



Migrating from Microsoft Exchange to Kerio MailServer

A comfortable migration path from Microsoft Exchange 5.5/2000/2003 to Kerio MailServer

Email Growth

Email continues to be mission-critical

Still Mission-Critical

Based on Meta Group findings, email continues to be a mission-critical application, as essential as the telephone to business communications.

Increasing Demand

IDC sizes the worldwide email market for 2004 at 1 billion mailboxes, with total number of email messages sent daily to exceed 60 billion worldwide in 2006.

Even for Small Businesses

A Small Business Survey done by Verizon showed that 75% of small businesses exchange email with customers, with 60% contacting customers at least once per week, 98% if the business has a web site.

1.0 The Exchange Dilemma

Microsoft Exchange 5.5 users have come to the point where they need to either upgrade or find a replacement mail server. Despite the availability of Exchange Server 2000 and higher for the past few years, faced with obstacles of cost and complication of the Exchange upgrade path, many sites remain reluctant to upgrade. And small to mid-sized businesses that have upgraded to Exchange 2000 and higher are being drained by high administrative costs and security concerns. However, email continues to be a mission critical application with increasing demands and new arising security concerns.

Migration Costs

Re-thinking your messaging structure

Exchange Upgrade Costs

Ferris Research found that the average Exchange 5.5 to Exchange 2000 migration ultimately costs \$400/user.

Exchange Security Concerns

Gartner warns, "Servers should be protected — especially Microsoft Exchange servers, which are four times as vulnerable to attack as other messaging servers."

1.1 Discontinued Support

For small to medium sized businesses (SMBs) especially, the risk of exposing themselves to unsupported software is concerning, while the costs of migrating to and maintaining an expanded, complex upgrade seem too costly and overdone for their needs. With mainstream support no longer available, and extended support discontinuing for Exchange 5.5, mail server migration has risen to the forefront as an issue for many Windows environments. Legacy software that is no longer supported poses an added challenge.

1.1.2 Increased Risk with Unsupported Software

- 1) **Security** – When a new security vulnerability is found, vendors rarely go back and check unsupported versions. While newer versions tend to have security more at the core of their design, following the growth of the Internet, keeping older versions secure tends to require more tweaking and configuring. For example, security measures for NT 4 are much more manual than in Windows 2000 or higher.
- 2) **Stability** – Quirks and glitches persist and may tend to escalate over time with unsupported software. For example, the Microsoft Knowledgebase documents stability problems in Exchange 5.5 that may arise if a client application opens large numbers of messages at once, with symptoms including slow performance, out-of-memory errors, and unexpected program exits by clients. This issue seems to have been resolved in Exchange 2003.
- 3) **Bug Fixes** – Even if vulnerabilities are located in an older system, there is not much hope that a patch will be available to fix it.

Exchange 5.5 users may be reluctant to upgrade along the Exchange upgrade path due in part to several key obstacles.

1.1.3 Obstacles to Exchange 5.5 Migrations

- 1) **Active Directory Dependency** – Exchange 2000 and higher roll-outs are tied to Windows 2000 or higher server deployments that include the complex new Active Directory technology.
- 2) **Interim Upgrade to Windows 2000** – Best practices recommend the cumbersome interim step of migrating to Exchange 2000 first before completing an Exchange 5.5 to Exchange 2003 migration.
- 3) **Infrastructure Redesign** – Difficult changes to infrastructure are generally required with Active Directory. Rather than just a simple mailbox migration, a successful migration to Exchange Server 2000 or higher must be carefully planned, and may also involve rethinking, and possibly redesigning, the entire messaging structure.
- 4) **Increased Costs** – Maintenance costs tend to rise with complexity. Exchange may no longer be appropriate for smaller businesses that do not have a dedicated IT person to work on mail services. Also, the cost of a 20-pack User CAL for Exchange 5.5 more than doubles with Exchange 2003 in most cases.

1.2 Rising Support Costs

For businesses that have migrated to Exchange 2000 or higher, rising support costs often become an increasing issue.

According to Ferris Research, operations for Exchange typically cost \$5.8 per user per month, or about \$6,960 per year for a 100 user installation. Having an IT staff that specializes in Exchange support is highly recommended. Also desktop support staff generally spends 20% of their time just on Exchange issues. Downtime on Exchange due to email outages generally averages 0.4 hours per mailbox per month, or \$18,000 (\$15 per mailbox per month) in annual productivity costs for a 100 user installation. Furthermore, Exchange users must also contend with the serious security concerns that continue to plague this solution.

However, while discontinued support and rising support costs for Exchange is cause for concern, there are other solutions.

2.0 The Solution

So you haven't upgraded yet. What are your options? For those who still find the prospect of an Exchange 2000 or higher upgrade to be a daunting task, Kerio offers a truly viable mail server replacement for small to medium sized businesses.

Kerio MailServer is a messaging and collaboration server that provides powerful protection against viruses and spam, and delivers secure access to email. A true groupware replacement for Microsoft Exchange, Kerio MailServer is ideally suited for the needs of small and medium sized companies, allowing Microsoft Outlook and Microsoft Entourage clients to natively access email messages and collaboration tools. The Kerio Migration Tool simplifies the process of moving from Exchange by migrating mailboxes, including all mail, attachments, folders, contacts, tasks, and calendar events.

Replacing Exchange with Kerio MailServer provides the following key benefits.

2.1 Benefit: Reduced Cost of Ownership

Kerio MailServer has a small footprint with modest hardware requirements on Windows 2000 and higher, SuSE Linux, Red Hat Linux, or Mac OS X. While a migration from Exchange to Kerio MailServer is not as expensive, it is still an involved process. However, the ongoing cost savings are significant, reducing total cost of ownership (TCO) exponentially. Osterman Research estimates that more than 90% of the cost of Exchange 2000 or higher is labor costs (01/2004).



Fig. 1. Migration Annual Total Cost of Ownership (TCO) Comparison
Annual TCO graph uses Ferris Research guidelines for 100 mailboxes, and assumes a Kerio MailServer install on Windows XP.

In addition to a reduced cost of ownership, Kerio MailServer offers several powerful features familiar to Windows users, making the switch from Exchange very easy, leveraging Outlook and Active Directory on a secure mail server that is specifically designed to meet the particular needs of small and mid-sized businesses.

2.2 Benefit: Outlook-like WebMail

The Kerio MailServer WebMail component enables end-users to gain access to their messages, public and private folders, contacts, calendars, and tasks from any computer with an Internet connection and Web browser.

Competitive Advantage

Why small and mid-sized businesses like the idea of migrating on Windows to Kerio MailServer

Partner Comments

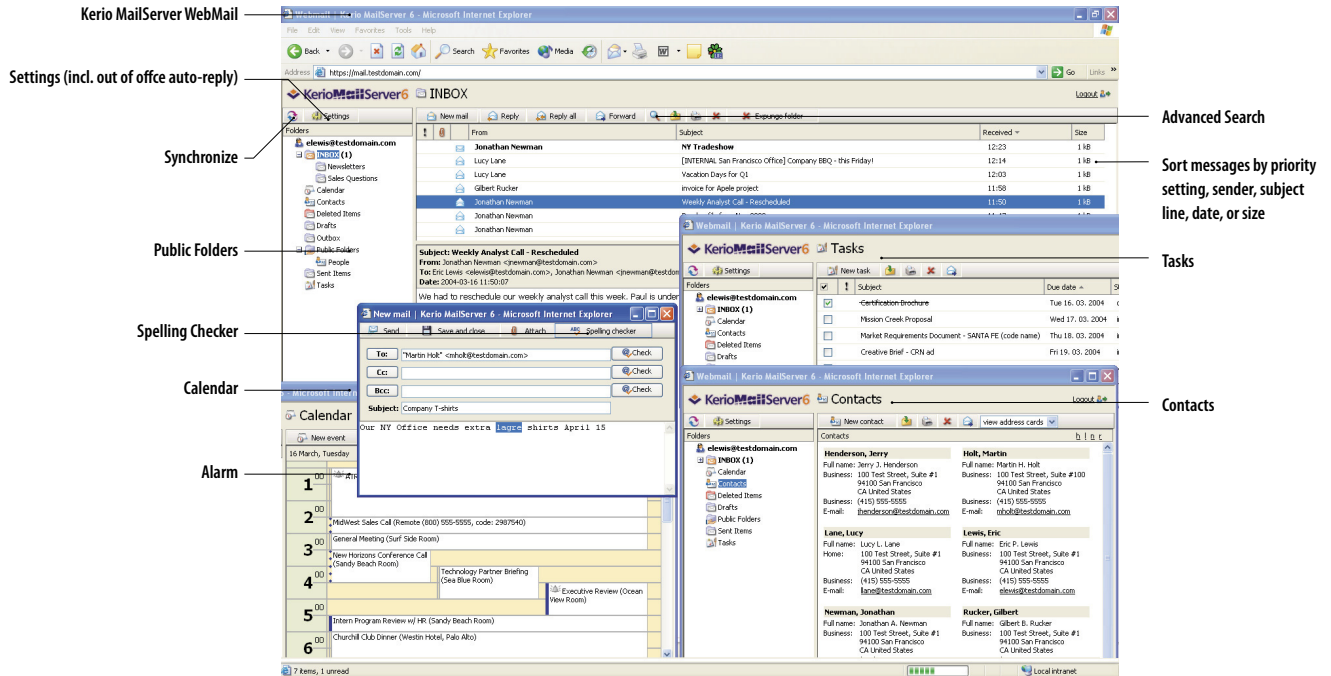
"For small to mid-size customers, Kerio has a price/performance advantage that the Microsoft-only providers cannot compete with."

– Patrick Kelley, President, Netex Group, Inc. in North Carolina, USA

"We chose Kerio MailServer as a mail hosting solution for our clients. We based our decision on stability, feature-set, and manageability. While we are primarily a Microsoft Exchange shop, Kerio offered us an excellent product with a very good price point. We could not be more pleased with our decision!"

– Robert Anderson, Principal/Sr. Technical Consultant, ingenuIT, New York

Fig. 2. Kerio MailServer WebMail



2.3 Benefit: Support for Outlook Clients

The Kerio Outlook Connector component provides a Messaging API Interface (MAPI) Provider in Kerio MailServer to deliver secure, reliable interoperability with Outlook clients, including versions of Microsoft Outlook 2000/XP/2003 and Microsoft Entourage X/2004.

Exchange 5.5 users may run into various glitches when attempting to use Outlook 2003. For instance, Microsoft reported that using Outlook 2003 to modify or import rules may cause the Exchange 5.5 store to halt when it tries to process a rule with a malformed property (12/2003).

2.4 Benefit: Familiar Directory Services

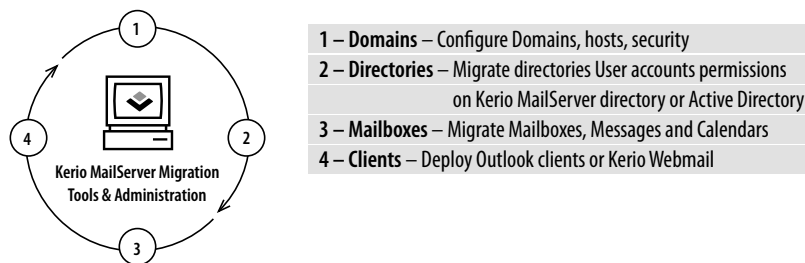
Just like Exchange 5.5, Kerio MailServer provides a similar built-in users database that can scale comfortably to 2,000 users on a single server without using external directory services. The Kerio Active Directory Extensions component allows for the optional use of Active Directory on Windows, allowing Kerio MailServer to scale above 2,000 users.

The reduced cost of ownership, Outlook-like WebMail, support for Outlook clients, and familiar directory services make Kerio MailServer an easier choice for small and medium sized businesses looking to migrate from Exchange. The Kerio Exchange MailServer Migration Tool and related utilities ease the migration process from Exchange to Kerio MailServer.

3.0 Kerio MailServer Migration Step-by-Step

Kerio MailServer provides a comprehensive selection of migration tools to migrate four important elements of your messaging infrastructure: your domains, directories, mail and clients.

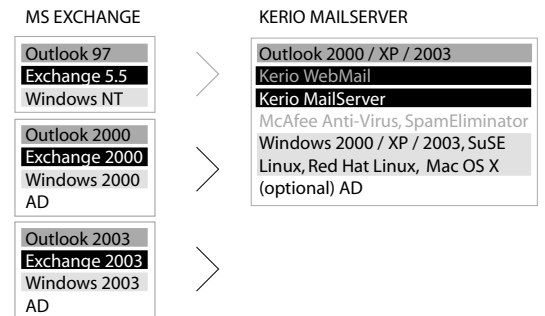
Fig. 3. Kerio MailServer Migration Process



Kerio has several tools to support your migration from Exchange 5.5/2000/2003.

- 1) **Configuration/Domains Section** (in Administration Console) – intuitive interface to enter multiple domains and parameters for domain-specific aliases, footers, forwarding, directory services, etc.
- 2) **Kerio MailServer Migration Tool** (separate utility) – migrates mailboxes, including all mail, attachments, folders, contacts, tasks, and calendar events
- 3) **Kerio MailServer Active Directory Schema Installer** (separate utility) – installs Kerio tab in Active Directory user properties to administer users directly through Active Directory
- 4) **Kerio Outlook Connector** (separate utility) – sets up communication for smooth interactions between Kerio MailServer and Outlook

Fig. 4. Kerio MailServer Migration Paths



Several migration paths are available for flexibility.

Here are answers to frequently asked questions about these tools.

Fig. 5. Kerio MailServer migration tools FAQ

- ① **Kerio MailServer Migration Tool Usage** – *When do I use it and for what?* The Kerio MailServer Migration Tool is designed to copy selected user accounts and their mailboxes, including email messages, attachments, folders, tasks and calendar events from an Exchange 5.5/2000/2003 server into a designated Kerio MailServer message store.
- ② **Non-Automated Processes** – *What do I have to do by hand?* Unfortunately, the Kerio MailServer Migration Tool does not automate everything. Administrators still must configure the domain(s) and security settings on the Kerio MailServer, and configure the Master Authentication in the Advanced Configuration area of the Administration Console before running the Migration Tool. You will also need to install Kerio Outlook Connector (KOC) on each client, and copy over your Public Folders manually.
- ③ **Backing Up Before Migration** – *Will data on the source server be protected during the migration?* The Kerio MailServer Migration Tools is only designed to copy, NOT move or delete source data. However, as a rule of thumb, backing up your data before doing a migration is a highly recommended practice.
- ④ **Verifying a Successful Migration** – *How do I know if the migration was successful? Is there a verification process? And what testing tools are available?* The Kerio MailServer Migration Tool will let you know when all of the Exchange accounts and mailboxes are migrated to the Kerio MailServer message store with a confirmation notice. Upon completion, administrators can view user accounts through the Kerio MailServer Administration Console. An email will arrive in your users' mailboxes with helpful information on how to get to WebMail, new login and password, new mail server address, and any new quotas you set for their migrated accounts.

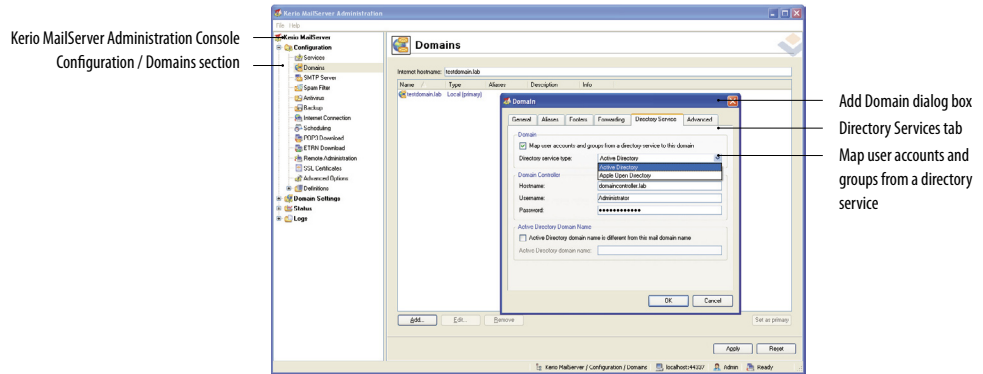
NOTE: The Import Users utility in the Domain Settings / Users section of the Administration Console can also be used to imports user accounts from Windows NT 4.0, Windows XP or 2000. Accounts imported using this method would not be affected by the Migration Tool.

The following sections review these migration processes in detail.

3.1 Domain Configuration

Kerio MailServer can serve several thousand independent mail domains, each containing any number of aliases. Domains are defined in the Configuration / Domains section of the Kerio Administration Console. Copying domains is mainly a matter of entering the domain names and binding them to their appropriate IP addresses.

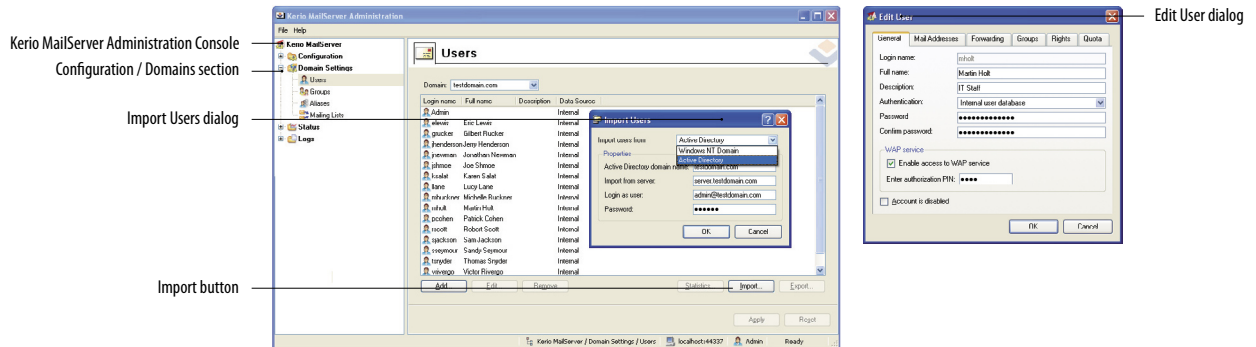
Fig. 6. Kerio MailServer Configuration Section of Administration Console to Define Domains



3.2 Directory Migration

Kerio MailServer eases the process of copying your old Exchange directory into the new Kerio MailServer internal users database. For Active Directory users, the Kerio Active Directory Extensions component provides integration between Windows Active Directory and Kerio MailServer.

Fig. 7. Kerio MailServer built-in users database as viewed in the Users Section of the Kerio Administration Console



Avoiding Active Directory
With Kerio MailServer, you don't have to use Active Directory at all.

Active Directory Obstacle
"Often, vendors hope that a major upgrade project will act as a catalyst for the migration. The obvious case in point is the way so many Exchange shops are still stuck at Exchange 5.5."
– Ferris Research

3.2.1 Importing users into the Kerio MailServer internal users database

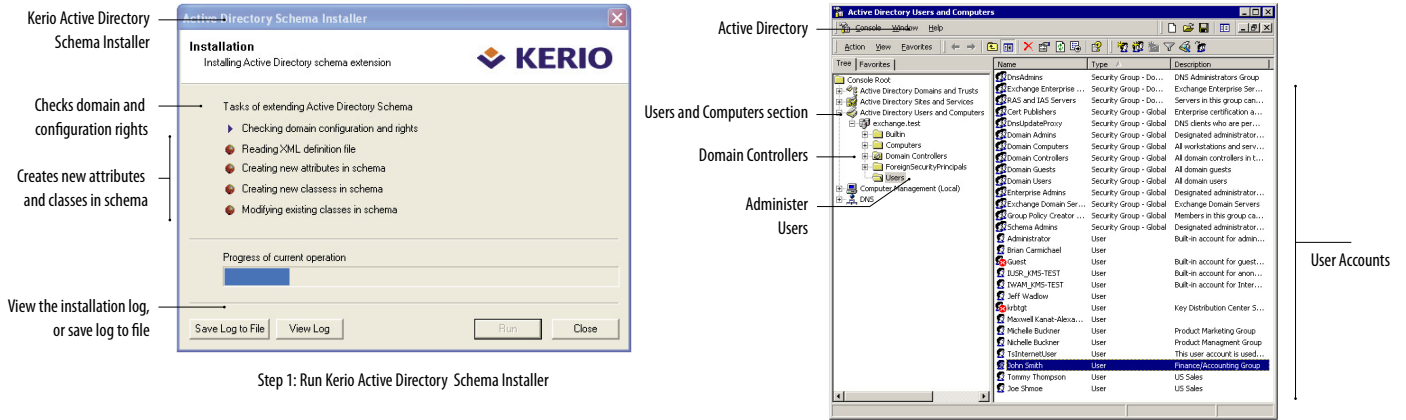
User accounts and contacts in Kerio MailServer are saved in the internal users database. User accounts will be migrated from Exchange with mailboxes when the Kerio MailServer Migration Tool is used. User accounts can also be either defined by hand in this database using the Domain Settings / Users section of the Administration Console, or imported into the database from other sources like a Windows NT domain. The Import button below the user list will open the dialog for user import.

3.2.2 Integrating with Active Directory in Windows 2000 or higher

If you decide to use Active Directory, you still need to build your Active Directory infrastructure. However, since Kerio MailServer provides full support for Active Directory using Kerio MailServer Active Directory Extensions, once extensions are installed, you can access your Kerio MailServer user accounts through the "Users and Computers" section within Active Directory.

With Kerio Active Directory Extensions, the dialog properties box in which new user accounts are created in Active Directory is extended with a tab called, "Kerio MailServer Account," in which specific information for Kerio MailServer can be entered (email addresses, forwarding, quota, etc.). So, new accounts only need to be created in Active Directory.

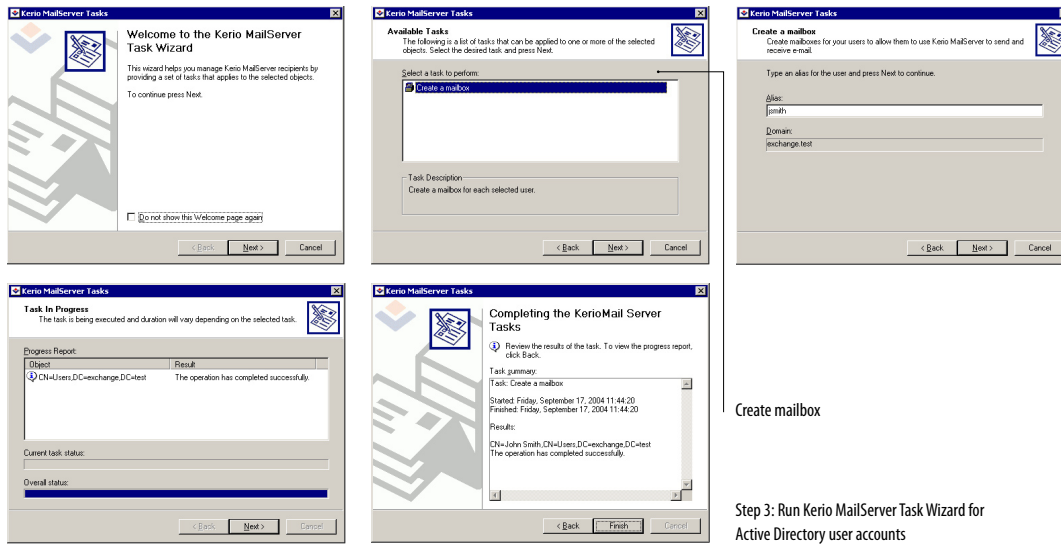
Fig. 8. Administration for Kerio MailServer User Accounts through Active Directory



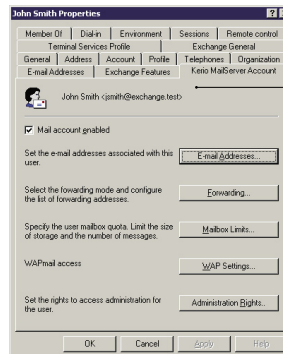
Step 1: Run Kerio Active Directory Schema Installer

Step 2: Use Active Directory to Administer Users

Note: After Kerio Active Directory Schema Installer has been run, when you right-click on a user in the Active Directory Users list, the context menu that opens contains the option to use the "Kerio MailServer Task Wizard" to create a Kerio MailServer mailbox.



Step 3: Run Kerio MailServer Task Wizard for Active Directory user accounts



Step 4: Find the Kerio MailServer Accounts tab in Active Directory User Properties

Multi-Platform Support

The option to choose a more secure operating system

Platform Flexibility

You can also choose to switch from Exchange on Windows to Kerio MailServer on Windows, Linux or Mac.

3.3 Migrating Mailboxes

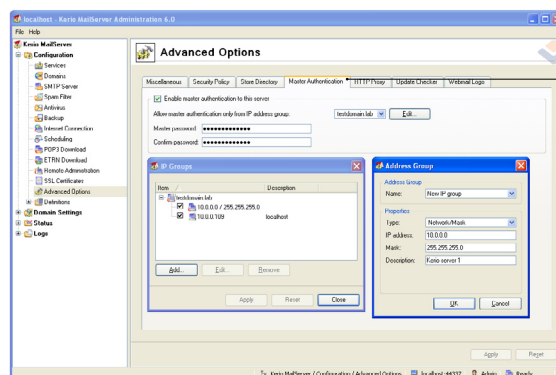
Kerio MailServer simplifies the mailbox migration process, automating many of the basic migration tasks with the Kerio MailServer Migration Tool. The tool copies the content in your users' mailboxes from your source Exchange mail server to the new mailboxes in the Kerio MailServer message store. The Kerio MailServer Migration Tool must run on the Exchange server from which you intended to migrate. It must be running under a user who has administrator rights and an email account on the same server.

Fig. 9. Mailbox Migration Steps

The migration tool guides you through several steps.

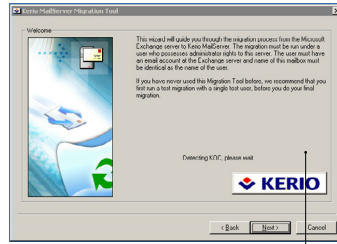
- ① **Enable Master Authentication** - Use the Kerio Administration Console to enable master authentication for the destination Kerio MailServer.
- ② **Start Kerio MailServer Migration Tool** - Install the migration tool onto the machine of the Exchange Server from which you want to migrate and click on the program icon to start. If the person doing the installation does not have administrator rights, before the migration a special temporary administrator account should be created with domain rights.
- ③ **Mailbox Selection** - Choose which mailboxes to migrate.
- ④ **Destination Server Identification** - Provide the location of the Kerio MailServer to which that you want to migrate.
- ⑤ **Set Kerio Outlook Connector (KOC)** - Automate install and update of KOC on host clients.

Fig. 10. Kerio MailServer Master Authentication in Configuration / Advanced Options section of Administration Console

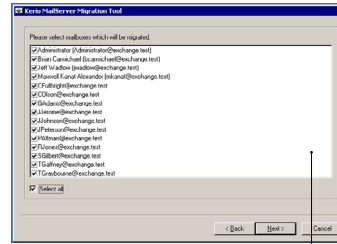


Set Master Authentication before using Migration Tool

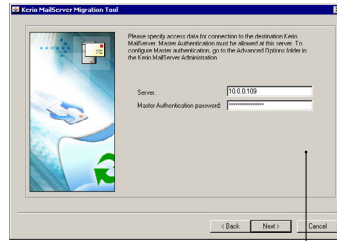
Fig. 11. Kerio MailServer Migration Tool



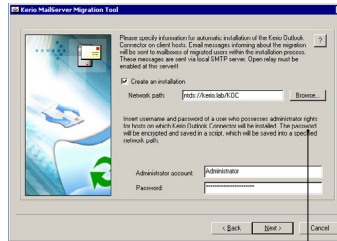
Step 1: Migration tool detects for Kerio Outlook Connector (KOC) upon install



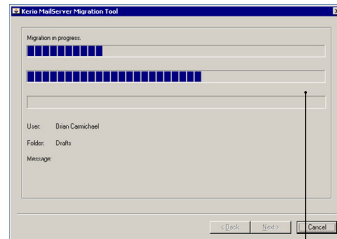
Step 2: Select Exchange mailboxes to migrate



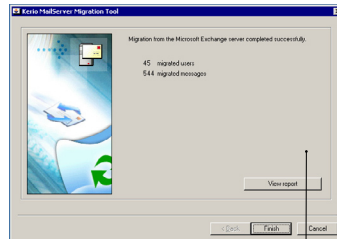
Step 3: Enter IP address of destination Kerio MailServer and Master Authentication password.



Step 4: Specify automatic install of KOC on client hosts



Step 5: Mailbox migration runs



Step 6: Migration report

Example Auto-Email to Client:

From: John Smith [mailto:jsmith@newmailbox.com]
 To: John Smith [mailto:jsmith@exchange.test]
 Date: Friday, September 17, 2004 3:55 PM
 Subject: Kerio MailServer Migration

This message was generated by the migration process of Kerio MailServer Migration Tool. During the migration, mail, calendars, tasks and other Microsoft Exchange items were copied to the Kerio MailServer.

The migration process completed successfully.

New server address: 10.0.0.51

Your login name: jsmith@exchange.test

Your new password: C982AA

To enable Microsoft Outlook with MAPI provider, Kerio Outlook Connector - a MAPI implementation developed by Kerio Technologies - must be installed first. Kerio Outlook Connector is an extension to MS Outlook. It allows users to work with groupware data (contacts, calendar, tasks) stored in the Kerio MailServer location. MAPI (Messaging Application Programming Interface) is a messaging interface that allows MAPI clients like Outlook to work with the mail server.

A profile for Microsoft Outlook must be created. Follow this link to start an automatic installation of the Kerio Outlook Connector and to create a user profile. Run the installation. ...

Step 7: Client receives new account information with Kerio Outlook Connector (KOC) installation path

For More Information

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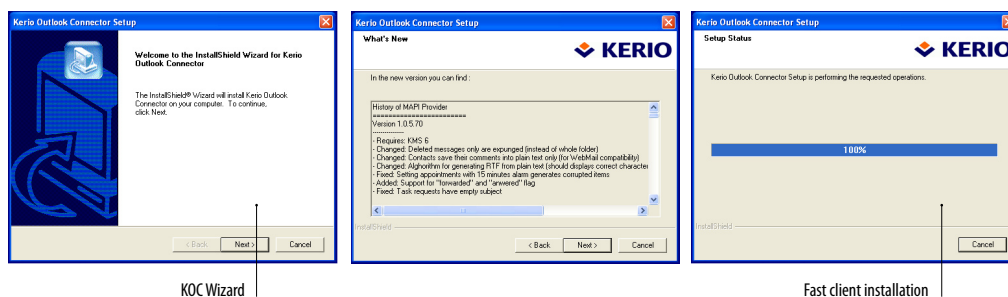
info@kerio.cz
www.kerio.cz

By comparison, Exchange 2000 and higher also provides migration tools to migrate mailboxes from Exchange 5.5 to Exchange 2000 or higher, though the process increases exponentially in complexity.

3.4 Updating Your Outlook Clients

The Kerio Outlook Connector (KOC) includes a MAPI Provider that streamlines synchronization and interoperability with your Outlook clients, including Outlook 2000 and higher. However, like Exchange, you must also deploy each Outlook client with the new server information. You will need to install KOC on each individual client.

Fig. 12. Kerio Outlook Connector (KOC) Client Installation



Note that Outlook must already be installed on a client for KOC to install successfully.

To ease the Outlook client update process, in addition to the WebMail URL and the new user name and password, the auto-generated email sent to clients when the Kerio MailServer Migration Tool is run also includes the path for KOC installation.

The step-by-step migration through Kerio MailServer and its associated tools will ease any transition from Exchange to Kerio MailServer, addressing elements from domain configuration and directory services to mailbox migration and client deployment.

Platform flexibility further addresses the Exchange dilemma.

4.0 Multiple Platform Support

Kerio MailServer provides the flexibility afforded by multiple platform support. In addition to Windows, Kerio MailServer migration tools also support Red Hat Linux, SuSE Linux, and Mac OS X platforms. In addition to Active Directory, Kerio MailServer can also work with Apple Open Directory. Thus, you can choose to switch from Exchange on Windows to Kerio MailServer on Linux or Mac OS X and get the same kind of Outlook functionality for your end-users.

5.0 Conclusion

Mail migration is an involved process regardless of your target server of choice. With tight integration to both Outlook and Active Directory, Outlook-like WebMail, and supported software, Kerio provides a truly viable replacement for Exchange that delivers similar functionality to small and medium sized businesses – significantly reducing complexity and expense, and making migration a much less painful and less frightening process. The Kerio MailServer Migration Tool and associated utilities supply the automation and flexibility to make migration worth the time.

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