

KerioMailServer6™

Step-by-Step

Kerio Technologies

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This guide provides detailed description on the *Kerio MailServer*, version 6.4.0. All additional modifications and updates reserved.

For current versions of the product and related manuals, check

<http://www.kerio.com/kms>.

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Contents

1	Introduction	4
1.1	Before you start	5
2	Installation	7
2.1	Windows	7
2.2	Mac OS X	7
2.3	Linux	8
2.4	Configuration Wizard	8
3	Server configuration	10
3.1	Starting Kerio MailServer	10
3.2	Starting the Kerio Administration Console	10
3.3	Setting domain and user accounts	12
3.4	Setting connection to the Internet and to the SMTP server	14
3.5	Antispam control of the SMTP server	14
3.6	Antivirus control	15
3.7	Email backup	15
4	Settings of client applications and connection to Kerio WebMail	17
4.1	Connection to Kerio WebMail	17
4.2	MS Outlook settings	17
4.3	MS Entourage settings	19
A	Legal Presumption	21

Chapter 1

Introduction

This document is a simple guide focused on description of *Kerio MailServer* configuration applied immediately upon its first installation and startup in the network. To make the guide as comprehensible as possible, let us see an exemplary implementation of *Kerio MailServer* (see figure 1.1):

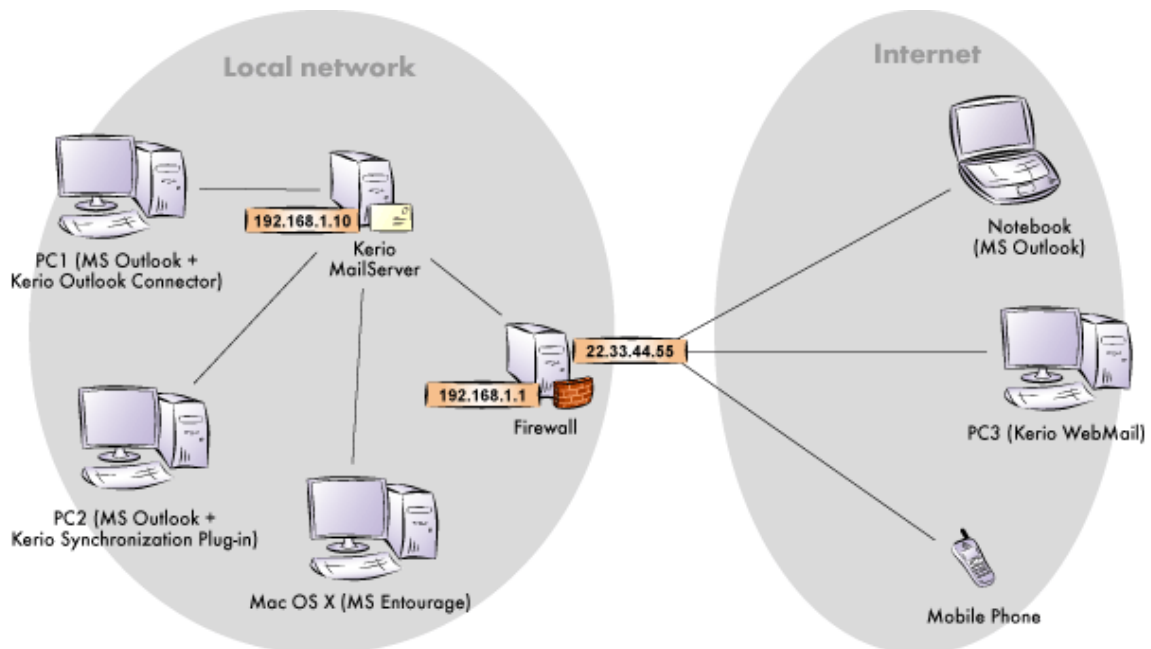


Figure 1.1 Example of Kerio MailServer implementation

1. Install *Kerio MailServer* on a separate server (no other services will be run on it) and run it in a local firewall-protected network.
2. *Kerio MailServer* will be connected to the Internet via a leased line. Email will be received and sent via SMTP. For this reason, it is necessary to enable antivirus and antispam control.
3. *Kerio MailServer* will be used for a single domain called `company.com`. The server will be installed and run in the local network, on a host with IP address `192.168.1.10` and DNS name `mail.company.com`.

4. In the internal user database, there will be created only one local account used for administration of *Kerio MailServer*. Any other user accounts will be mapped from the *Microsoft Active Directory* directory service (the same method can be used for the *Apple Open Directory*).

Name of the *Active Directory* domain will be the same as the name of the email domain and the name of the Kerberos realm.

5. The server will be available both from the local network and from the Internet. For security reasons, however, only SSL/TLS-secured Internet connections will be allowed.
6. All undelivered email (messages where the part preceding the @ symbol in the address is not valid) will be sent to `admin@company.com`.
7. Enable the *Kerio MailServer's* dual antivirus control. We will use the integrated McAfee antivirus (license of *Kerio MailServer* with *McAfee* is required) and the external *Clam AntiVirus* which will be installed on the same computer as *Kerio MailServer*.
8. All email will saved and backed-up in a local archiving folder once a week.
9. Users will access their email via *Kerio WebMail*, *MS Outlook* extended with the *Kerio Outlook Connector* and with the *Kerio Synchronization Plug-in*. *MS Entourage* will be used on Mac OS X..

The exemplary configuration can be easily customized. For detailed information on setting of individual features of *Kerio MailServer*, refer to *Kerio MailServer, Administrator's Guide*, chapter [Deployment Examples](#). The whole document can be downloaded from the *Kerio Technologies* website at <http://www.kerio.com/kms-manual>.

1.1 Before you start

Before you start the installation and configuration, prepare your environment as follows:

Set DNS MX records

Although *Kerio MailServer* is located in a private network, email will be sent and received to and from the Internet. Therefore, it is necessary to set the corresponding record in the public DNS for a public IP address assigned by the provider (in this example, the 215.75.128.33 IP address will be used). In the local network it is necessary to assign the `mail.company.com` name the local IP address 192.168.1.10. The private address will be set in the local DNS.

If no backup server is set, a public server log can be as follows:

company.com	MX	10	mail.company.com
mail.company.com	A		215.75.128.33

Firewall configuration

Kerio MailServer is installed in a local network behind a firewall. In addition to the mailserver's configuration, it is also necessary to perform corresponding additional settings of the firewall.

If the MailServer is to be accessible from the Internet, certain ports have to be mapped in the firewall. Each mapped port might introduce security problems. Therefore, map ports only for those services which you want to make available from the Internet.

In the case of our network environment, it is necessary to map port 25 (a default port for the SMTP service). This setting is required for cases where an MX record for the particular domain is addressed to the server. Any SMTP server on the Internet can connect to your SMTP server to send email to one of its domains. For this reason access to the mapped port 25 must not be restricted to particular IP addresses.

Now, it is necessary to map ports that will be used for connections out of the local network. Since the security risk is higher here, only SSL/TLS-secured services will be mapped. Settings are shown in table 1.1.

Service (default port)	Outgoing connection	Incoming connection
SMTP (25)	allow	allow
SMTPS (465)	allow	allow
POP3 (110)	allow	deny
POP3S (995)	allow	allow
IMAP (143)	allow	deny
IMAPS (993)	allow	allow
NNTP (119)	allow	deny
NNTPS (563)	allow	allow
LDAP (389)	allow	deny
LDAPS (636)	allow	allow
HTTP (80)	allow	deny
HTTPS (443)	allow	allow

Table 1.1 Services to be allowed on the firewall

Chapter 2

Installation

Kerio MailServer supports three types of operating systems. You can choose from Windows, Mac OS X and Linux.

List of versions (or distribution packs) of the operating systems supported by *Kerio MailServer* can be found at *Kerio Technologies* website (<http://www.kerio.com/kms>).

It is necessary to install a special additional installation package on any operating system (as for Linux, two packages are in question). All installation packages can be downloaded from the *Kerio Technologies* website at <http://www.kerio.com/kmsdwn/>.

Once a corresponding installation package is downloaded, the installation can be started. Installations differ by operating system:

2.1 Windows

Once the installation package is downloaded, run the installation under a user with administration rights for the operating system.

Standard wizard is used for the installation. *Kerio MailServer* is installed under the following directory:

C:\Program Files\Kerio\MailServer

When the installation is completed, the configuration wizard is started (see section 2.4).

2.2 Mac OS X

Once the installation package is downloaded, run the installation under a user with administration rights for the operating system (the installation program requires authentication). The installation package is opened as a disk in the *Finder* application and an executable installation file is offered.

In the standard installation wizard select the *Easy Install* option to start complete installation of the product to the `/usr/local/kerio/mailserver` directory.

When the installation is completed, the configuration wizard is started (see section 2.4).

2.3 Linux

Kerio MailServer is distributed in two *RedHat Package Manager* packages which include the server and the administration console.

The installation must be performed by a user with root rights. *Kerio MailServer Engine* is installed to `/opt/kerio/mailserver` and the *Kerio Administration Console* to `/opt/kerio/admin`.

Start installation using this command:

```
# rpm -i <installation_package_name>
```

In case of the recent versions of the distributions, problems with package dependencies might occur. In this case, install package `compat-libstdc++`

It is recommended to read carefully the `LINUX-README` file immediately upon the installation. The file can be found in

`/opt/kerio/mailserver/doc`

2.4 Configuration Wizard

Since the identical configuration wizard is used for all operating systems, the following instructions also apply to all of them:

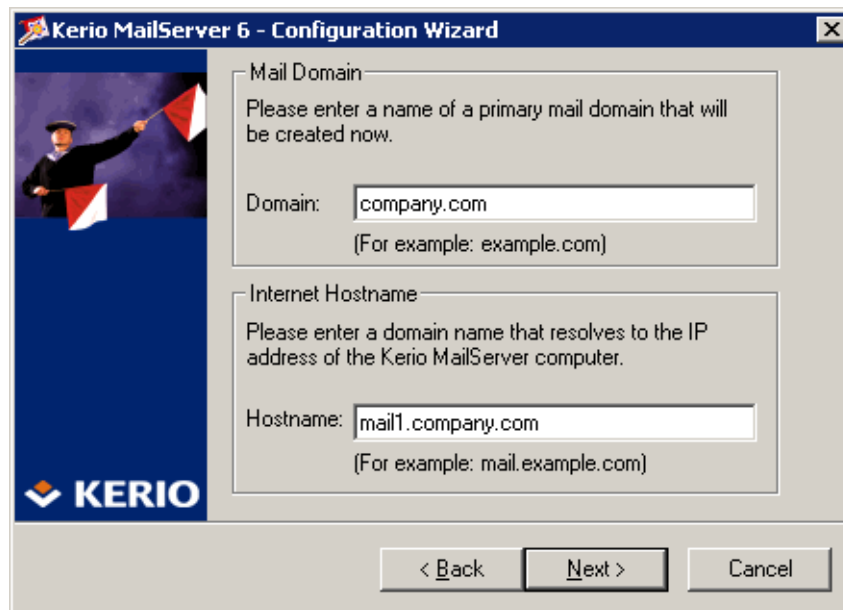
On Windows and Mac OS X, the configuration wizard is opened automatically upon a successful installation of *Kerio MailServer*. On Linux, it is necessary to run the wizard by using the following command:

```
cd /opt/kerio/mailserver/cfgwizard
```

Warning: The *Kerio MailServer Engine* must be stopped while the configuration wizard is running.

The following parameters are to be set in the configuration wizard:

1. In the first dialog, create an email domain and specify the Internet name of the server (see figure 2.1). .
2. In the next step of the wizard, create an administration account. Keep the *Admin* as name and enter password. Memorize the name and password defined in this dialog well since they will be later used for authentication to the *Kerio MailServer's* administration console.
3. The next dialog of the wizard allows setting of location of the data store. In this directory, all user accounts and server logs will be stored.
4. In the last dialog, a summary of the parameters just set is provided. When this dialog is closed, a notice of the successful completion of the installation is displayed.



The image shows a screenshot of the 'Kerio MailServer 6 - Configuration Wizard' window. The window has a title bar with the text 'Kerio MailServer 6 - Configuration Wizard' and a close button. On the left side, there is a vertical panel with a blue background. It features a small image of a person in a hat holding a red flag, and the 'KERIO' logo at the bottom. The main area of the window is light gray and contains two sections. The first section is titled 'Mail Domain' and contains the text 'Please enter a name of a primary mail domain that will be created now.' Below this text is a text input field with the value 'company.com' and a hint '(For example: example.com)'. The second section is titled 'Internet Hostname' and contains the text 'Please enter a domain name that resolves to the IP address of the Kerio MailServer computer.' Below this text is a text input field with the value 'mail1.company.com' and a hint '(For example: mail.example.com)'. At the bottom of the window, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Kerio MailServer 6 - Configuration Wizard

Mail Domain
Please enter a name of a primary mail domain that will be created now.

Domain:
(For example: example.com)

Internet Hostname
Please enter a domain name that resolves to the IP address of the Kerio MailServer computer.

Hostname:
(For example: mail.example.com)

< Back Next > Cancel

Figure 2.1 Configuration Wizard — creation of the primary domain

Chapter 3

Server configuration

3.1 Starting Kerio MailServer

On Windows and Mac OS X, *Kerio MailServer* is automatically started upon a successful installation, while on Linux, the server must be run by hand.

Starting and stopping of the server depends on the operating system where *Kerio MailServer* is installed, as follows:

Windows

To run *Kerio MailServer*, use the icon which appeared in the notification area of the system toolbar (see figure 3.1).

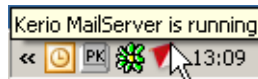


Figure 3.1 Kerio MailServer Monitor

To open a pop-up context menu, right-click on the icon. The *Start/Stop Kerio MailServer* options can be used to either run or stop the server.

Linux

The following commands can be used to stop, run or restart *Kerio MailServer*:

```
/etc/init.d/keriomailserver start  
/etc/init.d/keriomailserver stop  
/etc/init.d/keriomailserver restart
```

Mac OS X

On Mac OS X, *Kerio MailServer* can be started or stopped by using the *Kerio MailServer Monitor* (its startup icon is available in the *Other* section of *System Preferences*). Username which must belong to the Admins group and password is required for stopping or running of the service. Once authenticated, clicking *Stop* or *Start* is sufficient.

3.2 Starting the Kerio Administration Console

Kerio Mailserver is configured through the *Kerio Administration Console* application. The method of starting of the administration console depends on the operating system where the application is installed:

Windows

On Windows, the administration console can be run by clicking on the *Kerio MailServer Monitor's* icon displayed in the notification area of the system toolbar (see figure 3.1). To run the administration console, double-click on this icon.

Linux

The *Kerio MailServer's* administration program can be started by the `kerioadmin` script stored under the `/usr/bin` directory (the path to this directory is set by default in the system).

Mac OS X

To start the administration console, click on the *Administration Console* icon in *Applications* → *Kerio MailServer*.

Once the program is started, the administration window of the *Kerio Administration Console* and the *New connection* dialog box appear (see figure 3.2). Use the dialog box to enter the login data defined in the configuration wizard (see chapter 2).



Figure 3.2 New connection to Kerio MailServer

On any operating system, click on *Connect* to open the *Kerio MailServer's* administration window. Upon the first authentication, a product registration dialog is displayed. It is possible to register either the full product version or the trial version — charge-free technical supported is available for any registered version. This support is available during the whole period of the product's validity, either of the full or of the trial version.

Notes:

- The *Save as* option can also be used to save the connection.
- Besides the connection administration, the *Kerio Administration Console* window al-

allows also perform language localization settings for the administration program. Localization settings can be changed under *Tools* → *Options*.

3.3 Setting domain and user accounts

Email domains are configured in the *Configuration* → *Domains* section. The section already includes the domain previously created in the configuration wizard (see figure 3.3).

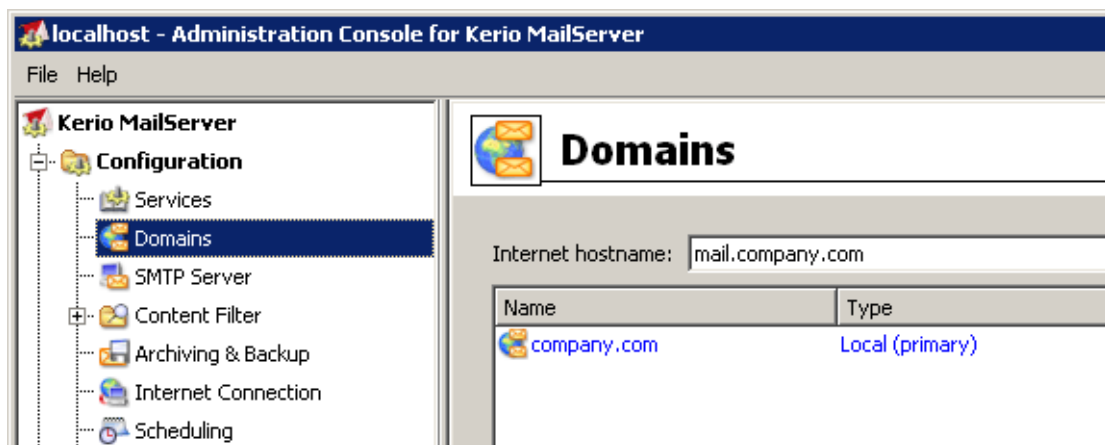


Figure 3.3 Domains

Mapping of user accounts and groups from a directory service

1. On the domain server, install the *Kerio Active Directory Extensions* which is available for free at the *Kerio Technologies* website. This application extends the directory service by certain *Kerio MailServer's* features.
2. In the *Kerio MailServer's* administration console, open the *Configuration* → *Domains* section (see figure 3.3).

Open the domain created within the installation by clicking on the *Edit*.

3. Switch to the *Directory Service* tab to enter the domain server data (see figure 3.4). Enable mapping by checking the *Map user accounts and groups from a directory service to this domain* option. Select *Active Directory* as the directory service type. In the *Hostname* entry, specify DNS name or IP address of the domain server. Use the *Username* entry to specify a username with read and write rights for the *Active Directory's* LDAP database.

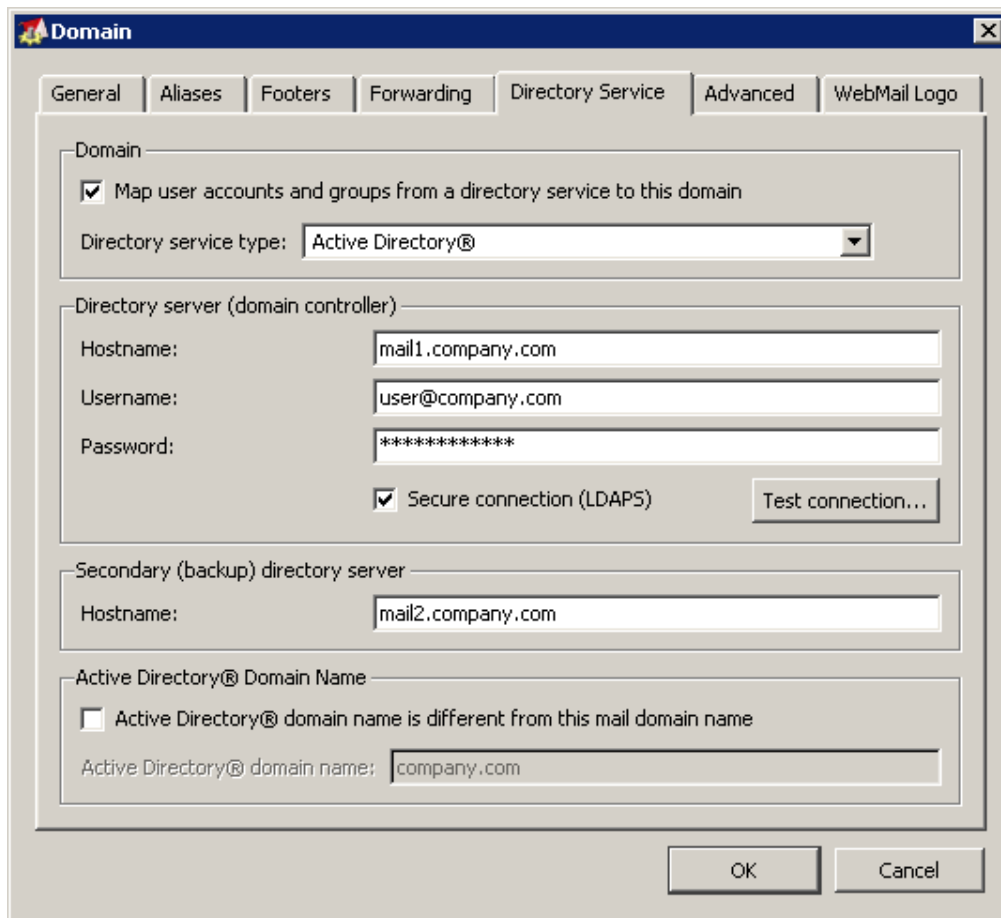


Figure 3.4 Setting mapping of Active Directory

Use the *Test connection* button to test whether all parameters have been set correctly to allow *Kerio MailServer* connect to the *Active Directory's* domain controller.

4. Switch to the *Advanced* tab. It is necessary that Kerberos realm is defined in the Kerberos 5 entry on this tab. The upper-case is set automatically for the name.

Once mapping is set, open the *Domain Settings* → *User Accounts* section. User list will include all mapped users and one local account for *Kerio MailServer* administration.

The user groups can be mapped in a similar way as users. Groups are administered in *Domain Settings* → *Groups*.

Setting an alias for undeliverable email

Aliases can be defined in the *Domain Settings* → *Aliases* section.

1. Click on *Add*.
2. This opens a dialog where a new alias can be added. In the *Alias* entry, enter the * symbol. In the *E-mail address* textfield specify the address of the mailbox where any undeliverable email will be sent.
3. Once the alias is saved, you can test it by the *Check address* button available in the *Aliases* section.

3.4 Setting connection to the Internet and to the SMTP server

Anyone can connect to the SMTP server to send messages to local domains. Sending of messages to other domains will be restricted to local users only. Users connected from the Internet will be prompted to authenticate on the SMTP server by username and password. This setting can be done on the *Relay Control* under *Configuration* → *SMTP server*:

1. On the tab, enable the *Allow relay only for* option.
2. Check option *Users from IP address groups* and select the *Local Clients* group which includes all private ranges of IP addresses.
3. Enable option *Users authenticated through SMTP for outgoing mail* to allow users connected from the Internet send email.

Note: Authentication against the SMTP server must be set in the email client. Settings of some popular clients are focused in chapter 4.2).

Details on security of the SMTP server can be found in chapter [SMTP server](#) of the *Kerio MailServer, Administrator's Guide*.

3.5 Antispam control of the SMTP server

The SMTP server is accessible from the Internet and, therefore, it is necessary to configure an antispam control of the SMTP server. Antispam filters can be set under *Configuration* → *Content Filtering* → *Spam Filter*:

1. Antispam rating can be started and set on the *Spam Rating* tab. Default settings of this tab can be kept.
2. On the *Blacklists* tab, it is recommended to enable control involving Internet spammer databases and to set 2 points as a score for each database.

3. Switch to the *SpamAssassin* tab and enable option *Check every incoming message in Spam URI Realtime Blocklist (SURBL) database*.
4. On tabs *Caller ID* and *SPF*, set control of e-mail policy records of the sender SMTP server and set the spam score to 2 points. This control allows to filter out messages with fake sender addresses.
5. On the *Spammer Repellent* tab, enable SMTP connection delay. This filter efficiently stops spam messages at the SMTP level which relieves the server from a remarkable volume of spam testing.

Antispam filters of the SMTP server are focused in the *Kerio MailServer, Administrator's Guide*, chapter [SMTP Delivery](#).

3.6 Antivirus control

Another necessary settings of *Kerio MailServer* to be done are enabling of the antivirus control and attachment filter that can be performed in the following sections:

Antivirus

Antivirus check can be enabled under *Configuration → Content Filter → Antivirus*:

1. Check that the *Use the integrated McAfee antivirus engine* option is running.
2. On the *Kerio MailServer's* host, install the external *Clam AntiVirus*.
3. Under *Configuration → Content Filter → Antivirus*, enable option *Use external antivirus* and select *Clam AntiVirus* in the menu.

Attachment Filter tab

To set attachment filter, go to the *Configuration → Content Filter → Attachment Filter* section and check the *Enable attachment filter* option.

In the list, it is also possible to add/remove other attachments to be filtered and use the *Add* button to add attachment types which are not included in the list yet.

3.7 Email backup

Email backup and archiving can be set under *Configuration → Archiving and Backup*.

Backup of the data store and configuration files

Backup can be set on the *Backup* tab:

1. The backup can be enabled by checking the *Enable message store and configuration recovery backup* option.
2. In the *Backup scheduling* table, set one full backup for Sunday midnight so that the backup does not burden the server within working hours.
3. In the *Backup directory* entry, specify the path to the directory where backups will be stored. The path must be entered in a way in accordance with convenience of the operating system where *Kerio MailServer* is running.
4. Enter your email address in the *Email address* field. *Kerio MailServer* will automatically generate results of each backup and send it to the address defined.

Email archiving

Email archiving can be set on the *Archiving* tab:

1. To enable archiving, check the *Enable mail archiving* option.
2. The default path to the directory can be kept.
3. Enable the *Archive to local folder* option.
4. Set the interval used for creating of new archive folders to one week.

Archiving folders will be displayed in the *Kerio MailServer's* administrator mailbox. They can be viewed, for example, in the *Kerio WebMail* interface.

Chapter 4

Settings of client applications and connection to Kerio WebMail

Users will connect to the server via the *Kerio WebMail* interface or use a supported *MS Outlook* (on Windows) or *MS Entourage* (on Mac OS X) clients. The following sections include instructions on how to connect to *Kerio WebMail* and how to set email clients optimally.

4.1 Connection to Kerio WebMail

To access the HTTP service using a web browser, insert the IP address (or the name if it is contained in DNS) of the computer where *Kerio MailServer* is running. A protocol has to be specified in the URL — either HTTP for non-secured access or HTTPS for SSL-encrypted access. The URL will be as follows: `http://mail.company.com` or `https://mail.company.com`.

It is recommend to use the HTTPS protocol for remote access to the service (simple HTTP can be tapped and the user login data can be misused). By default, the *HTTP* and *HTTPS* services use the standard ports (80 and 443). If the standard ports are changed, specify the port number in the URL address: `http://mail.company:8000` or `https://mail.company.com:8080`.

Note: The description above focuses accessing email via PDA devices. If connection of the PDA device to *Kerio MailServer* fails, it is possible that it chooses a wrong connection (it tries to connect to the full version instead of *Kerio WebMail Mini*). In this case, simply enter the following URL: `https://mail.company.com/pda`.

If the a correct URL is entered, authentication page is opened requiring username and password. Click on *Connect* to connect to the account.

4.2 MS Outlook settings

Kerio (MAPI) account

Install and configure the Kerio account as follows:

1. Install *MS Outlook* on the client station, run it and close it again.
2. Install the *Kerio Outlook Connector*.

3. Create a new email profile in the *Start → Settings → Control Panel → Mail* menu.
4. Enter a name for the new profile and in the new account wizard select *Add a new email account*.
5. On page two of the wizard, select *Other server types* and click on *Next*.
6. The next step allows selection of a server type. Select the *Kerio MailServer* option (it is often the only option offered here).
7. Now, set the *Kerio Outlook Connector* on the *Kerio MailServer* dialog's tabs:
 - *Account* — on this tab, enter Internet name of the server where *Kerio MailServer* is installed and username and password for the mailbox. If the user does not have an account in the primary domain, it is necessary to use full username including the domain name: *username@company.com*. Click on *Check connection* to check whether it is possible to establish connection to the server under the parameters having been defined.
 - *Advanced* — on this tab, it is possible to change ports for SMTP, IMAP and HTTP services. Ports of non-secured versions of these services are set by default. This implies that it is not necessary to change these ports in case that an account is being set within the local network. If setting an account of the local network, enable the *Secured Connection (SSL)* option.
 - *Sender* — the tab allows setting of basic user information. It is not obligatory to set this information since it takes no effect on the communication between the server and the client.

POP3 and IMAP account

Before setting POP3 or IMAP account in *MS Outlook*, it is recommended to use the *Kerio Synchronization Plug-in* extension module for synchronization of the private folders Calendar and Contacts. Installation with the *Kerio Synchronization Plug-in* will be as follows:

1. Install *MS Outlook*.
2. If *MS Outlook* is running, close it.
3. Install *Kerio Synchronization Plug-in*.
4. In *MS Outlook*, create a new profile (*Start → Settings → Control Panel → E-Mail*).

5. A particular POP3 or IMAP account is set withing creation of the profile:
 - In the new account wizard, opened automatically upon setting a name of the new profile, select POP3 or IMAP.
 - Set the *E-mail and Internet Settings* section carefully. In the *Name* entry, specify first and second name of the user, and enter the user's address in the *E-mail Address* field. Specify username in the *Username* entry. If the user does not have an account in the primary domain, it is necessary to use full username including the domain name: `username@company.com`. Specify *Password* that will be used for connection to *Kerio MailServer*. Finally, enter the DNS name or IP address of the server where *Kerio MailServer* is running in the *Incoming mail server* and *Outgoing mail server (SMTP)* entries.
 - If the user connects from the Internet, it is necessary to set authentication in accordance with the configuration of the SMTP server (see section 3.4). Click on *Advanced settings*. This opens a dialog including several tabs where other parameters of the account can be set. Switch to the *Outgoing mail server* tab, enable the *My outgoing server (SMTP) requires authentication* option and select *Use the same settings as my incoming mail server*.
6. Run *MS Outlook* in the new profile. If the installation is completed successfully, the user is informed by an alert that *Kerio Synchronization Plug-in* must be set first. Once this dialog is confirmed, a configuration window is opened where synchronization as well as an account from which folders will be synchronized can be set. The account just created is set as default. Therefore, the settings can be kept as they are.

If it is not desirable to use synchronization by the *Kerio Synchronization Plug-in*, simply do not install the extension and set the account as described in step five.

4.3 MS Entourage settings

Kerio MailServer uses an interface for *MS Exchange* in *MS Entourage* and thus it allows work with groupware data (email, calendar, contacts and public email folders), use the *Free/Busy* server, connect to various LDAP databases for contact searching, etc. The account can be set as follows:

1. Install a supported version of *MS Entourage* and run it.

Note: For updated list of supported versions of *MS Entourage*, refer to *Kerio Technologies* website (<http://www.kerio.com/kms/>).
2. Upon the installation, the wizard for creating of a new account is started — it will not be needed for the configuration now, so you can simply close it.

3. To perform the settings, go to *Tools* → *Accounts*. This opens the *Accounts* dialog box. The dialog includes several tabs. Switch to the *Exchange* tab
4. On the *Exchange* tab, click on the *New* button available on the toolbar.
5. This opens a dialog where new accounts can be created. The dialog includes the *Configure account manually* option. Click on this button to set an account.
6. This opens a—dialog where new accounts can be set manually. Since this point, settings differ from version to version. Therefore, let us only see which settings should be done here:
 - Basic account settings — account name, full name of the user, email address, username, password and name of the email domain and name of the Exchange server — DNS name or IP address of *Kerio MailServer*.
 - LDAP settings — DNS name or IP address of *Kerio MailServer*.
 - Free/Busy settings — in the section called either *Free/Busy server* or *Public folders server*, set DNS name of *Kerio MailServer* in form `server_name/public` (in our example, the line would go `mail.company.com/public`).

Appendix A

Legal Presumption

Microsoft[®], Windows[®], Windows NT[®], Internet Explorer[®], Active Directory[®], Outlook[®], ActiveSync[®] and Windows Mobile[®] are registered trademarks of Microsoft Corporation.

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