

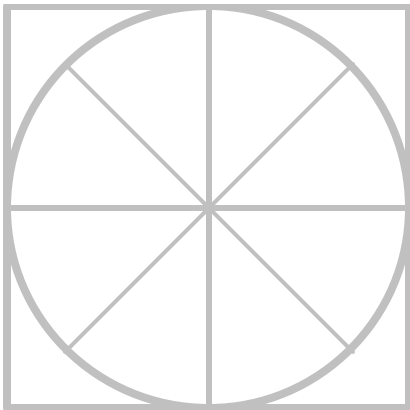
•
•
•
•
•
•
•

The Radicati Group, Inc.
595 Lytton Avenue
Palo Alto, CA 94301
Phone 650-322-8059
Fax 650-322-8061
<http://www.radicati.com>

The Radicati Group, Inc.

Mirapoint Message Server Total Cost of Ownership

• • • • • • • • • •



A White Paper
www.radicati.com

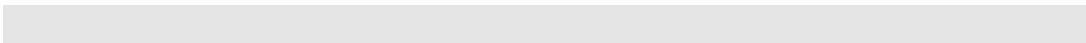


TABLE OF CONTENTS

1.0 Scope 2

2.0 Methodology..... 3

3.0 Executive Summary..... 4

4.0 Survey Sample 6

5.0 The Enterprise TCO Model..... 10

5.1 General Assumptions 11

6.0 Microsoft Exchange 2003 TCO..... 12

6.1 Acquisition Costs..... 13

6.2 Maintenance Costs 17

6.3 Administration Costs..... 18

6.4 Migration and Upgrade Costs 20

6.5 Storage Costs 21

6.6 Downtime Costs..... 23

6.7 Training Costs..... 24

6.8 Microsoft Exchange 2003 Total Cost of Ownership 25

7.0 Anti-Virus, Anti-Spam and Instant Messaging Use..... 28

8.0 Conclusions 29

9.0 Appendix A..... 31

Mirapoint Message Server Total Cost of Ownership

*An Assessment of the Acquisition and
Operational Costs of Mirapoint Message
Server in Enterprise Environments*

1.0 Scope

This analysis of the Total Cost of Ownership (TCO) of Mirapoint Message Server was conducted by The Radicati Group, Inc. in Q1 2004. The study provides extensive information on Mirapoint Message Server's acquisition costs, administration costs, downtime, staffing requirements and much more.

A total of 5 Global 1000 corporations were surveyed as part of this study.

In addition, the study also compares and contrasts the TCO of Mirapoint Message Server with Microsoft Exchange 2003. The TCO information on Microsoft Exchange 2003 is based on an earlier study conducted in December 2003 by The Radicati Group, Inc., "Microsoft Exchange 2003 Total Cost of Ownership." Key highlights from that study are re-printed here for ease of comparison between the two environments.

For simplicity's sake, this study uses the terms "Messaging" and "Messaging and Collaboration" interchangeably.

Sponsorship of the Study

This study was sponsored by Mirapoint.

2.0 Methodology

The data and analysis in this report is based on primary research conducted by analysts of The Radicati Group, Inc. in the form of a specially designed questionnaire administered by phone, email or in person. Respondents interviewed were largely senior managers, high level administrators, telecommunications managers, and IT managers knowledgeable about messaging and collaboration within each of the Enterprise organizations surveyed. A description of the survey population is provided in the Survey Profile section of this study. The full questionnaire used is included in Appendix A of this study.

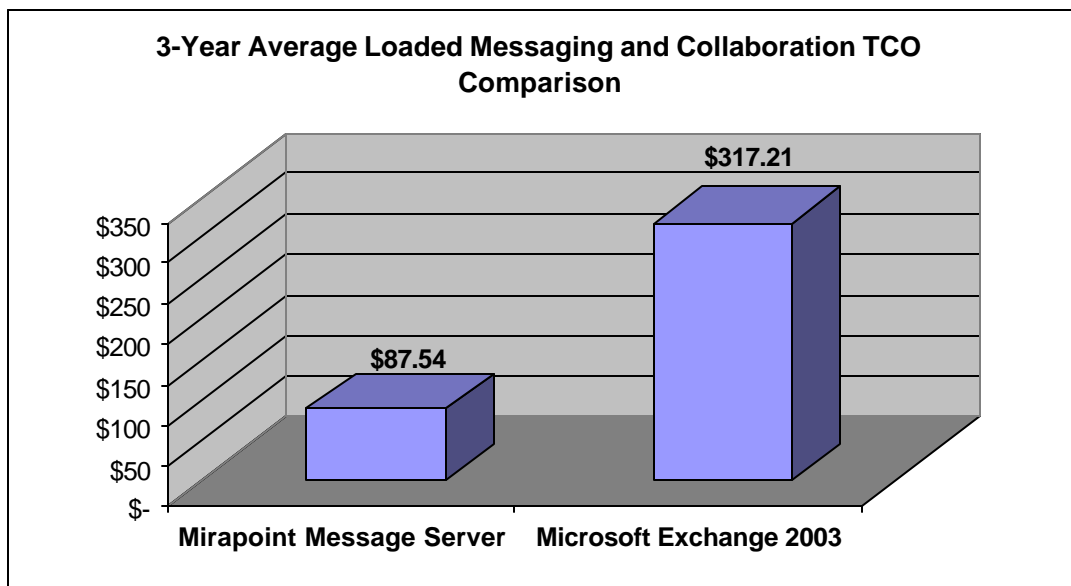
All financial information presented in this study is in US\$.

3.0 Executive Summary

- This Total Cost of Ownership study shows that Mirapoint Message Server offers a significant Total Cost of Ownership advantage over Microsoft Exchange 2003, on the order of 57%, or an approximately 3:1 cost advantage. There are cost advantages in all areas of cost, including Administration, Downtime and Training.
- Furthermore, this TCO study shows that when server hardware and storage costs are included (in the 'loaded' TCO analysis), in addition to comparing the client/server software costs, there is a 72% TCO savings for Mirapoint over Microsoft Exchange 2003.
- Mirapoint offers comprehensive, 'all-in-one' hardware/software solutions. These highly reliable turnkey systems are easily deployed and maintained, and offer significant performance benefits. This strategy of offering application-specific messaging appliances is a departure from the more traditional approach of selling hardware platforms and software separately.
- For this study, we surveyed 5 organizations which were provided as customer references by Mirapoint. These consist of:
 - Global 1000 corporations (100%)
- This study differentiates between:
 - i. *Messaging and Collaboration TCO* - which can be used to compare the cost-efficiency of different messaging and collaboration products in terms of client/server software.
 - ii. *Loaded Messaging TCO* - which includes Platform and Infrastructure (server hardware) costs, and can be used by companies to benchmark operating costs and understand the financial impact of platforms and the full infrastructure typically required for each product.
- The following table shows the Mirapoint Message Server Messaging and Collaboration TCO over a 3-year period.

Mirapoint Message Server Messaging and Collaboration Costs	Year 1	Year 2	Year 3
Messaging & Collaboration Acquisition Cost per User	\$ 15.47	N/A	N/A
Messaging & Collaboration Maintenance Cost per User	N/A	\$ 1.86	\$ 1.86
Administration Cost per User	\$ 8.32	\$ 8.32	\$ 8.32
Migration & Upgrades Cost per User	\$ 0.67	\$ 0.67	\$ 0.67
Storage Cost per User	\$ 3.80	\$ 3.80	\$ 3.80
Downtime Cost per User	\$ 26.26	\$ 26.26	\$ 26.26
Training Cost per User	\$ 0.06	\$ 0.06	\$ 0.06
Messaging and Collaboration TCO per User/ Year	\$ 54.58	\$ 40.97	\$ 40.97
3-Year Average Messaging and Collaboration TCO per User/ Year			\$ 45.51

- The study also compares and contrasts the TCO of Mirapoint Message Server to that of Microsoft Exchange 2003 from our December 2003 TCO Study “Microsoft Exchange 2003 Total Cost of Ownership.” The TCO information on Microsoft Exchange 2003 is based on an earlier study conducted in December 2003 by The Radicati Group using the same methodology.
- The figure, below, compares the 3-Year Average Loaded Messaging and Collaboration TCO per User/Year of Mirapoint Message Server with that of Microsoft Exchange 2003.



- Some other noteworthy conclusions from this research included:

- High levels of overall customer satisfaction with Mirapoint – rated on a scale of 1 to 5, 5 being the best. On average, Mirapoint customers were very satisfied with the Message Server, giving it a 4.1 out of 5.
- Prior to deploying the Mirapoint, 100% of customers had been running Microsoft Exchange. The overwhelming reason to switch to the Mirapoint was because customers felt that the prior system was too complex and required too much dedicated administration time.

4.0 Survey Sample

- The Mirapoint Message Server enterprise survey sample consists of 5 organizations which were provided as customer references by Mirapoint. It consists of:
 - Global 1000 corporations (100%)
- The organizations surveyed represent the following vertical industries:
 - food and beverages (40%),
 - telecommunications (20%),
 - manufacturing (20%),
 - travel and hospitality (20%).

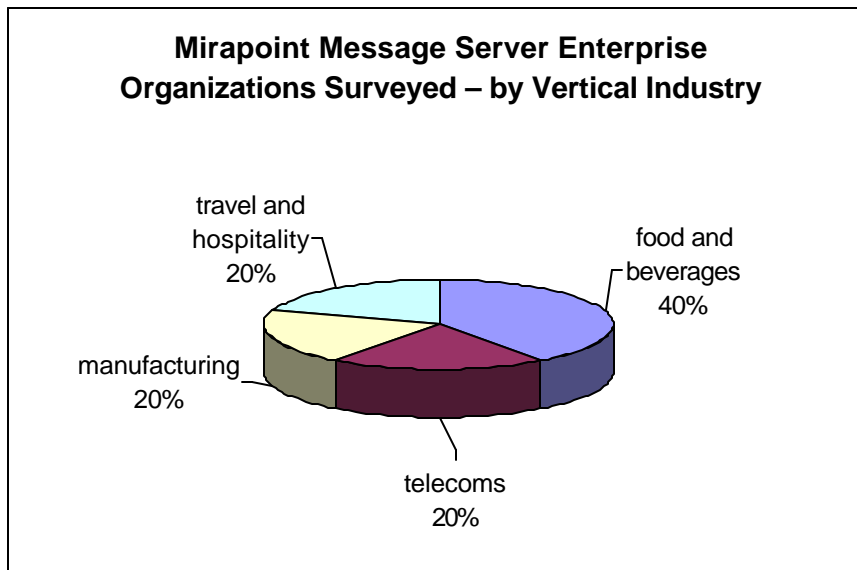


Figure 1: Mirapoint Message Server Organizations Surveyed – by Vertical Industry

- In terms of company size, the breakdown of the organizations surveyed is as follows:
 - 40% of the organizations surveyed are very large email deployments with more than 10,000 email users.
 - 60% of the organizations surveyed have less than 5,000 email users.

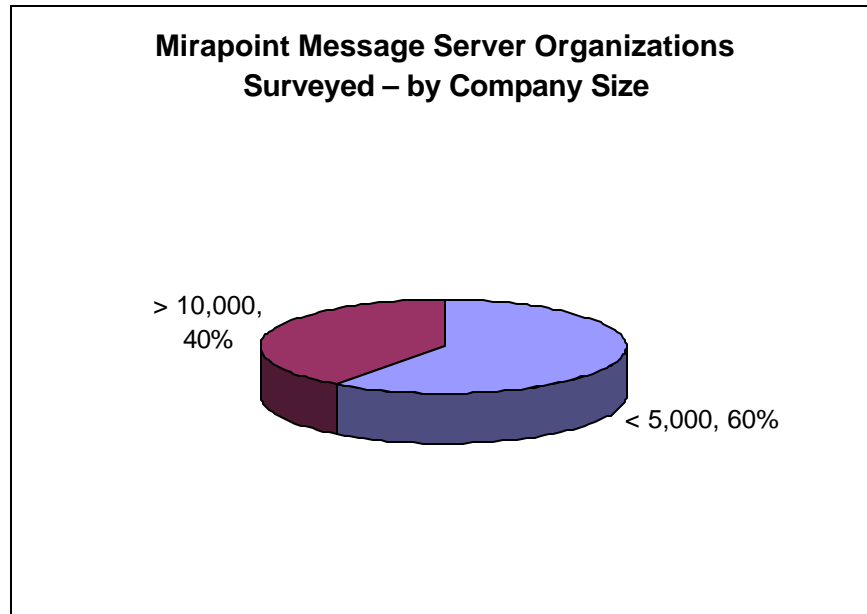


Figure 2: Mirapoint Message Server Organizations Surveyed – by Company Size

- In terms of geographic distribution, all 5 organizations surveyed were from North America.

4.1 Survey Sample of Microsoft Exchange 2003

- This study compares and contrasts the TCO of Mirapoint Message Server to that of Microsoft Exchange 2003. To that effect, we briefly summarize here the make-up of the Exchange 2003 survey sample used in that study.
- The Exchange 2003 survey sample from The Radicati Group, Inc.'s December 2003 TCO Study consisted of 4 organizations (3 Global 1000 organizations and 1 government organization) which were provided as customer references by Microsoft Corporation.
- The 4 organizations surveyed represented the following vertical industries:

- education (50%)
 - government (25%)
 - travel and hospitality (25%).
- In terms of company size, the 4 organizations surveyed were as follows:
 - 25% of the organizations surveyed are very large email deployments with more than 10,000 email users.
 - 75% of the organizations surveyed have between 5,000 and 10,000 email users.

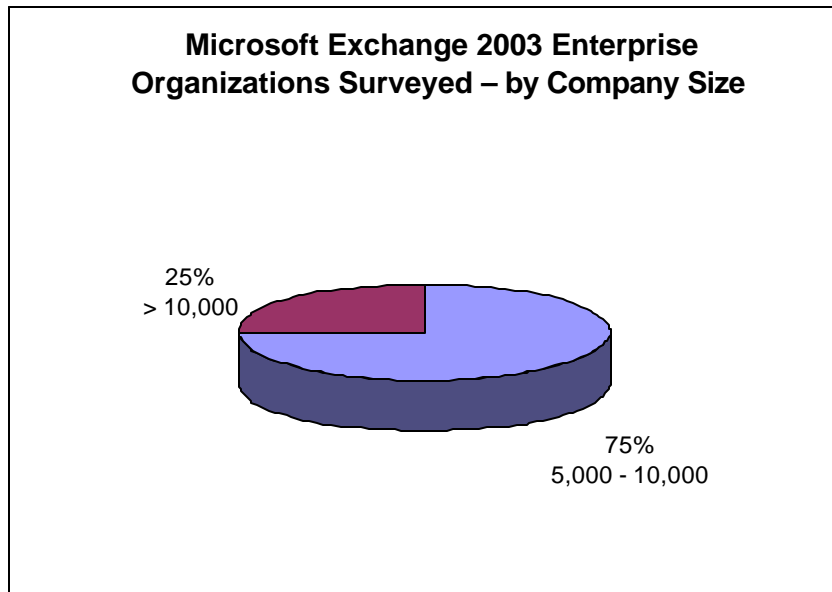


Figure 3: Microsoft Exchange 2003 Organizations Surveyed – by Company Size

- In terms of geographic distribution, the 75% of the organizations surveyed were from North America and 25% were from Western Europe.

5.0 Mirapoint Message Server Customer Feedback

- The 5 Mirapoint customers have deployed Mirapoint Message Server for an average of 3.3 years.
- Mirapoint customers indicated the following as reasons for deploying the Message Server:
 - Reliability,
 - Features and functionality,
 - Price,

Mirapoint Message Server Total Cost of Ownership

- Low TCO,
 - Scalability,
 - User-friendly.
- The majority of Mirapoint customers (40%) indicated that reliability was the primary reason for selecting and deploying the Message Server.
 - 20% of customers said that the Message Server's features and functionality were the primary reason for its deployment.
 - 20% gave its low TCO as the primary reason for deploying the Message Server.
 - 20% of customers indicated that they have deployed the Message Server mainly because of its high scalability.

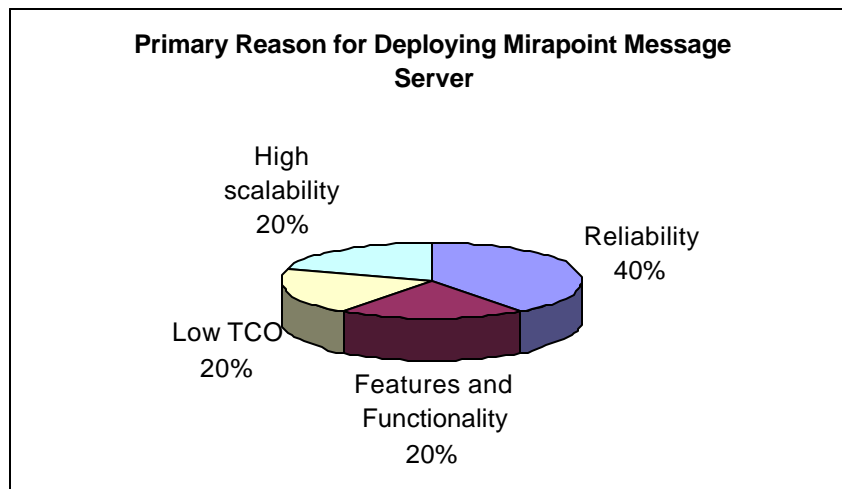


Figure 4: Primary Reason for Deploying Mirapoint Message Server

- We asked Mirapoint customers to rate their overall satisfaction with the Message Server on a scale of 1 to 5, 5 being the best. On average, Mirapoint customers were very satisfied with the Message Server, giving it a 4.1 out of 5.
- Prior to deploying the Mirapoint Message Server, 100% of customers had been running Microsoft Exchange. The overwhelming reason to switch to the Message Server was because customers felt that the prior system was too complex and required too much dedicated administration time.

6.0 The Enterprise TCO Model

The Radicati Group's Messaging and Collaboration Total Cost of Ownership Model for Enterprises has been built to assist organizations in assessing the effectiveness of their systems, reduce costs and make better decisions on how to invest time and money.

The Enterprise TCO model used in this study is exactly the same as that used in our previous studies, as well as our December 2003 TCO study "Microsoft Exchange 2003 Total Cost of Ownership".

The model looks at the following key components of cost:

- ***Acquisition Costs*** - Acquisition Costs refer to the costs of purchasing all the hardware and software which makes up the Messaging and Collaboration Environment. In measuring acquisition costs within enterprise environments, we look at costs along two lines:
 - *Messaging and Collaboration Software Acquisition Costs* - which allows us to compare products.
 - *Platform and Messaging Infrastructure Acquisition Costs* - which gives an idea of what organizations are actually spending to provide messaging and collaboration to their employees.
- ***Maintenance Costs*** - These comprise the cost of yearly support contracts for all hardware and software components. Similarly to Acquisition Costs, Maintenance Costs can be looked at along two dimensions:
 - *Messaging and Collaboration Software Maintenance.*
 - *Platform and Messaging Infrastructure Maintenance.*
- ***Administration Costs*** - These include a series of tasks, on-going as well as corrective, performed by Messaging Administrators to ensure the efficient update and operation of the messaging system.
- ***Migration and Upgrade Costs*** - Migration and upgrades represent a major cost component in most enterprise organizations. For the purpose of this model, we are assuming 1 major upgrade a year, and 2 minor upgrades a year. This is in line with what most organizations have told us

in this survey, as well as many other corporate surveys which we have undertaken in the past two years.

- **Storage Costs** – Storage Costs represent the cost of email storage per user per year. This can vary greatly among organizations, and even within the same organization, with different tiers of users being allotted different amounts of storage space.
- **Downtime Costs** - These include any lost productivity caused by failure (i.e. downtime) of the messaging systems. These include both scheduled and unscheduled downtime.
- **Training Costs** - These include training costs for Messaging Administrators, and Help Desk Staff.

6.1 General Assumptions

All financial information shown in this study is in US\$, unless explicitly noted.

The TCO model used in this study makes the following assumptions regarding salaries:

- \$60/hour for Full-Time Messaging Administrators fully loaded (i.e. includes overhead, benefits, taxes etc.), or \$124,800/year.
- \$60/hour for Part-Time Messaging Administrators fully loaded (i.e. includes overhead, benefits, taxes etc.), or \$124,800/year.
Note: Often, the salary of a Part-Time Messaging Administrator is lower than that of a Full-Time Messaging Administrator, but for simplicity's sake, our model assumes that they have the same salary.
- \$30/hour for Help Desk Staff fully loaded (i.e. includes overhead, benefits, taxes etc.), or \$62,400/per year.
- \$35/hour for Messaging Users fully loaded (i.e. includes overhead, benefits, taxes etc.), or \$72,800/per year.

7.0 Mirapoint Message Server TCO

Mirapoint environments analyzed in this study are running Mirapoint Message Server with either Mirapoint’s proprietary Messaging Operating System (MOS) 3.3 or 3.4.

Mirapoint deployments have an average of 6,124 messaging users, deployed over an average of 5 servers. This yields an average 1,225 users per server; however, the average maximum number of users per server was 3,456.

Enterprises running Mirapoint Message Server are somewhat distributed with about 35% of messaging users connecting from remote locations to do their work.

In terms of directory services, the organizations are relying on Mirapoint’s LDAP-based Directory Server for messaging and collaboration.

On average, enterprises deploying Mirapoint Message Server have 0.28 full time messaging administrators, 0.02 part-time administrators and 2.12 help desk staff.

Messaging and Collaboration Staff	Mirapoint Message Server
FT Administrators	0.28
PT Administrators (i.e. 50% of time or less)	0.02
Help Desk Staff	2.12

Table 1: Mirapoint Message Server Staffing Chart

The following table compares the Messaging and Collaboration staffing of Mirapoint Message Server with that of Microsoft Exchange 2003.

Messaging and Collaboration Staff	Mirapoint Message Server	Microsoft Exchange 2003
FT Administrators	0.28	1.88
PT Administrators (i.e. 50% of time or less)	0.02	1.75
Help Desk Staff	2.12	9.75

Table 2: Staffing Chart Comparison between Mirapoint Message Server and Exchange 2003

In terms of security products, Mirapoint’s organizations surveyed indicated that they are using Sophos Anti-Virus for virus control.

7.1 Acquisition Costs

Mirapoint offers comprehensive, 'all-in-one' hardware/software solutions. These highly reliable turnkey systems are easily deployed and maintained, and offer significant performance benefits. This strategy of offering application-specific messaging appliances is a departure from the more traditional approach of selling hardware platforms and software separately.

Designed for service providers and enterprises, Message Server is a robust, scalable, carrier-grade solution. Message Server operates on Mirapoint's proprietary Messaging Operating System (MOS), which seamlessly integrates between hardware and software components. MOS is delivered as a single system image, enabling turnkey messaging service deployment and quick system upgrades via download.

Mirapoint built Message Server to offer 99.999% reliability, even in highly demanding environments. Redundant hardware, power supplies, cooling fans and RAID controllers reduce the potential for downtime due to component failure. The automatic embedded hardware 'watchdog' monitors system performance, and re-boots the system in the event a failure occurs. A clustering option, which includes a hot stand-by redundant system, is also available.

Organizations can expect to pay \$33 per user for a Mirapoint MOS client license that includes POP, IMAP, Webmail & Group Calendar. This price includes additional anti-virus and anti-spam security protection on top of the basic client license.

If applicable, organizations can also expect to pay \$57 for an Exchange 2003 CAL, which includes rights to the Outlook 2003 CAL, as well as Outlook Web Access, Outlook Mobile Access and Exchange Server ActiveSync.

Other costs include the cost of the client desktop platform, and any additional infrastructure costs such as: bandwidth, firewalls, storage systems, support, administration, etc.

To obtain a full understanding of the total cost of messaging and collaboration for organizations, we also looked at the Loaded Messaging and Collaboration Acquisition costs, which include the following cost components:

- The cost of the computing platform (both hardware and software) used for messaging and collaboration.
- The share of the client desktop platform (both hardware and software)

attributed to messaging and collaboration.

- The cost of any additional network infrastructure, such as: network bandwidth, firewalls, supplies of media, including all labor required to support these, etc.

The average cost of the client desktop PC in the surveyed Mirapoint customer environments was \$1,200.

In this study, we look at Acquisition Costs along 2 lines:

1. Messaging and Collaboration Acquisition Costs, which allow us to compare different messaging and collaboration products. The Messaging and Collaboration Acquisition Cost per User for Mirapoint Message Server is \$15.47.
2. Platform and Infrastructure Acquisition Costs, which gives an idea of the total amount which organizations are spending to provide messaging and collaboration to their employees. The Platform and Infrastructure Acquisition Cost per User for Mirapoint Message Server is \$101.69.

Acquisition Costs for Mirapoint Message Server in the environments we surveyed are as follows:

Mirapoint Message Server Total Cost of Ownership

Acquisition Costs	Quantity	Price	Mirapoint Message Server	
Number of Users	6,124			
Number of Servers	5			
Messaging and Collaboration Acquisition				
Messaging and Collaboration Server Software:			included	N/A
Messaging and Collaboration Client Software:				
40% Outlook Express	2,450	\$ 0	\$	0
15% Microsoft Outlook/OWA CAL	918	\$ 57	\$	52,326
24% Eudora	1,470	\$ 0	\$	0
21% Webmail/POP/IMAP	1,286	\$ 33	\$	42,438
Total			\$	94,764
Messaging and Collaboration Acquisition Cost/User			\$	15.47
Platform and Infrastructure Acquisition				
Total Messaging Server Platform Cost (Hardware and OS)	5	\$ 3,928	\$	19,640
Client Desktop Platform (Hardware and OS)	6,124	\$ 1,200		
% Attributed to Messaging	5%	\$ 7,349,280*	\$	367,464
Any Additional Infrastructure: bandwidth, firewalls, storage systems, support and administration, etc.			\$	135,664
Total			\$	622,768
Platform and Infrastructure Acquisition Cost/User			\$	101.69

*Note: This figure is the cost of the Desktop Platform (\$1,200) multiplied by 6,124 users.

**Note: All prices assume volume discounts.

Table 3: Acquisition Costs for Mirapoint Message Server

Figures 5 and 6, compare the Acquisition Costs of Mirapoint Message Server to Exchange 2003. While Exchange 2003 has a relatively higher Acquisition Cost than Mirapoint, it is important to note that there is great variance in the number of users and servers between the environments surveyed, as well as in the Acquisition pricing models. Microsoft customers have to pay for both server and client license fees, on top of messaging server platform costs (hardware and OS).

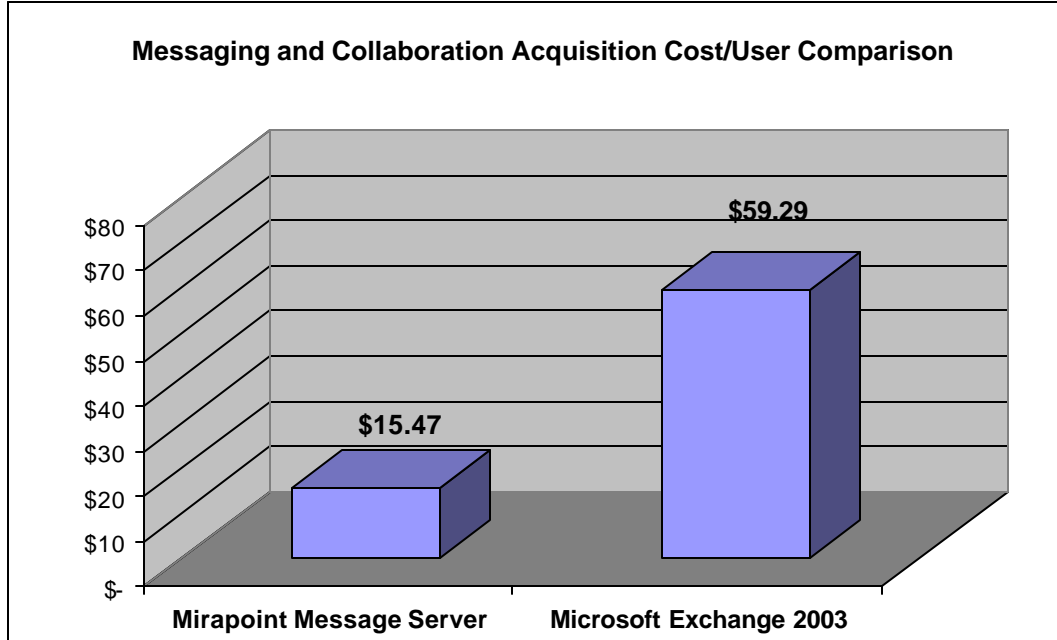


Figure 5: Messaging and Collaboration Acquisition Cost/User Comparison between Mirapoint Message Server and Exchange 2003

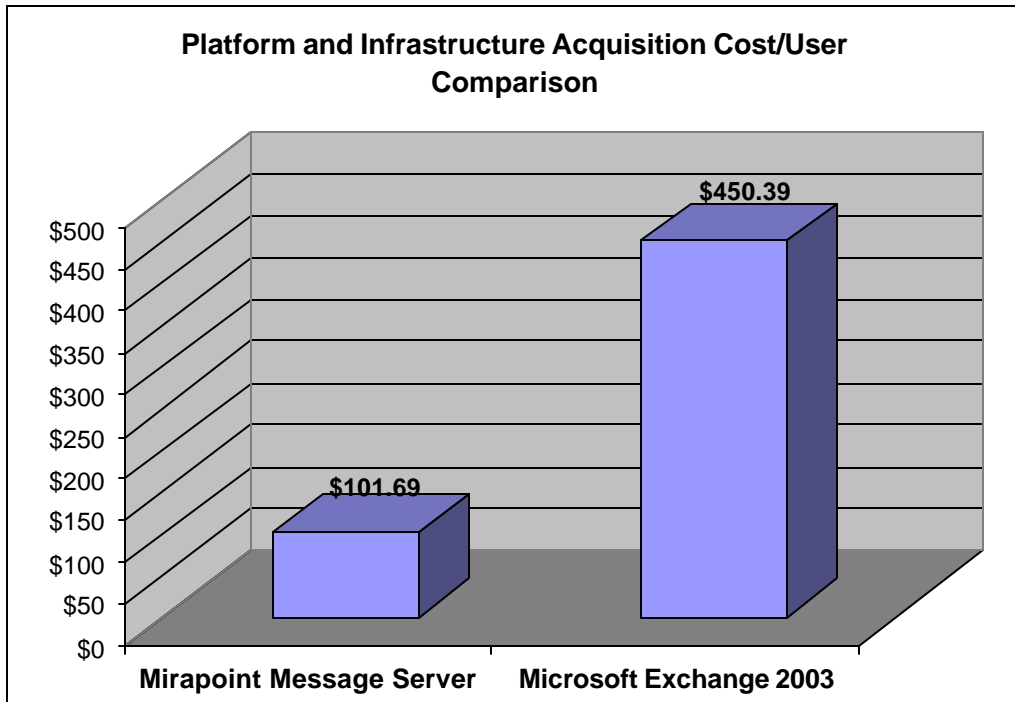


Figure 6: Platform and Infrastructure Acquisition Costs Comparison between Mirapoint Message Server and Exchange 2003

7.2 Maintenance Costs

Maintenance costs for messaging and collaboration for Mirapoint Message Server are based on the following cost components:

- Maintenance of the Messaging and Collaboration Software, which for Mirapoint Message Server is \$1.86 per user per year, and includes MOS updates and phone/email support.
- Maintenance of the Share of Computing Platform and Infrastructure Maintenance, which for Mirapoint Message Server is \$12.20 per user per year.

Maintenance Costs for Mirapoint Message Server per user per year are as follows:

Maintenance Costs	Quantity	Price	Mirapoint Message Server
Messaging and Collaboration Maintenance			
Server Software Maintenance	12%	included	N/A
Client Software Maintenance	12%	\$ 94,764	\$ 11,372
Total			\$ 11,372
Messaging and Collaboration Maintenance Cost/User			\$ 1.86
Platform and Infrastructure Maintenance			
Messaging Server Platform Maintenance (HW and OS)	12%	\$ 119,640	\$ 14,357
Client Desktop Platform Maintenance (HW and OS)	12%	\$ 367,464	\$ 44,096
Additional Infrastructure Maintenance	12%	\$ 135,664	\$ 16,280
Total			\$ 74,733
Platform and Infrastructure Maintenance Cost/User			\$ 12.20

Table 4: Maintenance Costs for Mirapoint Message Server

The following figures compare the Maintenance Costs of Mirapoint Message Server to Exchange 2003. Microsoft environments surveyed were using a slightly more expensive platform, which increases their overall costs when looking at the full Platform and Infrastructure Acquisition cost. This ultimately increases their Maintenance costs which are a percentage of the Acquisition costs.

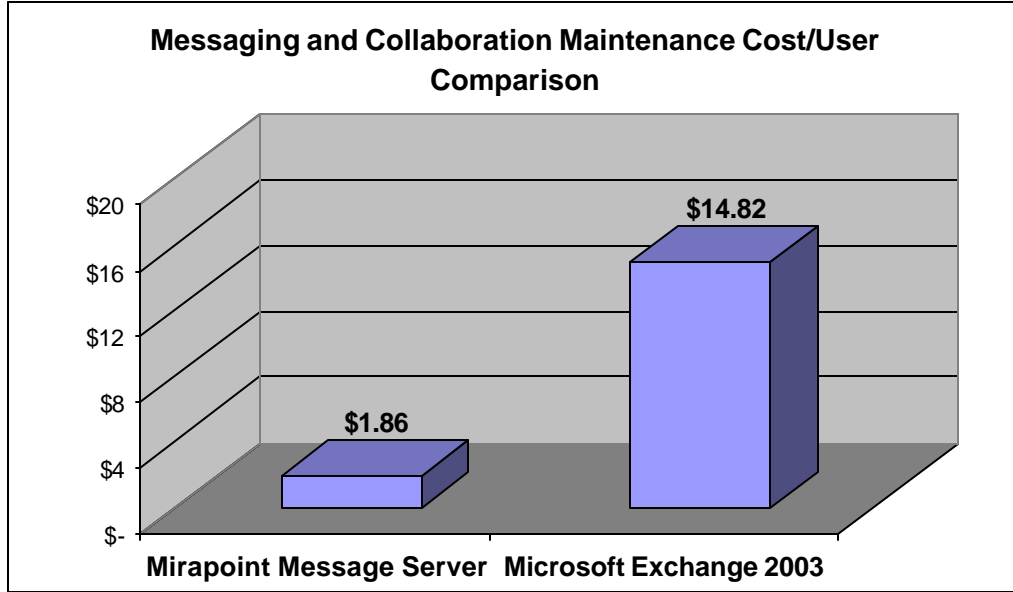


Figure 7: Messaging and Collaboration Maintenance Cost/User Comparison between Mirapoint Message Server and Exchange 2003

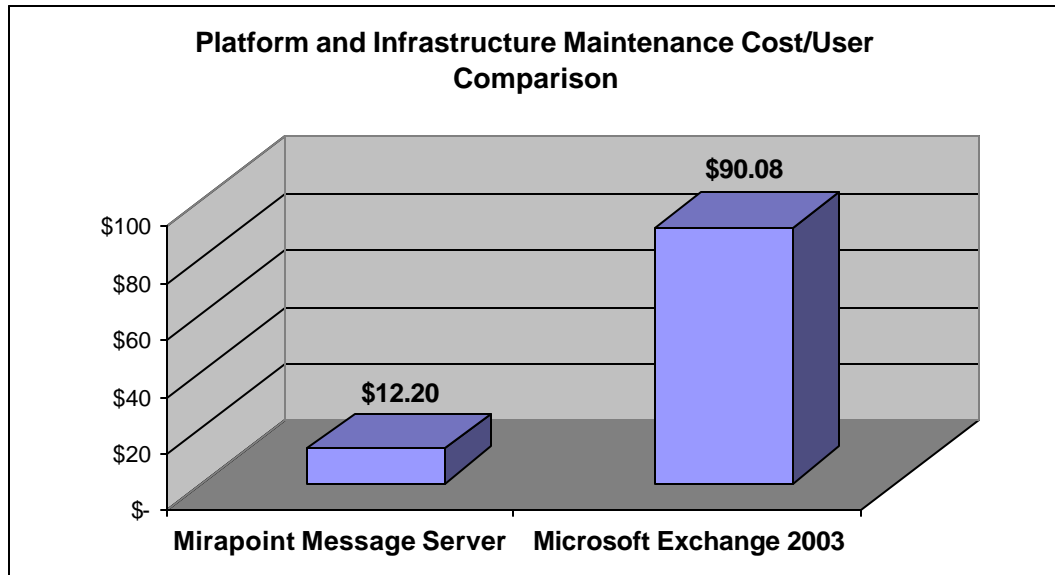


Figure 8: Platform and Infrastructure Maintenance Cost/User Comparison between Mirapoint Message Server and Exchange 2003

7.3 Administration Costs

The complete integration of hardware and software components simplifies the administration of Message Server. Mirapoint Message Server can be deployed in only minutes. A variety of user-friendly interfaces and administration tools reduce the complexity of administration, even in demanding environments with many users.

Mirapoint Message Server Total Cost of Ownership

Message Server also offers optional anti-virus and anti-spam protection that are enabled with the purchase of a user key.

Administration Costs for Mirapoint Message Server are \$8.32 per user per year, as follows:

Administration Costs	No. of Administrators	Total Hours Per Week (for ALL administrators)	Salary per Hour	No. of Weeks	Mirapoint Message Server
adding/deleting users	0.29	0.93	\$60.00	52	\$ 2,902
managing distribution lists	0.29	0.30	\$60.00	52	\$ 936
managing access controls	0.29	0.00	\$60.00	52	\$ 0.00
managing user passwords	0.29	0.93	\$60.00	52	\$ 2,902
performing backup and restores	0.29	2.60	\$60.00	52	\$ 8,112
administering web-access mail	0.29	0.00	\$60.00	52	\$ 0.00
administering rich clients	0.29	1.62	\$60.00	52	\$ 5,054
administering security features	0.29	0.40	\$60.00	52	\$ 1,248
administering rules and filters	0.29	2.10	\$60.00	52	\$ 6,552
directory management	0.29	0.60	\$60.00	52	\$ 1,872
administrating remote client access	0.29	0.02	\$60.00	52	\$ 62
managing messaging-based applications	0.29	0.43	\$60.00	52	\$ 1,342
end-user support issues	0.29	4.70	\$60.00	52	\$ 14,664
administering anti-virus controls	0.29	0.80	\$60.00	52	\$ 2,496
administering anti-spam controls	0.29	0.90	\$60.00	52	\$ 2,808
Total		16.33			\$ 50,950
Administration Cost/User					\$ 8.32

**Note: The 0.29 administrators comprises all 0.28 of the Full-Time Messaging Administrators, and 50% of the 0.02 Part-Time Messaging Administrators, which yields 0.28+0.01=0.29 total Messaging Administrators.*

Table 5: Administration Costs for Mirapoint Message Server

The following figure compares the Administration Cost of Mirapoint Message Server to Exchange 2003.

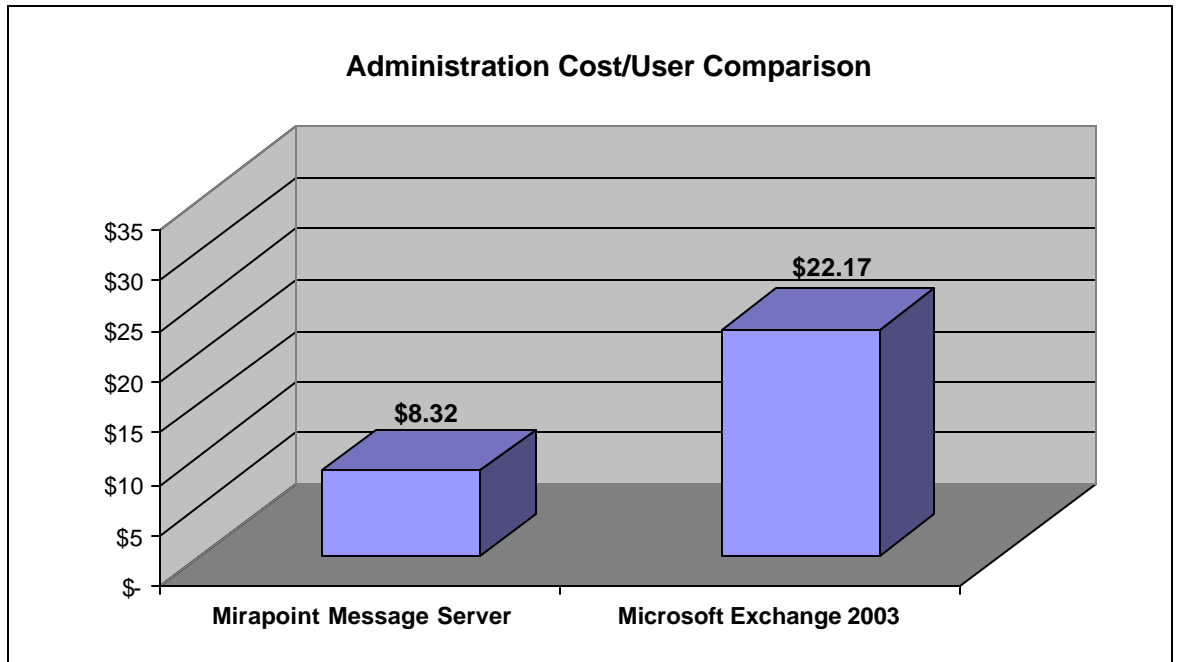


Figure 9: Administration Cost/User Comparison between Mirapoint Message Server and Exchange 2003

7.4 Migration and Upgrade Costs

In this study, we assume 1 major upgrade and 2 minor upgrades per year. Upgrade expenses include mainly the time of administrators to install, test and reconfigure various aspects of their environments. All the organizations which we surveyed indicated they spend a great deal of their time on a yearly basis on migration and upgrade tasks, regardless of the products deployed.

It is worth noting that the administrators which we interviewed had a slightly different interpretation of migration and upgrades than vendors do. Essentially while vendors anticipate the need for migration when there is a new major or minor software release, administrators in our survey used the term “migration and upgrade” to denote any type of transition in their current environments. This accounts for the fact that even environments, which last released a major software upgrade some time ago, or were only recently released, indicated they were spending a great deal of their time on migration and upgrades.

The key issue we were striving to measure was not how often upgrades take place, but rather how long it takes to carry out upgrades. How long it takes to carry out

upgrades is a reflection of how flexible the messaging environment is, and how well designed the administrative tools are.

Migration and Upgrade Costs for Mirapoint Message Server are \$0.67 per user per year, as follows:

Migration & Upgrade Costs	No. of Administrators	Hours / Year (ALL administrators)	Quantity Affected	Salary per Hour	Mirapoint Message Server
Major Upgrades (HW and SW)	0.29	38	1	\$ 60.00	\$ 2,280
Minor Upgrades (HW and SW)	0.29	15	2	\$ 60.00	\$ 1,800
Total					\$ 4,080
Migration & Upgrade Cost/User					\$ 0.67

Table 6: Migration and Upgrade Costs for Mirapoint Message Server

Figure 10, below, compares the Migration and Upgrade Cost of Mirapoint Message Server to Exchange 2003.

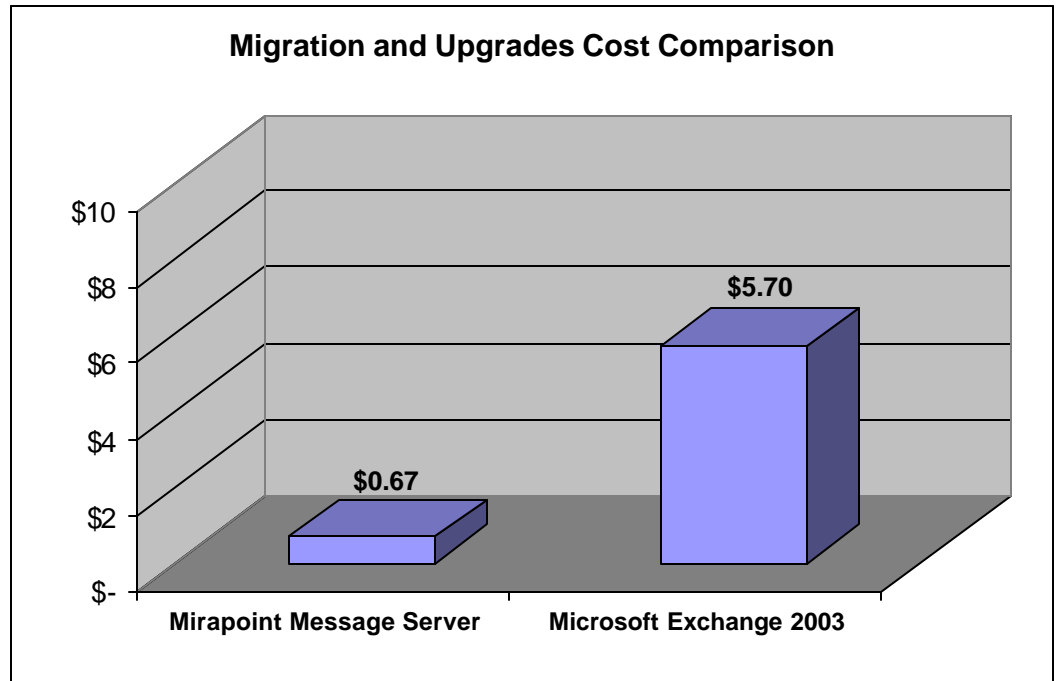


Figure 10: Migration and Upgrade Cost/User Comparison between Mirapoint Message Server and Exchange 2003

7.5 Storage Costs

Mirapoint Message Server customers surveyed indicated they are spending an average of \$0.13/MB for storage. In order to provide a fair comparison, we

assumed an equal amount of storage per user (i.e. 30MB) for all the environments surveyed, but we varied the cost of storage based on the cost per MB which was provided by the customers we surveyed.

Mirapoint Message Server Storage Costs are \$3.80 per user per year, as follows:

Storage Costs	Storage/User (MB)	Cost/MB	Mirapoint Message Server
Storage allocated/user (MB)	30	\$0.13	\$ 3.80
Storage Cost/User			\$ 3.80

Table 7: Storage Costs for Mirapoint Message Server

The following figure compares the Storage Cost of Mirapoint Message Server to Exchange 2003.

Based on the cost per MB it is clear that organizations are also deploying very different quality of storage devices. Storage costs varied greatly among the organizations surveyed. Exchange 2003 environments averaged \$0.35/MB for storage. Also, the average storage size per user and storage management policies varied greatly among organizations.

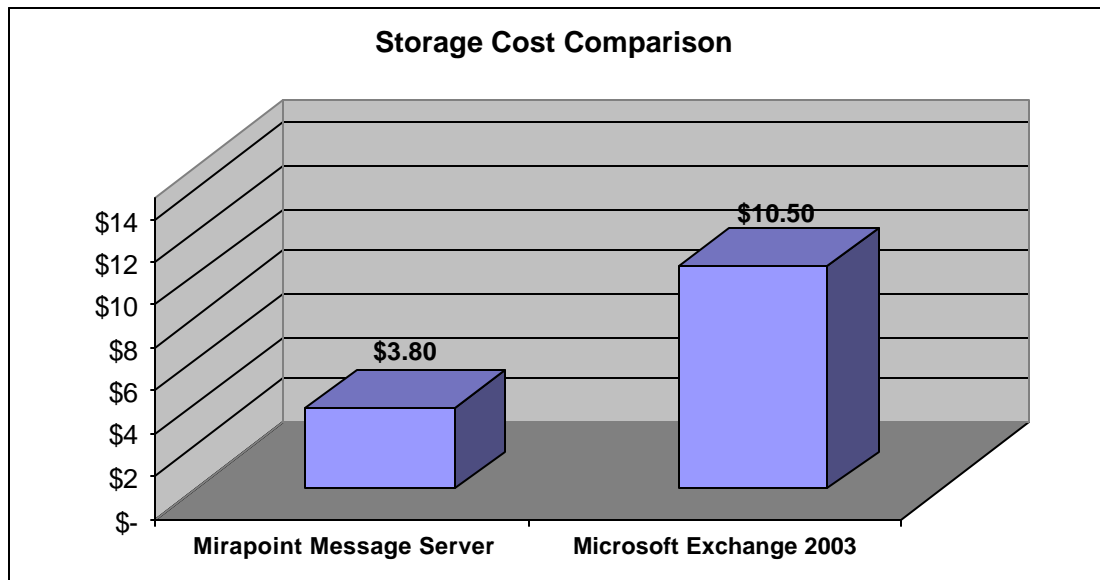


Figure 11: Storage Cost/User Comparison between Mirapoint Message Server and Exchange 2003

7.6 Downtime Costs

Downtime is a reflection of the level of on-going maintenance required by each product (i.e. scheduled downtime), as well as the robustness of each product (i.e. un-scheduled downtime). Downtime Costs also include any lost productivity caused by failure of the messaging systems.

Two key factors contribute the most to the level of downtime:

- The relative newness of a product or release, which of course makes it more prone to failures and maintenance in the early months of production deployment.
- The number of users in the environments surveyed, since our TCO model assumes that un-scheduled downtime affects 25% of the total user population, the larger the population size the greater the financial impact of any un-scheduled downtime.

Mirapoint Message Server Downtime Costs are \$26.26 per user per year, as follows:

Downtime Costs	Avg. Hours/Month	Affected Personnel	No. of Months	Hourly Salary	Mirapoint Message Server
Un-scheduled Downtime (affects 25% of population)	0.25	1,531	12	\$ 35.00	\$ 160,755
Scheduled Downtime	0.25	0.29	12	\$ 60.00	\$ 52
Total					\$ 160,807
Downtime Cost/User					\$ 26.26

Table 8: Downtime Costs for Mirapoint Message Server

Figure 12, below, compares the Downtime Costs of Mirapoint Message Server to Exchange 2003.

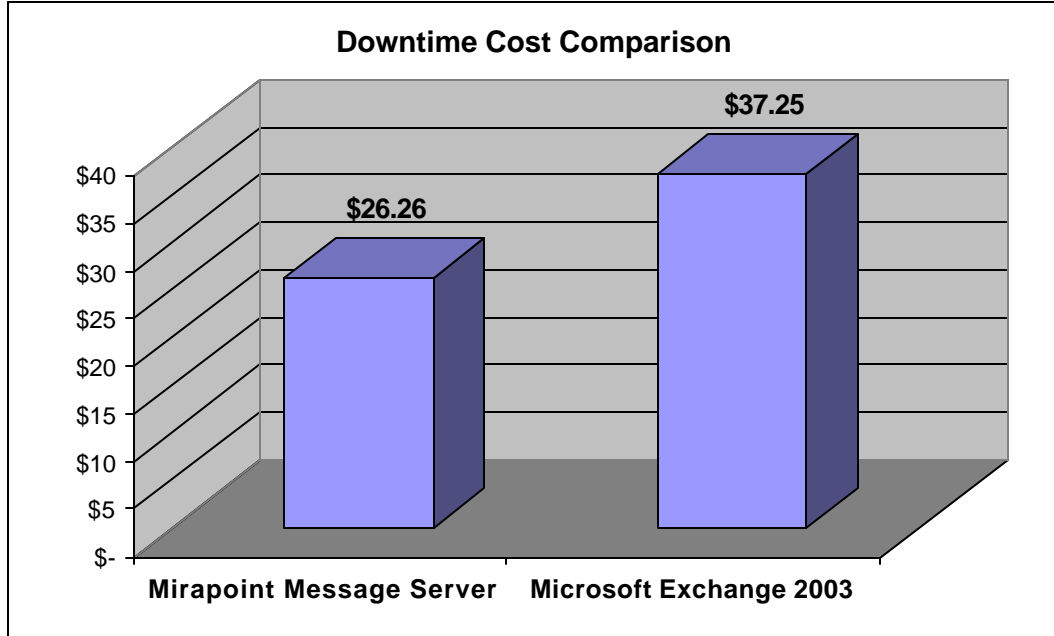


Figure 12: Downtime Costs Comparison between Mirapoint Message Server and Exchange 2003

7.7 Training Costs

Training costs include training for all Messaging Administrators, and Help Desk Staff.

Mirapoint Message Server Training Costs are \$0.06 per user per year, as follows:

Training (Yearly) Costs	Avg. Hours/Year	Affected Personnel	Hourly Salary	Mirapoint Message Server
Messaging Administrators	14.8	0.29	\$ 60.00	\$ 258
Help Desk Staff	2.0	2.12	\$ 30.00	\$ 127
Total Yearly Cost				\$ 385
Training Cost/User				\$ 0.06

Table 9: Training Costs for Mirapoint Message Server

Figure 13, below, compares the Training Costs of Mirapoint Message Server to Exchange 2003. Training costs serve to gauge how easy the system is for administrators to learn and become proficient in.

Exchange 2003 Training Costs tend to be lower than most other messaging and collaboration systems as many administrators are already used to running Exchange systems, which has been on the market for a number of years. However, Mirapoint has been taking care to ensure its Message Server is as intuitive and user-friendly as possible, which is evident in its low training cost compared to Exchange 2003.

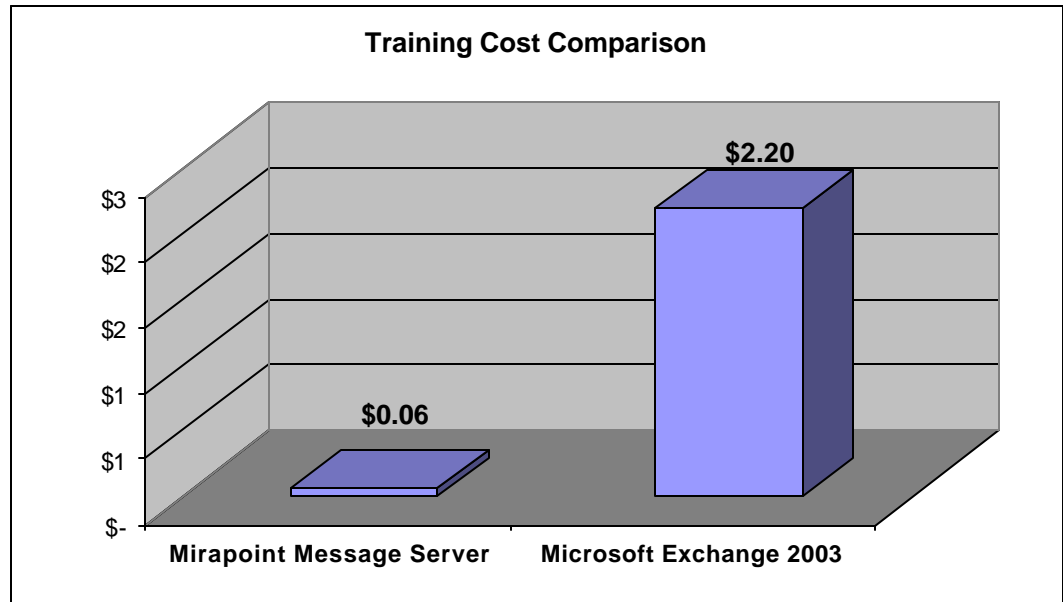


Figure 13: Training Costs Comparison between Mirapoint Message Server and Exchange 2003

7.8 Mirapoint Message Server Total Cost of Ownership

Mirapoint Message Server’s Messaging and Collaboration TCO over a 3-year period is as follows:

Mirapoint Message Server Messaging and Collaboration Costs	Year 1	Year 2	Year 3
Messaging & Collaboration Acquisition Cost per User	\$ 15.47	N/A	N/A
Messaging & Collaboration Maintenance Cost per User	N/A	\$ 1.86	\$ 1.86
Administration Cost per User	\$ 8.32	\$ 8.32	\$ 8.32
Migration & Upgrades Cost per User	\$ 0.67	\$ 0.67	\$ 0.67
Storage Cost per User	\$ 3.80	\$ 3.80	\$ 3.80
Downtime Cost per User	\$ 26.26	\$ 26.26	\$ 26.26
Training Cost per User	\$ 0.06	\$ 0.06	\$ 0.06
Messaging and Collaboration TCO per User/ Year	\$ 54.58	\$ 40.97	\$ 40.97
3-Year Average Messaging and Collaboration TCO per User/ Year			\$ 45.51

Table 10: Mirapoint Message Server Messaging and Collaboration TCO per User per Year

Mirapoint Message Server’s 3-Year Messaging and Collaboration TCO comes up to an average of \$45.51 per user per year for an organization of 6,124 users.

Figures 14 and 15, below, show the Year 1 Messaging and Collaboration TCO per User/Year and the 3-Year Average Messaging and Collaboration TCO per User/Year of Mirapoint Message Server and Exchange 2003.

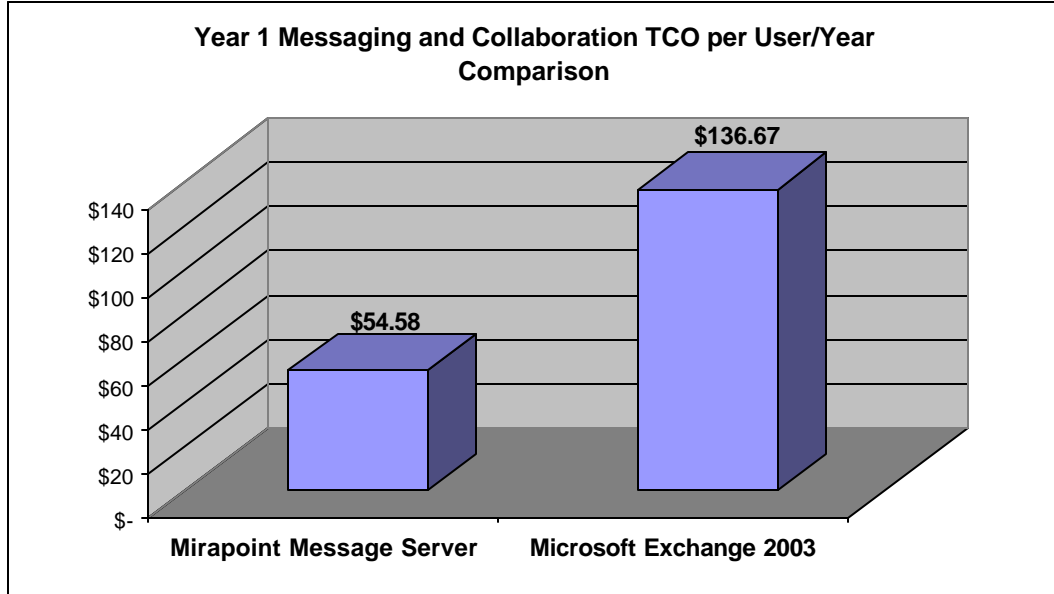


Figure 14: Year 1 Messaging and Collaboration TCO per User/Year Comparison between Mirapoint Message Server and Exchange 2003

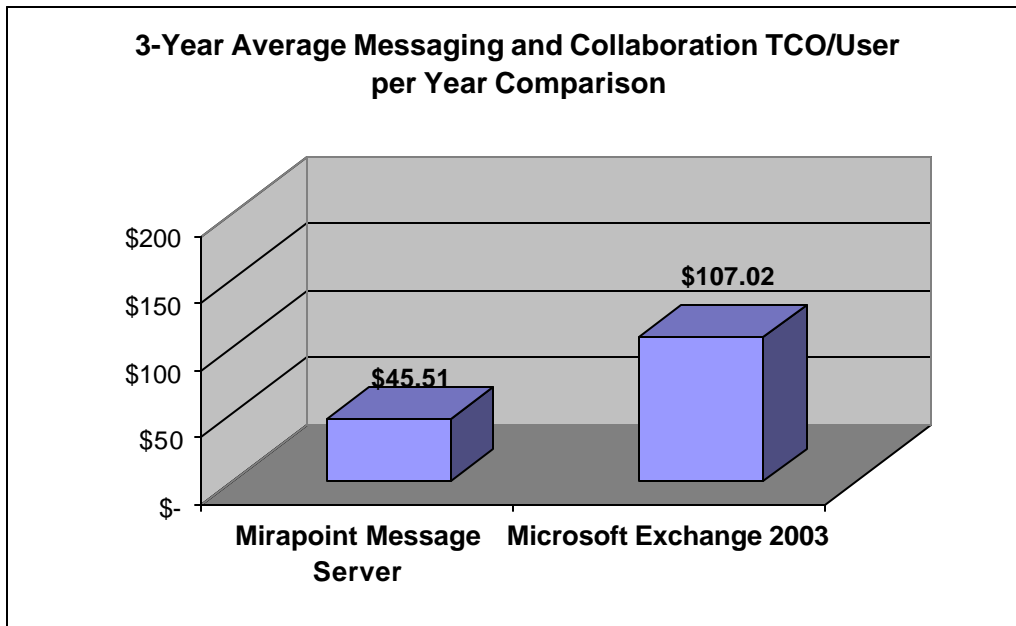


Figure 15: 3-Year Average Messaging and Collaboration TCO per User/Year Comparison between Mirapoint Message Server and Exchange 2003

We also attempt to estimate the Loaded Messaging and Collaboration TCO, taking into account all platform and infrastructure costs. This number can vary greatly due to hardware, client software and implementation decisions. The average 3-Year Platform and Infrastructure cost per user in Mirapoint Environments amounts to \$42.03 per user, as shown in the following table:

Mirapoint Message Server Total Cost of Ownership

Mirapoint Message Server Platform and Infrastructure Costs	Year 1	Year 2	Year 3
Platform and Infrastructure Acquisition Cost/User	\$ 101.69	N/A	N/A
Platform and Infrastructure Maintenance Cost/User	N/A	\$ 12.20	\$ 12.20
Platform and Infrastructure TCO per User/Year	\$ 101.69	\$ 12.20	\$ 12.20
3-Year Average Platform and Infrastructure TCO per User/ Year			\$ 42.03

Table 11: Mirapoint Message Server Platform and Infrastructure Cost per User

Adding the messaging-only and the computing platform and infrastructure costs per user, we find that the average 3-Year Loaded Cost of Ownership per Year for Mirapoint Message Server is \$87.54, as shown in the following table:

Mirapoint Message Server Loaded Messaging and Collaboration TCO	Year 1	Year 2	Year 3
Messaging and Collaboration TCO per User/Year	\$ 54.58	\$ 40.97	\$ 40.97
Platform and Infrastructure TCO per User/Year	\$ 101.69	\$ 12.20	\$ 12.20
Loaded Messaging and Collaboration TCO per User/Year	\$ 156.27	\$ 53.17	\$ 53.17
3-Year Average Loaded Messaging and Collaboration TCO per User/Year			\$ 87.54

Table 12: Mirapoint Message Server Loaded Cost of Ownership per User per Year

The following figure shows the 3-Year Average Loaded Messaging and Collaboration TCO per User/Year of Mirapoint Message Server, comparing it to Exchange 2003.

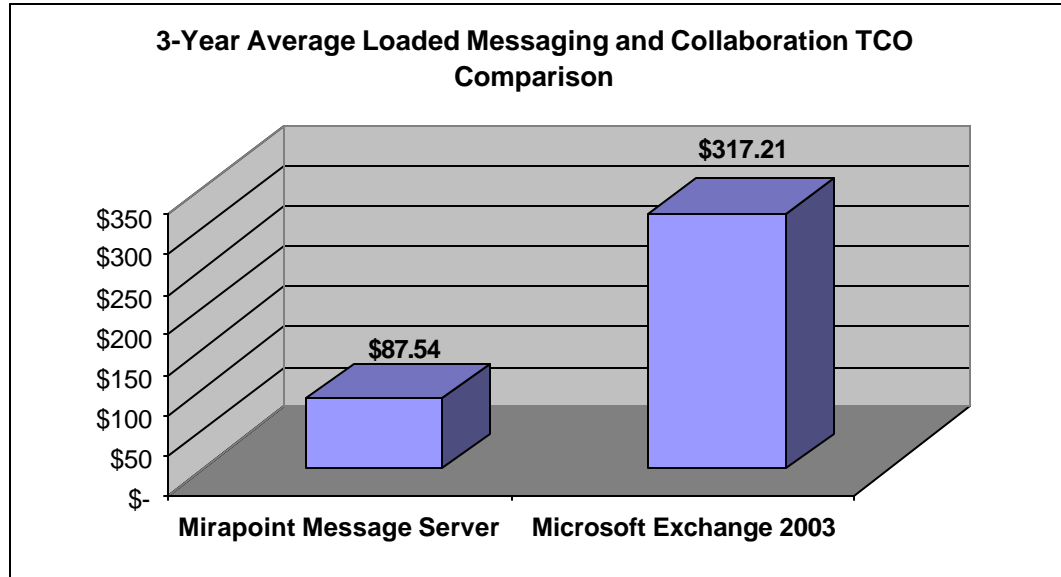


Figure 16: 3-Year Average Loaded Messaging and Collaboration TCO per User/Year Comparison between Mirapoint Message Server and Exchange 2003

8.0 Anti-Virus, Anti-Spam and Instant Messaging Use

Antivirus Software

Anti-virus software in use with Mirapoint Message Server customers is from Sophos. The Sophos virus scan technology has been fully-integrated into the existing Mirapoint management interfaces and is a license-enabled feature. On average it took 1 hour to install anti-virus software on a new server for the first time, and 0 hours a week to administer it.

Anti-Spam Software

Anti-spam software in use by Mirapoint Message Server customers is license-enabled, tightly-integrated Mirapoint proprietary technology called Full-Spectrum™ which includes updatable heuristic rules, white/black lists, per-user controls, support for RBLs and Vipul's Razor, among other features. On average it took 1 hour to install anti-spam software on a new server for the first time, and 1.5 hours a week to administer it.

Instant Messaging Software

Mirapoint Message Server customers did not deploy Instant Messaging.

Mirapoint Message Server		
Anti-Virus		
Products in use	Sophos	
Avg. time to install (in hours)		1.0
Avg. hours/week to administer		0.0
Anti-spam		
Products in use	Integrated Mirapoint Full-Spectrum technology for anti-spam	
Avg. time to install (in hours)		1.0
Avg. hours/week to administer		1.5
Instant Messaging Software		
What product	N/A	

Table 13: Mirapoint Message Server Summary of Anti-Virus, Anti-Spam and Instant Messaging Software

9.0 Conclusions

It is clear from the results of this TCO study that Mirapoint Message Server offers significant cost of ownership benefits over Microsoft Exchange 2003. There are cost advantages in all areas, including Acquisition, Administration, Downtime and Training. Mirapoint’s comprehensive, solutions-oriented approach is especially valuable for organizations seeking to replace legacy, or aging messaging systems. In fact, displacement of existing systems has become a key focus of Mirapoint’s business model. Security products are also a growing source of revenue for the company.

Mirapoint’s security appliances are flexible with both Mirapoint Message Server and non-Mirapoint environments, like Microsoft Exchange, Lotus Notes or Novell Groupwise. Mirapoint's email security appliances include the Message Director and RazorGate solutions. They offer multi-faceted protection, branded as Mirapoint’s Full-Spectrum™ technology, including a hardened OS and system design to stop hackers, granular SMTP connection management capabilities, integrated anti-virus protection, a broad range of anti-spam filtering features, as well as additional security for advanced content filtering, policy enforcement and compliance, intrusion detection, and detailed logging and reporting.

In comparison to Microsoft Exchange 2003 measured in the December 2003 TCO study, Mirapoint Message Server has a 3-year Messaging and Collaboration TCO cost of \$45.51, followed by Microsoft Exchange 2003 with \$107.02.

In terms of 3-year Average Loaded Messaging TCO, Mirapoint Message Server is at \$87.54, followed by Microsoft Exchange 2003 with \$317.21.

In terms of customer experience, Mirapoint customers are very satisfied with Message Server. Also, the overwhelming reason customers switched to Mirapoint was because customers felt that the prior Exchange system was too complex and required too much dedicated administration time.

10.0 Appendix A

**Mirapoint Message Server
Total Cost of Ownership Survey**

Site Profile:

Company Name _____

Respondent's Name _____

Address _____

City _____ **State** _____ **Zip** _____

Phone Number _____

Email _____

Number of Employees: _____

Industry: _____

A. ENVIRONMENT

1. How many email users there in your organization? _____

a) Of these, how many are on:

	<u>Number of Users</u>
i. Mirapoint Message Server M400	_____
ii. Mirapoint Message Server M4000	_____
iii. Mirapoint Message Server M450	_____
iv. Mirapoint Message Server M4500	_____
v. Other	_____

2. How many **Mirapoint Message Servers** are there in your organization?

3. What **Mirapoint Message Server** software OS is your organization running on?

a) MOS 3.2 ____

b) MOS 3.3 ____

c) MOS 3.4 ____

d) Are you using clustered servers? _____ Yes _____ No

i. If yes, how many servers are there in a cluster?

ii. Of these, how many servers in the cluster are active?

iii. How many servers in the cluster are passive? (i.e. meaning they only act as “spare tires” in the event of a failure)

4. What is the average maximum number of users per Mirapoint Message Server in your organization? _____

5. What is the total number of **Full-Time Messaging Administrators** in your organization? _____

a) Of these, how many are responsible for **Mirapoint Message Server**?

b) What percentage (%) of their time is spent on **Mirapoint Message Server**?

6. What is the total number of **Part-Time Messaging Administrators** in your organization? _____

a) Of these, how many are responsible for **Mirapoint Message Server**?

b) What percentage (%) of their time is spent on **Mirapoint Message Server**?

7. What is the total number of **Help-Desk Staff** in your organization?

a) Of these, how many are responsible for **Mirapoint Message Server**?

b) What percentage (%) of their time is spent on **Mirapoint Message Server**?

8. How many Internet Gateway servers are used with **Mirapoint Message Server**?

9. What is the percentage of users who connect remotely on **Mirapoint Message Server**? _____

10. What messaging-related security products are in use with **Mirapoint Message Server**? _____

11. What types of desktop clients are used in your organization with **Mirapoint Message Server**? (i.e. Web mail, Outlook etc.) Please specify client type and % used by users in your organization.

a) Client Type 1 _____

% Used _____

b) Client Type 2 _____

% Used _____

c) Client Type 3 _____

% Used _____

B. ADMINISTRATION

*Please answer the following questions only for **Mirapoint Message Server**.*

Please give total time per week in hours for ALL administrators

12. How many hours are spent during an average week on the following tasks:

- a) Adding/deleting users _____
- b) Managing distribution lists _____
- c) Managing access controls _____
- d) Managing user passwords _____
- e) Performing backups/restores _____
- f) Administering web-mail access _____
- g) Administering rich clients _____
- h) Administering security features _____
- i) Administering rules and filters _____
- j) Directory Management _____
- k) Administration of remote access clients _____
- l) Managing messaging-based applications _____
- m) End-user support issues _____

Mirapoint Message Server Total Cost of Ownership

n) Adding/deleting vacation messages or other tasks for end users

o) Administration of anti-virus controls _____

p) Administration of anti-spam controls _____

C. MIGRATION AND UPGRADES

*Please answer the following questions only for **Mirapoint Message Server**.*

13. How many administrator hours were spent per year to migrate to **Mirapoint Message Server**? _____

14. How many administrator hours are spent per year on **Mirapoint Message Server** minor upgrades? _____

D. PLATFORM COSTS

15. Share of Desktop Computing Platform in conjunction with **Mirapoint Message Server**:

a. What is the estimated total cost per **Mirapoint Message Server** user of their desktop computing platform, including: PCs, LAN/WAN, systems, storage hardware, OS and support and administration etc. Cost \$:

b. What % of that can be attributed to messaging and collaboration?

16. Share of Server Computing Platform in conjunction with **Mirapoint Message Server**:

- a. What is the estimated total cost per **Mirapoint Message Server** user of their server computing platform, including: Servers, LAN/WAN, systems, storage hardware, OS and support and administration etc. Cost \$:

- b. What % of that can be attributed to messaging and collaboration?

E. STORAGE COSTS

17. Storage costs in conjunction with **Mirapoint Message Server**:

- a. How much storage in MBs is normally allocated per **Mirapoint Message Server** user? _____

- b. What is your estimated cost per MB? _____

F. DOWNTIME

*Please answer the following questions only for **Mirapoint Message Server**.*

- 18. What is the number of hours of *un-scheduled* downtime of **Mirapoint Message Server** per month? _____

- 19. What is the number of hours of *scheduled* downtime of **Mirapoint Message Server** per month? _____

G. TRAINING

*Please answer the following questions only for **Mirapoint Message Server**.*

20. How many total hours were spent on **Mirapoint Message Server** administrator training per year? _____

21. How many hours were spent on **Mirapoint Message Server** help desk training per year? _____

I. APPLICATIONS & THIRD PARTY SOFTWARE

(Note: these questions are being included for general information purpose only, the information collected will not be included in the TCO numbers for messaging and collaboration.)

*Please answer the following questions **only** in conjunction with **Mirapoint Message Server**.*

Anti-Virus Software

a. What product do you use? _____

b. How many person/hours are required to install Virus software on a new Messaging Server? _____

c. How many person/hours are required to administer Virus software on a weekly basis?

Anti-Spam Software

a. What product do you use? _____

- b. How many person/hours are required to install Anti-spam software on a new Messaging Server? _____
- c. How many person/hours are required to administer Anti-spam software on a weekly basis? _____

Instant Messaging Software

- a. What Instant Messaging product do you use? _____
- b. How many dedicated Instant Messaging servers are in use within your service?

- c. How many person months were required to customize the look and feel of the Instant Messaging software? _____
- d. How many person/hours are required to install Instant Messaging software on a new server? _____
- e. How many person/hours are required to administer Instant Messaging software on a weekly basis? _____

II. OTHER

1. When did your organization first deploy **Mirapoint Message Server**?

2. Why did you or your organization choose **Mirapoint Message Server**? (Please check the top 3, 1 being the most important)

- a. Price _____
- b. TCO _____
- c. Features and Functionality _____
- d. Reliability _____
- e. User-friendly _____
- f. Scalability _____

Mirapoint Message Server Total Cost of Ownership

g. Other (Please state) _____

3. On a scale of 1 to 5, 5 being the best, how well does the **Mirapoint Message Server** serve the needs of your organization? _____

4. Prior to deploying **Mirapoint Message Server**, what other messaging product(s) did you consider?

5. What did you like / not like about your previous product(s)? (Features, client integration, etc.)

6. What has been the experience with the previous product(s)? (Hard to manage and scale, unreliable, complex, etc.)

7. If you still use your previous product(s) in some capacity, would you be interested in additional Mirapoint products to complement the other servers? (Performance caching, archival, etc.) Why?
