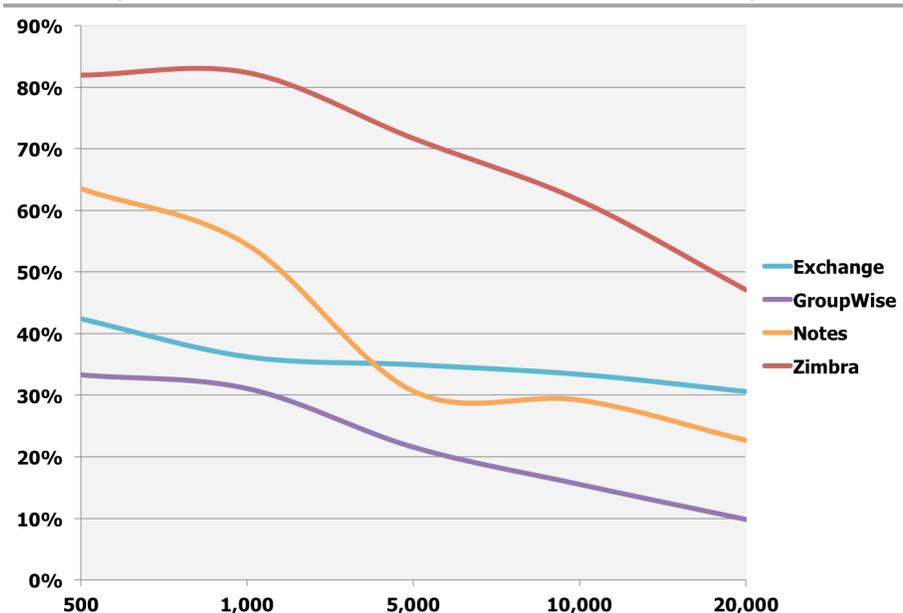
Demonstrating the relatively minor impact of server hardware costs, even if we tripled the price of this server with all other costs held the same, the impact on overall TCO would be relatively minor, particularly at higher user counts. For example, the cost per user per month for on-premises Microsoft Exchange would increase from \$15.59 to \$16.06 for 500 users (an increase of 2.0%), and from \$12.63 to \$12.80 for 20,000 users (an increase of 0.9%).

FOCUS ON LABOR, NOT INFRASTRUCTURE

What this reveals is that the server-related components of an on-premises email system will have a relatively minor impact on overall TCO. As a result, significant expenditures for robust and reliable hardware, clustering, disaster recovery and business continuity systems will have little impact on the total, multi-year TCO of email. If an organization opts to extend the life of its infrastructure to four or five years between major upgrades, then the impact of server hardware and server software will be reduced even further.

However, the time investments required to manage an on-premises email system, as well as labor rates, will have a more important impact on the overall TCO, although this depends to a large extent on the system under examination. For example, Zimbra is heavily influenced by IT labor investments and rates, as shown in the following figure, because the server hardware and other software is relatively inexpensive, while other systems (e.g., Exchange and Notes/Domino), require more expensive software licenses, and so their costs are more influenced by software licensing costs.

Figure 3
Percentage of Labor in Overall TCO for Various On-Premises Systems



Source: Osterman Research, Inc.

Another important issue for decision makers to keep in mind is that, for systems whose TCO is more influenced by labor costs, the location of a data center to support on-premises email systems is an important consideration. For example, organizations that build a private cloud using these systems can achieve better TCO by placing these data centers in regions with lower labor rates.

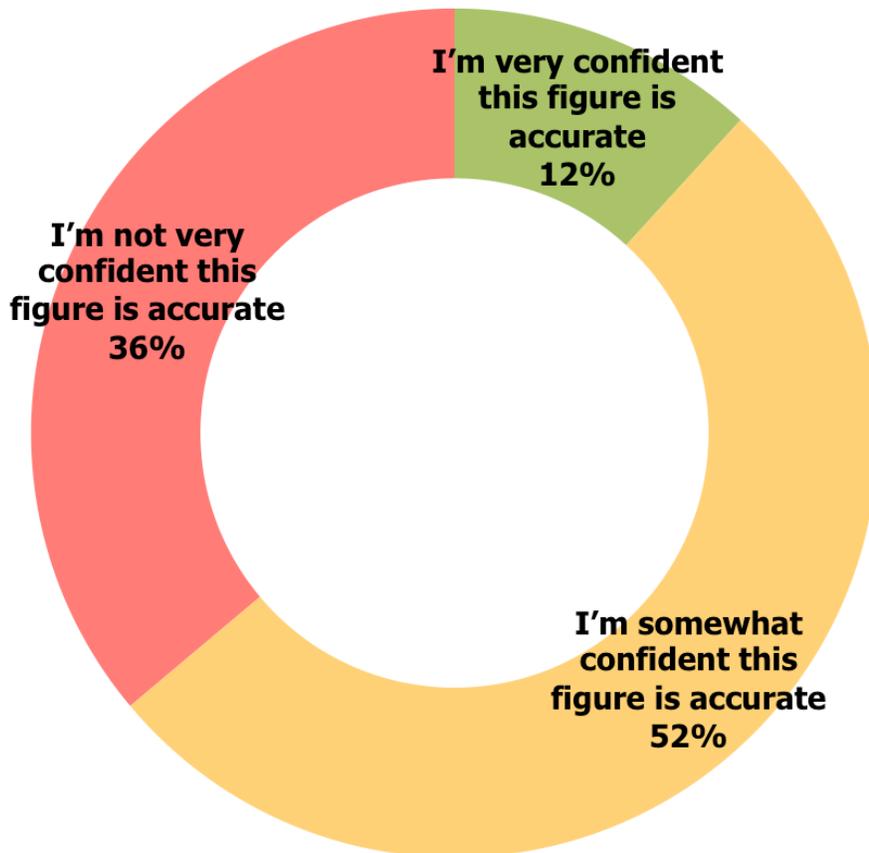
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BEST PRACTICES TO CONSIDER

UNDERSTAND THE ACTUAL TCO OF EMAIL

When considering the deployment of a new email system with the goal of reducing TCO, decision makers must fully understand the TCO of both their current system and the new system(s) they are considering. However, Osterman Research has found that email-focused decision makers and influencers often do not believe that they can accurately estimate the TCO of their current email system, as shown in the following figure.

Figure 4
Confidence in Estimates of Messaging Costs



Source: Osterman Research, Inc.

What this reveals is that many managers are making decisions about new email platforms without adequate information. They often cannot reliably estimate the cost of their current email platform and so cannot accurately estimate how a new system will impact TCO. A key area in which decision makers and influencers are not as well versed as perhaps they should be is overall contribution of IT labor to TCO, largely because without a chargeback mechanism in place, many decision makers do not have the tools available to determine the TCO of their current email system(s).

EVALUATE THE AVAILABLE OPTIONS

Another important consideration is for decision makers to carefully evaluate their deployment options for new messaging platforms. While on-premises solutions are the most common deployment model in most organizations, the cloud is growing in popularity. For example:

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- A 50-seat organization will typically be better served using a cloud-based solution because of its lack of dedicated IT staff and the much higher costs incurred by smaller organizations because they lack the economies of scale to drive costs per seat lower.
- A 1,000-seat organization, on the other hand, is large enough to hire its own IT staff and can support an on-premises email system, or it can be well served by a cloud-based email solution from a leading vendor.
- A very large organization, on the other hand, with a large headquarters operation and many field offices with only a handful of employees in each one, could deploy a hybrid email system in which on-premises infrastructure is deployed within the headquarters and a cloud-based solution is used to support the remote offices. Another alternative is to maintain servers on-premises, but deploy desktop email clients only for some users and Webmail for field offices and all other users. This approach – assuming that the Web client provides a snapshot of the cloud for offline use and does not require an always-on connection – can drive costs down because the system is maintained only at the server, and it can provide a robust and satisfying user experience.

The advantage of the hybrid approach – whether using a combination of on-premises and cloud-based services, or a combination of thick and Web clients – is that on-premises IT staff are not needed in locations that cannot afford them, nor is an office manager required to be the de facto “IT guy”.

Regarding the choice of on-premises, cloud-based or hybrid email solutions, there is no “right” answer that can be applied across all organizations. The issue must be determined based on TCO considerations, as well as how and which mail-enabled applications are used in an organization, the geographic distribution of employees, corporate initiatives for migrating to the cloud and other factors.

CONSIDER LONG-TERM REQUIREMENTS

Although TCO is an important consideration when selecting an email system, there are several other important factors that impact TCO less directly and so should also be involved in the decision-making process as organizations evaluate their email options:

- **How will email need to integrate with other capabilities?**
Another key consideration, somewhat related to the point above, is that email will need to integrate with other capabilities like text messaging, ERP, CRM, and other corporate applications. The choice of an email system will need to include how well that system can integrate with third-party capabilities to provide additional capabilities and more user efficiency. Systems that integrate easily with other capabilities will keep TCO low – systems that do not will result in higher TCO.
- **How will email be used over the next several years?**
Some believe that email is on its way out and that it will be replaced by other messaging tools as younger workers enter the workforce. Osterman Research strongly believes that is not the case. Instead, email – which is used about 160 minutes per day by the typical user – will evolve into more of a portal for email and other types of communication. For example, some email clients today allow social media and instant messaging to be used directly from within the email client itself. Email systems that permit this integration can lower TCO because they reduce the “friction” that can result when users must continually switch between interfaces to view their various modes of communication.

Consequently, Osterman Research believes that email will become something of a “clearinghouse” for various types of content. During the next few years, email will be managed via a combination of corporate policies and client-side rules that

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will determine how communications are managed, and that will decide the best mode to employ on a real time basis.

- **What will the computing environment look like long term?**

Another consideration is the long-term view of what the corporate computing environment will look like. Will it be based primarily in the cloud with only the highest value services managed on-premises? Will it continue to be managed primarily using in-house systems because IT prefers to keep key infrastructure elements behind the corporate firewall? Will basic capabilities be managed on-premises and more sophisticated services provided by cloud providers because of a lack of in-house expertise? Will the infrastructure remain on-premises but be managed by third parties remotely?

These are all questions that, in addition to direct TCO, will have an important bearing on which email system an organization should choose. For example, an inexpensive, on-premises email system might be migrated easily to a cloud model, or it could create disruption and require something akin to a “rip-and-replace” of the existing infrastructure. If the former, it will maintain the low TCO for which the system was adopted in the first place; if the latter, it could end up being more expensive than systems that today have a higher TCO.

In short, the key questions need to be these:

- What is the TCO of an email system today – the short term view of TCO, and,
- How adaptable is an email system to the future IT landscape – the long-term view of TCO?

CONCLUSION – WHY CONSIDER ZIMBRA?

Decision makers seeking an email system that offers low TCO should seriously consider Zimbra for several reasons:

- As discussed in this white paper, Zimbra offers a lower TCO than market leader Microsoft Exchange and other on-premises systems across all of the user ranges analyzed – for mid-sized organizations through large enterprises. This will result in significant savings for any size of organization. For example, an organization of 500 users will save more than \$28,000 annually by using on-premises Zimbra compared to on-premises Exchange, while an organization of 20,000 users will save nearly \$2.6 million annually.
- Zimbra offers an identical user experience when used via a browser interface or when using the free thick client available for Windows, OS X or Linux. This can lead to further reductions in TCO, since no training is required for users switching from one interface to the other, friction is not introduced for users switching back-and-forth between Web and thick clients on a regular basis, and any desktop operating system can be supported.
- Zimbra is available both as an on-premises system, as well as a cloud-based solution by a number of independent providers worldwide. This permits an organization to deploy Zimbra on-premises and later migrate to the cloud with relative ease, or vice versa. Moreover, it permits relatively seamless deployment of a hybrid system in which some users are served by on-premises infrastructure and others are served by cloud providers.
- Zimbra, founded in 2003, has a long track record of innovation and offers easy integration with third party applications. This enables TCO to remain low because new capabilities can easily be integrated into the Zimbra user experience,

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whether used with the thick client or via the Web.

ABOUT OSTERMAN RESEARCH, INC.

Osterman Research provides timely and accurate international market research, cost data, cost models, benchmarking information, white papers, Webinars and other services to technology-based companies. We do this by continually gathering information from IT decision-makers and end-users of information technology. We analyze and report this information to help companies develop and improve the products and services they offer to these markets or to internal customers.

Osterman Research has developed numerous cost models that compare and contrast the cost of various messaging solutions, including hosted/managed versus on-premises solutions.

Among the things that make Osterman Research unique is our market research panel: a large and growing group of IT professionals and end-users around the world with whom we conduct our research surveys. This allows us to conduct surveys quickly and accurately with very high response rates. We are continually developing our panel of IT professionals and end-users into one of the leading sources of information for companies that offer products and services in the IT space.

More information is available at <http://www.ostermanresearch.com/>.

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ⁱ Unpublished Osterman Research survey data, March 2014

ⁱⁱ Unpublished Osterman Research survey results, September 2011