

exchange4linux Server Suite 2.5



Manual

EN.2004 Edition

exchange4linux Server Suite 2.5: Manual

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Preface

Thank you for choosing a Neuberger & Hughes' exchange4linux product. We have made all possible efforts to make this manual as extensive and clear as possible for both the inexperienced user and the professional system administrators. In case you still have questions, please consult the on-line N&H Support System at <http://support.n-h.com>. To use this and other support tools, you need to have a valid support contract. For more information on the support possibilities, please contact Neuberger & Hughes.

This manual consists of four parts. When you want to start directly with the installation of the exchange4linux Server Suite, we advice you to read at least part II: "Before you start". This section contains important information that can prevent confusion while using exchange4linux.

Part I. Explanation and terminology

This part shall help you to develop a better understanding of the network possibilities and to get to know some special expressions you need to set up exchange4linux.

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Chapter 1. Explanation of network settings

Internal exchange4linux network

exchange4linux can manage one dedicated network. The internal IP-addresses are, contrary to the IP-addresses used on the Internet, only visible for computers within the network. Depending on the size of the network, a specific range of IP-addresses must be used. The possible ranges are sorted in several classes:

1. C-Class network:
This class enables you to assign 256 IP-addresses within the network. These addresses have to start with: **192.168.**
On the third position must be a value between 0 and 256, eg. **192.168.2. ...**
The last position must be a 0, in this case the network address would be: **192.168.2.0**
When using a DHCP server, the settings of this server have to match the values mentioned above. In this case, IP-addresses can be assigned in the range **192.168.2.0** to **192.168.2.255** with the exception of the IP-address used by exchange4linux itself.
2. B-Class network:
When more than 256 addresses are needed, one can use a B-Class network. This allows you to assign 256*256 IP-addresses. The range must start with **172.**
The second number must lie between 16 and 31, so between **172.16.** and **172.31.**
The network address ends with 0.0
An example: as a network address you choose **172.22.0.0**. The DHCP Server can, if set up properly, assign addresses in the range **172.22.0.0** to **172.22.255.255** with exception of the exchange4linux IP-address.
3. A-Class network:
There is also one private A-Class network (10.0.0.0). This network range cannot be used with exchange4linux though. exchange4linux's nameserver is based on advanced "reverse resolving", and when activating a profile which uses this A-Class network an extremely large nameserver database must be built. This can take several hours!



Caution:

Using official (public) IP-addresses, which are not owned by you, for an internal network is against the rules and regulations described in RFC 1597 - Address Allocation for Private Internets, and we strongly dissuade you not to do this. When using official IP-addresses, which are not assigned to you, for the internal network, the correct functioning of exchange4linux cannot be guaranteed.

4. Netmask:
The (sub)netmask serves as a display of the network size. The standard values for the netmask are:
 - for a B-Class network **255.255.0.0**
 - for a C-Class network **255.255.255.0**

Chapter 2. Terminology

Alias-addresses:

Alias-addresses are addresses that refer to a mailbox/user. The value of such an alias is, that multiple names can be appointed to one single mailbox. In case of exchange4linux an additional advantage is that alias-addresses can be larger than the 16 characters a mailbox may consist of. An example of an alias-address is:

```
<firstname.surname@company.com>.
```

This alias-address then refers to the mailbox:

```
<surname@company.com>.
```

Autoresponder:

An autoresponder can be used to respond with a standard reply to persons sending a message to your account, for example in case of a vacation. In this reply you can notify them of your absence and return date.

Backup Service (Section 6.3):

The Backup Service offers the possibility to save the exchange4linux userdata by means of an accompanying Windows application. When data has been lost, this application can restore a previously made back-up.

Default Transport Service (Outlook):

The 'Default Transport Service' is the location where your e-mail is normally delivered at. This location is also crucial for the method of e-mail transportation. The Default Transport Service is based on the order in which e-mail accounts are being set up. When the first account set up in Outlook is an exchange4linux account, this will be the Default Transport Service. Your e-mail is being saved centrally in the exchange4linux database and will be sent through the MAPI service of the installed Outlook Connector.

On the other hand, when a POP3 account is set up first, the e-mail will be sent through Outlook's built-in SMTP service. When set up like this, Outlook will make a set of **Personal folders**. Incoming POP3 mail will be saved on the client using a .pst file.

DHCP Server (Section 6.10):

A DHCP Server appoints a dynamic IP-address to computers within the network. This saves a lot of work, since no additional network settings have to be made on the workstations (IP-address, broadcast, netmst, DNS Servers, etc.).

Domain suffix:

The domain suffix is the internal domain name of the server. In case of fixed IP-addresses the domain suffix must be inserted into the DNS-searchlist of the clients. On exchange4linux the standard value of the suffix is "local.intranet".

Email: (Batched) SMTP (Section 6.5):

(Batched) SMTP is a method of receiving e-mail whereby all the e-mail for your domain is actively pushed to the server. Once the e-mail arrives at the exchange4linux server, the address of the recipient is checked and if existent the mail is being distributed to the user. Nowadays most providers make use of this protocol.

Email: POP3 (Section 6.5):

A method which polls the e-mail from the provider using a fixed interval, whereby messages are being sent to the user's workstation.

Email: IMAP (Section 6.5):

A method that sends a copy of the actual message to the e-mailclient, but saves one on the server as well. This implies that, at the cost of more disk space, one can manage his e-mail using several programs (eg. Outlook, Mozilla and webmail) without removing messages from the server.

exchange4linux folders (Outlook):

These personal folders are saved on the exchange4linux server and not on the local computer. By setting permissions you can make folders accessible to certain users.

Caution: Do not mistake these folders for personal folders that might be present in your Outlook profile and are saved locally as a .pst file.

Fileserver (Section 6.11):

The EasyShare fileserver integrated in exchange4linux offers the possibility to save files, that can be accessed from any workstation within the network. It is possible to make exceptions as to which users have access to certain files.

Groupware:

A Groupware application enables users of the network to manage certain data sources together, eg. an agenda, task list and contacts. exchange4linux Server Suite is among other things a Groupware solution.

Host:

A host is a PC or server with a certain IP-address.

Maildomain (Section 6.5.1):

This is the domain (eg. *company.com*) that is being used by the exchange4linux mailserver. The mailbox names and alias-addresses are all complemented with the domain name(s) mentioned here.

Manual nameserver entries:

Here combinations of hostname and IP-address can be inserted, to make sure that the nameserver knows which IP-address matches a certain host. Accordingly the hostname can be inserted in a user's browser, after which the correct website will be shown.

Nameserver (Section 6.12):

The nameserver (DNS) is being used to bind URL's (eg. <http://www.google.com>) to IP-addresses. exchange4linux has its own DNS server, that works in combination with the provider's server.

Personal folders (Outlook):

These folders are made automatically by Outlook on the harddisk of the PC on which Outlook is installed. The data is saved in a file with the extension .pst

PDF Server (Section 6.7):

The Easy PDF Service activates the PDF Server on the exchange4linux Server Suite. This server enables users to convert documents from every workstation to a PDF file; an often-used standard for digital documents.

Profiles (Section 6.2):

A profile is a file in which all exchange4linux Server Suite settings at certain point in time are being saved. When the server does not function properly, it can easily be restored to a previous state. This is an extremely user-friendly way of configuring, since changes can be made undone with one click of the mouse. Profiles can also be imported and exported from and to a workstation. This way your settings can always be saved eg. when the exchange4linux software is being re-installed.

Public folders (Outlook):

These folders are saved on the exchange4linux server. The data that is being saved in these folders can be accessed, edited and deleted by other exchange4linux users (depending on the permissions they have).

Read confirmation:

A read confirmation can accompany outgoing e-mail messages and requests the recipient to confirm the delivery of the message.

Spamblocker RBL (Section 6.5.2):

A spamblocker filters incoming messages for known distributors of spam (unsolicited e-mail) before they are being sent to the users. On the internet, databases with these spam-addresses are continually being updated. exchange4linux consults these databases and returns known spammail to the sender.

Spamfilter (Section 6.6):

A spamfilter attempts to filter spam (unsolicited e-mail) from all incoming e-mail by looking at certain characteristics that are often a sign of spammail. Spam is one of the most hated phenomena on the internet and adds up to a considerable percentage of worldwide e-mail traffic.

Subdomain:

A specified domain within the normal domain. Most internet providers offer the possibility to supply you with a subdomain. Subsequently this subdomain can be used for e-mail addresses and websites. A subdomain looks like this: *department.company.com*. An e-mail address would look like: *john@sales.company.com*.

WINS Server:

Windows Internet Name Server; a protocol that makes sure that computers within the network are easily accessible for each other. EasyShare uses this service.

Part II. Before you start

To install and set up exchange4linux you need some information e.g. from your provider. To save time the important points are listed in this part, so you are able to collect them "before you start" the installation respectively the setup

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Chapter 3. Network and provider data

You need to have the following data at hand before configuring exchange4linux.

1. License domain:

- The domain name must be known when registering. It can be inserted in the "Registration" menu.

2. For the e-mail settings you need:

- The IP-address of your provider's SMTP server (to send mail) and the POP3 server (to receive mail). To receive mail using SMTP you do not need to fill in an IP-address in the configuration menu. Normally your provider takes care of this by means of setting up a so-called MX-record.
- When using POP3, you also need to know the username and password of the mail account.

3. Network data:

In order to place exchange4linux correctly within the network, some data has to be available to you. The following IP-addresses must be required for the configuration of your exchange4linux server:

- Network address and an unused IP-address for the exchange4linux Server Suite
- Broadcast address
- Netmask
- IP-address of the router that connects exchange4linux to the internet

Chapter 4. Software installation

This chapter describes how to install the exchange4linux Server Suite on your own hardware. Therefore it is not necessary to read this section when you have bought an all-in-one server including hardware.

4.1. What do you need to install exchange4linux?

- Monitor
- Keyboard
- PC that satisfies the hardware requirements, including a CD-Rom drive
- Cross-over cable or regular UTP cable
- Free port on the hub or switch



Caution:

It is important to know the brand names and model numbers of the installed Network Interface Cards (NICs) and ISDN device (if applicable) in advance. This has to be indicated during the installation procedure.

4.2. Installation

Start the PC with the exchange4linux cd in the CD-Rom device and the BIOS boot-order set up to load the CD-Rom before the harddisk. For instructions on how to do this, please consult the manual of your motherboard. If done correctly, the screen looks like Figure 4.1. Now press **Enter**. Repeat this action when the dialog shown in Figure 4.2 appears.



Figure 4.1.

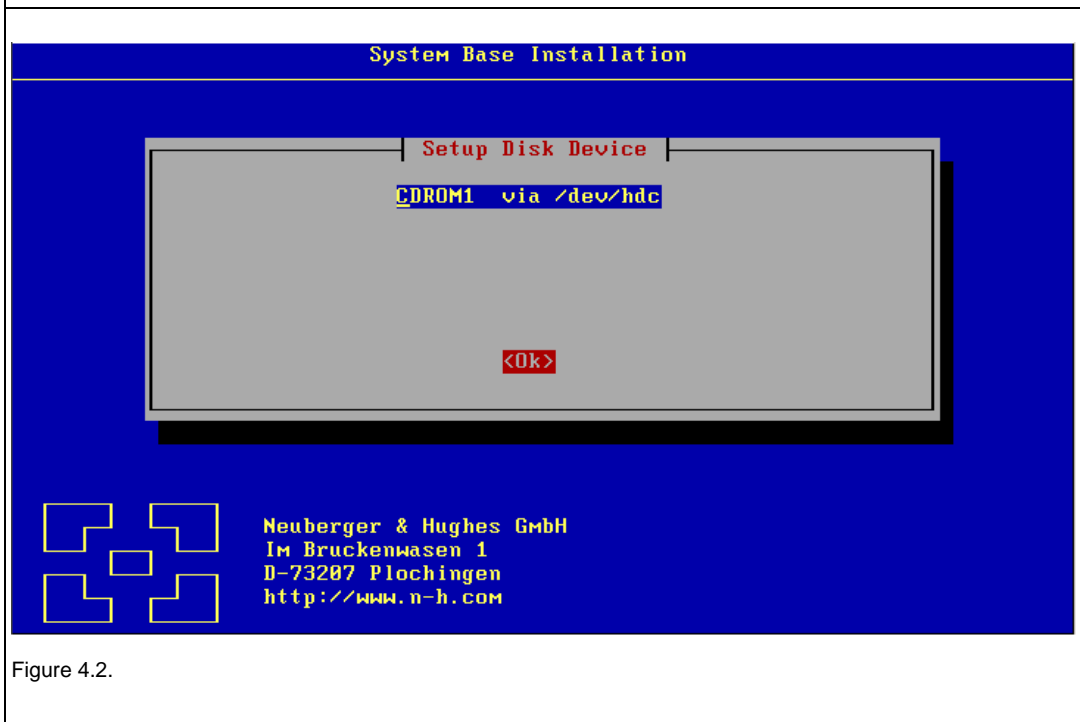


Figure 4.2.

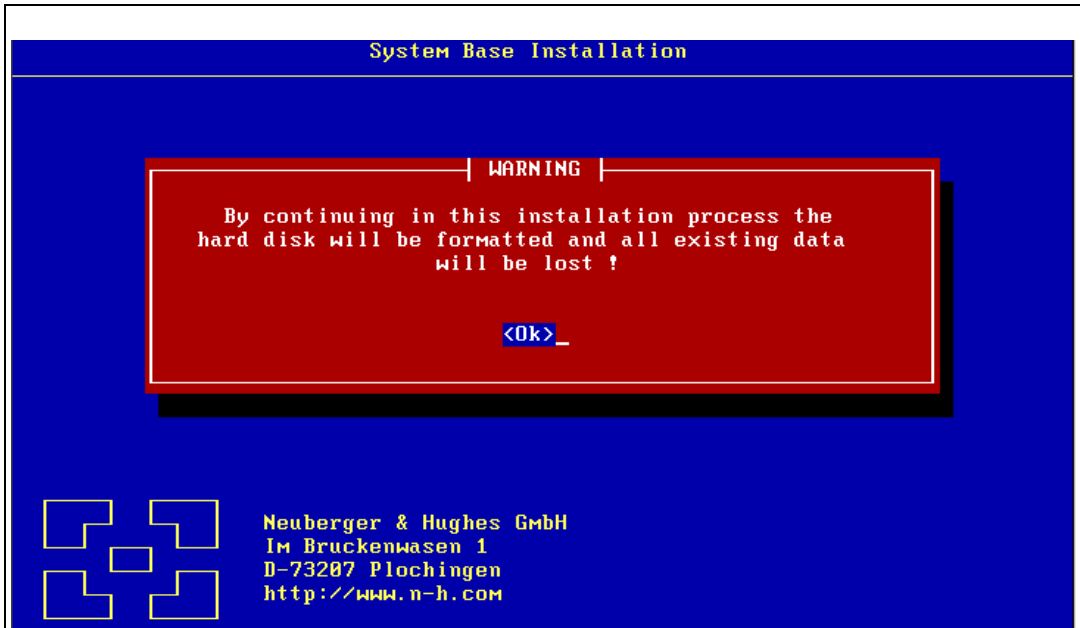


Figure 4.3.

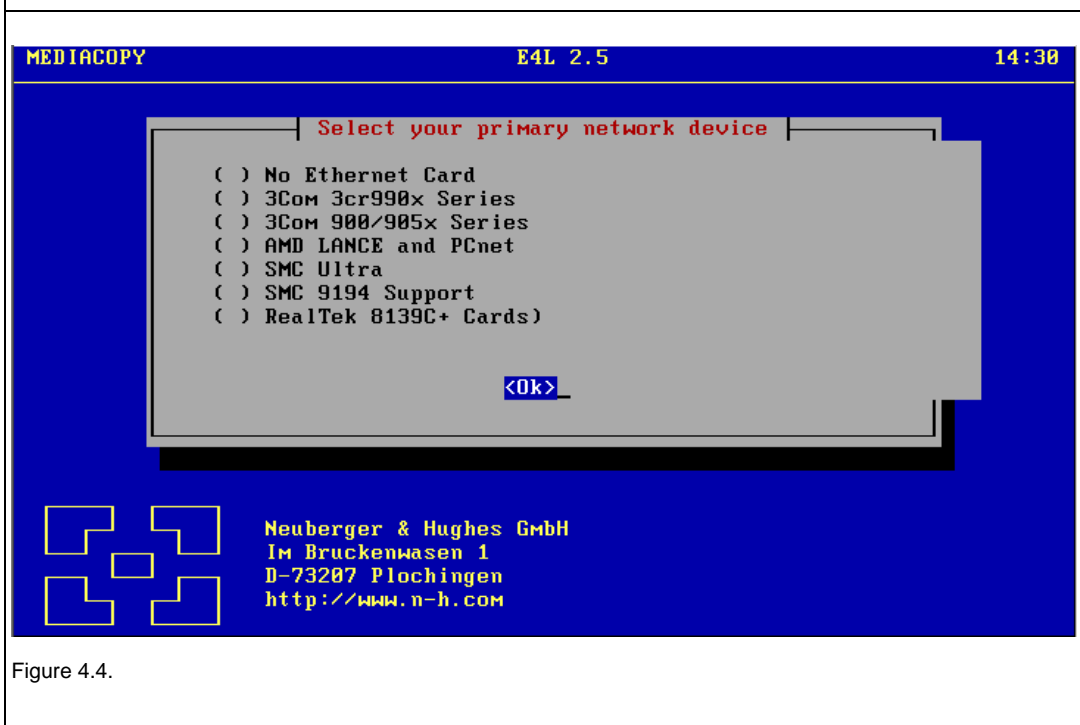


Figure 4.4.

The warning that is being displayed (Figure 4.3) notifies you of the fact that all existing data on the harddisk will be erased during installation. Please be aware of this before starting the factual installation procedure. Also take into account that the PC cannot be used for other purposes as long as exchange4linux is running on it.

Now the network device must be identified (Figure 4.4). The *primary network device* is the first Network Interface Card, meant for the communication between the exchange4linux server and the network. This card must be attached to the hub or switch. The second NIC can be attached to an ADSL- or cable modem, if present. Usually this second connection is indirect, since there is often a router or firewall between exchange4linux and the internet. It is also possible to include an ISDN device for two possible reasons: as a back-up solution for the regular connection method; or to make use of the integrated faxserver. For more information on supported devices, please consult the Hardware Compatibility List on the exchange4linux website. Note that in order to use exchange4linux as a faxserver, a so-called **active** ISDN device is required.

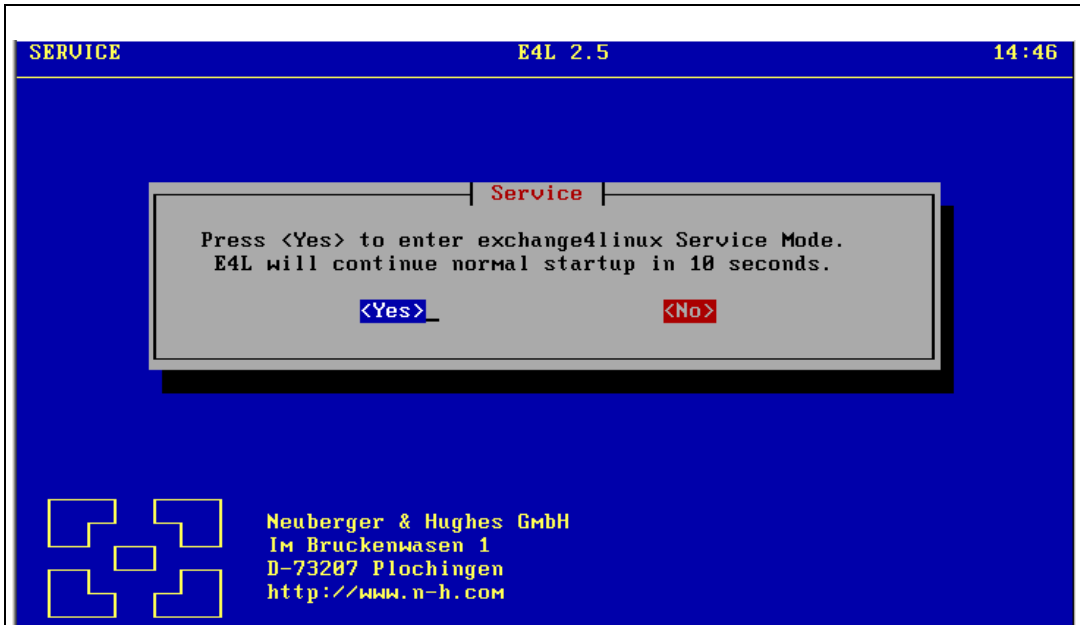


Figure 4.5.



Figure 4.6.

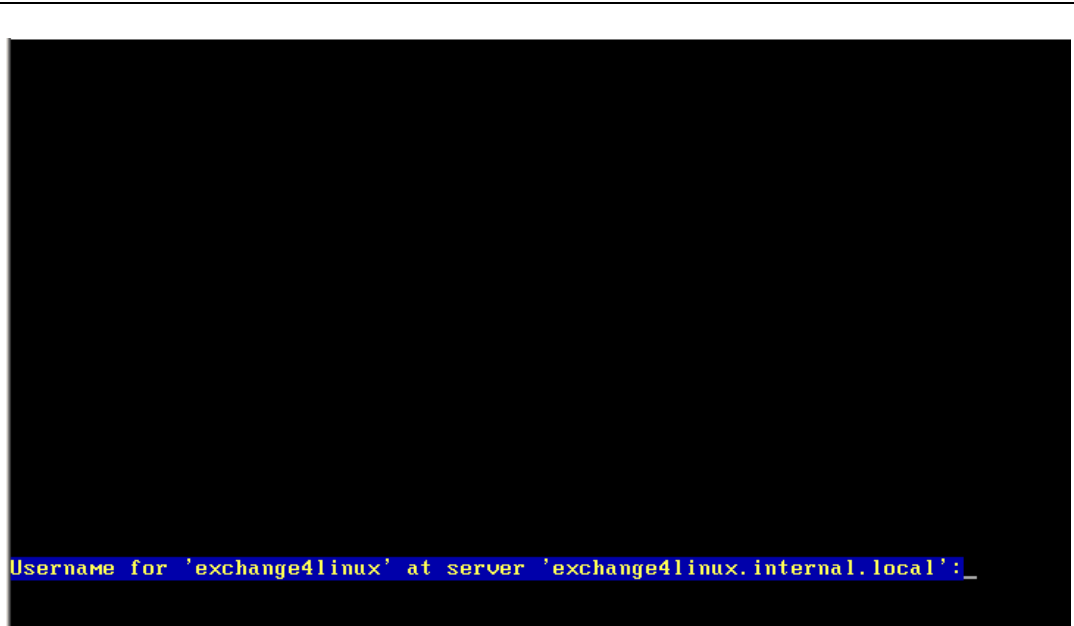


Figure 4.7.

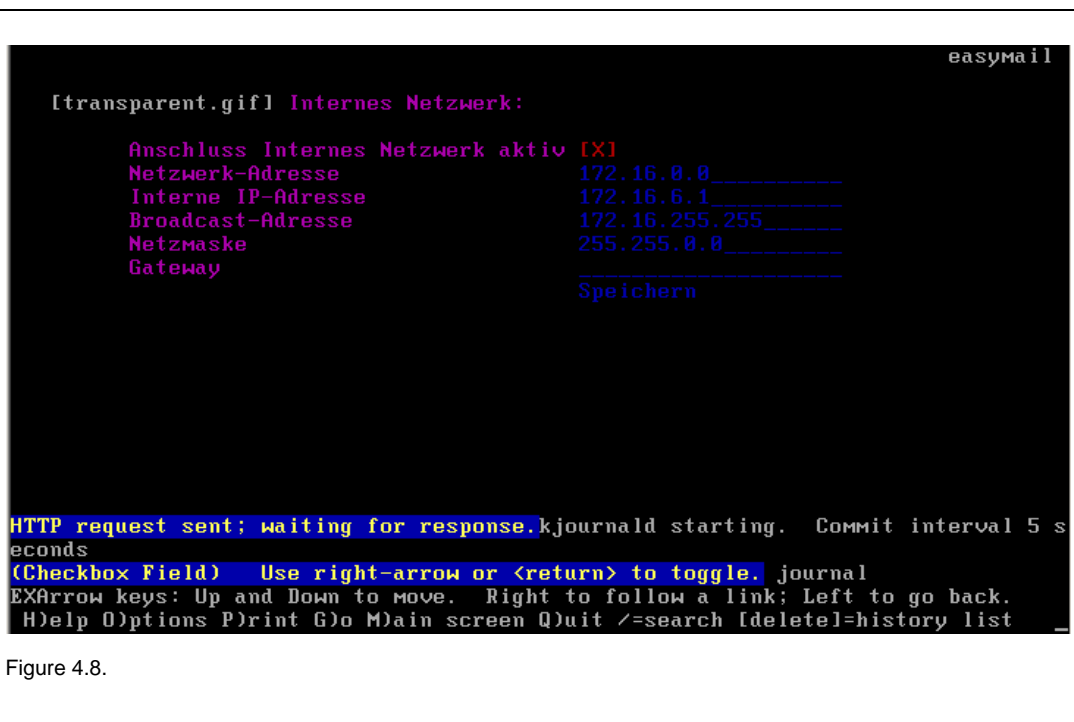


Figure 4.8.

Subsequently the desired language of the system can be selected. If desired, the language settings can always be altered in the exchange4linux configuration menu. Now *remove the cd* from the CD-Rom tray and press **Enter** to reboot the system.

When starting the system, a dialog like Figure 4.5 is being displayed. The “Service Mode” is meant to offer a way of repairing the system when it no longer functions properly. Normally you will not need this.

After a short while the start-up procedure is finished and the screen looks like Figure 4.6. Now exchange4linux is ready to be configured from a workstation by using a cross-over cable or through the hub. In both cases make sure that the network cable is attached to the internal/primary network device of your exchange4linux server. You can then access the configuration menu by locating <http://exchange4linux> or <http://172.16.6.1> in a webbrowser on the attached PC or on a regular PC within the network (depending on whether a cross-over or regular cable is used).

Alternatively some basic settings can be made directly on the console. To do this, click **Enter** to

configure the network. Log in with username **admin** and password **exchange4linux**. By making the correct network settings here, exchange4linux will be visible within the network and can be configured from a random workstation within the network. After saving the new settings, do not forget to reboot the system by simultaneously pressing the **Control, Alt** and **Delete** buttons.

The system will reboot and when the primary network device is attached to the hub, the configuration menu can be reached by browsing to *http://<ip-address>* with a webbrowser. Again, log in with the combination:

username:

admin

password:

exchange4linux

Chapter 5. Saving changes

When configuring exchange4linux it is not necessary to reboot the system after every change that has been made. We advise to reboot after every 3 or 4 changes made.



Caution:

When, after changing the configuration, exchange4linux does not start up properly, the previous profile can be re-activated by means of the Service Mode. To do this, attach a keyboard and monitor to the system and wait until the Service Mode notification appears (Figure 5.1).



Now make sure that *Yes* is highlighted and press **Enter**.

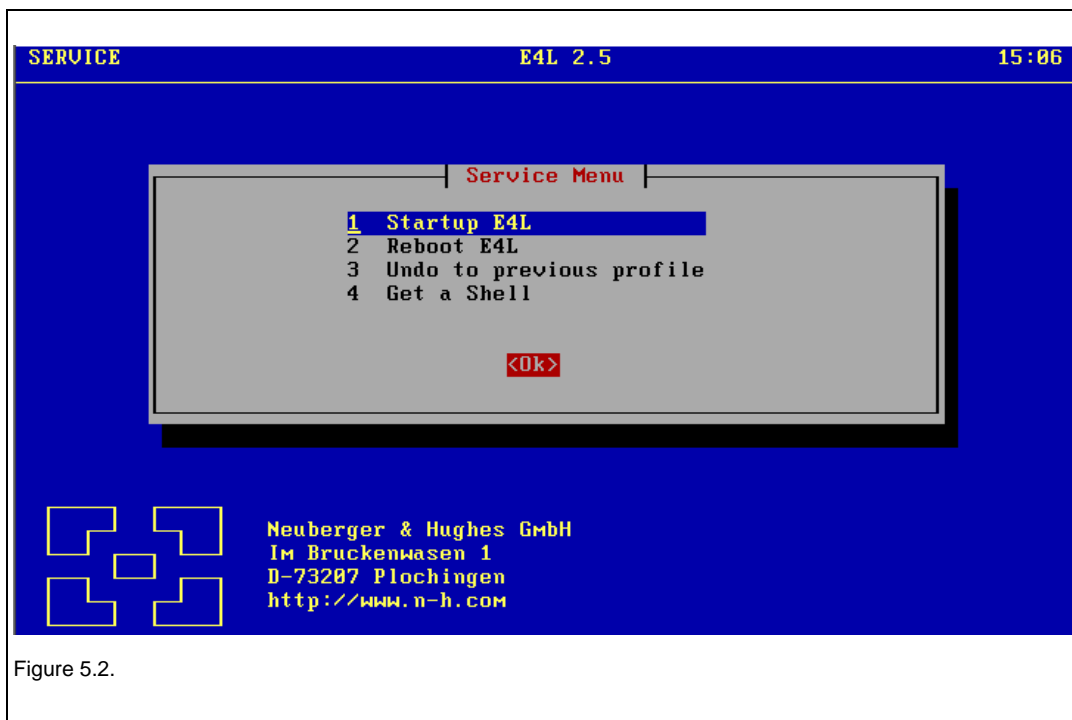


Figure 5.2.

In the Service Menu choose the option: *Undo to previous profile*. Now exchange4linux will reboot with the previous profile activated.

Part III. Configuration and management

This part describes how to configure exchange4linux correctly and how to manage the offered possibilities. The amount of shown options depends on your exchange4linux version, so it is possible that some points described in here do not appear in your version.

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Chapter 6. exchange4linux configuration

This chapter explains how to configure exchange4linux, beginning with general information and on to detailed setup information.

6.1. General

6.1.1. Introduction

In this section all the necessary steps to configure exchange4linux are being described. The placement of exchange4linux, its functioning and the EasyConfig menu are being depicted.

When you have bought or downloaded the exchange4linux software, please consult Chapter 4 *Software installation* first. After that, this section will explain how to configure the software.

To buy or register the software (in case of an evaluation version) please contact your nearest exchange4linux reseller, distributor, or Neuberger & Hughes directly.

6.1.2. Appendices

Every once in a while new features are being made available for exchange4linux. Logically in that case your manual will no longer be up-to-date. Whenever such a new feature needs documentation, an appendix for this manual is placed on the exchange4linux website.

6.1.3. exchange4linux models and versions

exchange4linux is available on different hardware platforms:

- software only
- standard slimline server
- Professional tower server
- 19" slimline rackmount model (1 unit / 1U)
- 19" rackmount model of 2 or more units (2U and up)

For more information on the specification of the different hardware platforms please consult the exchange4linux website (menu "Pre-installed systems").

6.1.4. Placement of exchange4linux

After removing exchange4linux from its package, it should be set up in a proper location.

The product complies with the usual standards for electronic devices. Please make sure that the location satisfies the following requirements:

1. There must be a grounding contact near the exchange4linux server
2. The room/location must be clean, dry and dust-free
3. The room/location must be well ventilated and the exchange4linux server should not be placed near heat-sources (including direct sunlight)
4. There should not be strong electromagnetic fields (appliances with large electronic engines, air-conditioners, radios, televisions or high frequency alarm systems) nearby; such devices can adversely affect the functionality and durability of your hardware

5. The connection to the Local Area Network (LAN) must be sufficiently close to the exchange4linux server

Attach the power cable to the rear end of the exchange4linux server and to a power contact on the other side.

6.1.5. Attaching a PS/2 keyboard

To configure exchange4linux directly from the console, a PS/2 keyboard and a SVGA monitor have to be attached to the system before booting it. This can be useful when the network settings on exchange4linux must be altered before connecting to it using a workstation.

Alternately, you can connect a PC directly to the exchange4linux server by making use of a cross-over (or null-Ethernet) cable.



Caution:

A null-Ethernet cable is not the same as an ordinary UTP network cable. If you do not have a cross-over cable, the workstation and exchange4linux can be connected through a single network hub.

By default, the DHCP-server is set up for a class B network with the address 172.16.0.0 using the netmask 255.255.0.0. The IP-address of exchange4linux is configured to 172.16.6.1

6.1.6. Network connection

The standard network interface supports Twisted Pair (UTP) connections and is capable of both 10 Mbps and 100 Mbps data transfer rates. It is also possible to use 1000 Mbps (gigabit) and Token-Ring devices.

6.1.7. Attaching a router/ADSL/cable modem

When you have a second network interface on the exchange4linux server, it is possible to connect the system to an external network, a router or a DSL/cable modem. One of the interfaces on the back of exchange4linux is designated for use with the external network. In most cases the onboard LAN connection is for the local network and the additional NIC is for the external network connection.

6.1.8. Booting the system

The exchange4linux system comes with a number of standard settings; this way you can start up the system immediately. To boot up the system, press the power switch on the front panel of the server. On the 19" models, you need to press the "ON" switch on the front. Some 19" models also have an "ON" switch on the backside.

6.1.9. Conditions for using the management software

When configuring from a client (to do this, a network connection must first be established), the client needs at least Netscape version 3.0 or Microsoft Internet Explorer version 3.0.2. The configuration interface will not function properly with Internet Explorer 3.0!

It is also possible to use another browser, eg. Mozilla, on the condition that a recent version is being used. For problem-free communication the TCP/IP protocol must be installed and set up correctly on every workstation.

6.1.10. Starting the management software

There are two possible methods to access the configuration interface.

1. Configuring from a client:

- `http://exchange4linux` or
- `http://172.16.6.1`



Caution

This only works if your network is set up to use dynamic IP-addresses and there is no DHCP-server active at present, or if you already have a network with network address 172.16.0.0 and netmask 255.255.0.0

Furthermore the IP-address 172.16.6.1 may not be in use !! Please make sure that the client with which you are attempting to make a connection has an IP-address that falls within the network.

2. Network configuration from the console:

After starting the exchange4linux system, the following screen will appear (Figure 6.1):



Figure 6.1.

If you press Enter, the following message will appear:

Alert!: access without authorization denied – retrying

After a few seconds you will see:

Username for "exchange4linux" at server "exchange4linux":

Here you insert:

admin

Then you will see:

Password

Here you insert:

exchange4linux

(The login screen is case sensitive, so make sure the <CAPS LOCK> key is not activated.)

Once successfully authenticated, you will see a menu where you can modify the exchange4linux network settings in order to reach it over the network. You can navigate between the different lines with the <UP>, <DOWN> and <TAB> keys.



Warning

It is advisable to only change the network data when you have a clear understanding of TCP/IP networks and when you know exactly what to insert. Incorrect settings can lead to a malfunctioning system.

Once the settings are correctly modified, go to the line that says:

Save

Now press:

ENTER

Now the following text appears:

Beware: The configuration has changed. You have to reboot EasyGate to activate the configuration.

Using the <TAB>-key, go to the line that says:

Save and press **ENTER**

Now simultaneously press **SHIFT** and **Q** to leave the configuration menu.



Caution

The command **SHIFT-Q** only function when the cursor is at the *Save* line.

Finally press the **CTRL**, **ALT** and **DELETE** keys simultaneously to reboot the exchange4linux server. After several minutes the start-up screen appears. Now the server can be connected to the network and the configuration menu can be reached by entering the following location in an internet browser on a workstation:

http://<exchange4linux IP-address>

6.1.11. Logging onto exchange4linux

When entering *http://<exchange4linux IP-address>* in the webbrowser (for this the IP-address of the exchange4linux server must be known), a log-in screen like Figure 6.2 appears. When you click *logon to exchange4linux* the dialog as seen on Figure 6.3 appears. Fill in the username **admin** (the system administrator) and the corresponding password *exchange4linux*.



Caution:

It is advised to change the password immediately after the first log-on. How to change a password is explained further on in this manual. Make sure that the a possible alteration of the password is documented correctly, as it is not possible to give support when

the admin password is unknown!

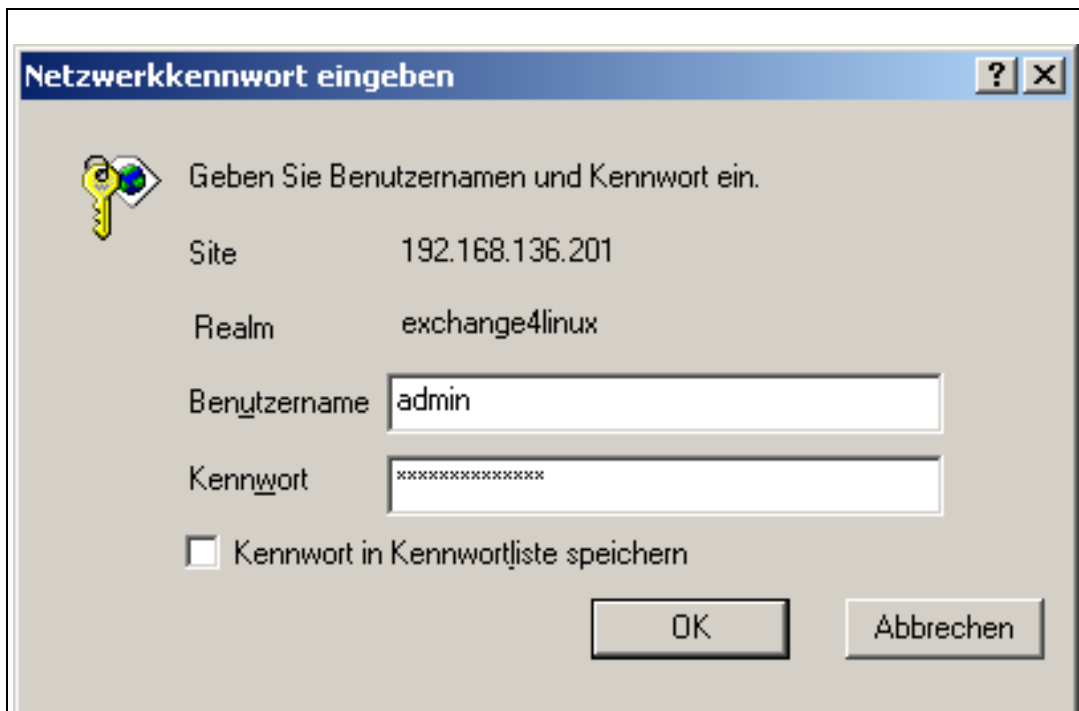


Figure 6.2.

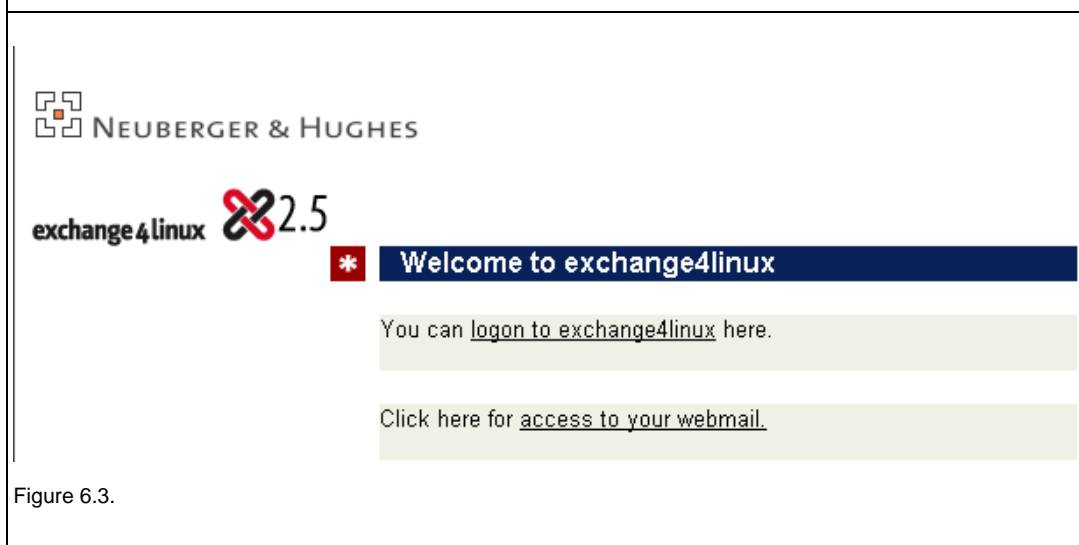


Figure 6.3.

After filling in the username and password, one can enter the main menu of EasyConfig by pressing the **Enter** key.

6.1.12. EasyConfig main menu

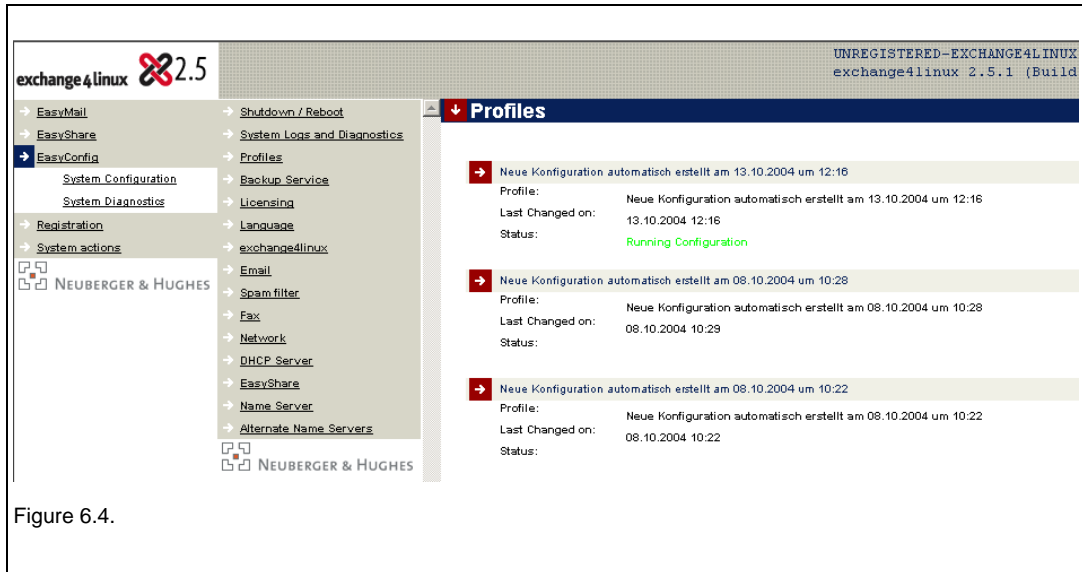


Figure 6.4.

On the left panel of the EasyConfig screen, the main menu is visible. From here you can browse between the different configuration items. In the following chapters these items will be explained one by one.

6.1.13. Navigation

Navigation within EasyConfig is thoroughly explained in Section 7.1 of this manual. For directions on how to navigate between the menus while configuring the server, you are requested to read this chapter.

6.1.14. Shutdown / reboot exchange4linux

To shutdown or reboot exchange4linux, browse to the menu item *System actions*, then select *Shutdown / Reboot System*. Now click on the applicable button (Figure 6.5).

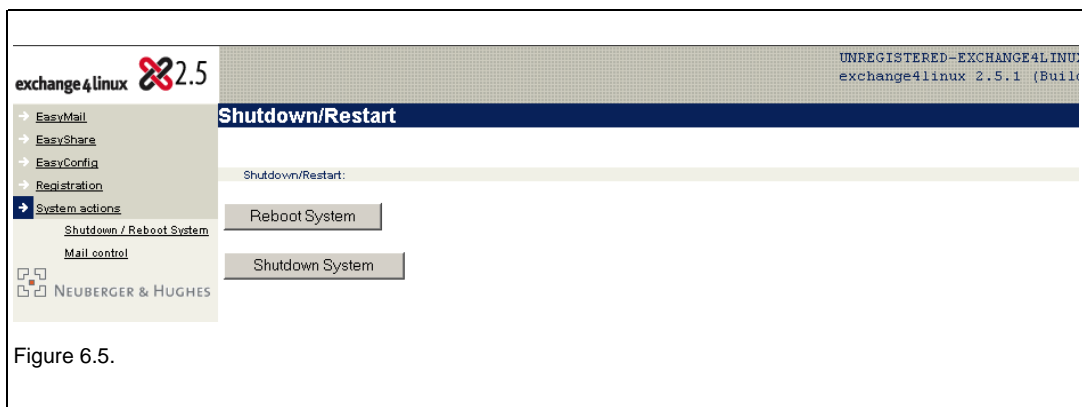


Figure 6.5.

6.1.15. Language settings

The language of the exchange4linux software can easily be changed directly from the web browser. The new settings will be activated after a reboot of the system. To change the language, browse to the menu item *Language*, click *Language settings* and select the desired language. Then click *Save* and reboot the system.

6.2. Profiles

6.2.1. Profile management

In this part it is described how to work with profiles, eg. creating new profiles, editing or copying profiles and deleting them. A profile contains all the settings of a certain configuration. This does not include the usernames or any userdata at a certain point in time!

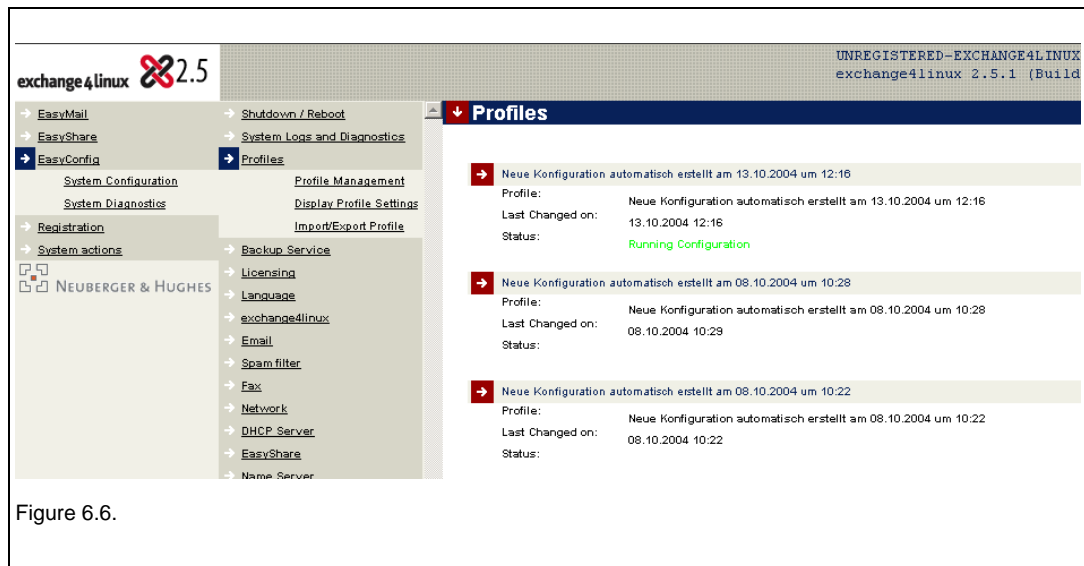


Figure 6.6.

After clicking *Profile management*, a list with the existing configuration will be displayed. The profiles are sorted on date, with the most recent profile on top. This can be the activated profile (to be recognized by the green status description) or the new profile when changes have been made to the configuration after the last reboot (a red status description). Every profile shows the date and time of its latest alteration. Old profiles do not have a status description.

A profile can be copied in two ways:

- Click the arrow-button to the left of the *Profiles* header, select a reference profile from the list and enter a title for its copy. Now press *Save* and a copy of the profile will be made.
- Select a profile by clicking on the arrow left of its name. Rename it and click *Save*.

After this a new configuration will be visible at the first position on the list.

6.2.2. Display profile settings

This function can be used to show an entire configuration on the screen. To do this, click the arrow-button at the left of the desired profile. Now its configuration settings will be displayed and can easily be sent to the printer by issuing the print command.

6.2.3. Import/export profiles

This paragraph describes how to import external profiles into exchange4linux and export existing profiles to eg. a workstation or a disk (for back-up purposes and the like).

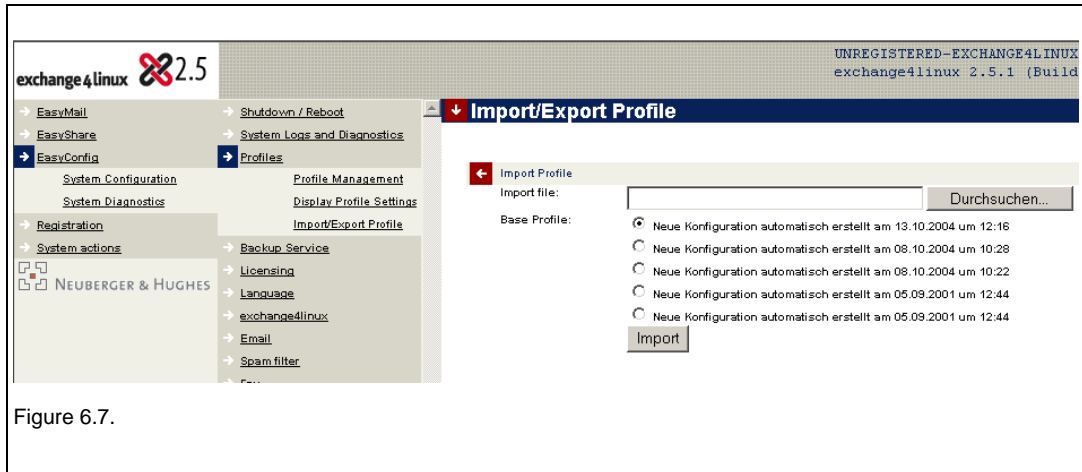


Figure 6.7.

Importing a profile:

When you click the arrow-button to the left of the *Import/Export Profile* header, a dialog will be shown in which you can select a profile by using the browse-button. Now click **Import** and the imported profile will appear on top of the list with profiles. After rebooting the system, this imported configuration will be activated.

Exporting a profile:

To export a profile, click the button to the left of the desired profile. Now a *download file* dialog will appear, in which you can select a location and name for the file. By default the filename looks like *em0000xx..*. Give the file an easy-to-remember name, followed by the extension *.emc*, for example:

testprofil-3-januari.emc

Use the *.emc* extension, so that exported profiles can easily be recognized in the future.

6.3. Backup Service

6.3.1. Setting up the Backup Service

The Backup Service (*System Configuration - Backup Service - Backup Service (passive)*) can be used to save a copy of the exchange4linux userdata, by making use of a Windows application described in Section 6.3.3. Select *Backup Service active* followed by *Save* to activate this function. Subsequently the following items can be configured.

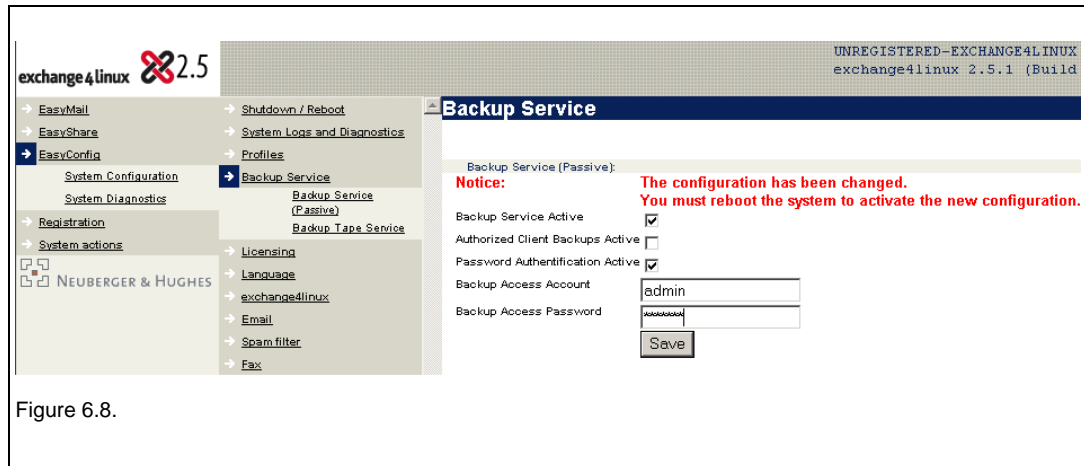


Figure 6.8.

Authorized Client Backups Active:

With this option selected, a backup can only be made from (a) certain IP-address(es). Fill in one or more IP-address in the fields that appear, and save the settings by clicking *Save*.

Password Authentication Active:

When checked, a password authentication mechanism can be activated to make sure that only certain individuals can make and restore backups.

The Backup Service can be controlled with the Windows application **easygate.exe**. This application can be downloaded from the exchange4linux website (see Section 6.3.3).

6.3.2. Backup Tape Service

The Backup Tape Service offers the possibility to make a daily backup of the exchange4linux data to a tape streamer.

exchange4linux works with nearly every SCSI tape streamer, as long as it is connected to a SCSI-controller that is being supported by exchange4linux. For more information see the Hardware Compatibility List, which can be found on the exchange4linux website.

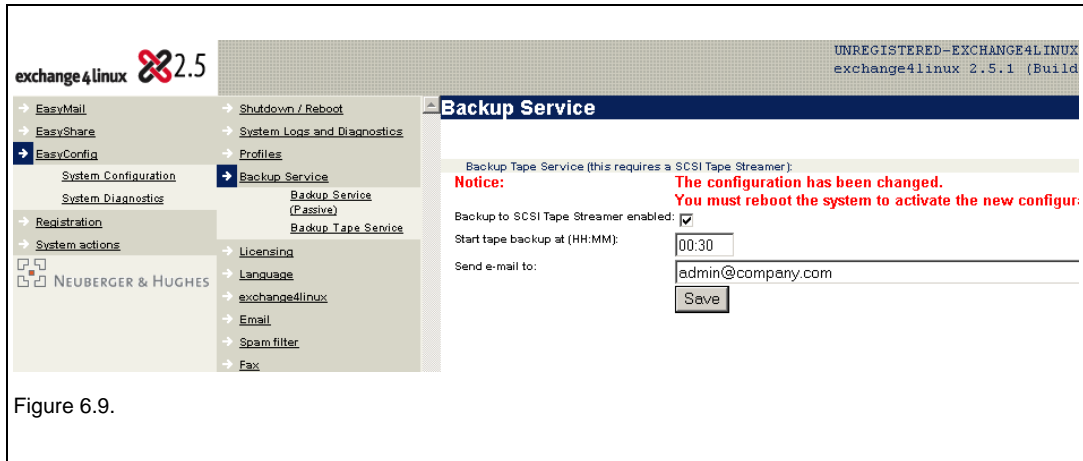


Figure 6.9.

The starting time of the daily backup procedure can be entered here, as well as the e-mail address that receives a confirmation of each successful backup.

6.3.3. easygate.exe and batchfiles

Using the `easygate.exe` backup-software, a copy of all exchange4linux data can be made. This means the profile, all workgroup data and e-mail (as long as IMAP is being used). The backup can only be started when the correct settings have been made in the configuration menu (see Section 6.3.1 above). The username/password combination filled in there must be known for the batchfiles `restore.bat` and `backup.bat` to work.

Making and restoring a backup:

Make a new directory where the backup must be saved. This can be both locally and on a network drive. Be aware of the fact that a backup can amount up to several gigabytes in disk space, especially when IMAP mail is being used.

1. Download the backup software (`backup.zip`) from <http://www.exchange4linux.com> - *Downloads - Extra's*
2. Unzip the file `backup.zip` into the new directory. The backup will be split up into files of at most 650 MB, so that the different parts can easily be written to CD-Recordables later.
3. Use a text-editor such as Notepad to open the files `backup.bat` and `restore.bat`, so that the following data is inserted correctly:
 - hostname (or IP-address) of the exchange4linux server
 - username and password of the Backup Service

`backup.bat` now looks similar to the line below:
`easygate.exe exchange4linux GET USERDATA admin back-up`

If necessary, replace `exchange4linux` with the IP-address of exchange4linux. The last two variables are respectively username and password that have been defined in the Backup Service menu.

Now save both files and close them.

4. Double click `backup.bat` to start the backup procedure. The files will be saved in the directory the batchfile is started from. After a short while a file named `USERDATA.E01` will be visible there, whose size gradually increases. When no file appears you can be sure that something has gone wrong. In that case make sure that you check the settings in `backup.bat`. The backup is concluded successfully when, after some time, the DOS-screen closes.



Caution:

easygate.exe does not take free disk space into account. Before starting a backup-task, make sure that there is enough free space on the harddisk where the backup files are to be saved on.

6.4. License

This menu item enables the user to register the exchange4linux software at Neuberger & Hughes.

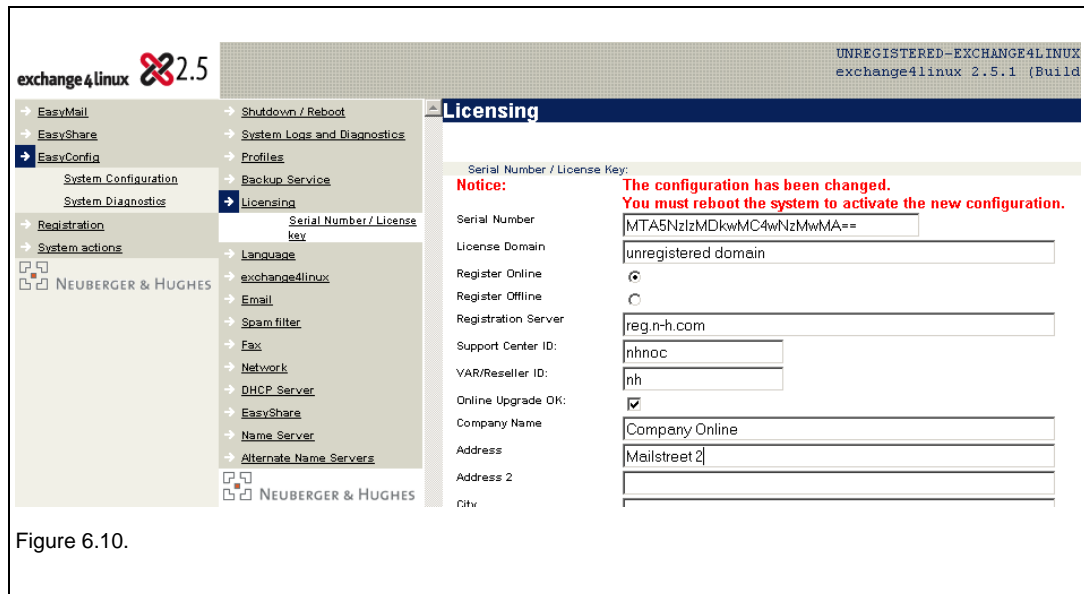


Figure 6.10.

Normally this part is already filled in by your exchange4linux reseller or distributor. When this is not the case, or when you have questions on this matter, please contact your nearest exchange4linux registration-center.

At least the following data must be present:

- **License domain:**
your (main) domain (companyname.com)
- **Registration server:**
reg.n-h.com

At online-registration:

- **Service center ID:**
nhnoc
- **VAR/Reseller ID:**
nh

The *exchange4linux License key* has been supplied to you or is already filled in. When this is not the case, please contact the exchange4linux registration-center.

After filling in the necessary data, click *Save*. When the server reboots, the registration data will be activated. When the registration is completed successfully, your domain name will be visible on top of the configuration menu.



Caution:

the "timezone" of your exchange4linux will be activated during the online registration.

exchange4linux registration-center Germany:

Neuberger&Hughes
Im Bruckenwasen 1

73207 Plochingen
Germany
phone: +49 - (0)7153 6120-0
fax: +49 - (0)7153 6120-33
mail: info@n-h.net

6.5. Email settings

6.5.1. Email domain

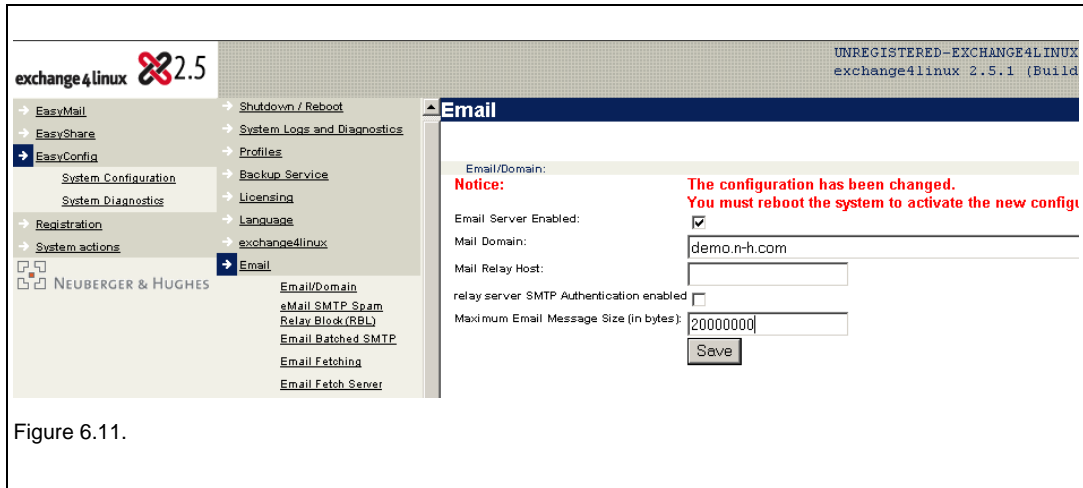


Figure 6.11.

Email server enabled:

This is where you can activate exchange4linux' Email server functionality. It is the main switch, which has to be activated at all times. If you remove the check, mail will **NOT** be sent or received. This should only be used to temporarily disable the mailserver on exchange4linux.

Mail domain:

This is the name of the mail domain. This is usually the domain-name, for instance *YourCompany.com*, sometimes with a subdomain in front of it (e.g. *marketing>YourCompany.com*). Your provider usually supplies you with this information.

Mail relay host:

Here the mailhost of your provider must be filled in (usually something like *smtp.provider.nl*). Your provider usually supplies you with this information. When exchange4linux has to function as mail relay host itself (which we usually recommend), this field needs to remain empty. This is only advised for permanent internet connections.



Caution:

It is strongly recommended to always use the hostname of the mail relay server instead of its IP-address, since providers sometimes change the underlying IP-addresses of hostnames without warning you in advance. This causes exchange4linux to attempt to connect to a non-existing IP-address.

Relay server SMTP authentication enabled:

When the provider uses SMTP authentication, this option needs to be checked.

Relay server SMTP authentication user id:

Here you fill in the username that has been supplied to you as SMTP authentication. Consult your internet provider when this value is unknown.

Relay server SMTP authentication password:

Fill in the corresponding password here.

Maximum Email message size (in bytes):

Use this field to limit the size of all incoming and outgoing mail, both internal and external. Please pay attention to the fact that an attachment causes its message to become about 1.4 times the size of this attachment. For example, email with a 5 MB attachment will be 7 MB in size.

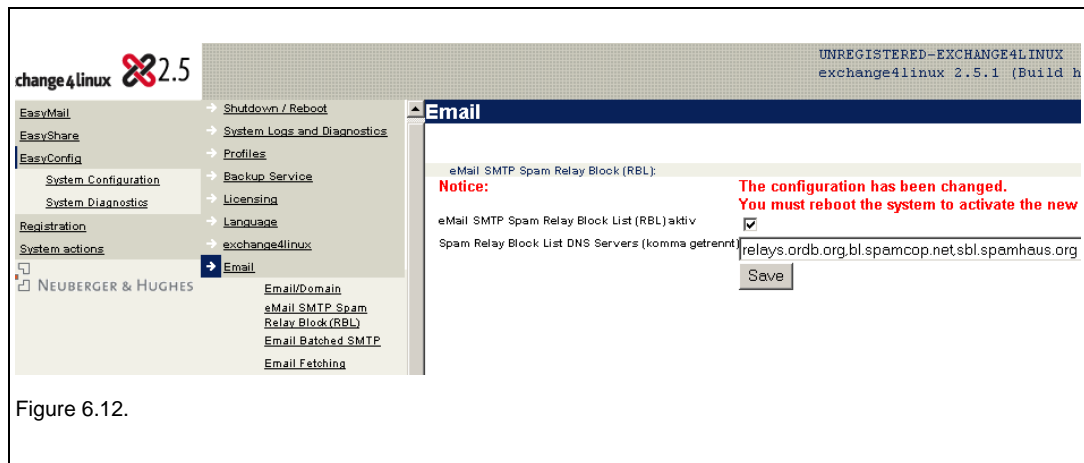
6.5.2. Email Spam Relay Block (RBL)

Figure 6.12.

The exchange4linux Spamblocker can be activated to bounce messages that have been sent from known spam distributors already before it reaches the users. By default there are three DNS servers filled in here that are considered to be the most up-to-date spamblocking databases. You are free to add more servers to the list, make sure to separate entries with a comma.

6.5.3. Batched SMTP

When email needs to be fetched by means of batched SMTP, activate it here and enter the mail domain again. Also enter the address of the SMTP-server, which is often identical to the mail relay host.

This function only needs to be activated when the provider expects a so-called ETRN-command before the mail is being sent. Some providers automatically send the mail as soon as exchange4linux has connected. When in doubt, ask your provider.

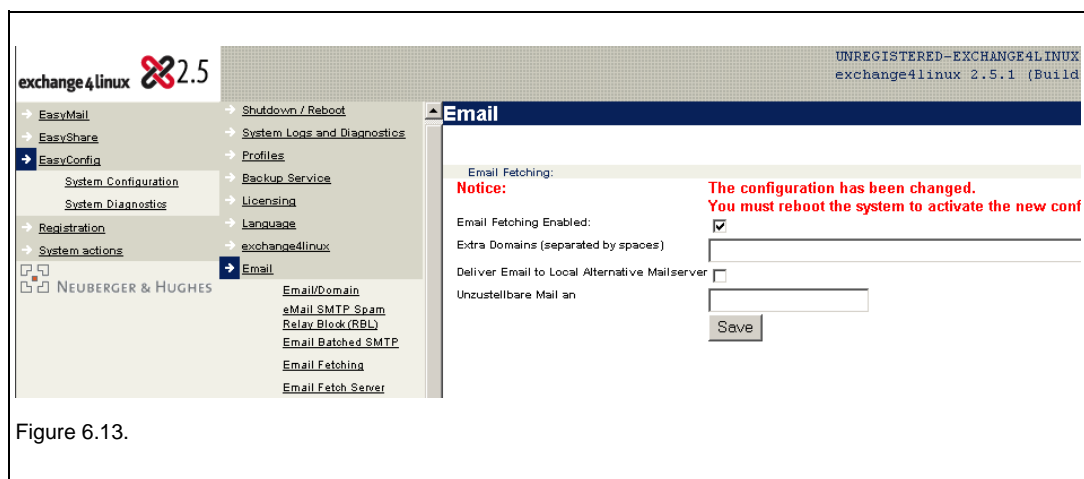
6.5.4. Fetching

Figure 6.13.

Email fetching enabled:

Here you can (de)activate the Email fetching scheme. If you deactivate Email fetching, mail will not be sent and retrieved anymore. However, mail will be sent and retrieved when there is an internet connection. Usually this function should be activated.

Extra domains (separated by spaces):

This is where extra domains can be inserted, for which exchange4linux should accept incoming Email. For example, besides *YourCompany.com* there is also *YourBrandname.com*. Multiple entries have to be separated by a space.

Deliver Email to local alternative mailserver:

When mail is NOT retrieved by SMTP, but by multidrop POP3, it can be forwarded to another mailserver. When this box is checked (and after clicking *Save*), a new field is created where you can enter the IP-address of the alternative mail server. **This function does not work with (batched) SMTP!** Since batched SMTP is the most often used method of Email delivery, this function is obsolete in most cases.

Forward Undeliverable Email to:

This setting only works when the Email is fetched by means of multidrop POP3. **If you use batched SMTP, this setting will not have any effect.** Undeliverable Email will be, in case of SMTP, returned to the sender with the error message *User unknown*.

When mail is being fetched with (multidrop) POP3:

An existing mailbox-name has to be entered here. All mail that exchange4linux cannot deliver because the local recipient is not a valid user will be routed to this mailbox. This happens when someone makes a typing-error in the e-mail address. For instance: an email is sent to *boob@yourcompany.com*. Within exchange4linux this address is unknown. However, there is a user called *bob@yourcompany.com*. This way the message will arrive and the user who checks this mailbox can forward the mail to the intended recipient.

In general this setting makes sure that all mail for your domain, that is all mail sent to a user *@yourcompany.com* will arrive. Normally *admin* is the desired recipient for undeliverable messages.

6.5.5. POP3 server(s)

In order to add a new mail-server, click on the arrow to the left of *email fetch server*. The following screen appears:

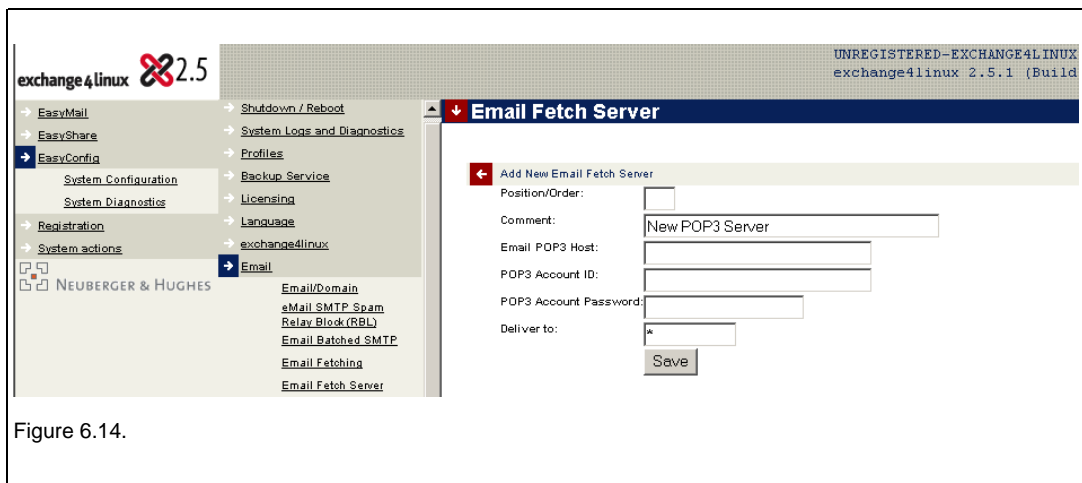


Figure 6.14.

Add new Email fetch server:

In this section you can select from which POP3 servers the mail has to be retrieved. This is only ne-

cessary when you **do not** use batched SMTP.

Also other servers can be entered here. For instance, the mailserver of an already present mail subscription. The setting can be altered (click on the arrow pointing to the right) or a new server can be added (click on the arrow pointing downwards).

Position/order:

This is the rank the server in question has. If there are multiple servers, you can decide on the sequence of connections to the different mailservers (more important servers could be checked first).

Comment:

A description can be entered here. This will appear under the server-name in the server-list. For instance *POP3 at providername*.

Email POP3 host:

This is the mailhost-name of the provider. Normally your provider has given this information to you. In general the value resembles *pop3.provider.com*

Email POP3 username:

This is the username of the e-mail account. Often (though not always) it is the same as the access-account username.

Email POP3 password:

The password that corresponds to the POP3 account mentioned above.

Forward to:

Here you can indicate which email address the emails need to be forwarded to. This field generally is set to wildcard (“*”). It makes sure that messages are delivered at the recipient that the sender addressed the message to. If a mailbox-name is filled in here, all mail will be sent to this mailbox, regardless of the intended recipient. This is useful if mails need to be fetched from an old e-mail account or e-mail domain, and all of these messages need to be sent to another mailbox (like *OldMail-Domain@YourCompany.com*)



Caution:

The wildcard-setting can only be used in combination with a multidrop POP3-account. Your provider can inform you on this matter.

6.5.6. Auto fetch days

Figure 6.15.

Here you tick off the days on which Email may be automatically sent and received.

6.5.7. Auto transfer schedule

This is where you can adjust exactly how frequently exchange4linux is permitted to send and receive Email. The settings here determine the connection-behavior of exchange4linux, and therefore also the related telephone costs. Since most companies nowadays have a flat-fee internet connection, the relevance of these settings is gradually declining.

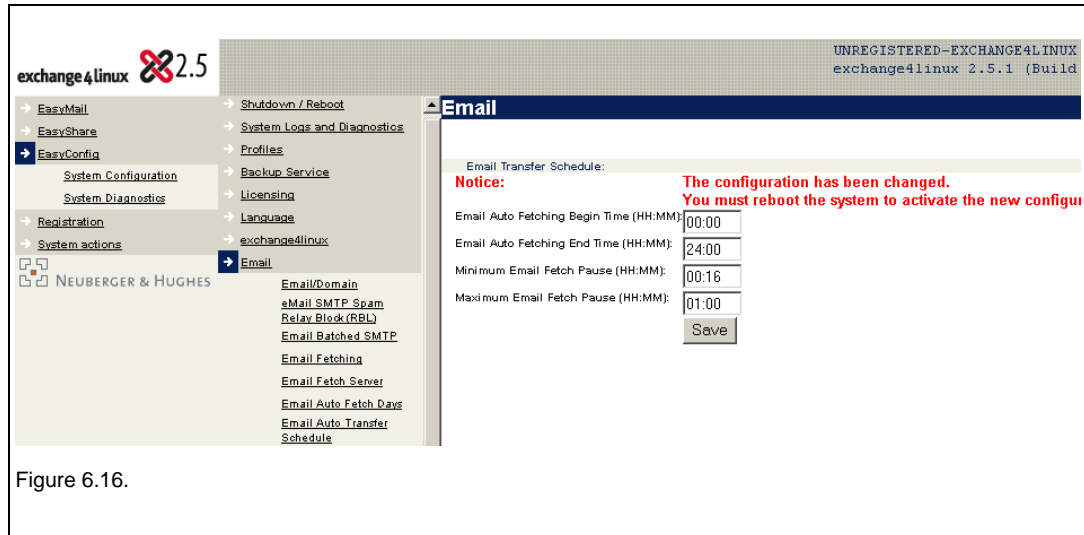


Figure 6.16.

The setup possibilities in this part are the most general parameters, that is, they have the highest priority in the determining of the connection behavior of exchange4linux.

Email transfer start time:

Start time for the mail-transport. For instance, it could be set to half an hour before the normal starting time of the users. This way, Email has already been fetched by the time users want to read it.

Email transfer end time:

End time for the mail-transport. Please be aware of the fact that after this time no more mail is being sent and received. When employees often work late, a sensible time like 20:00 can be filled in here.

Minimum Email Transfer Pause:

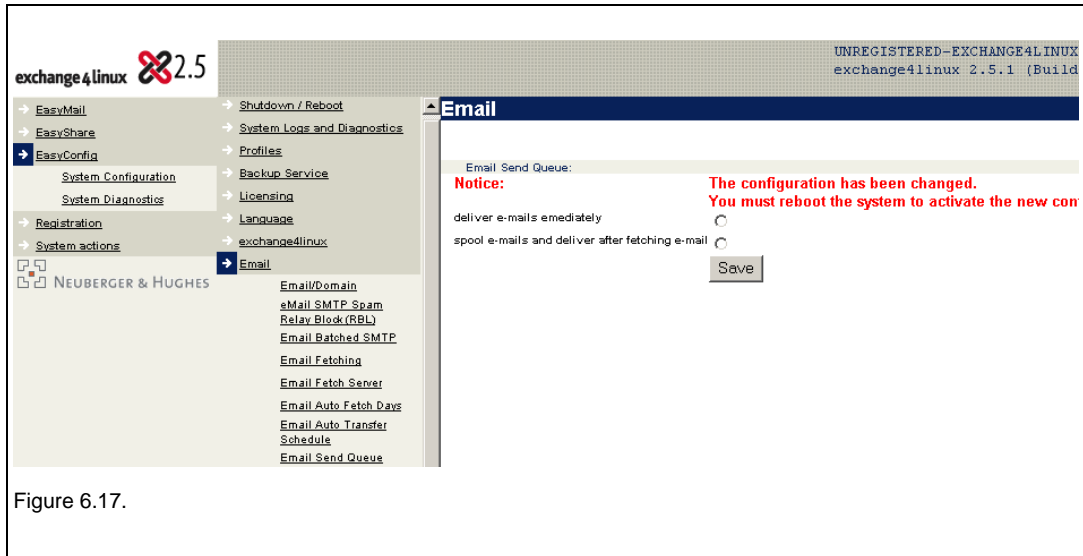
This is the minimum time that must pass before a new connection is initiated again. With this setting, the number of connections made can be limited. There would be unnecessary costs incurred if every 5 minutes a new connection is made because there is another message in the send queue. A sensible value is between 15 and 30 minutes for an ISDN connection. This parameter works in conjunction with the settings in the following paragraph. Note that for a flat-fee connection the values entered here can be much more strict.

Maximum Email Transfer Pause:

This is the maximum time that will elapse before a new connection is initiated again. A sensible value is between 30 and 60 minutes for an ISDN connection.

6.5.8. Send queue

In this section you can set the schedule according to which exchange4linux will send Email. Depending on the type of connection it is advised to send directly or according to a schedule.



Deliver Email immediately:

A new e-mail message delivered to exchange4linux will be sent immediately. When you have a flat-fee internet connection, like ADSL, this is the recommended method since there is a minimal delay between sending and receiving mail.

Save messages and deliver them after fetching Email:

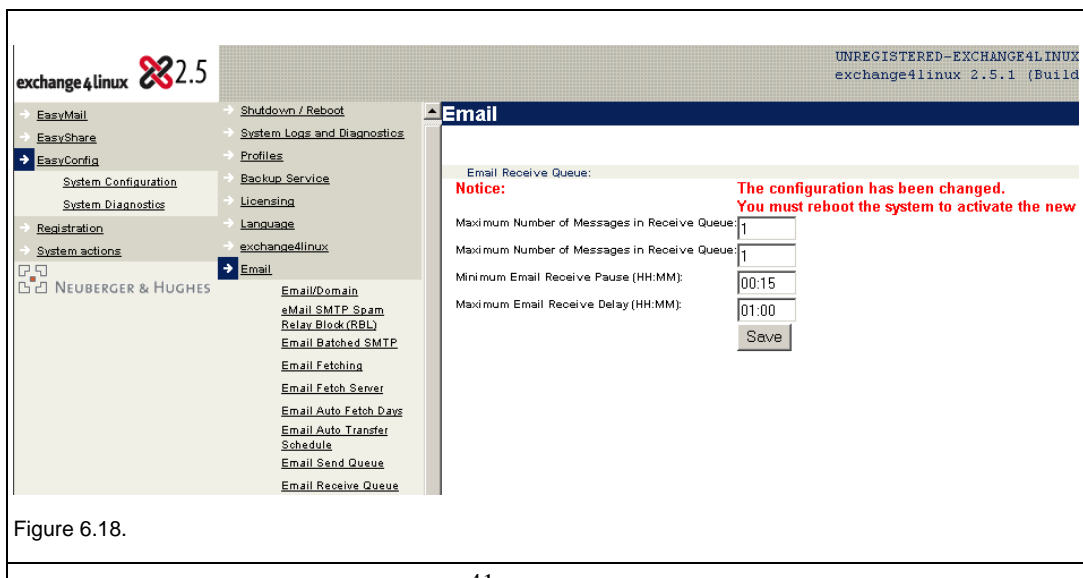
With this method checked, exchange4linux will send Email according to the settings made in the menu "auto fetch days" (Section 6.5.6) and "auto transfer schedule" (Section 6.5.7). This method saves connection costs when ISDN is being used, since there will not be made an internet connection for every e-mail message.

6.5.9. Receive queue



Caution:

These settings are only relevant when you have a special callback account. Since only few providers grant this service, chances are small that you have to fill in anything here.



6.5.10. Transport errors

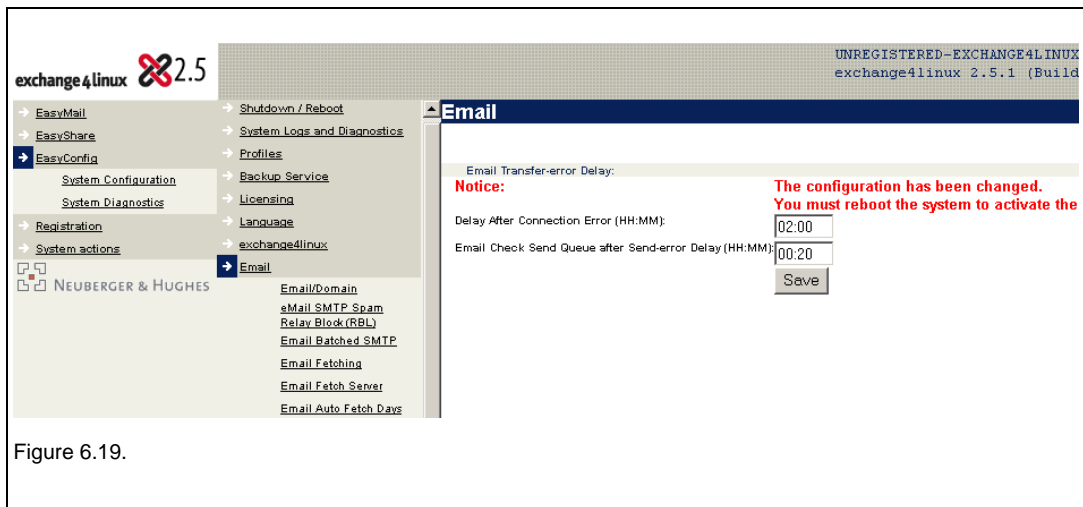


Figure 6.19.

Delay after connection error:

If errors should occur while making a connection, then this time must elapse before trying to connect again. This prevents immediate attempts to reconnect after a failed connection.

Email check send queue after send error delay:

The period of time that elapses after there has been a connection-error with a transfer action. A logical value is somewhere between the settings minimum and maximum Email transfer-pause. The send queue is checked for not yet delivered mail. A connection is only made when mail to be sent is queued.

6.6. Spamfilter

6.6.1. Spamfilter configuration

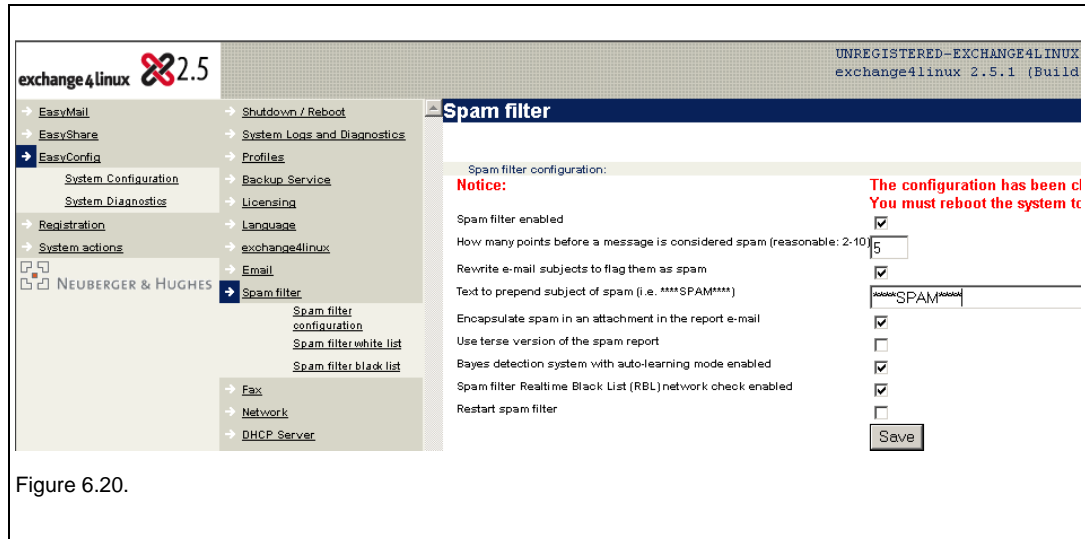


Figure 6.20.

Spamfilter enabled:

The spamfilter can be (de)activated here.

How many points before a message is considered spam:

The score system decides when a messages is considered to be spam, based on several characteristics of spammail. The lower the value set here, the higher the risk of getting *false positives*: messages marked as spam while they are actually not. A value of 5 usually results in very few false positives, while most of the spammail is being filtered out.

Rewrite e-mail subjects to flag them as spam:

When a message is marked as spam, its subject can be changed by putting a common text in front of it. Fill in this subject in the field that appears when this option is checked. Due to this common subject line, a user can easily discover spammail in its mailbox.

Encapsulate spam in an attachment in the report e-mail:

The original spammessages can be included as an attachment with the report that will be sent to the recipient. The report includes information on the distributor of the message and the reason for marking the message as spam.

Use terse version of the spam report:

Select this option to send just a minor report to the recipient of the spammessages.

Bayes detection system with auto-learning mode enabled:

The Bayes selection system is a complex method that nuances the before mentioned score when deciding on the status of each individual message. This is being done by looking at messages that a user received in the past and by using a special weighing system to decide on the possibility of a message being spam. It is advised to activate this setting, since it further decreases the risk of false positives while spam is recognized better.

Spam filter Real-time Black List (RBL) network check enabled:

With this option enabled the spamfilter checks the sender of a message by using several on-line

blacklists. These databases contain extensive information on networks and mailservers that distribute spam. As soon as a message originates from such a server points are added to the score of the message, so that it might be considered spammail.

Restart spamfilter:

When changes have been made to the configuration of the spamfilter, it can be restarted without having to reboot the exchange4linux server. Just check this option and click *Save*. Note that due to a changed profile, there will still be a notification that the system must be rebooted in order to activate the new profile.

6.6.2. Spamfilter whitelist

It is possible to put certain e-mail addresses and domains on a so-called whitelist. By doing this you prevent mail from trusted descent to be marked as spam, due to a high score.

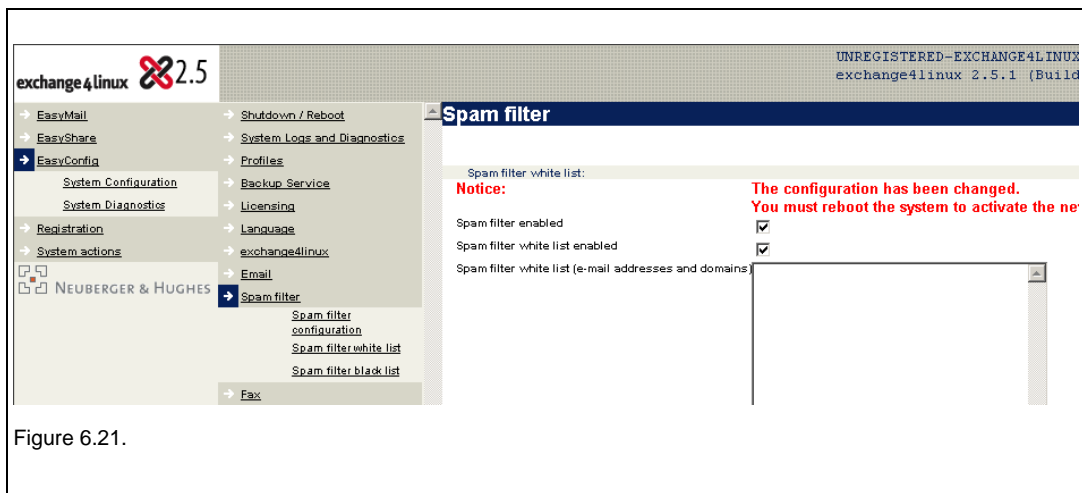


Figure 6.21.

Spamfilter enabled:

Always leave this option checked, unless you want to disable the spamfilter completely.

Spamfilter whitelist enabled:

This option (de)activates the whitelist as described above.

Spamfilter whitelist:

Add e-mail addresses and domains here to make sure that their messages will not be marked as spam.



Caution:

insert every entry on a new line. A domain must be defined `*@domein.com`, an e-mail address must be inserted completely.

Restart spamfilter:

Use this option to restart the spamfilter directly after changes have been made to its configuration.

6.6.3. Spamfilter blacklist

A blacklist works in the same fashion as a whitelist, but then the other way around. In this case messages from a certain domain or e-mail address is marked as spam, independent of the score that individual messages are awarded.

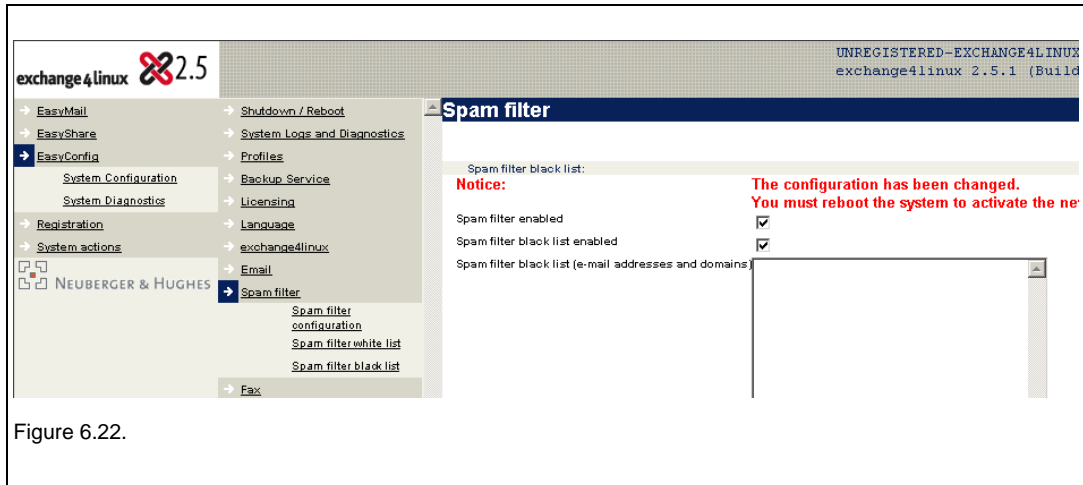


Figure 6.22.

Spamfilter enabled:

Always leave this option checked, unless you want to disable the spamfilter completely.

Spamfilter blacklist enabled:

This option (de)activates the blacklist as described above.

Spamfilter blacklist:

Add e-mail addresses and domains here to make sure that their messages will always be marked as spam.

**Caution:**

insert every entry in a new line. A domain must be defined ***@domein.com**, an e-mail address must be inserted completely.

6.7. Easy PDF Service

6.7.1. Easy PDF Service in general

When you are subscribed to the Easy PDF Service, it is enabled on the exchange4linux server. Note though that there will not appear a dedicated item in the configuration menu. The Easy PDF Service is visible for all users of the network as a printer (PDF Secretarius). In order to use it, this printer must be set up on the workstation. The necessary settings are described and explained in Section 8.3

6.7.2. Define PDF templates

The Easy PDF Service comes with five pre-defined templates named **PDF-layout<1-5>-PDFsecretarius**. These templates can be used to give PDF documents certain fixed layout elements, like a logo, a watermark or a company address.

When there is no template available the document will be made, without further error messages, with a blank background.

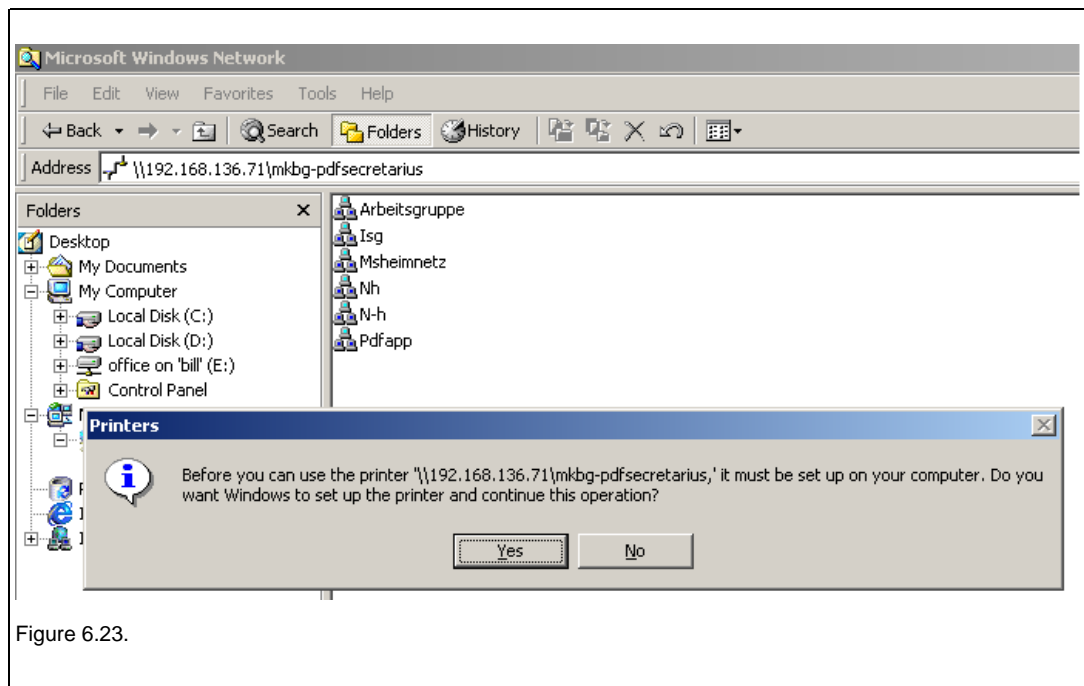


Figure 6.23.

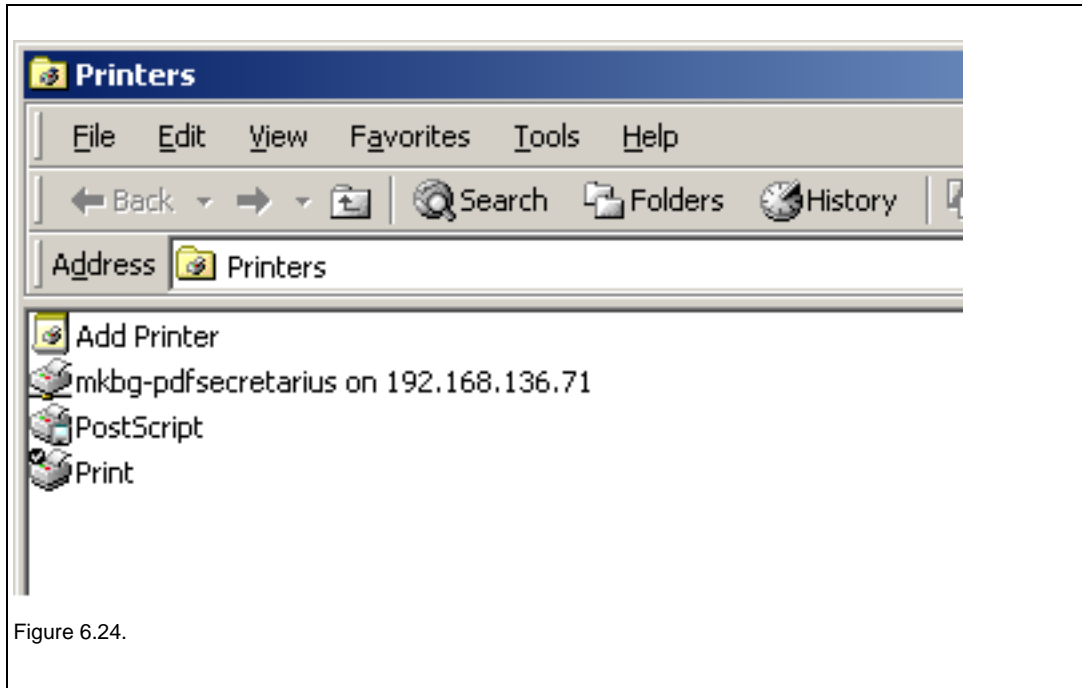


Figure 6.24.

A template can be configured in the following way:

1. Log onto a workstation as Administrator.
2. Add the printer **mkgb-PDFsecretarius** as described in Section 8.3
3. Design, for example in Microsoft Word, the template. Save the file as *PDF-layout<1-5>.doc* (instead of <1-5> fill in an unused number between 1 and 5; the extension is irrelevant, since it is removed automatically). The resulting printer template will be named eg. **PDF-layout3-PDFsecretarius**. Take into account that the filenames are case-sensitive.
4. Add, again as described in Section 8.3, the newly created template as a printer.

From now on PDF documents can be made with this template as a basis. Select the printer of choice (eg. *PDF-layout3-PDFsecretarius*) and print the document, after which it will be sent to you by e-mail.

6.8. Faxserver

6.8.1. Functioning of the faxserver

With the faxserver on exchange4linux it is possible to send and receive faxes from every workstation within the network. This way, incoming faxes can easily and swiftly be sent to the recipient as an Adobe Acrobat PDF-file. To use the faxserver capabilities, the exchange4linux server needs to contain a Sedlbauer ISDN faxmodem. For more information on adding this device to your system please contact your exchange4linux supplier. Sending a fax message is very easy: the user has to install a faxclient of choice (eg. the freely available WHFC). After this a document can be "printed" to the faxserver. The use of a faxclient is explained in detail in Section 8.2

Incoming faxes are sent by default to the mailbox *fax*. Another recipient can be chosen by means of the menu *EasyMail - Forwardings*.

6.8.2. Configuring the faxserver

The necessary settings for the faxserver in the configuration screen are explained below.

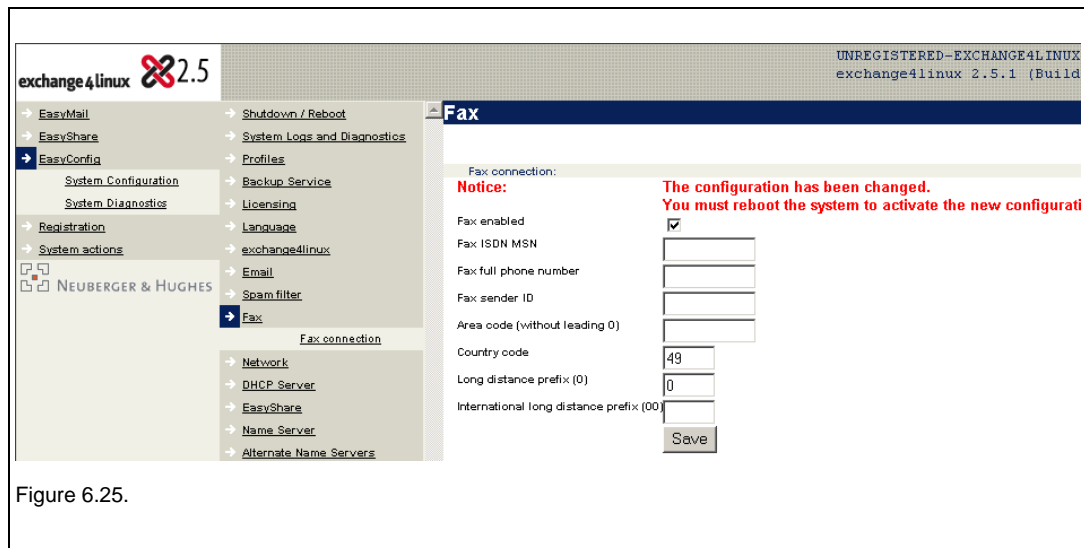


Figure 6.25.

Fax enabled:

Check this box to enable the faxserver.

MSN:

Fill in the MSN number (without 0) which will be used to send and receive fax messages. As soon as a fax call is made to this MSN number, exchange4linux will accept the incoming connection.

Full fax number:

This number will be attached to every outgoing fax message.

Fax sender ID:

The value filled in here will also accompany an outgoing fax message and will appear on the LCD screen of the recipient's fax machine.

Area code (without 0):

Insert the area code (without 0).

Country code:

Insert the country code here, eg. for The Netherlands 31 and for Germany 49.

Interlocal prefix:

The prefix that is placed in front of an interlocal number, usually a 0.

International prefix:

The prefix that is placed in front of an international number, usually 00.

6.9. Network

6.9.1. Internal network

This is where the network and IP addresses of the internal network can be inserted. Note that you only have to change something here if you already use TCP/IP in the network and you want to adapt exchange4linux to this network. Otherwise you should leave the settings as they are, and to let the DHCP-server dynamically assign IP-addresses. Normally this is already activated in the related menu item.



Caution:

Make sure that the address range you allow the DHCP-server to choose from (see Chapter 7) falls within the network that is defined here. A wrong entry can lead to a non-operating network, so it is important to pay attention what you enter here.

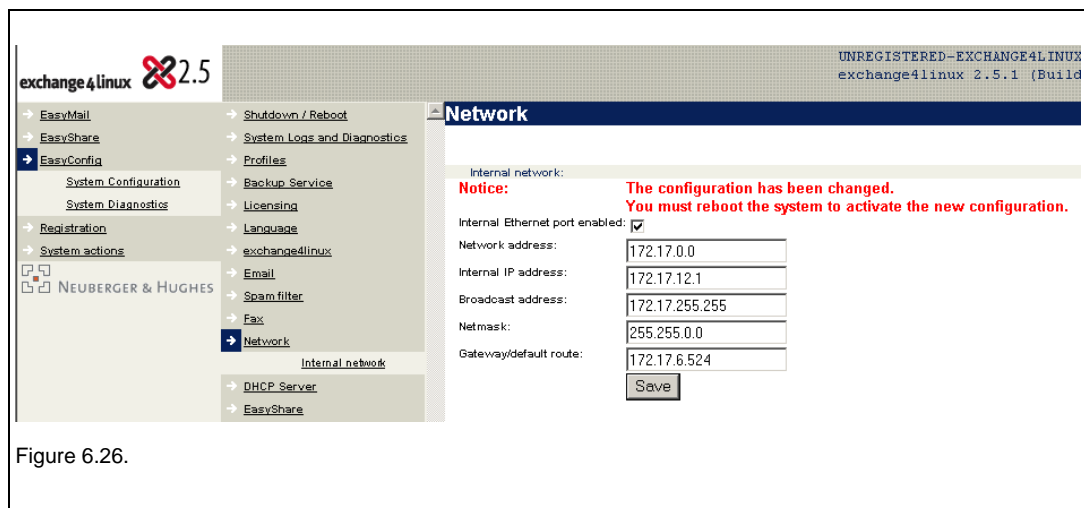


Figure 6.26.

Internal Ethernet port enabled:

This is where you (de)activate the connection to the internal network. Normally this item should be activated.

Network address:

This is where the base-address of your network should be inserted. Do not fill in a subnet address. When the internal network is a subnet, then fill in the C-class or B-class network address that lies above it and add the subnet address to the menu item *Name Server - Name server settings - Alternative Name server network address*.



Important:

Fill in a network address from one of the private ranges. Don't use the 10.0.0.0 A-class network. Obviously it is not allowed to use another A-class network, since the remaining A-class networks are reserved official IP-ranges.

Internal IP-address:

The IP-address that is to be used by exchange4linux.

Broadcast address:

The broadcast address of the network. This address should always end on .255 with a C-class network and on .255.255 in case of a B-class network. When an alternative IP-range is being used (eg. in case of subnetting), there should still be a C-class or B-class broadcast address. The correct broadcast address can now be added to the menu item *Name Server - Name server settings - Alternative Name server network address*.

Netmask:

The netmask of the network. It usually ends on .0 with a C-class network and on .0.0 with a B-class network. However, this is not always true: In case of subnetting there should still be a C-class or B-class netmask. The correct netmask can now be added to the menu item *Name Server - Name server settings - Alternative Name server network address*.

Gateway/default route:

Fill in the gateway here. This can be an internal router, but also a DSL- or cable-modem/router.



Caution:

When using ADSL by KPN (before Mxstream) in The Netherlands, this field **MUST** remain empty.

6.10. DHCP server

6.10.1. DHCP Server settings

In this part the dynamic assignment of IP-addresses is configured.

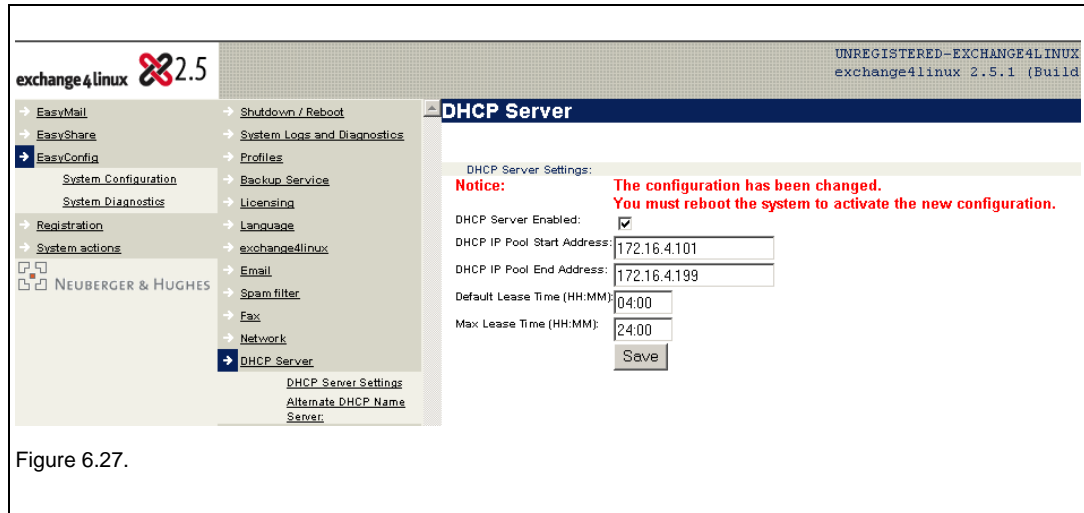


Figure 6.27.

DHCP server activated:

Here the dynamic assignment of IP-addresses can be (de)activated. This function needs to be deactivated only if **all** computers in the network have a fixed IP-address.

When there is already a DHCP server active in your network, some settings of the exchange4linux server have to be added to its configuration. For DHCP this implies the values for default route/gateway, internal domain and Name server (if applicable also the WINS server). In this case the exchange4linux DHCP server can safely be disabled.



Caution:

The following settings have to comply with the configuration of the internal network and with your general network configuration. Incorrect entries can lead to a non-functioning network.

DHCP IP Pool Start Address:

First IP-address of the pool from which addresses will be assigned dynamically.

DHCP IP Pool End Address:

Last IP-address of the pool from which addresses will be assigned dynamically.

Default Lease Time (HH:MM):

This is the default lease time for a dynamically assigned IP-address. You can leave this setting unaltered. Change it only in special situations.

Max Lease Time (HH:MM):

This is the maximum lease time of a dynamically assigned IP-address. You can leave this setting unaltered. Change it only in special situations.

6.10.2. Alternate DHCP Name server

In general these settings do not need to be altered. If exchange4linux functions as DHCP server and the clients should use one or more different Name servers, these servers should be inserted here. A maximum of 3 alternative IP-addresses of available DHCP- and WINS-servers can be added.

6.11. EasyShare

6.11.1. EasyShare settings

In this menu EasyShare can be configured.

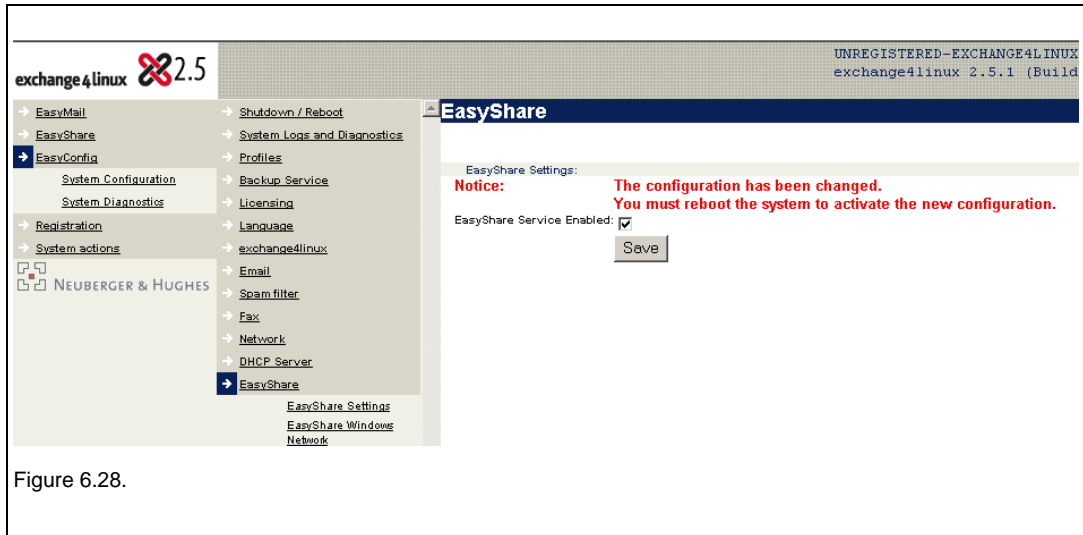


Figure 6.28.

EasyShare Service Enabled:

This setting (de)activates the exchange4linux fileserver functionality. When it is deactivated, the fileserver is shut down and it will no longer be possible to reach its fileshares.

6.11.2. Windows network

Here the Windows network services of EasyShare can be (de)activated.

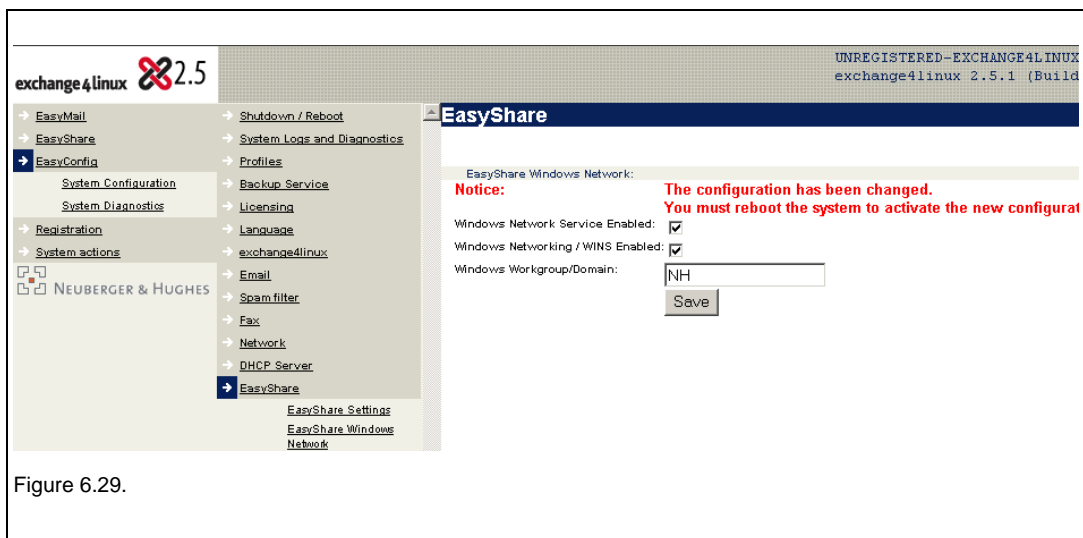


Figure 6.29.



Caution:

To make use of the Windows network services, users of EasyShare need to log onto the network with their exchange4linux mailbox-name and password. When this is not the case, a connection to the fileshares is not possible from a Windows workstation. Therefore it is advised to use the same log-in for both the network and the exchange4linux server.

Windows network service Enabled:

When activated, access to EasyShare files and folders is possible from Windows PCs (when the user has got access rights). For example, one can connect to the fileshares by means of attaching a network drive letter to them within the Windows Explorer.

Windows WINS Enabled:

With this function activated, the Windows Internet Name Service (WINS) will be used. This is necessary when no other WINS server is active within the network and users wish to connect to the exchange4linux network shares. By default WINS is activated. When there is already a WINS server present within the network, it is advised to disable this function on exchange4linux. Do keep in mind to make a manual entry in the existing WINS server with the IP-address of exchange4linux.

Windows Workgroup/domain:

Here the workgroup name that has been defined in the Network Neighborhood of Windows NT/95/98/2000/XP can be filled in. The exchange4linux server will then be visible within this workgroup. Alternatively the name of the NT-domain can be filled in.

6.12. Nameserver

6.12.1. Name server settings

Here the settings for the integrated Name server on exchange4linux can be defined.

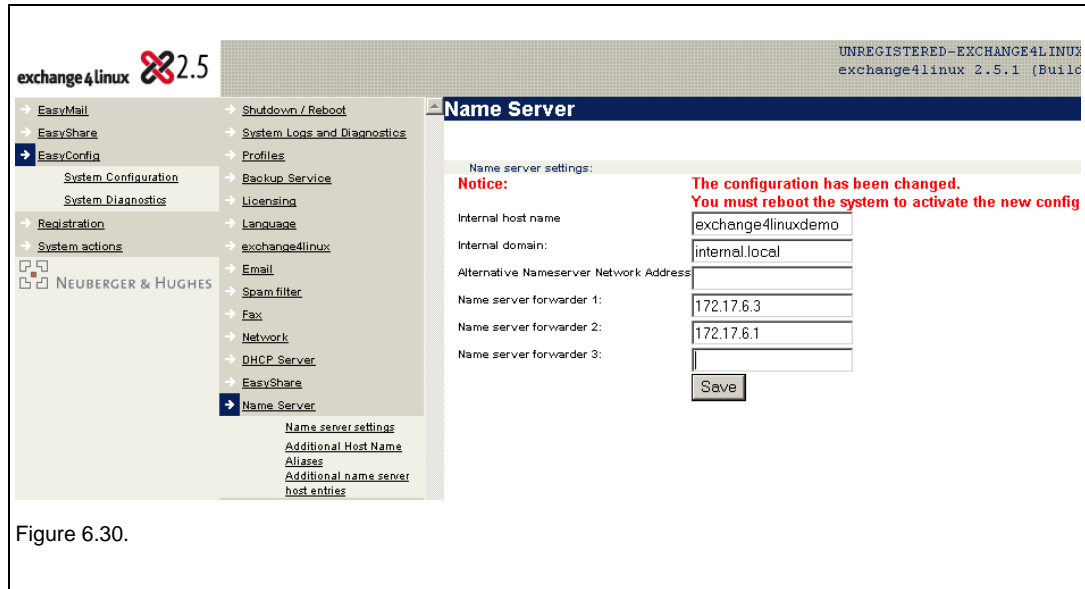


Figure 6.30.

Internal host name:

Define the internal hostname of exchange4linux here. By default it is set to **exchange4linux**. Normally you do not have to change this value.

Internal domain:

The internal domain suffix must be filled in here. When there is not yet an internal domain suffix in use, it is advised not to change this value.

In case of Apple users the suffix must include a . (dot), eg. local.intranet. This is the domain suffix that, in case of fixed IP-addresses, must be inserted in the DNS searchlist of the workstations. By default it is set to **local.intranet**.

Alternative Name server network address:

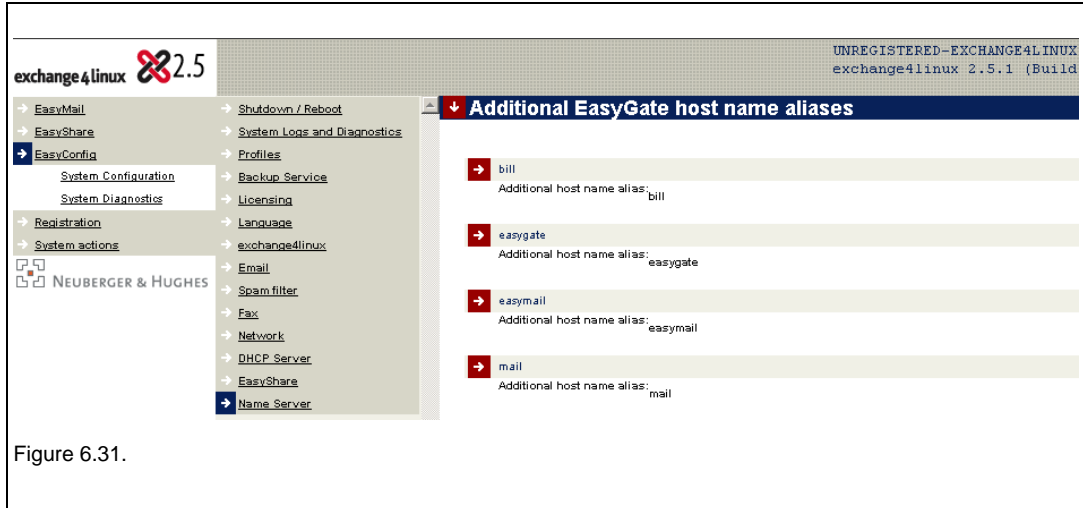
In special cases you can enter an alternative network address here. This could be necessary in case of a WAN configuration. The result is that exchange4linux will build a Name server for the network defined here instead of for the network defined at *Internal network*. This way, one can make sure that a B-class network Name server is being built, while a C-class network has been configured.

Name server forwarder 1,2,3:

When this function is activated, up to three IP-addresses of other name servers can be included, which will be queried respectively. Usually the name servers of the ISP are filled in here. At least 2 IP-addresses have to be filled in, which have been supplied to you by your provider.

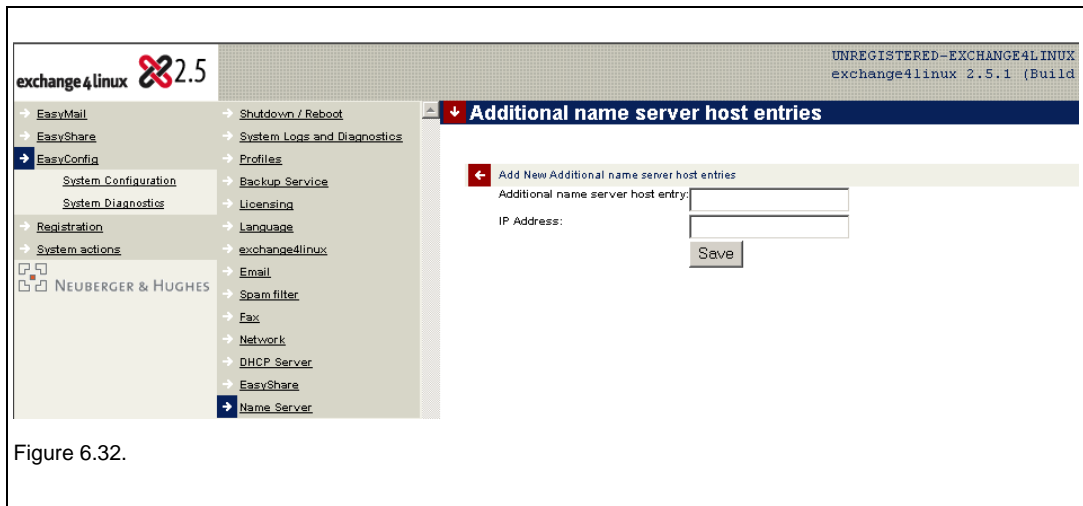
6.12.2. exchange4linux hostnames

It is possible to define additional hostnames for the exchange4linux server. A new hostname can be added by clicking the arrow pointing downwards to the left of the item header, an existing hostname can be changed or deleted by clicking the arrow to the left of the hostname in question.



6.12.3. Manual name server entries

Here you can assign hostnames to specific IP-addresses, eg. for servers that are located within the network. This way there is no need to update the host table on every workstation.



6.13. Alternative Name servers

It is possible to add additional name servers here, which will be consulted by exchange4linux. Please be aware of the fact that these servers must also be capable of converting internet hostnames. If necessary, also add the accompanying domain suffix.

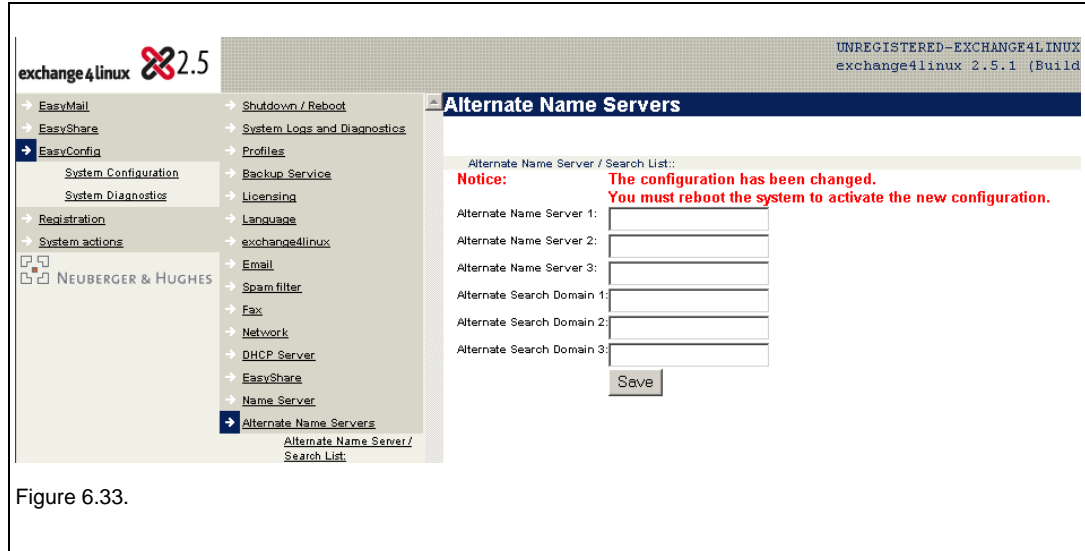


Figure 6.33.



Caution

When a Name server is filled in here, the IP-address of exchange4linux **MUST** be added to it as well, otherwise the internal hostname lookups will not function properly.

6.14. System actions

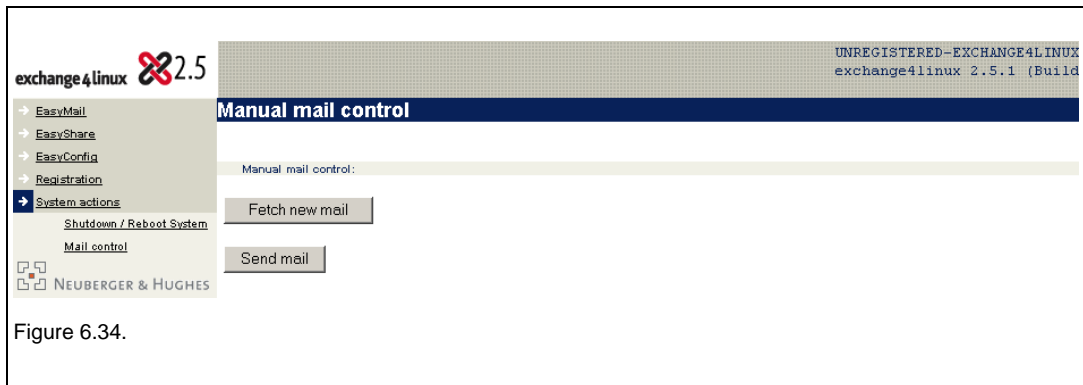


Figure 6.34.

6.14.1. Shutdown / reboot system

Use this menu to shutdown or reboot the exchange4linux server.

6.14.2. Mail control

With these controls the server can be forced to send or receive Email.

Chapter 7. User guide

7.1. Operating instructions

7.1.1. Layout of the screen

The window that appears after you have logged on to exchange4linux consists of three parts. On the left the menu is visible, where you can select menu items by clicking on them with a mouse-click. In the upper right hand corner the title bar can be seen, where the name of the selected menu item appears. Beneath the title bar is the main window, in which relevant information from the selected menu item is displayed.



Figure 7.1.

7.1.2. Navigating through the menu

When you choose a menu item that contains sub-menus, the sub-menus will *unfold*. You can also see the sub-menus by clicking the down-pointing triangle next to a given menu item.



Figure 7.2.

7.1.3. Adding new items

With most of the menu items and sub-menus it is possible to add new items (mailboxes, alias-addresses, external addresses, etc.). Whether this is possible for a given sub-menu is shown on the title bar. When there is a down-pointing arrow on the left side of the title bar, it is possible to add a new item to the list with a mouseclick on this arrow.

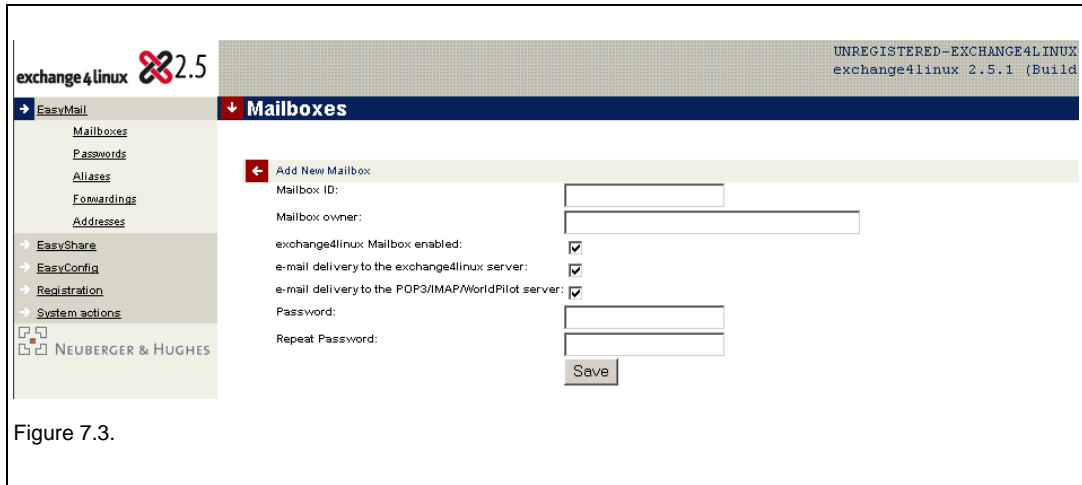


Figure 7.3.

When the necessary data has been provided, click the *Save* button. As soon as an invalid entry has been made or an obligatory field has been left empty, you are informed of this by means of an error message and a red italic text which is displayed on top of the menu item. Depending on the field, an indication of what went wrong is also included.

7.1.4. Editing items

With many sub-menus it is possible to edit the properties of an item after inserting the data for the first time. For example, it is possible to change the name of a mailbox owner, a password, etc. To edit an item, you click on the arrow pointing to the right, which is next to the item's name in the list view. A window with the item properties will then be opened and you can change one or more of them. After the changes have been made, click the *Save* button. Now your changes are saved and you are automatically returned to the previous list view. If a mistake has been made, an error message will pop up. To cancel the editing process, click on the arrow pointing to the left.

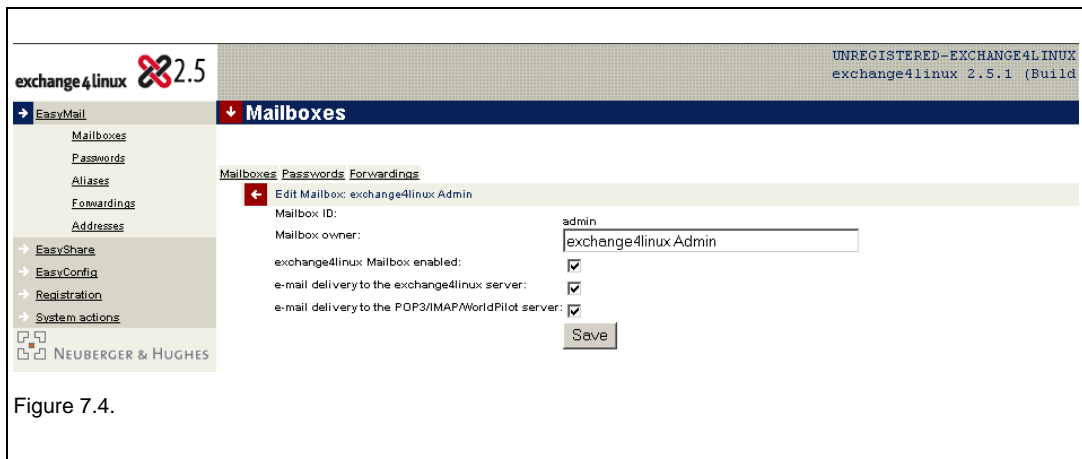


Figure 7.4.

7.1.5. Removing items

To delete an item, open it by clicking the arrow in front of it. Now click the delete symbol: the cross on the right of the title bar. Now the removal of the specific item must be confirmed.

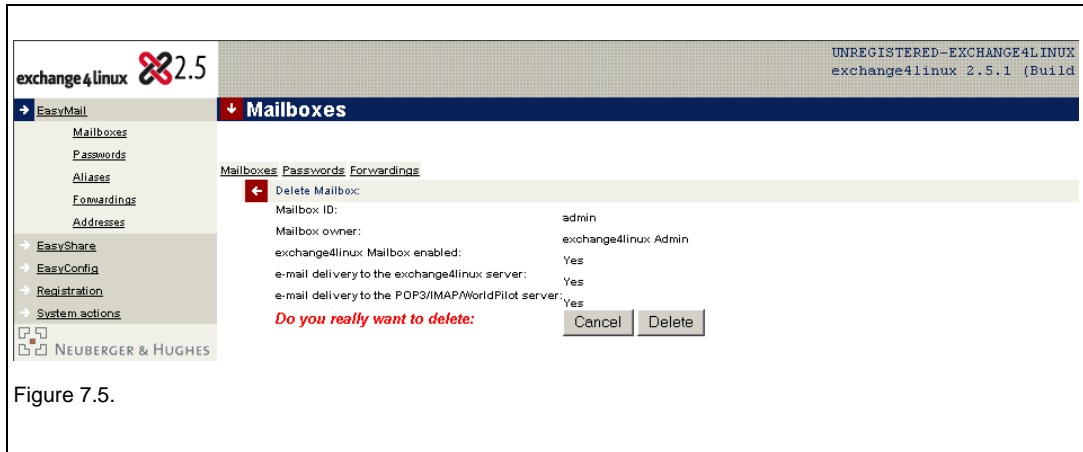


Figure 7.5.

7.2. Managing the e-mail functions

7.2.1. Introduction

In this chapter it is described how the exchange4linux e-mail functions are managed. The way in which individual users can change their mailbox settings is being explained in Section 7.5: *Functions for the user*. Most of the exchange4linux management functions can only be performed as administrator (username **admin**). All e-mail functions are explained in detail in the following paragraphs.

7.2.2. Mailboxes

Adding new users

To add new mailboxes, log in as **admin** and select the menu item **Mailboxes**. Then click on the arrow next to the word *Mailboxes* on the title bar, after which an empty form appears (Figure 7.6). Fill in the empty fields, consult the form below for an explanation of the possibilities.

The screenshot shows the 'exchange4linux 2.5' web interface. The top right corner displays 'UNREGISTERED-EXCHANGE4LINUX exchange4linux 2.5.1 (Build...)'.

The left sidebar contains a menu with the following items: EasyMail, Mailboxes (selected), Passwords, Aliases, Forwardings, Addresses, EasyShare, EasyConfig, Registration, System actions, and NEUBERGER & HUGHES.

The main content area is titled 'Mailboxes' and contains a sub-section 'Add New Mailbox' with the following form fields:

- Mailbox ID:
- Mailbox owner:
- exchange4linux Mailbox enabled:
- e-mail delivery to the exchange4linux server:
- e-mail delivery to the POP3/IMAP/WorldPilot server:
- Password:
- Repeat Password:
- Save button

Figure 7.6.

Field name	Contents	Remarks
Mailbox ID	This is the name with which the user logs onto his e-mail application. This is also the address at which the user will receive e-mail. Normally this is the user's surname or initials.	Fill in the text that is in front of the @-sign. It should contain at most 16 characters and must be made up of alphanumeric symbols only.
Mailbox owner	The full name / description of the mailbox owner.	It is allowed to use spaces and other symbols here.
exchange4linux mailbox enabled	Check to give the user access to Public folders within exchange4linux.	This way the user is given the right to access eg. shared address books, notes, etc.
e-mail delivery to the e4l server	Check to allow the user to send	When Microsoft Outlook is

Field name	Contents	Remarks
	and receive e-mail through exchange4linux.	used for sending and receiving e-mail this option can be checked.
e-mail delivery to the POP3/IMAP/ webmail server	Check to let the user send and receive e-mail in an alternative way. Obviously it will still be managed by the exchange4linux server.	This is often a better way of processing e-mail, since it is faster and requires less CPU capacity.
Password	Mailbox access password. This is also used for the e-mail application.	The entered data is displayed in asterix's for security reasons.
Repeat password	To prevent mistakes, the password has to be entered twice.	

It can be decided to deliver e-mail to exchange4linux: e-mail will appear within the Personal folders in the user's Microsoft Outlook profile. To do this, check *e-mail delivery to the exchange4linux server*. In general POP3/IMAP/Webmail should always be checked, since it makes sure that e-mail is available through POP3/IMAP and Webmail. Check *exchange4linux mailbox enabled* when the user is part of the exchange4linux workgroup.



Caution:

In all cases mentioned above, e-mail will be sent and received through the exchange4linux server. The difference is based on the protocol being used: exchange4linux or POP3/IMAP. More information on this theme can be found in the explanation of the terminology (Chapter 2) and in Section 9.2.

Editing mailboxes

To edit a mailbox, click the arrow button to the left of the mailbox that is to be changed. Subsequently the settings of this mailbox are being displayed and can be edited. See the table on the previous page for an explanation of the different fields.

The screenshot shows the 'exchange4linux 2.5.1' web interface. The top right corner displays 'UNREGISTERED-EXCHANGE4LINUX exchange4linux 2.5.1 (Build...)'.

The main navigation menu includes: EasyMail, Mailboxes, Passwords, Aliases, Forwardings, Addresses, EasyShare, EasyConfig, Registration, and System actions.

The 'Mailboxes' section is active, showing a list of mailboxes. The 'Edit Mailbox: exchange4linux: Admin' form is displayed with the following fields:

- Mailbox ID: admin
- Mailbox owner: exchange4linux Admin
- exchange4linux Mailbox enabled:
- e-mail delivery to the exchange4linux server:
- e-mail delivery to the POP3/IMAP/WorldPilot server:

A 'Save' button is located at the bottom right of the form.

Figure 7.7.



Caution:

The mailbox ID cannot be changed afterwards!

7.2.3. Passwords

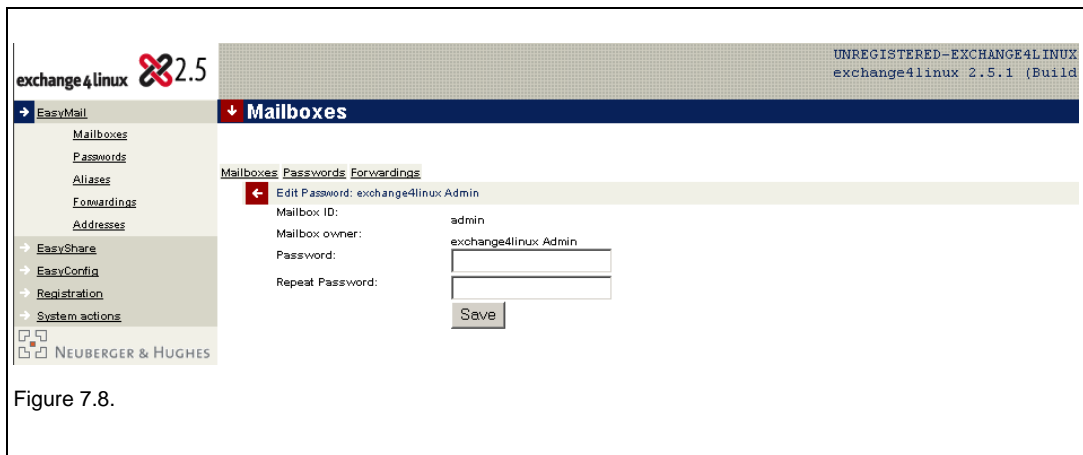


Figure 7.8.

To change the password of a mailbox, go to the menu item **Passwords** and click on the arrow to the left of the mailbox in question. In the screen that appears the new password must be filled in twice. Note that passwords should contain at least one number and one character in capital letters.

7.2.4. Aliases

Adding a new alias address

An alias is an address that refers to a given mailbox. The advantage of such an address is that it can be longer than 16 characters and may include non-alphanumeric characters, which are not allowed in mailbox-ID's such as "." and "_". This way, it is possible to use an e-mail address like: **name.surname@company.com**

This alias then refers to the mailbox that has eg. the user's surname or the initials as its ID.

To create a new alias, one needs to log-in as admin, browse to the menu point *Mailboxes - Aliases* and click on the arrow on the left of the title bar (Figure 7.9). Now an empty form appears. Use the following guidelines when filling in the required data.

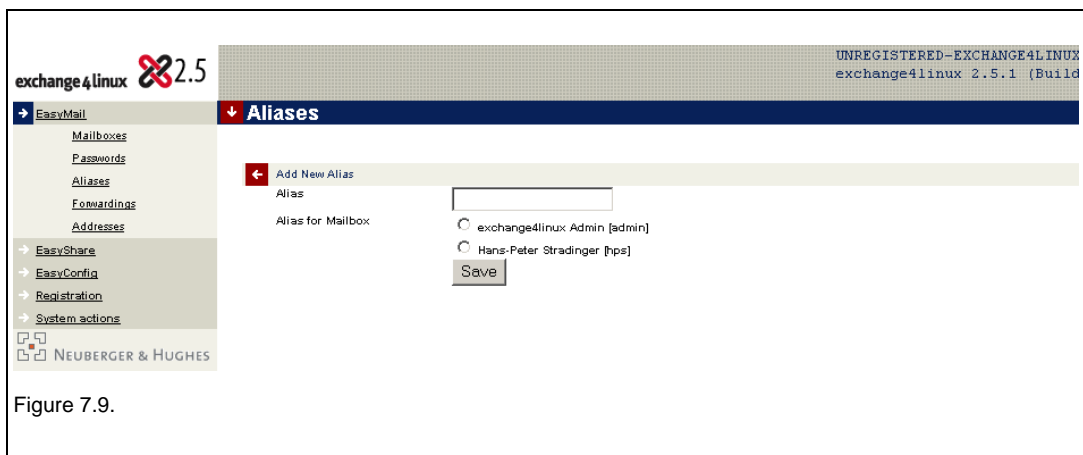
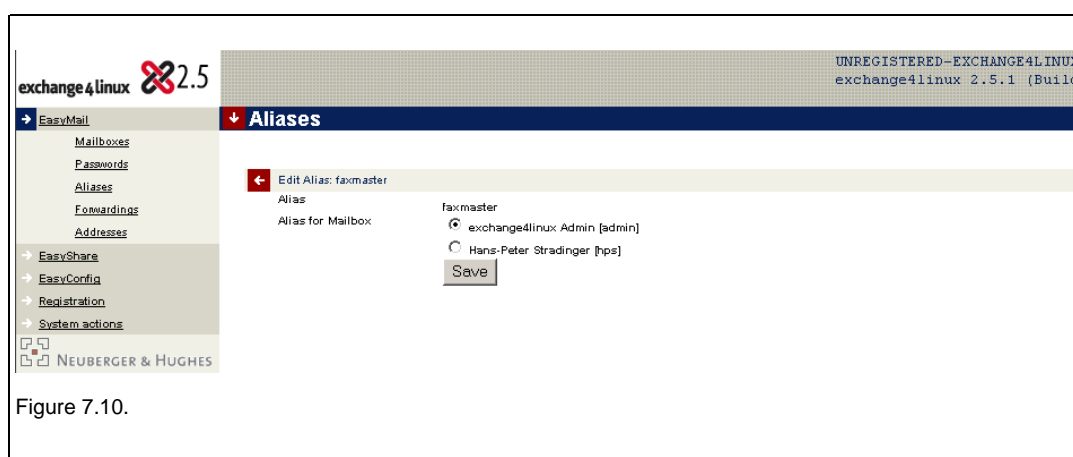


Figure 7.9.

Field name	Contents	Remarks
Alias	This is the alias that can be used to send and receive e-mail.	Only fill in the part in front of the @-sign
Alias for mailbox	All the available mailboxes are listed here (so no other aliases) with a checkbox in front.	By default only one mailbox can be selected. Selecting a mailbox is obligatory.

Editing aliases

Within the menu item **Aliases**, one can select an alias in order to edit it. The alias itself cannot be re-named, but the mailbox to which it refers can. By clicking on the cross on the right of the title bar, the alias will be removed.



7.2.5. Forwardings

This menu item (Figure 7.11) combines several functionalities:

- incoming mail for a certain user will be forwarded automatically to another mailbox
- incoming mail for a certain user will be distributed automatically to several other mailboxes
- set up an autoresponder

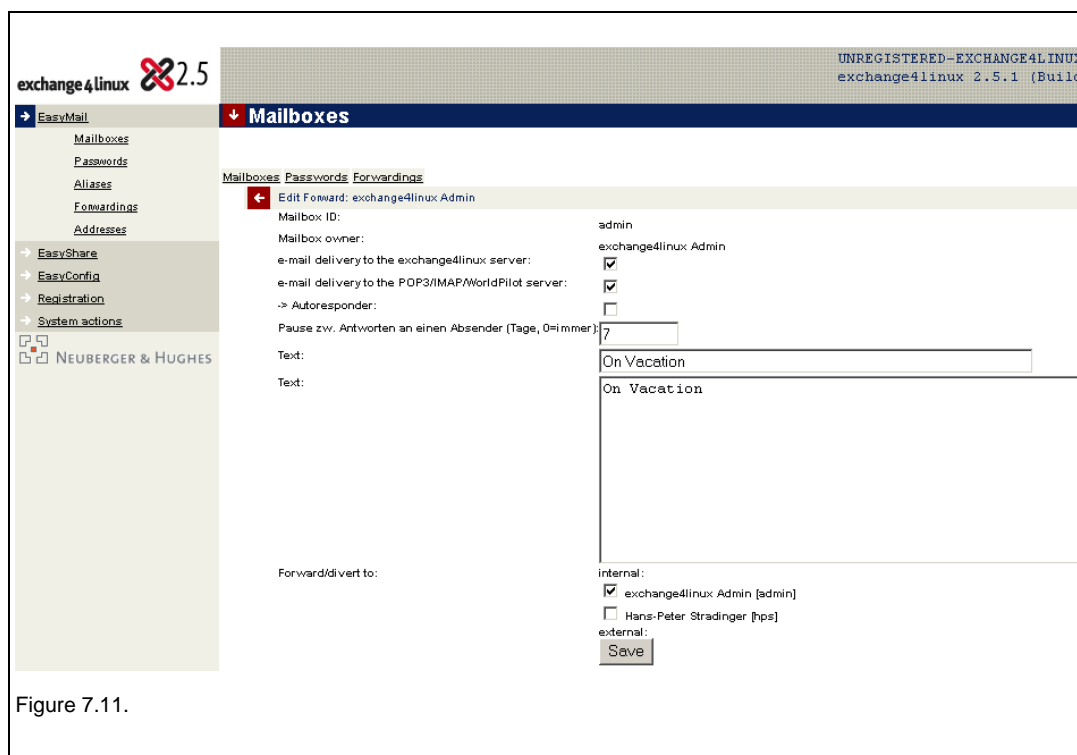


Figure 7.11.

The first functionality, mail forwarding, can be useful in the event that a user is not able to access his mail account due to vacation, business or otherwise. The mail can be forwarded to a private e-mail address or to a colleague's mailbox.

The second functionality, mail distribution, offers the possibility to maintain distribution lists. Often used distribution addresses are *info*, *sales*, *helpdesk* and *general*. These addresses can then be forwarded to the relevant employees within the firm. One e-mail message now suffices to reach an entire workgroup, department or the whole firm.

In the menu point **edit forward** (reached by clicking on the arrow in front of an existing forward or by clicking on the *new forward* arrow) the mailboxes (both internal and external) that have to receive the forwarded e-mail must be selected by clicking the checkboxes in front of them.

If the mailbox itself is not read/emptied by someone (i.e. if the mailbox alias marketing is simply being used to distribute mail to everyone in marketing and not actually being polled by anyone), then the checkbox next to this mailbox name should be cleared. It is obligatory to check at least one mailbox: when mail is not forwarded this implies that the mailbox itself is checked by default.

The third functionality, **autoresponder**, can be used to send an automatically generated reply to those who send you e-mail during your absence. In this reply they can be notified of your absence. The function can be activated by clicking the relevant checkbox in the forward dialog (Figure 7.11). It is possible to change the subject of the message that will be replied with and the text it contains. The autoresponder keeps track of who sends e-mail, so that it can reply with a certain interval to be decided on by the user. For example, when you fill in a value of 3 here, an autoreply will be sent every three days. This function prevents you from replying to every message that is received from a certain e-mail address. It is advised **not** to fill in 0 here, to make sure that an unnecessary large amount of mail traffic is being created and to prevent two autoresponders from sending each other an unlimited amount of replies.

7.2.6. External addresses

Adding external addresses

External addresses are e-mail addresses from outside your mail domain. These external addresses

can be added in the menu item **Addresses**, so that they can be referred to when setting up a forward address in the menu item **Forwardings**. This implies that a user with an external e-mail address must ask the administrator to add this address to the list, since **admin** is the only user that can add and remove external addresses.

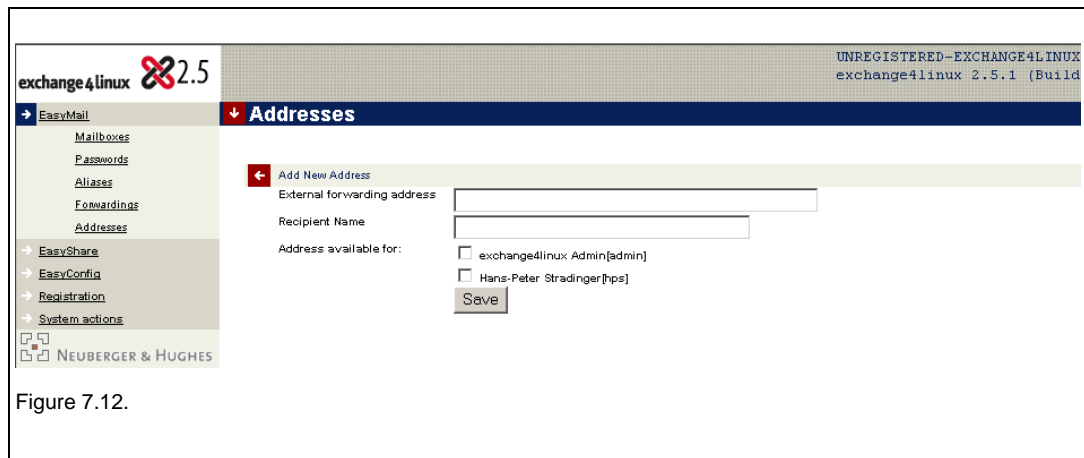


Figure 7.12.

To add an external address, the administrator must select the menu item *Addresses*. Now click the arrow-button at the left of the title bar and complete the form that appears. Fill in the empty form (Figure 7.12) in accordance with the following rules:

Field name	Contents	Remarks
External forwarding address	Fill in the complete e-mail address	Include both the part in front of and the part behind the @ symbol.
Recipient name	A descriptive name of the external address	Spaces are allowed.
Address available for	All mailboxes are displayed with a checkbox	Click the checkbox next to the mailboxes that should have access to this address.

Edit external addresses

Modifying an external address is limited to changing its description and the availability of the address to existing mailboxes on the system. Only the administrator can do this. It is done by selecting **Addresses** from the menu and by clicking on the address that has to be changed (Figure 7.13). An external address can be removed here by clicking on the cross on the right of the title bar.

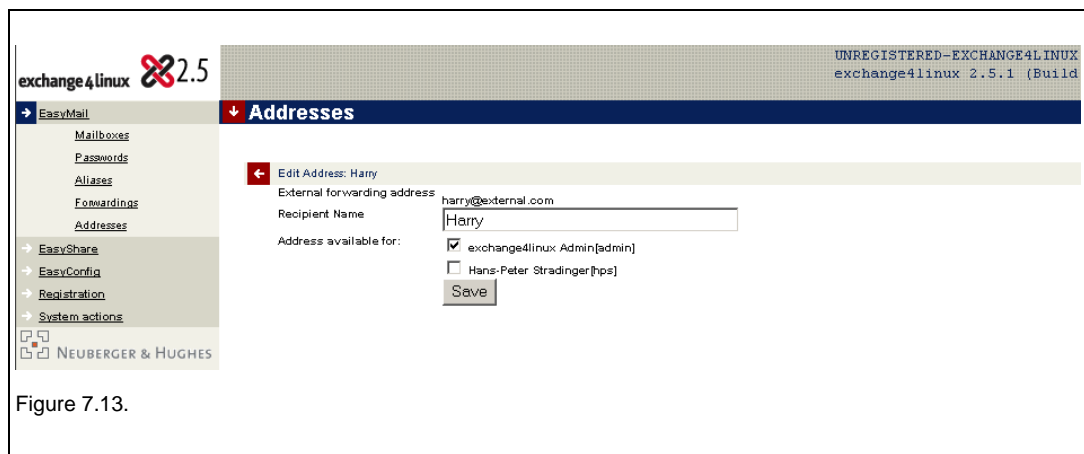


Figure 7.13.

7.3. Managing the EasyShare functions

7.3.1. Introduction

This chapter explains the functions of EasyShare, the fileserver that is integrated in exchange4linux Server Suite.

With EasyShare it is possible to manage fileshares. This way, important files can be made available to several (or all) users of the network.

7.3.2. Fileshares

This menu item allows you to manage the fileshares. To add or edit a share (Figure 7.15 shows how to edit one) click the relevant button. Subsequently you need to fill in several fields that appear on screen. Below is described what is to be included in each field. A website or share can be removed by selecting it and clicking the cross on the right of the title bar. After a confirmation the item, including all the data it contains, will be removed.

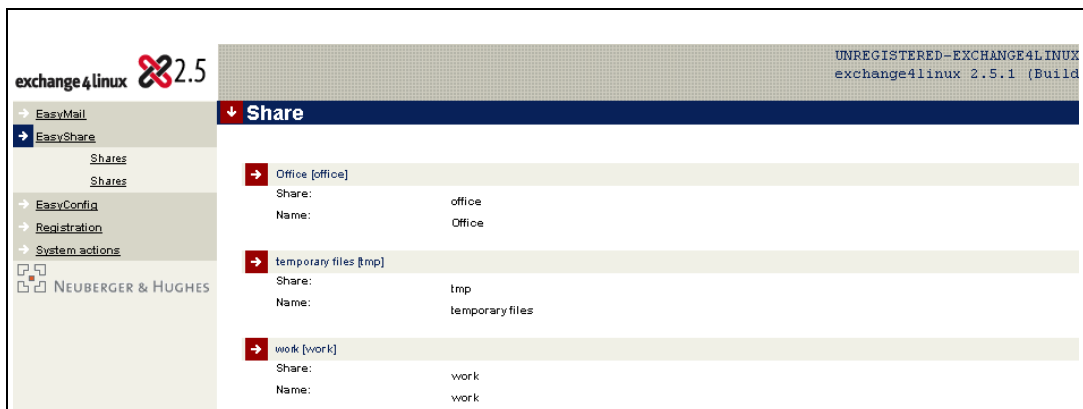


Figure 7.14.

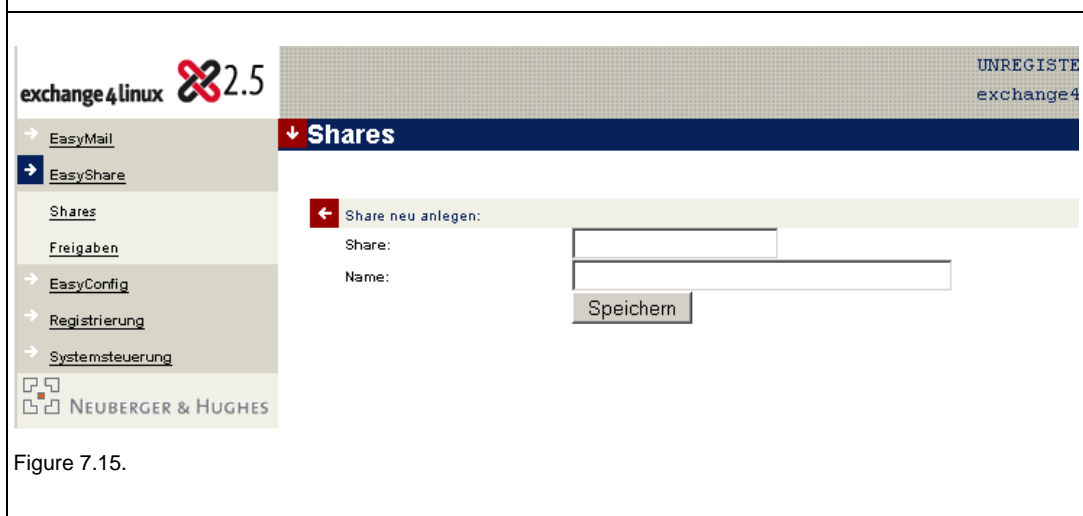


Figure 7.15.

Field name	Contents	Remarks
Share	The name of the share, under which it is known on the network	The name can contain no more than 10 characters and cannot be changed afterwards. This is also the name which is used in Windows Explorer to reach the share.
Name	Fill in the complete name of the share	This name can be altered afterwards.

7.3.3. User privileges

The fileshares can be reached from a workstation using the Windows Network Services. This can be done by multiple users, as long as they have been granted user privileges. There are two levels (user_privileges_2): **read access**, where the contents of the share is visible in the Windows Explorer. In this case it is not possible to modify or delete files. The second level, **write access**, allows the user to perform editing actions: modifying and deleting files. User privileges can be attributed to users in the menu item **Shares**.

When the user, to whom privileges are to be granted, is selected, it is possible to indicate what his or her rights are for each share. Simply tick off and save the desired user privileges.

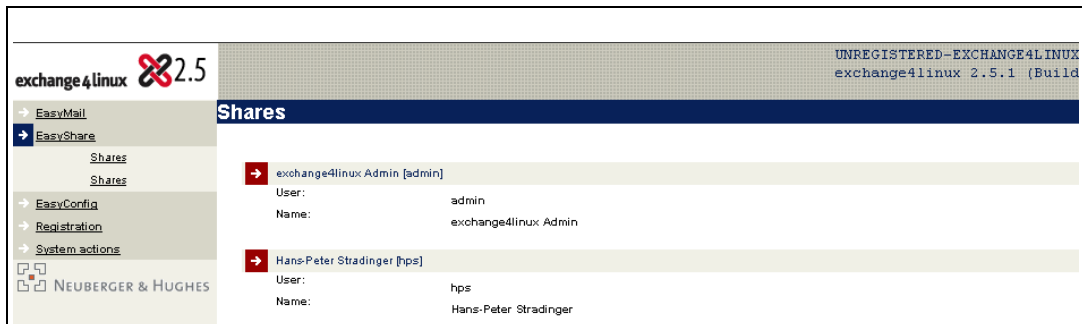


Figure 7.16.

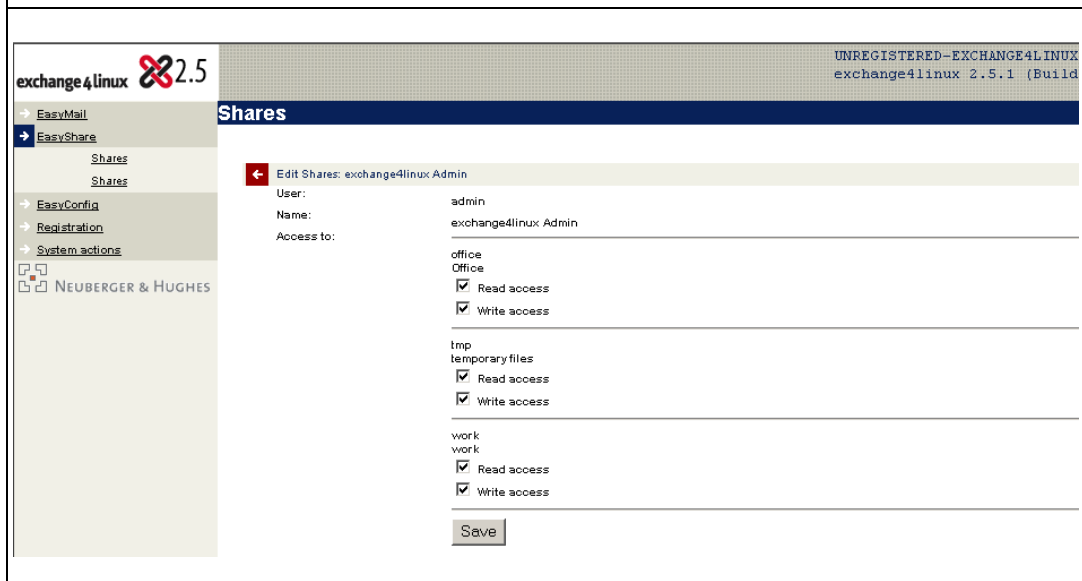


Figure 7.17.

**Caution:**

To let the users work with shares from a Windows environment, it is necessary that the network-*logon* takes place using the mailbox name and the password the user has on *exchange4linux*. If this is not the case, the user will not receive the proper user privileges at start-up.

7.3.4. Using fileshares in Windows

A user with at least reading privileges can browse the fileshares within Windows Explorer and bind these shares to a Network drive letter. To do this, look for the *exchange4linux* server in the *Network neighborhood* using Windows Explorer. After clicking it, all fileshares for which the user has got at least reading privileges will be made visible. Now the user can right-click one of these shares and select **Map network drive** to bind a drive letter to the share. This way it is possible to perform regular Windows tasks within this folder.

If this method does not succeed, right-click *Network neighborhood* and then select *Map network drive*. In the dialog that appears a drive letter can be chosen, fill in the following in the *Path*-field:
\\exchange4linux\sharename or **\\<internal-ip-address-exchange4linux>\sharename**
 For example: **\\exchange4linux\home** or **\\192.168.1.2\home**

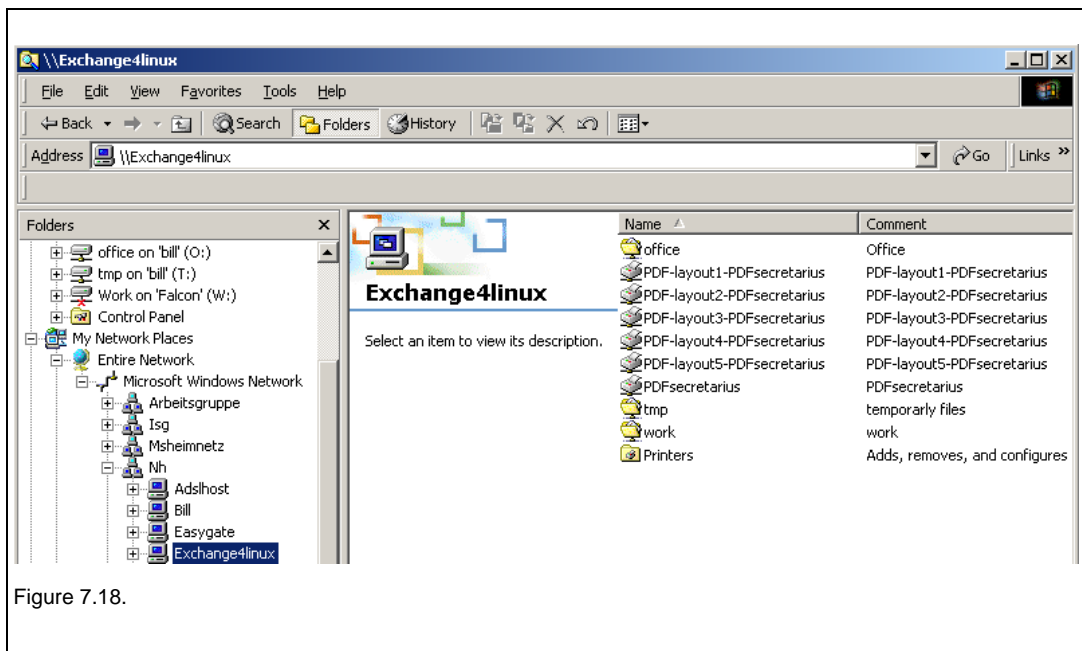


Figure 7.18.

7.4. Consulting System diagnostics

7.4.1. Introduction

To see how the different processes on exchange4linux are functioning, **System diagnostics** shows the output of the most essential tasks on the system. The menu can be found underneath EasyConfig, when you are logged on as **admin**. System diagnostics is an essential tool when solving potential problems on the system. By clicking + and -, one can browse through the different time periods.

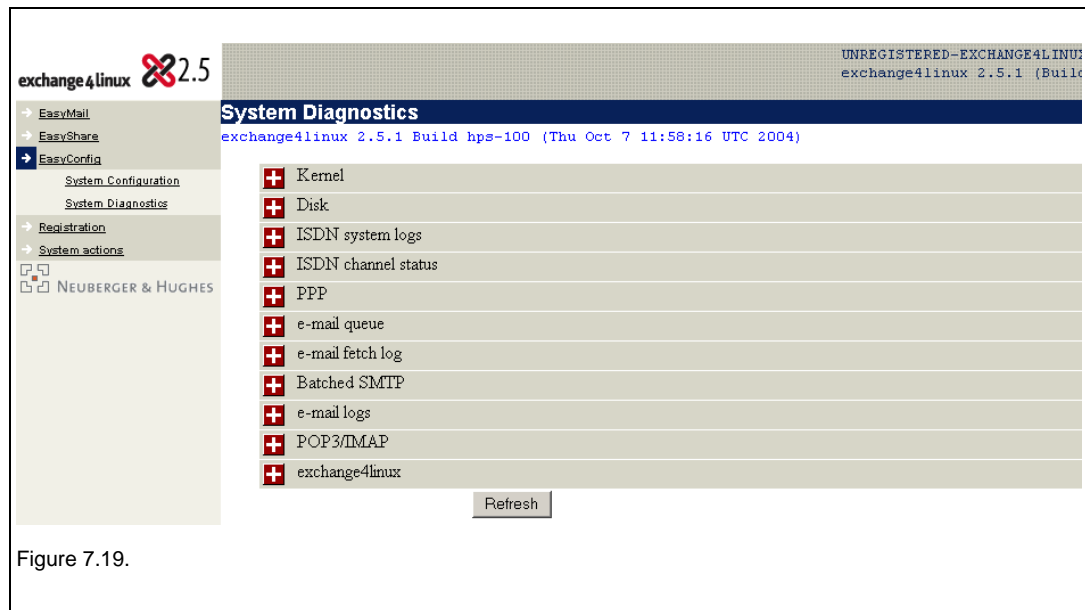


Figure 7.19.

7.4.2. Components of System diagnostics

In this paragraph the different items of the logging are briefly explained.

Kernel:

General system notifications are displayed here, especially those related to the start-up processes, the file system and the loading of drivers.

Disk:

This item gives an overview of the existing partitions on the system and the amount of free disk space. This way, one can discover in advance whether a new harddisk has to be added or disk space has to be created on the system.

e-mail queue:

Messages that have not yet been sent are displayed here.

e-mail fetch log:

This item shows information on potential POP3 accounts that are being managed by exchange4linux.

Batched SMTP:

When Batched SMTP is being used, information on the mail distribution will be shown here.

e-mail logs:

This item will display all e-mail related processes that are active on exchange4linux. The handling of every item that has been sent or received can be reviewed in this logfile.

POP3/IMAP:

E-mail is being distributed towards the individual users by means of POP3 or IMAP. Here you are notified of potential problems during the distribution.

exchange4linux:

Every notification with regard to the groupware functionality (see Chapter 2) of exchange4linux can be found here.

When a fax device is implemented on exchange4linux, there will also be an item called **ISDN- and Fax logging** to display the status of the ISDN channels and the faxserver.

7.5. Functions for the user

7.5.1. Introduction

Every user can manage certain settings on exchange4linux, provided he can log onto the system with his username and password. For a detailed description of the setting in question, you are kindly referred to the relevant paragraph in respectively Section 7.2 and Section 7.3

7.5.2. EasyMail

In the EasyMail menu, the user can make the following settings:

Menu item	Possible action
Mailboxes	The describing name can be changed here.
Passwords	The user can change his password here.
Aliases	The user can see the aliases that refer to his mailbox. It is not possible to change the configuration of aliases yourself.
Forwarding	The user can forward or distribute his e-mail to other users, for instance when he is on vacation and his secretary has to receive his mail. One can also (de)activate the autoresponder here.
External addresses	Here, the user can see which external e-mail addresses can be referred to when forwarding one's e-mail.

7.5.3. EasyShare

In the EasyShare menu the following settings can be made:

Menu item	Possible action
Shares	The user can edit the settings of fileshares for which he has been assigned at least read access.
User privileges	The user cannot change the settings here, but it is possible to view the permissions assigned to him/her.

Part IV. Client settings

This part explains how to set up your workstation to use e.g. fax or the EasyPDF service. Also it is described how to set up your Outlook version to use the possibilities exchange4linux offers.

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Chapter 8. Settings on the workstation

To use exchange4linux from a workstation, several settings need to be made on this PC. Depending on the exact network configuration and the configuration of the client PC's, several settings need to be made or at least reviewed.

8.1. The e-mail application

The configuration varies from program to program, but a number of settings is always the same. Some applications automatically start a configuration wizard, where the necessary settings are to be filled in step by step. The essential ones are discussed in the table below:

Setting	Fill in
Connection	Using local network, using LAN.
Type of server	POP3 or IMAP
Server for incoming mail, or POP3 or IMAP4 server	exchange4linux
Server for outgoing mail, or SMTP server	exchange4linux
Port numbers (the default settings are correct, usually no alteration is needed)	25 for SMTP, 110 for POP3 and 143 for IMAP4
POP3-name, IMAP-username, username, login-name	Mailbox-name on exchange4linux, when an alias is being used: the name of the underlying mailbox.
Password	The password that belongs to the above-mentioned mailbox
e-mail address	The full e-mail address that is to be used, so the combination of the mailbox-name or the alias and <@domainname.com>.



Caution:

For a fast e-mail communication the application can be configured so that it will check every 2 minutes for new messages. Furthermore, one can select to *send e-mail directly*.

IMAP or POP3 mail:

Every user can choose between IMAP and POP3 mail. When these terms are unknown, please consult Chapter 2 at the beginning of this manual. There is no setting to be made on the exchange4linux server itself concerning either IMAP or POP3 mail, since both methods are being supported simultaneously. The only way to select one of these protocols is through the configuration of the e-mail application. As can be seen in the example below, there is always a setting called **servertype**. Normally you can choose between POP3 and IMAP here.

Webmail:

On the exchange4linux Server Suite Squirrelmail Webmail has been implemented. This easy-to-use and secure webbased e-mail client can be reached easily through the exchange4linux welcome screen on <http://exchange4linux>. For more information on how to use Squirrelmail you are advised to consult its manual, which can be found at <http://www.squirrelmail.org>.

Example: Microsoft Outlook Express:

On Figure 8.1 to Figure 8.4 several dialogs of the Microsoft Outlook Express Configuration wizard are shown. The procedure is comparable when using Microsoft Outlook 97, 98, 2000, XP and 2003. The possibilities when configuring e-mail for an IMAP or POP3 account are slightly different, but these differences are so small that they do not need to be discussed here.

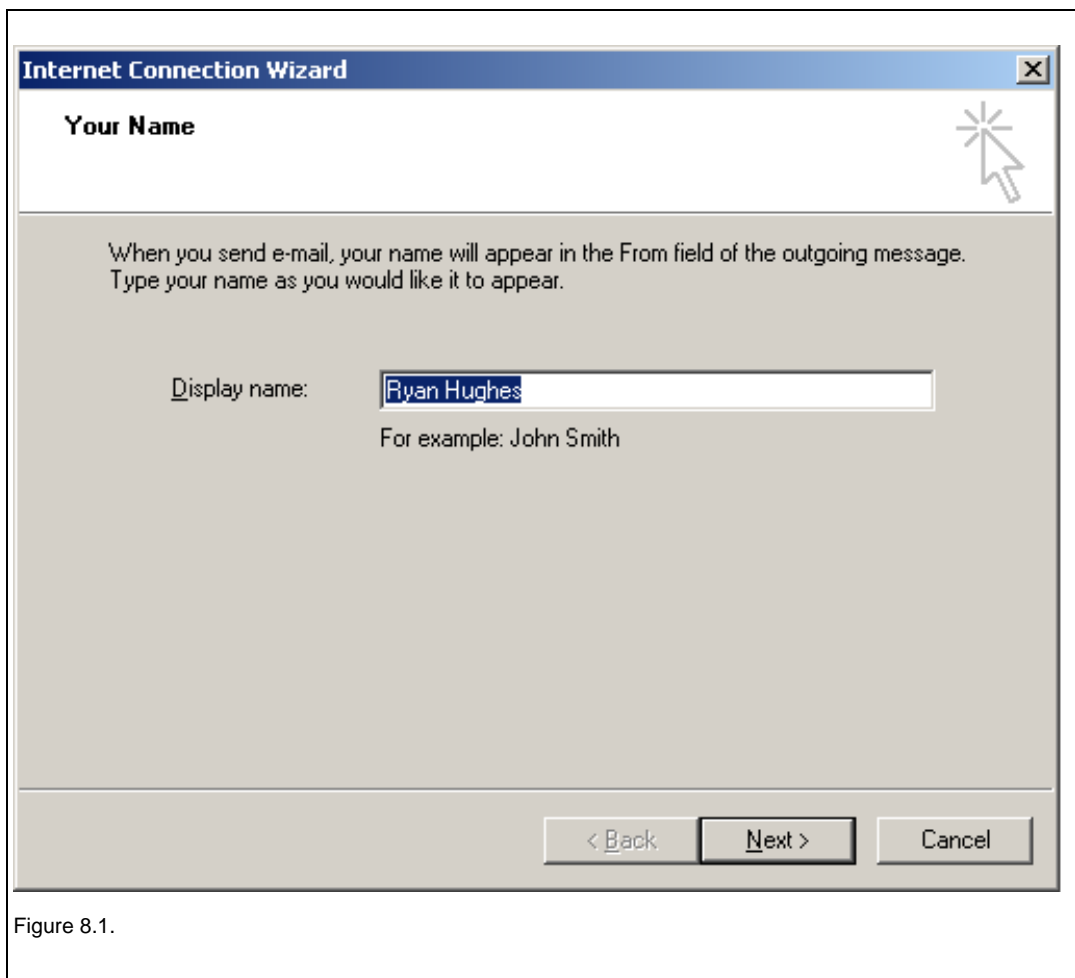


Figure 8.1.

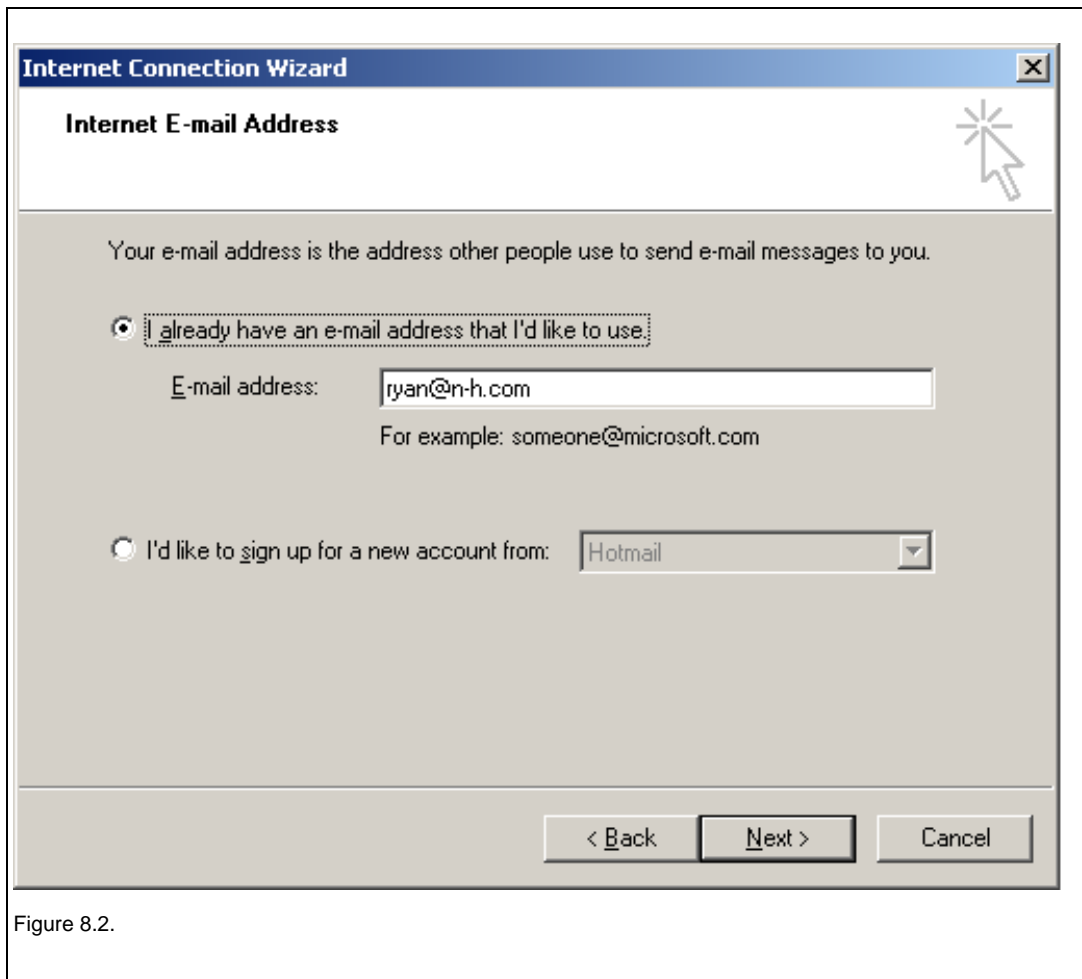


Figure 8.2.

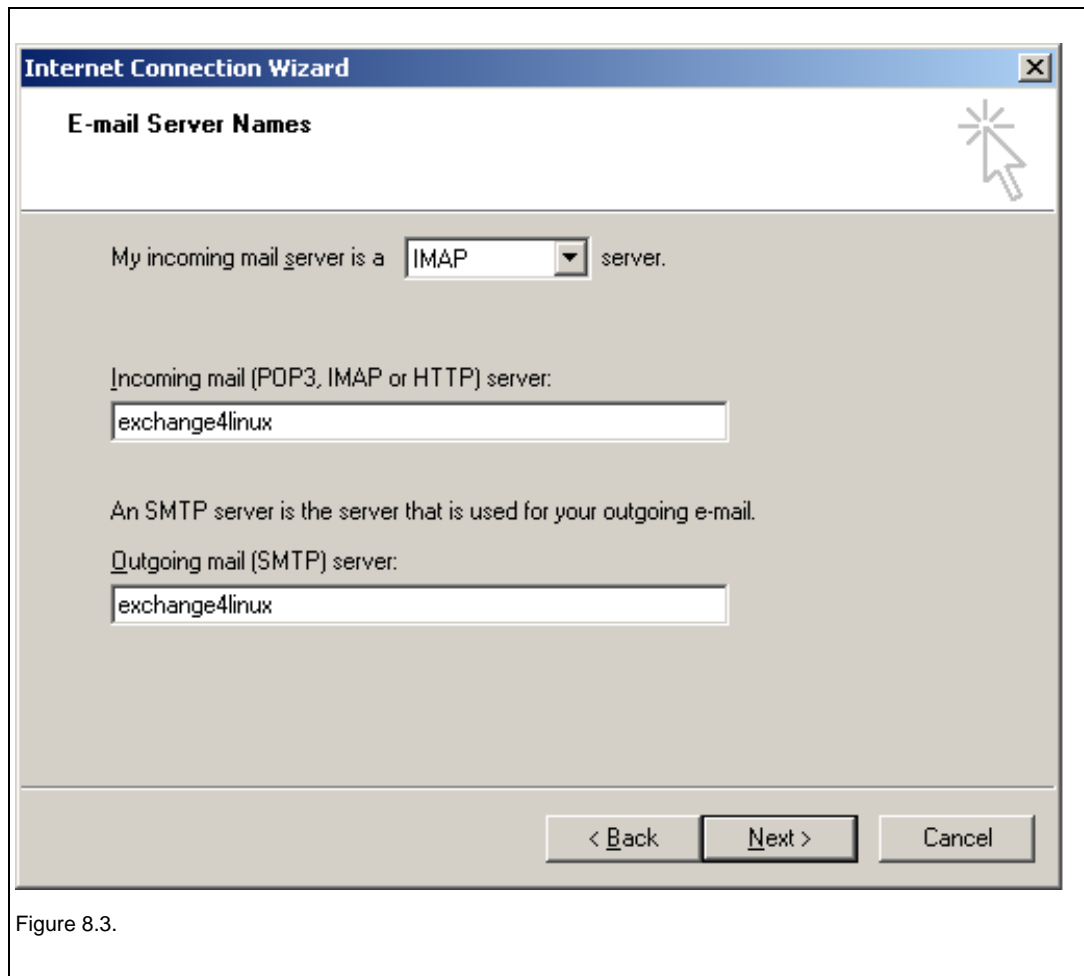


Figure 8.3.

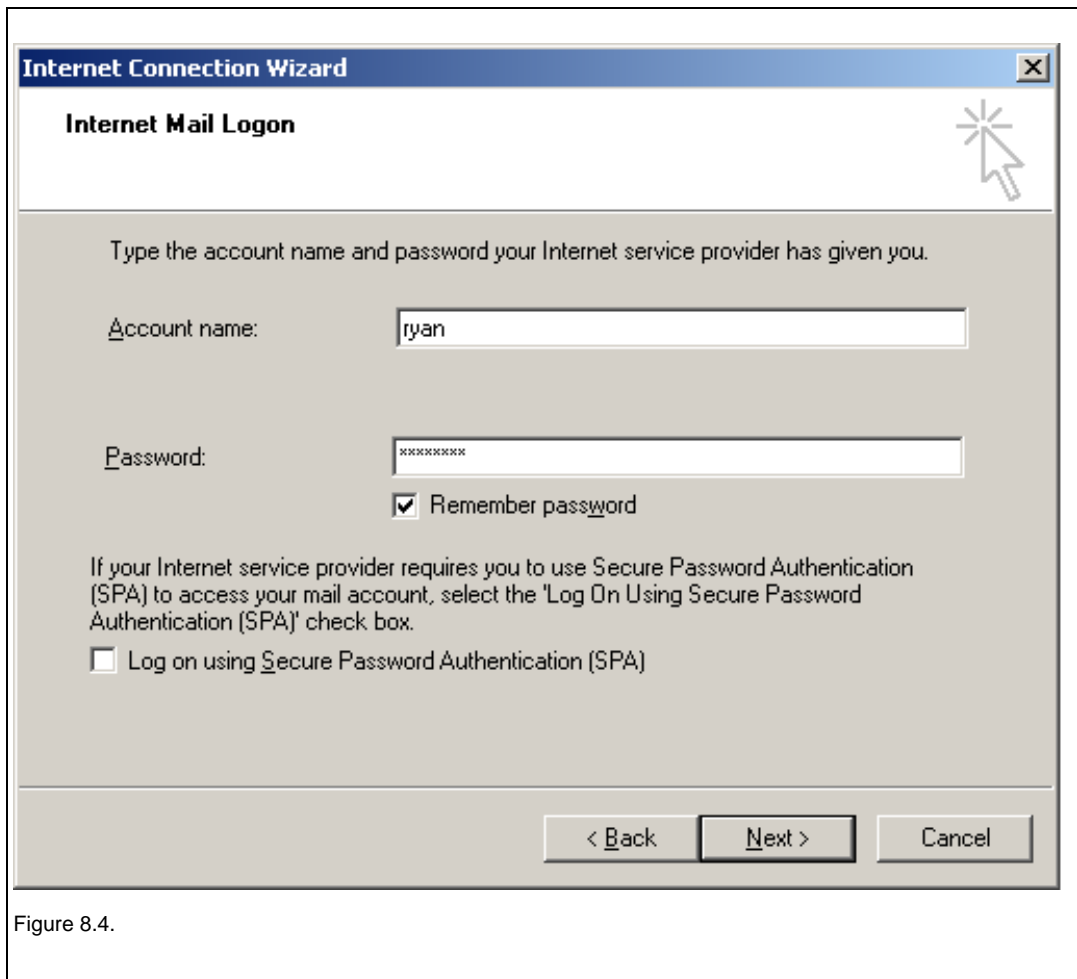


Figure 8.4.

8.2. The faxclient

In order to send faxes using the exchange4linux faxserver, the workstation needs to have a faxclient installed that is suitable for HylaFax. For each Operating System there are numerous applications available, many of which can be downloaded from the internet for free. In combination with exchange4linux, Neuberger & Hughes has thoroughly tested the faxclient WHFC. This application can be downloaded for free from the manufacturer's website:
<http://www.uli-eckhardt.de/whfc/>



Caution

WHFC is **NOT** an Neuberger & Hughes product. Consequently there is no support given on the software by N&H or any of its partners. When WHFC does not suffice your requirements you can decide on the acquisition of a commercial faxclient, eg. Cypheus (see <http://www.cypheus.de>). A commercial faxclient usually comes with support by its manufacturer.

The installation and configuration of WHFC, our preferred solution, works the following way:

After the standard installation of the executable, the following needs to be set up in the section **system settings**.

Figure 8.5.

Hostname:

Fill in *exchange4linux*.

Port No.:

Leave this to the default setting of 4559.

Job format:

Leave this entry unaltered.

The other settings can be changed as wished. In case of doubt you are referred to the website of the manufacturer.

There are also several settings that need to be made in the menu **user settings**:

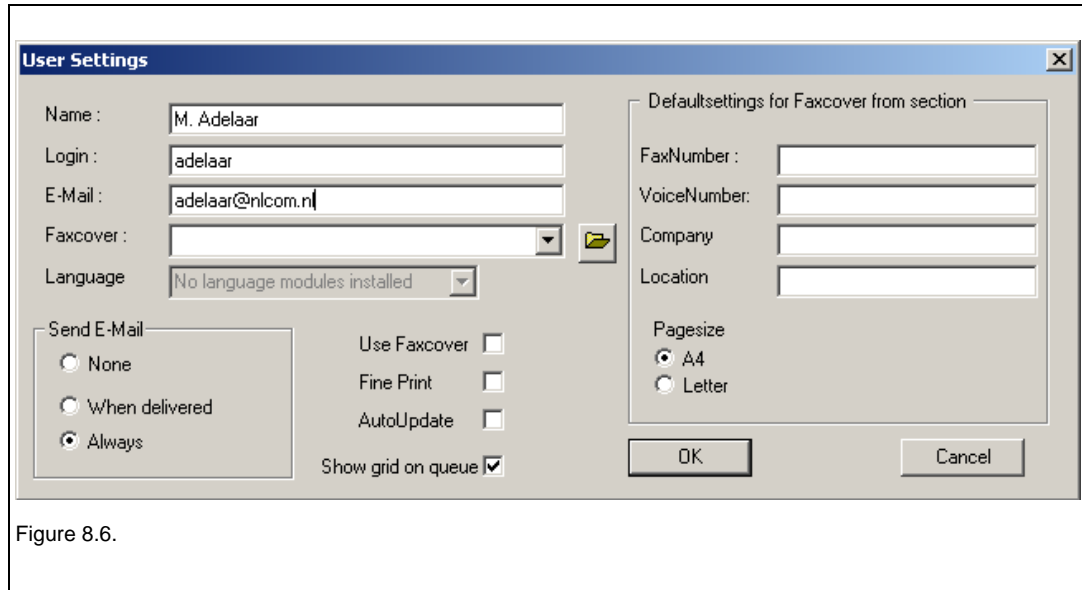


Figure 8.6.

Login:

The login here is equal to the mailbox-name on exchange4linux for this user.

E-Mail:

The e-mail address to which a confirmation of an outgoing fax will be sent. Usually this is the e-mail address of the user itself.

Only when PostScript cover letters are being used, you should pay attention to the other items. For more information on composing fax covers, please consult the website of the manufacturer.

Installing the printerdriver:

Now the faxclient must be installed as a virtual printer in the Control panel for printers and faxes. To do this, go to the **Control panel**, then click the item **printers and faxes** and finally click **add printer**. Select as a printer port **WHFCFAX** and as a printer, when Windows 98/NT/2000/XP is being used: the *Apple LaserWriter 16/600 PS*. When using Windows 95: choose the *Apple LaserWriter*.

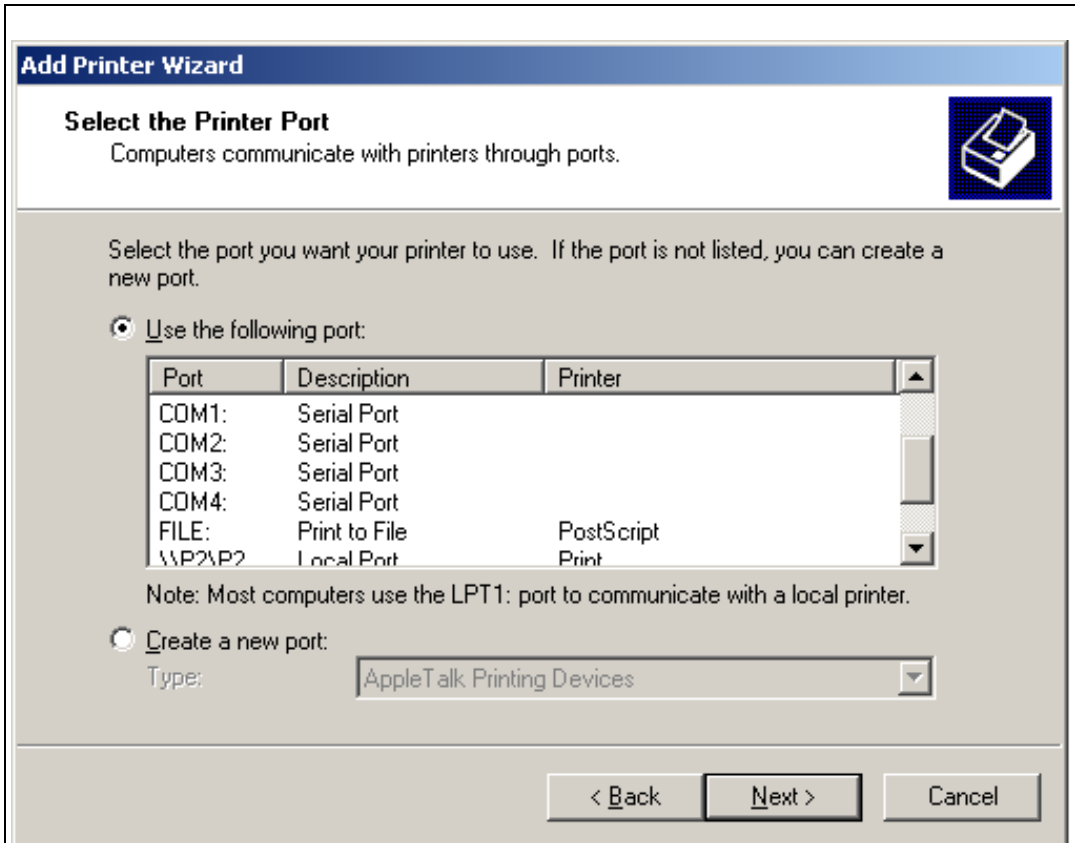


Figure 8.7.

Selecting the printer port

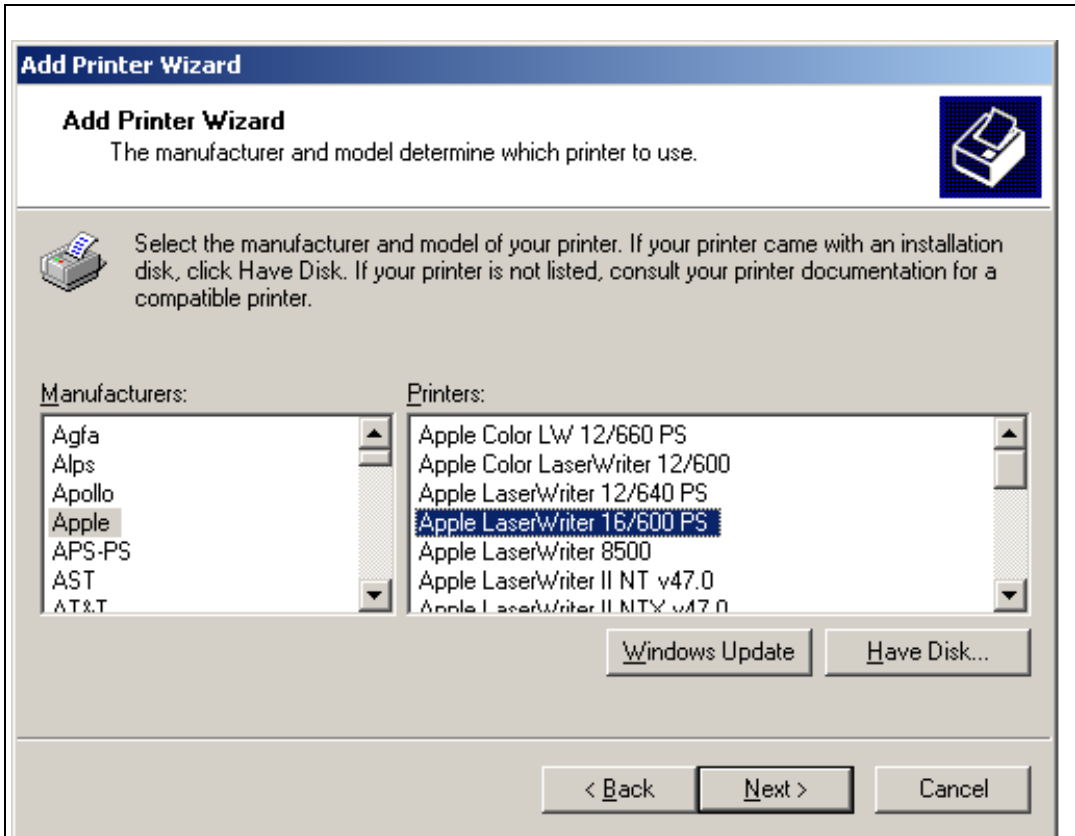


Figure 8.8.

Selecting the printer

Sending a fax message:

To send a fax from eg. Microsoft Word, go to **File - Print**. Now select the Apple printer that has just been installed and click **OK**. Now a dialog appears in which some data of the recipient has to be entered. The fax will now be sent and the sender will receive a confirmation of this action by e-mail.

8.3. Easy PDF Service

The Easy PDF Service is visible for all users of the network as a printer: PDFsecretarius. It needs to be set up as such before you can use it. This can happen in one of the two ways explained below:

- Through Windows Explorer: Open Windows Explorer and insert the hostname (usually *exchange4linux*) or the IP-address of the exchange4linux Server Suite in the address bar in the following way:
\\name-or-ip-address

Now the PDFsecretarius printer should be visible. Double click it and choose to install the printer. The Easy PDF Service is ready to use as soon as the empty printer queue appears on-screen.

- Using the DOS-prompt: Enter the following line in a Command Prompt Window (cmd.exe) (Figure 8.9):
rundll32 printui.dll,PrintUIEntry /in /n \\name-or-ip-address\PDFsecretarius

With, instead of *name-or-ip-address* the IP-address or hostname (usually *exchange4linux*) of the exchange4linux Server Suite. This command can also be added to a netlogon script.

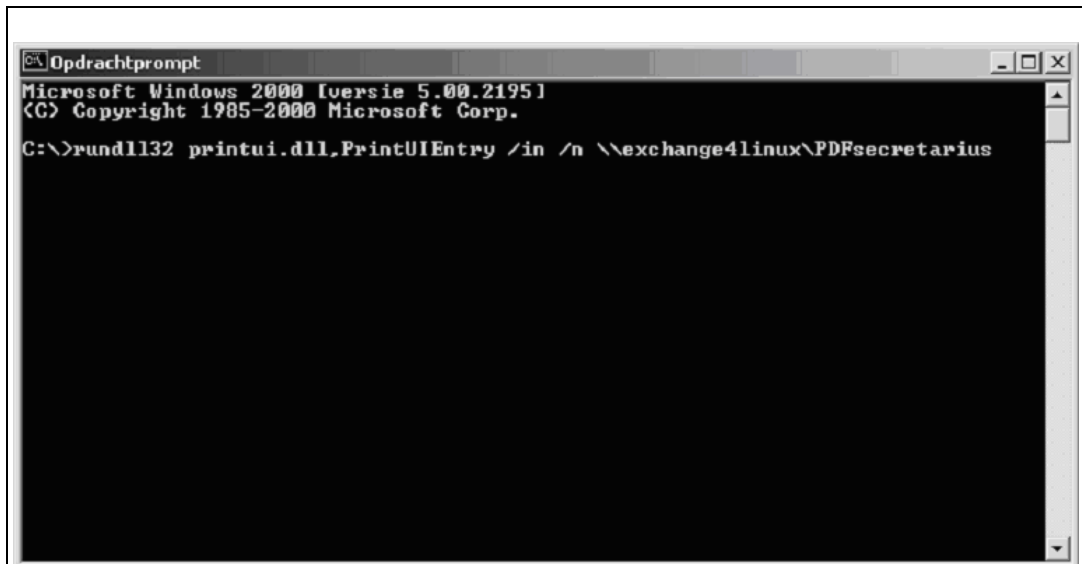


Figure 8.9.

It is important to make sure that the username and password of Windows is equal to the one used for the exchange4linux mailbox. This prevents you from having to submit a password when adding the PDFsecretarius printer and makes sure that the PDF files are sent to the correct user.

Chapter 9. exchange4linux

9.1. Functioning of the exchange4linux Server Suite

In this paragraph the different configuration possibilities of exchange4linux are being explained. The configuration that is most optimal for your network depends on among other things the Outlook version which is being used, the server capacity and the amount of exchange4linux users.

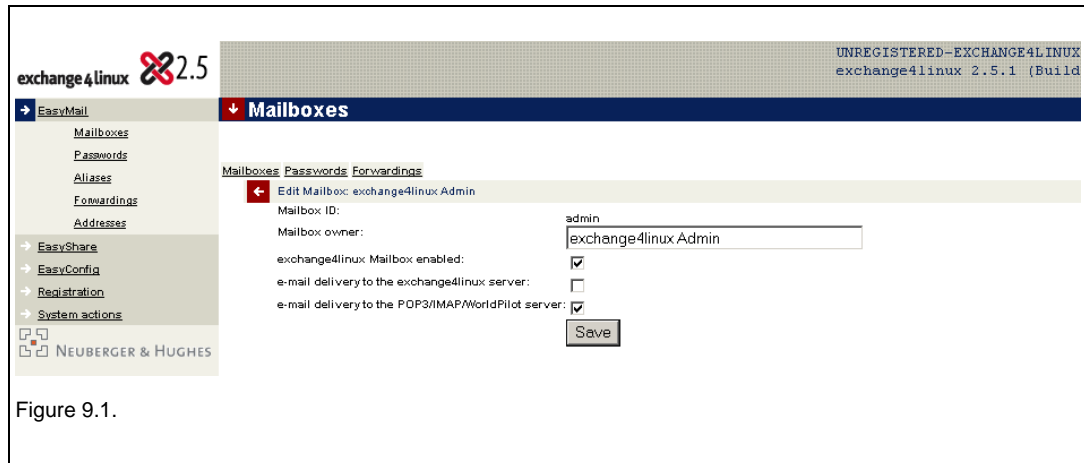


Figure 9.1.

After logging in as **admin** on the exchange4linux web interface, there are several settings of importance when managing the users. When a new user is added, there are the following possibilities (Figure 9.1):

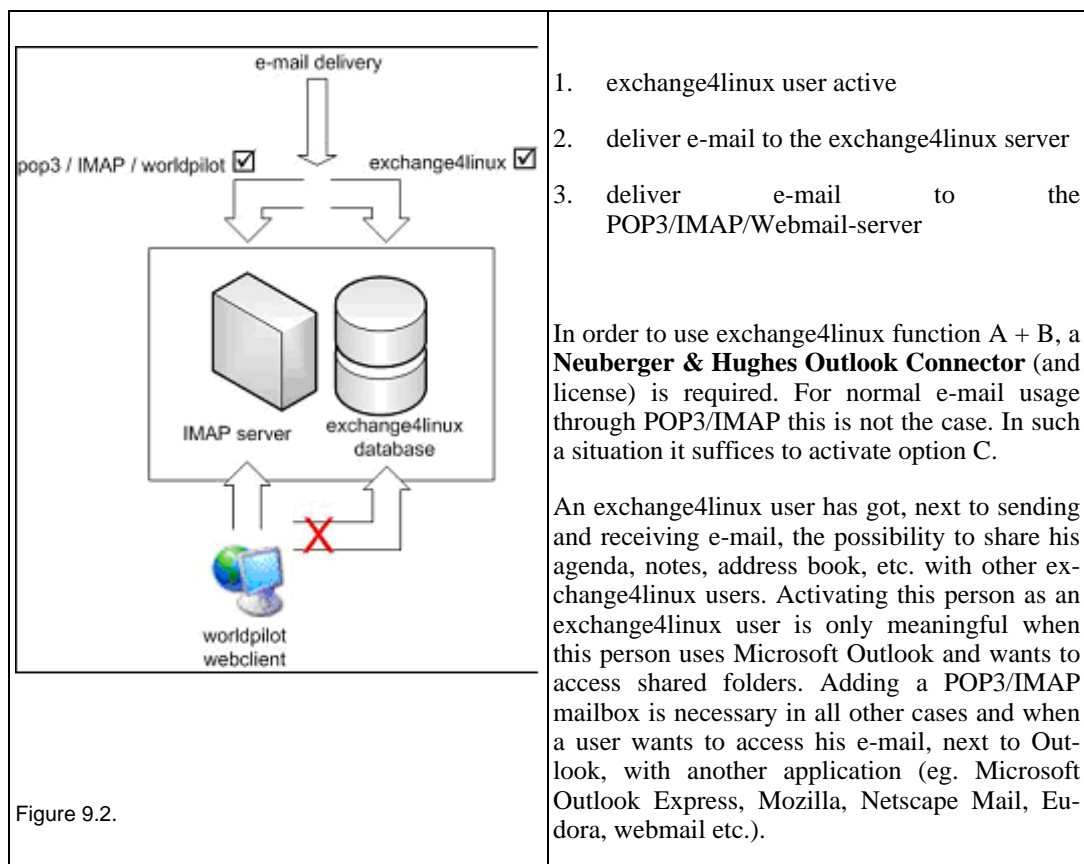


Figure 9.2.

In order to use exchange4linux function A + B, a **Neuberger & Hughes Outlook Connector** (and license) is required. For normal e-mail usage through POP3/IMAP this is not the case. In such a situation it suffices to activate option C.

An exchange4linux user has got, next to sending and receiving e-mail, the possibility to share his agenda, notes, address book, etc. with other exchange4linux users. Activating this person as an exchange4linux user is only meaningful when this person uses Microsoft Outlook and wants to access shared folders. Adding a POP3/IMAP mailbox is necessary in all other cases and when a user wants to access his e-mail, next to Outlook, with another application (eg. Microsoft Outlook Express, Mozilla, Netscape Mail, Eudora, webmail etc.).

9.2. Configuration possibilities

In the previous paragraph three potential settings were mentioned for configuring a new mailbox. For a new user, the following two combinations can be used in practice:*

- **A + B:**
exchange4linux user + mail through exchange4linux (full E4L-account)
- **A + C:**
exchange4linux user + mail through POP3/IMAP (combination account)

* exchange4linux users that want maximal flexibility can have e-mail delivered on both platforms (A+B+C), for example for backup purposes or for webmail.

Full E4L-account:

When you use full E4L-accounts (A+B), all the workgroup data of these users will be saved in the central E4L-database. Setting up a full E4L-account within Outlook is very simple: only one service needs to be added to the profile. The folder structure within Outlook is clear and consists of one set of personal exchange4linux folders and one set of public exchange4linux folders. For configuration possibilities see the table below.

Combination account:

By using combination accounts (A + C), the mail objects of these users is being kept outside of the exchange4linux database. This way your database remains small, fast and this makes your server suitable for a significantly larger amount of users. When you use exchange4linux in combination with IMAP, all data still remains centrally on the server! Within Outlook this requires some additional configuration work, since multiple services need to be added to the profile. The consequence of this approach is that there will appear two sets of e-mail folders within Outlook: one exchange4linux tree and one IMAP tree. Incoming messages will appear in the IMAP inbox. Outgoing e-mail, drafts, etc. will be saved in the exchange4linux folders. For more info, see the configuration possibilities in the table below.



Caution:

Outlook 97, 98 and 2000 can only be combined with POP3 e-mail in Workgroup-mode. This is a limitation of Outlook which is resolved in Outlook XP, where workgroup items and IMAP mail can be used simultaneously.

To make a mailbox for distribution purposes, there are the same possibilities. Here you also need to point out whether it concerns a regular POP3/IMAP/Webmail mailbox and/or an exchange4linux mailbox.

	Outlook XP(2002)/2003	Outlook 97/98/2000
Full exchange4linux account: <ul style="list-style-type: none"> • you can use personal and public exchange4linux folders • your e-mail will be delivered to the exchange4linux server • default transport service = E4L 	A	B

	Outlook XP(2002)/2003	Outlook 97/98/2000
<p>exchange4linux in combination with POP3/IMAP:</p> <ul style="list-style-type: none"> • you can use both personal and public exchange4linux folders • your e-mail will be delivered to the POP3/IMAP server • default transport service depends on the configuration 	C	D

In the next paragraphs the required Outlook settings for the different configuration possibilities are being explained.

Before you start:

Before you start you need to be sure that there is an active, correctly installed exchange4linux server in your network. Furthermore you need to have a username and the corresponding password at hand. The most recent Outlook Connector can be downloaded from the website: <http://www.exchange4linux.com>

When an older version of the Outlook Connector is installed on the workstation, please notify yourself of the version that is being used at this moment. Sometimes the active version needs to be de-installed completely before starting the installation process of the new Connector. To do this, read the instructions in this manual or on the exchange4linux website. When in doubt, consult your exchange4linux Service Center.

To make Microsoft Outlook 97, 98 and 2000 suitable for the exchange4linux Server Suite, there are several settings that need to be made on the workstation. To begin with, Outlook must be configured for usage in the Workgroup mode. You can confirm this through the menu item **Help - About Microsoft Outlook**. When the term **Workgroup** is not visible here, but instead **Internet Mail**, Outlook needs to be re-configured. To do this, go to **Tools - Options - Tab Mail delivery** and click **Re-configure Mail Support**. Now choose the option **Workgroup**.

9.3. Options A and B

e4l with Outlook 97/98/2000/XP/2003: mail through E4L

- Outlook XP or Outlook 97/98/2000 in workgroup mode
 - Default transport service: exchange4linux through MAPI
 - The standard Outlook Connector is being used
1. Close Outlook. Make sure that the processes *outlook.exe* and *mapisp32.exe* do not run anymore by opening the Windows Task Manager. If necessary, close them manually.
 2. Install the Outlook Connector (*exchange4linux-setup-xxx.exe*)
 3. Make a new profile at **Control panel - Mail (Outlook 2003: E-mail)** which you name eg. *exchange4linux*. If you want to, you can let Outlook ask which profile to use when starting the program (Section 9.9).
 4. First, add a new e-mail account to this profile. Choose the category **additional server types** (Figure 9.4 and Figure 9.5). In Outlook 2000 choose **Manually configure information services**, Figure 9.6.
 5. Fill in the IP-address of the exchange4linux server, together with the mailbox name and the corresponding password (Figure 9.7). Check **Don't send read receipts** to make sure that no **read confirmation** (see Chapter 2) will ever be returned. The e-mail address is composed in the following way: *<mailbox name>@domainname.com*. With Outlook Connector 2.5.8 and higher it is possible to set up another sender's address that accompanies every message. See **Optional settings: E-mail address**. At **Add mailbox** one can add one or more **delegate accounts** if applicable. This functionality will be explained in more detail in Section 9.8.
 6. Start Outlook, the folder list will look somewhat similar to Figure 9.8.
 7. Go to **Tools - Address book** and choose **Tools - Options**. The settings here need to correspond to those visible in Figure 9.3.
 8. It could be that after a first installation you get warning messages with regard to the information archive or the demo mode. Please ignore such a message and restart Outlook.
 9. Control whether Outlook functions properly.

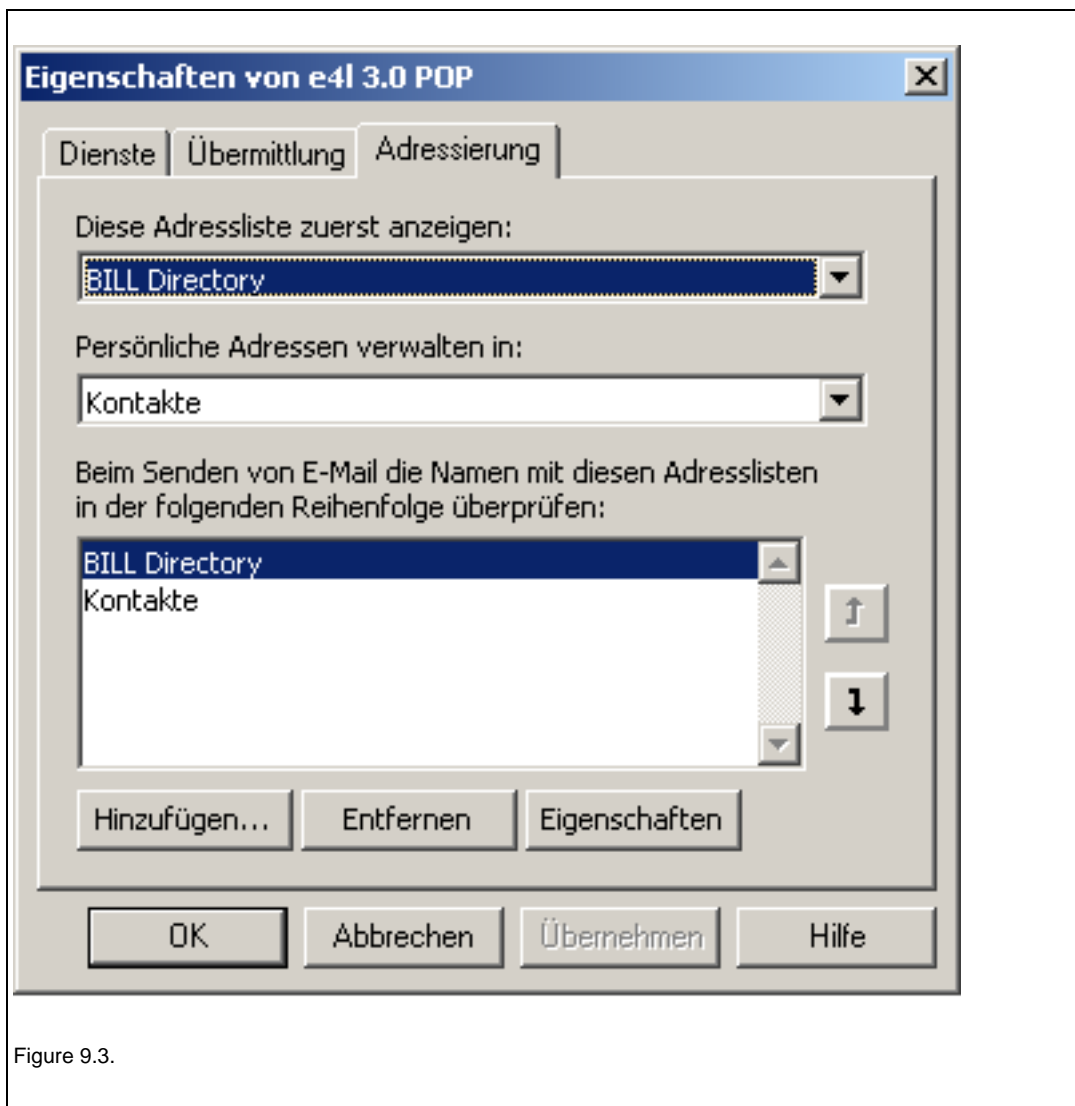


Figure 9.3.

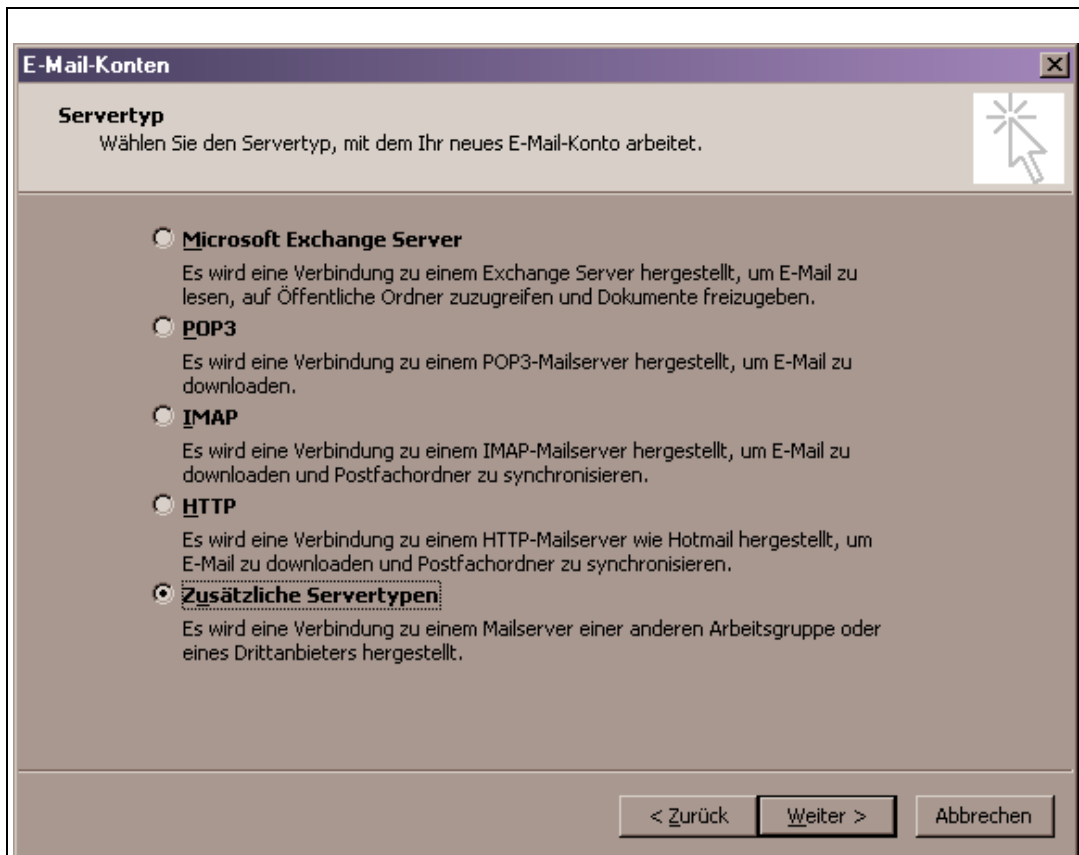


Figure 9.4.

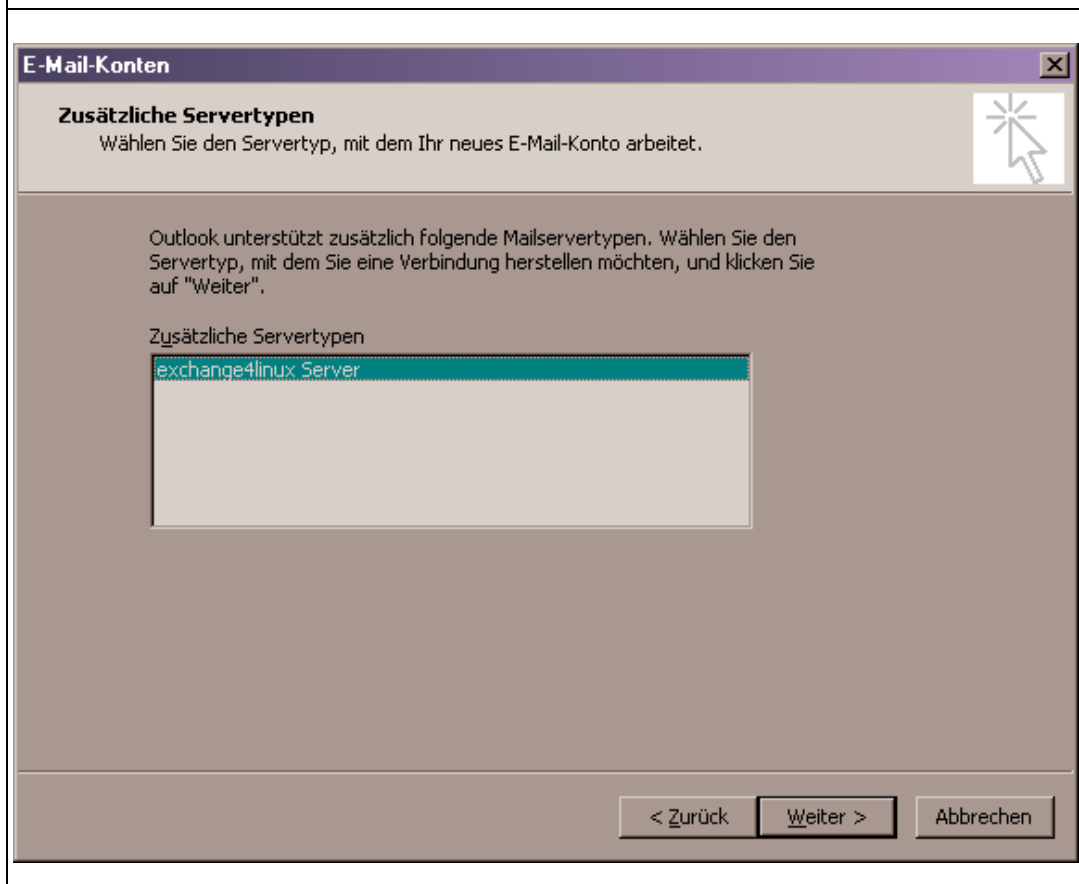


Figure 9.5.

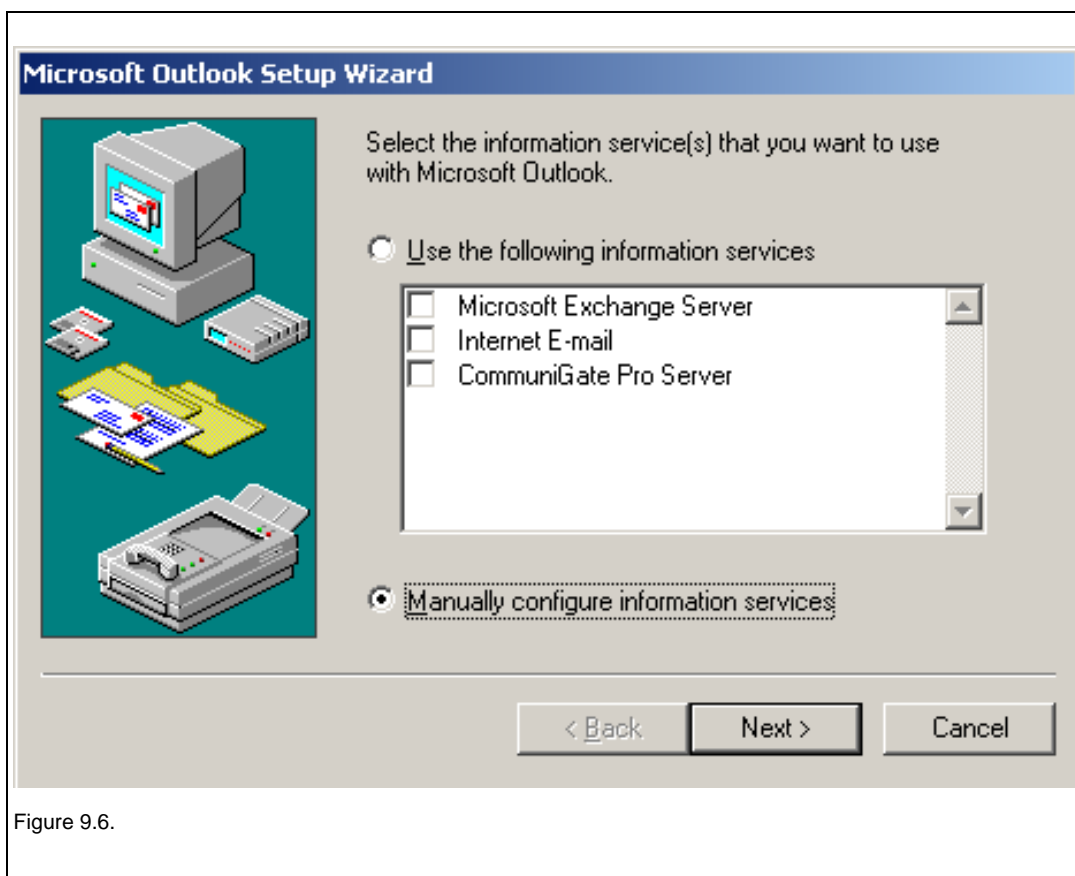


Figure 9.6.

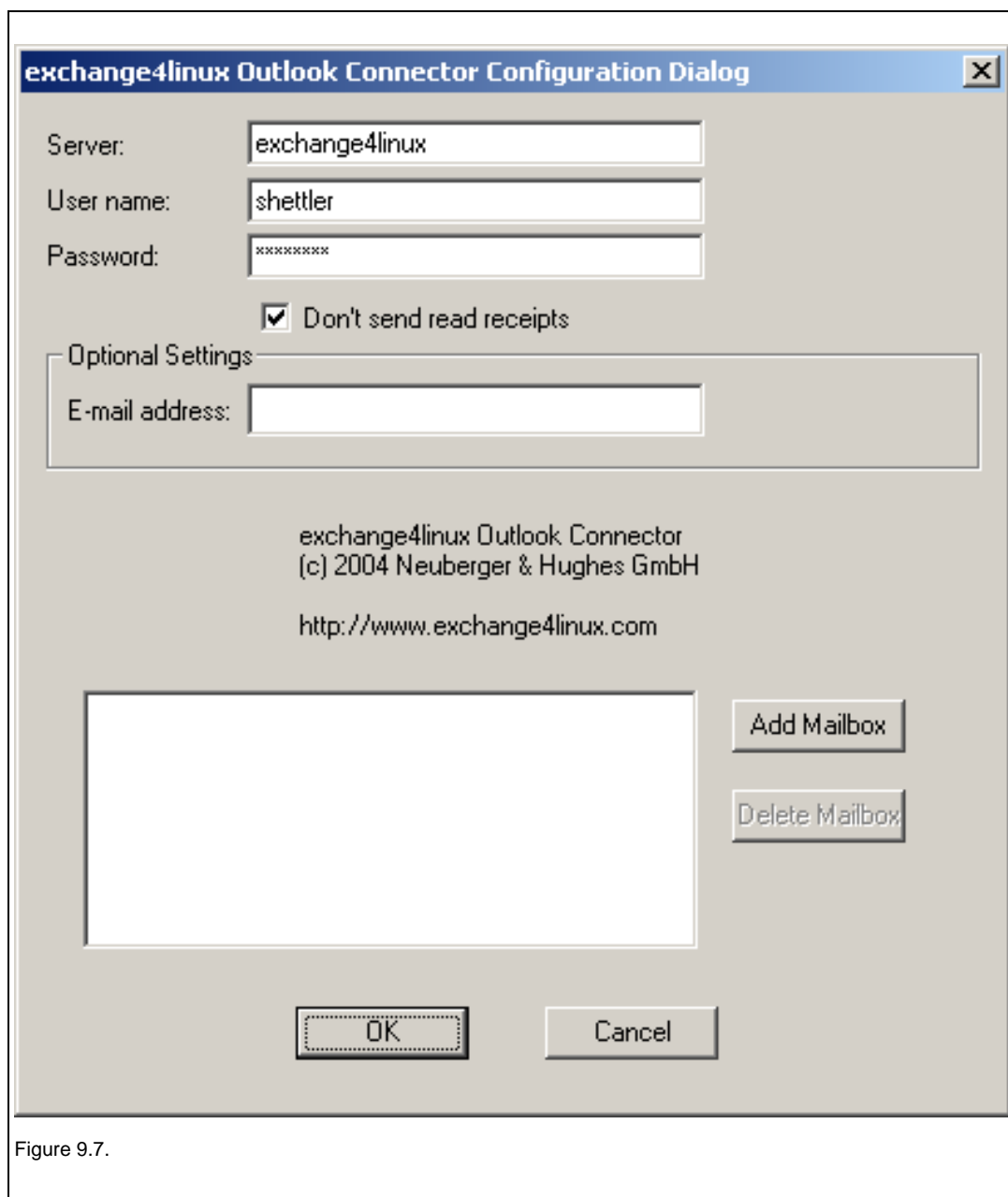


Figure 9.7.

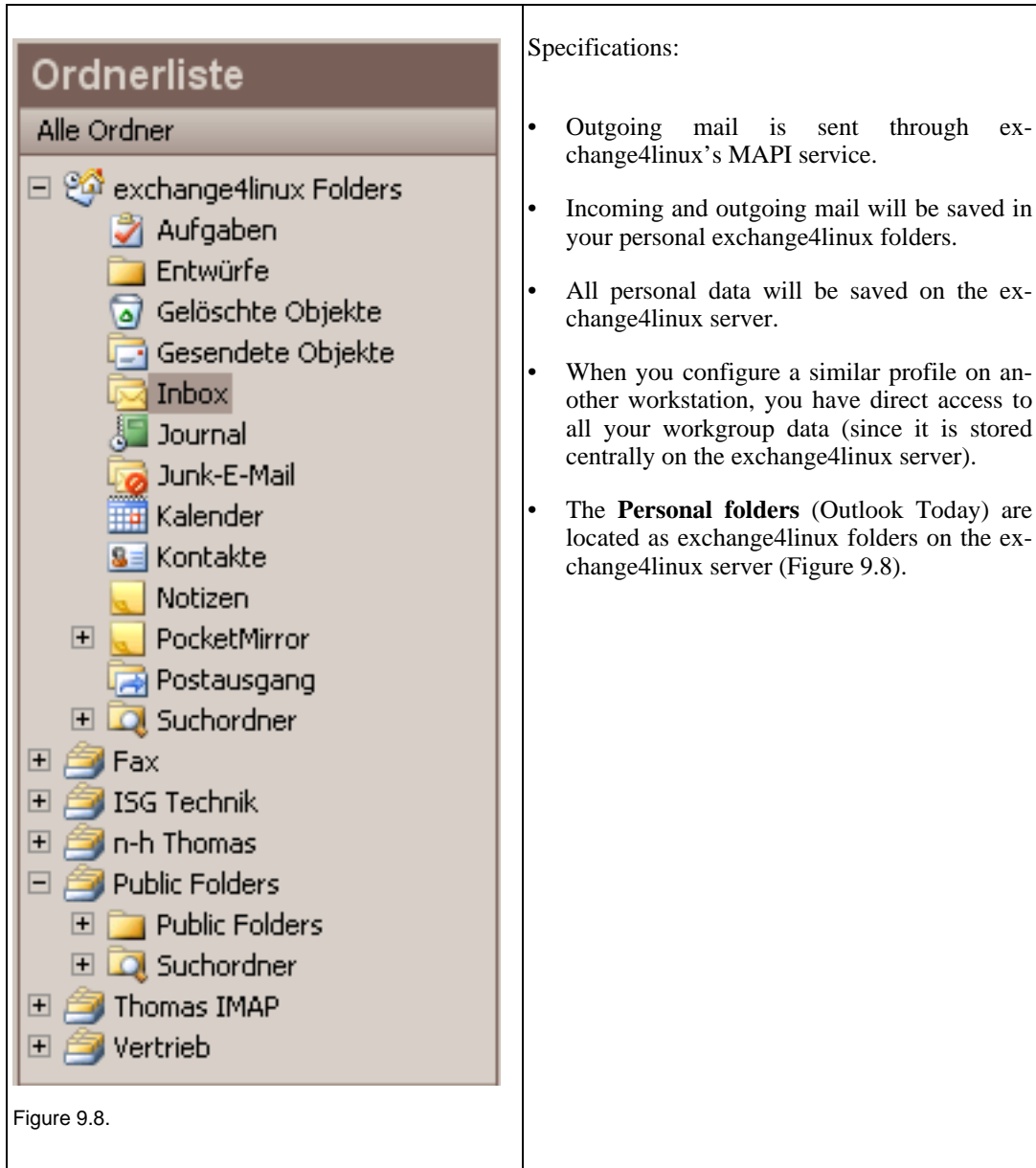


Figure 9.8.

9.4. Option C

e4l with Outlook XP/2003: mail through POP3/IMAP

- Outlook XP
 - Default transport service: depends on the order of installing accounts
 - Available services: (combinations of) E4L, POP3 and IMAP accounts
 - The standard Outlook Connector is being used
1. Close Outlook. Make sure that the processes *outlook.exe* and *mapisp32.exe* do not run anymore by opening the Windows Task Manager. If necessary, close them manually.
 2. Install the Outlook Connector (*exchange4linux-setup-xxx.exe*)
 3. Make a new profile at **Control panel - Mail (Outlook 2003: E-mail)** which you name eg. *exchange4linux*. If you want to, you can let Outlook ask which profile to use when starting the program (see Section 9.9).
 4. **Caution:**

The order in which the different accounts are being configured decides **Default transport service** (see Chapter 2). When you configure a POP3/IMAP account first, then this will be the Default transport service and mail will accordingly be sent through the standard SMTP service of Outlook. When an exchange4linux account is configured first, mail will be sent using the MAPI service of the Outlook Connector.
 5. Add a new e-mail account to this profile (POP3 or IMAP), the Default transport service will thus be the standard SMTP service of Outlook (Figure 9.9 and Figure 9.10).
 6. Fill in the necessary account data (Figure 9.11).
 7. Start Outlook, the folder tree will look somewhat similar to Figure 9.12.
 8. It could be that after a first installation you get warning messages with regard to the information archive or the demo mode. Please ignore such a message and restart Outlook.
 9. At this point additional e-mail accounts can be added. When you choose a POP3/IMAP account at step 5, you will normally select an exchange4linux account now and vice versa (see Section 9.3 on how to add an exchange4linux account to an Outlook profile).
 10. Control whether Outlook functions properly. After adding an exchange4linux account the folder tree will look somewhat similar to Figure 9.13.

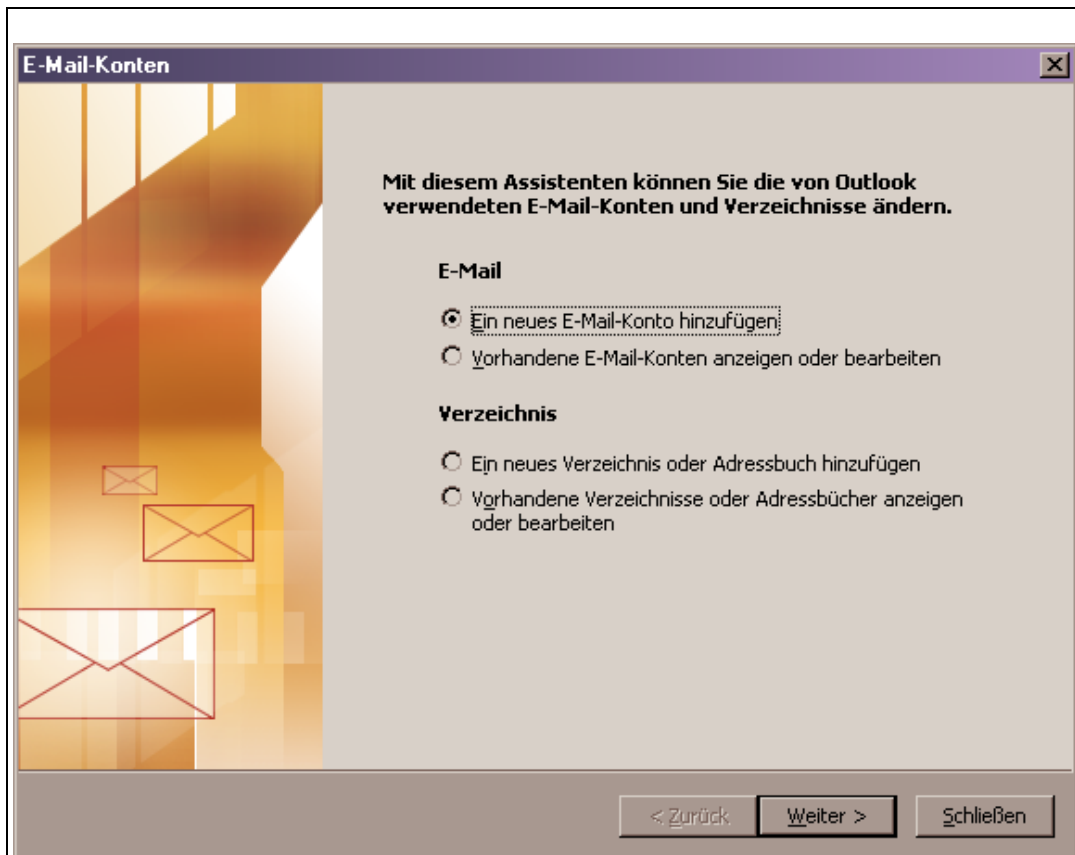


Figure 9.9.

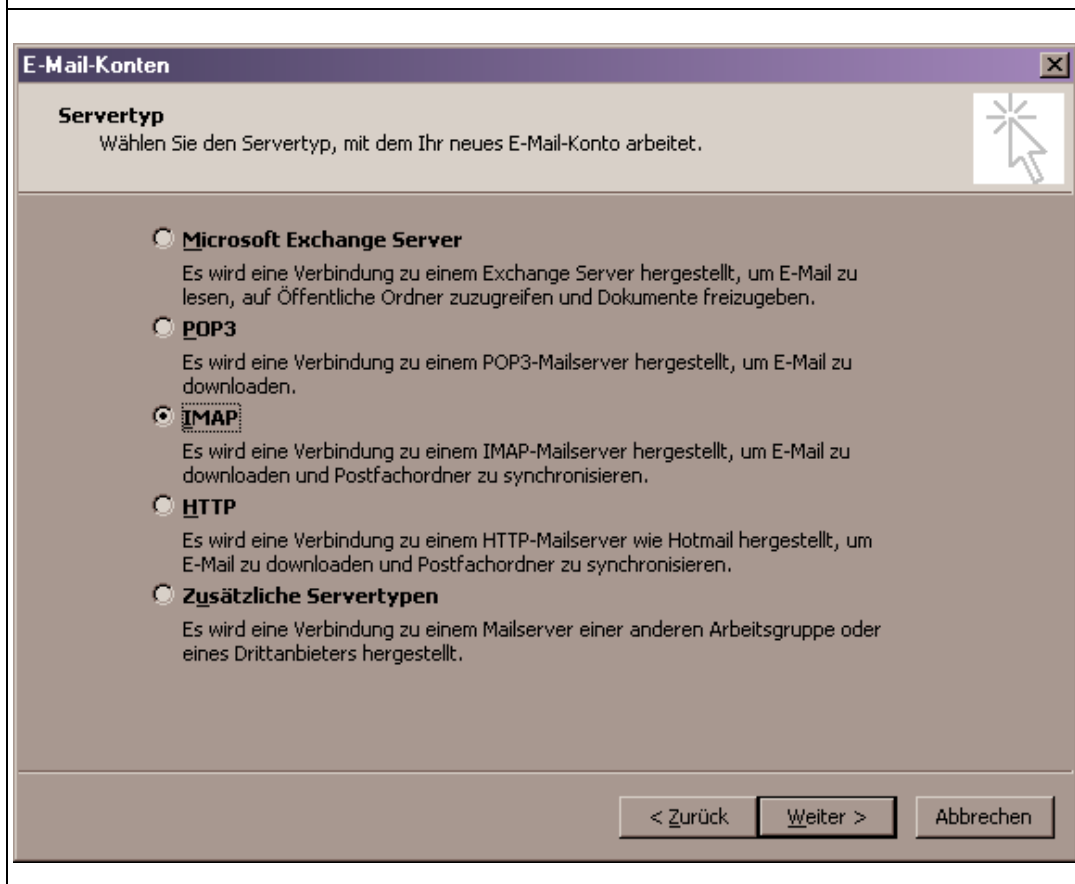


Figure 9.10.

E-Mail-Konten

Internet-E-Mail-Einstellungen (IMAP)
Alle Einstellungen auf dieser Seite sind nötig, damit Ihr Konto richtig funktioniert.

Benutzerinformationen

Ihr Name: Forename Surname

E-Mail-Adresse: fs@company.com

Serverinformationen

Posteingangsserver (IMAP): exchange4linux

Postausgangsserver (SMTP): exchange4linux

Anmeldeinformationen

Benutzername: fs

Kennwort: *****

Kennwort speichern

Anmeldung durch gesicherte Kennwortauthentifizierung (SPA)

Weitere Einstellungen...

< Zurück Weiter > Abbrechen

Figure 9.11.

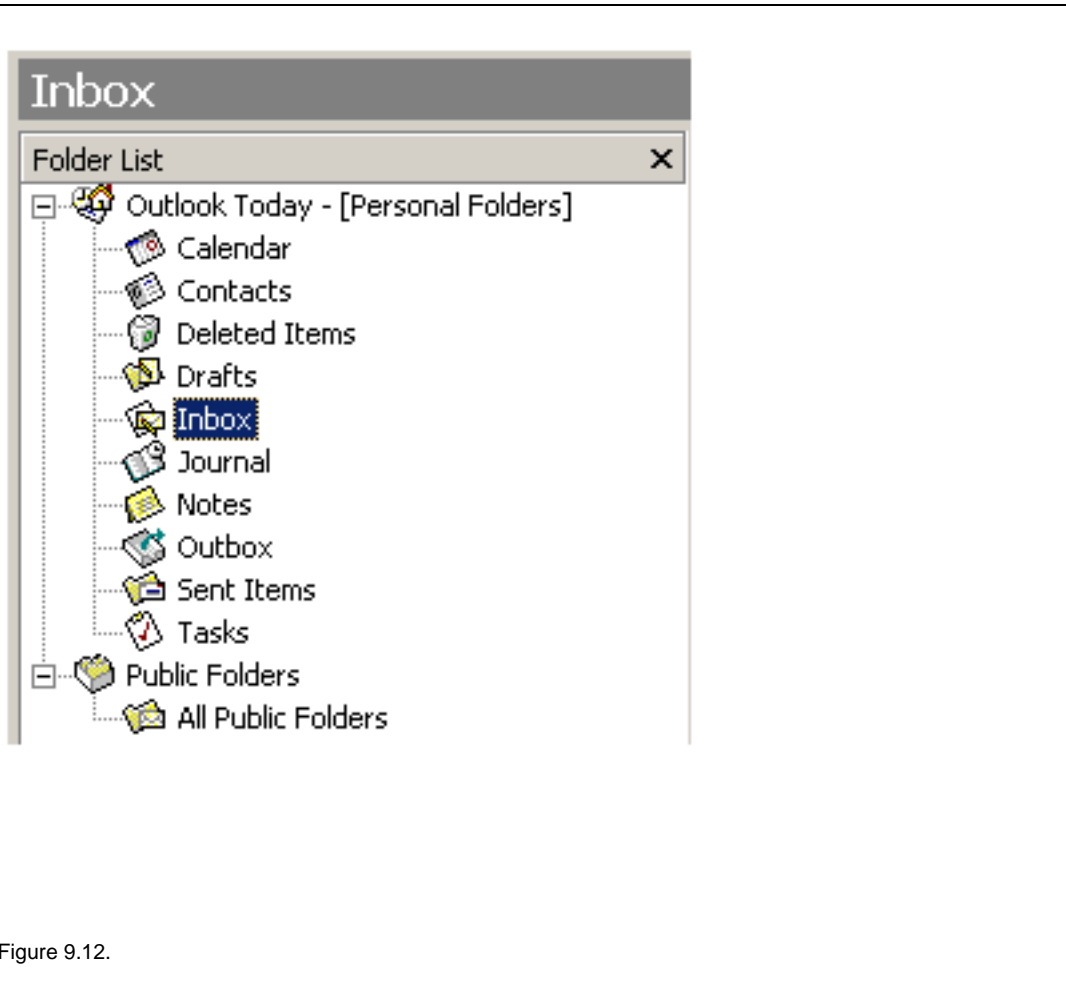


Figure 9.12.

<p>The screenshot shows the Outlook 'Inbox' window. The 'Folder List' pane on the left displays a tree view of folders. Under the 'Outlook Today - [exchange4linux Folders]' group, the following folders are listed: Calendar, Contacts, Deleted Items, Drafts, Inbox (highlighted with a blue selection bar), Journal, Notes, Outbox, Sent Items, and Tasks. Below this group is the 'Public Folders' group, which contains 'All Public Folders'.</p>	<p>Specifications:</p> <ul style="list-style-type: none"> • Mail is being sent in a way depending on the order of configuration, either through the exchange4linux Outlook Connector or using the regular Outlook SMTP service. • In case of an IMAP account the e-mail is being saved centrally on the exchange4linux IMAP server and will be made available for webmail use as well. • When mail is being retrieved using POP3 and exchange4linux as Default transport service, the mail is being saved centrally in the exchange4linux database. • Incoming mail for POP3 accounts is being saved in the Inbox of the Personal folders, depending on the Default transport service this can be the exchange4linux database or a <i>.pst</i> file on your computer.
--	---

Figure 9.13.

9.5. Option D

e4l with Outlook 97/98/2000: mail through POP3

- Outlook 97/98/2000
- Default transport service: depends on the order of installing accounts
- Available services: (combinations of) E4L and POP3 accounts
- The standard Outlook Connector is being used when exchange4linux is set up as the Default transport service.
- When the POP3 account functions as Default transport service, use the **modified Outlook Connector** (exchange4linux-setup-pop3pst-xxx.exe, see for more info <http://www.exchange4linux.com>).



Caution:

The order in which the accounts are being configured decides the **Default transport service** (see Chapter 2). When a POP3 account has been configured first, this will be the Default transport service and mail is being sent through the standard Outlook SMTP service. In this case the special, modified Outlook Connector (exchange4linux-setup-pop3pst-xxx.exe) must be used. Please follow the installation procedures described below:

1. Close Outlook. Make sure that the processes *outlook.exe* and *mapisp32.exe* do not run anymore by opening the Windows Task Manager. If necessary, close them manually.
2. Install the correct Outlook Connector, depending on the Default transport service (exchange4linux-setup-pop3pst-xxx.exe in case of POP3).
3. Make a new profile at **Control panel - Mail (Outlook 2003: E-mail)** which you name eg. *exchange4linux*. If you want to, you can let Outlook ask which profile to use when starting the program (Section 9.9).
4. Add a POP3 account (Internet e-mail) to this profile first, so that it will use the Outlook SMTP service as Default transport service (Figure 9.6).
5. Fill in the necessary account data.
6. Start Outlook, the folder tree should resemble Figure 9.12.
7. It could be that after a first installation you get warning messages with regard to the information archive or the demo mode. Please ignore such a message and restart Outlook.
8. Now the exchange4linux account can be added as is described in Section 9.3.
9. Go to **Control panel - post** and then to the tab **Delivery**. Make sure that the first item, **Deliver new e-mail to**, has got the personal folders selected. Furthermore at the tab **Addressing** the following settings need to be made (Figure 9.14 and Figure 9.15):
 - **Show this address list first:**
Bill Directory
 - **Keep personal addresses in:**
Contacts
10. Control whether Outlook functions properly.

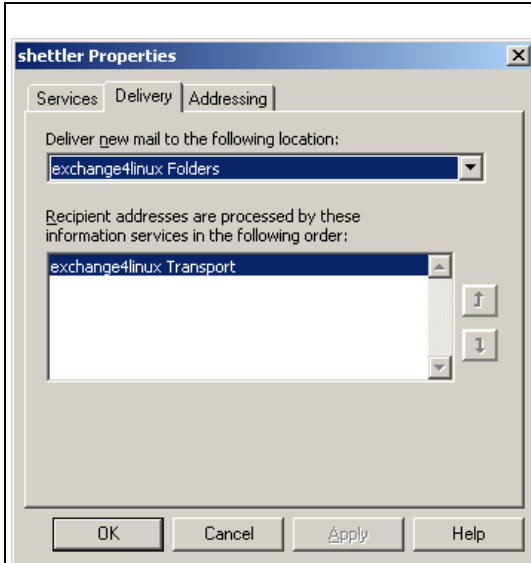


Figure 9.14.

When you choose to make an exchange4linux account first, the mail will be transferred using the MAPI services of the installed *normal* connector. In this situation you first follow the installation procedure as described in Section 9.3, followed by setting up the POP3 account.

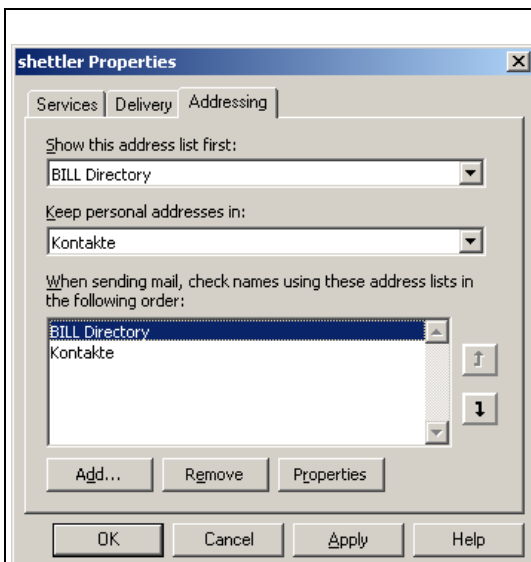


Figure 9.15.

Specifications:

- Mail is being sent in a way depending on the order of configuration, either through the exchange4linux Outlook Connector or using the regular Outlook SMTP service.
- When mail is being retrieved using POP3 and exchange4linux as Default transport service, the mail is being saved centrally in the exchange4linux database.
- When mail is being retrieved using POP3 as the Default transport service, the mail is being saved locally in a .pst file on the computer.
- Outgoing e-mail will be saved in the **Sent items** of the Default transport service.
- When exchange4linux is the Default transport service, the **Personal folders** (Outlook Today) are saved as exchange4linux folders on the exchange4linux server.

9.6. Settings for meeting invitations (free/busy times)

To be able to use the free/busy times functionality, the following settings have to be made on the workstation:

1. Install the **web publishing wizard** on the desired workstations. The program can be downloaded from the following location:
<http://www.microsoft.com/downloads/release.asp?ReleaseID=22658&area=search&ordinal=2>
2. Adjust these settings in Outlook: At **Options - Calendar options - Free/busy options (Outlook 2003: Availability information)**:
Publish at this URL: **ftp://exchange4linux/freebusy/%NAME%.vfb**
Search at this URL: **http://exchange4linux/freebusy/%NAME%.vfb**
Confirm this alteration by clicking OK for several times. Then go to **Send & receive - Free/busy information (Outlook 2003: Availability information)**.

9.7. Functions within Microsoft Outlook

Within Microsoft Outlook there are several new functions available. In the folder tree there is a new main folder named **exchange4linux Folders** (Figure 9.16), with a set of **personal folders** underneath and a subfolder with **public folders** that contain shared items like address books and calendars.

Personal exchange4linux folders are managed centrally on the server, but are only accessible for the specific user. These folders can contain among other things e-mail messages, calendar items, contacts, etc. Since this information is stored centrally, the items can be accessed from every workstation on which this specific exchange4linux profile is activated. It is possible to make new folders yourself (Figure 9.17) and, in case of a public folder, to make it visible/editable for all or certain workgroup users. In other words: one can allow certain users to e.g. be able to delete or edit items in this folder (Figure 9.18). The *default* settings hold for all users except for those that are mentioned specifically.

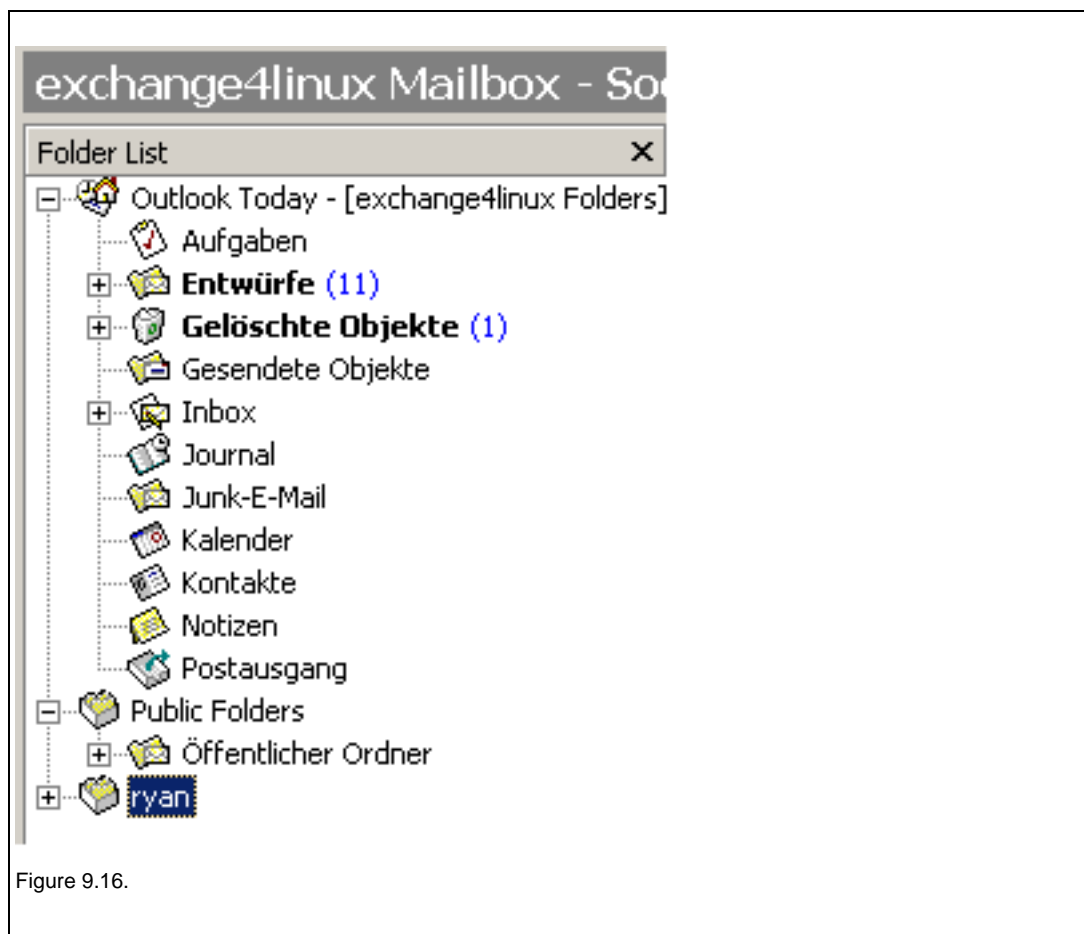


Figure 9.16.

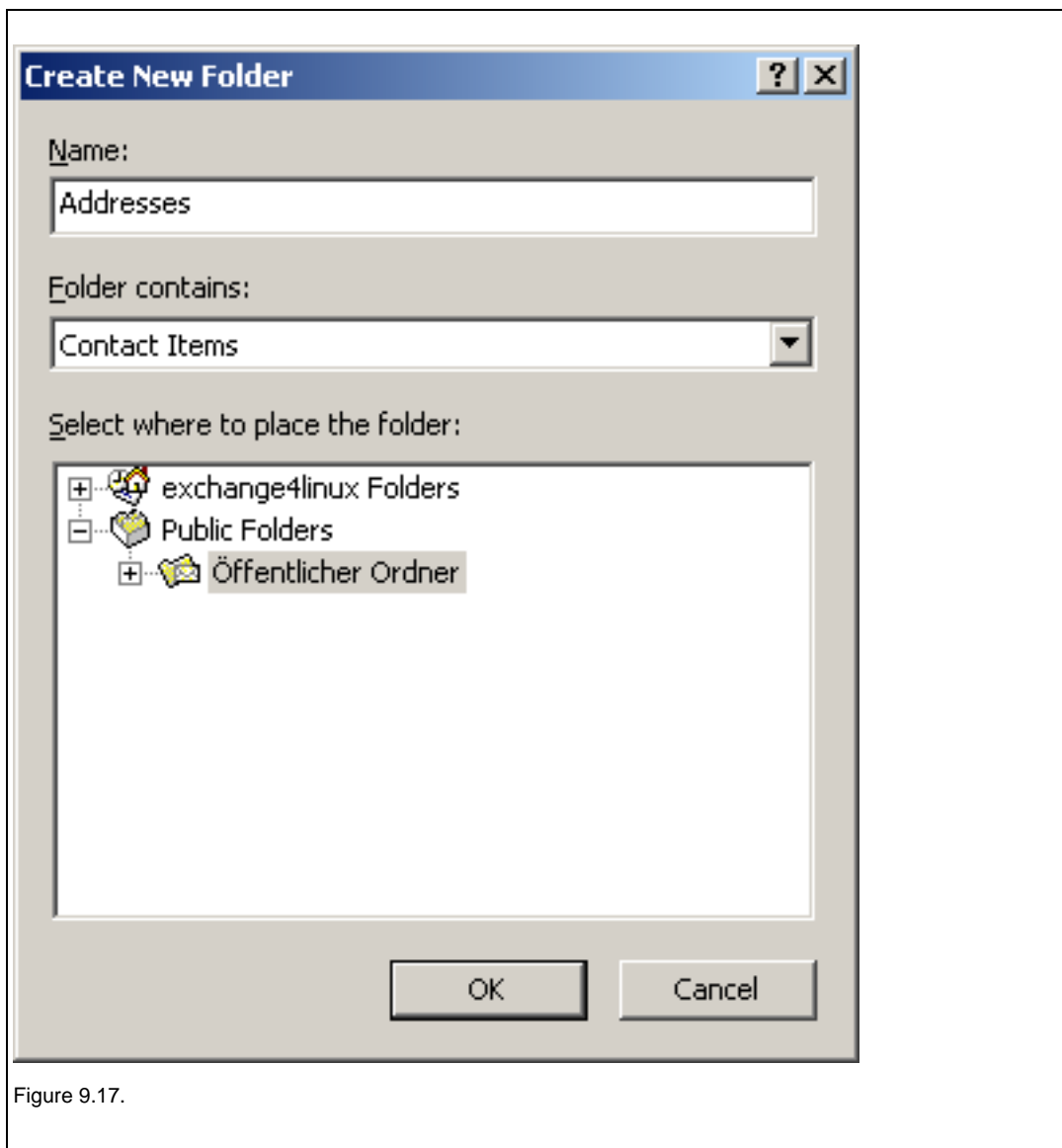


Figure 9.17.

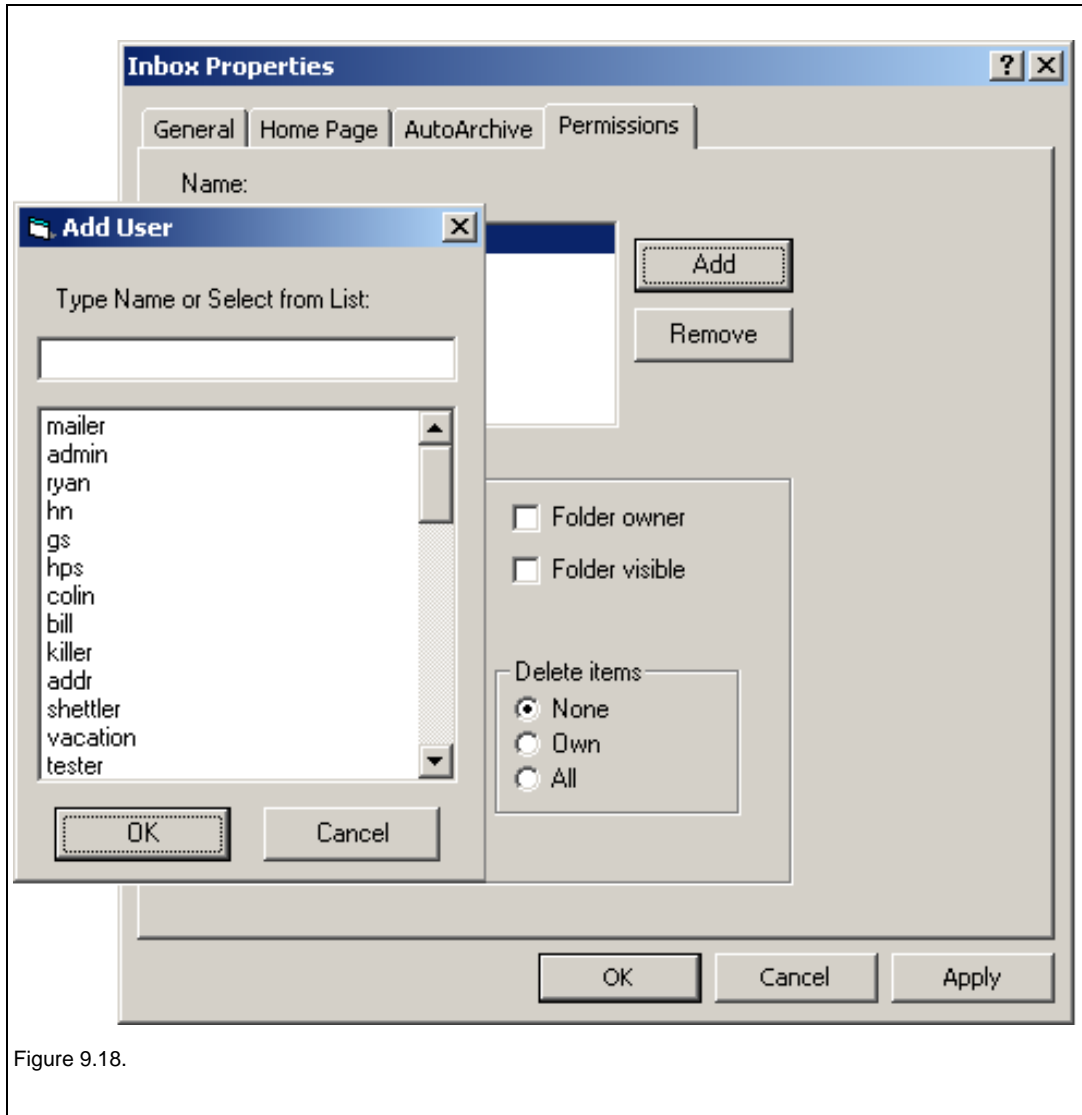


Figure 9.18.

Because of security reasons, only the user **admin** is allowed to make new subfolders within the **public folder tree**. When it is desired that other users are permitted to do this as well, please follow this procedure:

1. Open Outlook as user **admin**.
2. Right-click the main folder **Public Folders** and click **Properties**.
3. Go to the tab **Permissions** and add the users that are allowed to make new folders (or select **Default** when all users should be allowed to do this).
4. Make sure that the applicable users have got all permissions checked here (except for Folder owner).



Caution:

No one but the user that has created a folder is allowed to remove it!

The following permissions can be set for each folder:

- **Create items** the user is allowed to add new items to the folder.
- **Read items** all the items within the folder are visible to the user.

- **Create subfolders** the user can create a subfolder within this specific folder.
- **Folder owner** the user is able to change the permissions for other users.
- **Folder visible** the folder itself is visible to the user.
- **Edit items** in case of **none** the user is not allowed to edit items, in case of **own** the user may edit his own items and in case of **all** the user is allowed to change all items within the folder.
- **Delete items** in case of **none** the user is not allowed to delete items, in case of **own** the user may delete his **own** items and in case of **all** the user is allowed to delete **all** items within the folder.

9.8. Delegate accounts

It is possible to make so-called **delegate accounts**, which enables a user to make his **personal folders** visible for another workgroup user (eg. an assistant). For each folder one can appoint permissions to another user. This specific user then has the possibility to make these folders visible in his/her Outlook. In this paragraph it is described how to add and use a delegate account.

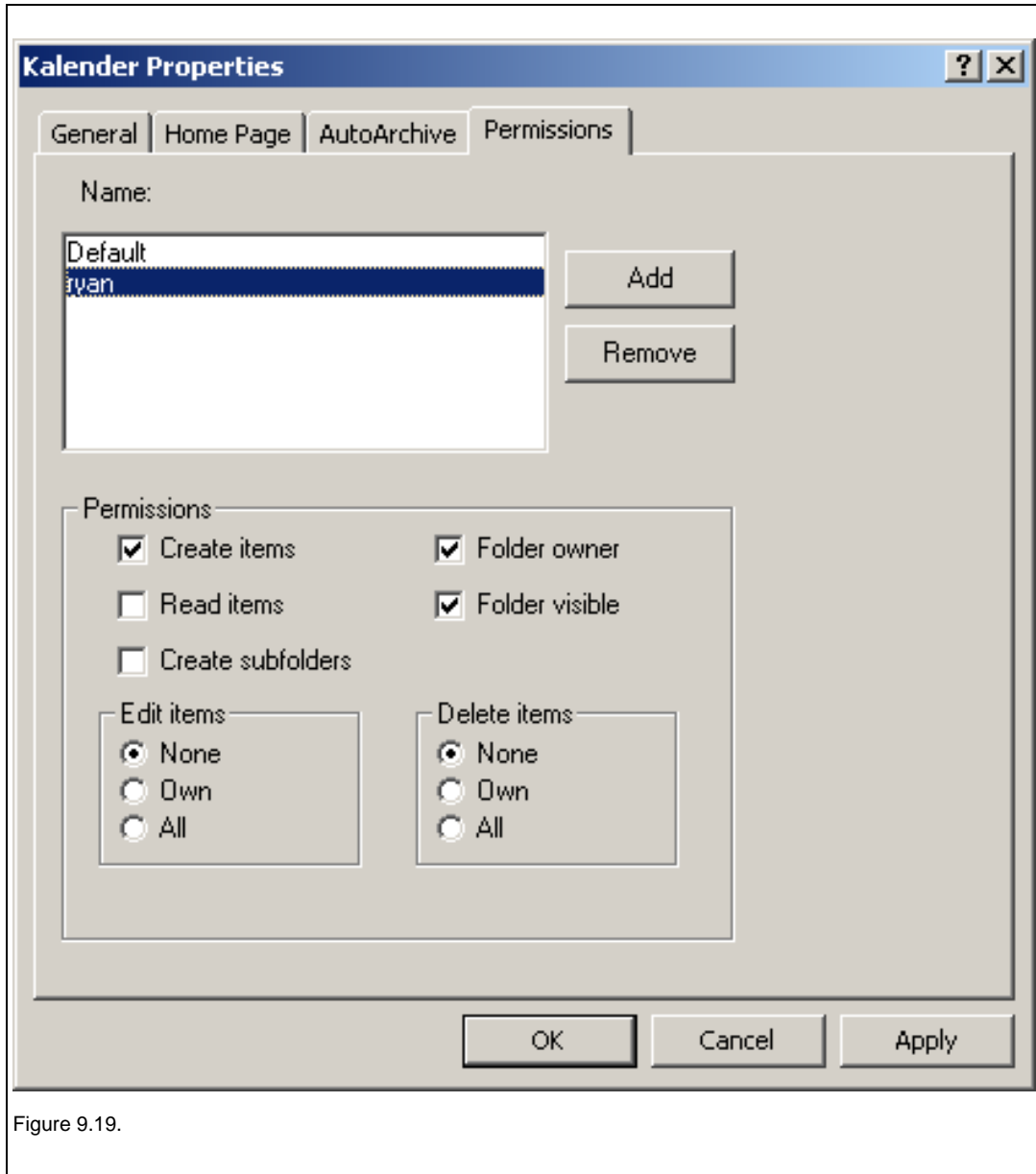
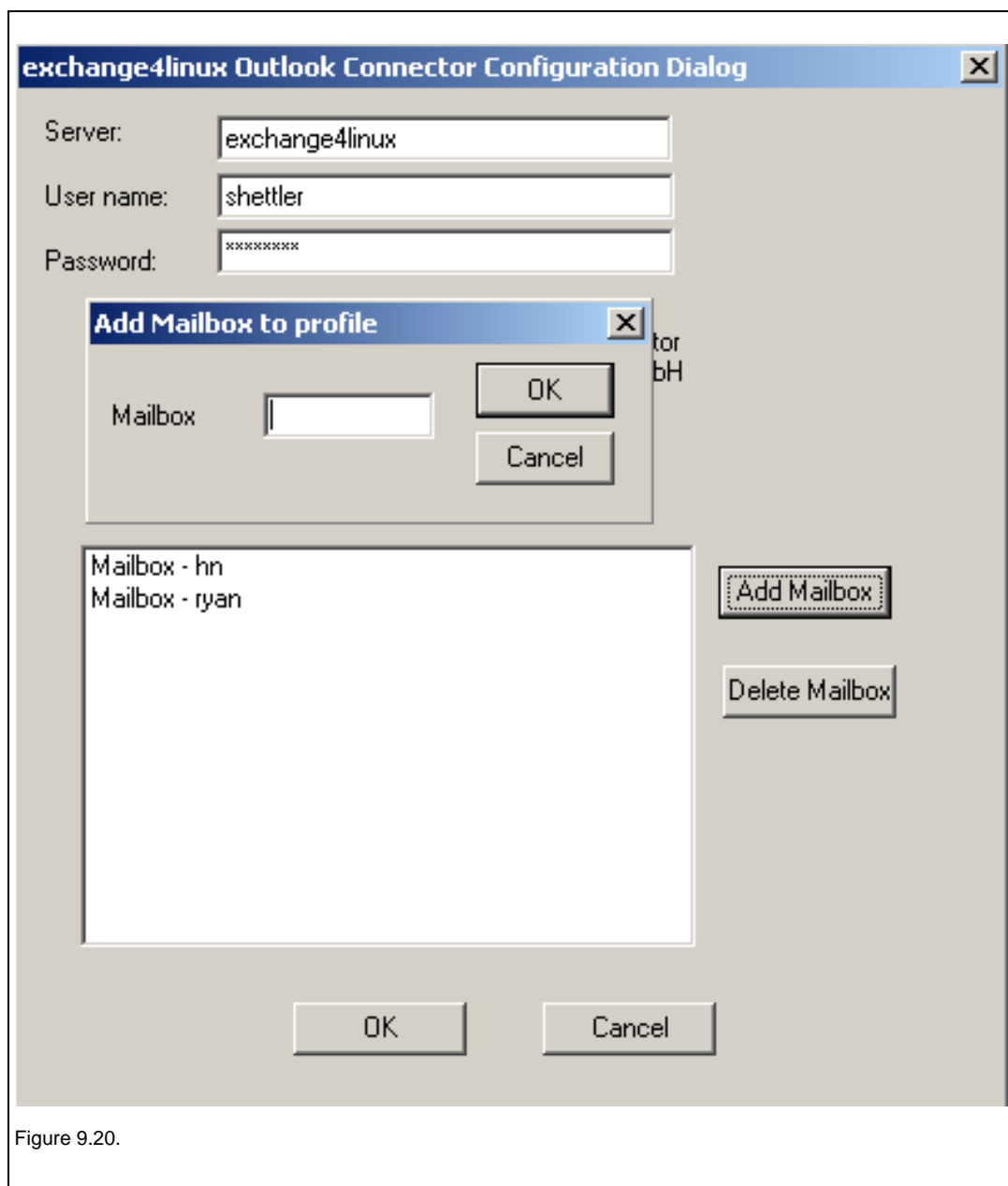


Figure 9.19.



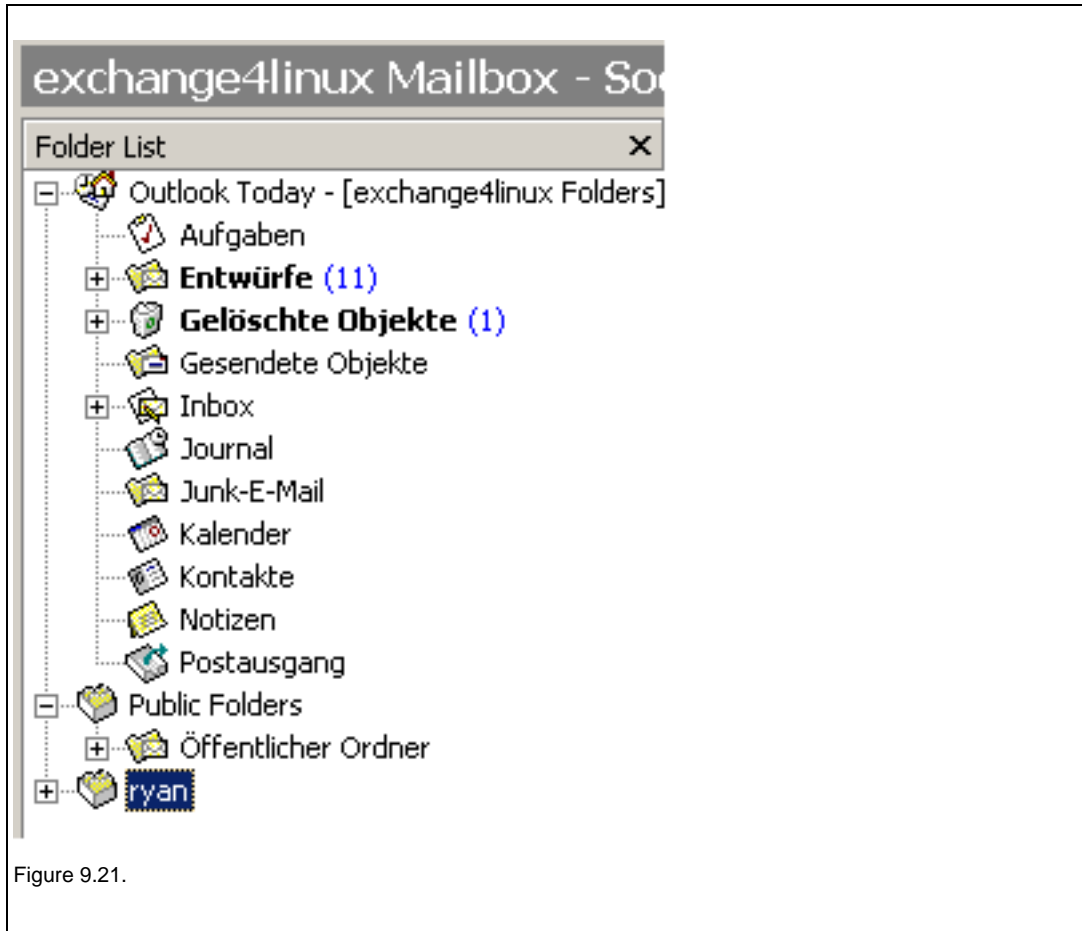


Figure 9.21.

1. Appoint permissions to users that you want to allow access to certain personal folders, eg. calendar and inbox. Do this by right-clicking the folder in question, selecting **Properties** and then by going to the tab **Permissions**. The settings are similar to those available for a public folder, described in the previous paragraph. On Figure 9.19 the user *bogaard* gets permission to read items in a certain folder of this user.
2. User *bogaard* can now decide to make this folder visible in his Outlook profile. This is done by browsing to account properties (go to **Extra - E-mail accounts - Display or edit existing e-mail accounts - exchange4linux Server - edit**). Here the mailbox name can be inserted of the user whose personal folders are to be displayed, eg. *ryan* (see Figure 9.20).
3. From now on the folders that have been selected for this purpose will be visible, and with the proper permissions it is also possible to add/remove items (Figure 9.21).



Caution:

due to the additional load on the exchange4linux server that is caused by using delegate accounts, it is advised not to set up over five delegates per user.

9.9. Tips and remarks

1. In case you suffer sudden problems with the functioning of Microsoft Outlook, please shut-down the program and restart it. Always make sure that the processes *outlook.exe* and *mapisp32.exe* do not run anymore after shutting down the application. Do this by opening the Windows Task Manager (press Ctrl – Alt – Esc simultaneously). If necessary, close them manually here.
2. When using delegate accounts there will be an additional folder in the tree with the mailbox name of the user that has granted you access rights.
3. When multiple persons use the same workstation, there needs to be a separate Outlook- (or even better a Windows-) profile for every user. Please make sure that the correct mailbox name and password are filled in for all of them.
4. It can occur that some mails include an attachment called *winmail.dat*. This has got nothing to do with exchange4linux. A thorough explanation for this phenomenon is given by Microsoft on the following URL: <http://support.microsoft.com/?kbid=241538>
5. Items for which one want to set up a reminder need to be made in the corresponding folder of the Default transport service.
6. Outlook will always check free/busy times based on the corresponding folder of the Default transport service.
7. When exchange4linux is being used as the Default transport service, the functionality **read receipts** is not supported.
8. When exchange4linux is being used as the Default transport service, it is not possible to send e-mail messages directly from other Microsoft applications (like Word, Excel, etc.)
9. Outlook 97 and 98 do not offer the functionality to grant permissions for (public) folders.
10. Outlook 97 and 98 do not offer the possibility to use *free/busy times information*.
11. At this point in time, sending HTML-mail is only supported when exchange4linux is not set up as the Default transport service.
12. Sometimes it can occur that after installing a new Connector, a new profile must be made. Settings of a previous profile can easily be copied though. This way one does not need to configure the new profile after it has been added.

Appendix A. Copyright & License Information

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Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

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0.9.0 thru 1.2		1991-1995	CWI	yes
1.3 thru 1.5.2	1.2	1995-1999	CNRI	yes
1.6	1.5.2	2000	CNRI	no
2.0	1.6	2000	BeOpen.com	no
1.6.1	1.6	2001	CNRI	yes (2)
2.1	2.0+1.6.1	2001	PSF	no
2.0.1	2.0+1.6.1	2001	PSF	yes
2.1.1	2.1+2.0.1	2001	PSF	yes
2.2	2.1.1	2001	PSF	yes
2.1.2	2.1.1	2002	PSF	yes
2.1.3	2.1.2	2002	PSF	yes
2.2.1	2.2	2002	PSF	yes
2.2.2	2.2.1	2002	PSF	yes
2.3	2.2.2	2002-2003	PSF	yes
2.3.1	2.3	2002-2003	PSF	yes
2.3.2	2.3.1	2002-2003	PSF	yes
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