



White Paper

metagroup.com



800-945-META [6382]

August 2003

Exchange 5.5 Migration to Exchange 2003: Cost-Savings Scenarios

A META Group White Paper

“Economic conditions and new IT group initiatives are forcing organizations to scrutinize the value of any technology upgrade. This study presents a model for comparing the cost of operations of Exchange 5.5 to the cost of operations for Exchange 2003.”



METAGROUP

Contents

| | |
|---|-----------|
| Executive Summary | 2 |
| Financial Modeling Details | 3 |
| <i>Server Hardware Costs</i> | <i>3</i> |
| <i>Server Software Costs</i> | <i>5</i> |
| <i>Personnel Costs</i> | <i>5</i> |
| <i>Remote Office WAN Costs</i> | <i>6</i> |
| Financial Considerations | 7 |
| Study Assumptions | 9 |
| Scenario One | 9 |
| <i>Background</i> | <i>9</i> |
| <i>Situational Analysis</i> | <i>9</i> |
| <i>Financial Analysis</i> | <i>10</i> |
| <i>Summary</i> | <i>14</i> |
| Scenario Two | 15 |
| <i>Background</i> | <i>15</i> |
| <i>Situational Analysis</i> | <i>15</i> |
| <i>Financial Analysis</i> | <i>15</i> |
| <i>Personnel Costs</i> | <i>17</i> |
| <i>Remote Office WAN Costs</i> | <i>17</i> |
| <i>Summary</i> | <i>18</i> |
| <i>Other Benefits</i> | <i>18</i> |
| Bottom Line | 18 |

Executive Summary

Economic conditions and new IT group initiatives are forcing organizations to scrutinize the value of any technology upgrade. This study presents a model for comparing the cost of operations of Exchange 5.5 to the cost of operations for Exchange 2003. It quantifies many of the benefits of the migration and suggests other more-intangible benefits of the upgrade. Because Exchange 2003 is in the early stages of deployment at most companies, this report is based on hypothetical scenarios that we believe reflect real-world conditions. The cost of migration has not been included because the final summary of those costs is unknown at this time. Subsequent research will determine actual cost savings as a result of the migration from Exchange 5.5 to Exchange 2003. As such, the data in this report is based on the best thinking from META Group's research analysts working with Exchange administrators at many organizations. Our experience working with organizations that have performed a migration from Exchange 5.5 to Exchange 2003 also aids this report. Because every organization is different, we choose to model two theoretical companies with different topologies. We suggest that organizations needing more custom cost savings estimates take the methodology used in this White Paper and apply it to their own Exchange infrastructure.

In Scenario One, the organization attained cost savings of approximately \$240,000 annually, by taking advantage of Exchange 2003 features such as multiple mailbox stores per server, Mailbox Recovery Storage Group, and across-the-wire compression enabled with Outlook 2003. In Scenario Two, the company generated about \$600,000 of operational cost savings annually, by leveraging Exchange 2003's ability to accommodate more users per server while maintaining usable backup windows.

While both scenarios within this White Paper demonstrate quantifiable savings, all organizations are different and will, thus, experience different results. Companies best suited to find operational cost savings are those that can consolidate a large number of servers. The ability to consolidate mailbox servers is made possible by Exchange 2003's ability to handle multiple storage groups/databases per server, (which enables companies to run approximately 5,000 active MAPI users on a single server), over-the-wire compression (which makes server centralization more attractive via greater bandwidth efficiencies), and client-side caching (which improves the user experience when remotely accessing a central server). Server consolidation yields an immediate cost savings due to the elimination of operational duties associated with maintaining a higher number of servers

required to service users — namely hardware and operating system maintenance along with Exchange-specific duties.

Financial Modeling Details

META Group calculated cost savings related to an Exchange 5.5 and Exchange 2003 operations using a field-tested methodology. This methodology has been developed over many years as part of the cost accounting work we routinely do with our clients. The two scenarios we present demonstrate how the methodology and other assumptions are applied. For those companies with ready access to internal costs or have an atypical infrastructure, we recommend using the methodology presented here but users should substitute company-specific data to generate exact cost figures when forecasting their own operational cost-model differentials.

We believe there are four key areas that contribute to operational cost savings associated with a migration from Exchange 5.5 to Exchange 2003:

- Server hardware
- Server software
- Personnel
- Remote office WAN

Organizations should perform these calculations using their company's cost data, to better understand their unique cost-savings projection associated with their migration scenario. In the absence of such figures, META Group has calculated a mainstream average, but companies should be advised that there may be a variance of up to 25%, based on labor costs, geographic distribution, product configuration, and other variables.

Server Hardware Costs

In general, most organizations have more than one defined Exchange server configuration. For our study, we have selected two sizes: a medium-size server to accommodate small-to-medium sites and a large server configuration to effectively handle those central sites where a large number of users are LAN connected.

A medium-size Exchange server has dual processors, 2GB RAM, and 400GB of storage. This is enough disk space to accommodate the mailbox store with forecast growth. We used the formula of 1,000 users x 200MB per user x 2 to allow for overflow and storage management. A large Exchange server has four processors and 4GB RAM, and 800GB (2,000 users x 200MB x 2) in storage.

User mailbox size and storage needs of Exchange have not changed much from Exchange 5.5 to Exchange 2003; therefore, we assume that storage needs will not change. Subsequently, the operational costs for storage will not change either. As a result, cost savings associated with storage are not included within this study. Some organizations may change their storage methods or policies as a result of the migration and, therefore, must factor these changes into their own operational calculations (e.g., migrating from direct-attached storage to a storage-area network).

Server configurations are not further defined because we do not want to introduce bias toward any particular server manufacturer. In addition, META Group research has found the performance and cost of a similar server configuration from different vendors is similar. For the purposes of this study, we assume that a medium-size server purchased four years ago when Exchange 5.5 was implemented cost on average about \$20,000, and a medium-size server purchased today to support Exchange 2003 will cost approximately \$20,000 (but this machine has vastly improved clock speeds and more reliable components). Using the same logic, an average large server for either Exchange version is \$30,000. The average costs for the two server sizes are inclusive of hardware, hardware maintenance, hardware utilities, operating system, operating system maintenance, backup devices, and backup software. These costs are amortized more than four years, which is the mean of three-year, four-year, and five-year amortization schedules we see in the field.

Two server sizes and two Exchange versions generates four possible scenarios:

- Exchange 5.5 on a medium server can support approximately 500 users
- Exchange 5.5 on a large server can support approximately 1,500 users
- Exchange 2003 on a medium server can support approximately 2,500 users
- Exchange 2003 on a large server can support approximately 5,000 users

While Exchange 2003 is more efficient with its use of resources, the differences in scale above show a larger disparity than can be explained from a software engineering perspective. With Exchange 5.5, organizations typically limited the number of users on a server to accommodate backup and restore windows. Exchange 2003 allows multiple databases per server, eliminating the artificial bottleneck imposed by the backup and restore windows. Active Directory also plays a large role in the ability of an Exchange 2003 server to handle substantially more users. By offloading all directory lookups and user management to Active Directory and Global Catalog servers, it facilitates this large jump in the number of users supported per server. In this White Paper, we used Microsoft's forecast that

one Global Catalog server is needed to handle the workload of every five Exchange servers.

For this study, we assume that Exchange 5.5 was implemented four years ago, and all hardware and software will be fully depreciated when Exchange 2003 is implemented. We subsequently amortize all the Exchange 2003 costs over four years, allowing a year-by-year comparison of operational costs.

Server Software Costs

Software costs for each server include Exchange Server licensing and maintenance, as well as Exchange-specific monitoring and management utilities. Client access licenses have specifically not been included in the comparison, because it is our experience that the costs do not change when migrating to Exchange 2003.

Exchange 2003 Enterprise Server for a Select Level C customer is \$3,391 per year, decreased to \$2,882 annually with a 15% discount. We estimate the same customer would have paid a similar price for Exchange 5.5 server licensing. Software assurance for both versions would run approximately \$720 per server, per year. An average company would pay approximately \$1,000 per server, per year for a management utility that aggregates server logs, highlights exceptions, and generates statistics. Although this tool would not run or collect against Global Catalog servers, most companies would have a separate Active Directory specific tool already implemented as part of their network administration. The cost of this tool is not included in this study.

Personnel Costs

To calculate server consolidation figures, we assume there is a certain amount of human activity associated with keeping the base server platform operational. This is called hardware operations and includes:

- Examining server logs for exceptions and summaries on a daily basis.
- Adding, changing, and deleting users at the NOS level.
- Performing daily backup duties (mounting the media, initiating the backup, checking progress and then cataloging and filing the media).
- Managing server storage — compacting, rearranging, and defragging disks on a weekly basis.
- Applying hot fixes and service pack to the operating system.

- Troubleshooting and problem resolution of both the hardware and system software.

It is important to understand why we use full-time equivalents (FTEs) instead of saying employee, technician, or engineer. An FTE summarizes the amount of work to be done. An FTE does not characterize any one employee. It combines a blended salary of all individuals who perform a task spread evenly over a 40-hour work week. The work may actually be performed by four different people for two hours each day to achieve the FTE. This allows us the luxury of easier financial calculations. It's easier to calculate one FTE than it is to model 25% of four employees.

We assume that one FTE hardware operations employee, on average, can support about 15 servers per year at the hardware and system software level. We calculate the FTE cost to be \$140,000 per year, fully burdened, using a 50% salary benefit premium (for office space, healthcare benefits, overhead, other benefits, etc.). Therefore, for every 15 servers, it costs most organizations \$140,000 per year for basic operational functionality.

We also assume some cost savings by eliminating Exchange servers at the application level, which we have named Exchange Server Maintenance. Consolidating Exchange servers does not create account management operational savings because the number of users remains the same, but we believe there are benefits involving Exchange Server Maintenance. These activities typically include adding Exchange service packs and patches, running maintenance scripts on the servers, log monitoring, Level 2 problem resolutions, and exception handling. Most organizations consolidate errors and exceptions into master reports, thereby reducing any efficiency gains to be found within log examination by consolidation.

To calculate Exchange Server Maintenance costs, we assume one FTE can perform the above-defined actions on 20 Exchange servers. Therefore, as servers are consolidated, the number of FTEs required decreases. In addition, an FTE with the proper skills dictates a fully burdened annual salary of \$130,000.

Costs for Level 3 support and virus management were also considered, but it was determined that these costs were dependent on a per-user ratio, which would not change in an Exchange 5.5 to Exchange 2003 conversion.

Remote Office WAN Costs

It is not a common practice to implement an Exchange server at remote office locations that do not have the quantity of users to demand a full server. For the purposes of this study, we assumed that a site with less than 20 users would simply load Exchange on the file-and-print server. For sites larger than 20 users, we feel the file-and-print server would have a more significant workload to address and a separate solution would be needed for Exchange. These sites are typically connected via high-speed WAN links to a central site and use an Exchange server there. META Group believes the break point at which it is financially beneficial to have an Exchange 5.5 server in a remote location is 75 users, based on client experiences. According to current lab data, we expect Exchange 2003, when implemented with Outlook 2003, to allow a greater-than 30% efficiency gain, by utilizing across-the-wire data compression and local caching techniques. This improvement in network efficiencies and code execution allows the possibility for remote sites with 100 or greater people to utilize central Exchange mail servers, based on available bandwidth. Please refer to the Microsoft Exchange Server 2003 Site Consolidation White Paper available on <http://www.microsoft.com/exchange> for more details on testing for available bandwidth and Exchange site consolidation scenarios. Also, realize that public folder use and offline address books are not considered as part of this study, and either may change many of the assumptions for remote office solutions.

Microsoft projects an average across-the-wire compression of more than 50% for HTML-based messages and more than 30% compression for attachments. In addition, Microsoft has rewritten the MAPI protocol to be more efficient in Outlook/Exchange 2003. For this study, we used a conservative 30% compression for all traffic over WAN links to calculate benefits. This compression benefit requires Outlook 2003 on the client; and if the attachment is already compressed, the additional benefit would be negligible. The Outlook 2003 cache mode improves remote user response time by allowing background replication of mailbox data. However, because user satisfaction cannot easily be quantified, this improvement does not factor into our cost-savings equation.

Financial Considerations

Organizations seeking customized financial calculations for their particular circumstances should contemplate the following and make the necessary adjustments:

- Are the definitions for hardware costs, software costs, personnel costs, and remote office WAN costs applicable?



Exchange 5.5 Migration to Exchange 2003: Cost-Savings Scenarios

- Is there a more-exact FTE-to-server ratio that can be substituted for our 15:1 ratio for base maintenance of the hardware and system software platform?
- Are labor rates for a fully burdened FTE different from our figures? Do FTEs work an average of 2,000 hours/year?
- Are the hardware costs inclusive of maintenance, utilities, backup devices, and backup software accurate for your environment?
- Is the hardware depreciation schedule different from our assumption?
- Is the organizational breakdown of personnel costs into hardware operations, and Exchange Server Maintenance appropriate?
- User profiles at different organizations can vary. Are the user profiles assumed within this study in line with user profiles seen on your network?
- Are assumptions on bandwidth pricing in line with your current telecommunications prices? (These are North American prices; European prices may be more.)

Study Assumptions

The following points should be kept in mind while reviewing the scenarios:

- This study does not look at migration costs. It looks only at operational costs.
- All scenarios in this study are exclusively based on North American hypothetical companies.
- The study may mention benefits but does not attempt to quantify many because of the lack of recognized methodology for such cost accounting (e.g., how much is one percentage point increase in uptime worth to an organization?)

Scenario One

Background

This scenario describes a company with the need to support both centralized and decentralized messaging requirements. The messaging service must support a total of 11,000 users at 19 sites. The following table presents the characteristics of locations that must be supported.

| Site Type | # Sites | Average # Users/Site | Total Users | Existing User Connection To Exchange 5.5 Server |
|--------------|---------|----------------------|-------------|---|
| Remote | 10 | 50 | 500 | WAN |
| Small | 5 | 100 | 500 | LAN |
| Medium | 2 | 500 | 1000 | LAN |
| Large | 1 | 2000 | 2000 | LAN |
| Headquarters | 1 | 7000 | 7000 | LAN |

Situational Analysis

The Exchange 5.5 environment includes five large servers at the headquarters, two large servers at the large site, and seven medium servers to support the small and medium-size sites. The 10 remote sites were connected via frame relay to either the headquarters or the large site for their messaging needs.

In addition, this configuration requires two SMTP servers to transfer mail to and from the Internet. An additional medium-size server (used as a restore server) at the headquarters would be used to allow recovery of mailboxes and messages as requested without affecting the production message stores.

Exchange 5.5 Migration to Exchange 2003: Cost-Savings Scenarios

As expected, the Exchange 2003 architecture would require substantially fewer servers. Headquarters user capacity could be handled by two large servers. The large site needs one large server, and the medium sites would continue to be handled by two medium servers. However, in conjunction with deployment of Outlook 2003 to the small sites, those servers were eliminated and users were now connected via frame relay to the large servers at the large/HQ site along with the previous remote sites.

Exchange 2003 uses the more-efficient SMTP message routing to replace Exchange 5.5's RPC-based message routing. This allows two message-routing servers to be eliminated, but two Global Catalog servers (one at the headquarters and one at the large site) would be introduced to allow for fast lookups for end users. Exchange 2003's implementation of a Mailbox Storage Recovery Group within every message store, allows removal of the previous dedicated server for restores.

Financial Analysis

A reduction from 15 Exchange 5.5 servers, including one restore server, to five Exchange 2003 servers drives most of the cost savings.

Hardware Cost Savings

| Exchange 5.5 Server Hardware Costs | | | |
|---|------------|-------------|------------------|
| | Qty | Cost | Total |
| Medium Servers | 7 | \$20,000 | \$140,000 |
| Large Servers | 7 | \$30,000 | \$210,000 |
| Restore Servers | 1 | \$20,000 | \$20,000 |
| Message Routing Servers | 2 | \$20,000 | \$40,000 |
| | | | \$410,000 |
| Amortized over four years | | | \$102,500 |

Exchange 5.5 Migration to Exchange 2003: Cost-Savings Scenarios

| Exchange 2003 Server Hardware Costs | | | |
|-------------------------------------|-----|----------|------------------|
| | Qty | Cost | Total |
| Medium Servers | 3 | \$20,000 | \$60,000 |
| Large Servers | 2 | \$30,000 | \$60,000 |
| Global Catalog Servers | 2 | \$20,000 | \$40,000 |
| | | | \$160,000 |
| Amortized over four years | | | \$40,000 |

Reduction in hardware costs of \$102,500 – \$40,000 = \$62,500/annually.

Software Cost Savings

| Exchange 5.5 Server Software Costs | | | |
|------------------------------------|-----|------------------------|------------------|
| | Qty | Cost | Total |
| Exchange Enterprise server license | 17 | \$2,882 | \$48,994 |
| Annual Software Assurance | 17 | \$720/yr x four years | \$48,960 |
| Utilities & Monitoring Software | 14 | \$1000/yr x four years | \$56,000 |
| | | | \$153,954 |
| Amortization over four years | | | \$38,489 |

| Exchange 2003 Server Software Costs | | | |
|-------------------------------------|------|------------------------|-----------------|
| | Qty | Cost | Total |
| Exchange Enterprise server license | Five | \$2,882 | \$14,410 |
| Annual Software Assurance | Five | \$720/yr x four years | \$14,400 |
| Utilities & Monitoring Software | Five | \$1000/yr x four years | \$20,000 |
| | | | \$48,410 |
| Amortization over four years | | | \$12,203 |

Reduction in server software costs of \$38,489 – \$12,203 = \$26,286/annually.

Personnel Costs

Exchange 5.5 Hardware Operations Support
 1 FTE can support 15 servers and = \$140,000 fully burdened
 17 servers demands 1.13 FTEs = \$158,200

Exchange 2003 Hardware Operations Support
 1 FTE can support 15 servers and = \$140,000 fully burdened
 7 servers demands .47 FTEs = \$65,800

Exchange 5.5 Server Maintenance
 1 FTE can support 20 servers and = \$130,000 fully burdened
 17 servers demands .85 FTEs = \$110,500

Exchange 2003 Server Maintenance
 1 FTE can support 20 servers and = \$130,000 fully burdened
 5 servers demands .25 FTEs = \$32,500

\$158,200 – \$65,800 + \$110,500 – \$32,500 = \$170,400 annual savings in Personnel Costs

Remote Office WAN Costs

This scenario is interesting because it demonstrates the ability for Exchange 2003 to exploit falling telecommunications costs to reduce overall operations costs. The first thing we must understand to calculate the savings are user profiles. META Group used the table below to calculate bandwidth needs for users connecting over a WAN to their Exchange server.

| User Behavior Characteristic | Light | Medium | Heavy |
|----------------------------------|-------|--------|-------|
| Messages per Day | 25 | 50 | 100 |
| Size of Message | 15K | 20k | 60K |
| Bandwidth in K | 6 | 10 | 15 |
| Bandwidth in K (Compressed) | 4 | 7 | 10 |
| Percentage of Users of This Type | 30% | 40% | 30% |

Using these user profiles and percentages, the Exchange 5.5 environment has 500 users at 10 sites or 50 users per site utilizing Exchange over the WAN. Bandwidth planning must accommodate the time of highest demand. We believe

that the morning, when users just log on, there will be 60% of the users accessing the WAN concurrently to download their e-mail. This equates to a maximum bandwidth need of 309K for each 50-person site. To meet this demand, we feel a company would implement a frame relay connection including a 768k port and a 512K Private Virtual Connection (PVC). Market rates from META Group's telecommunications research shows the average cost of this connection to be \$1,025/month.

So, $\$1,025 \times 10 = \$10,250 \times 12 \text{ months} = \$123,000$ annually for WAN bandwidth.

After implementing Exchange 2003, two things will occur with regards to remote office WAN connectivity:

- Outlook 2003 with compression allows us to use the compressed bandwidth number in the calculations.
- The servers from the five small sites were subsequently removed, because they can adequately be handled remotely now. This adds an additional 500 users to our remote office pool.

Bandwidth needs for the existing 10 remote offices decrease to 210k during maximum usage times. This allows the company to use a less-expensive 512k port and 256k PVC frame relay circuit. Market rate for this connection is \$665/month.

$\$665 \times 10 = \$6,650 \times 12 \text{ months} = \$79,800$ annually to connect same 10 sites.

In addition, the five new remote sites would require 420k during peak demand. This bandwidth need would be satisfied by a frame relay connection with a 768k port and a 512k PVC with a price tag of \$1,025/month.

$\$1,025 \times 5 = \$5,125 \times 12 \text{ months} = \$61,500$ annually to connect the new five sites.

Total costs are \$123,000 for Exchange 5.5 and \$141,300 for Exchange 2003. A net cost **increase** of \$18,300. It must be realized, though, that Exchange 2003 allowed a reduction of \$43,200 annually, to connect the same 10 sites as were remote in Exchange 5.5. The additional \$61,500 would need to be compared to the hardware, software, and personnel costs to run five additional servers, making it about even. However, centrally located servers — instead of having to service and maintain servers at remote sites — creates many intangible benefits. It is important to note that the remote sites do not need additional global catalog servers, because it is assumed they have file-and-print infrastructure, which has those in place already.



Exchange 5.5 Migration to Exchange 2003: Cost-Savings Scenarios

Summary

| | Exchange 5.5 | Exchange 2003 | Difference |
|-----------------------|--------------|---------------|------------------|
| Server Hardware Costs | \$102,500 | \$40,000 | \$62,500 |
| Server Software Costs | \$38,489 | \$12,203 | \$26,286 |
| Personnel Costs | \$268,700 | \$98,300 | \$170,400 |
| Remote WAN Costs | \$123,000 | \$141,300 | -\$18,300 |
| Total Cost Savings | | | \$240,886 |

Implementing Exchange 2003 resulted in \$240,000 annual operational cost reductions for this company.

Scenario Two

Background

This scenario supports 45,000 Exchange 5.5 users in six states. The bulk of users (41,000) are in one state at 10 different sites. The remaining users are located at seven other sites in seven different states. The following table presents the characteristics of each location:

| Site Type | # Sites | Average # Users/Site | Total Users | Existing User Connection To Exchange 5.5 Server |
|---------------------|---------|----------------------|-------------|---|
| Headquarters | 10 | 4,100 | 41,000 | LAN |
| Medium Remote Sites | 5 | 700 | 3,600 | LAN |
| Small | 2 | 200 | 400 | LAN |

Situational Analysis

Exchange 5.5 would be deployed using three large servers at each of the large sites, and one large server at each of the medium sites, along with one medium server at each of the small sites. This equates to 37 servers overall. There are also 10 message routing servers, one at each of the large sites to handle the large message routing loads.

Due primarily to the increased capacity per server, implementing Exchange 2003 would require only one large server at each of the large sites, and one medium server for each of the medium and small sites. Ten Message Routing servers would be eliminated by Exchange 2003's use of SMTP message routing, instead of Exchange 5.5's remote procedure call based methodology. However, 10 additional Global Catalog servers are needed, one at each large site, to handle the increased queries of all the messaging users. In total, only 17 Exchange 2003 servers would be needed to handle the same workload of the 37 Exchange 5.5 servers. Message Routing servers and Global Catalog servers end up being a wash.

Financial Analysis

Consolidation from 37 Exchange servers down to 17 Exchange servers creates some dramatic cost savings.

Exchange 5.5 Migration to Exchange 2003: Cost-Savings Scenarios

Server Hardware Costs

| Exchange 5.5 Server Hardware Costs | | | |
|------------------------------------|-----|----------|--------------------|
| | Qty | Cost | Total |
| Medium Servers | 2 | \$20,000 | \$40,000 |
| Large Servers | 35 | \$30,000 | \$1,050,000 |
| Message Routing Servers | 10 | \$20,000 | \$200,000 |
| | | | \$1,290,000 |
| Amortized over four years | | | \$322,500 |

| Exchange 2003 Server Hardware Costs | | | |
|-------------------------------------|-----|----------|------------------|
| | Qty | Cost | Total |
| Medium Servers | 7 | \$20,000 | \$140,000 |
| Large Servers | 10 | \$30,000 | \$300,000 |
| Global Catalog Servers | 10 | \$20,000 | \$200,000 |
| | | | \$640,000 |
| Amortized over four years | | | \$160,000 |

Reduction in hardware costs of \$322,500 – \$160,000 = \$162,500/annually.

Software Cost Savings

| Exchange 5.5 Server Software Costs | | | |
|------------------------------------|-----|---------------------|------------------|
| | Qty | Cost | Total |
| Exchange Enterprise server license | 47 | \$2,882 | \$135,454 |
| Annual Software Assurance | 47 | \$720/yr x 4 years | \$135,360 |
| Utilities & Monitoring Software | 37 | \$1000/yr x 4 years | \$148,000 |
| | | | \$418,814 |
| Amortization over four years | | | \$104,704 |

Exchange 5.5 Migration to Exchange 2003: Cost-Savings Scenarios

| Exchange 5.5 Server Software Costs | | | |
|------------------------------------|-----|---------------------|------------------|
| | Qty | Cost | Total |
| Exchange Enterprise server license | 17 | \$2,882 | \$48,994 |
| Annual Software Assurance | 17 | \$720/yr x 4 years | \$48,960 |
| Utilities & Monitoring Software | 17 | \$1000/yr x 4 years | \$68,000 |
| | | | \$165,954 |
| Amortization over four years | | | \$41,489 |

Reduction in server software costs of \$104,704 – \$41,489 = \$63,215/annually

Personnel Costs

Exchange 5.5 Hardware Operations Support

1 FTE can support 15 servers and = \$140,000 fully burdened

47 servers demands 3.13 FTEs = \$438,200

Exchange 2003 Hardware Operations Support

1 FTE can support 15 servers and = \$140,000 fully burdened

27 server demands 1.8 FTEs = \$252,000

Exchange 5.5 Server Maintenance

1 FTE can support 20 servers and = \$130,000 fully burdened

47 servers demands 2.35 FTEs = \$305,500

Exchange 2003 Server Maintenance

1 FTE can support 20 servers and = \$130,000 fully burdened

17 servers demands .85 FTEs = \$110,500

\$438,200 – \$252,000 + \$305,500 – \$110,500 = \$381,200 annual savings in personnel costs

Remote Office WAN Costs

Since there are no remote offices in this scenario, there are no remote office WAN costs or cost savings for that matter.

Summary

| | Exchange 5.5 | Exchange 2003 | Difference |
|-----------------------|--------------|---------------|------------------|
| Server Hardware Costs | \$322,500 | \$160,000 | \$162,500 |
| Server Software Costs | \$104,704 | \$41,489 | \$63,215 |
| Personnel Costs | \$743,700 | \$362,500 | \$381,200 |
| Remote WAN Costs | \$0 | \$0 | \$0 |
| Total Cost Savings | | | \$606,915 |

This scenario produced \$600,000 in annual operational cost reductions for this company by going to Exchange 2003.

Other Benefits

META Group realizes that not all benefits are easily quantifiable in monetary terms. Listed below are some of the expected benefits as a result of a migration, but financial analysis cannot easily associate dollars with these benefits.

- A company may be able to eventually combine its Exchange and NT user account management teams (via Active Directory), thereby creating a more efficient and less-troublesome account management process.
- Because there are fewer servers in the Exchange 2003 environment, a company is able to reduce the amount of spare servers and server parts they must maintain to meet internal service-level requirements.
- Built-in redundancy facilities of Exchange 2003, may allow a company to boost its uptime service-level agreements.
- The Mailbox Storage Recovery Group will reduce the need for downtime to restore user required messages and mailboxes.
- Exchange 2003 integrates Office Mobile Access, Office Web Access and RPC-HTTP access of e-mail into every server. This eliminates the need to install specific mobile-connection-capable servers using alternate technology, and increases the access flexibility of the Exchange environment.

Bottom Line

These two scenarios show some of the benefits that a migration from Exchange 5.5 to Exchange 2003 may produce, with the focus on operational costs. Certain organizations may see dramatic operational cost reductions. The areas of greatest savings may be realized through server consolidation, elimination of message



Exchange 5.5 Migration to Exchange 2003: Cost-Savings Scenarios

routing infrastructure, purging of dedicated restore infrastructure, and replacing remote servers with minimal bandwidth. It is important to realize that Exchange 2003, when paired with Outlook 2003, also provides additional benefits such as cache mode, which improves the remote user experience, as well as decreased network load via compression.

Matt Cain has 17 years of IT experience and initiated META Group's e-mail and collaboration coverage in 1990. He remains focused on this market and its evolution. He is the creator of the concept of "contextual collaboration," which forecasts the marriage of collaboration services and business processes and is now widely accepted as the driving force behind future collaboration industry development. Mr. Cain also leads META Group's coverage of collaborative computing suites (e.g., Microsoft, Lotus), tools, and external service providers, advising clients on their applicability for improved customer/partner/employee interaction and knowledge management. Mr. Cain is co-author of Strategies in Business Collaboration Management, and before joining META Group in October 1990, was managing editor of MIS Week. He began his career as an editor for Electronic News. Mr. Cain has a BA from Dickinson College and an MA from Columbia University.

Brian Golumbeck has more than 12 years of experience in IT, with expertise in network and infrastructure strategy, project management, IT process re-engineering, cost benefit analysis, negotiation, and change management. Major accomplishments include: automation of sales training processes for a global company, design and implementation of a large-scale dot-com network operations center, redesign of a wide-area network and negotiation of telecom contracts to achieve significant cost savings, risk assessment and cost justification of web hosting alternatives for a major insurance provider, and successful management of business transformation initiatives for a US publishing company. Before joining META Group in early 2002, Mr. Golumbeck held positions at VTech Industries, Cahners Business Information, and McGladrey & Pullen. His work spans various industries, including manufacturing, publishing, healthcare, financial, and governmental. Mr. Golumbeck attended Northern Illinois University and is a Certified Network Engineer, a Microsoft Certified Systems Engineer, and a Microsoft Certified Professional.



About META Group

Return On IntelligenceSM

META Group is a leading provider of information technology research, advisory services, and strategic consulting. Delivering objective and actionable guidance, META Group's experienced analysts and consultants are trusted advisors to IT and business executives around the world. Our unique collaborative models and dedicated customer service help clients be more efficient, effective, and timely in their use of IT to achieve their business goals. Visit metagroup.com for more details on our high-value approach.

