EasyGate 6.0

Manual

EN.2006 Edition

EasyGate 6.0: Manual

Contact information:

Neuberger & Hughes GmbH
Im Bruckenwasen 1
Plochingen
73207
Germany
phone: +49 (7153) 6120-0
fax: +49 (7153) 6120-33
mail: info@n-h.net

N&H helpdesk system:

web: http://support.n-h.com
mail: support@n-h.com

Internet:

http://www.n-h.com
http://www.exchange4linux.com

Table of Contents

Preface

Thank you for choosing a Neuberger & Hughes' 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 EasyGate, we advice you to read at least Part II. This section contains important information that can prevent confusion while using EasyGate.

The manual contains a lot of images to simplify the configuration. Some of these images are from the exchange4linux server suite 2.5. In this case there is no difference between the configuration of exchange4linux and EasyGate.

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 EasyGate.

Table of Contents

Chapter 1. Explanation of network settings

Internal EasyGate network

EasyGate 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 EasyGate 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 EasyGate 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 EasyGate though. EasyGate'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 EasyGate 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 EasyGate 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 6.4):

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

DHCP Server (Section 6.14):

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 EasyGate the standard value of the suffix is "local.intranet".

Email: (Batched) SMTP (Section 6.6):

(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 EasyGate 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 6.6):

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 6.6):

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.

Fileserver (Section 6.19):

The EasyShare fileserver integrated in EasyGate 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.

Host:

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

Maildomain (Section 6.6.1):

This is the domain (eg. *company.com*) that is being used by the EasyGate 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 6.20):

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

Profiles (Section 6.3):

A profile is a file in which all EasyGate 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 EasyGate software is being re-installed.

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 6.6.2):

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. EasyGate consults these databases and returns known spammail to the sender.

Spamfilter (Section 6.7):

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 EasyGate 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.

Table of Contents

Chapter 3. Network and provider data

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

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

   - Network address and an unused IP-address for the EasyGate server
   - Broadcast address
   - Netmask
   - IP-address of the router that connects EasyGate to the internet

Chapter 4. Software installation

This chapter describes how to install the EasyGate 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 EasyGate?

- 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 EasyGate 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.

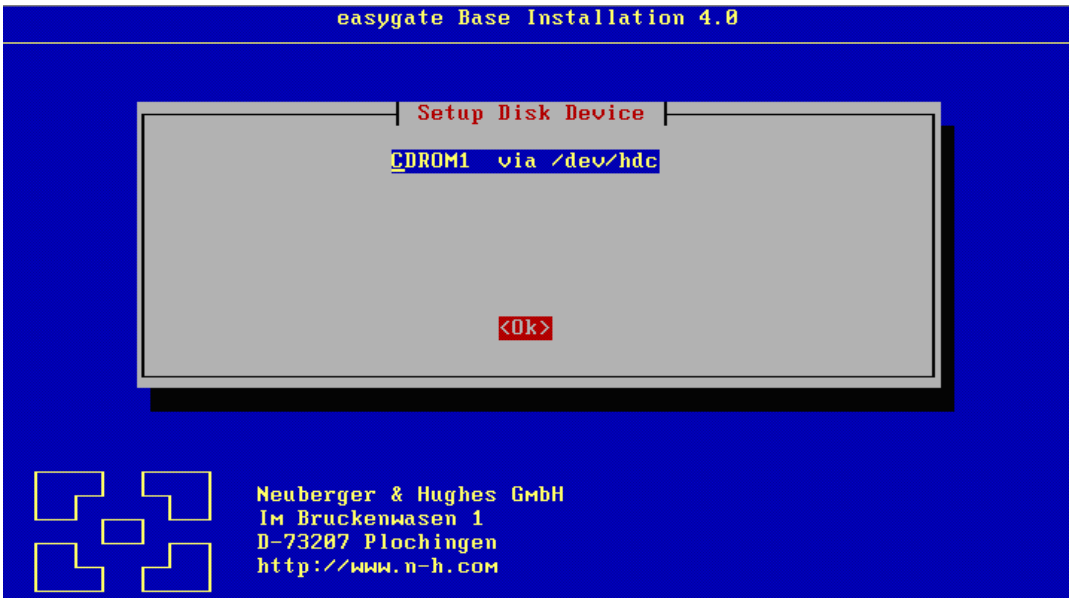


Figure 4.3.

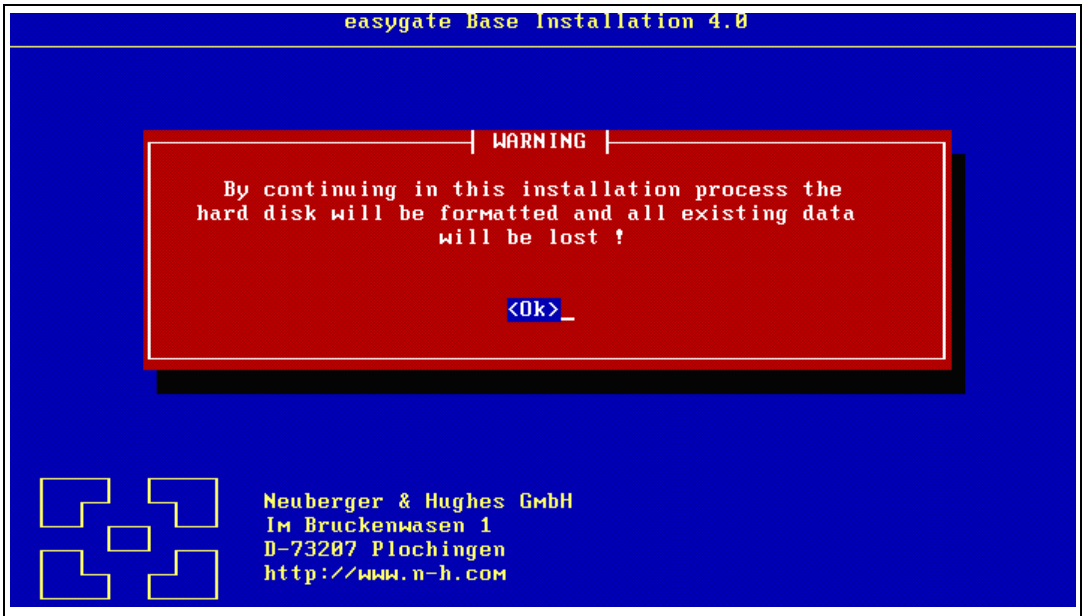
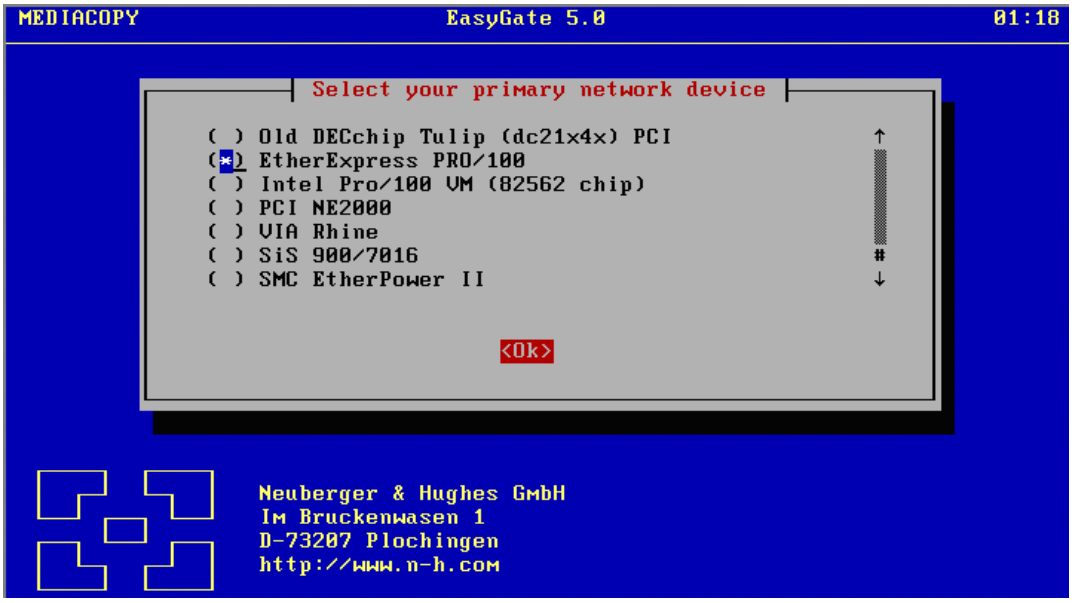


Figure 4.4.



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 EasyGate 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 EasyGate 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 EasyGate 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 EasyGate website http://www.n-h.com/NHSite/NH/Download. Note that in order to use EasyGate as a faxserver, a so-called **active** ISDN device is required.

Figure 4.5.

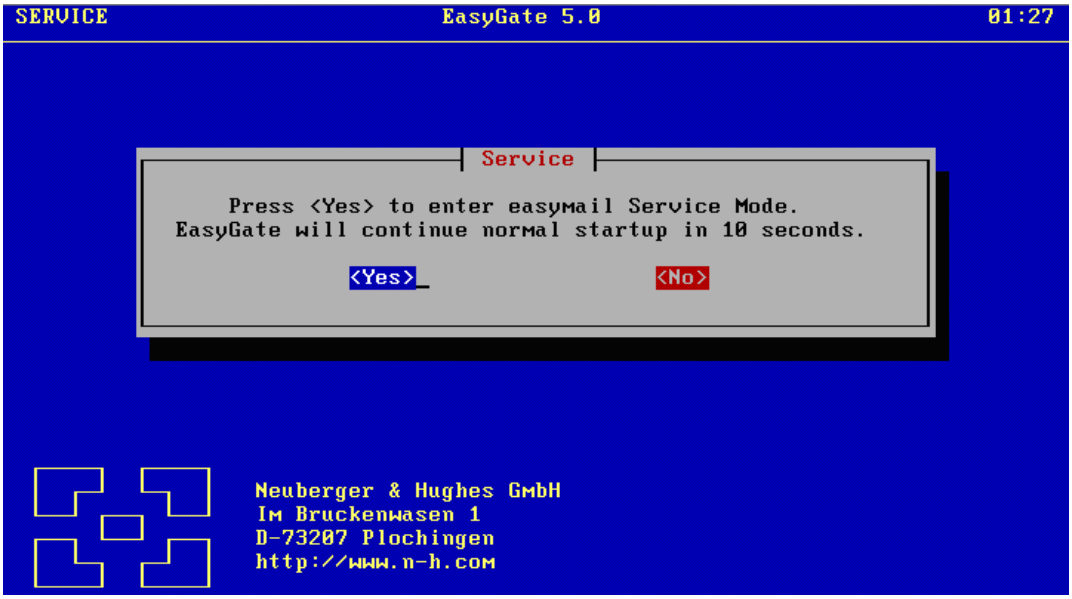


Figure 4.6.

Figure 4.7.

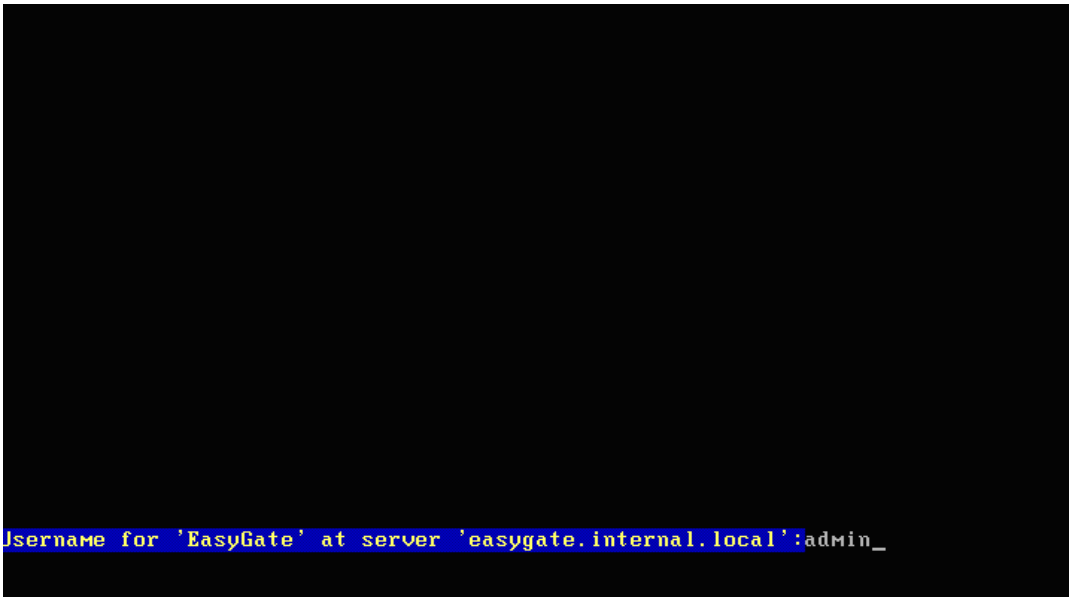


Figure 4.8.

Subsequently the desired language of the system can be selected. If desired, the language settings can always be altered in the EasyGate 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 EasyGate 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 EasyGate server. You can then access the configuration menu by locating http://easygate 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 **easygate**. By making the correct network settings here, easygate will be visible within the network and can be configured from a ran-

dom 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:

easygate

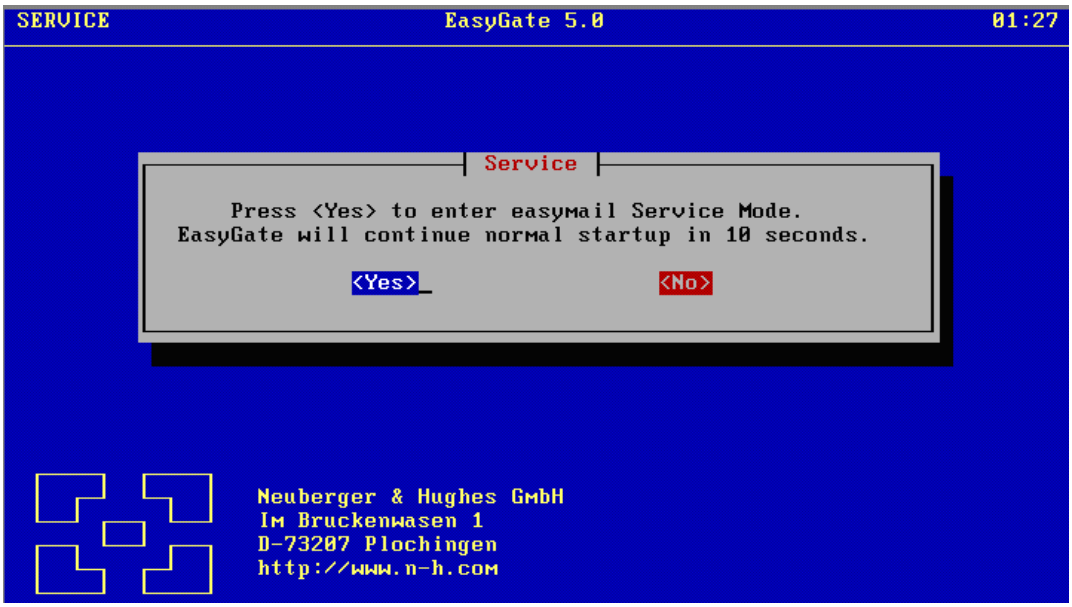
Chapter 5. Saving changes

When configuring EasyGate 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, EasyGate 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).

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 EasyGate will reboot with the previous profile activated.

Part III. Configuration and management

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

Table of Contents

Chapter 6. EasyGate configuration

This chapter explains how to configure EasyGate, 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 EasyGate are being described. The placement of EasGate, its functioning and the EasyConfig menu are being depicted.

When you have bought or downloaded the EasyGate 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 EasyGate reseller, distributor, or Neuberger & Hughes directly.

6.1.2. Appendices

Every once in a while new features are being made available for EasyGate. 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 EasyGate website.

6.1.3. EasyGate models and versions

EasyGate 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 EasyGate website (menu “Pre-installed systems”).

6.1.4. Placement of EasyGate

After removing EasyGate 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 EasyGate server
2. The room/location must be clean, dry and dust-free
3. The room/location must be well ventilated and the EasyGate 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 EasyGate server

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

6.1.5. Attaching a PS/2 keyboard

To configure EasyGate 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 EasyGate must be altered before connecting to it using a workstation.
Alternately, you can connect a PC directly to the EasyGate 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 EasyGate 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 EasyGate 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 EasyGate 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 EasyGate 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 EasyGate 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 (see Section 8.1).

6.1.10. Starting the management software

There are two possible methods to access the configuration interface.

1. Configuring from a client:

   - http://easygate *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 EasyGate 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 "easygate" at server "easygate":

Here you insert:

admin

Then you will see:

Password

Here you insert:

easygate

(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 EasyGate 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 simulataneously 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 EasyGate 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://<EasyGate IP-address>

6.1.11. Logging onto EasyGate

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

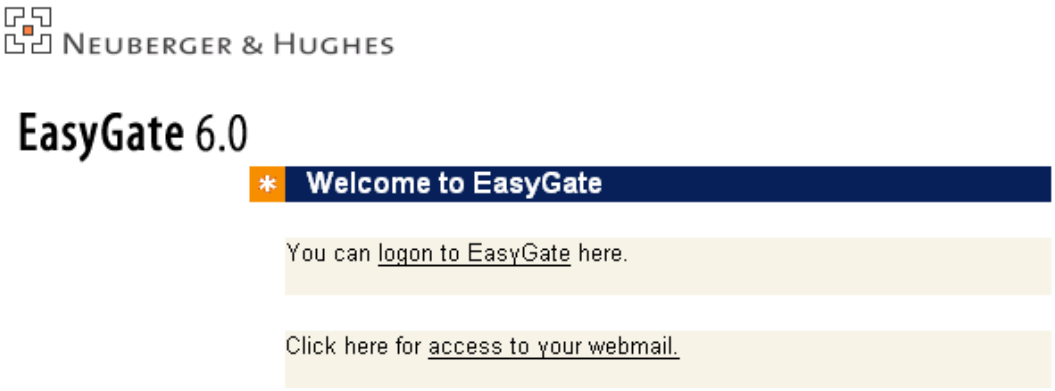
Caution:

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.

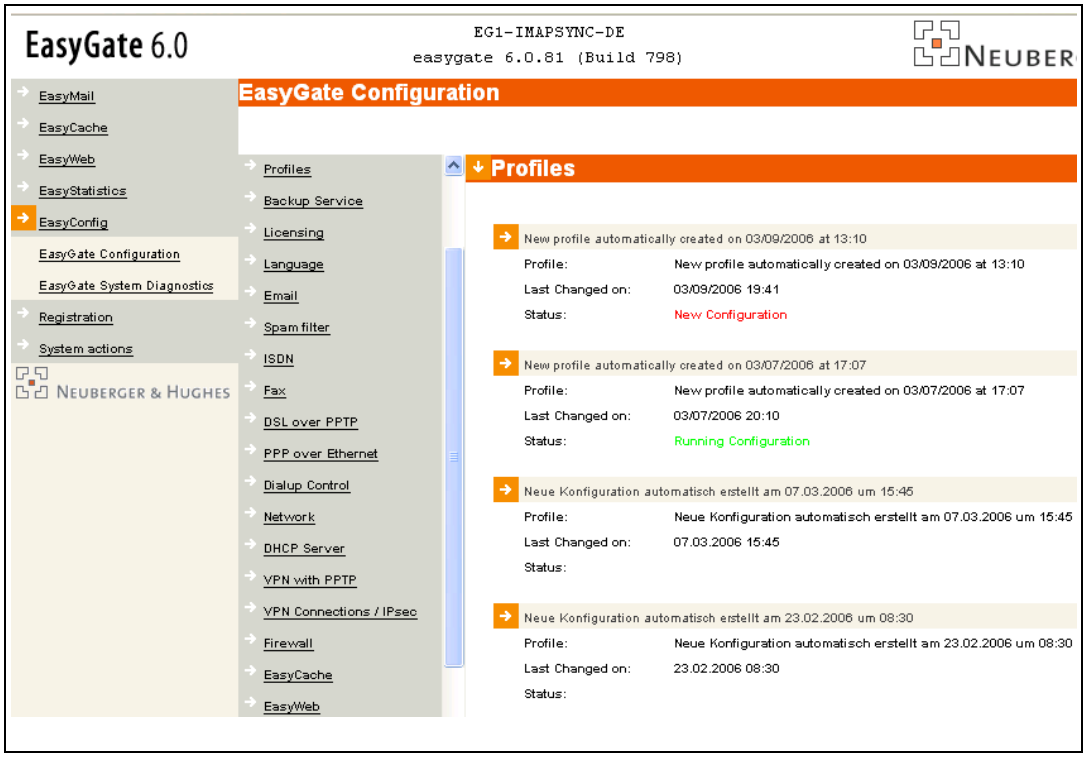
Figure 6.3.



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 EasyGate

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

Figure 6.5.

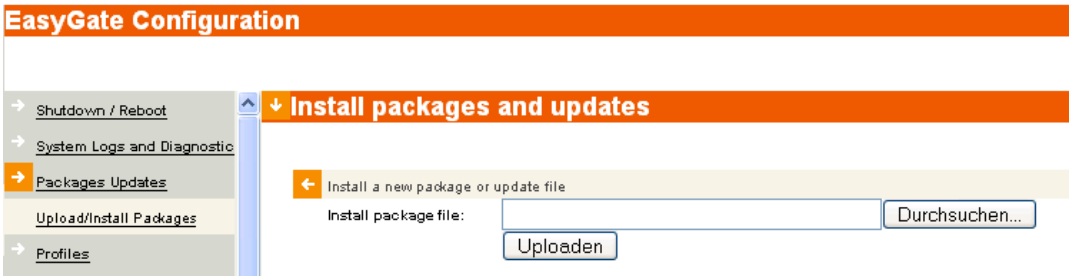
6.1.15. Language settings

The language of the EasyGate software can easily be changed directly from the webbrowser. 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. Packages Updates

This section details the installation process for new packages and updates on EasyGate. You are able to add new packages and/or updates by “uploading” them and installing them on EasyGate. (In the manual, installing a new package will be used as an example but the process is identical for updates.)
To open the following image click on *Packages Updates – Upload/Install Packages*. Previously uploaded and installed packages can be seen in this screen. Included with the package name are their status and a brief description.
To upload a package, click on the white arrow left beside “Install packages, updates”. A screen appears in which you can enter the name of the package file to be uploaded or you can select it by means of the *Browse*-button.

Figure 6.6.



After selecting the package, click on *Upload*.
The uploaded package now appears in the main-window. If there are other packages already installed, the new package will appear at the bottom of the list with the status: *Not yet installed*. **After uploading a package it still needs to be installed**. Click on the white arrow next to the name of the package you want to be installed. Now a screen with detailed information about the package appears. To install the package click on the *Install*-button in this mask.
Now the overview screen appears again with the status-description *Successfully installed, reboot EasyGate to finish installation*. To activate the new package, you have to restart EasyGate.

Attention

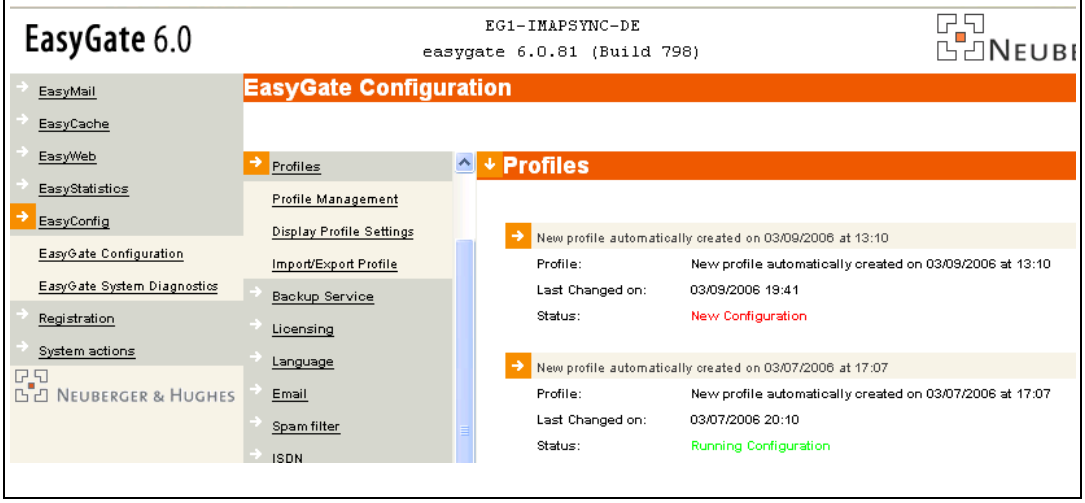
Some browsers can cause problems while uploading files, when the proxy-connection in the browser is activated. To prevent problems while uploading packages, it is a good idea to **temporarily** deactivate the proxy server (for uploading the file only). More details about how to activate and deactivate the proxy server can be found in Appendix A of the *EasyGate User Guide*.

6.3. Profiles

6.3.1. 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 6.7.



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.

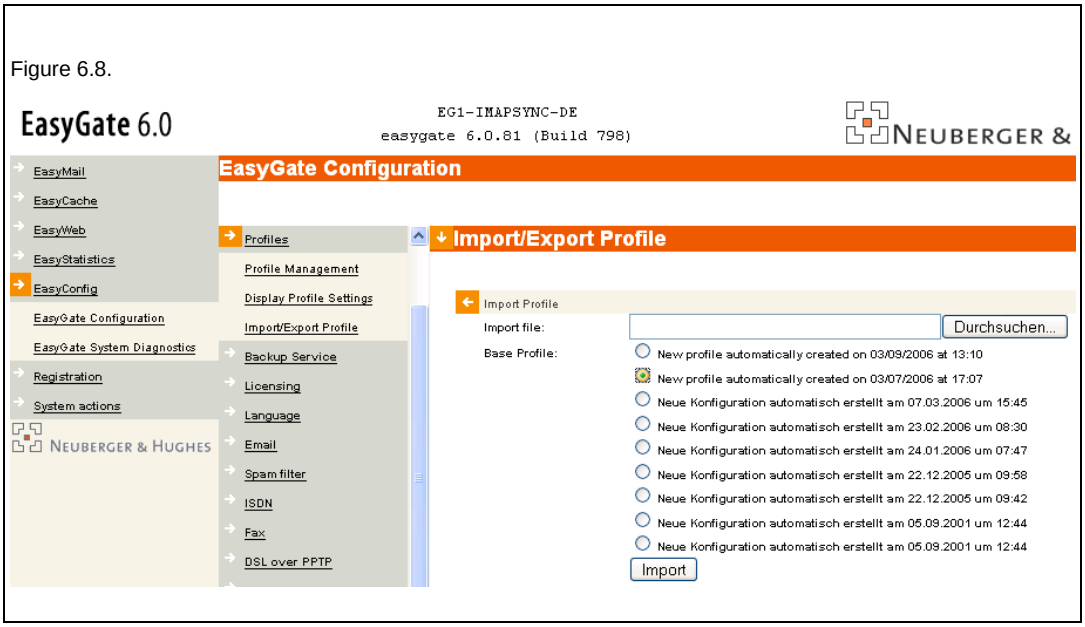
6.3.2. Display profile settings

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.

6.3.3. Import/export profiles

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

Figure 6.8.



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:

testprofiel-3-januari.emc

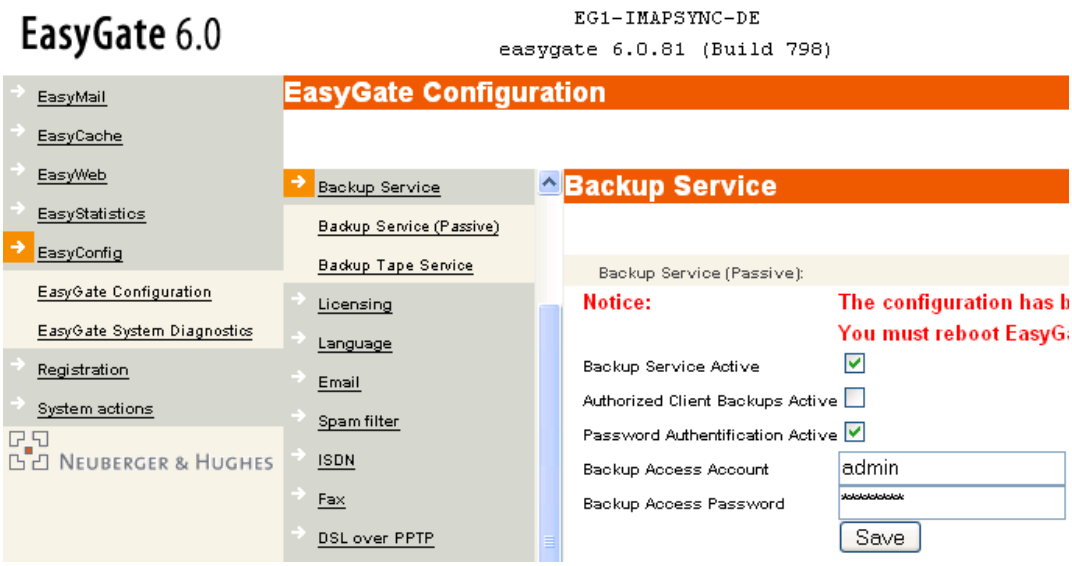
Use the *.emc* extension, so that exported profiles can easily be recognized in the future.

6.4. Backup Service

6.4.1. Setting up the Backup Service

The Backup Service (*System Configuration - Backup Service - Backup Service (passive)*) can be used to save a copy of the EasyGate userdata, by making use of a Windows application described in Section 6.4.3. Select *Backup Service active* followed by *Save* to activate this function. Subsequently the following items can be configured.

Figure 6.9.



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 Authentification Active:

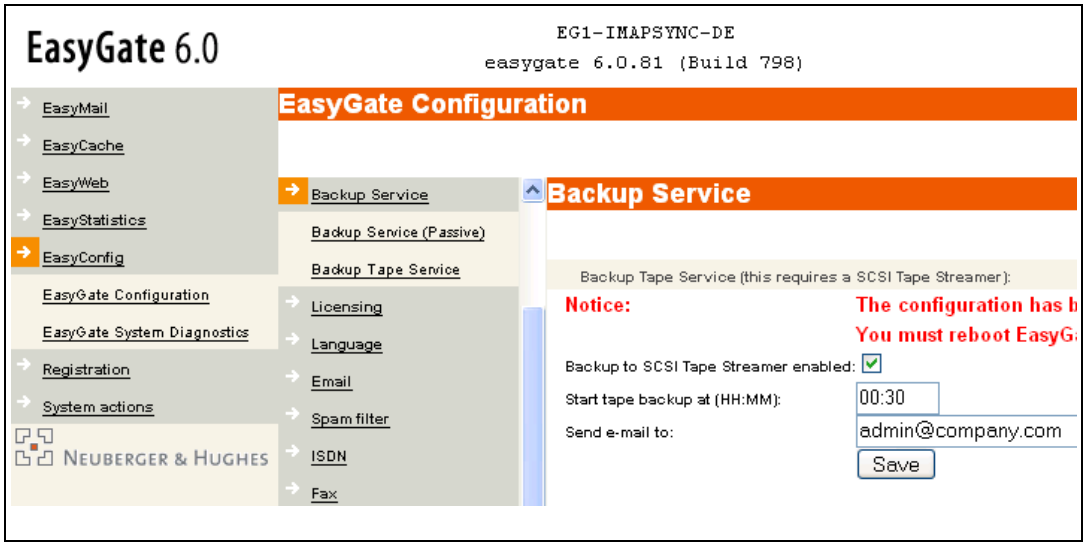
When checked, a password authentication mechanism can be activated to make sure that only certain individuals can make and restore backups.

The Backup Service can be controlled with the Windows application **easygate.exe**. This application can be downloaded from the EasyGate website (see Section 6.4.3).

6.4.2. Backup Tape Service

The Backup Tape Service offers the possibility to make a daily backup of the EasyGate data to a tape streamer.
EasyGate works with nearly every SCSI tape streamer, as long as it is connected to a SCSI-controller that is being supported by EasyGate. For more information see the Hardware Compatibility List, which can be found on the EasyGate website.

Figure 6.10.



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.

6.4.3. easygate.exe and batchfiles

Using the easygate.exe backup-software, a copy of all EasyGate 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 6.4.1 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 diskspace, 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 EasyGate server
   - username and password of the Backup Service

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

   If necessary, replace *exchange4linux* with the IP-address of EasyGate. 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.

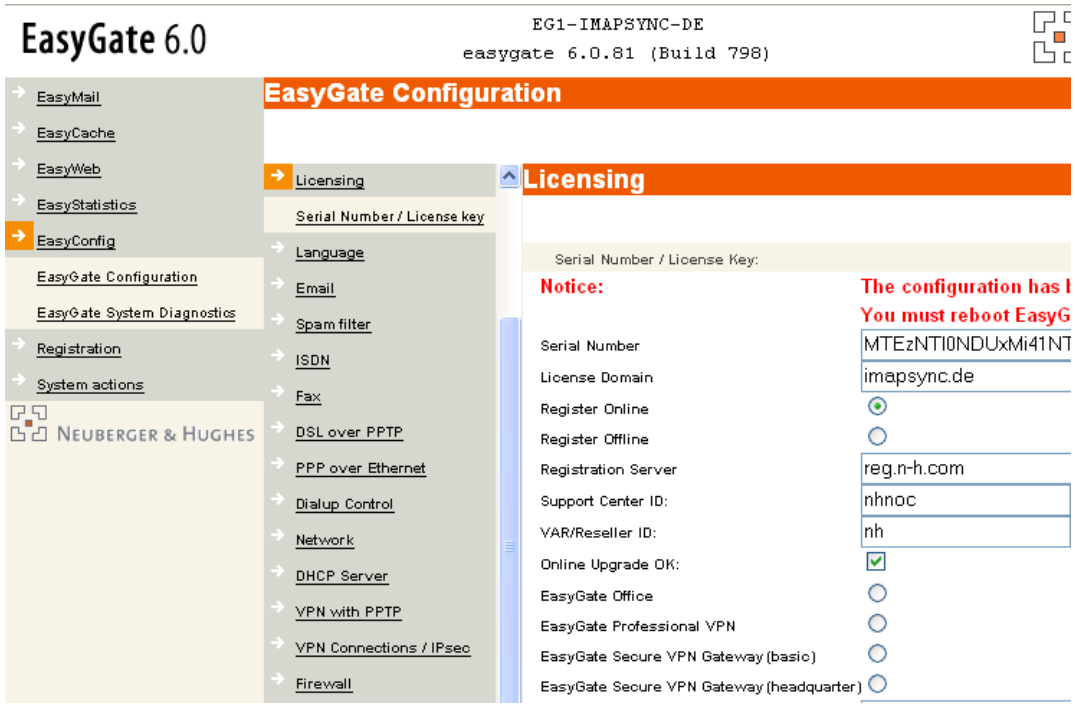
Caution:

easygate.exe does not take free diskspace 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.

6.5. Licensing

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

Figure 6.11.



Normally this part is already filled in by your EasyGate reseller or distributor. When this is not the case, or when you have questions on this matter, please contact your nearest EasyGate 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:**
  ask your reseller
- **VAR/Reseller ID:**
  ask your reseller

The *EasyGate License key* has been supplied to you or is already filled in. When this is not the case, please contact the EasyGate 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 EasyGate will be activated during the online registration.

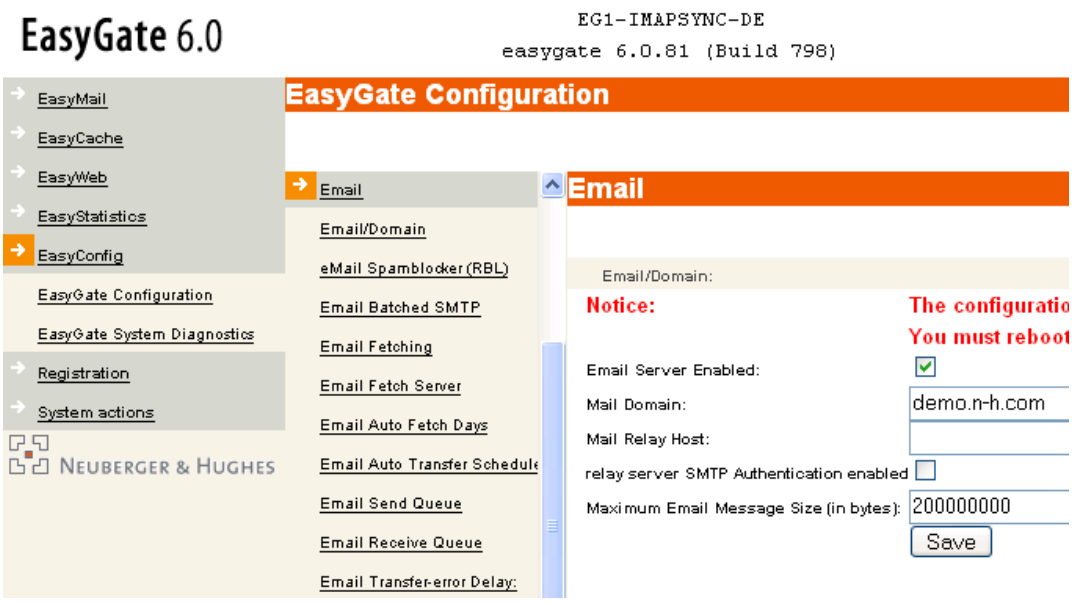
EasyGate registration-center:

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

6.6. Email

6.6.1. Email domain

Figure 6.12.



Email server enabled:

This is where you can activate EasyGate' 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 EasyGate.

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 EasyGate 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.

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:

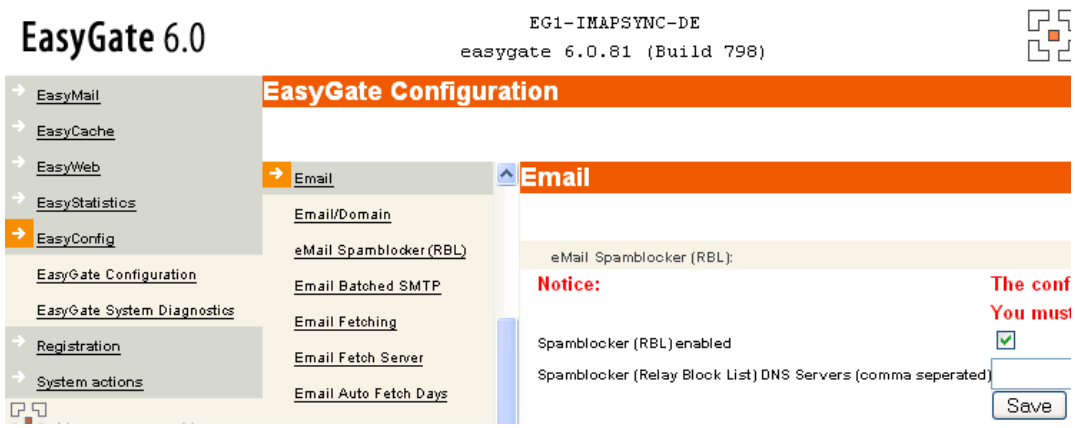
Fill in the corresponding password here.

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.

6.6.2. Email Spam Relay Block (RBL)

Figure 6.13.



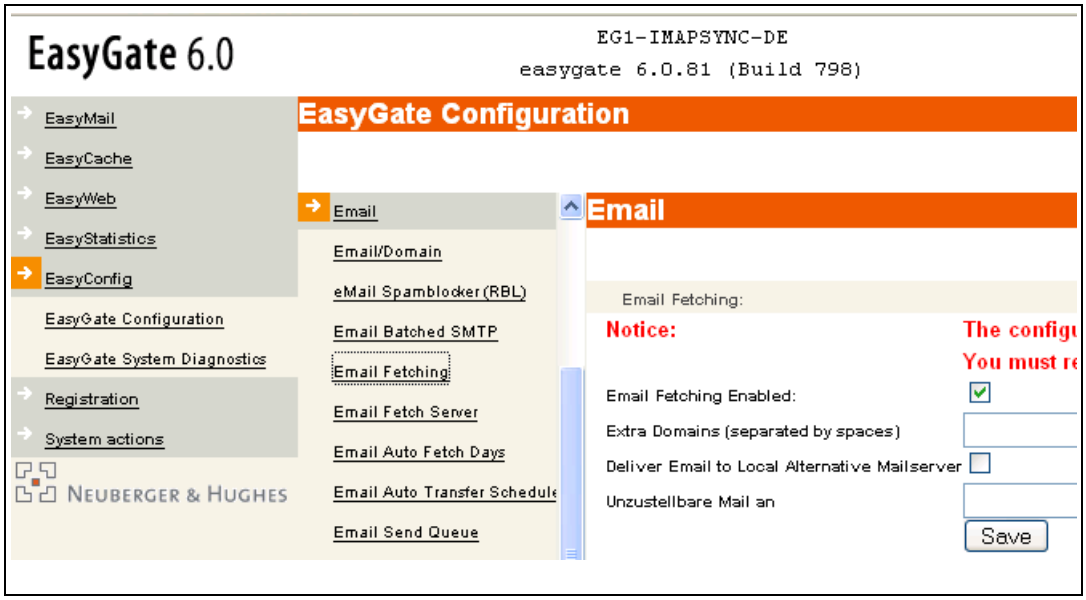
The EasyGate Spamblocker can be activated to bounce messages that have been sent from known spam distributors already before it reaches the users. By default there are three DNS servers filled in here that are considered to be the most up-to-date spamblocking databases. You are free to add more servers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

6.6.3. 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 EasyGate has connected. When in doubt, ask your provider.

6.6.4. Fetching

Figure 6.14.



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 EasyGate 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:

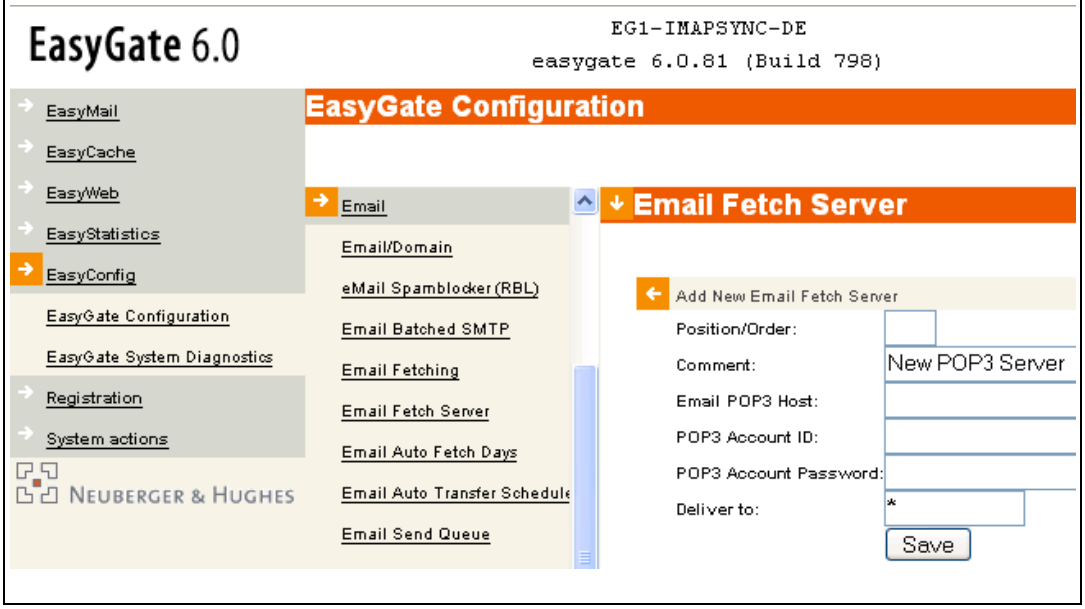
This setting only works when the Email is fetched by means of multidrop POP3. **If you use batched SMTP, this setting will not have any effect.** Undeliverable Email will be, in case of SMTP, returned to the sender with the error message *User unknown*.

When mail is being fetched with (multidrop) POP3:
An existing mailbox-name has to be entered here. All mail that EasyGate 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 EasyGate 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.

6.6.5. 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 6.15.



Add new Email fetch server:

In this section you can select from which POP3 servers the mail has to be retrieved. This is only necessary 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 Account ID:

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.

Deliver to:

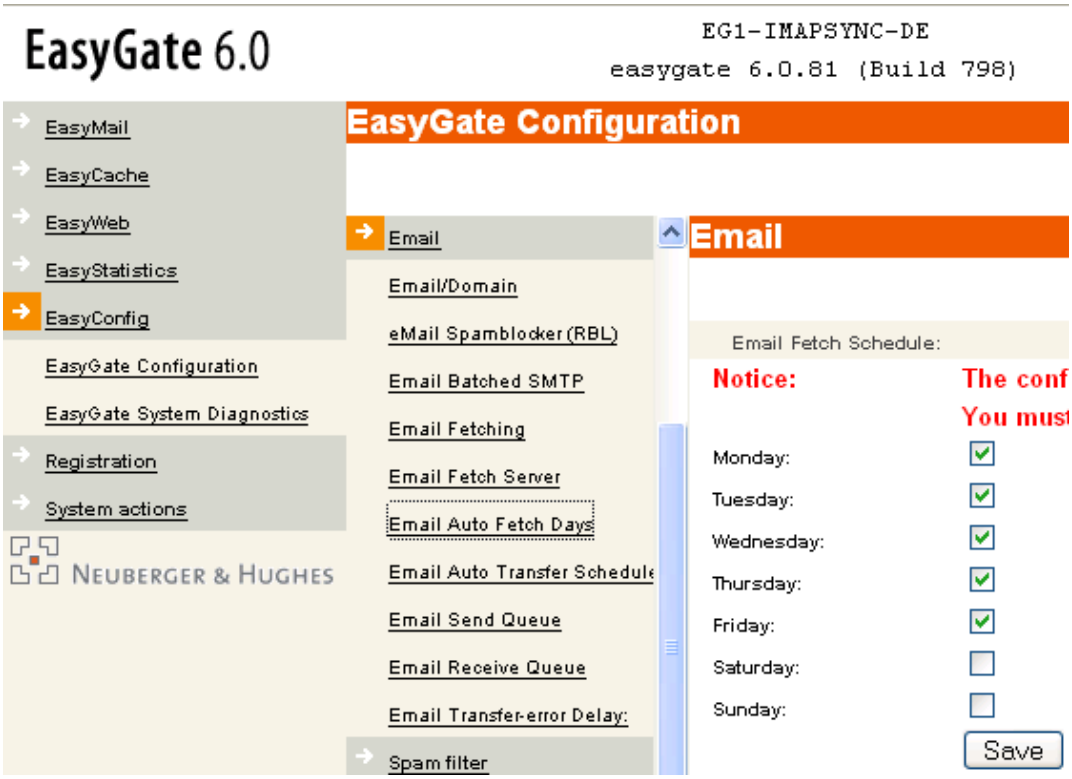
Here you can indicate which email address the emails need to be forwarded to. This field generally is set to wildcard ("*"). It makes sure that messages are delivered at the recipient that the sender addressed the message to. If a mailbox-name is filled in here, all mail will be sent to this mailbox, 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.

6.6.6. Auto fetch days

Figure 6.16.

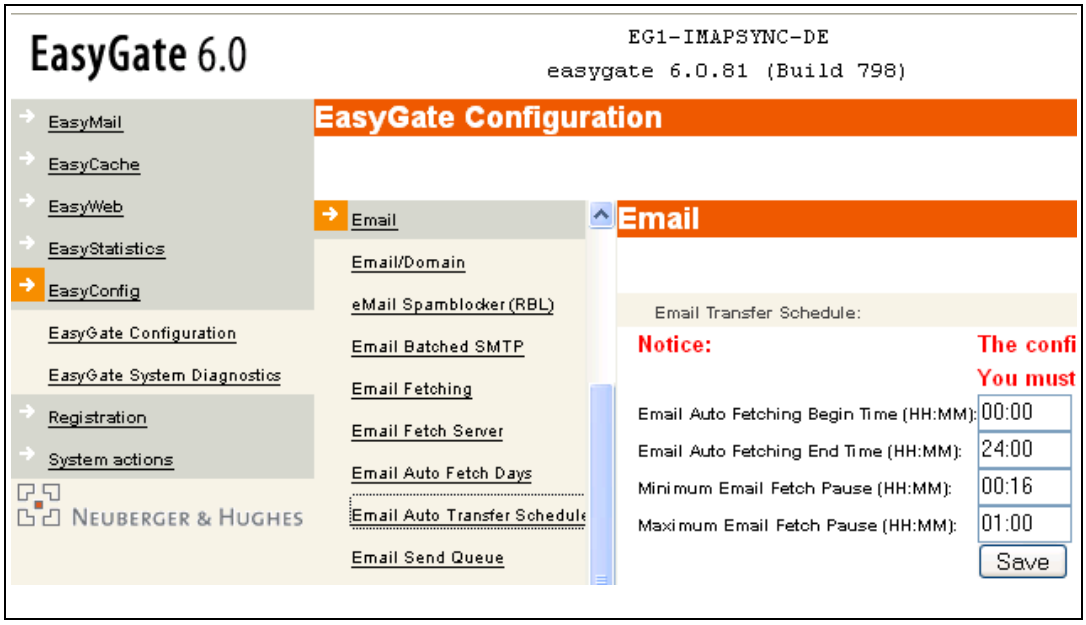


Here you tick off the days on which Email may be automatically sent and received.

6.6.7. Auto transfer schedule

This is where you can adjust exactly how frequently EasyGate is permitted to send and receive Email. The settings here determine the connection-behavior of EasyGate, 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 6.17.



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 EasyGate.

Email Auto Fetching Begin 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 Auto Fetching 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 Fetch 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.

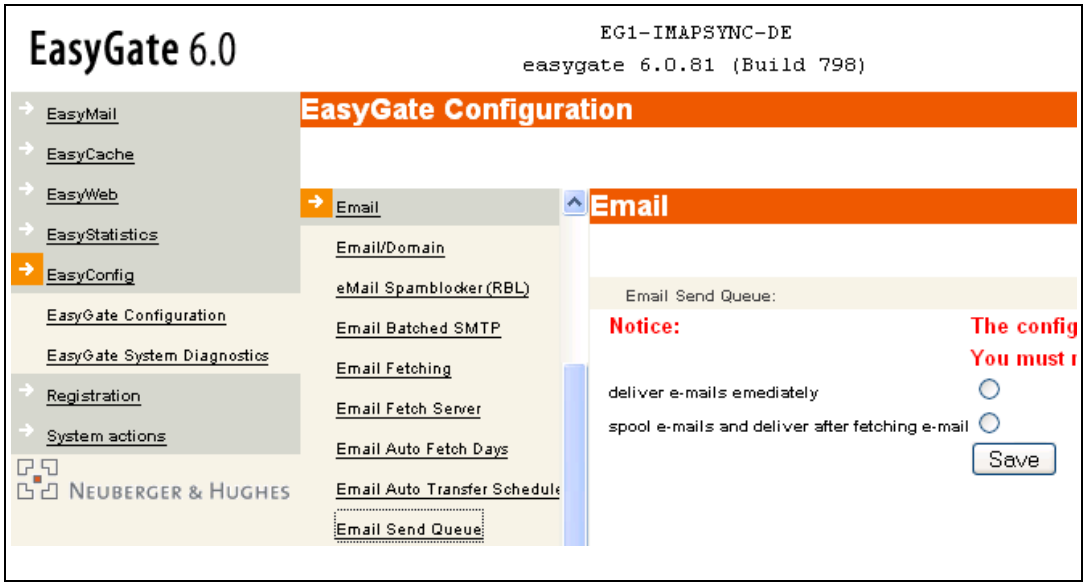
Maximum Email Fetch Pause:

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.

6.6.8. Send queue

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

Figure 6.18.



deliver e-mails immediately:

A new e-mail message delivered to EasyGate 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.

spool e-mails and deliver after fetching e-mail:

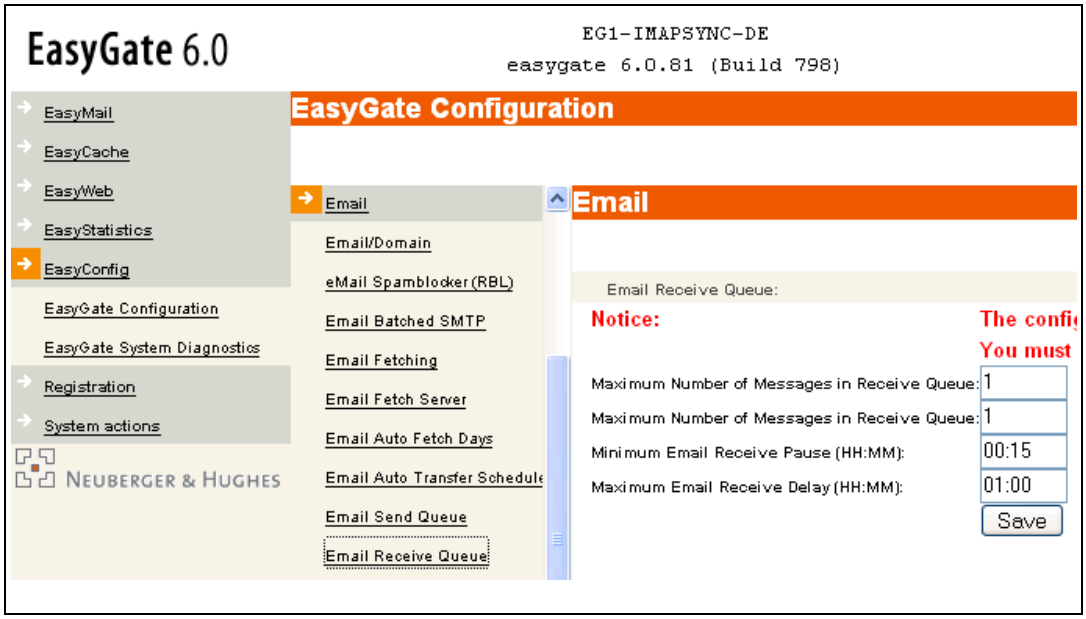
With this method checked, EasyGate will send Email according to the settings made in the menu "auto fetch days" (Section 6.6.6) and "auto transfer schedule" (Section 6.6.7). This method saves connection costs when ISDN is being used, since there will not be made an internet connection for every e-mail message.

6.6.9. Receive queue

Caution:

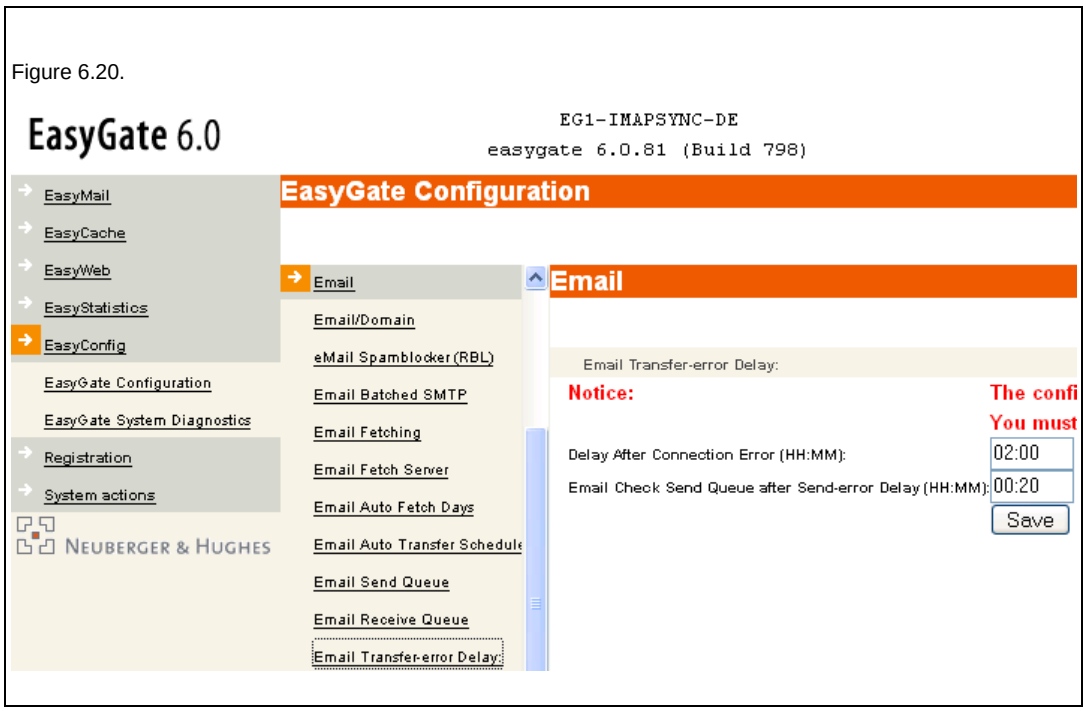
These settings are only relevant when you have a special callback account. Since only few providers grant this service, chances are small that you have to fill in anything here.

Figure 6.19.



6.6.10. Transport errors

Figure 6.20.



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.

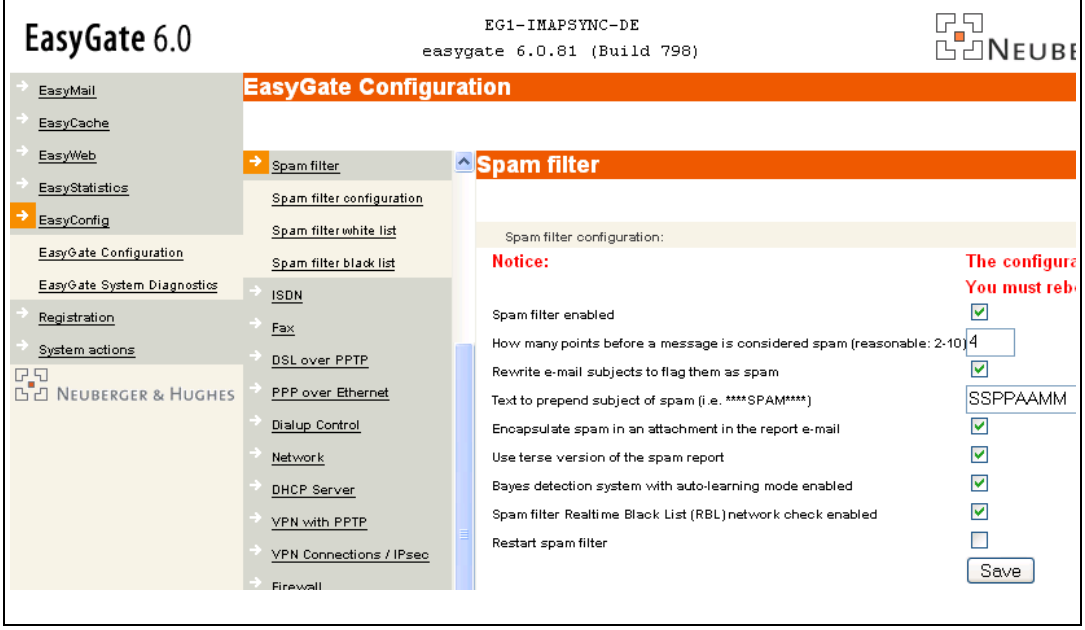
Email Check Send Queue after Send-error Delay:

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.

6.7. Spamfilter

6.7.1. Spamfilter configuration

Figure 6.21.



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 spammessage 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 spammessage.

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.

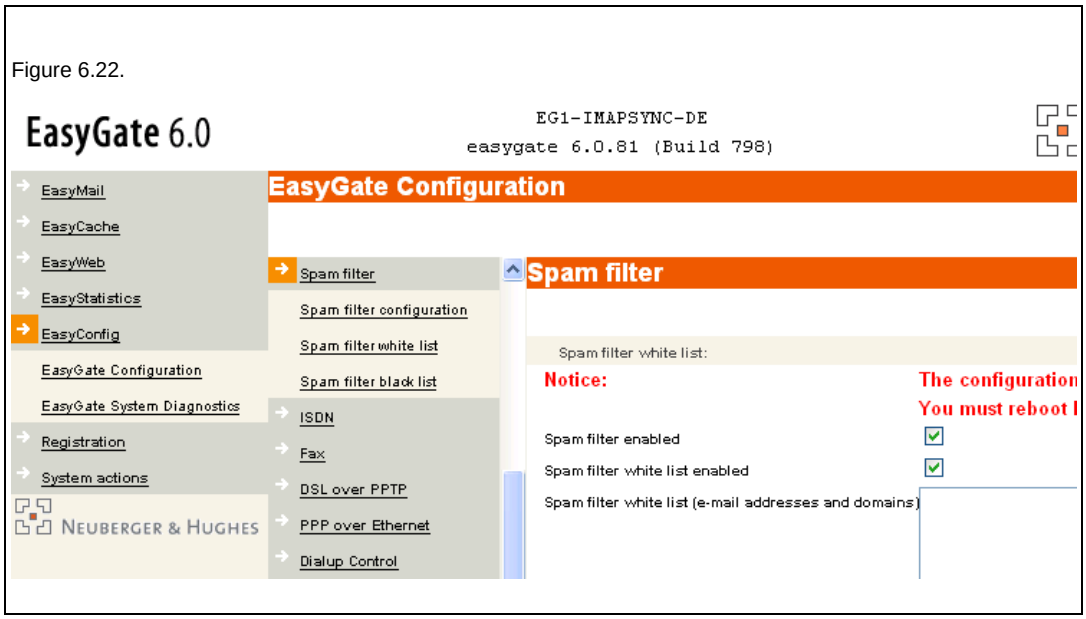
Restart spamfilter:

When changes have been made to the configuration of the spamfilter, it can be restarted without having to reboot the EasyGate 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.

6.7.2. 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 6.22.



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 ***@domain.com**, an e-mail address must be inserted completely.

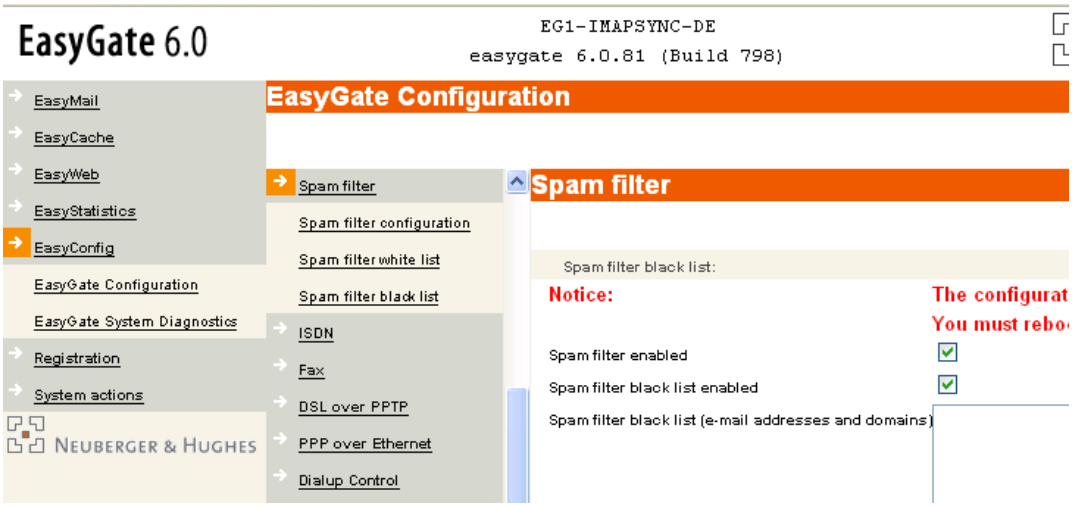
Restart spamfilter:

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

6.7.3. 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 6.23.



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.

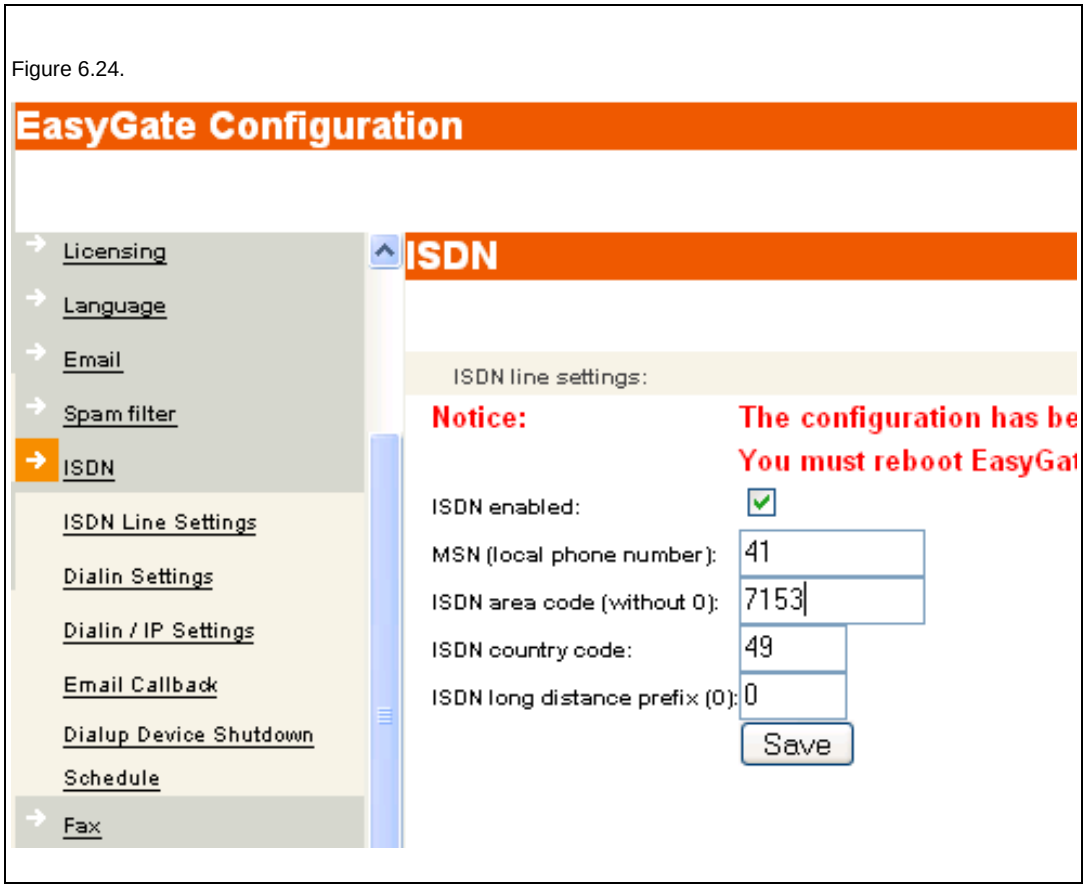
Caution:

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

6.8. ISDN

6.8.1. ISDN Line Settings

Figure 6.24.



ISDN enabled.

This setting activates the connection through the built in ISDN-adapter. (When you have an EasyGate with 2 network cards, but **without** an ISDN-card, this option should be disabled.)

Note:

ISDN is only for use in Europe.

MSN (local phone number).

Enter the MSN (see part II *preliminary information*) of EasyGate. There are two possibilities how the entry has to be:

1. **If there are multiple numbers assigned to your ISDN-connection: .**

   Example: 2003501, 2203502, 2203503
   Select one number which is reserved only for EasyGate.

   Attention:

   You have to enter the number **completely** in the MSN field

2. **If you have an ISDN-central.**

   If you have ISDN-central, you have got a telephone number for the central and you are able to allocate numbers within a specific area (at present ten).

   Example.

   Central: 220350-0
   Telephone numbers: 220350-20 until 220350-30

   Attention:

   In this case you have to enter **only** the direct dialing number of the connection to which EasyGate is connected.

Ask your responsible colleague for the MSN of the ISDN-junction to that EasyGate will be connected.

ISDN area code (without 0): .

Enter your area code without *0* (zero).

ISDN country code:

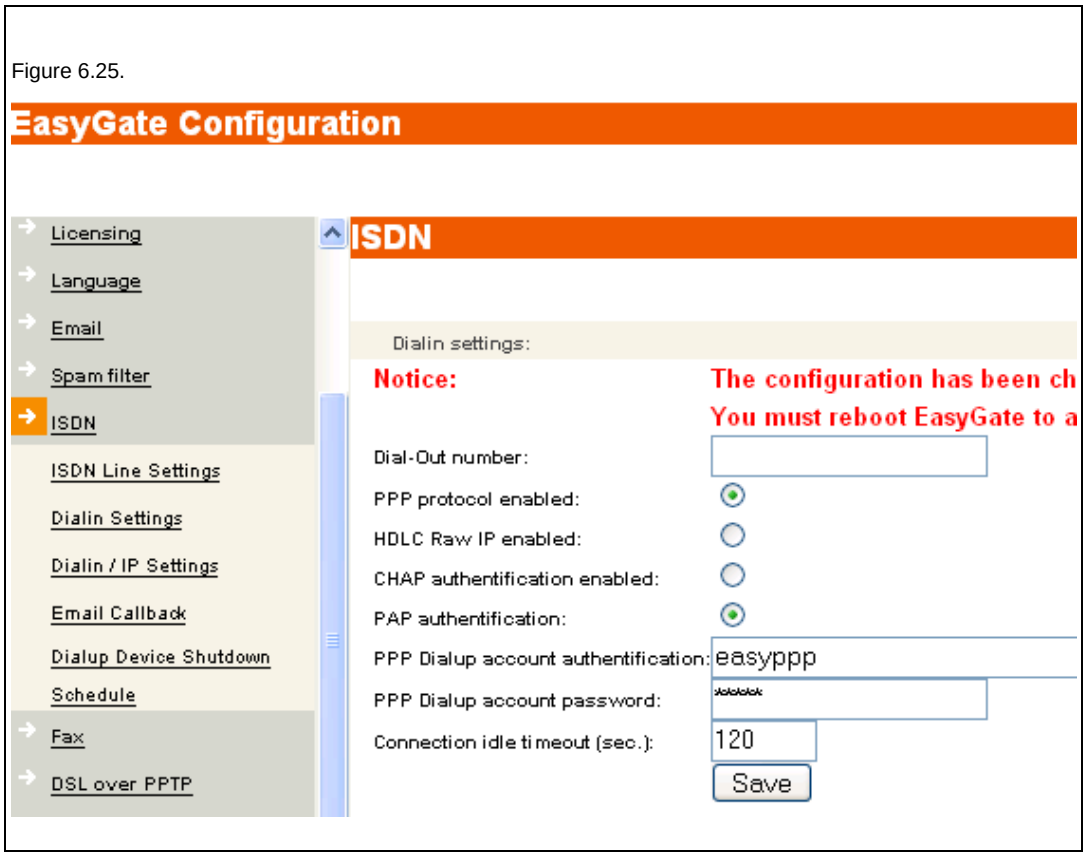
Enter the country code (e.g. for Germany: 49).

ISDN long distance prefix (0):

In Europe this normally is zero (0). In the United States and Canada, it is one (1).

6.8.2. Dialin Settings

Figure 6.25.



Dial-Out number.

Here you have to enter the number that has to be dialed in order to reach your provider

- often called PoP
- normally to local tariff

Attention:

Entry: prefix with 0 plus the subscriber's number

Example: 0711338540

1. **Select PPP / HDLC Raw IP.**

   Depending on your Provider you have to select one of these dialup methods. If you do not know which method you have to select ask your provider.

2. **Select CHAP / PAP authentication.**

   Depending on your provider you have to select one of these athentification methods. Your provider can provide you with the necessary information. CHAP is a safer method then PAP for authentification, however both methods are being used by multiple providers. T-Online for example uses PAP, UUNET in contrast uses CHAP.

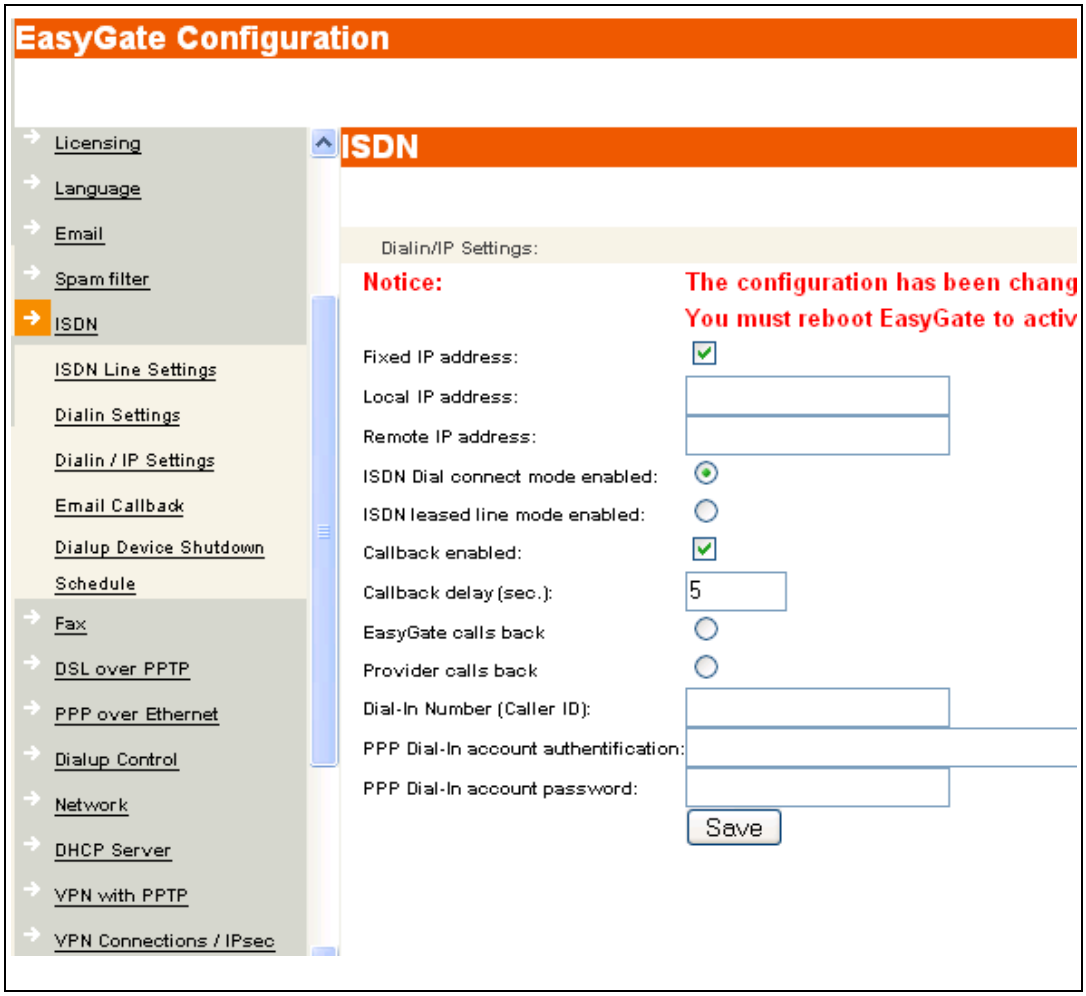
3. **If you have enabled the PPP protocol.**

   PPP Dialup account authentication:
   Enter the login-name which you have got from your provider.
   PPP Dialup account password:
   Enter the password that goes along with your login-name.

6.8.3. Dialin / IP Settings

The settings shown here are necessary if you have a dedicated line or a callback connection to your provider. Otherwise you should not change anything here.
You need a fixed IP address from your provider to be able to use this function.
If you have a fixed IP address you can open the setting fields by checking the box beside *Fixed IP address* and after that *Save*.

Figure 6.26.



Local IP address.

Enter the fixed IP address which you have received from your provider.

Beware:

This is a different IP address than the one that you have entered in *Internal Network*.

Remote IP Address.

Here you should enter the IP address of the router of your provider which needs to be called. You will get this address from your provider.

ISDN Dial-connect mode / leased line mode:

Select the kind of connection that you have to your provider.

1. **ISDN Dial-connect mode:**
   That is the so-called dialup connection. The connection will only be established when it is necessary.

2. **ISDN leased line mode:**
   That is a dedicated line to your provider.

Callback enabled.

You can activate/deactivate the callback function here. Make inquiries first with your provider,

whether he has activated this option for your account.

Callback delay.

When you have activated the callback function, you can indicate here, how long there has to be waited with the callback. This is measured from the point of time that the provider has given a signal. A sensible value is between 1 and 10 seconds.

Dial-in number (Caller ID).

The caller ID (normally the telephone number) is the number with that the provider logs on to EasyGate. The entry is necessary therewith EasyGate is able to recognise your provider.

Beware:

The number has to be entered in the format: *area code without preceding 0 plus subscriber's number*.

PPP Dial-in account authentification.

This is the name with that the provider logs on to EasyGate.

PPP Dial-in account password.

Enter the accompanying password.
The last two settings are only necessary if the PPP method is used.

6.8.4. Email Callback

This is where you can set the email callback, if your provider activates this service and it is not a dedicated line.
The number has to be entered in the format: *area code without preceding 0 plus subscriber's number*.

6.8.5. Dialup Device Shutdown Schedule

See Section 6.12

6.9. Faxserver

6.9.1. Functioning of the faxserver

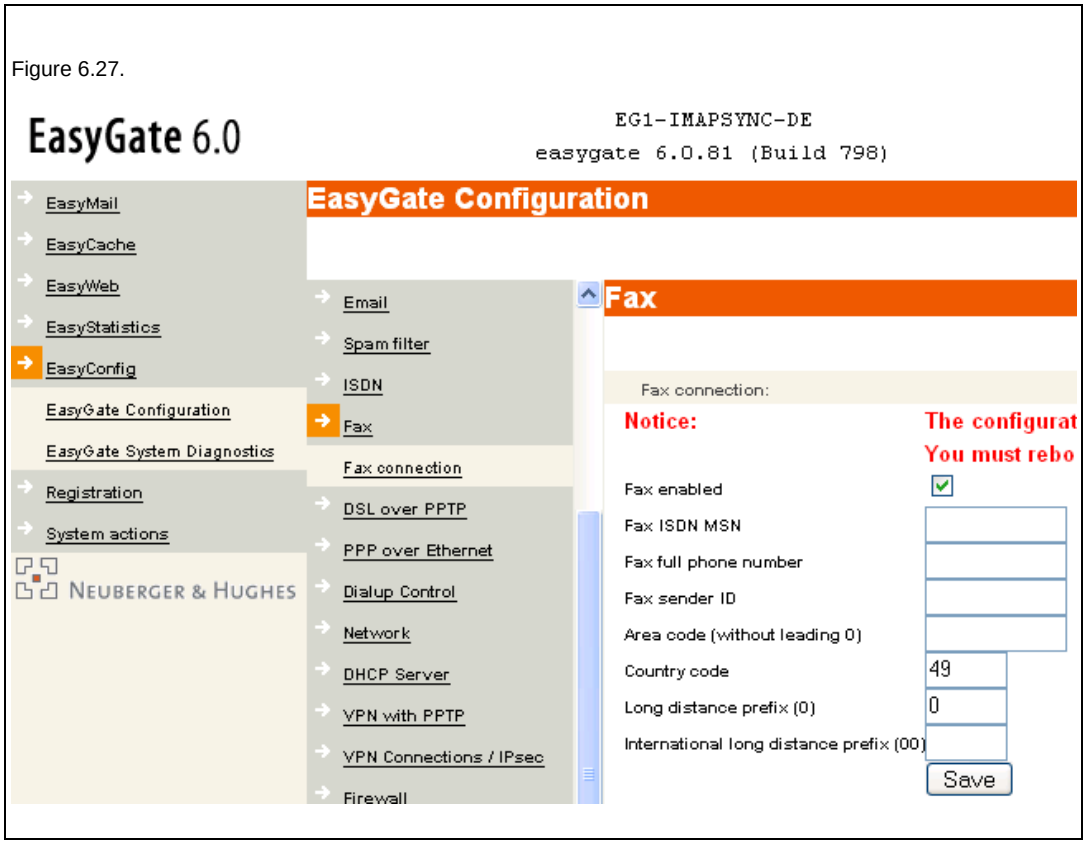
With the faxserver on EasyGate it is possible to send and receive faxes from every workstation within the network. This way, incoming faxes can easily and swiftly be sent to the recipient as an Adobe Acrobat PDF-file. To use the faxserver capabilities, the EasyGate server needs to contain a Sedlbauer ISDN faxmodem. For more information on adding this device to your system please contact your EasyGate 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 8.4

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

6.9.2. Configuring the faxserver

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

Figure 6.27.



Fax enabled:

Check this box to enable the faxserver.

Fax ISDN 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, EasyGate will accept the incoming connection.

Fax full phone 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.

Long distance prefix (0)::

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

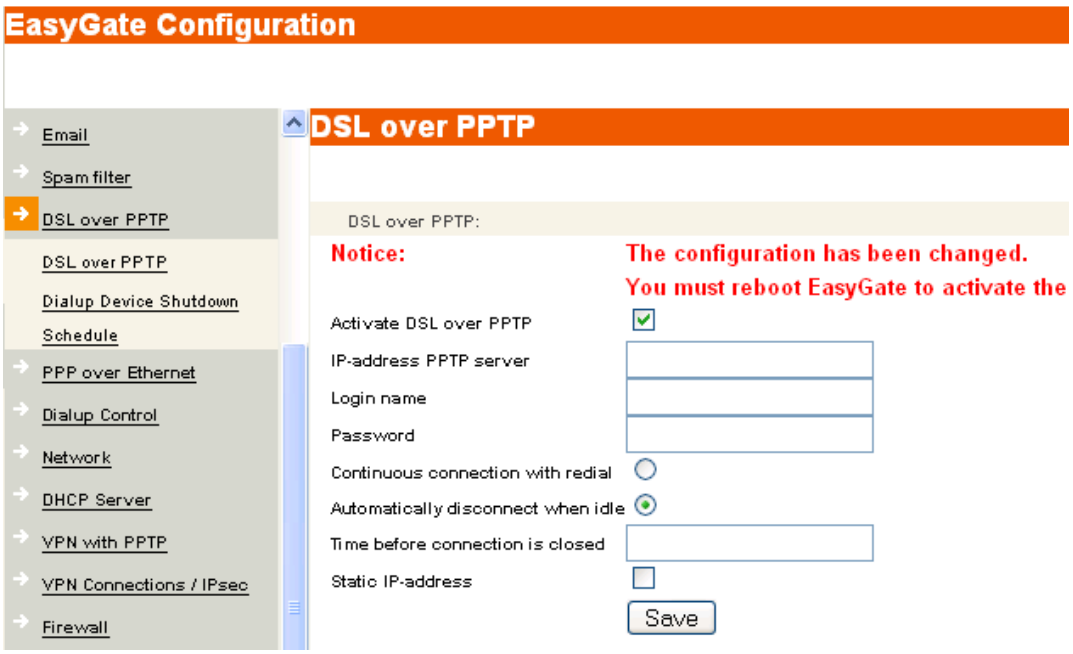
International long distance prefix:

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

6.10. DSL over PPTP

This option is only relevant if your DSL connection uses the PPTP technology. To make sure what technology your connection uses, please contact your internet access provider.

Figure 6.28.



Activate DSL over PPTP.

Check this box to activate DSL over PPTP.

IP-address PPTP server.

This is the IP address of your DSL modem. Read the documentation of your DSL modem for more information or ask your service provider.

Login name.

Enter your login name which has been sent to you by the provider.

Password.

Enter the accompanying password.

Continuous connection with redial.

Select this option if you have a “flat-rate” fee internet access. Flat-rate means that you pay a fixed amount to your provider every month but you do not have any other connectivity costs.

Warning

If this setting is activated your connection is established the whole time. If you do not have a flat-rate, this can cause high costs.

Automatically disconnect when idle.

Select this option if you want that the connection will be cancelled when there is no activity. That is sensible if you do not have a flat-rate.

Time before connection is closed.

Amount of seconds before the connection will be cancelled when there is no activity. (Only appears when “Automatically disconnect when idle” is enabled)

Static IP-address.

Activate this option only if you have got a fixed IP from your internet service Provider.

Local IP address.

Here you have to enter the fixed IP address that you have got from your provider. This IP is **NOT** the internal IP address of EasyGate in your network.

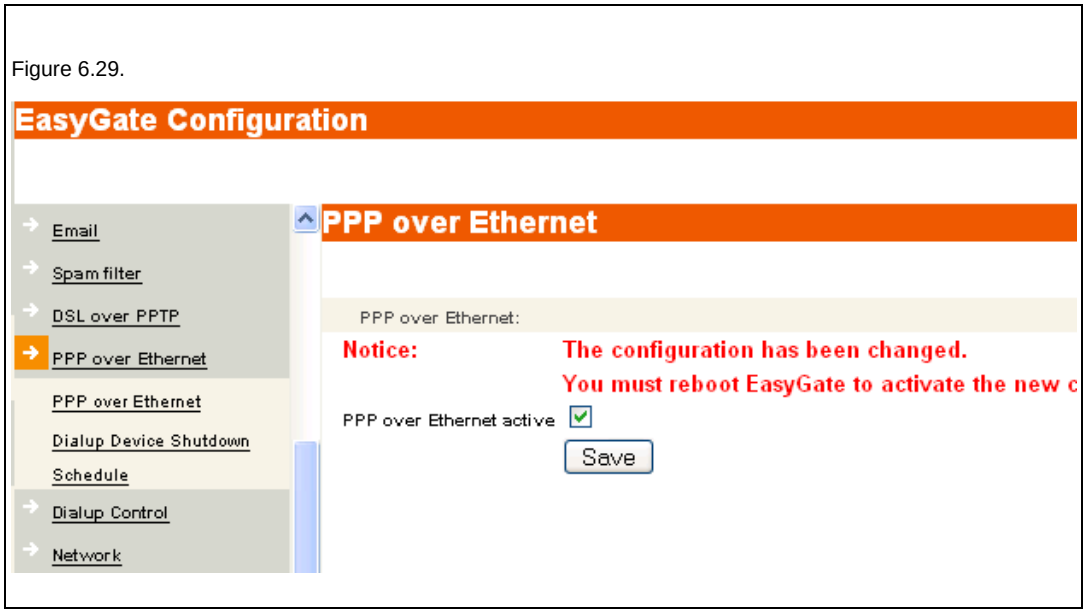
External IP address.

This is the IP address of the gateway of the provider. You will get this information from your provider. (This address might change over time, so if you notice that your IPSec connection is not available anymore, check if this address has changed.)

6.11. PPP over Ethernet

The PPPoE technology is standard in Germany. To make sure what technology your connection uses, please contact your internet access provider. The settings described below are only relevant when your DSL connection uses the PPPoE technology. This technology is used for example by T-Online for the ordinary DSL access. Some cable-providers use this technology too.

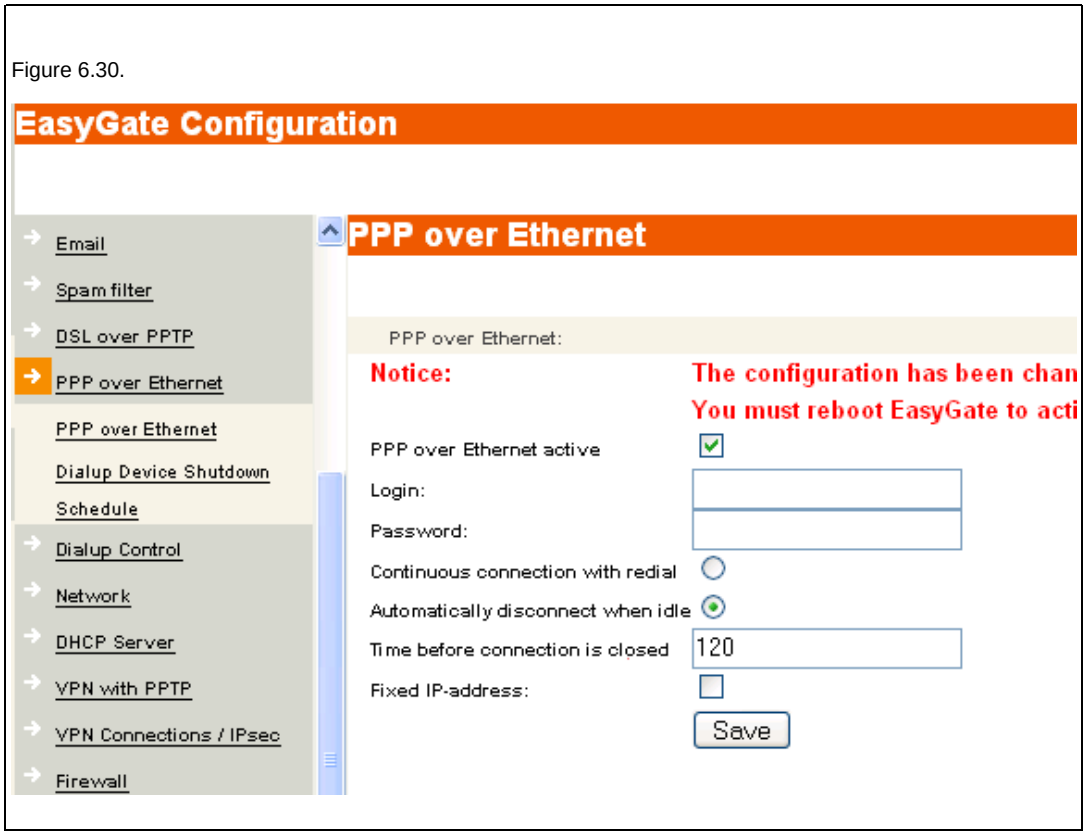
Figure 6.29.



PPP over Ethernet active.

Check this box to activate PPP over Ethernet on EasyGate.
Then press the *Save*-button. Figure 6.30 appears

Figure 6.30.



Login.

Fill in the login-name that you have received from your internet service provider. The login-name can be composed of three parts. You have to enter them in the correct order.

Password.

Fill in the accompanying password here.

Continuous connection with redial.

Select this option if you have a “flat-rate” fee internet access. Flat-rate means that you pay a fixed amount to your provider every month but you do not have any other connectivity costs.

Warning

If this setting is activated your connection is established the whole time. If you do not have a flat-rate, this can cause high costs.

Automatically disconnect when idle.

Select this option if you want that the connection will be cancelled when there is no activity. That is sensible if you do not have a flat-rate.

Time before connection is closed .

Amount of seconds before the connection will be cancelled when there is no activity. (Only appears when *Automatically disconnect when idle* is enabled)

Fixed IP address.

Select this option only if you have got a fixed IP address from your provider. The following two settings only appear when this option is activated.

Internet IP-address EasyGate.

Here you have to enter the fixed IP address that you have got from your internet service provider. **DO NOT** fill in the internal IP address of EasyGate here. The internal IP address is not the same.

Internet IP-address provider.

This is the IP-address of the gateway/receiver of the provider. (This address also might change over time, so if you notice that your IPSec connection is not available anymore, check if this address has changed.)

Advice:

Consider the Internet dialup break which you can configure in Section 6.12. EasyGate can not establish a connection during the blocked time.

6.12. Dialup Control

To access these features navigate to *EasyConfig - Dialup control*.

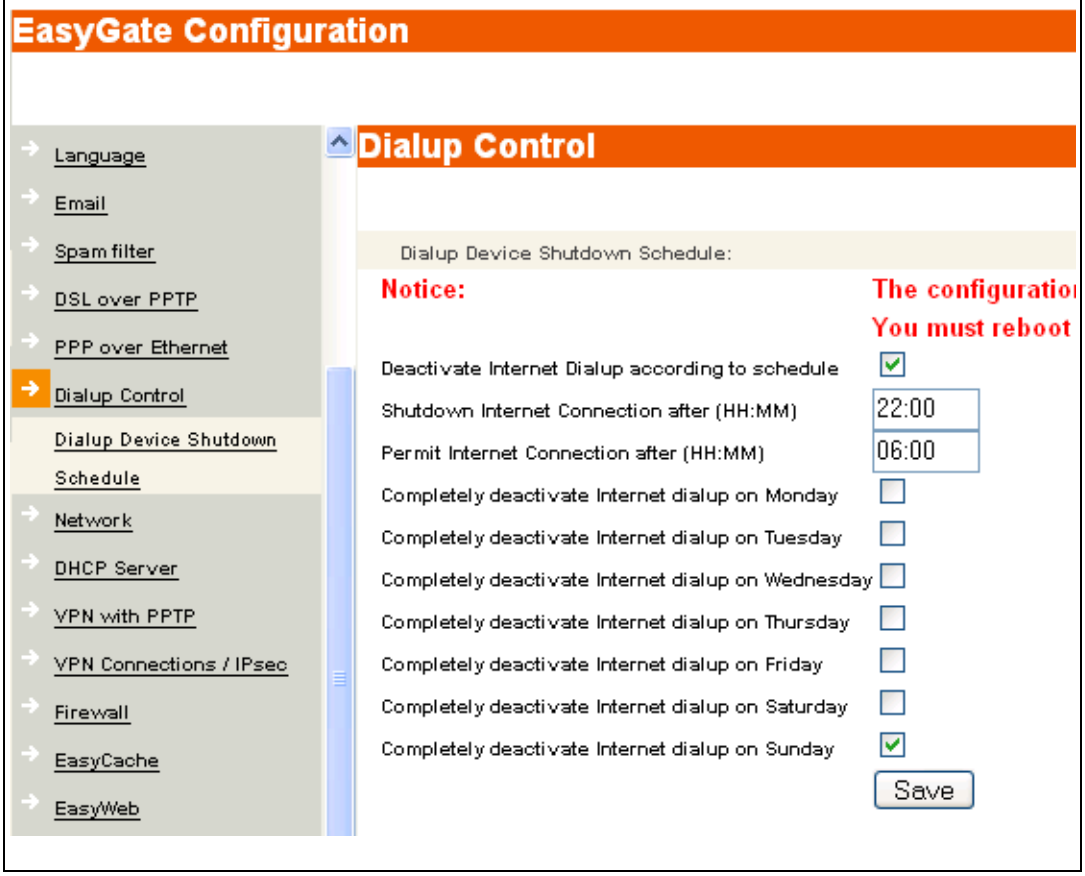
Dialup Device Shutdown Schedule.

With the dialup control, you can shutdown the internet connection for defined times and days.

Caution:

If you block a day or a special timeframe, nobody can access the internet during that period of time. There is also no mailtransfer during that time.

Figure 6.31.



Deactivate Internet Dialup according to schedule.

Check this box to deactivate Internet dialup of EasyGate according to schedule.

Shutdown Internet Connection after (HH:MM).

Fill in the daily time to shut down the internet connection (f.e. 20:00). After that time no internet access is possible until the point of time you enter in the following setting.

Permit Internet Connection after (HH:MM).

Fill in the daily time to start the internet connection (f.e. 07:00).

Completely deactivate Internet dialup on Monday-Sunday.

Check the box according to a day to block all access to the internet on that day (f.e. Sunday)

With the dialup control you are able to shut down the internet access completely.

6.13. Network

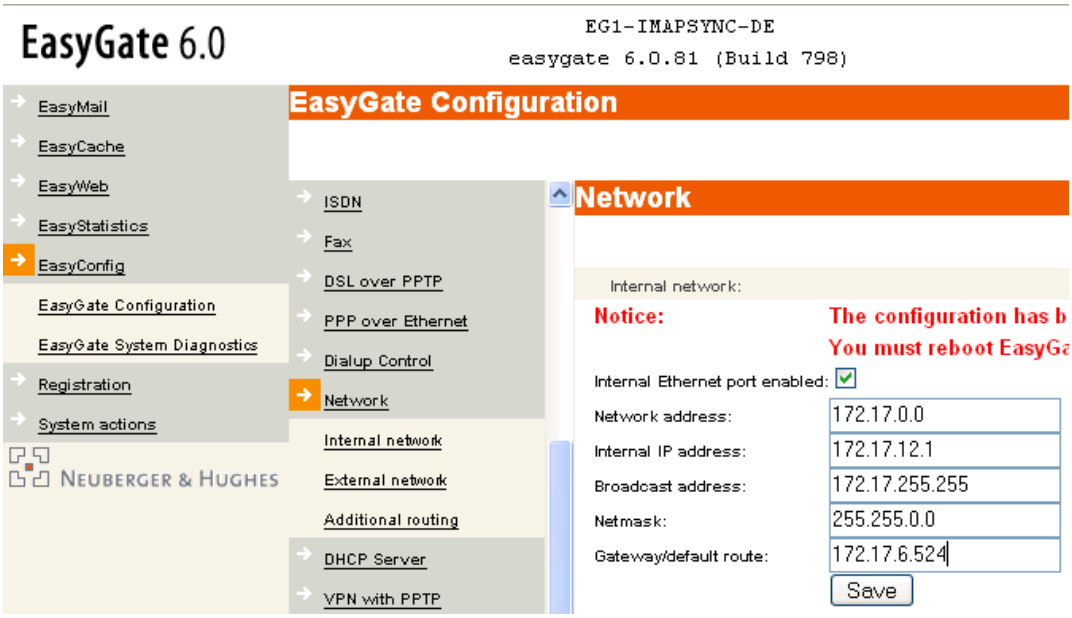
6.13.1. Internal network

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 EasyGate 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 6.32.



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 re-

maining A-class networks are reserved official IP-ranges.

Internal IP-address:

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

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.

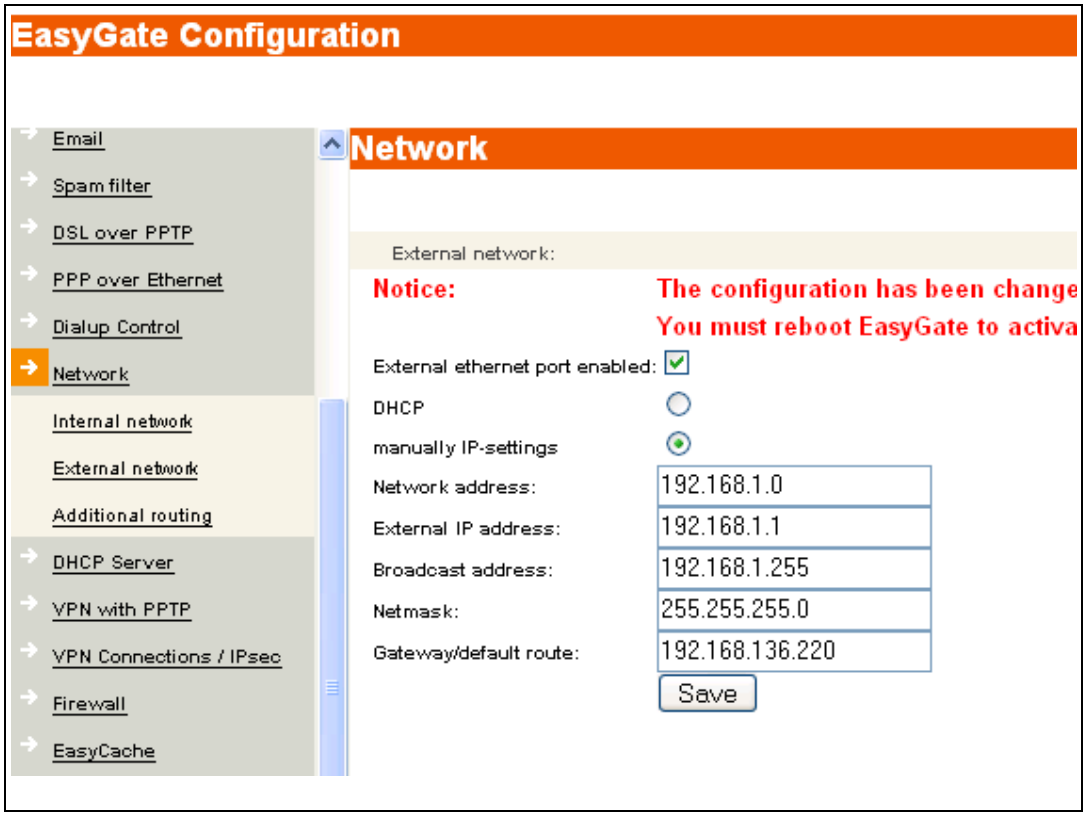
Caution:

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

6.13.2. External Network

Here you can enter the IP address of an external network. The connection to an external network is important in case that there is a cable modem or an alternate router that should be used for the connection to the internet. In this case normally the ISDN connection will not be used for accessing the Internet, so you can deactivate this option.
This setting will only function if you have an EasyGate with two network-adapters.
Only enter something if you know exactly that it has to be entered here!!! If an already existing router shall be used for the connection to the internet, activate the connection for the external network. In this case you have to enter the IP address of the external net.

Figure 6.33.



External ethernet port enabled.

This setting activates the connection of an external network / external router.

DHCP.

From here you can request an IP address for your EasyGate via an external DHCP-Server.

manually IP settings.

Here you configure the IP address of EasyGate for the external access.

Network address.

Enter the base-address of the external network.
Normally it ends with “0” (zero). (For example: 192.168.1.0)

External IP address.

Enter the external IP address of EasyGate here.

Broadcast address.

Enter the Broadcast address of the external network.

Netmask.

Here you have to enter the netmask of the external network.

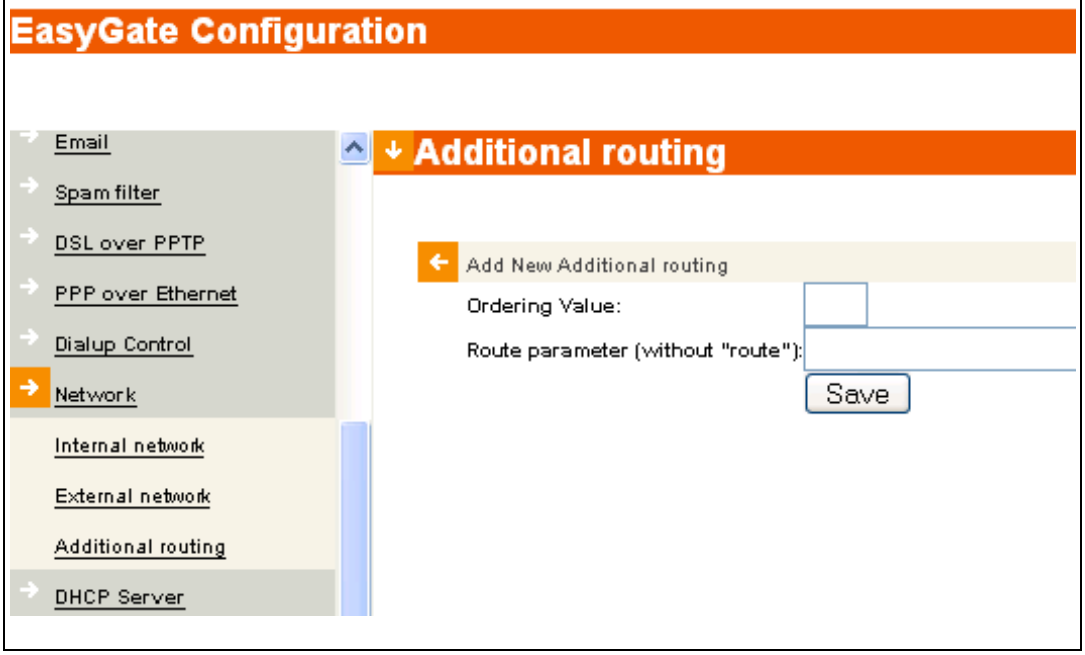
Gateway/default route.

If EasyGate is **NOT** used as Gateway you can enter the IP address of an alternative Gateway here.
So EasyGate will know which connection it has to select to reach the internet.
Otherwise this array will stay empty.

6.13.3. Additional Routing

This is where the extra routings can be entered.
These extra routings are only necessary when other networks have to be reached through EasyGate, because otherwise EasyGate will not identify the other network and so EasyGate will block it.
This is **not** necessary for VPN-connections that are established with EasyGates. This settings are only for the usage explained above.

Figure 6.34.



To enter an additional routing click on the arrow on the left side of the title bar. A new frame appears (see Figure 6.34). Enter ordinal position and route-parameter (without the command *route* at the beginning)

The syntax of the route-entry is the following:

add -net *IP address target network* netmask *netmask of target network* gw *IP address gateway to this network*

For example:

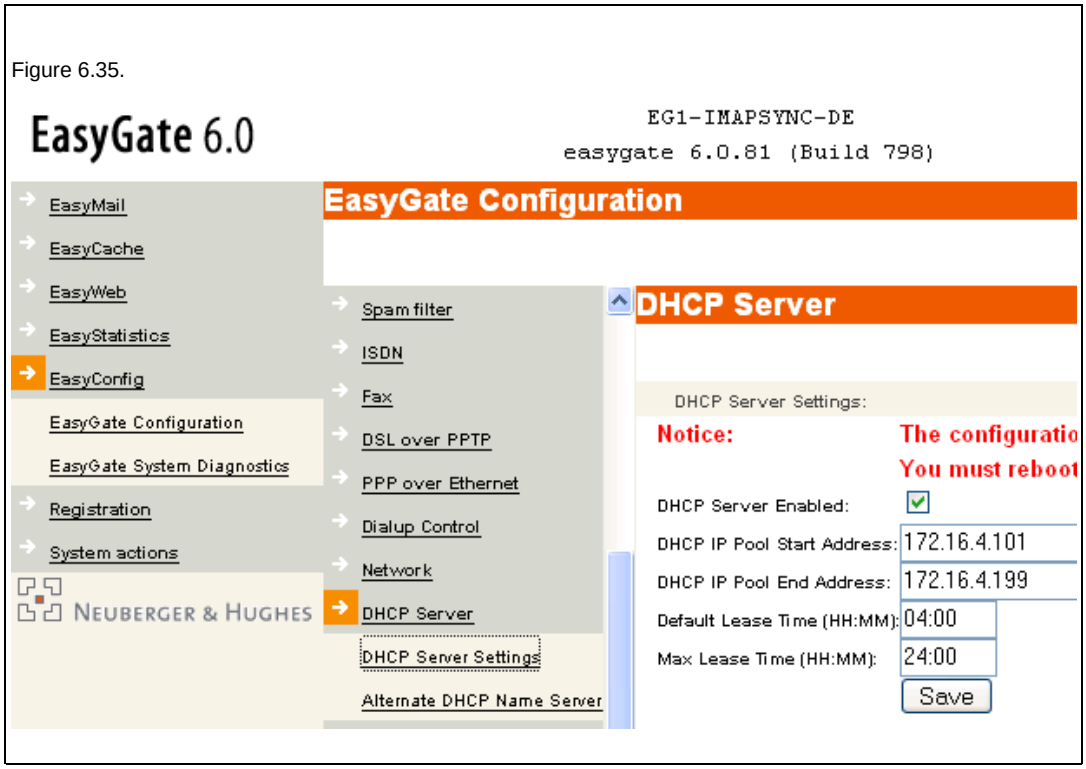
To reach the network 172.31.1.0 with netmask 255.255.255.0 through a router with IP-address 172.16.6.200 you enter the following (presuming the EasyGate is on the network 172.16.0.0 with netmask 255.255.0.0)
add -net 172.31.1.0 netmask 255.255.255.0 gw 172.16.6.200
Remember that the external routers and workstations also have to be configured for this situation. (That means the routers that make a connection with the EasyGate network from an external network must have EasyGate configured as the so-called *default route*.)

6.14. DHCP server

6.14.1. DHCP Server settings

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

Figure 6.35.



DHCP Server Enabled:

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 EasyGate 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 EasyGate 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 un-

altered. 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.

6.14.2. Alternate DHCP Name server

In general these settings do not need to be altered. If EasyGate 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.

6.15. VPN with PPTP

Hint

If you have bought the EasyGate Office version, these functions are not available and the menu points *PPTP* and *IPSec* do not appear.

A Virtual Private Network (VPN) is an encrypted connection with other computers and networks established over the internet instead of a dedicated line. VPNs use a so-called “tunnelling” system to send and receive data packages over the internet. EasyGate supports the PPTP protocol (Point-to-Point-Tunnelling- protocol) of Microsoft ©, a client-server VPN protocol available on all newer MS Windows versions. With older versions than Windows 95, it might be necessary to update the Microsoft networking drivers (at least to 1.3). With the PPTP-protocol, you can access Windows Networking (SMB) shares over the Internet in a secure fashion, as if your computer were actually a part of the local area network.

6.15.1. Configuration of EasyGate

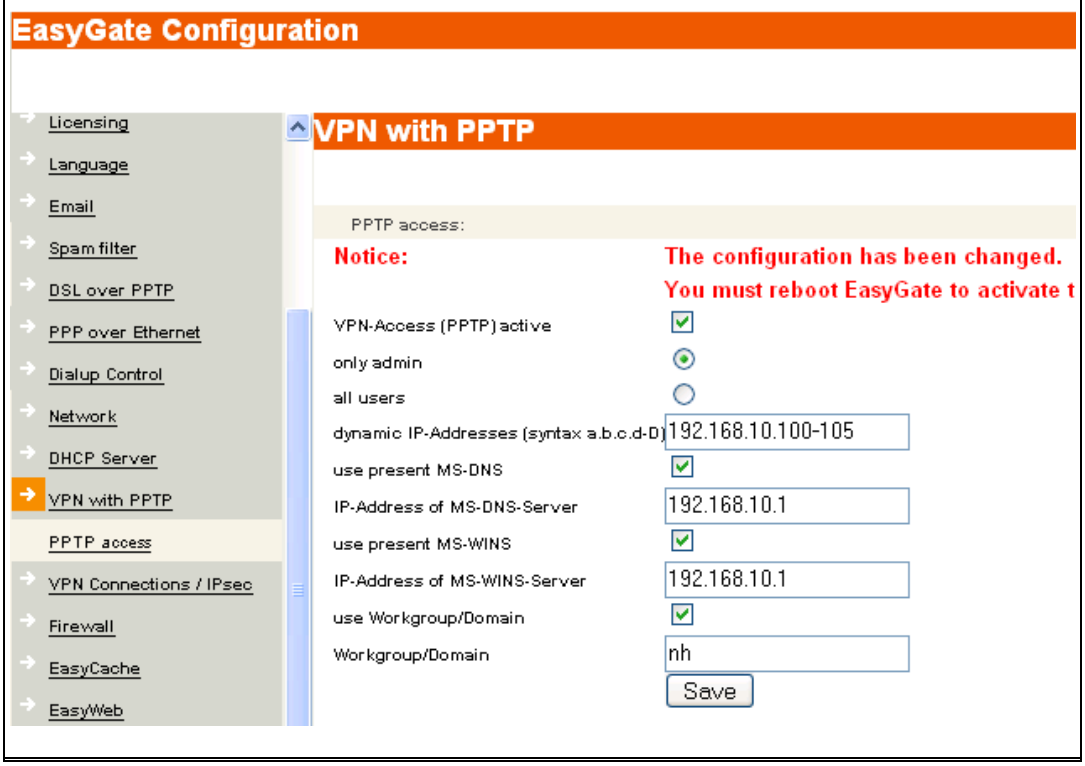
To open the page with the PPTP configuration options click on *VPN with PPTP* and then click on *PPTP access* in the EasyConfig menu.

The current EasyGate version provides two PPTP access configurations:

1. only admin:
   only the admin account will be allowed access to the LAN via PPTP

2. all users:
   all active accounts on the EasyGate are given PPTP access privilege

Figure 6.36.



Dynamic IP addresses.

This is where the number of simultaneous PPTP connections can be configured.
Simply enter an IP address range corresponding to the number of simultaneous PPTP connections you wish to allow. The example (above) allows a range of six addresses, from 210 to 215, inclusive. The syntax of this field must correspond to the example given above.

Attention:

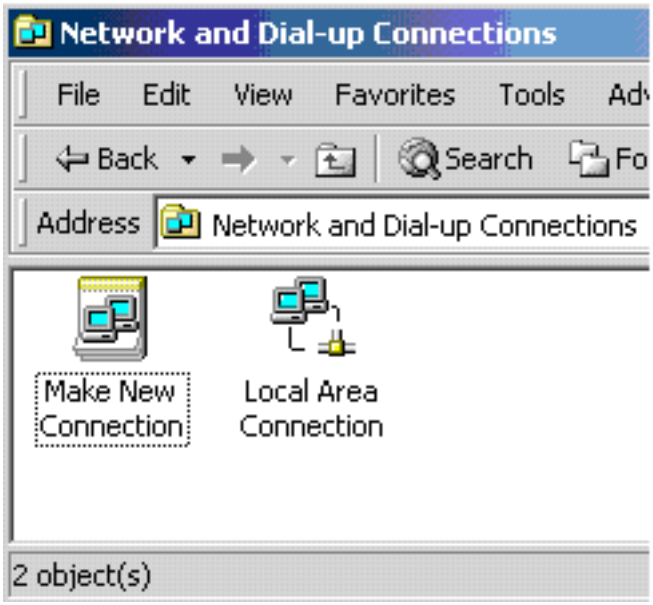
The IP range being used for PPTP must not overlap with the range being used by the DHCP server on EasyGate!

Use present MS-DNS	Here you can enter the IP address of an existing MS-DNS server. This is **not** absolutely necessary for VPN functionality.
Use present MS-WINS	Here you can enter the IP address of an existing MS-WINS server. This is **not** absolutely necessary for VPN functionality.
Use Workgroup/ Domain	Here you can enter an existing MS workgroup or domain name. This is **absolutely** necessary for VPN functionality.

6.15.2. Configuration of the Windows client PC

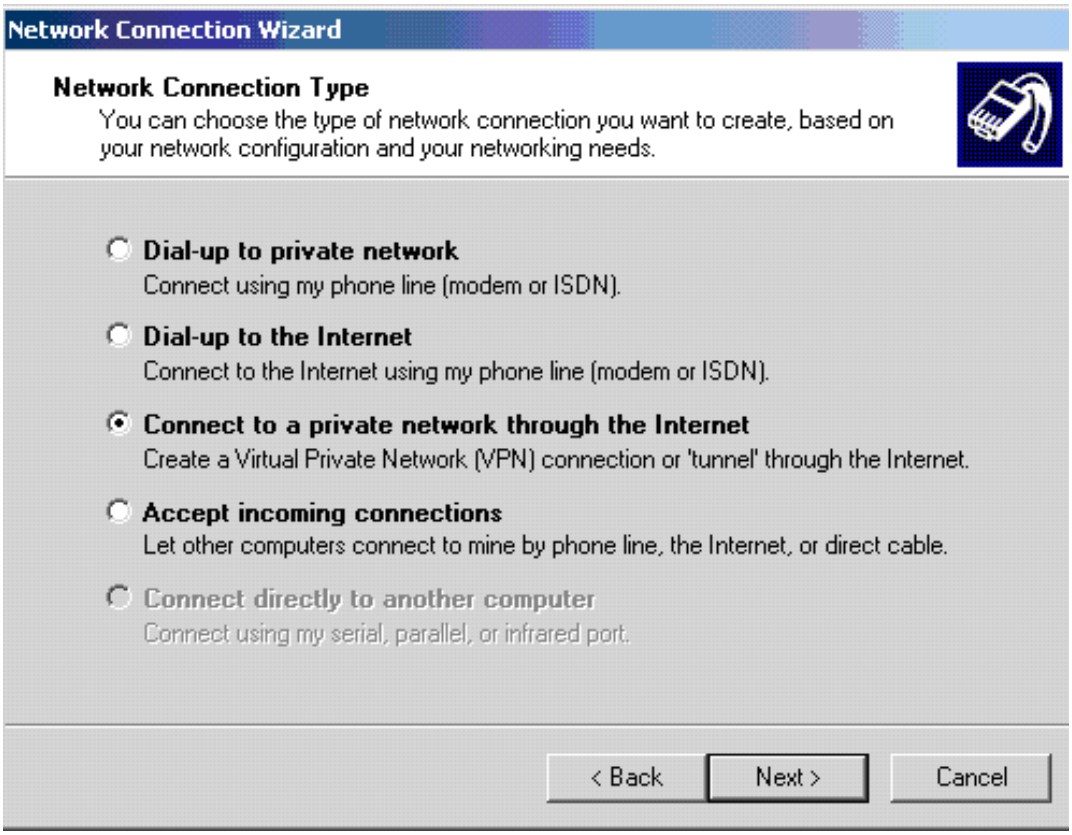
Click on *Start*. Then select *settings* and after that *control panel*. Then select *Network and Dial-up Connections* and create a new connection by a double click on the symbol.

Figure 6.37.



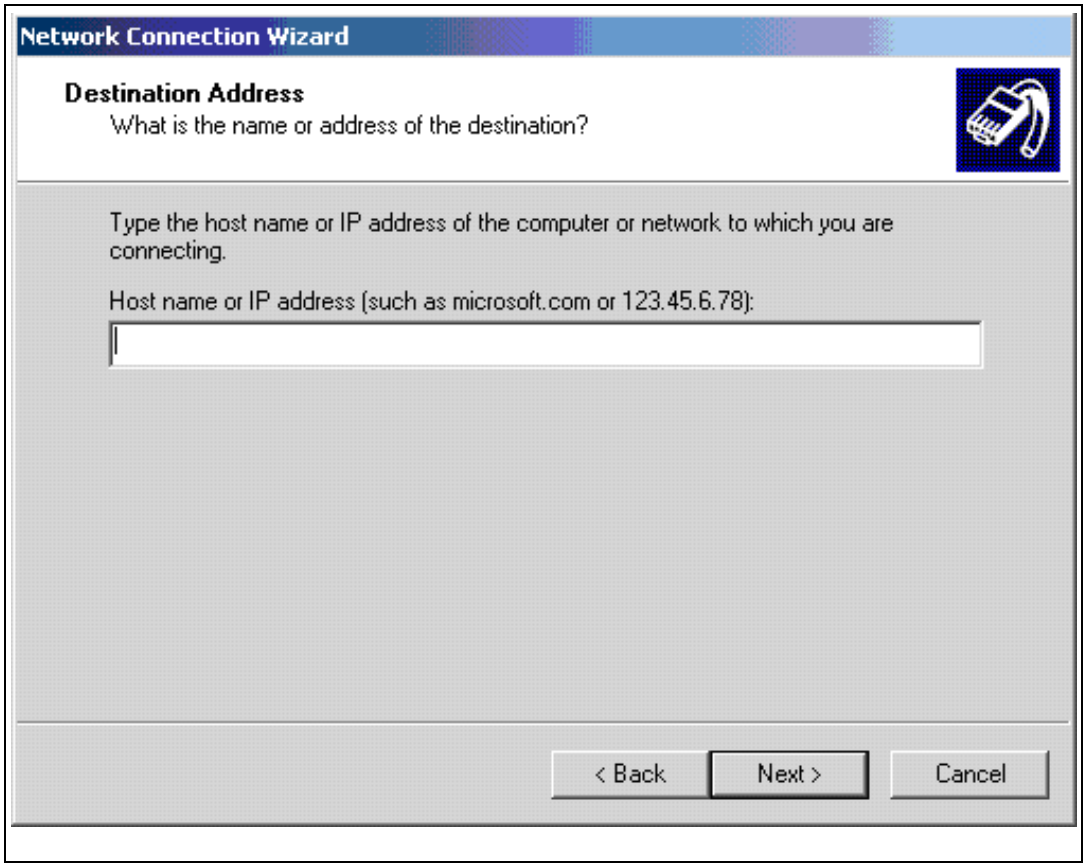
Hereby you create a new connection.

Figure 6.38.



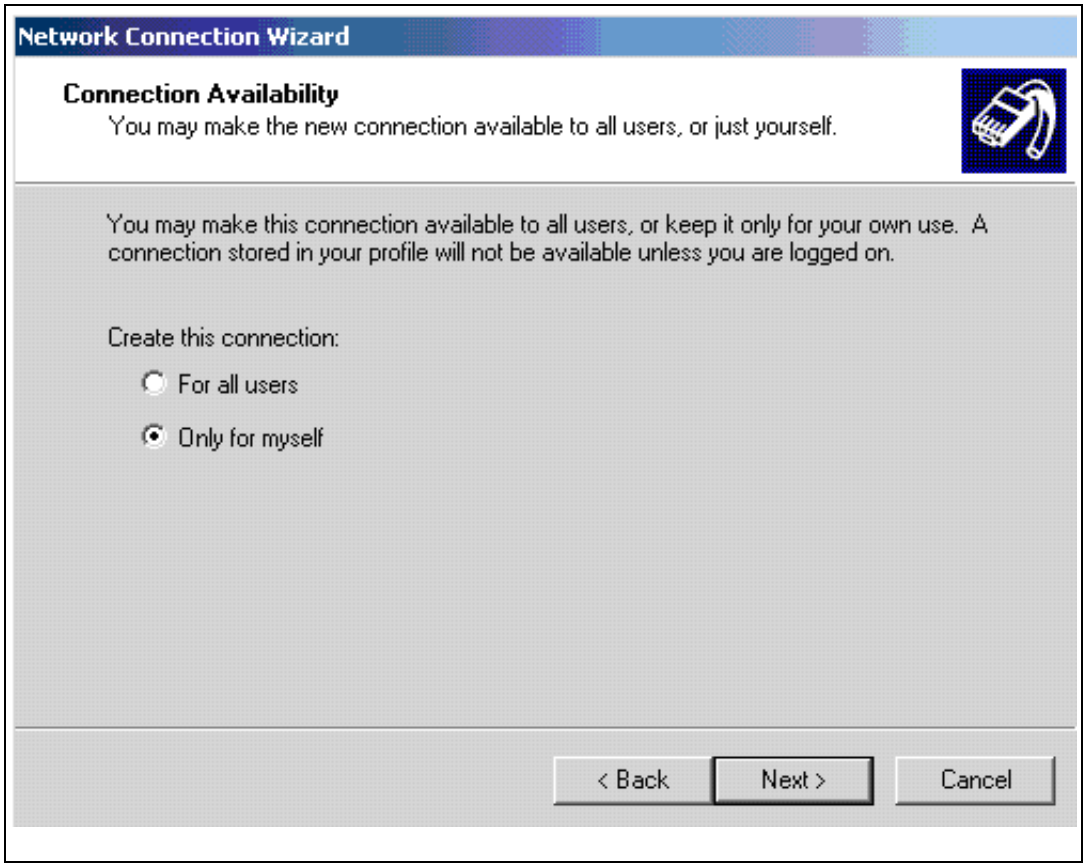
Here you have to select *Connect to a private network through the Internet*.

Figure 6.39.



Here you can either enter the fixed IP address or the host name of EasyGate which you have got from your provider.

Figure 6.40.



Here you are able to allow the connection for all users or only for you as Administartor.

Figure 6.41.

Enter a suitable name for the connection and click on *Finish*.
Now the configuration is complete. With a double click on the connection you are able to connect with EasyGate.

Figure 6.42.

Because of security reasons it is not recommended to save the password. Do not activate this option.

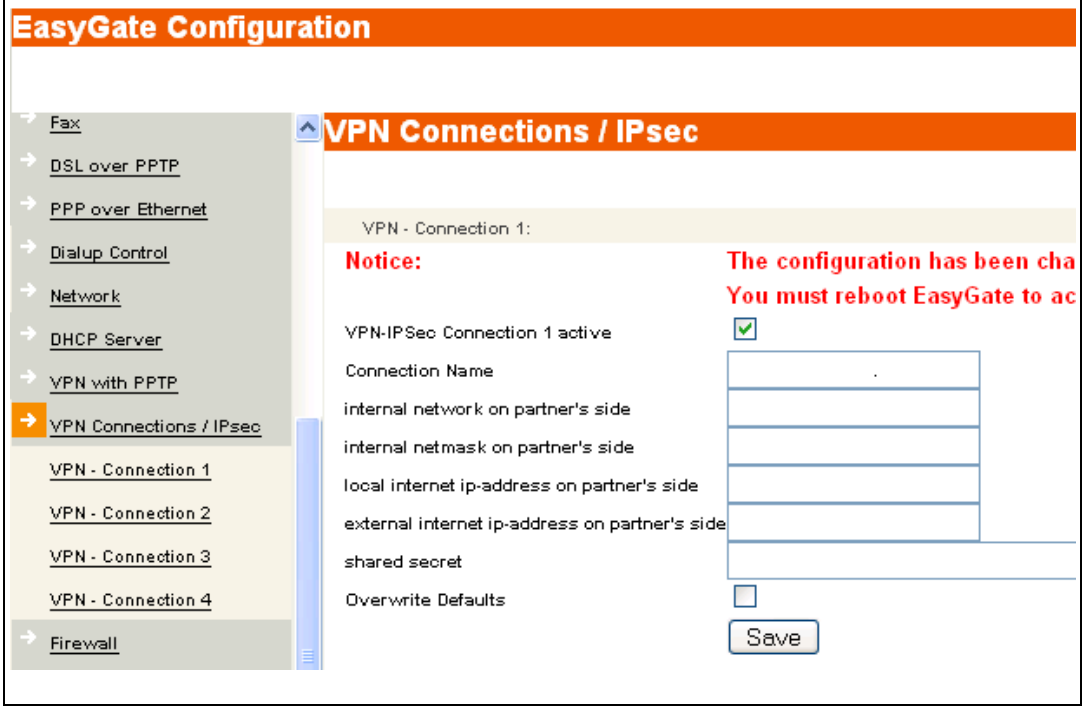
6.16. VPN Connections / IPsec

Attention

If you have got the version “EasyGate office”, these functions are not available and the menu points „PPTP“ and „IPSec“ do not appear.

A Virtual Private Network (VPN) is an encrypted connection with other computers and networks established over the internet instead of a dedicated line. VPNs use a so-called “tunnelling” system to send and receive data packages over the internet.
EasyGate implements the open IPSec (Internet Protocol Security) standard, which is the basis of all server-to-server VPN-connections. This enables you to set up a secure connection between two EasyGates located in geographically unique locations, as long as the two systems have fix IP addresses (e.g. between two company locations).

Figure 6.43.



6.16.1. Configuration

Select *VPN-Connection 1* to create a new VPN connection. Maximum there are 4 VPN connections with EasyGate. It is very important to be careful when you enter IP and network information.
Setting up an IPSec connection between two EasyGates is conceptually the same as establishing a WAN (Wide Area Network) connection between two LANs by using a pair of routers. Therefore, the range of IP addresses used by each site must be different. In many cases the address range at one of the sites will need to be changed before a VPN session can be established. The VPN connection needs to be configured at both sites. On each site you have to make VPN settings, which means that you set-up a connection to the network of the other site.

Connection name.

Here you have to set a sensible name for the VPN connection.

Tip:

We recommend to use the same name for one VPN connection at both sites.

Example: *Portland-Plochingen VPN connection*

Internal network on partner's side.

Here you have to enter the base-address of the network on the other site.

Internal netmask on partner's side.

Here you have to enter the netmask of the network on the other site.

Local internet IP address on partner's side.

The static Internet IP address of the VPN server (resp. EasyGate) on the other site. (It is the local fixed IP address that you have got from your provider.)

External internet IP address on partner's side.

The remote IP address on the other site. It is the IP address of the provider (i.e. the gateway) at on the other site.

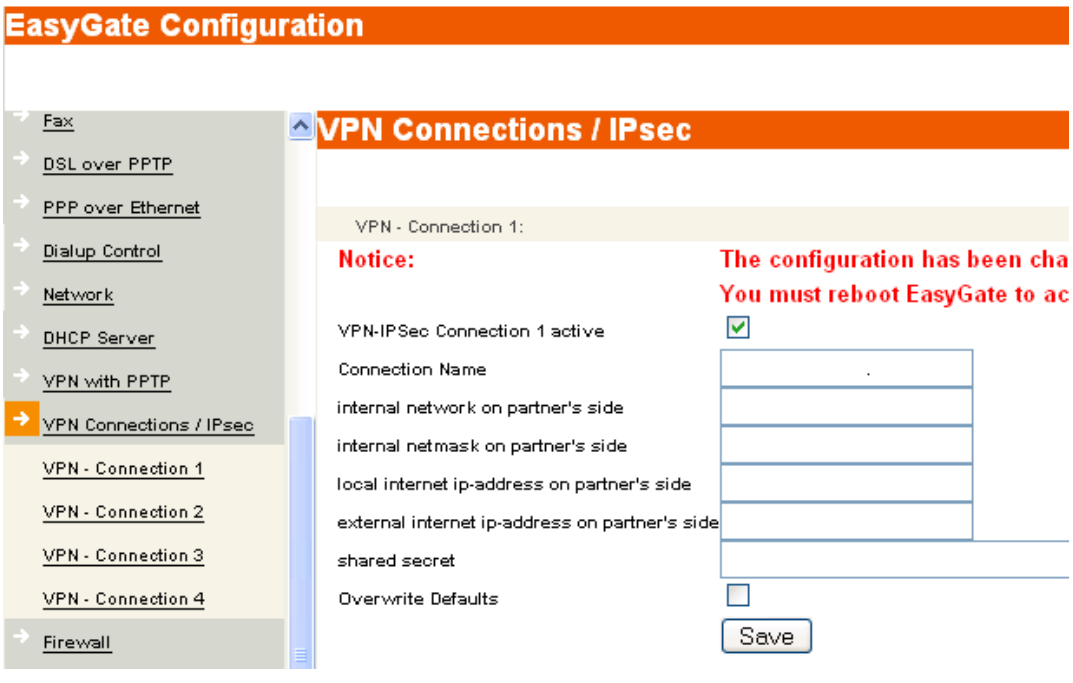
Shared secret.

This is a character string key that has to be known at both ends of the connection. Use a string of at least 80 characters (use numbers, symbols, and both upper- and lowercase). Do not use logical names and words. The easiest way to generate the shared secret is to press 80 keys at random (use the Shift-key every now and then) and copy-paste this string into the appropriate field.

6.16.2. Authentication

The protocol that EasyGate uses to establish connections between VPN gateways uses a kind of authentication. That means that the VPN server has to know to which server it is talking to before it can create a secure connection.

Figure 6.44.



Overwrite defaults.

Check this box to further customize the VPN settings. These additional fields do not show up until you have clicked the *Save*-button and the page has refreshed. Usually these extra settings are not needed. Do not change anything unless you know exactly what to do.

Authentification ESP encrypted (default).

This implies that the authentication is done according to the ESP encryption. (The encryption is done before the authentication.) This is the default setting.

Authentification AH Protocol.

Click here to let the authentication be done according to the AH protocol.

Keylife (default: 8h).

How long a particular set of SAs (keys) should be used, from successful negotiation to expiry; acceptable values are an integer optionally followed by s (a time in seconds) or a decimal number followed by m, h, or d (a time in minutes, hours, or days respectively) (default 8.0h, maximum 24h).

Rekey margin (default: 9m).

How long, before key expiration, the system should start to negotiate the new key; acceptable values as for keylife (default 9m).

Rekey Fuzz (default: 100%).

The maximum percentage by which rekey margin should be randomly increased to randomize rekeying intervals (important for hosts with many connections); acceptable values are an integer, which may exceed 100, followed by a “%”. The default is set according to the IPSec pluto (8) protocol, currently 100%. The value of rekey margin, after this random increase, must not exceed keylife. The value 0% will suppress time randomization.

Max. keying attempts (default: 3) 0=never give up.

This is the maximum number of attempts that is to be made, while trying to make or replace a connection, before quitting.

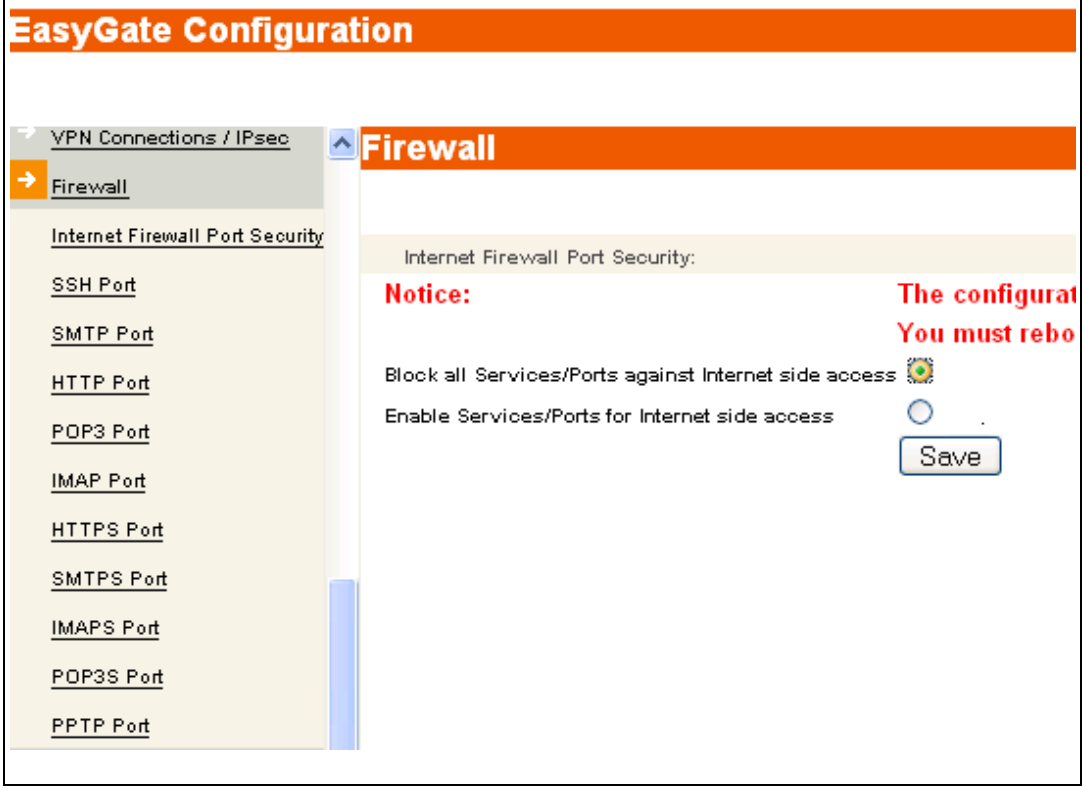
Important note:

The connection settings of a VPN connection must be configured simultaneously on both sides of the connection. Otherwise, at boot time, IPSec will make twenty 40-second attempts to establish the connection (this is approximately 12 minutes) before giving up and continuing in the boot process. If this behavior occurs, it means that your EasyGate is configured absolutely correct; this is simply the default behavior of the IPSec service.

6.17. Firewall

The firewall protects you against external access to your data.
The integrated firewall blocks the access from the internet to the internal LAN. All TCP/IP ports will be blocked. This way nobody can access services running on EasyGate or on computers behind the firewall.
For better use of your EasyGate you may open some ports to allow the access to internal services. In that case you have to take care that the open services work in a secure way. This is typically done by installing always the latest version of the service and all related security fixes.
By default, all ports are blocked by the firewall.

Figure 6.45.



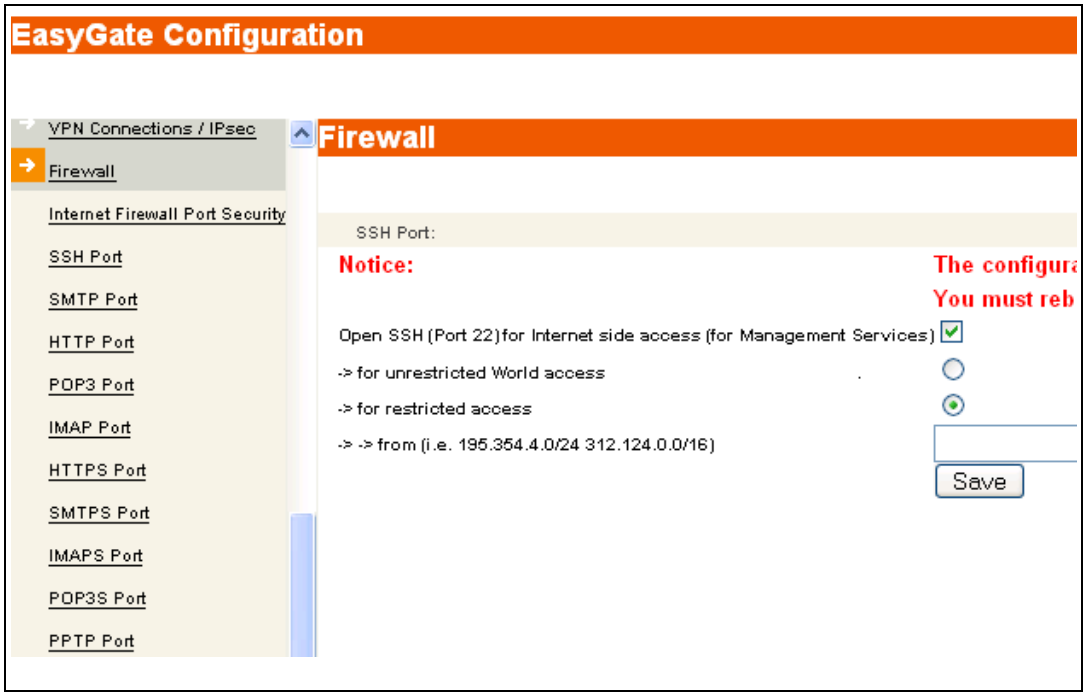
Block all Services/Ports against Internet side access.

When this option is activated every access from the internet to your LAN is blocked.

Enable Services/Ports for Internet side access.

When you activate this button and press “save”, you are able to open the firewall for some ports with services behind the ports.

Figure 6.46.



SSH Port.

By activating the checkbox you open port 22 for SSH (secure shell) access over the internet. You either can allow everybody to use this port, or you restrict the access to one or more IP addresses.

Important:

The SSH port has to be open, if you want any kind of external help from the N&H Network Operating Center or any other Service Provider. SSH itself is a secure service which uses encryption and password authentication to block use without permission.

SMTP Port.

By activating the checkbox you open port 25 for SMTP (simple mail transfer protocol) access over the internet. You either can allow everybody to use this port, or you restrict the access to one or more IP addresses.

Important:

The SMTP port should stay closed. Open it only , if you have a fixed IP and your Provider sends you mail by SMTP. In that case the mail relay from the outside to outside addresses is blocked anyway. This prevents that other people use your EasyGate for SPAM mail.

HTTP Port.

By activating the checkbox you open port 80 for HTTP access over the internet. You either can allow everybody to use this port, or you restrict the access to one or more IP addresses.

Important:

This port has to be open if you host your own website on EasyGate and want other people to access it.

POP3 Port.

By activating the checkbox you open port 110 for POP3 access over the internet. You either can al-

low everybody to use this port, or you restrict the access to one or more IP addresses.

Important:

The POP3 port should stay closed. You only need to open it if you want to check mails from a notebook for example over the internet. Opening this port is a security risk. It is more secure to make a PPTP tunnel connection over the internet to your internal LAN and then get the mails via internal POP3.

IMAP Port.

By activating the checkbox you open port 143 for IMAP access over the internet. You either can allow everybody to use this port, or you restrict the access to one or more IP addresses.

Important:

The IMAP port should stay closed. You only need to open it if you want to check mails from for example a notebook over the internet. Opening this port is a security risk. It is more secure to make a PPTP tunnel connection over the internet to your internal LAN and then get the mails via internal IMAP..

HTTPS Port.

By activating the checkbox you open port 443 for HTTPS access over the internet. You either can allow everybody to use this port, or you restrict the access to one or more IP addresses.

Important:

The HTTPS port has to be open, if you want any kind of external help from the N&H Network Operating Center or any other Service Provider. HTTPS itself uses encryption and password authentication to block use without permission.

SMTPS Port.

By activating the checkbox you open port 465 for SMTPS access over the internet. You either can allow everybody to use this port, or you restrict the access to one or more IP addresses.

Important:

The SMTPS port has to be open, if you want any kind of external help from the N&H Network Operating Center or any other Service Provider. SMTPS itself uses encryption to block use without permission.

IMAPS Port.

By activating the checkbox you open port 993 for IMAPS access over the internet. You either can allow everybody to use this port, or you restrict the access to one or more IP addresses.

Important:

The IMAPS port has to be open, if you want any kind of external help from the N&H Network Operating Center or any other Service Provider. IMAPS itself uses encryption to block use without permission.

POP3S Port.

By activating the checkbox you open port 995 for POP3S access over the internet. You either can allow everybody to use this port, or you restrict the access to one or more IP addresses.

Important:

The POP3S port has to be open, if you want any kind of external help from the N&H Network Operating Center or any other Service Provider. POP3S itself uses encryption to block use without permission.

PPTP Port.

By activating the checkbox you open port 1723 for PPTP access over the internet. You either can allow everybody to use this port, or you restrict the access to one or more IP addresses.

Important:

The PPTP port has to be open, if you want to access EasyGate from a PC or notebook over the internet over PPTP. See also the chapter about PPTP connections.

6.18. EasyCache

There are several methods available that enable the administrator to restrict or block internet access. This can be accomplished based on time restriction (employees are allowed to use to internet for up to a certain amount hours/minutes) and/or based on the characteristics of websites. In the table below the possible configurations are displayed and explained.

Caution:

In order to use the extensive functions of the content filter one needs to have an EasyGate Blacklist subscription. Please contact your EasyGate supplier for more information.

Status Authentication	Status Content Filter	Consequences for the users
Authentication OFF	Content Filter OFF	Everyone can browse the web and use Internet services (telnet, ftp, ping, etc.) without restrictions
Authentication ON	Content Filter OFF	Internet access (browsing and other services) is only possible when users are logged on / authenticated
Authentication OFF	Content Filter ON	When visiting webpages through the proxy the content filter is used. Other Internet services (telnet, ftp, ping, etc.) are accessible to all users
Authentication ON	Content Filter ON	When users browse the internet through the proxy, the content filter is applicable. Other services (telnet, ftp, ping, etc.) are only possible when users are logged on / authenticated. **Beware:** the log-on system is not applicable for browsing

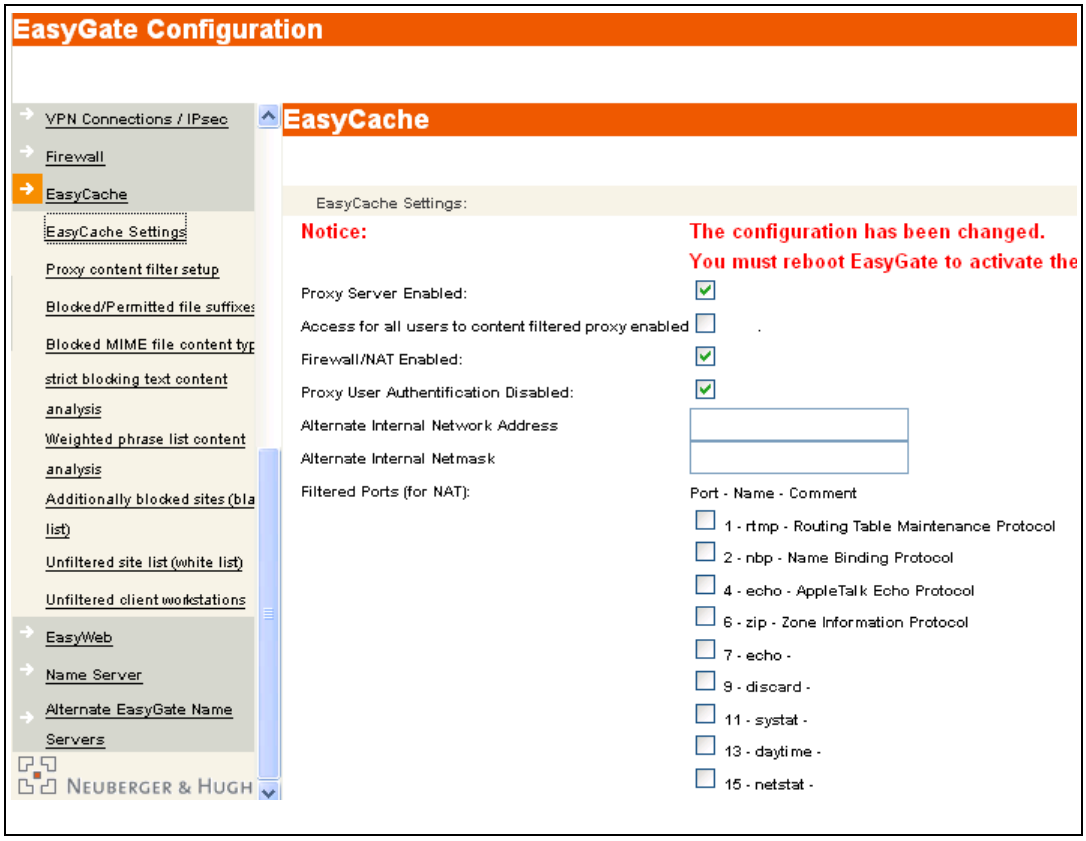
Tip:

Within the EasyCache settings port 80 can be blocked to force workstations to browse the internet through the proxyserver. Within the content filter IP addresses can be entered to which no filters will be applied.

6.18.1. EasyCache Settings

Here the EasyCache function can be configured.

Figure 6.47.



Proxy Server Enabled.

This is where the proxy-server is activated. When deactivated it is no longer possible to connect to webpages through the proxy server. In general the proxy server should be activated.

Access for all users to content filtered proxy enabled.

Here the content filter can be (de)activated. When the filter is disabled, user can visit websites without any content restrictions.

Firewall/NAT enabled.

Here the firewall can be (de)activated. Make sure that the firewall is always activated. If not, your network is no longer protected against network attacks from outside.

Proxy User Authentication Disabled.

This is where you can (de)activate the Internet access log-on procedure. The EasyCache settings for controlled Internet access in EasyGate are only effective once user authentication is activated here.

Alternate Internal Network Address / Netmask.

These settings are only relevant in very special situations.
If there is a class C network set up in the *Internal network* section, then here you can enter an above-lying class B network. This could be necessary in case of a WAN. Do not forget to fill in the netmask as well.

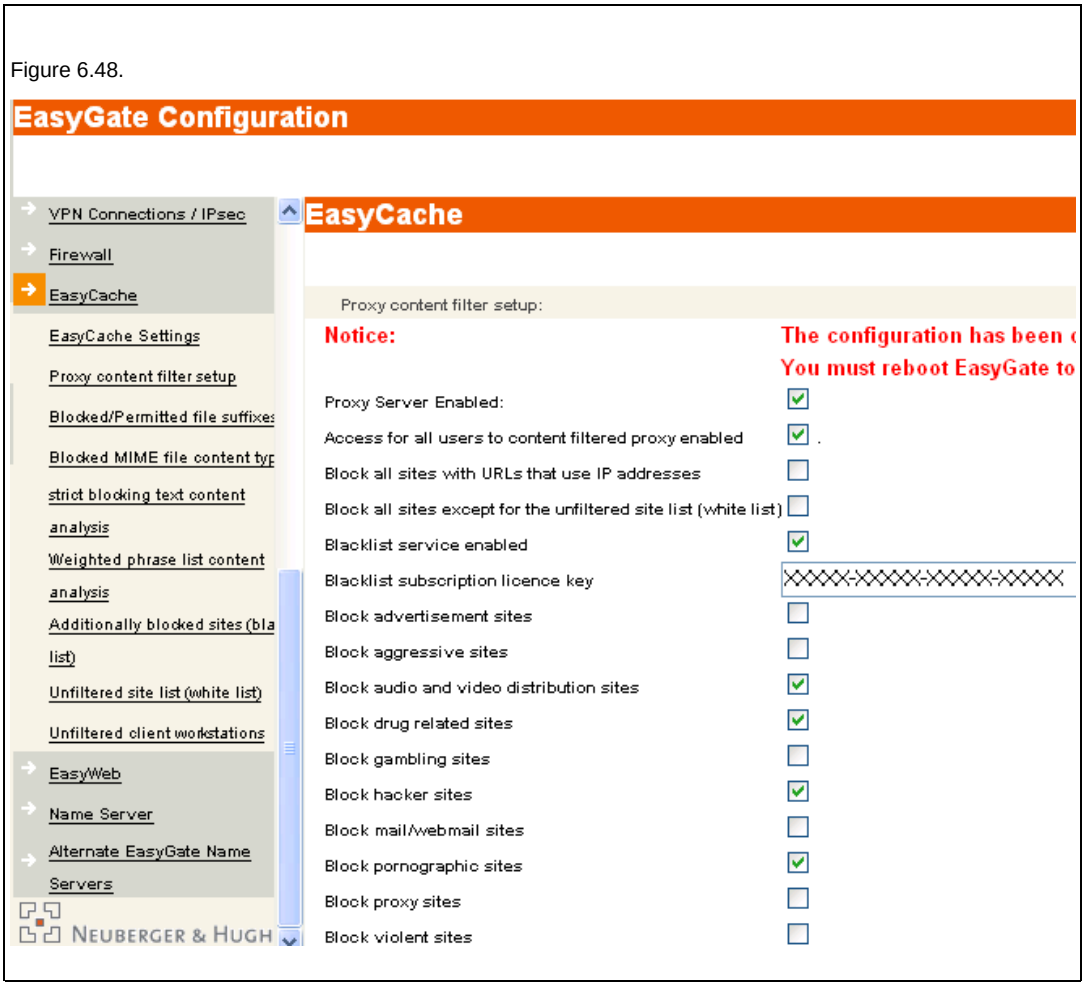
Filtered Ports (for NAT).

This is where you can block several Internet-services **from inside to the outside world**. Only use this when you are familiar with the functioning and excluding of port numbers. You disconnect a port by checking the port in question. Next to every port-number is the Internet-service, which is associated with that port. Beware that after making changes you click the *Save*-button! By default the NetBIOS-ports 137, 138 and 139 are closed.

6.18.2. Proxy content filter setup

Here the functions of the content filter can be configured.

Figure 6.48.



A short overview of the settings is given below.

Block URLS's with IP-addresses.

Websites with IP-addresses in the URL are not accessible.

Block all sites except the *Allowed websites (whitelist)* .

Websites that are not in the Whitelist are not accessible.

Blacklist service active.

When you have an EasyGate Blacklist subscription this function should be activated to be sure that access to websites that are on the Blacklist is not possible. Please contact your EasyGate supplier for more information.

Beware:

The options mentioned below are only applicable when the Blacklist service is activated.

Blacklist subscription licence key.

If the Blacklist service is used, please enter the licence key here.

Block advertisements.

Check this box when advertisements have to be blocked.

Block aggressive sites.

Block sites that contain aggressive or racist texts and/or images.

Block audio and video distribution sites.

Block sites that offer audio- and videomaterial, like mp3, avi and mpg files.

Block drugs-related sites.

Block sites that contain drugs-related information.

Block gambling sites.

Block sites offering on-line gambling games.

Block hacking sites.

Block sites that contain hacker-related information.

Block mail sites (BEWARE: this will block a.o. Hotmail!).

Block sites that offer e-mailservices, like hotmail, freemail, etc.

Block pornographic sites.

Block sites that contain pornographic material

Block proxy sites.

Block websites that allow access to proxy services which can be used to evade the EasyGate content filter.

Block violent sites.

Block sites that contain violent images and/or text.

Block Warez/Sharing sites.

Block sites that offer *warez* (illegal software, games, etc.)

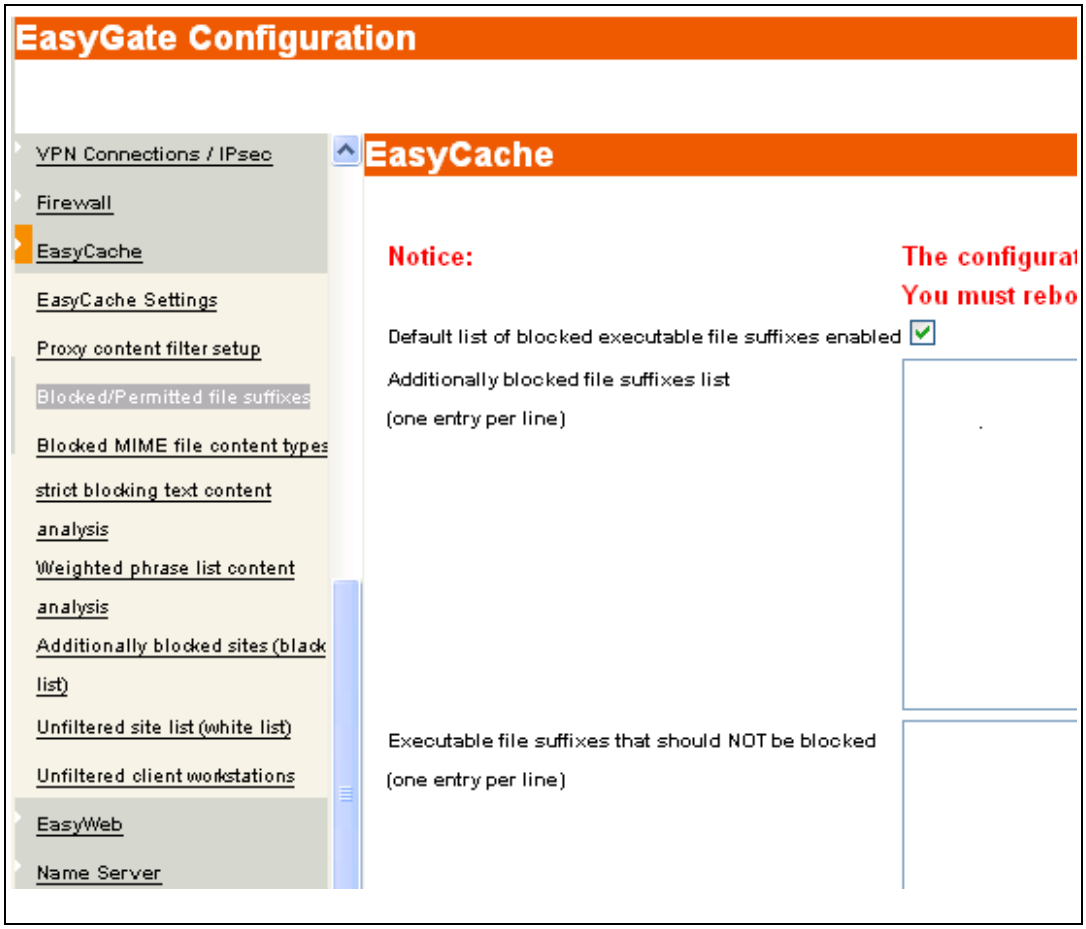
Restart proxy content filter .

Restart the content filter after changes have been made to its configuration.

6.18.3. Blocked/Permitted file suffixes

It is possible to explicitly block or allow files with certain extensions. By blocking an extension, it is no longer possible to download such files from a website.

Figure 6.49.



Standard list with blocked executable file extensions active.

Check this option to block a selection of frequently used file extensions. The list contains extensions that are often infected with viruses (like .exe, .com, .vbs, .zip) or that consume a large amount of bandwidth (.mp3, .avi, etc.).

Additional file extensions to be blocked.

Enter file extensions that, besides the standard list, should not be accessible to users.

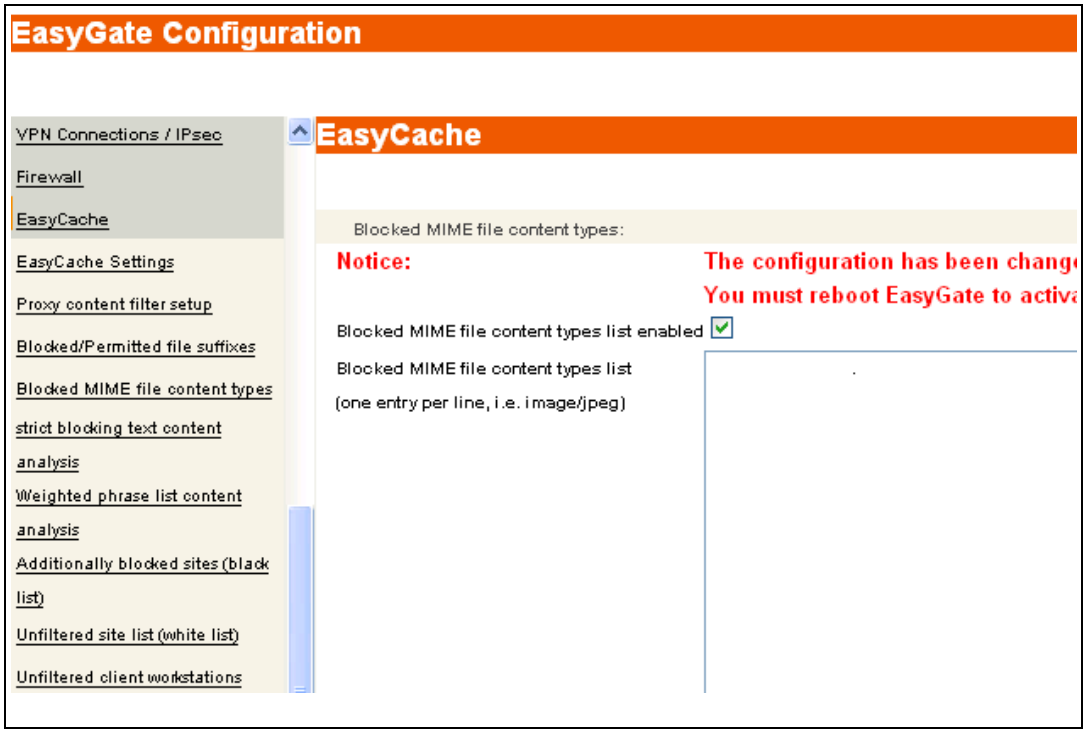
File extensions that should NOT be blocked.

Additional extensions can be entered here that are explicitly allowed to be downloaded.

6.18.4. Blocked MIME file content types

Besides on file extensions it is also possible to filter on MIME-types, the “file encoding” which is attached to every file once it is transferred through the Internet. This is useful for prohibiting pop-up windows from attempting to install applications on a workstation. The MIME-types that have to be blocked can be entered here. Note that each type has to start on a new line.

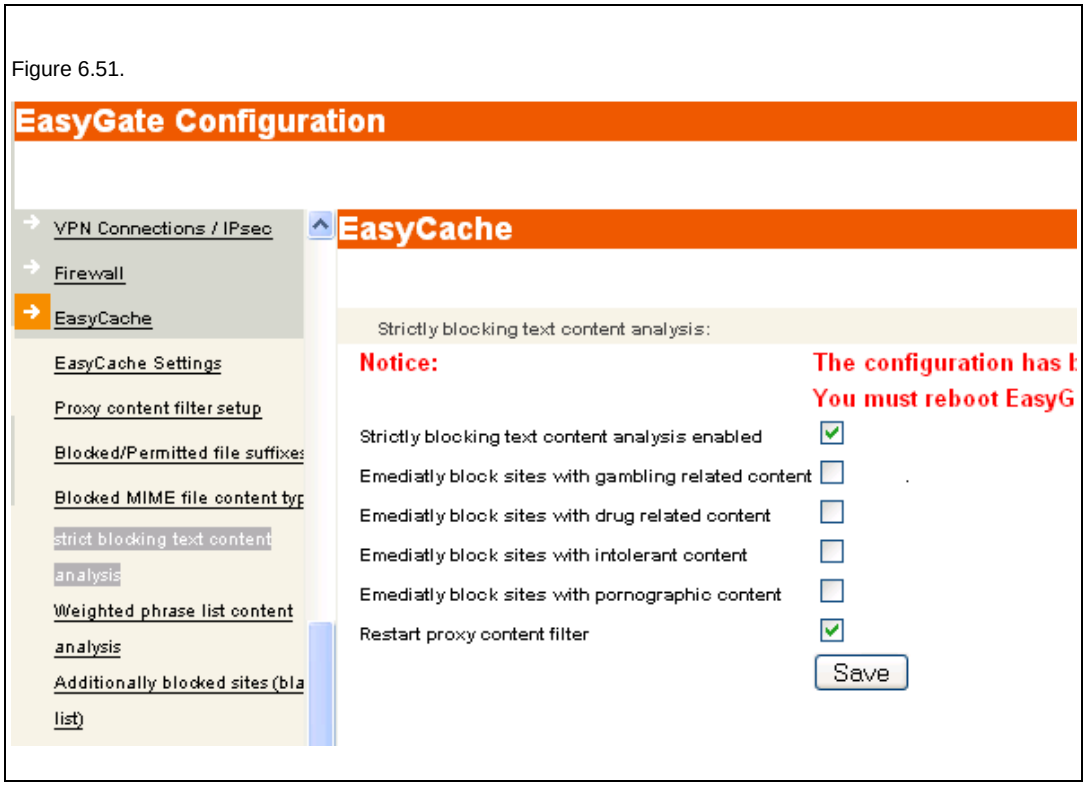
Figure 6.50.



6.18.5. strict blocking text content analysis

It is possible to block websites with certain contents directly. When a term from one of the selected categories is mentioned on a webpage, the site is not available to users. The word lists that are used for the text-analysis are also part of the Blacklist service and are continuously updated.

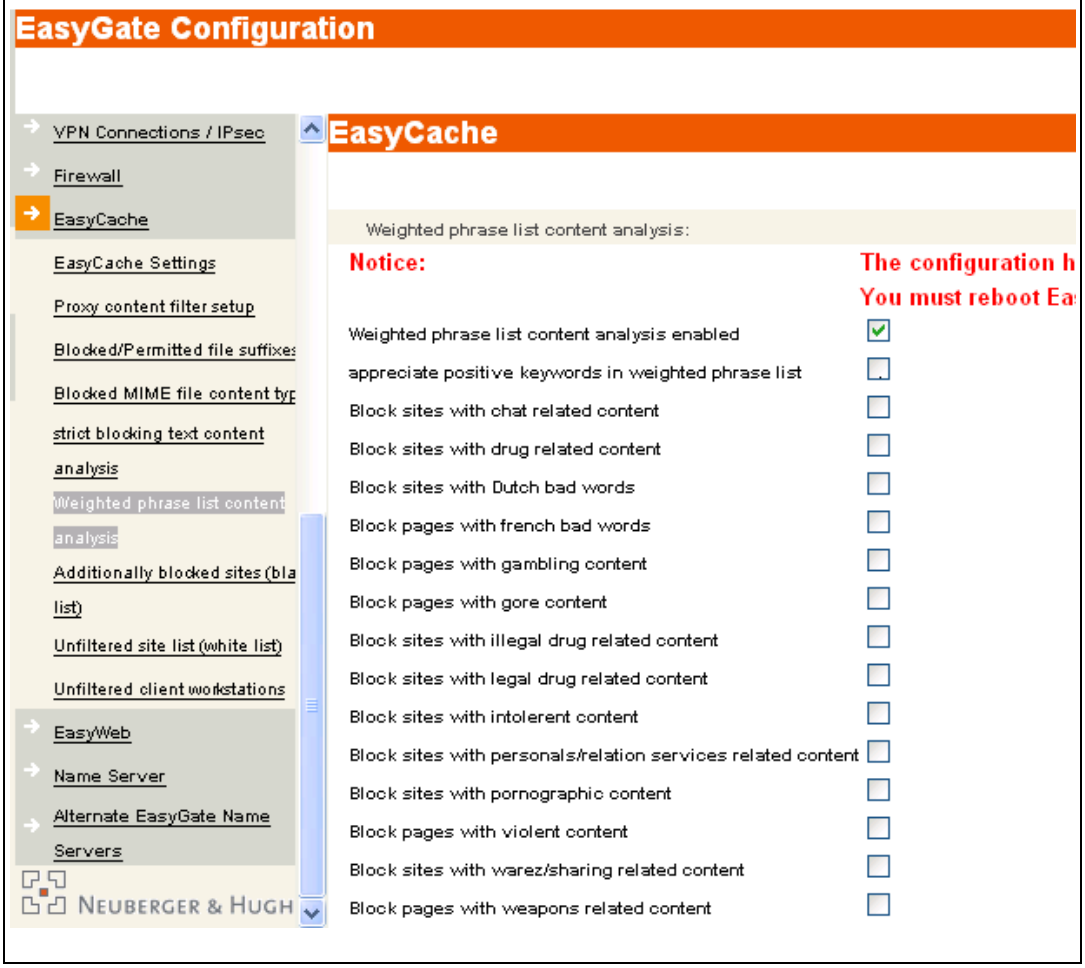
Figure 6.51.



6.18.6. Weighted phrase list content analysis

It is possible to block websites with certain contents based on a weighted analysis. When a certain amount of terms (varying in weight) is mentioned on a webpage, de page will not be displayed. It is possible to choose from a collection of terms and next to that it is possible that *positive* elements on a webpage improve its negative score.

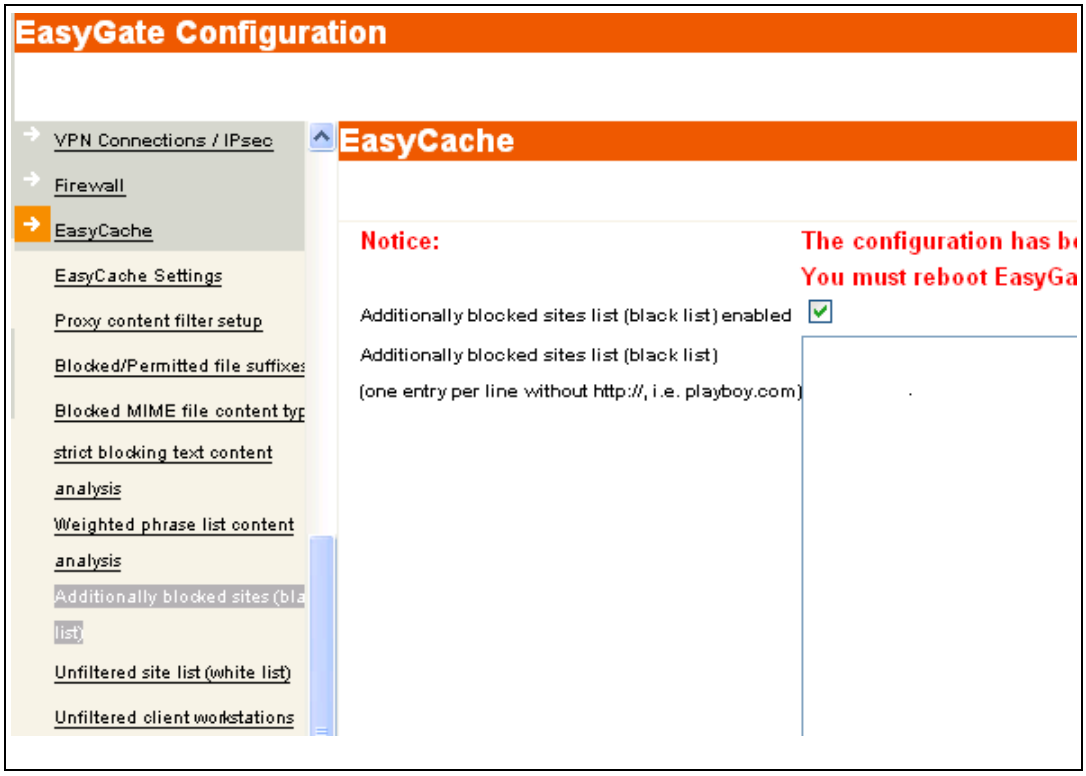
Figure 6.52.



6.18.7. Additionally blocked sites (black list)

The content filter can check whether the to be visited website is registered in a so-called *Blacklist*; a system in which a large amount of websites with dubious contents is listed and which is continuously updated. The contents is categorized according to the settings that can be made in the *Setting up the content filter* menu. To use the Blacklist, one needs to be subscribed to the EasyGate Blacklist service. Please contact your EasyGate supplier for more information.

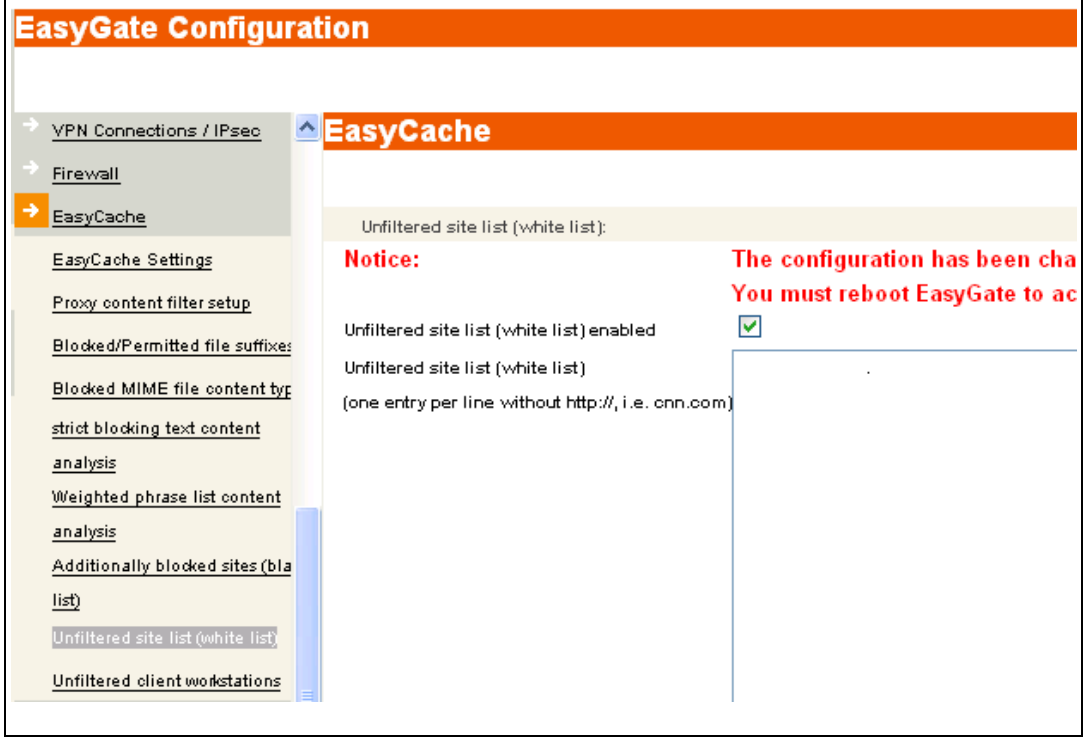
Figure 6.53.



6.18.8. Unfiltered site list (white list)

Besides the Blacklist with forbidden websites it is also possible to explicitly allow certain websites to be displayed, even when these sites belong to the Blacklist. Enter the domains here, beware that you put each domain on a new line and that there is no http:// in front of it.

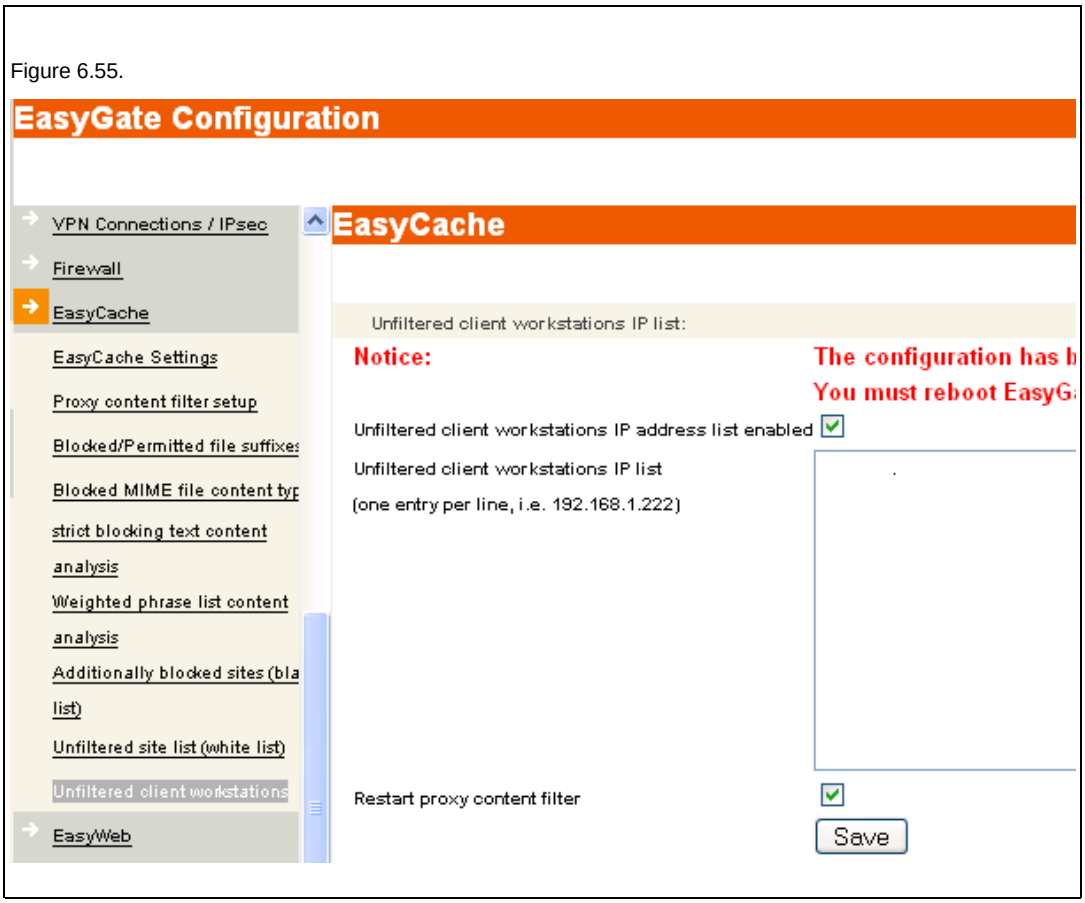
Figure 6.54.



6.18.9. Unfiltered client workstations

Here internal IP addresses can be listed of workstations that should not be restricted by the content filter while browsing the internet. Each IP-address should be entered on a blank line. It is also important to note that these workstations have a fixed IP address. If not, the workstation will not be filtered once the IP address has changed.

Figure 6.55.

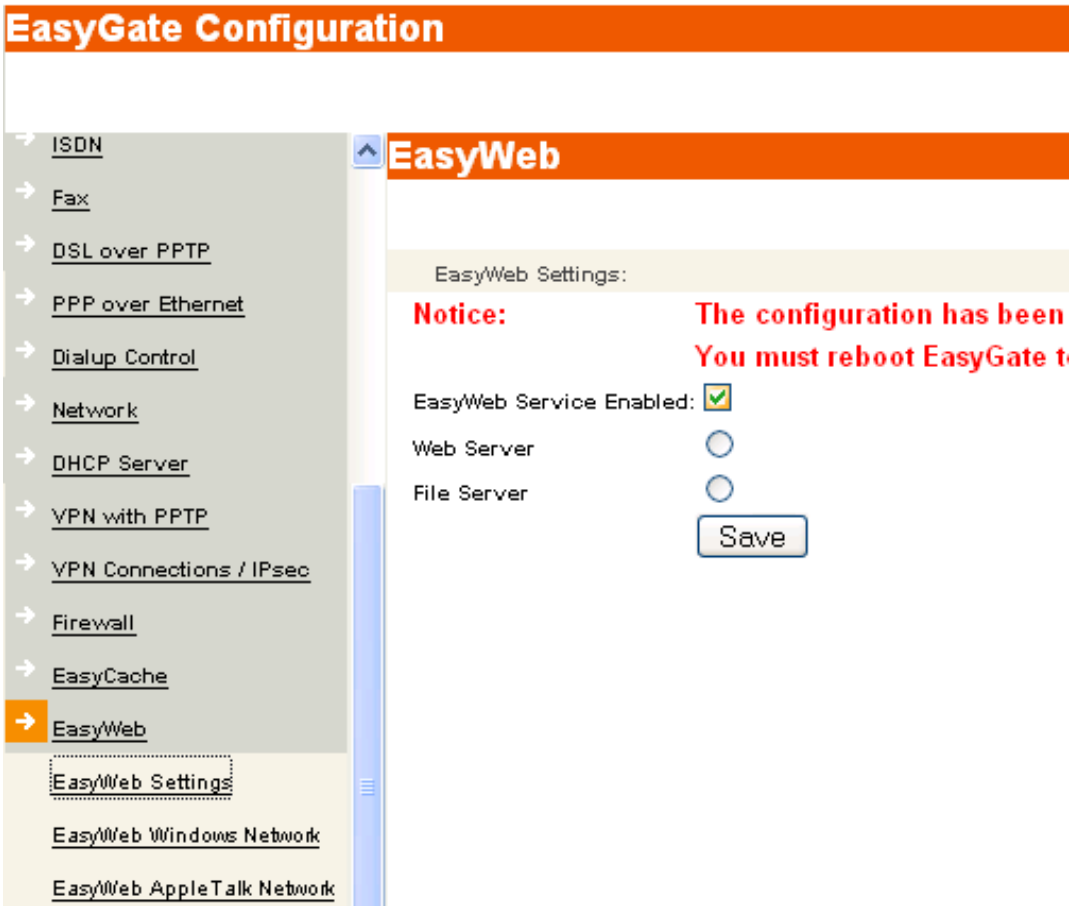


6.19. EasyWeb

This is the web server of EasyGate. With EasyGate you are able to save data on your server and access this data from your client PCs in the EasyGate network (Intranet)

6.19.1. EasyWeb Settings

Figure 6.56.



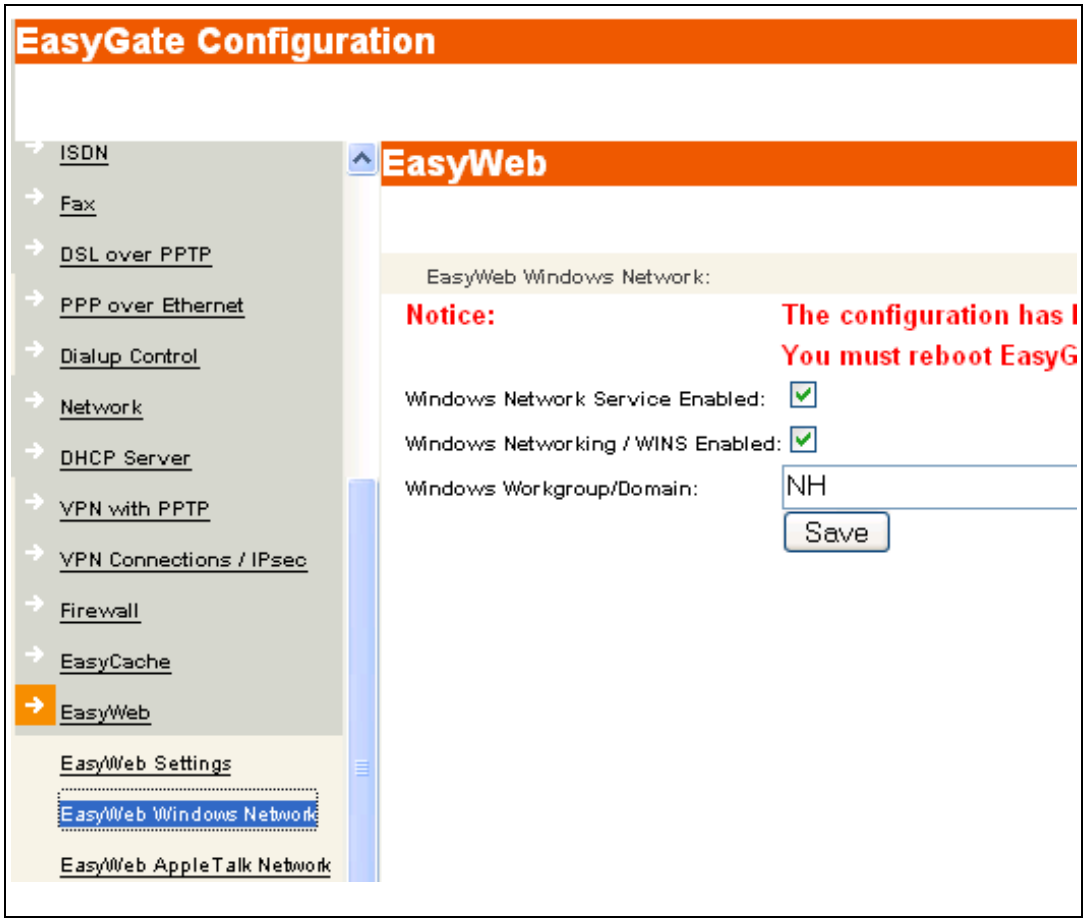
EasyWeb services enabled.

This setting (de)activates the web services of your EasyGate. When this is deactivated, the web server is switched off and you will not be able to work with any websites on your EasyGate. This will also disable access to any existing Intranet site on your EasyGate. Also EasyGate can not be used as file server.

6.19.2. EasyWeb Windows Network

Here you can activate the Windows network services of EasyWeb.

Figure 6.57.



Attention:

To make use of the Windows network services, the users of EasyWeb need to login to the Window's network (at system start-up) with their EasyGate username and password (e.g. *bill* with the corresponding password if the user's address on EasyGate were *bill@yourCompany.com*).

Otherwise the file sharing that allows website access from Windows can not take place.

Windows Network Service Enabled.

If checked off, the access from Windows PC's to EasyWeb files and EasyWeb folders is possible (if access is granted to the user).
After that e.g. you are able to assign certain Mappings on network-drive letters to the different websites by means of the Internet Explorer.

Windows WINS enabled.

When you have activated this function, the Windows Internet Name Server (WINS) is activated. This is necessary if no other WINS server is active in the network, and you want to use the EasyWeb Windows network services. By default, this function is activated.

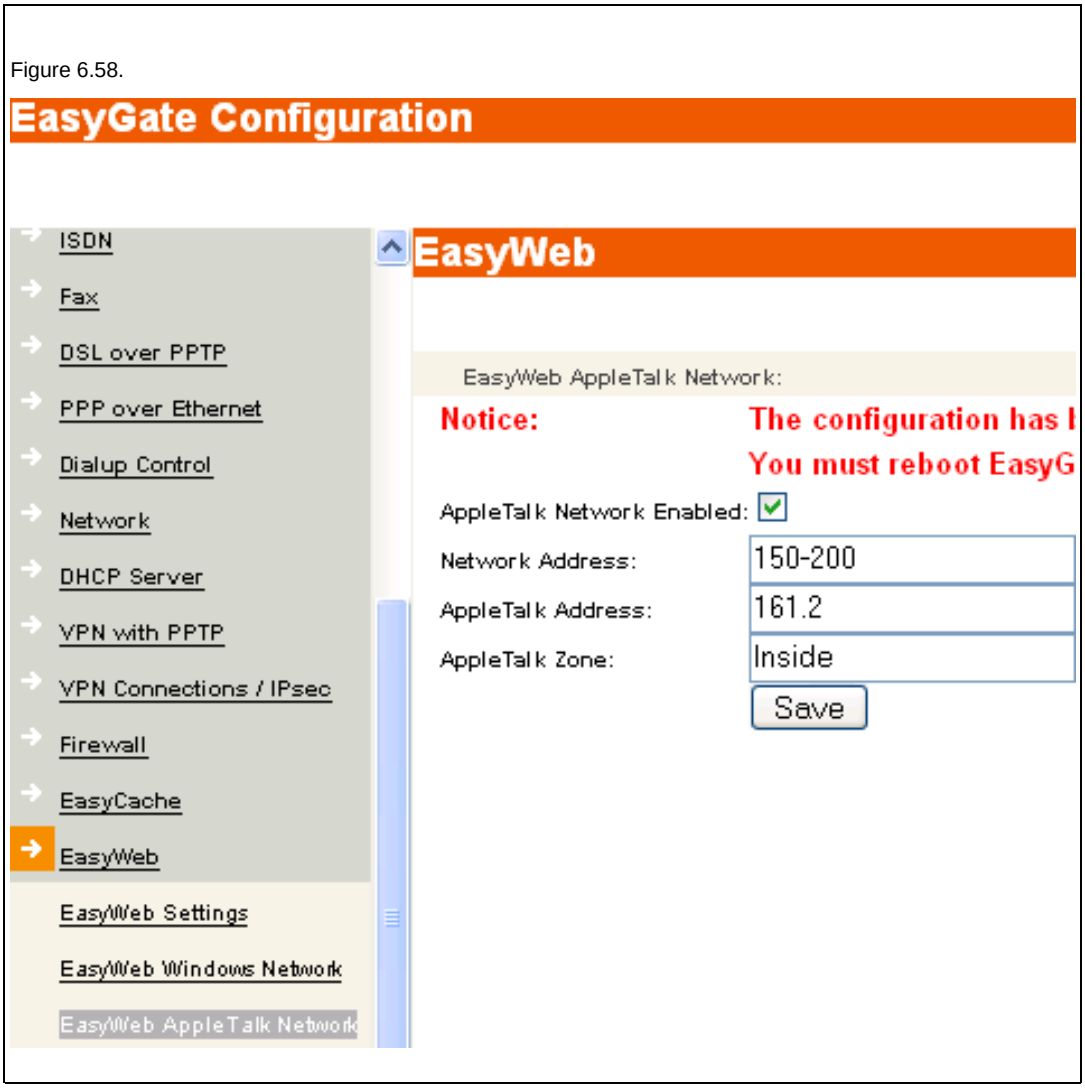
Windows workgroup / domain.

Here, the workgroup name of the Windows NT/95/98 network has to be entered (defined in the Network neighborhood properties). This could be a Windows 95/98 workgroup or a Windows NT domain.

6.19.3. EasyWeb AppleTalk Network

This is where the EasyWeb functions for the AppleTalk network services can be adjusted.

Figure 6.58.



Attention

In order to use the coupling of the AppleTalk network services, the users of EasyWeb need to login to the AppleTalk with their EasyGate username and password.

AppleTalk network enabled.

This activates the AppleTalk network.

Network address.

Here you have to enter the network address of the AppleTalk network.

AppleTalk address.

This is the AppleTalk address of EasyGate in the AppleTalk network. This is not the same as the IP address.

AppleTalk Zone.

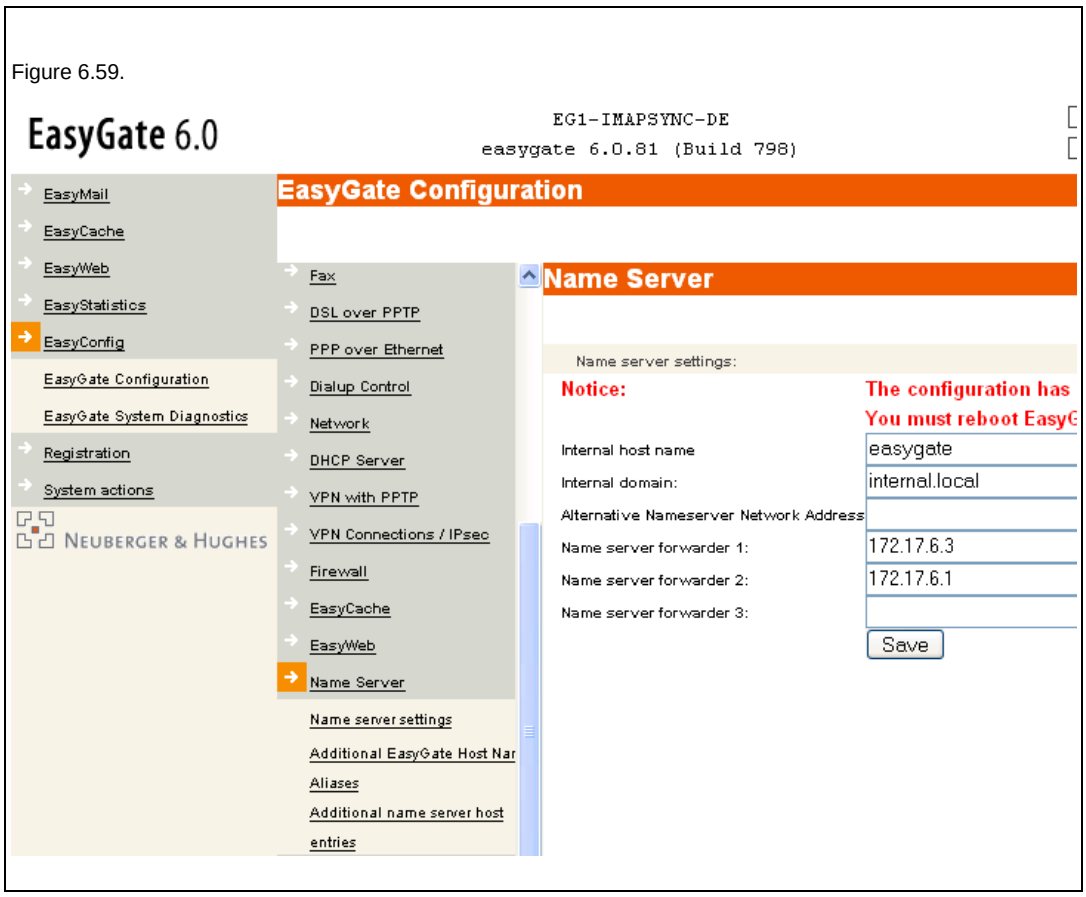
Here the specific AppleTalk zone-description has to be entered.

6.20. Name Server

6.20.1. Name server settings

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

Figure 6.59.



Internal host name:

Define the internal hostname of EasyGate here. By default it is set to **easygate**. 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 EasyGate 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:

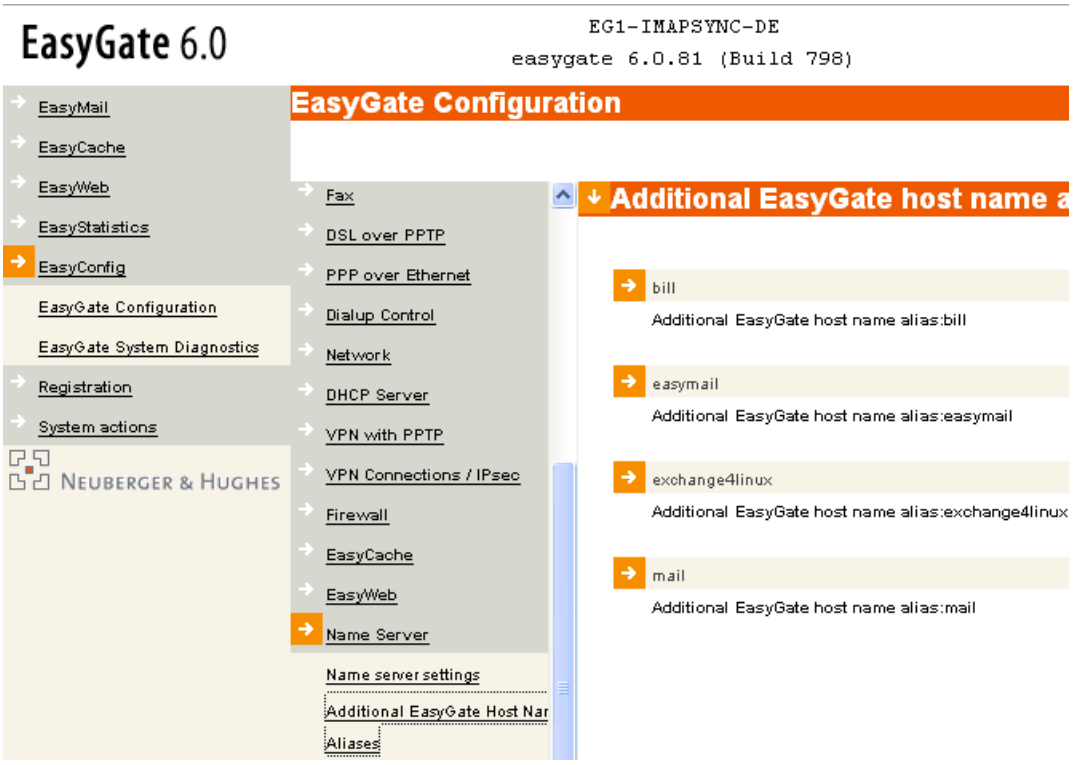
When this function is activated, up to three IP-addresses of other name servers can be included,

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.

6.20.2. EasyGate hostnames

It is possible to define additional hostnames for the EasyGate 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.

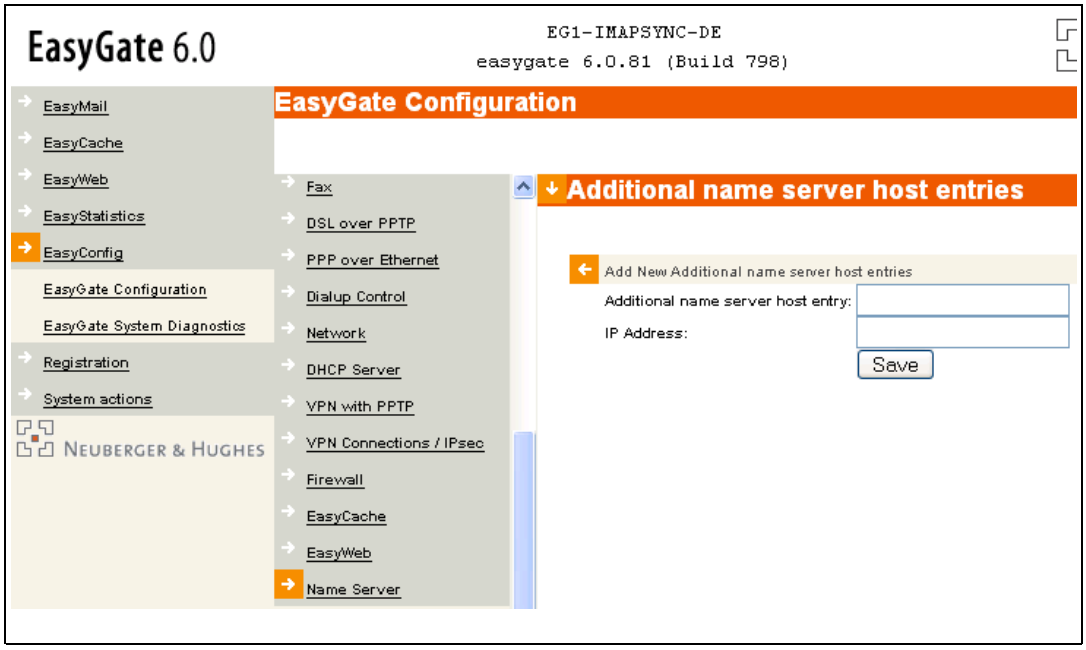
Figure 6.60.



6.20.3. 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.

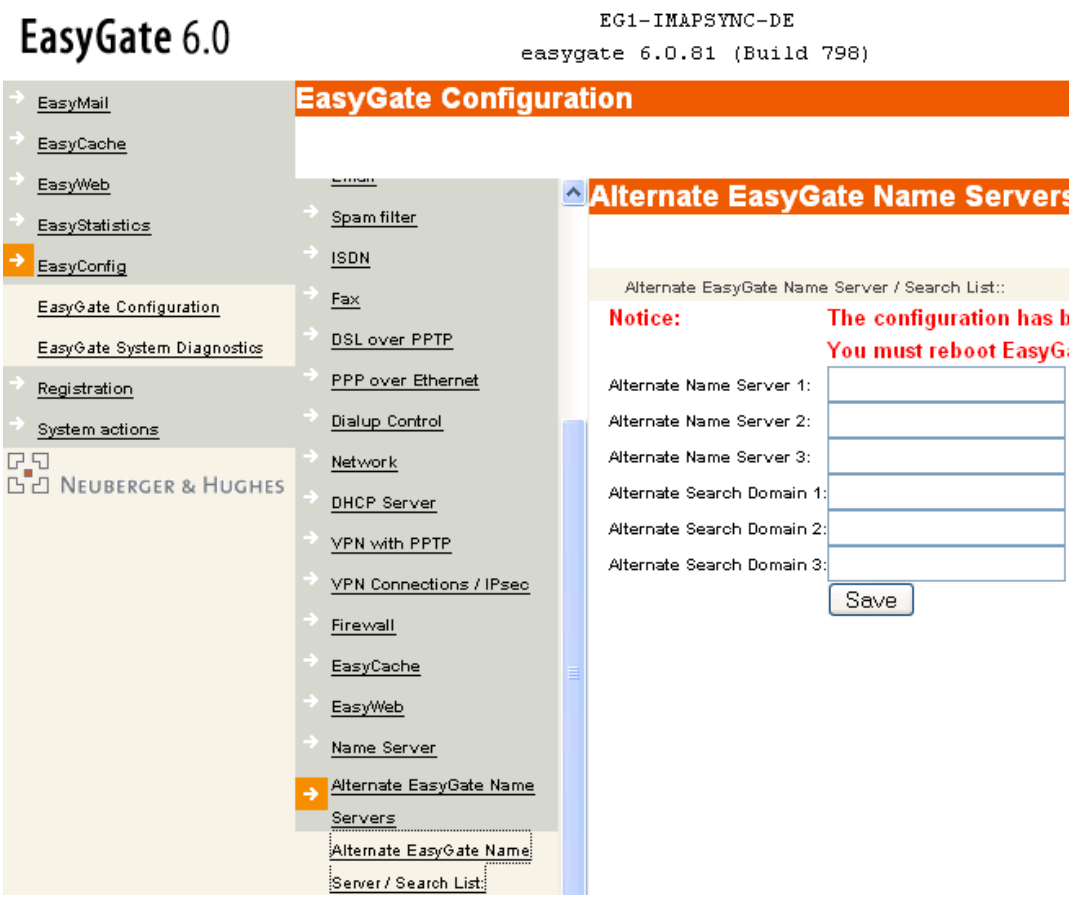
Figure 6.61.


EasyGate 6.0
EG1-IMAPSYNC-DE
easygate 6.0.81 (Build 798)
EasyMail
EasyCache
EasyWeb
EasyStatistics
EasyConfig
EasyGate Configuration
EasyGate System Diagnostics
Registration
System actions
NEUBERGER & HUGHES
EasyGate Configuration
Fax
DSL over PPTP
PPP over Ethernet
Dialup Control
Network
DHCP Server
VPN with PPTP
VPN Connections / IPsec
Firewall
EasyCache
EasyWeb
Name Server
Additional name server host entries
Add New Additional name server host entries
Additional name server host entry:
IP Address:
Save

6.21. Alternative Name servers

It is possible to add additional name servers here, which will be consulted by echange4linux. 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 6.62.



Caution

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

6.22. System actions

Figure 6.63.

6.22.1. Shutdown / reboot system

Use this menu to shutdown or reboot the EasyGate server.

6.22.2. Mail control

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

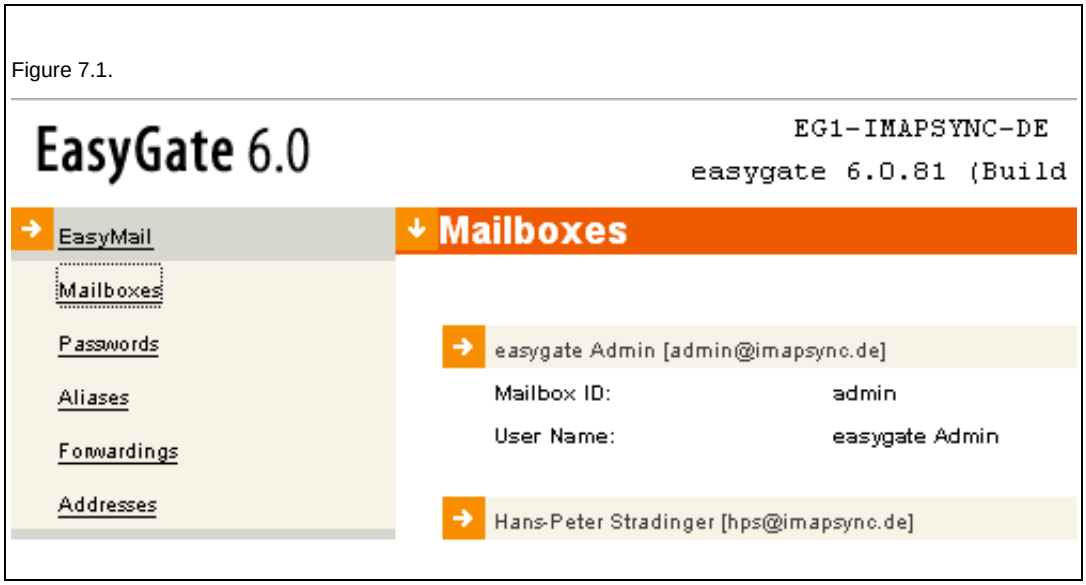
Chapter 7. User guide

7.1. Operating instructions

7.1.1. Layout of the screen

The window that appears after you have logged on to EasyGate 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.

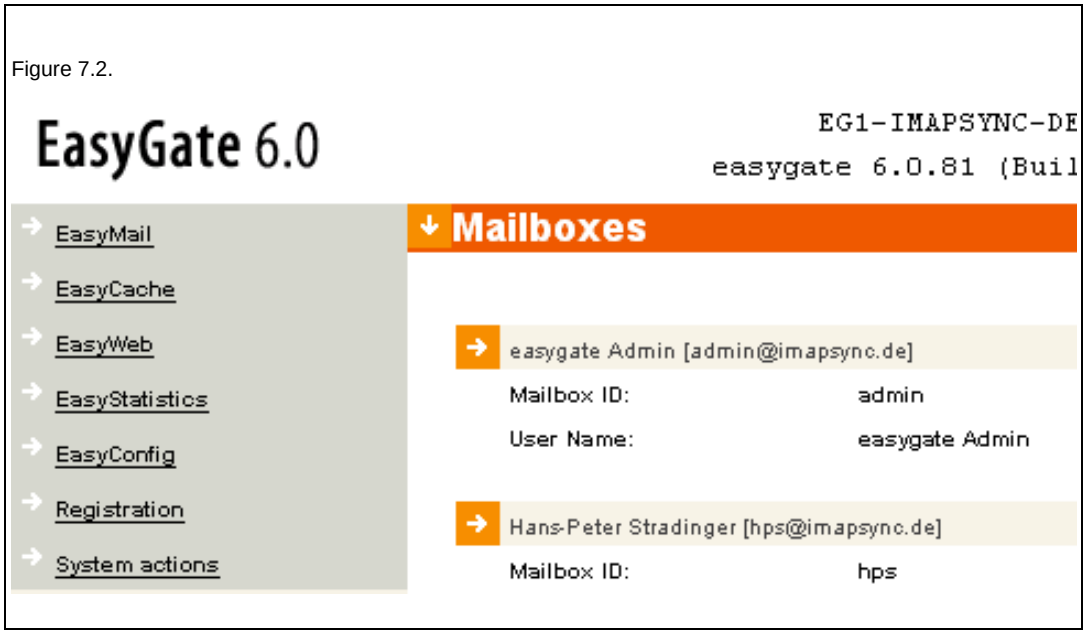
Figure 7.1.



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.

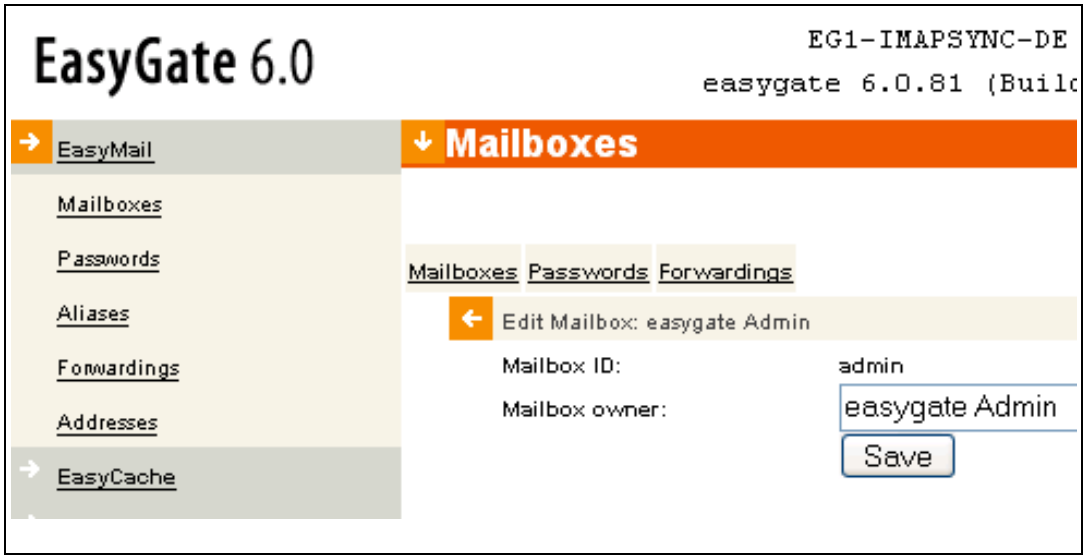
Figure 7.3.

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.

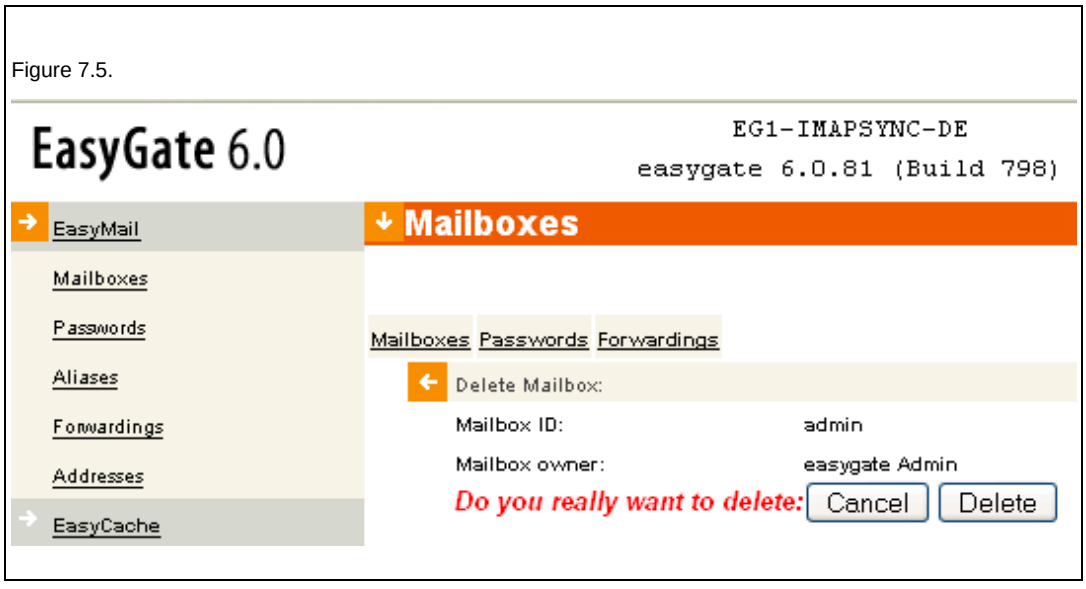
Figure 7.4.



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 EasyGate 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 EasyGate 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.

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.
Password	Mailbox access password. This is also used for the e-mail application.	The entered data is displayed in asterix's for security reasons.

Field name	Contents	Remarks
Repeat password	To prevent mistakes, the password has to be entered twice.	

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.

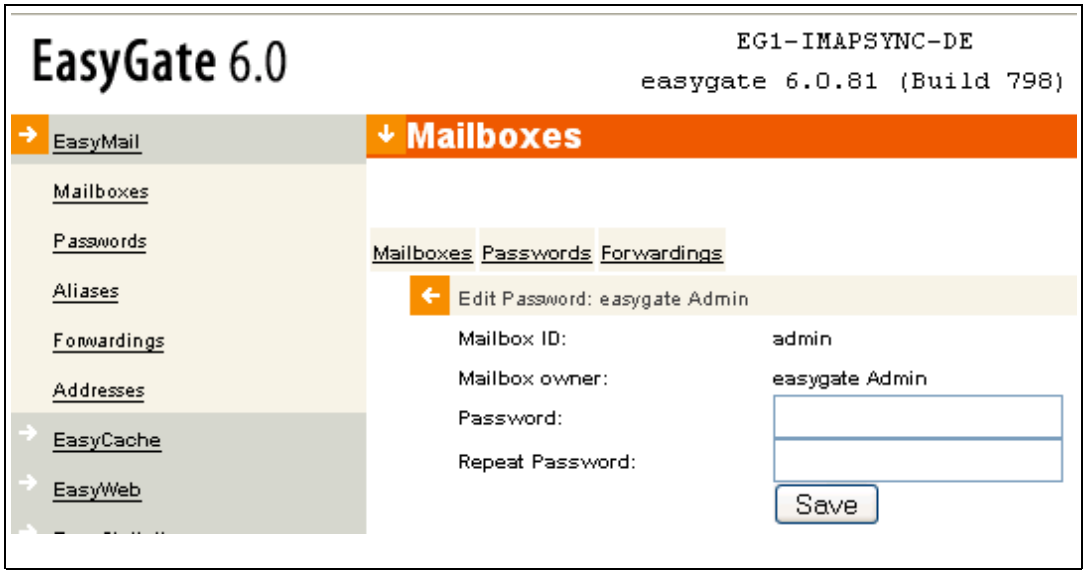
Figure 7.7.

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-alphanumerical 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 renamed, 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.

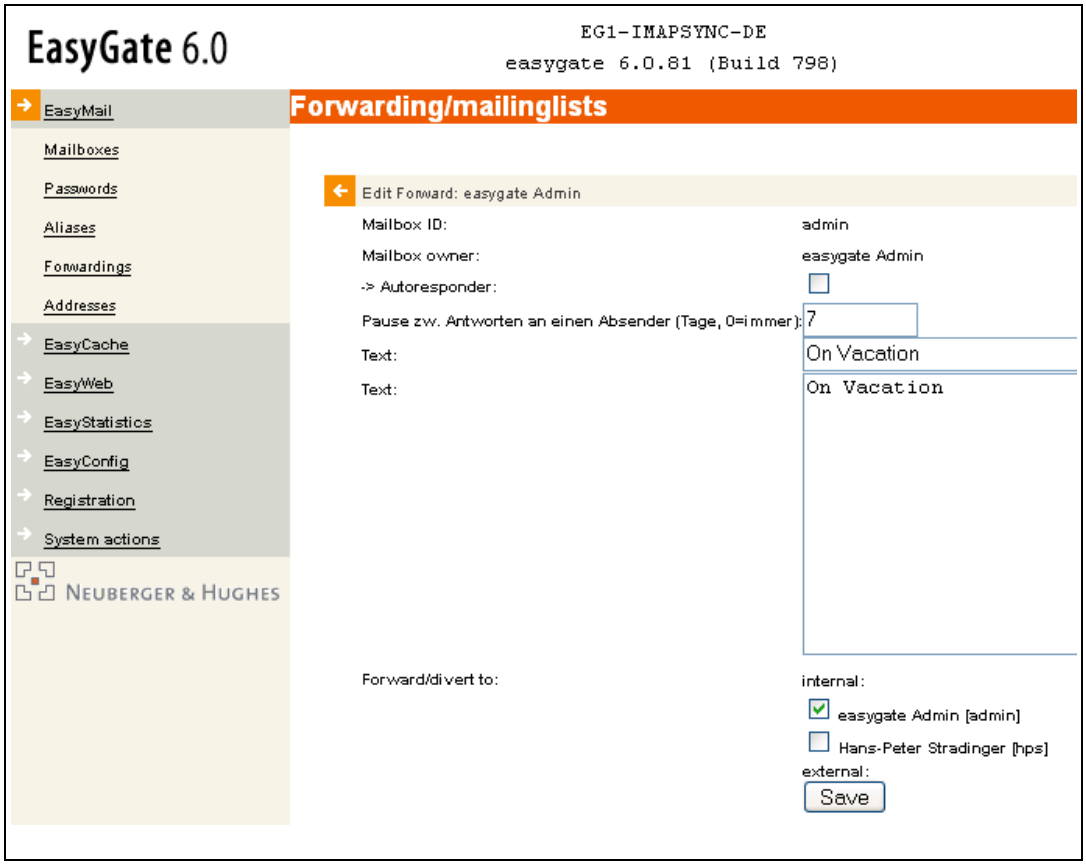
Figure 7.10.

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 lease 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 functions 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.


EasyGate 6.0
EG1-IMAPSYNC-DE
easygate 6.0.81 (Build 798)
EasyMail
Mailboxes
Passwords
Aliases
Forwardings
Addresses
EasyCache
Addresses
Edit Address: Harry
External forwarding address
harry@external.com
Recipient Name
Harry
Address available for:
easygate Admin[admin]
Hans-Peter Stradinger[hps]
Save

7.3. Managing the EasyWeb functions

7.3.1. Introduction

This chapter explains the functions of EasyWeb, EasyGate's web server. EasyWeb is not present on all EasyGate-versions, so it is possible that your EasyGate system does not contain this module. If you do wish to make use of EasyWeb, please contact your EasyGate-supplier for information about the EasyWeb-upgrade.

With EasyWeb you can manage up to three websites. You can build up an Intranet (website *home*), develop and debug a test site (website *tmp*) and you can hold a copy of your live website, which is likely hosted at your provider (website *www*). On this last site you are able to develop (further) and test your website and when it's ready, you can publish it to your provider with the function *Publish*. The websites can be opened very quickly in your web-browser by using the short names (by default *www*,*tmp* and *home*). Simply type *http://www* (or *http://tmp* or *http://home*) into your web browser and the site will load.

With EasyGate it is also possible to host your own website. To do this, you need a permanent connection or callback-functionality. You should take into account that the more visitors your site generates, the slower your connection will be. In general it is advised to host your website at a provider, since they usually have a widebandwidth connection.

7.3.2. Websites

In this submenu you are able to manage the websites and their properties. A maximum of three websites can be maintained. In order to create or modify a website, choose the function related to this. Then you need to fill in or modify a number of fields that appear on your screen. What needs to be entered in every field is explained in the table below. A website can be removed by selecting the relevant site and clicking on the white cross in the upper right corner. After confirming this decision, the site is permanently removed.

Figure 7.14.

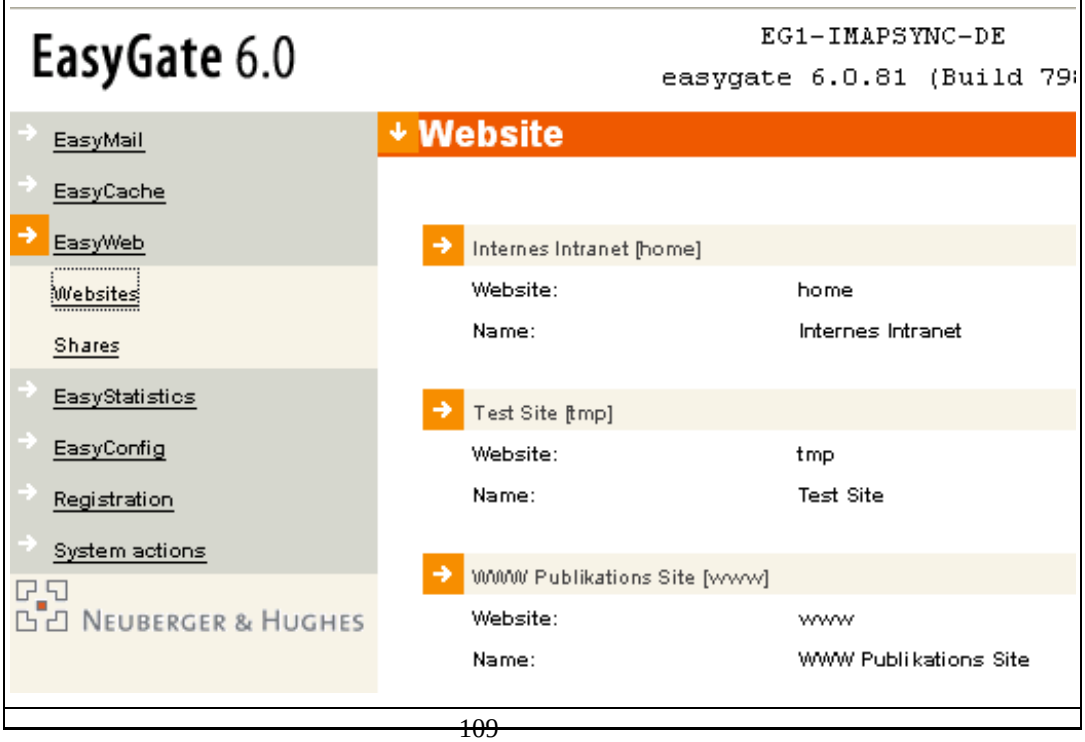


Figure 7.15.

Field name	Contents	Remarks
Website	In this field the short name of the website is entered	The name has a maximum of 10 characters, and, once entered, cannot be changed. This is also the name with which you reference the site in the browser
Name	In this field you can enter a description or full name of the website	This field can be changed later on
Website visible for the internet	When selected, this option makes your website visible on the internet	
Visible website IP address	Here you fill in an official IP-address that has been given to you by your provider. This way, people can access your website. It is attached to the chosen hostname	This can be the same address that has been given to EasyGate for ISDN- and email traffic, but when you have been given multiple official IP-addresses, you can select a different one as well
Visible website hostname	The hostname that is attached to your website has to be filled in here. This has to be within one of your domain names. The hostname is linked to the IPaddress, so people are able to reach your website through this hostname	Usually something like: *www.domainname.com* or *support.domainname.com*

It is possible to enter multiple hostnames for one IP-address; so multiple websites can be hosted un-

derneath one IP-address.

Note:

Do not forget to provide your website provider with the combination of your IP-address and hostname(s). This way, these combinations can be added to the providers name server, making the websites accessible throughout the whole Internet.

7.3.3. User privileges

The client, by means of a link with the Windows-network services or AppleTalk-services, can edit the websites. This can be done by multiple users, as long have been granted user privileges. There are two levels: a *Read access*, where the contents of the website can be read in the Windows/Apple-interface. This also gives the user the right to publish websites. Modifications to the site cannot be carried out with this privilege. The second right is *Write access*. With this, site modifications can be made.

When the user to whom privileges are to be granted has been selected, it is possible to indicate what his or her rights are per website. Simply tick off and save the desired user privileges.

Figure 7.16.

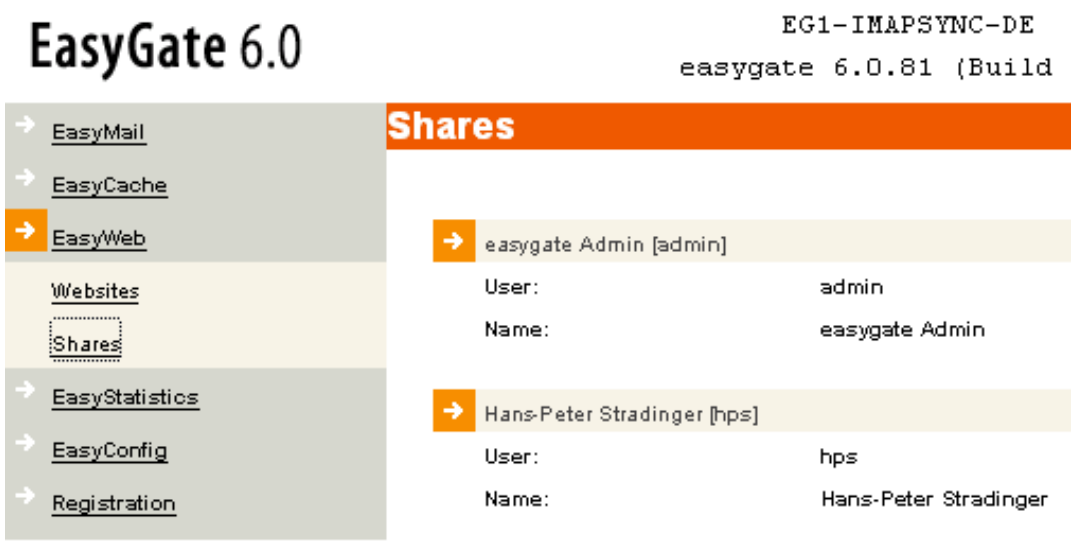
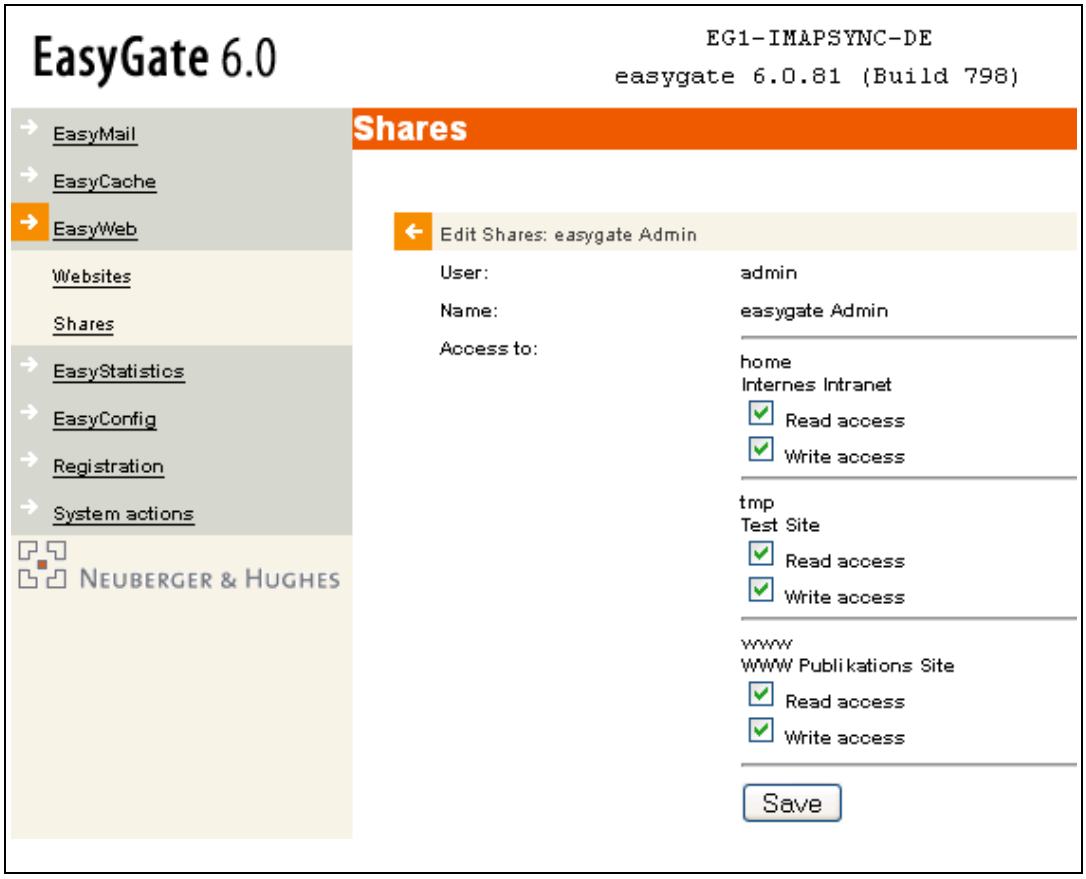


Figure 7.17.



Note:

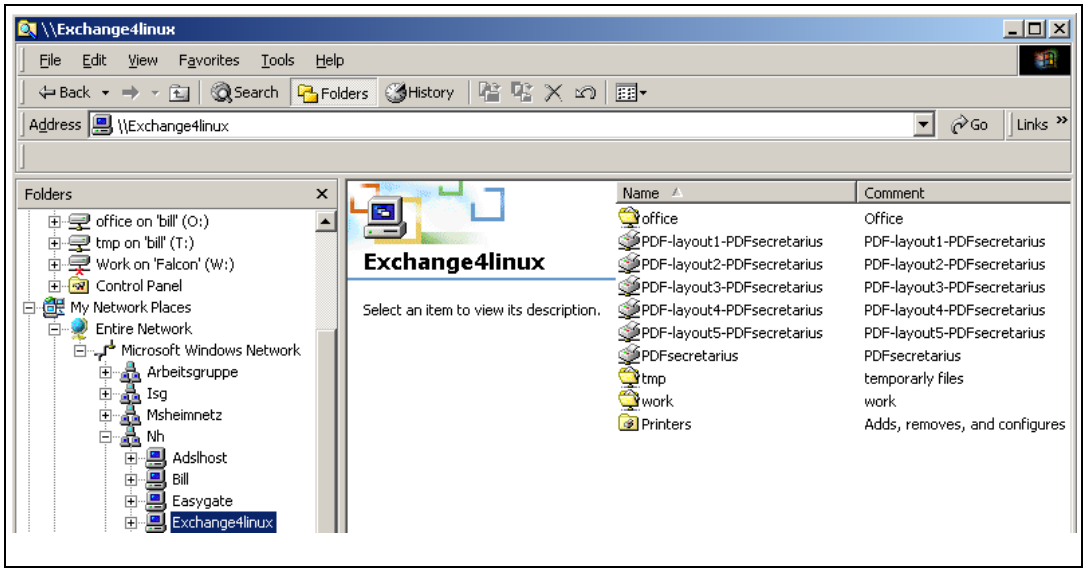
To let the users work from a Windows or MacOS environment, it is necessary that the network-logon takes place using the mailbox-name and the password the user has on the EasyGate system. If not, the user will not be able to granted access to the websites.

7.3.4. Using Websites in Windows

A user with at least reading privileges can browse the websites within Windows Explorer and bind these shares to a Network drive letter. To do this, look for the EasyGate 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:
\\easygate\sharename or **<internal-ip-address-easygate>\sharename**
For example: *easygate**home* or *192.168.1.2**home*

Figure 7.18.

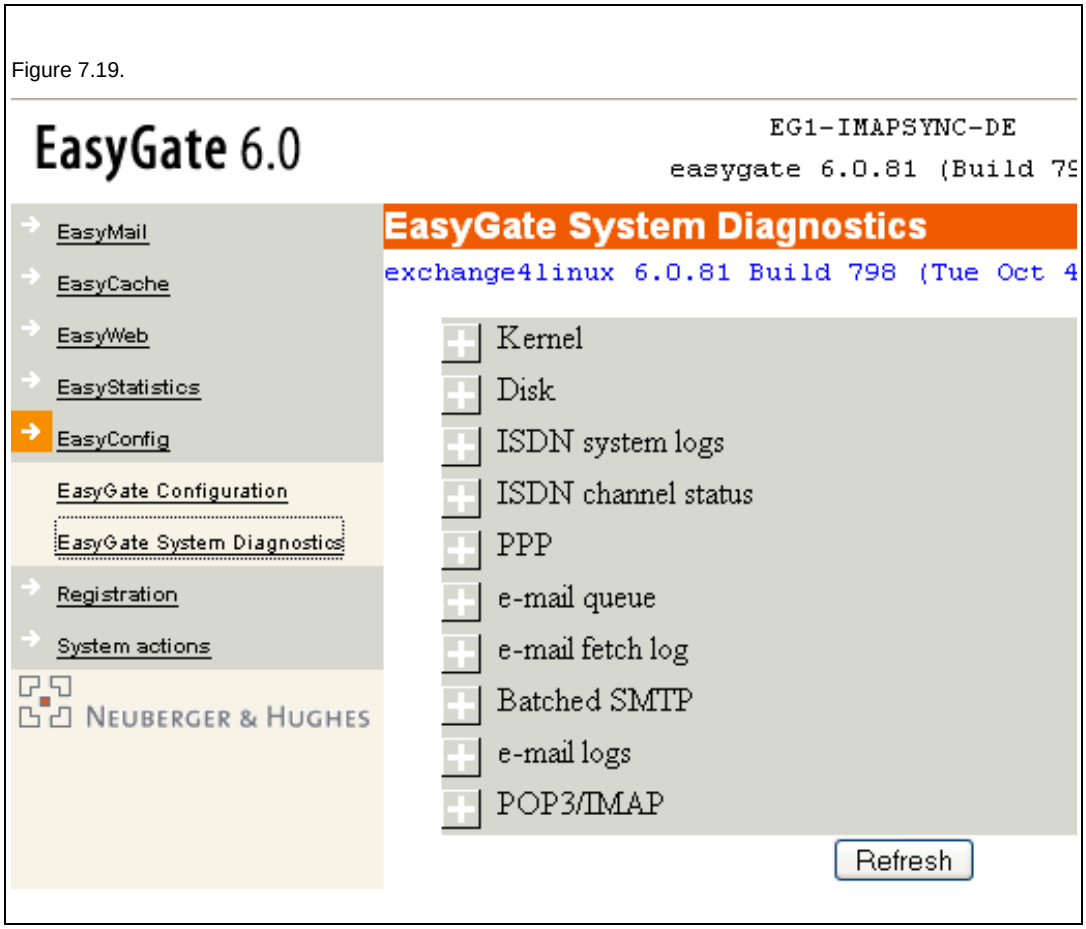

\\Exchange4linux
File Edit View Favorites Tools Help
Back Search Folders History
Address \\Exchange4linux
Go Links
Folders
office on 'bill' (O:)
tmp on 'bill' (T:)
Work on 'Falcon' (W:)
Control Panel
My Network Places
Entire Network
Microsoft Windows Network
Arbeitsgruppe
Isg
Msheimnetz
Nh
Adslhost
Bill
Easygate
Exchange4linux
Exchange4linux
Select an item to view its description.
Name
Comment
office
Office
PDF-layout1-PDFsecretarius
PDF-layout1-PDFsecretarius
PDF-layout2-PDFsecretarius
PDF-layout2-PDFsecretarius
PDF-layout3-PDFsecretarius
PDF-layout3-PDFsecretarius
PDF-layout4-PDFsecretarius
PDF-layout4-PDFsecretarius
PDF-layout5-PDFsecretarius
PDF-layout5-PDFsecretarius
PDFsecretarius
PDFsecretarius
tmp
temporarly files
work
work
Printers
Adds, removes, and configures

7.4. Consulting System diagnostics

7.4.1. Introduction

To see how the different processes on easygate 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 easyGate.

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 EasyGate. 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.

When a fax device is implemented on EasyGate, 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 EasyGate, 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. Appendix

This part explains how to set up your workstation to use e.g. fax.

Table of Contents

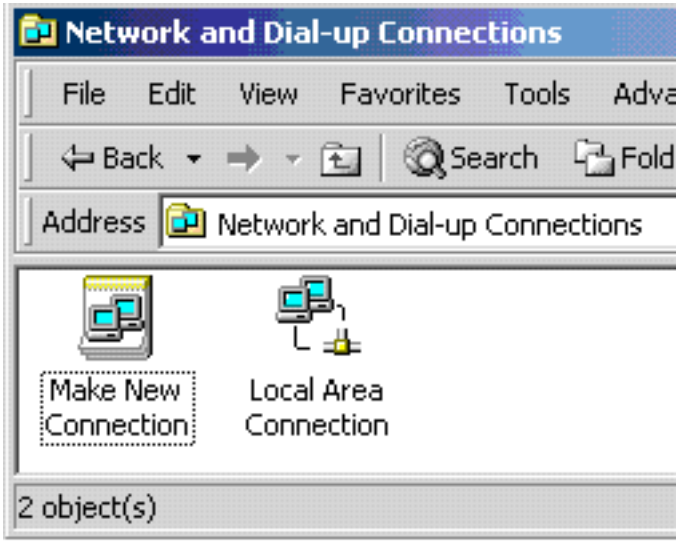
Chapter 8. Settings on the workstation

To use EasyGate 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. TCP / IP settings (Wondows 2000)

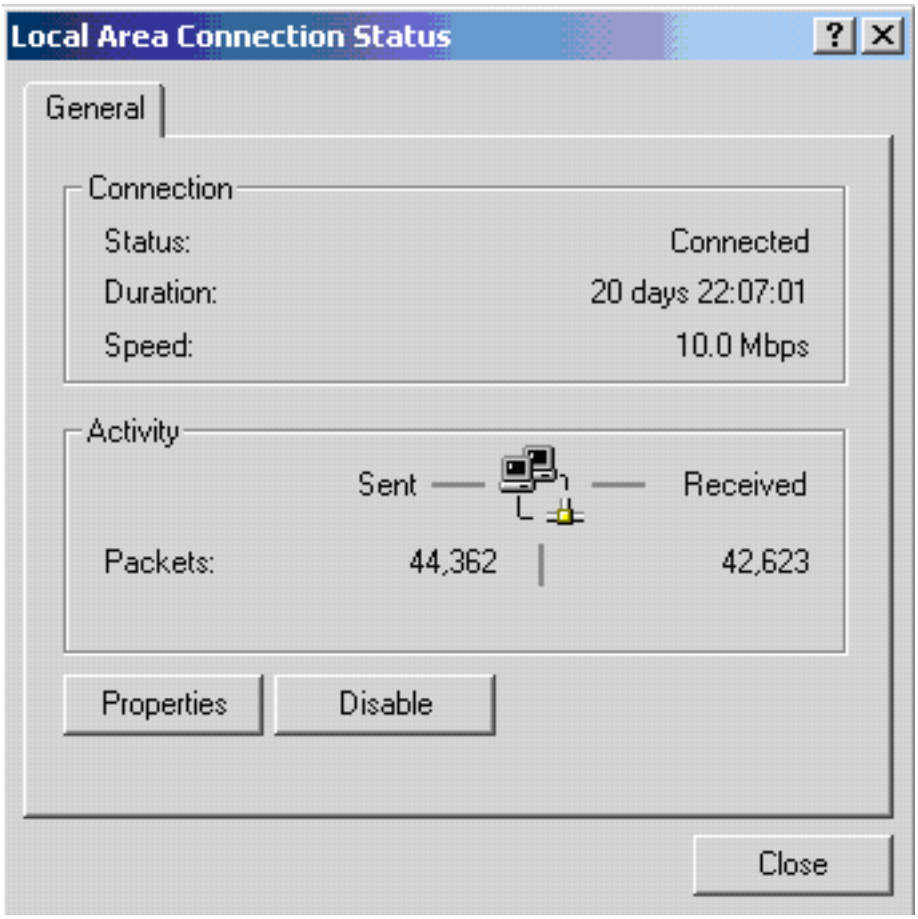
The TCP/IP protocol has to be installed on every PC in the network.
Open *Network and Dial-up connections* in the menu (you can find it under *start menu – settings*) and click on the button *Local Area Connection* (see Figure 8.1).

Figure 8.1.



The following window appears (Figure 8.2).

Figure 8.2.

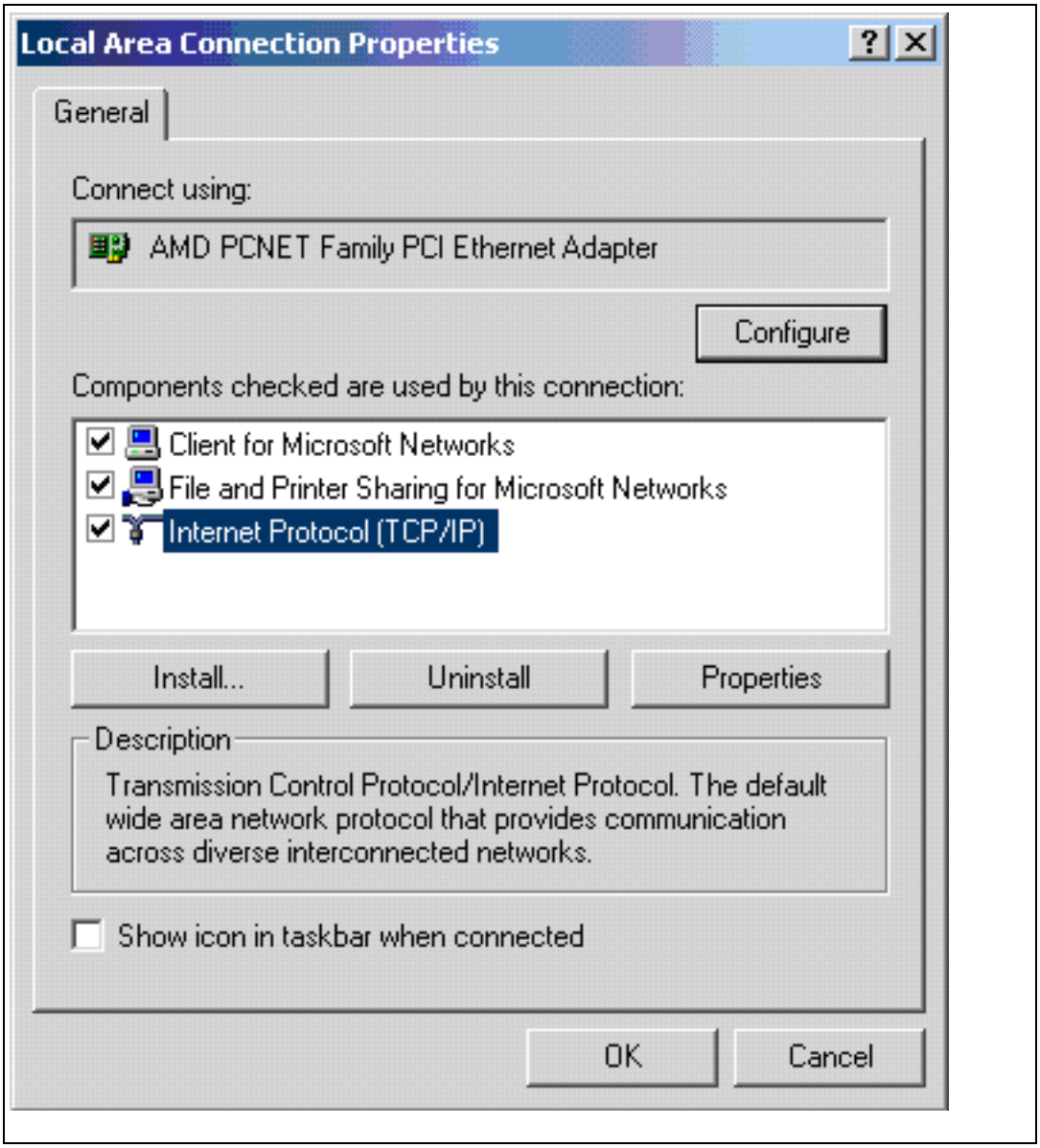


Attention:

The shown images were taken out of a Windows 2000 PC. But there are only few differences to other Wondows versions.

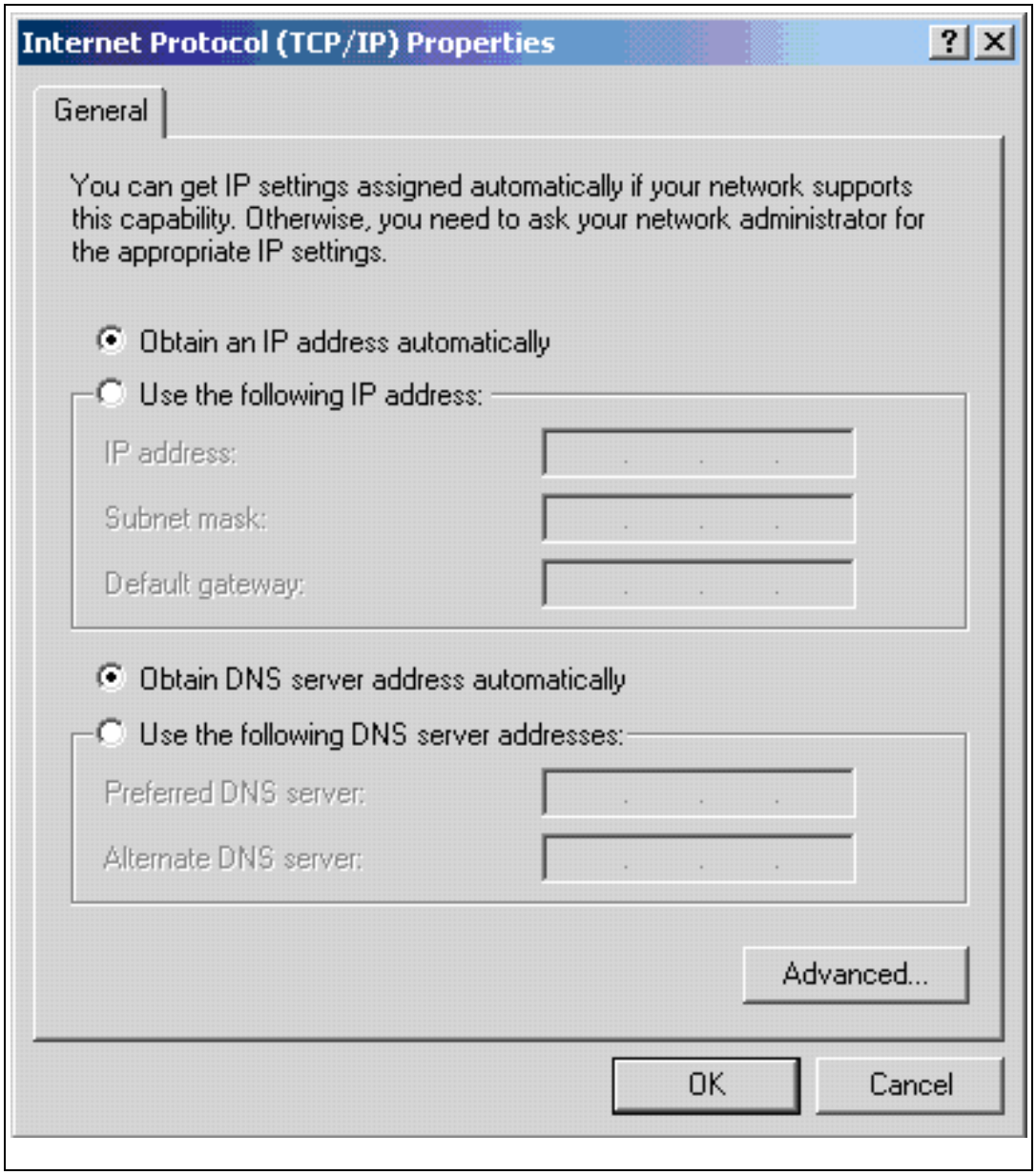
Click on *Properties*.
The following window appears.

Figure 8.3.



Click on *Internet protocol (TCP/IP protocol)*. (If there are more than one TCP/IP versions, select the configuration that is connected with your network card: *TCP/IP – name of the network card*.) The following window appears (Figure 8.4).

Figure 8.4.



- **If the DHCP server of EasyGate is activated select:**

  Obtain an IP address automatically

- **If the DHCP server of EasyGate is not enabled, click on:**

  Use the following IP address
  Then you have to enter an IP address and a subnet mask that corresponds with your net and EasyGate.

Example for the IP address:

When EasyGate has the network address: *192.168.100.0*

the IP address has to be: *192.168.100.XXX*.

If the DHCP server of EasyGate is enabled, you do not have to enter a standard gateway address.
If the DHCP server of EasyGate is deactivated, enter the internal address of EasyGate as the new gateway.

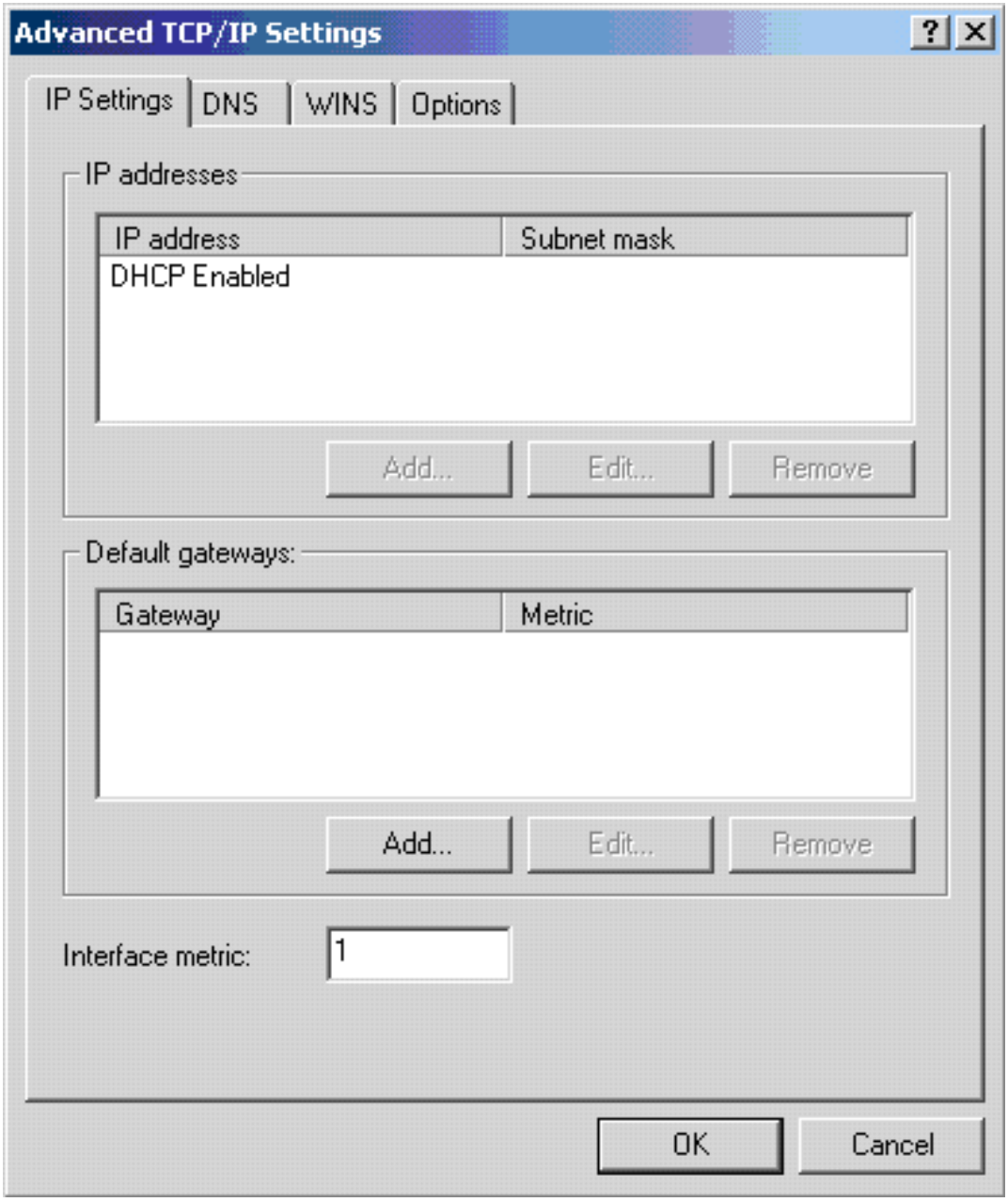
If the computer is in another network than the network of EasyGate, you have to enter the address of the common gateway. In this case you have to modify some settings of EasyGate too (e.g. *extra-routing*). If you have questions, you can ask your provider or supplier.

Attention:

It is important that **every computer** in the network has its own IP address. If you do not know enough about TCP/IP nets you should ask your provider or supplier.

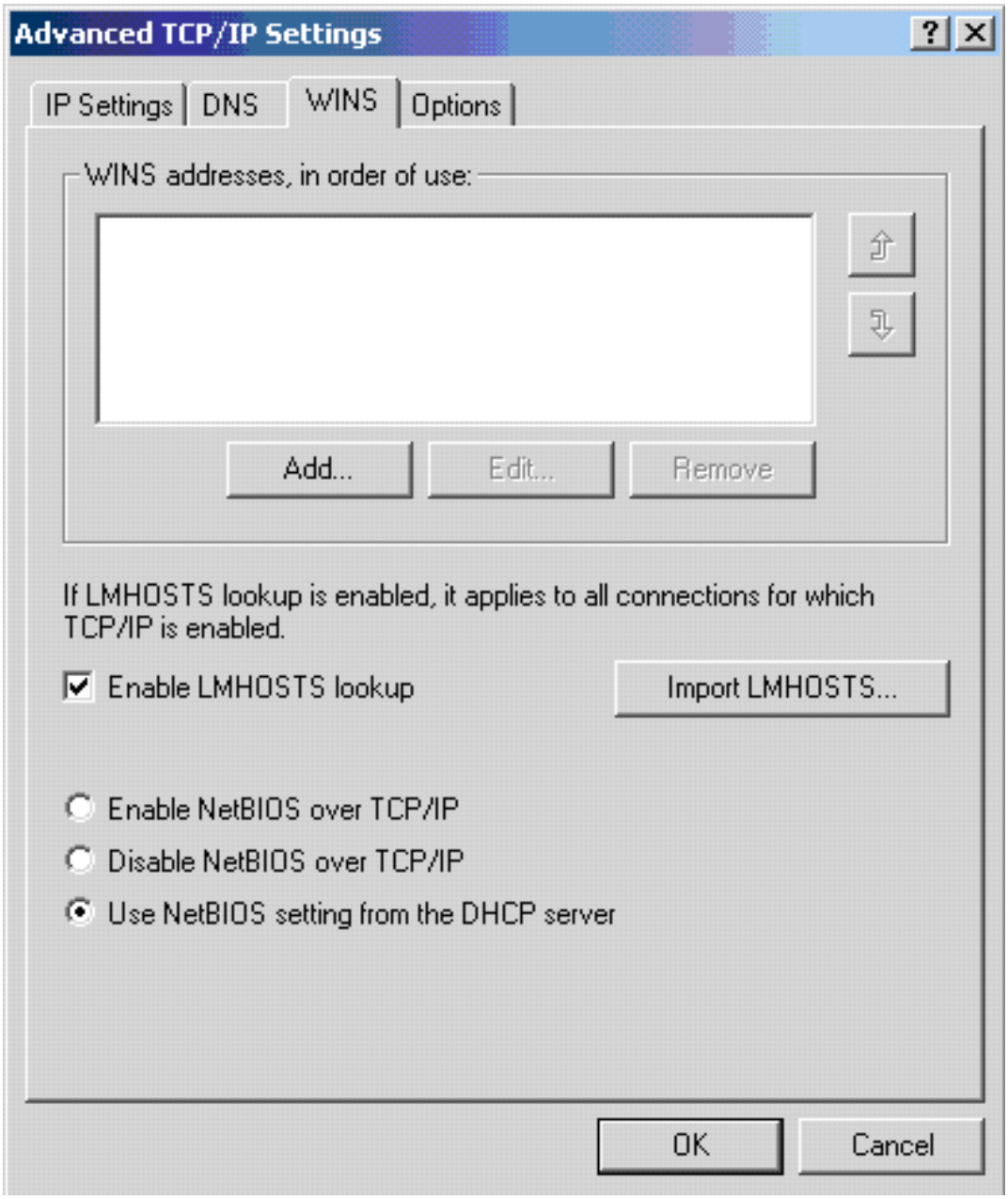
Now click on *Advanced* (Figure 8.5).

Figure 8.5.



Click on *WINS*.
The following window appears (Figure 8.6).

Figure 8.6.

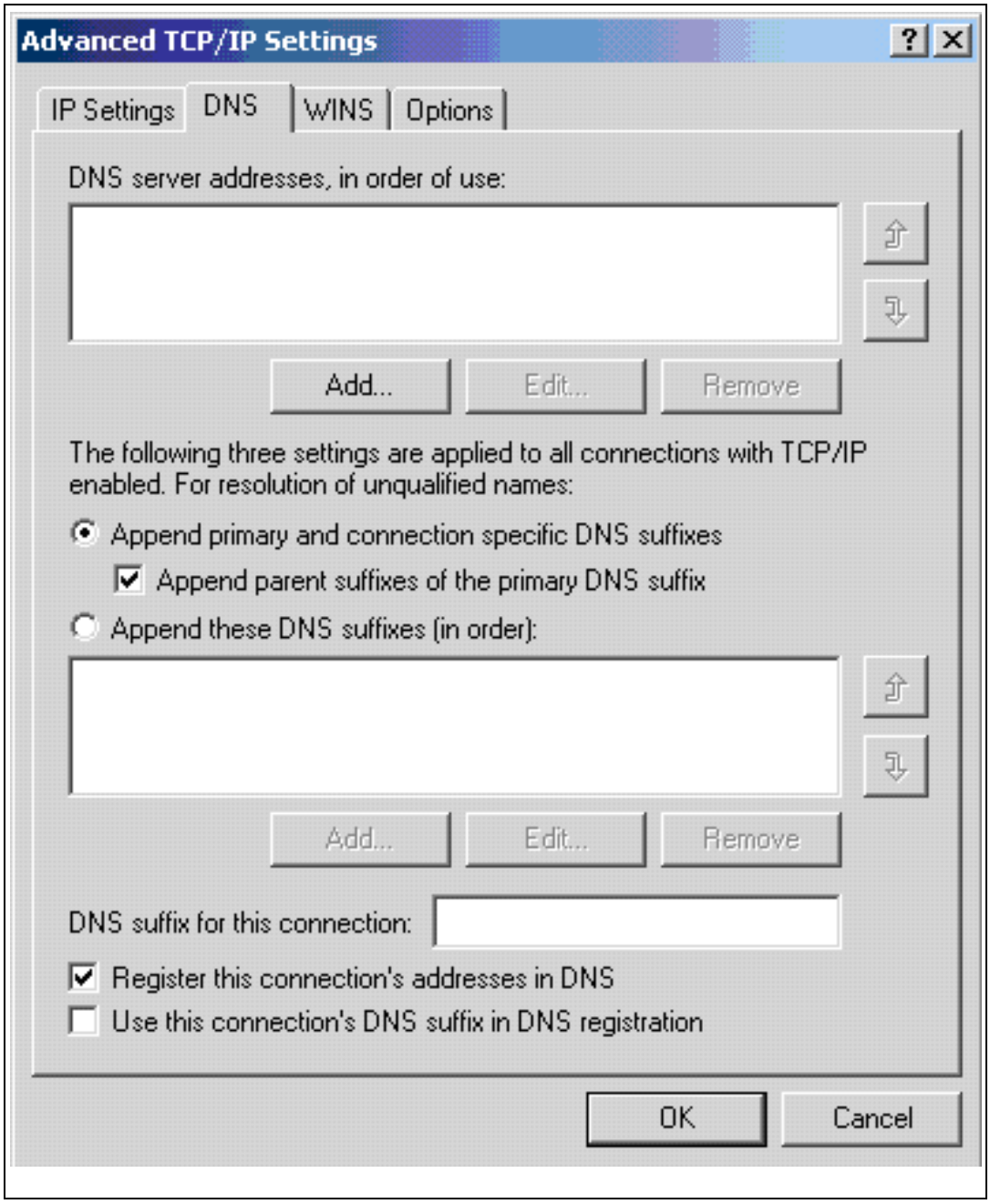


- If the DHCP server of EasyGate is enabled, select *Use NetBIOS settings from the DHCP server*.
- If the DHCP server of EasyGate is deactivated, select *Enable NetBIOS over TCP/IP*.

Then enter the internal address of EasyGate in the box above. Click on *Add*. Enter the corresponding information.

Now click on *DNS* (Figure 8.7) .

Figure 8.7.



If the DHCP server of EasyGate is enabled you do not have to enter a DNS server and you can leave DNS still deactivted (Figure 8.7). It is possible that there is a DNS server in the list already. Normally you can leave the current server. If there are problems you should consider if the current settings are necessary. If they are not necessary, you should delete them.
If the client computer has a fixed IP address, you have to activate the DNS. Enter a name that is bound to the current address of the computer. Under *Domain* you do not have to enter anything. Under *DNS server in order of use* you have to enter the internal address of EasyGate. Under *Append these DNS suffixes (in order)* enter the same information as they are in the EasyConfig menu under *Name server*. Normally this setting is configured by means of **internal.local** and do not have to be changed. If there are other settings already, normally it is sufficient to add the EasyGate settings.

Attention:

The item *Append these DNS suffixes (in order)* is not connected with the workgroup / domain in the *EasyGate - EasyConfig - EasyWeb* menu. This you will find at *Identification* in the *control panel - network* on the client PC.

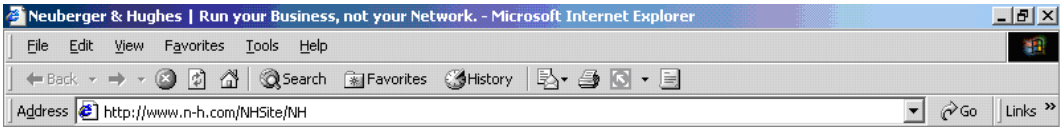
Thus the configuration of the TCP/IP settings is finished. The settings of the other options do not have to be changed. Now click on the **OK**-button. It is possible that the PC must copy a few data files from the installation CD. After that you have to restart your PC.

8.2. Webbrowser (Microsoft Internet Explorer)

To use your webbrowser with EasyGate you have to modify a few settings. The configurations for the Internet Explorer and for the Netscape Communicator are explained here. Consider that the exact settings could differ a little bit between the various versions. If you use Netscape the version has to be Netscape 3.0 at least. If you use Internet Explorer you have to use a version that is not older than 3.02. Other browsers should not be older than two years.

Open the Internet Explorer.
Click on *Tools* and after that on *Internet Options* in the menu.

Figure 8.8.



8.2.1. Option *General*

Figure 8.9.

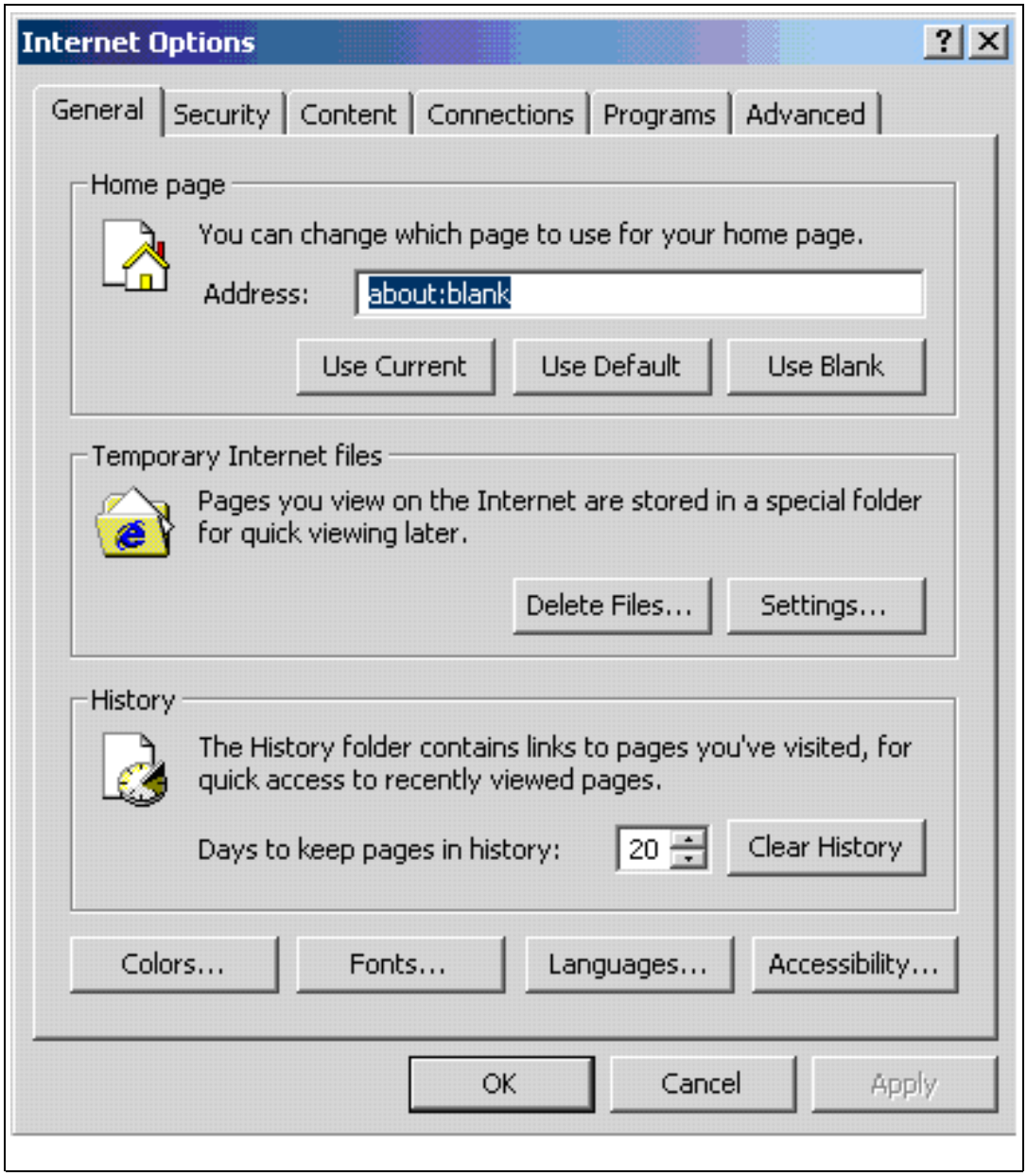
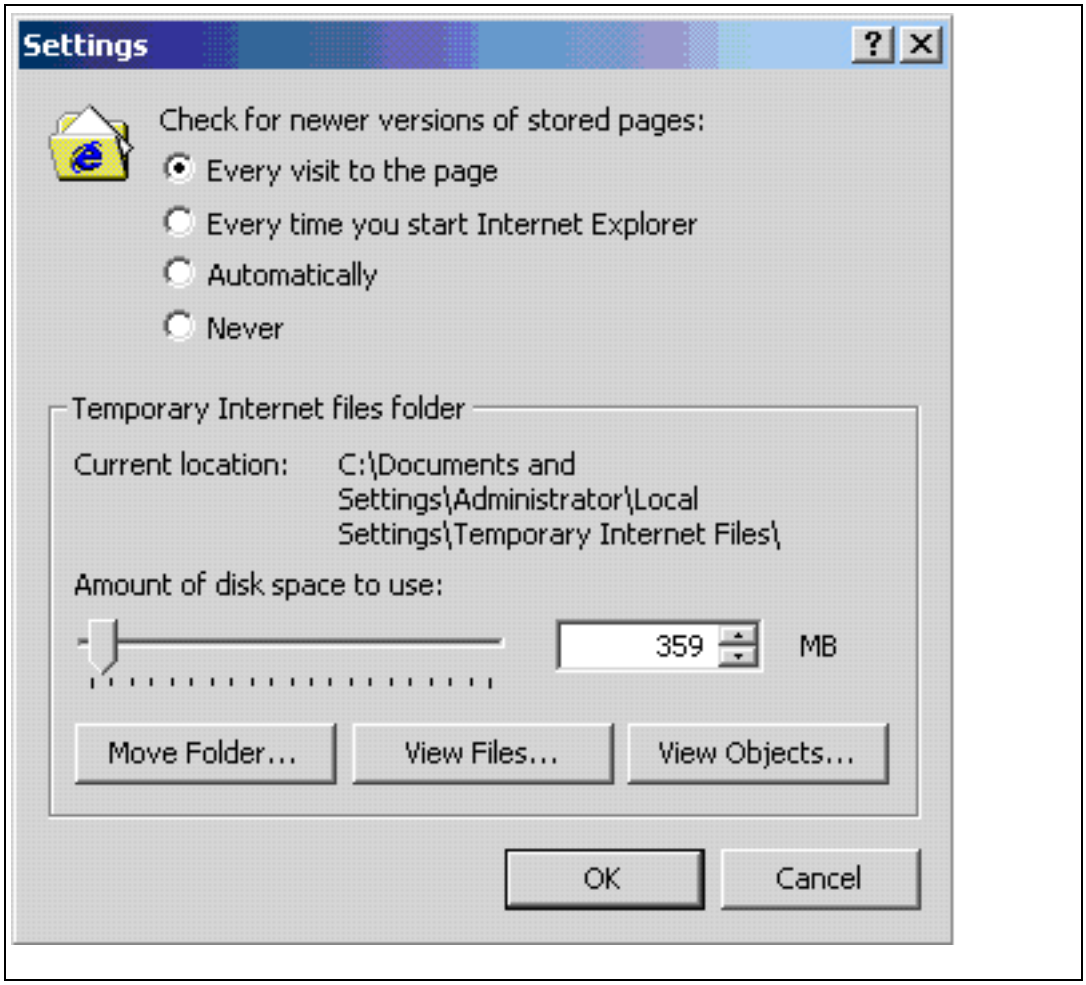

Internet Options
General
Security
Content
Connections
Programs
Advanced
Home page
You can change which page to use for your home page.
Address:
about:blank
Use Current
Use Default
Use Blank
Temporary Internet files
Pages you view on the Internet are stored in a special folder for quick viewing later.
Delete Files...
Settings...
History
The History folder contains links to pages you've visited, for quick access to recently viewed pages.
Days to keep pages in history:
20
Clear History
Colors...
Fonts...
Languages...
Accessibility...
OK
Cancel
Apply

Figure 8.10.



Temporal Internet data files (Figure 8.9).

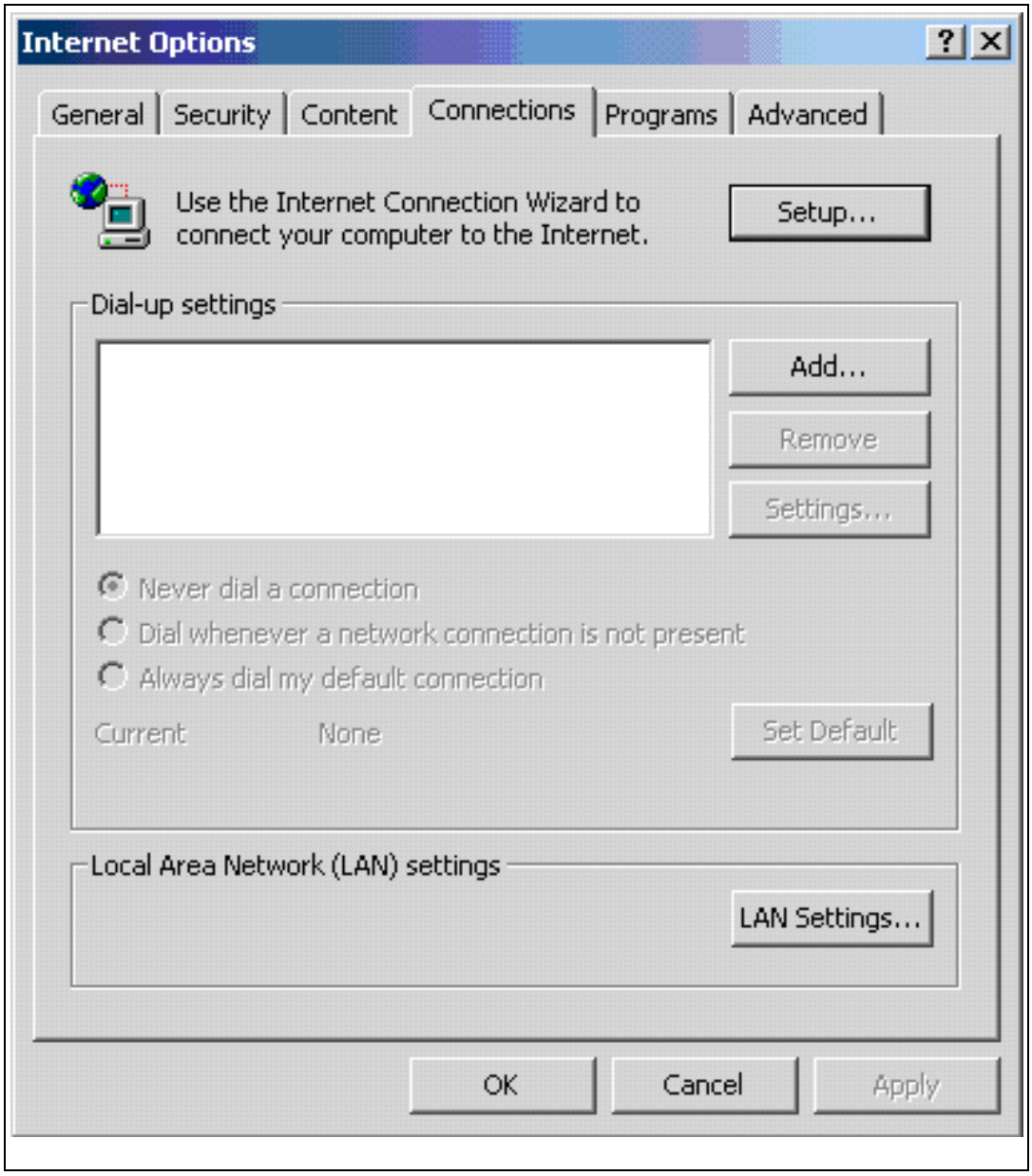
Click on *delete data files* and confirm with *OK*.
After that click on *settings*

Settings (Figure 8.10).

The option *at every access on the site* should be selected.
Configure the option *Saving area to occupy* to 1% of the drive.

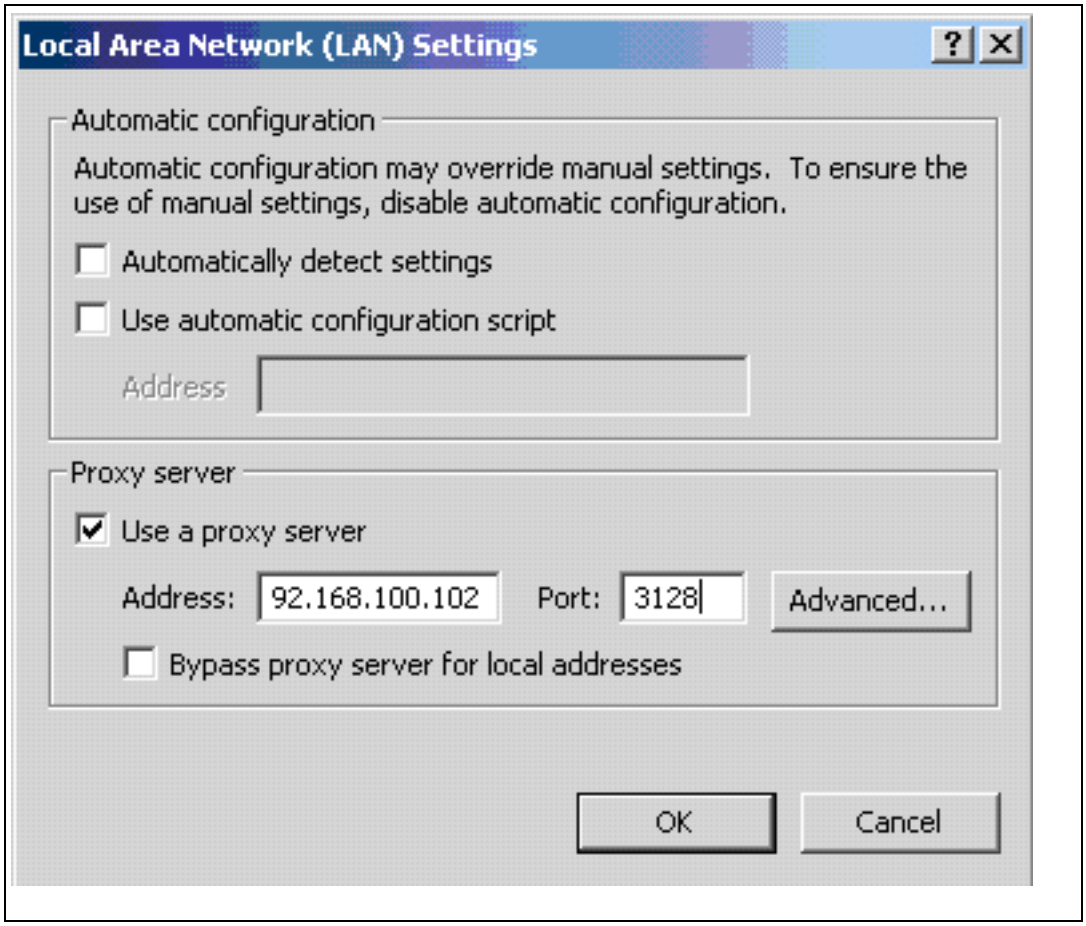
8.2.2. Option *Connections*

Figure 8.11.



Select *LAN Settings* (Figure 8.11)

Figure 8.12.



Click on *Use a proxy server* (Figure 8.12).

Address: enter the internal IP address of **EasyGate.**
Port: enter **3128**.
Click on *Advanced*.

Pay attention to the exceptions:

Here has to be entered *easymail*, the current host name and the IP address of EasyGate, seperated by semicolon. When you have entered the explained settings, leave the menu by clicking on the *OK button*.

8.3. 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	easygate
Server for outgoing mail, or SMTP server	easygate
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 EasyGate, 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 EasyGate 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 EasyGate server Squirrelmail Webmail has been implemented. This easy-to-use and secure webbased e-mail client can be reached easily through the EasyGate welcome screen on http://easygate . 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 8.13 to Figure 8.16 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. Partially it is necessary to replace *exchange4linux* with *easygate*.

Figure 8.13.

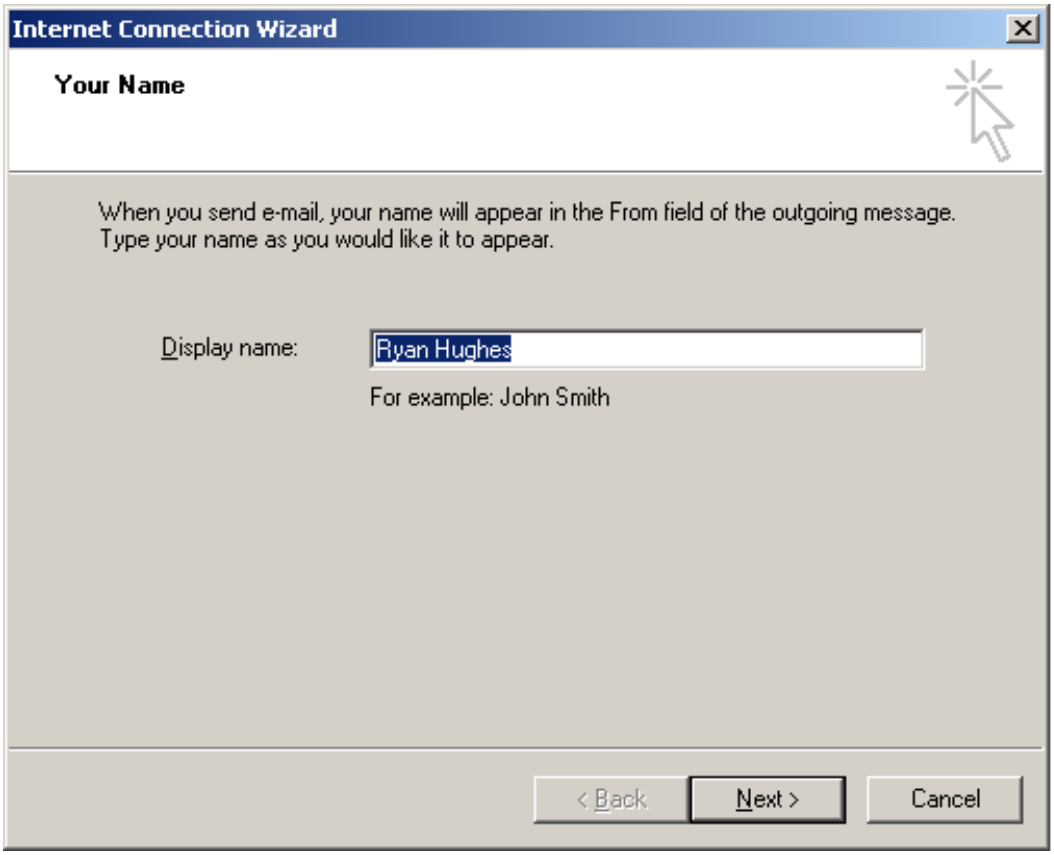


Figure 8.14.

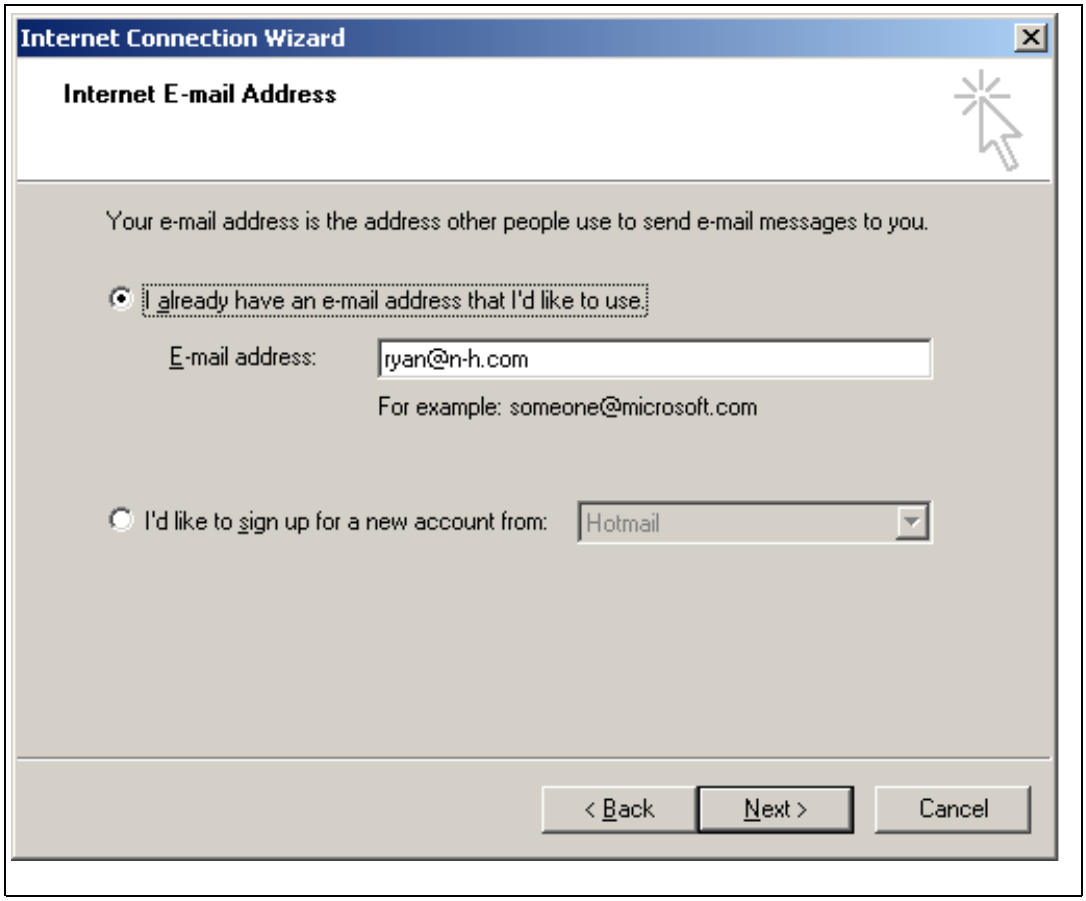

Internet Connection Wizard
Internet E-mail Address
Your e-mail address is the address other people use to send e-mail messages to you.
I already have an e-mail address that I'd like to use.
E-mail address:
ryan@n-h.com
For example: someone@microsoft.com
I'd like to sign up for a new account from:
Hotmail
< Back
Next >
Cancel

Figure 8.15.

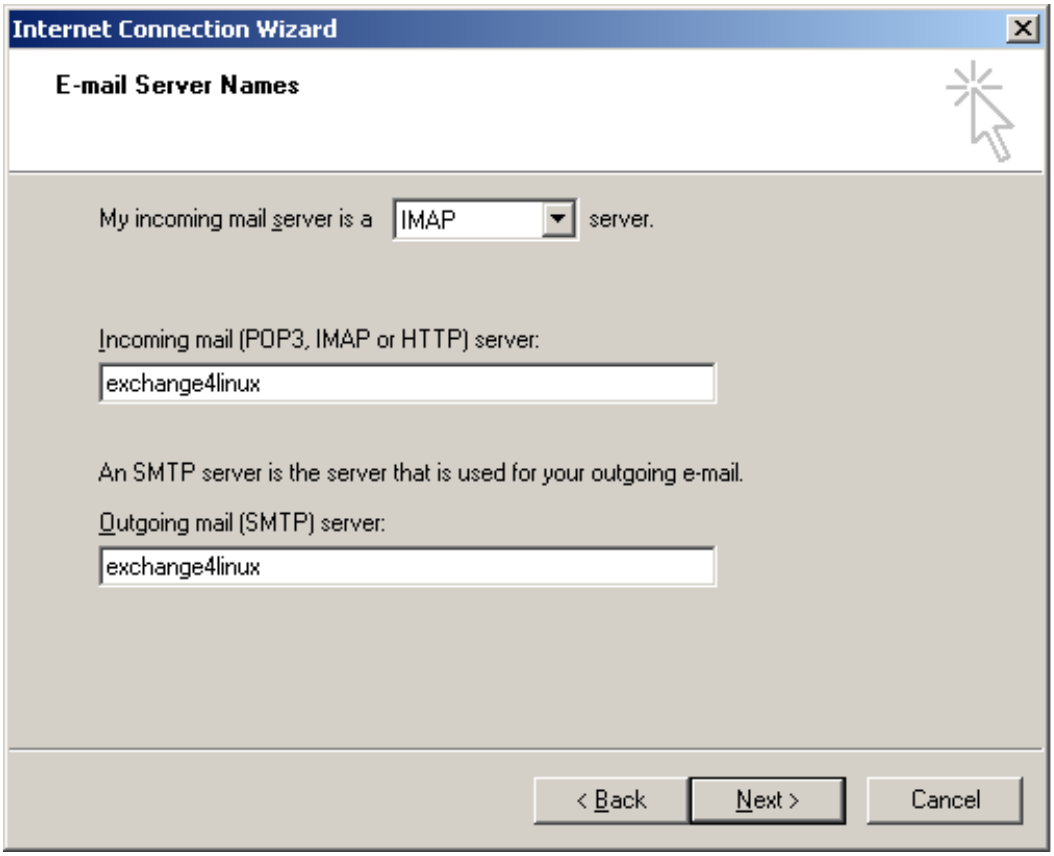
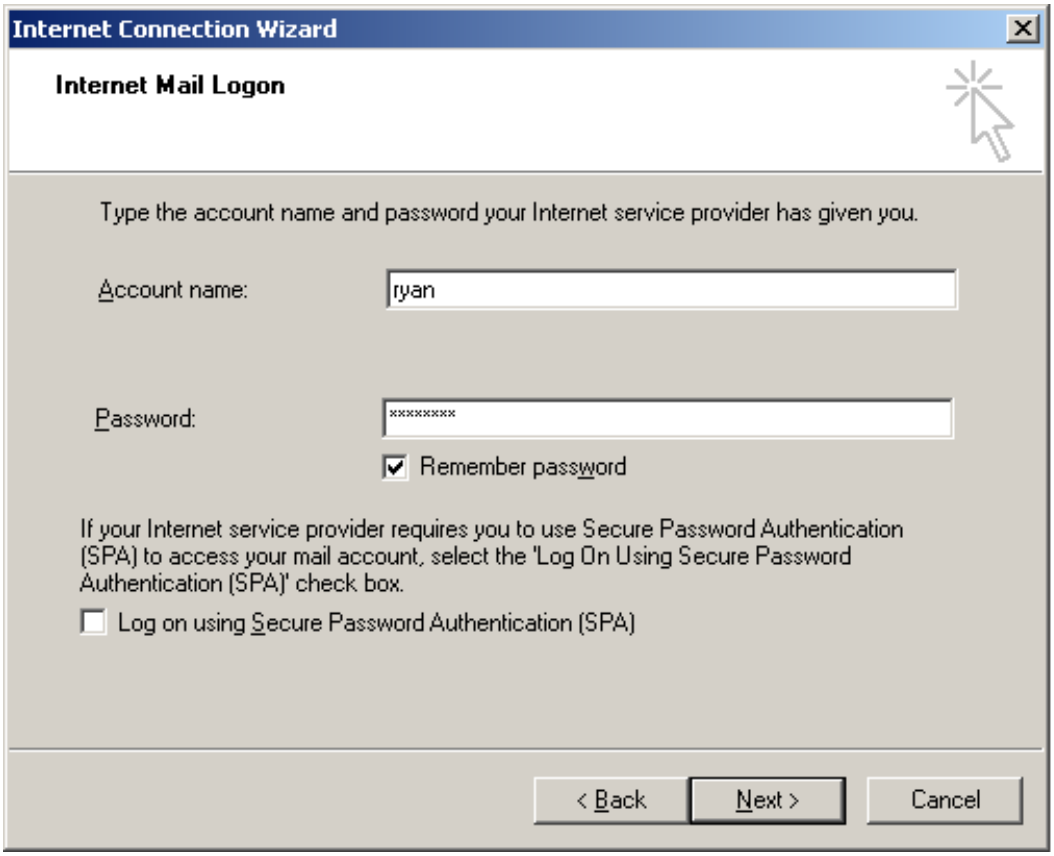

Internet Connection Wizard
E-mail Server Names
My incoming mail server is a IMAP server.
Incoming mail (POP3, IMAP or HTTP) server:
exchange4linux
An SMTP server is the server that is used for your outgoing e-mail.
Outgoing mail (SMTP) server:
exchange4linux
< Back
Next >
Cancel

Figure 8.16.


Internet Connection Wizard
Internet Mail Logon
Type the account name and password your Internet service provider has given you.
Account name:
ryan
Password:
Remember password
If your Internet service provider requires you to use Secure Password Authentication (SPA) to access your mail account, select the 'Log On Using Secure Password Authentication (SPA)' check box.
Log on using Secure Password Authentication (SPA)
< Back
Next >
Cancel

8.4. The faxclient

In order to send faxes using the EasyGate 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 EasyGate, 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/

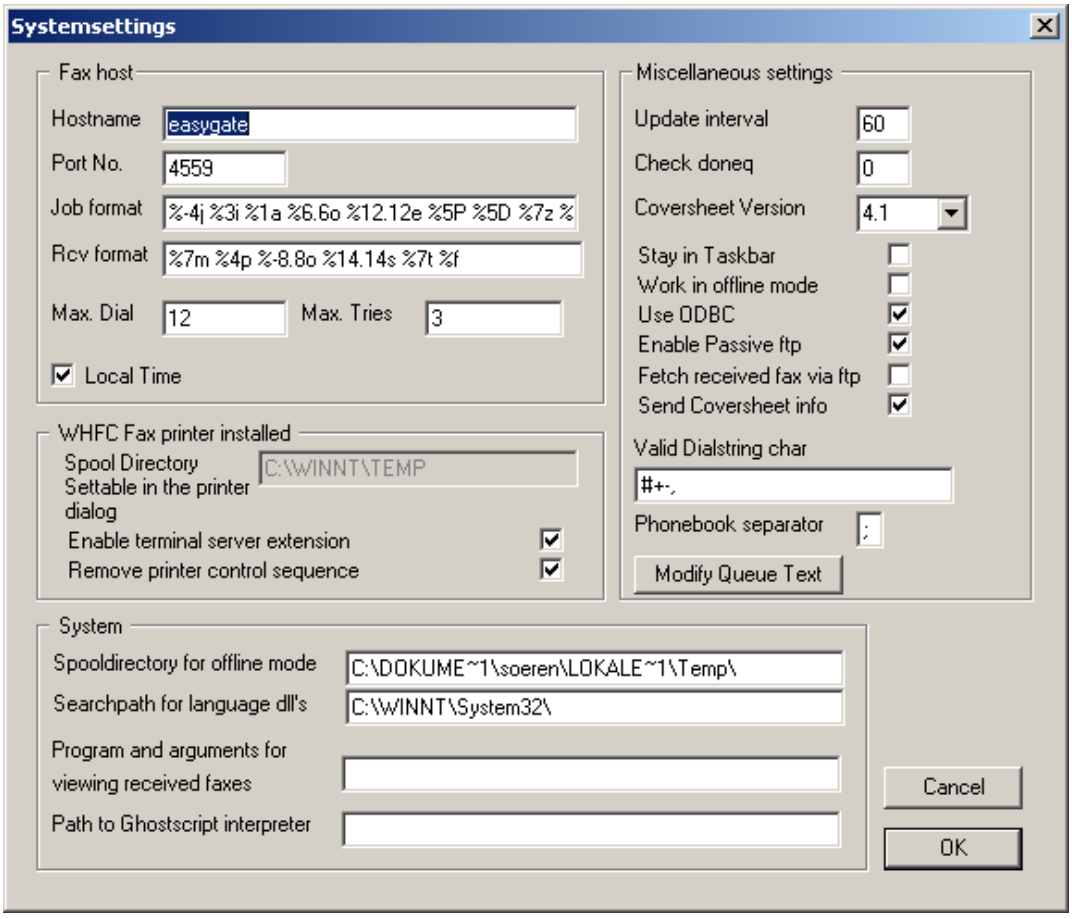
Caution

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 8.17.



Hostname:

Fill in *easygate*.

Port No.:

Leave this to the default setting of *4559*.

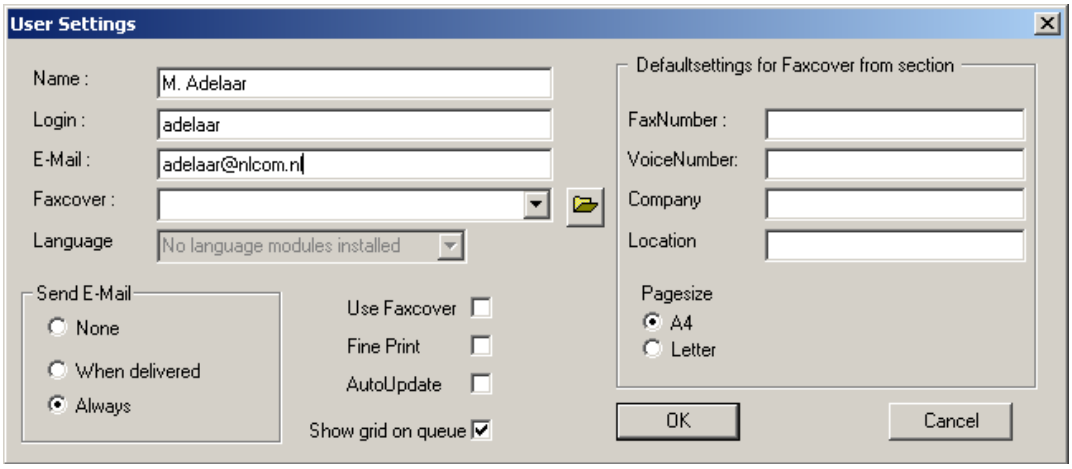
Job format:

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 8.18.



Login:

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

E-Mail:

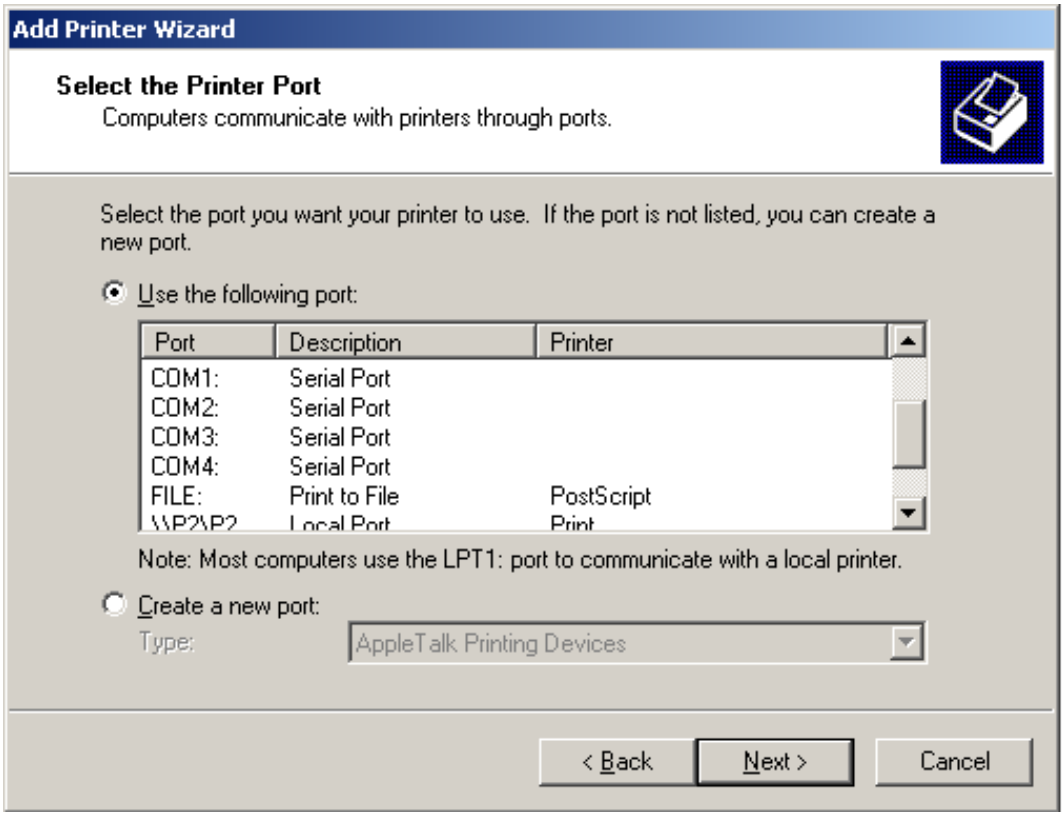
The e-mail address to which a confirmation of an outgoing fax will be sent. Usually this is the e-mail address of the user itself.

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:

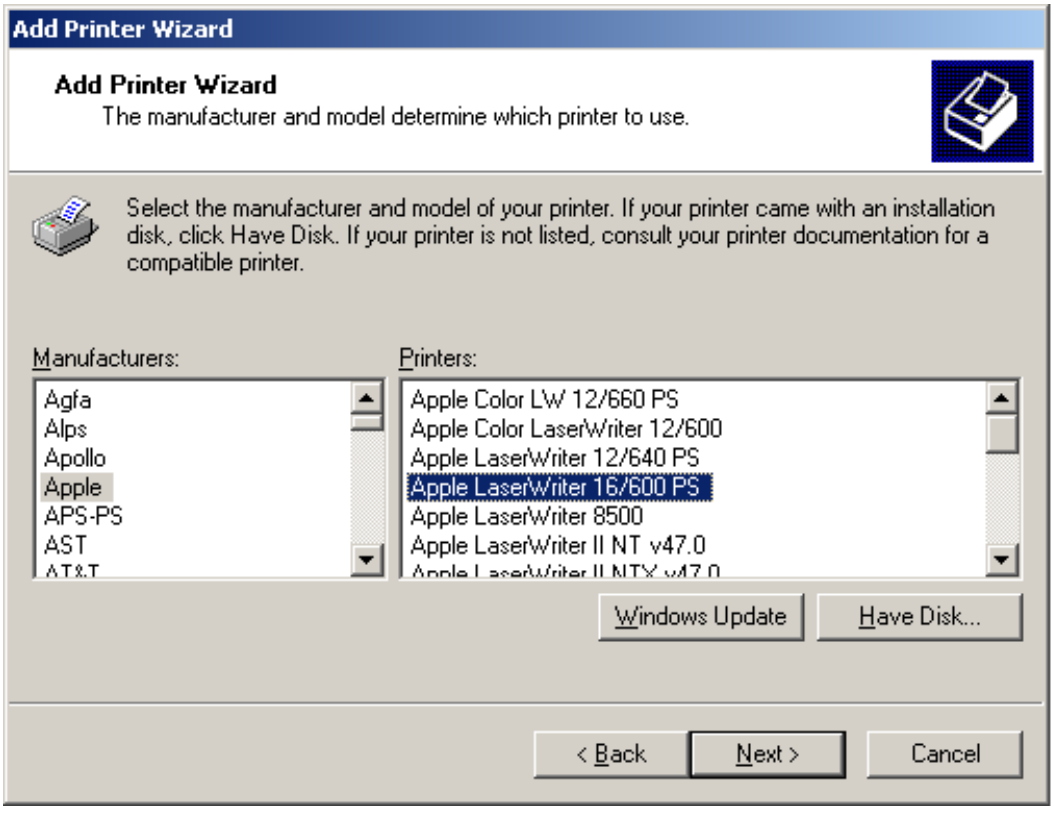
Now the faxclient must be installed as a virtual printer in the Control panel for printers and faxes. To do this, go to the **Control panel**, then click the item **printers and faxes** and finally click **add printer**. Select as a printer port **WHFCFAX** and as a printer, when Windows 98/NT/2000/XP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

Figure 8.19.



Selecting the printer port

Figure 8.20.



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.

Appendix A. Copyright & License Information

Table of Contents

A.1. Apache

Apache License
Version 2.0, January 2004
http://www.apache.org/licenses/

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

   (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

   (b) You must cause any modified files to carry prominent notices stating that You changed the files; and

   (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

   (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

   You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

http://www.apache.org/licenses/LICENSE-2.0

Unless required by applicable law or agreed to in writing, software
distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.

A.2. Bind

The ISC license for bind is:

```
------
# Copyright (c) 1993-1999 by Internet Software Consortium.
##
## Permission to use, copy, modify, and distribute this software for any
## purpose with or without fee is hereby granted, provided that the
above
## copyright notice and this permission notice appear in all copies.
##
## THE SOFTWARE IS PROVIDED "AS IS" AND INTERNET SOFTWARE CONSORTIUM
DISCLAIMS
## ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED
WARRANTIES
## OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INTERNET SOFTWARE
## CONSORTIUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR
CONSEQUENTIAL
## DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR
## PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER
TORTIOUS
## ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE
OF THIS
## SOFTWARE.

   Internet Software Consortium
   950 Charter Street
   Redwood City, CA 94063
   Tel: 1-888-868-1001
   Fax: 1-650-779-7055
   Email: licensing@isc.org
------
```

The RSA license is:

```
------
                        DNSSAFE LICENSE TERMS

This BIND software includes the DNSsafe software from RSA Data
Security, Inc., which is copyrighted software that can only be
distributed under the terms of this license agreement.

The DNSsafe software cannot be used or distributed separately from the
BIND software.  You only have the right to use it or distribute it as
a bundled, integrated product.

The DNSsafe software can ONLY be used to provide authentication for
resource records in the Domain Name System, as specified in RFC 2065
and successors.  You cannot modify the BIND software to use the
DNSsafe software for other purposes, or to make its cryptographic
functions available to end-users for other uses.

If you modify the DNSsafe software itself, you cannot modify its
documented API, and you must grant RSA Data Security the right to use,
modify, and distribute your modifications, including the right to use
any patents or other intellectual property that your modifications
depend upon.

You must not remove, alter, or destroy any of RSA's copyright notices
or license information.  When distributing the software to the Federal
Government, it must be licensed to them as "commercial computer
software" protected under 48 CFR 12.212 of the FAR, or 48 CFR
227.7202.1 of the DFARS.

You must not violate United States export control laws by distributing
```

the DNSsafe software or information about it, when such distribution is prohibited by law.

THE DNSSAFE SOFTWARE IS PROVIDED "AS IS" WITHOUT ANY WARRANTY WHATSOEVER. RSA HAS NO OBLIGATION TO SUPPORT, CORRECT, UPDATE OR MAINTAIN THE RSA SOFTWARE. RSA DISCLAIMS ALL WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AS TO ANY MATTER WHATSOEVER, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS.

If you desire to use DNSsafe in ways that these terms do not permit, please contact RSA Data Security, Inc., 100 Marine Parkway, Redwood City, California 94065, USA, to discuss alternate licensing arrangements.

A.3. CUPS

```
CUPS is licensed under the GNU General Public License and
GNU Library General Public License [http://gate.ac.uk/gate/licence.html#SEC1].
Please contact Easy Software Products for commercial support
and "binary distribution" rights.
```

A.4. cyrus

```
ALL versions of the Cyrus IMAP server are now covered by the following
copyright message. However, please note that in distributions before 2.0,
there may still be files that have the old copyright text.

* Copyright (c) 1994-2003 Carnegie Mellon University. All rights reserved.
*
* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
* are met:
*
* 1. Redistributions of source code must retain the above copyright
* notice, this list of conditions and the following disclaimer.
*
* 2. Redistributions in binary form must reproduce the above copyright
* notice, this list of conditions and the following disclaimer in
* the documentation and/or other materials provided with the
* distribution.
*
* 3. The name "Carnegie Mellon University" must not be used to
* endorse or promote products derived from this software without
* prior written permission. For permission or any legal
* details, please contact
* Office of Technology Transfer
* Carnegie Mellon University
* 5000 Forbes Avenue
* Pittsburgh, PA 15213-3890
* (412) 268-4387, fax: (412) 268-7395
* tech-transfer@andrew.cmu.edu
*
* 4. Redistributions of any form whatsoever must retain the following
* acknowledgment:
* "This product includes software developed by Computing Services
* at Carnegie Mellon University (http://www.cmu.edu/computing/)."
*
* CARNEGIE MELLON UNIVERSITY DISCLAIMS ALL WARRANTIES WITH REGARD TO
* THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY
* AND FITNESS, IN NO EVENT SHALL CARNEGIE MELLON UNIVERSITY BE LIABLE
* FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES
* WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN
* AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING
* OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

If you find this software useful and valuable in your work, we welcome any
support you can offer toward continuing this work.

We gratefully accept contributions, whether intellectual or monetary.
Intellectual contributions in the form of code or constructive collaboration
can be directed to cyrus-bugs+@andrew.cmu.edu (even if it is not a bug).

If you wish to provide financial support to the Cyrus Project, send a check
payable to Carnegie Mellon University to

                Project Cyrus
                Computing Services
                Carnegie Mellon University
                5000 Forbes Ave
                Pittsburgh, PA 15213
                USA
```

A.5. Fetchmail

```
This program is free software; you can redistribute it and/or modify
it under the terms of the GNU General Public License as published by
the Free Software Foundation; either version 2, or (at your option)
any later version.

This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the
GNU General Public License for more details.
```

A.6. GNU

GNU GENERAL PUBLIC LICENSE
Version 2, June 1991

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below,

refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this

License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR

REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

> <one line to give the program's name and a brief idea of what it does.>
> Copyright (C) <year> <name of author>
>
> This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.
>
> This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.
>
> You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

> Gnomovision version 69, Copyright (C) year name of author
> Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
> This is free software, and you are welcome to redistribute it
> under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

> Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker.
>
> <signature of Ty Coon>, 1 April 1989
> Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

A.7. OpenLDAP

OpenLDAP Public License

The OpenLDAP Public License
Version 2.8.1, 25 November 2003

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met:

1. Redistributions in source form must retain copyright statements and notices,

2. Redistributions in binary form must reproduce applicable copyright statements and notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution, and

3. Redistributions must contain a verbatim copy of this document.

The OpenLDAP Foundation may revise this license from time to time. Each revision is distinguished by a version number. You may use this Software under terms of this license revision or under the terms of any subsequent revision of the license.

THIS SOFTWARE IS PROVIDED BY THE OPENLDAP FOUNDATION AND ITS CONTRIBUTORS ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OPENLDAP FOUNDATION, ITS CONTRIBUTORS, OR THE AUTHOR(S) OR OWNER(S) OF THE SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The names of the authors and copyright holders must not be used in advertising or otherwise to promote the sale, use or other dealing in this Software without specific, written prior permission. Title to copyright in this Software shall at all times remain with copyright holders.

OpenLDAP is a registered trademark of the OpenLDAP Foundation.

A.8. Postfix

IBM PUBLIC LICENSE VERSION 1.0 - SECURE MAILER

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS IBM PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1. DEFINITIONS

"Contribution" means:
a) in the case of International Business Machines Corporation ("IBM"), the Original Program, and
b) in the case of each Contributor,
i) changes to the Program, and
ii) additions to the Program;
where such changes and/or additions to the Program originate from and are distributed by that particular Contributor. A Contribution 'originates' from a Contributor if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf.
Contributions do not include additions to the Program which:
(i) are separate modules of software distributed in conjunction with the Program under their own license agreement, and
(ii) are not derivative works of the Program.

"Contributor" means IBM and any other entity that distributes the Program.

"Licensed Patents " mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Original Program" means the original version of the software accompanying this Agreement as released by IBM, including source code, object code and documentation, if any.

"Program" means the Original Program and Contributions.

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

2. GRANT OF RIGHTS

a) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.

b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.

c) Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity.

Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.

d) Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3. REQUIREMENTS

A Contributor may choose to distribute the Program in object code form under its own license agreement, provided that:

a) it complies with the terms and conditions of this Agreement; and
b) its license agreement:
   i) effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;
   ii) effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits;
   iii) states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party; and
   iv) states that source code for the Program is available from such Contributor, and informs licensees how to obtain it in a reasonable manner on or through a medium customarily used for software exchange.

When the Program is made available in source code form:

a) it must be made available under this Agreement; and
b) a copy of this Agreement must be included with each copy of the Program.

Each Contributor must include the following in a conspicuous location in the Program:

Copyright (c) 1997,1998,1999, International Business Machines Corporation and others. All Rights Reserved.

In addition, each Contributor must identify itself as the originator of its Contribution, if any, in a manner that reasonably allows subsequent Recipients to identify the originator of the Contribution.

4. COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Contributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for other Contributors. Therefore, if a Contributor includes the Program in a commercial product offering, such Contributor ("Commercial Contributor") hereby agrees to defend and indemnify every other Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Contributor in connection with its distribution of the Program in a commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement. In order to qualify, an Indemnified Contributor must:

a) promptly notify the Commercial Contributor in writing of such claim, and
b) allow the Commercial Contributor to control, and cooperate with the Commercial Contributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Contributor might include the Program in a commercial product offering, Product X. That Contributor is then a Commercial Contributor. If that Commercial Contributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Contributor's responsibility alone. Under this section, the Commercial Contributor would have to defend claims against the other Contributors related to those performance claims and warranties, and if a court requires any other Contributor to pay any damages as a result, the Commercial Contributor must pay those damages.

5. NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OR CONDITIONS OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

6. DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. GENERAL

If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

If Recipient institutes patent litigation against a Contributor with respect to a patent applicable to software (including a cross-claim or counterclaim in a lawsuit), then any patent licenses granted by that Contributor to such Recipient under this Agreement shall terminate as of the date such litigation is filed. In addition, If Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

IBM may publish new versions (including revisions) of this Agreement from time to time. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its Contributions) under the new version. No one other than IBM has the right to modify this Agreement. Except as expressly stated in Sections 2(a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

A.9. PostgreSQL

A.10. proftp

```
Highly configurable GPL-licensed FTP server software.
```

A.11. Python

Python 2.3.4 license

This is the official license for the Python 2.3.4 release:

A. HISTORY OF THE SOFTWARE
==========

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.

All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

Release	Derived from	Year	Owner	GPL-compatible? (1)
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
2.3.3	2.3.2	2002-2003	PSF	yes
2.3.4	2.3.3	2004	PSF	yes

Footnotes:

(1) GPL-compatible doesn't mean that we're distributing Python under the GPL. All Python licenses, unlike the GPL, let you distribute a modified version without making your changes open source. The GPL-compatible licenses make it possible to combine Python with other software that is released under the GPL; the others don't.

(2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1

is "not incompatible" with the GPL.

Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible.

B. TERMS AND CONDITIONS FOR ACCESSING OR OTHERWISE USING PYTHON

PSF LICENSE AGREEMENT FOR PYTHON 2.3

1. This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using Python 2.3 software in source or binary form and its associated documentation.

2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python 2.3 alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright (c) 2001, 2002, 2003 Python Software Foundation; All Rights Reserved" are retained in Python 2.3 alone or in any derivative version prepared by Licensee.

3. In the event Licensee prepares a derivative work that is based on or incorporates Python 2.3 or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python 2.3.

4. PSF is making Python 2.3 available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON 2.3 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON 2.3 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON 2.3, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By copying, installing or otherwise using Python 2.3, Licensee agrees to be bound by the terms and conditions of this License Agreement.

BEOPEN.COM LICENSE AGREEMENT FOR PYTHON 2.0

BEOPEN PYTHON OPEN SOURCE LICENSE AGREEMENT VERSION 1

1. This LICENSE AGREEMENT is between BeOpen.com ("BeOpen"), having an office at 160 Saratoga Avenue, Santa Clara, CA 95051, and the Individual or Organization ("Licensee") accessing and otherwise using this software in source or binary form and its associated documentation ("the Software").

2. Subject to the terms and conditions of this BeOpen Python License Agreement, BeOpen hereby grants Licensee a non-exclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use the Software alone or in any derivative version, provided, however, that the BeOpen Python License is retained in the Software, alone or in any derivative version prepared by Licensee.

3. BeOpen is making the Software available to Licensee on an "AS IS" basis. BEOPEN MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, BEOPEN MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

4. BEOPEN SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF THE SOFTWARE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF USING, MODIFYING OR DISTRIBUTING THE SOFTWARE, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

5. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

6. This License Agreement shall be governed by and interpreted in all respects by the law of the State of California, excluding conflict of law provisions. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between BeOpen and Licensee. This License Agreement does not grant permission to use BeOpen trademarks or trade names in a trademark sense to endorse or promote products or services of Licensee, or any third party. As an exception, the "BeOpen Python" logos available at http://www.pythonlabs.com/logos.html may be used according to the permissions granted on that web page.

7. By copying, installing or otherwise using the software, Licensee agrees to be bound by the terms and conditions of this License Agreement.

CNRI LICENSE AGREEMENT FOR PYTHON 1.6.1
----

1. This LICENSE AGREEMENT is between the Corporation for National Research Initiatives, having an office at 1895 Preston White Drive, Reston, VA 20191 ("CNRI"), and the Individual or Organization ("Licensee") accessing and otherwise using Python 1.6.1 software in source or binary form and its associated documentation.

2. Subject to the terms and conditions of this License Agreement, CNRI hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python 1.6.1 alone or in any derivative version, provided, however, that CNRI's License Agreement and CNRI's notice of copyright, i.e., "Copyright (c) 1995-2001 Corporation for National Research Initiatives; All Rights Reserved" are retained in Python 1.6.1 alone or in any derivative version prepared by Licensee. Alternately, in lieu of CNRI's License Agreement, Licensee may substitute the following text (omitting the quotes): "Python 1.6.1 is made available subject to the terms and conditions in CNRI's License Agreement. This Agreement together with Python 1.6.1 may be located on the Internet using the following unique, persistent identifier (known as a handle): 1895.22/1013. This Agreement may also be obtained from a proxy server on the Internet using the following URL: http://hdl.handle.net/1895.22/1013".

3. In the event Licensee prepares a derivative work that is based on or incorporates Python 1.6.1 or any part thereof, and wants to make the derivative work available to others as provided herein, then

Licensee hereby agrees to include in any such work a brief summary of the changes made to Python 1.6.1.

4. CNRI is making Python 1.6.1 available to Licensee on an "AS IS" basis. CNRI MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, CNRI MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON 1.6.1 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. CNRI SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON 1.6.1 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON 1.6.1, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. This License Agreement shall be governed by the federal intellectual property law of the United States, including without limitation the federal copyright law, and, to the extent such U.S. federal law does not apply, by the law of the Commonwealth of Virginia, excluding Virginia's conflict of law provisions. Notwithstanding the foregoing, with regard to derivative works based on Python 1.6.1 that incorporate non-separable material that was previously distributed under the GNU General Public License (GPL), the law of the Commonwealth of Virginia shall govern this License Agreement only as to issues arising under or with respect to Paragraphs 4, 5, and 7 of this License Agreement. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between CNRI and Licensee. This License Agreement does not grant permission to use CNRI trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By clicking on the "ACCEPT" button where indicated, or by copying, installing or otherwise using Python 1.6.1, Licensee agrees to be bound by the terms and conditions of this License Agreement.

ACCEPT

CWI LICENSE AGREEMENT FOR PYTHON 0.9.0 THROUGH 1.2

Copyright (c) 1991 - 1995, Stichting Mathematisch Centrum Amsterdam, The Netherlands. All rights reserved.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Stichting Mathematisch Centrum or CWI not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

STICHTING MATHEMATISCH CENTRUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL STICHTING MATHEMATISCH CENTRUM BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

A.12. Samba

GNU Free Documentation License
Version 1.2, November 2002

0. PREAMBLE

The purpose of this License is to make a manual, textbook, or other functional and useful document "free" in the sense of freedom: to assure everyone the effective freedom to copy and redistribute it, with or without modifying it, either commercially or noncommercially. Secondarily, this License preserves for the author and publisher a way to get credit for their work, while not being considered responsible for modifications made by others.

This License is a kind of "copyleft", which means that derivative works of the document must themselves be free in the same sense. It complements the GNU General Public License, which is a copyleft license designed for free software.

We have designed this License in order to use it for manuals for free software, because free software needs free documentation: a free program should come with manuals providing the same freedoms that the software does. But this License is not limited to software manuals; it can be used for any textual work, regardless of subject matter or whether it is published as a printed book. We recommend this License principally for works whose purpose is instruction or reference.

1. APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work, in any medium, that contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. Such a notice grants a world-wide, royalty-free license, unlimited in duration, to use that work under the conditions stated herein. The "Document", below, refers to any such manual or work. Any member of the public is a licensee, and is addressed as "you". You accept the license if you copy, modify or distribute the work in a way requiring permission under copyright law.

A "Modified Version" of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A "Secondary Section" is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (Thus, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The "Invariant Sections" are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License. If a

section does not fit the above definition of Secondary then it is not allowed to be designated as Invariant. The Document may contain zero Invariant Sections. If the Document does not identify any Invariant Sections then there are none.

The "Cover Texts" are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License. A Front-Cover Text may be at most 5 words, and a Back-Cover Text may be at most 25 words.

A "Transparent" copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, that is suitable for revising the document straightforwardly with generic text editors or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup, or absence of markup, has been arranged to thwart or discourage subsequent modification by readers is not Transparent. An image format is not Transparent if used for any substantial amount of text. A copy that is not "Transparent" is called "Opaque".

Examples of suitable formats for Transparent copies include plain ASCII without markup, Texinfo input format, LaTeX input format, SGML or XML using a publicly available DTD, and standard-conforming simple HTML, PostScript or PDF designed for human modification. Examples of transparent image formats include PNG, XCF and JPG. Opaque formats include proprietary formats that can be read and edited only by proprietary word processors, SGML or XML for which the DTD and/or processing tools are not generally available, and the machine-generated HTML, PostScript or PDF produced by some word processors for output purposes only.

The "Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, "Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.

A section "Entitled XYZ" means a named subunit of the Document whose title either is precisely XYZ or contains XYZ in parentheses following text that translates XYZ in another language. (Here XYZ stands for a specific section name mentioned below, such as "Acknowledgements", "Dedications", "Endorsements", or "History".) To "Preserve the Title" of such a section when you modify the Document means that it remains a section "Entitled XYZ" according to this definition.

The Document may include Warranty Disclaimers next to the notice which states that this License applies to the Document. These Warranty Disclaimers are considered to be included by reference in this License, but only as regards disclaiming warranties: any other implication that these Warranty Disclaimers may have is void and has no effect on the meaning of this License.

2. VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever to those of this License. You may not use technical measures to obstruct or control the reading or further copying of the copies you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and you may publicly display copies.

3. COPYING IN QUANTITY

If you publish printed copies (or copies in media that commonly have printed covers) of the Document, numbering more than 100, and the Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible. You may add other material on the covers in addition. Copying with changes limited to the covers, as long as they preserve the title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material. If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

4. MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

A. Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.
B. List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has fewer than five), unless they release you from this requirement.
C. State on the Title page the name of the publisher of the Modified Version, as the publisher.
D. Preserve all the copyright notices of the Document.
E. Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.
F. Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.

G. Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.
H. Include an unaltered copy of this License.
I. Preserve the section Entitled "History", Preserve its Title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section Entitled "History" in the Document, create one stating the title, year, authors, and publisher of the Document as given on its Title Page, then add an item describing the Modified Version as stated in the previous sentence.
J. Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the "History" section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.
K. For any section Entitled "Acknowledgements" or "Dedications", Preserve the Title of the section, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.
L. Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.
M. Delete any section Entitled "Endorsements". Such a section may not be included in the Modified Version.
N. Do not retitle any existing section to be Entitled "Endorsements" or to conflict in title with any Invariant Section.
O. Preserve any Warranty Disclaimers.

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document, you may at your option designate some or all of these sections as invariant. To do this, add their titles to the list of Invariant Sections in the Modified Version's license notice. These titles must be distinct from any other section titles.

You may add a section Entitled "Endorsements", provided it contains nothing but endorsements of your Modified Version by various parties--for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard.

You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

5. COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice, and that you preserve all their Warranty Disclaimers.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single

copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original author or publisher of that section if known, or else a unique number. Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections Entitled "History" in the various original documents, forming one section Entitled "History"; likewise combine any sections Entitled "Acknowledgements", and any sections Entitled "Dedications". You must delete all sections Entitled "Endorsements".

6. COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other respects regarding verbatim copying of that document.

7. AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, is called an "aggregate" if the copyright resulting from the compilation is not used to limit the legal rights of the compilation's users beyond what the individual works permit. When the Document is included in an aggregate, this License does not apply to the other works in the aggregate which are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one half of the entire aggregate, the Document's Cover Texts may be placed on covers that bracket the Document within the aggregate, or the electronic equivalent of covers if the Document is in electronic form. Otherwise they must appear on printed covers that bracket the whole aggregate.

8. TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License, and all the license notices in the Document, and any Warranty Disclaimers, provided that you also include the original English version of this License and the original versions of those notices and disclaimers. In case of a disagreement between the translation and the original version of this License or a notice or disclaimer, the original version will prevail.

If a section in the Document is Entitled "Acknowledgements", "Dedications", or "History", the requirement (section 4) to Preserve its Title (section 1) will typically require changing the actual title.

9. TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided for under this License. Any other attempt to copy, modify, sublicense or distribute the Document is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

10. FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. See http://www.gnu.org/copyleft/.

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation.