Guntermann & Drunck
GmbH

seit 1985

UCON-IP-NEO

Operation Web Interface

Web Interface version 2.30
Subject to possible errors and technical modifications

License notes

G&D license

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Table of Contents

IP user module – Web Interface

1 Introduction to the web interface

1.1 General

The IP user module is configured via the **web interface**. The **configuration options** are extensive. In detail, these are:

- Integration in the productive network (e.g. assignment of IP addresses)
- Definition of the **web interface** timeout
- Designation of the standard language of the **web interface**
- Definition of the Syslog server
- Administration of the user settings of the respective registered user
- Update of the firmware (update function)

In addition, the **web interface** provides extensive **operating options**. You can thus:

- Restart the IP user module
- Call up the Java Client

In addition, the **web interface** provides information on:

- Currently used network settings
- Event protocol
- System configuration of the IP user module
- Current user sessions (client and server)

The following browser requirements have to be fulfilled to call up the **web interface**:

- Cookies enabled
- Java script activated
- Popup windows not principally blocked
- Internet Explorer:
  - Activate *Initial ActiveX control initialization and execute those that are not safe*

    or
  - Activate *Execute ActiveX Control Elements Safe for Scripting* and *Execute ActiveX Control Elements and Plug-ins* (default of the IE)

1.2 Unacceptable special characters

Some special characters may not be used in the web interface. In detail, these are:

- For the user name, user password, host name, domain name, NTPserver1 and 2, syslog server 1 and 2:

  " ' `

- For the file name (restore, update):

  " ' ` # & ;

1.3 Notes on system operation

The web interface was tested on different operation systems using the following browsers:

Operating system	**Browser**
Windows XP	Internet Explorer 7
Windows Vista	Internet Explorer 8
Windows 7	Mozilla Firefox 3.6
Ubuntu 10.04	
Ubuntu 10.10	

2 Starting the web interface

Perform the following steps in order to work with the **web interface**:

1. Open the web browser of your computer and enter the **IP address** or the **hostname** (for DNS servers) in the address bar of the IP user module.

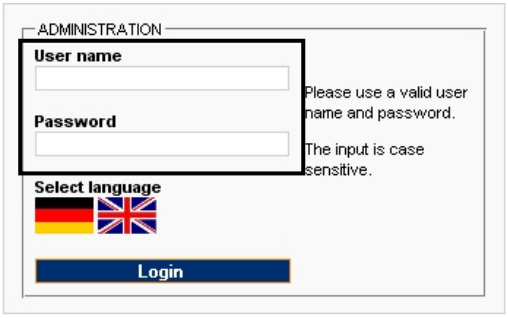
2. Click on **Yes** to confirm the security notice that is opening.

3. A **web interface** now opens. Select the language for running this session in the field **Language selection**. You can select between **German** and **English**. The language selection applies for the duration of the session. The language that is displayed when the web interface is first accessed is based on the defined standard language. This is set within the web interface in the menu **Configuration->System->User settings** (see **Chapter 3.1.2.1**)

4. Please login with the user name and password for the web interface. Ask your administrator for the respective information.

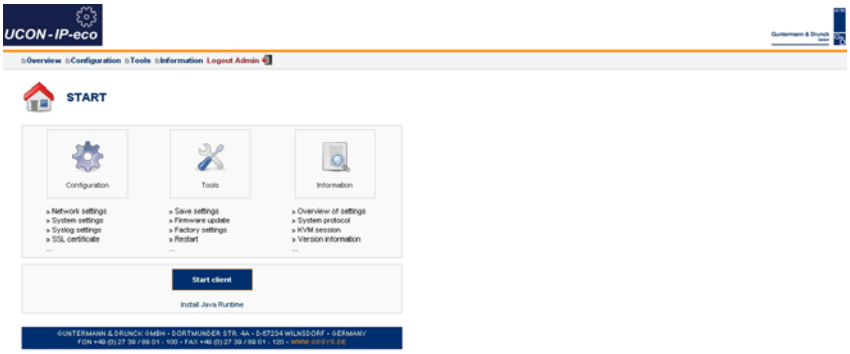
   The default user name is **Admin** and the password is **4658**. Please contact your administrator about the new user identification if this user identification has been changed.

   To login, first move to the field **User name**. Use the **TAB** key to move to the field **Password**.



5. After entering the **User name** and **Password**, click on **Login.**

Once you have logged in, you will see the start page of the **web interface**.



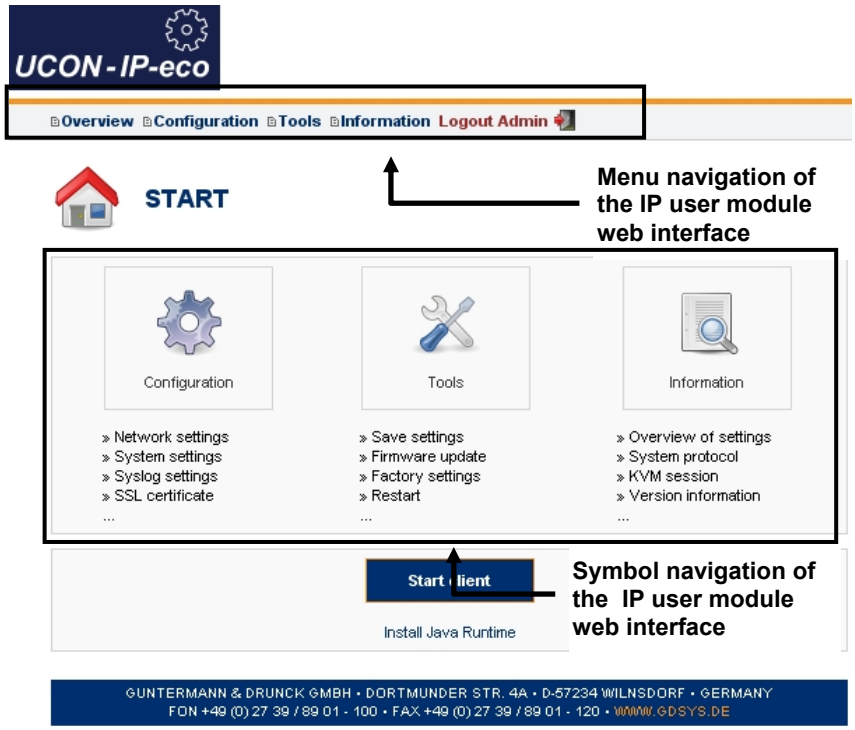
Now, from this window you can

- **configure,**
- **operate,**
- **and obtain system information.**

Information regarding these topics is given in the following chapters.

3 Menus

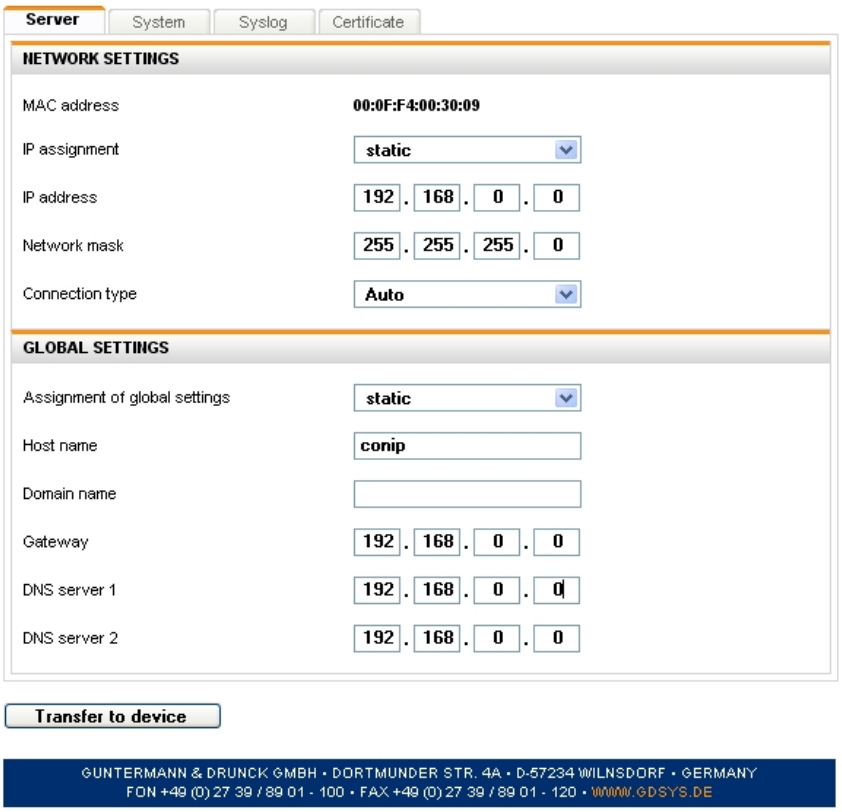
You have two options to navigate within the **web interface**:



Either move the mouse over an entry in the menu navigation or click on a symbol within the navigation symbol. Click one of these menu entries to open the selected menu and view the sub-entries associated with this menu (a new window appears).

3.1 Configuration menu

Click on the menu item **Configuration** in the menu navigation or symbol navigation.

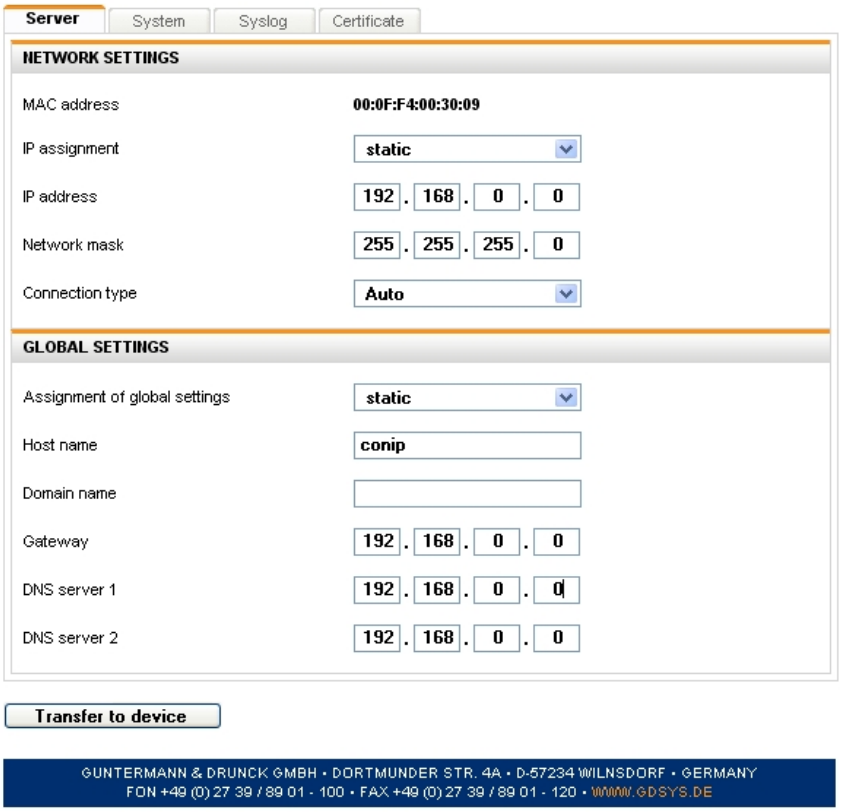


Note:

See the notes regarding the unacceptable special characters in **Chapter 1.2**!

3.1.1 Defining and editing network settings

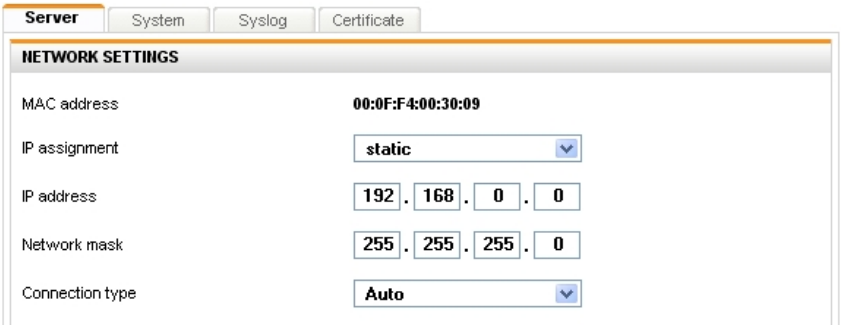
Click the **Server** tab. The following window opens:



The entries in this window to be configured refer to the ***Ethernet*** interface of the IP user module.

Use this interface to perform extensive network functions such as output of syslog messages, time adjustment via a time server, and the KVM access via the operation clients (Java or native client).

Use the **Network settings** section to define via which IP address the IP user module is to be accessed in the network.



In the area **IP assignment**, you can choose between the settings **Static** and **DHCP** (default: static).

If you set the entry in the field **IP configuration** to **DHCP**, no additional settings are required.

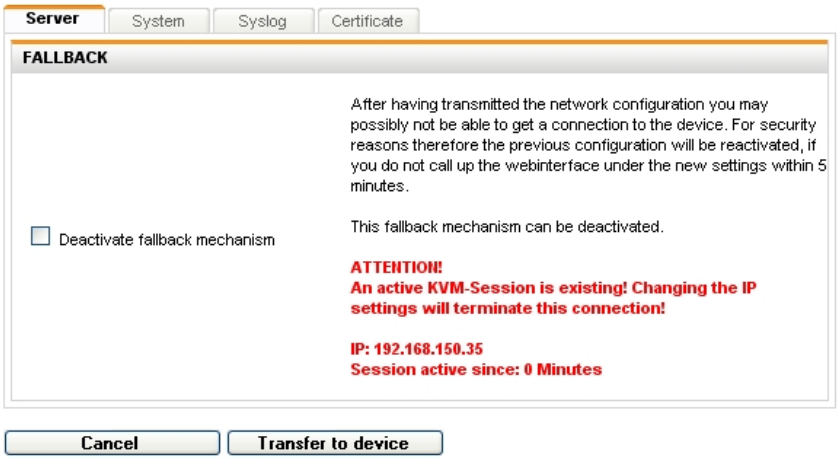
The new IP address is now displayed.

If you set the entry in the area **IP configuration** to **Static,** you have additional configuration options in the following fields:

IP Address: The IP address to be assigned to the IP user module in your network

Net mask: The standard setting is 255.255.255.0

Note: If you change the IP address during an active IP session, the following message window will alert you to this fact:



If you enter an invalid value in the field **IP address** (e.g. an alpha value, blank value or a value that is too high that does not correspond with the IPv4 specifications) and you want to transfer this value to the device (**Transfer to device** button) you will be advised of an invalid entry:

At the same time, the field **IP address** will mark the invalid entry box in red.

In the field **Connection type**, you choose the Ethernet connection speed and the mode. This selection is available for the static assignment as well as for the IP assignment via DHCP.

The options are:

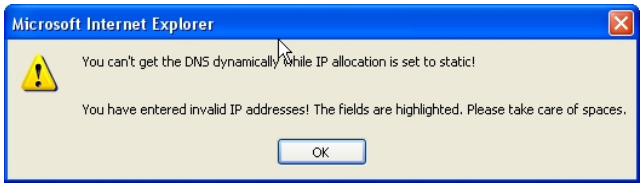
- **Fixed** Manual setting of the Ethernet connection speed and the mode. Select between the listed options.
- **Auto** The network interface and the counter device (second computer, hub, switch) coordinate the speed between each other.

In the section **Global settings,** you have the following entry options:

- **Assignment of global settings**
  Indicate here whether the IP address is to be a static or a dynamic assignment (DHCP)
- **Host name** The host name to be assigned to the IP user module
- **Domain** Indicate here which domain the IP user module is to belong to
- **Gateway** Indicate here via which standard gateway the IP user module is to be accessed
- **DNS-Server 1** Enter the P address of the DNS-Server
- **DNS-Server 2** See above

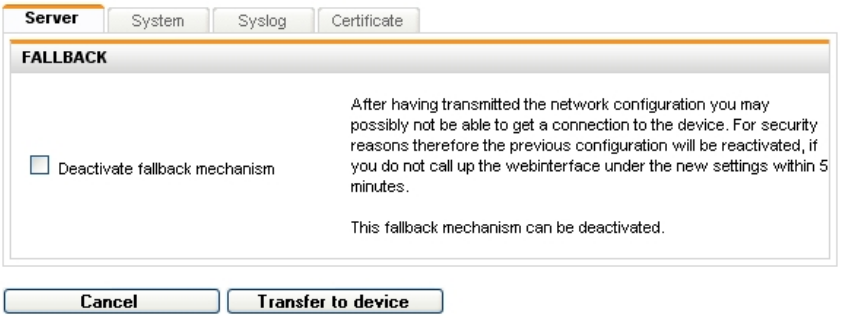
Note:

If you indicated in the field **IP assignment** (in the area for network settings) the value as static, but in the field **Assignment of global settings** (in the area of Global settings) you entered the value DHCP, you get the following warning:



Pay close attention that the values for the fields **IP assignment** and **assignment of global settings** correspond.

After you made your changes, you transmit them to the IP user module by clicking on **Transfer to device**. The following notification window opens:



If you decided to use this IP address for the IP user module in the future, you have to reconnect to the IP user module within 5 minutes. From the time of the next login, the IP user module can be accessed in the network with the new IP address.

With the fallback mechanism, you achieve that the IP user module picks up the old IP address setting again if there is no login after 5 minutes. This ensures that the IP user module is accessible again with the old network settings.

This function is deactivated by setting the **Deactivate fallback mechanism** checkmark! In this case, the IP user module keeps the new network settings.

By clicking **Cancel,** you end the process without transmitting the new settings to the IP user module and you return to the **Server** tab.

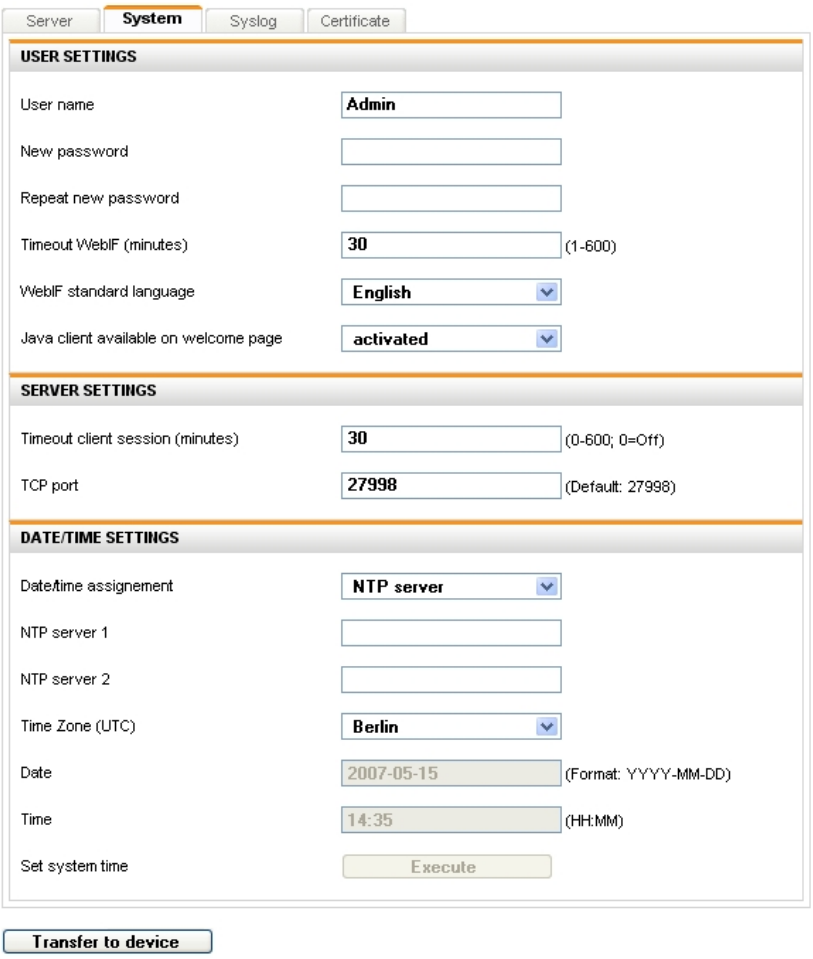
If you want to change the tab or the menu without saving, you will be notified of this condition in the following window:

Note:

Be sure to consider the notes regarding the impermissible special characters in **Chapter 1.2**!

3.1.2 Defining system wide settings

Click on the **Server** tab. The following window opens:



Here, you can change the user data of the web interface user, define the server setting of the IP user module and process date and time settings.

Note:

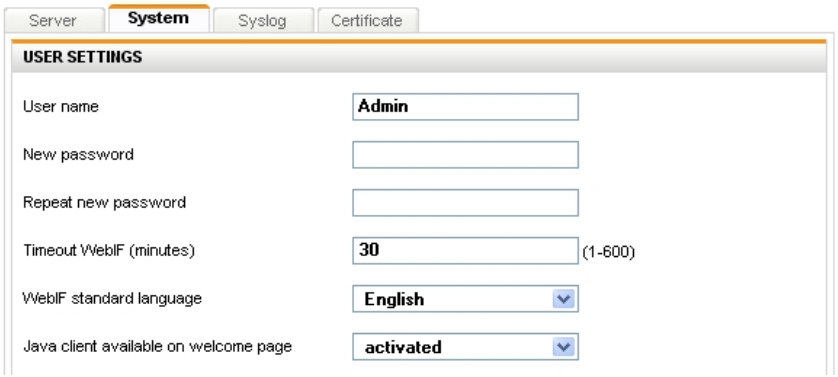
Be sure to consider the notes regarding the impermissible special characters in **Chapter 1.2**!

3.1.2.1 Adjust user settings

The IP user module only has one user. Additional user accounts cannot be created. This user has the rights of a web interface administrator. All tabs are accessible for this user.

The default user name is **Admin**, the login password is **4658**.

You can change these login dates in the area **User settings**.



Here, you have the following setting options:

User name: Enter your preferred user name here.
New Password: Assign a password to the new user. It must have at least 3 digits.
Repeat new password: In this field, repeat the new password.

Note:

Be sure to consider the notes regarding the impermissible special characters in **Chapter 1.2**!

In addition, you have these setting options:

- Definition of the period of inactivity after which an automatic logout should take place (timeout, can be set from 1-600 minutes)
- Determination of the standard language of the web interface. You may choose between German or English. The web interface is started with the standard language that is set here. This standard language however can be set for one language for the duration of a web interface session, which can differ from the standard language that is set here. This setting takes place on the welcome page on the web interface (see **Chapter 2, bullet point 3**).
- Use the **Java client standard layout** field to choose the keyboard layout of the connected keyboard.

After you made your changes, you transmit them to the IP user module by clicking on **Transfer to device**.

3.1.2.2 Adapting server settings

In this area, you can define the Timeout of a client session and determine the TCP port via which the IP user module should be accessible.

Timeout client session (minutes):
Use this entry to determine whether a client session should be protected against unauthorized access via timeout after a specified period without keyboard/mouse activities. Here, you can enter values ranging from 0 (no log-off) to a maximum of 600 minutes.

After the period entered and without mouse or keyboard activities, the IP user module terminates the client session (0 = no termination).

TCP port:
Here, you enter the port number to be used for accessing the IP user module in your network. You can enter values here ranging from 1 to a maximum of 65535. The port that is set here must be permitted in the firewall. **Port 80 and port 443 are blocked.**

Default: 27998

Note:
If you use a native client, please ensure that the server port in the native client is identical with the setting entered here.

Click **Cancel** to cancel all your changes.

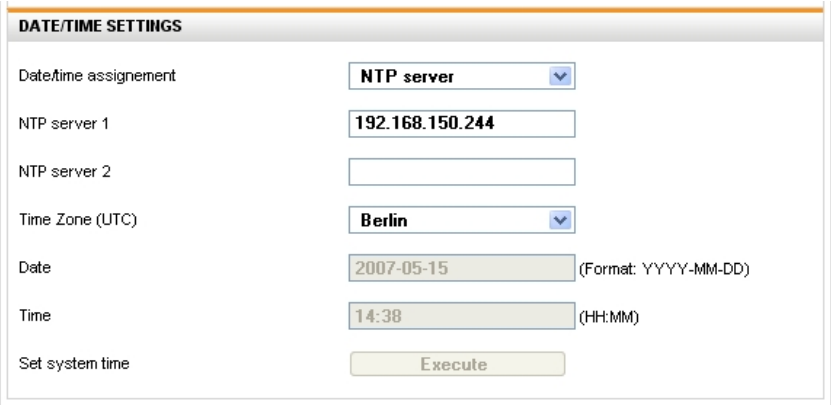
If all settings are correct, click **Save** to save your changes.

After you made your changes, you transmit them to the IP user module by clicking on **Transfer to device**.

3.1.2.3 Adjust time and date settings

In order to track log messages, the internal clock of the IP user module must be set to the correct time and date.

This can be automated via a network time protocol server or you do this manually.



Note:

Be sure to consider the notes regarding the impermissible special characters in **Chapter 1.2**!

Select the **automatic time setting** via an NTP server, set the entry in the area **Date/time assignment** to **NTP server**.

NOTE: Before you activate the time server, ensure that the time you specified via the manual settings differs by no more than +/- 5 min from your time server.

In the field **NTP server 1**, enter the IP address or the host name of the time server. Alternatively, you can set another time server in the field **NTP server 1**. In the field **Time zone,** you enter the applicable value.

For **manual time setting,** please proceed as follows:

Set the entry in the field **Date/time assignment** to **manually**.

Enter the values that apply for you in the fields **Time Zone**, **Date,** and **Time**.

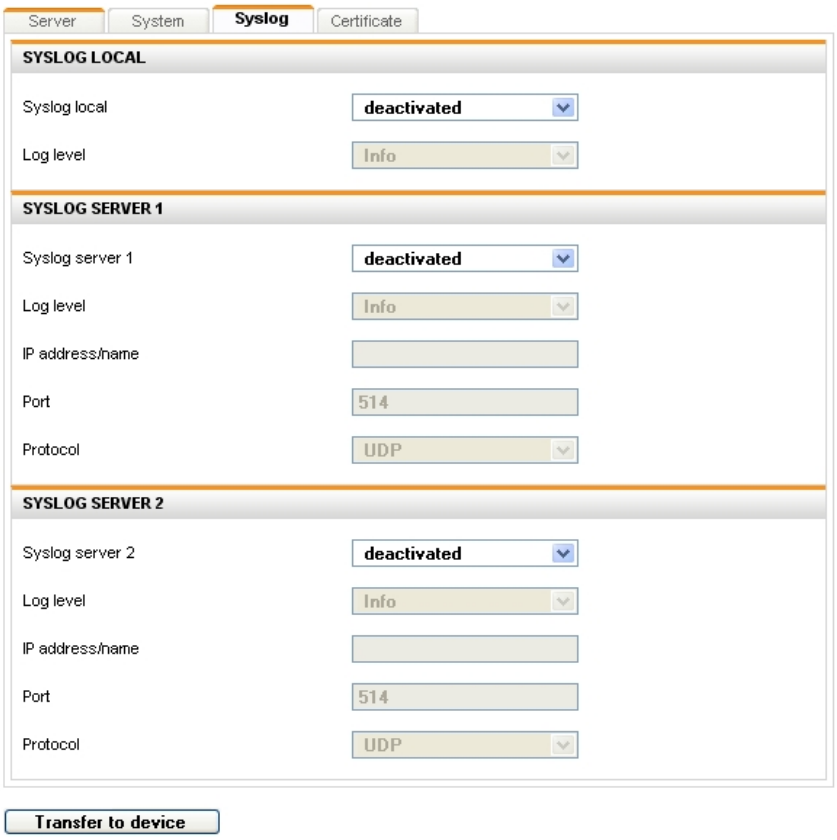
The time of the IP user module server must be identical with the time of the local computer from which the web interface is accessed. You can execute this by clicking on **Execute** in the line **Set system time**.

Click on **Transfer to device** to transmit your changes to the IP user module.

3.1.3 Syslog

In addition to the internal protocol, the IP user module can forward events to syslog servers in the network in the syslog format.

You can enter up to two systems in the network as recipients of events – the events are forwarded to any registered system via TCP or UDP to port 514 (default).

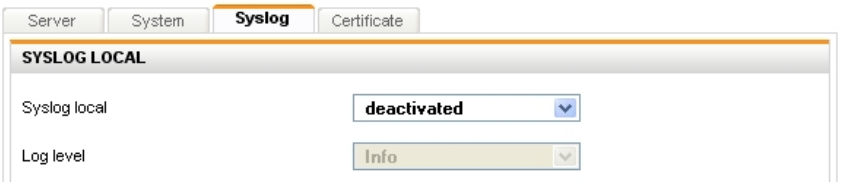


Here you can decide:

- whether the IP user module shall send syslog messages
- which log level shall send messages
- whether messages should be sent locally and/or to a syslog server

3.1.3.1 Locally activate syslog

If you set the value to *Activated* in the filed **Syslog local** in the drop down menu, the syslog messages are saved locally in the IP user module.



In the line **Log level,** you can determine the level from which messages are to be saved locally.

The storage space, however, is limited. If the storage is full, old messages are being overwritten by new messages. When the IP user module is restarted, all messages that were stored locally will be deleted.

For this reason, it is recommended to also list a syslog server. This will be explained in the next chapter.

3.1.3.2 Send syslog messages to a syslog server

As an alternative to sending syslog messages to the IP user module, you can activate a syslog server as the recipient for the syslog messages. Overall, a maximum of two syslog servers can be addressed via the IP user module.

In the area **Syslog server 1** set the value to *Activated* in the drop down menu. All additional fields in the area **Syslog server 1** are activated and can be edited.

Under **Log level,** you determine the level from which messages are to be sent to the syslog server.

Under **IP address** and **Port,** you enter the IP address and the port of the syslog server that is to receive the syslog messages.

In addition, you can also determine the protocol type (**TCP** or **UPD**).

If you want to transmit your entries to the IP user module by pressing the button **Transfer to device**, but you have not entered an IP address for a syslog server, the following message appears on your screen:

In this case, enter the required information for the certificate and the key.

If you have entered all required information, press the button **Transfer to device**. In the lower area, you receive a notification about the saving process with a "Please wait..." message.

Note:
If you intend to also communicate with a second syslog server, please repeat the previously described steps in the area **Syslog server 1**.

Be sure to consider the notes regarding the impermissible special characters in **Chapter 1.2**!

3.1.4 Import your own certificate

An SSL certificate is stored for the web server on the IP user module for the safe connection via SSL. If the name of the device in the certificate does not match with the name in the UPR, a warning message appears in the browser. The only option to remove this message is for the user or the administrator of the IP user module to import a certificate with the correct name. This can be done via the web interface. Here, it should be ensured that

- the certificate is a RSA certificate, and not a DSA certificate.
- it is neither a Certificate Authority (CA) and nor a root certificate.

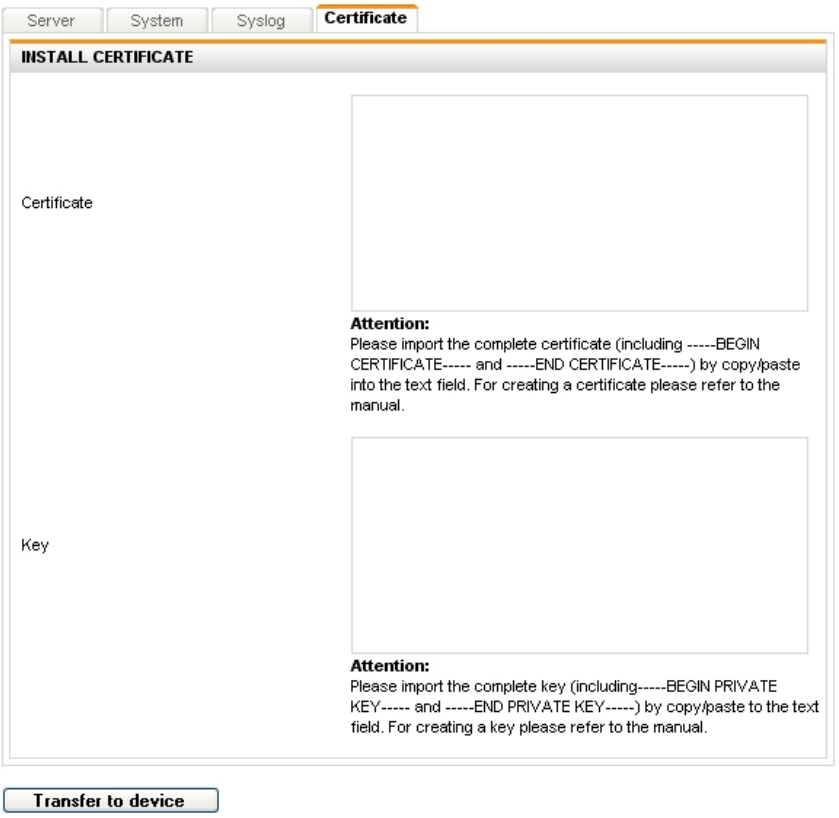
To create a certificate you can use the openssl program from the OpenSSL package, which can be downloaded from http://www.openssl.org/.
As an example the commands are:

1. Create private key: openssl genrsa -out server.key 2048
2. Create certificate request: openssl req -new -key server.key -out server.csr
3. Sign: openssl x509 -req -days 60 -in server.csr -signkey server.key -out server.crt

During the creation, some entries such as company, name, email address etc. are requested that the creator may enter at will. The DNS name or the IP address of the IP user module should be entered as **Common name**.

At the end of the process, 3 files were created: server.crt, server.csr and server.key. The content of **server.crt** is entered in the WebIF into the certificate field and the content of the server key is entered into the Key field.

Note:
The contents of the **server.crt** and **server.key** have to be entered in the respective fields because the certificate can otherwise not be copied successfully.



Example:

```
ds@ds:/tmp/ssl$ openssl genrsa -out server.key 2048
Generating RSA private key, 2048 bit long modulus
.....................................................+++
.....................................................................+++
e is 65537 (0x10001)
ds@ds:/tmp/ssl$ openssl req -new -key server.key -out server.csr
You are about to be asked to enter information that will be
incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or
a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) [AU]:DE
State or Province Name (full name) [Some-State]:NRW
```

```
Locality Name (eg, city) []:Wilnsdorf
Organization Name (eg, company) [Internet Widgits Pty Ltd]:G&D
Organizational Unit Name (eg, section) []:F&E
Common Name (eg, YOUR name) []:10.1.50.21
Email Address []:sales@gdsys.de

Please enter the following 'extra' attributes
to be sent with your certificate request
A challenge password []:
An optional company name []:G&D
ds@ds:/tmp/ssl$ openssl x509 -req -days 60 -in server.csr -signkey
server.key -out server.crt
Signature ok
subject=/C=DE/ST=NRW/L=Wilnsdorf/O=GuD/OU=F&E/CN=10.1.50.21/emailAddre
ss=sales@gdsys.de
Getting Private key
ds@ds:/tmp/ssl$
```

To copy the created certificate and keys, proceed as follows:

Import the certificate:

1. Save the certification on your computer.
2. Open the certificate with an editor.
3. Now, mark the certificate text.
4. In the following, copy the text of the certificate into the Certificate text field.

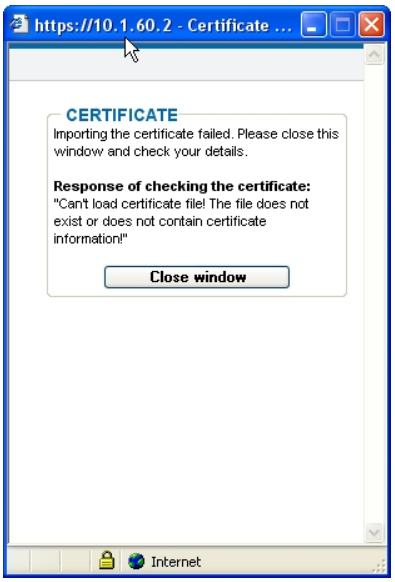
Import the key:

1. Save the key on your computer.
2. Open the certificate with an editor.
3. Mark the key text
4. In the following, copy the text of the certificate into the Certificate text field.

If you want to transmit your entries to the IP user module by pressing **Transfer to device**, but you have not entered a certificate or a key yet, the following message appears on your screen:

In this case, enter the required information for the certificate and the key.

The certificate or the key can also contain errors. In this case, the following message appears on your screen:

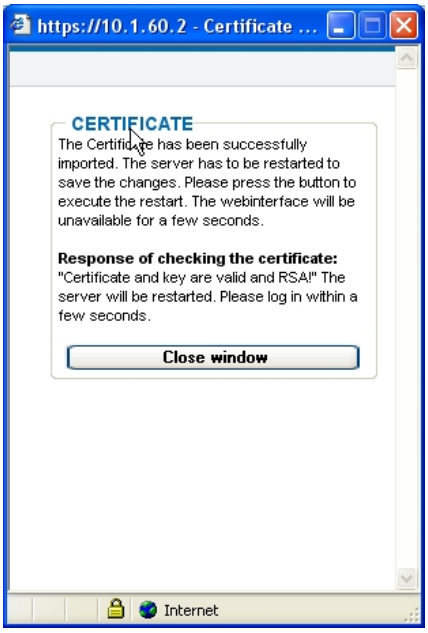


Additional possible error messages are:

- Cannot load certificate file! The file does not exist or does not contain certificate information (see error message above).
- Cannot load private key file! The file does not exist or does not contain a key!
- Certificate and key do not match!
- Private key is not RSA!
- Public key is not RSA!

Check the information again and repeat the transmission process to the IP user module afterwards.

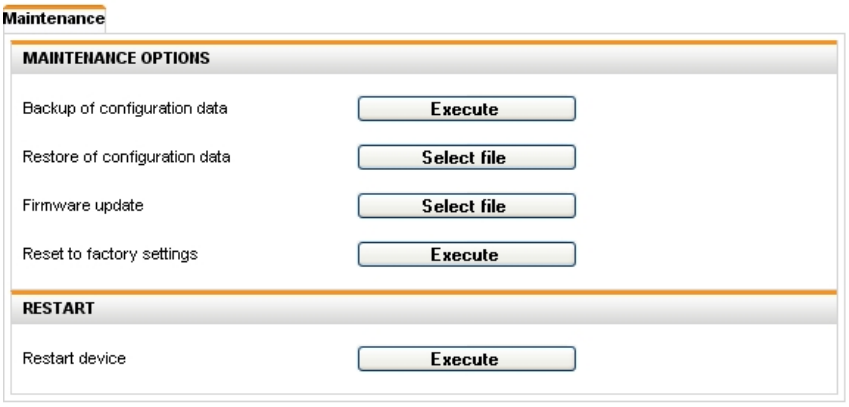
If on the other hand you have entered all required information, the following message appears upon successful transmission of the information:



Upon completion, click on **Close window**.

3.2 Tools menu

With the mouse click on the menu item **Tools** in the menu navigation or symbol navigation.



Here, the firmware of the IP user module can be

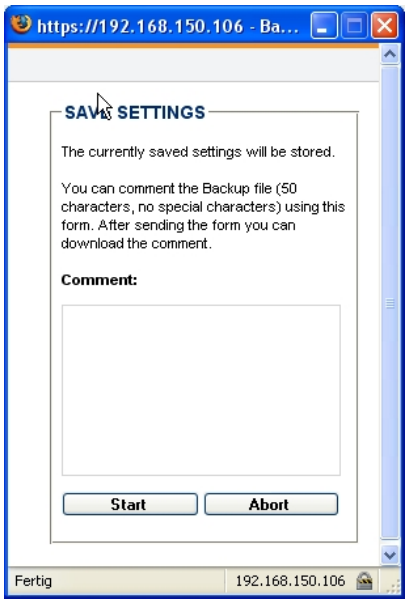
- updated (Update)

and the configuration settings can be

- backed up (Backup)
- restored (Restore)
- reset to factory settings

In addition, the KVM service and the IP user module can be restarted using this tab.

3.2.1 Backup of configuration data



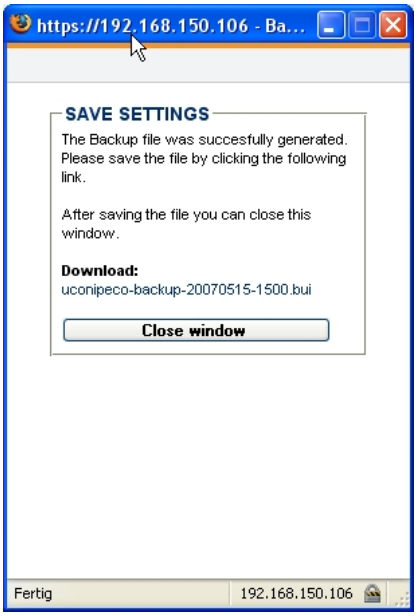
Click **Execute** to execute the backup. The system saves the current configuration data automatically.

This activity is confirmed by the following window.

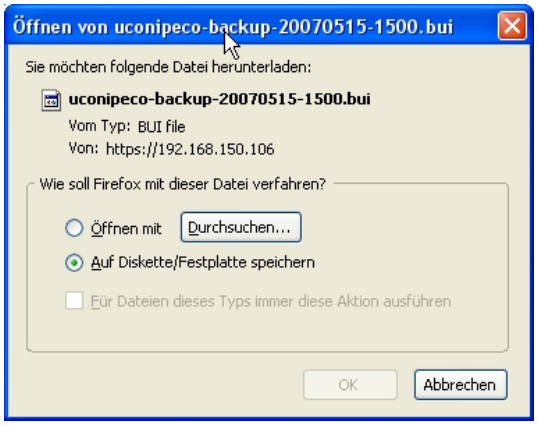
In addition to the backup, you can enter a comment to this configuration file under the *Comment* field.

You can now download this data to your local computer. Click on **Start**.

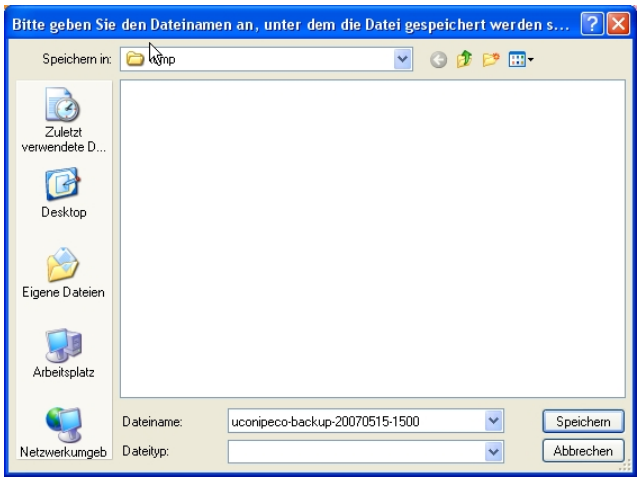
In the subsequent window click on the blue shaded hyperlink to download the backup file.



Select a folder in your computer where you want to save the backup file.



In this window, you determine the action that shall be executed. Click on **Save**. Next, determine the location where you want to save the backup file.

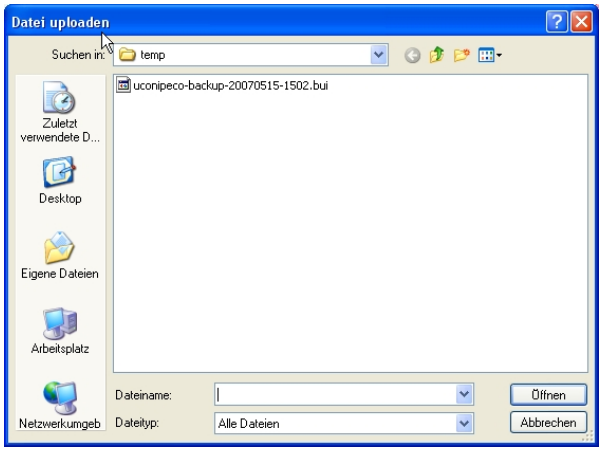


As soon as you have selected the location, click **Save** and the download of the backup file is completed.

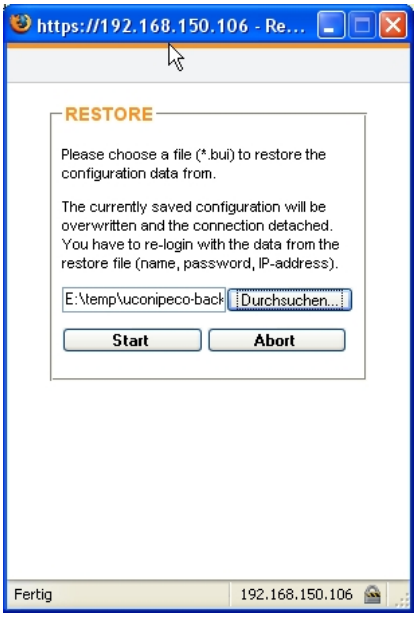
3.2.2 Restoring of configuration data

Click on **Select file** to execute the backup. The following message opens on your monitor:

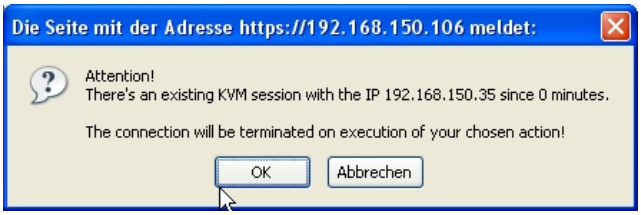
Click on **Browse** to search for the file to be used for the restore process.



When you selected the file, click on **Open**. This action is confirmed by the following window:



Now click on **Start**. The following window advises you at this time about a potentially existing IP session:



You end the restore process by clicking on **Cancel**.

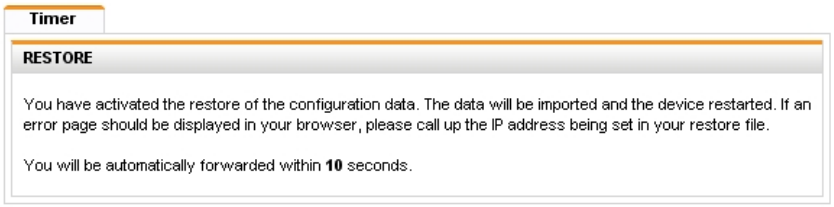
If you click on **OK,** the restore process continues.

During the process, the following window opens on your screen with any existing comments.

Start the restore process in this window by clicking on **Start**. This restarts the system functions and the WebIF cannot be accessed for about 20 seconds.

During the restore process, the following message will appear on your screen.

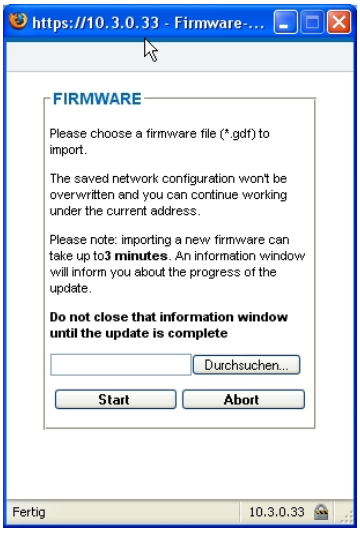
In the web interface, however, a message opens that indicates how long the restore process will still last.



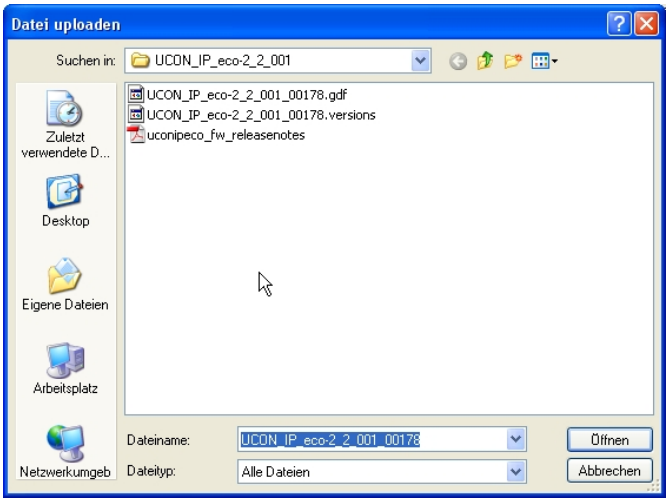
Upon completion of this action, you have to log back in to the IP user module web interface.

3.2.3 Execute a firmware update

Click on **Select file** to execute the firmware update. The following message appears on your monitor:



Click on **Browse** to search for the file to be used for the restore process.

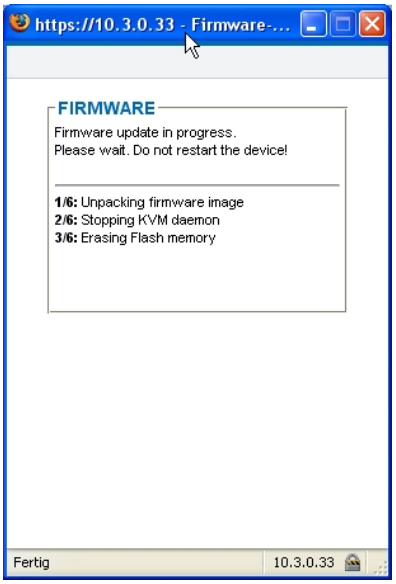


When you have selected the file, click on **Open**. This activity is confirmed by the following window:

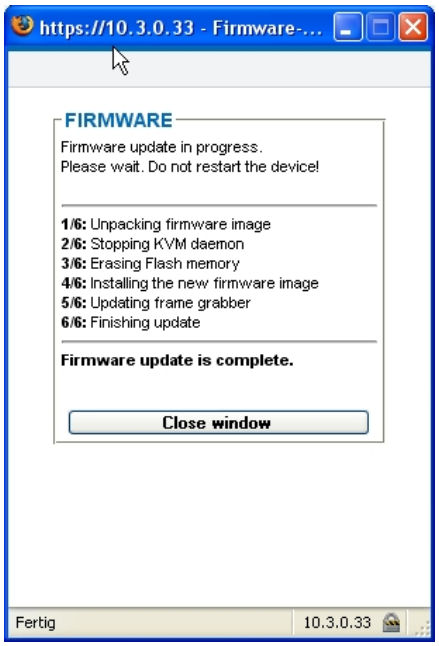
Note:
The saved configuration will not be overwritten. You can continue to work with the current settings. The import of a new firmware can take up to **3 minutes**. No window content is visible during this time period.

During the firmware update, do not close the window that appears on the screen!

Now click on **Start**. The following notification window will inform you about the firmware update process:

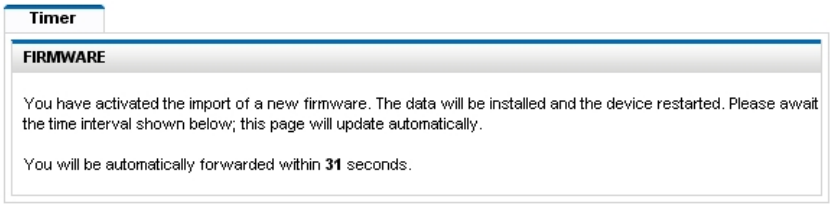


Once the new firmware is successfully imported into the system, the following message appears:



The system will restart automatically. You can close this window by clicking on **Close window**!

In the web interface, however, a message appears that indicates how long the restart will still take.



Upon completion of this action, log back in to the IP user module web interface.

3.2.4 Create delivery status

The execution of this function sets all values that are determined in the system (e.g. other user, IP configuration, etc.) to the values that were defined by the delivery status.

A list of all default values can be found in **Chapter 3.2.4.3**.

There are two ways to initiate the execution of this function:

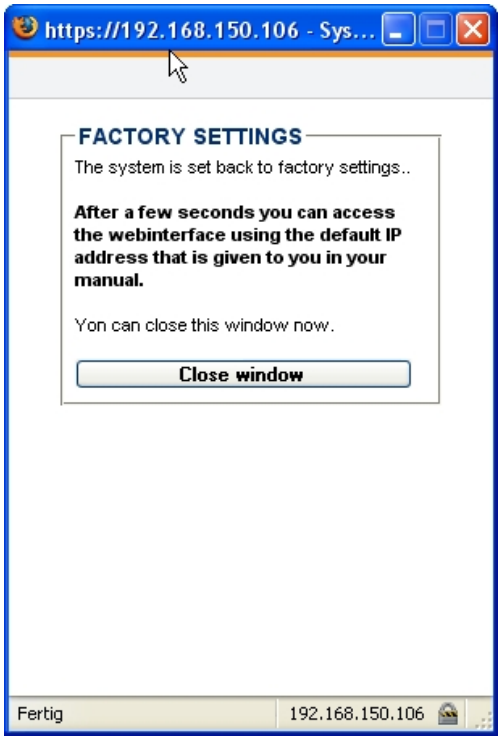
- via the web interface
- on the device at the IP user module

These two procedures are explained in the following chapters.

3.2.4.1 Create delivery status via web interface

To execute this function via the web interface, click on **Execute**. The following message appears on your monitor:

In this window, click on **Start**. The following message appears on your monitor:



You can now close this window. A message appears in the web interface that indicates that you have to login again.

After the default settings have been reset, the web interface of the IP user module can only be accessed over the address described in the chapter "Configuration before initial startup" of the installation manual.

The chapter "Configuration before initial startup" of the installation manual also provides information on how to adjust the network settings of the IP user module to the local network.

3.2.4.2 Create the delivery status via the IP user module

The creation of the delivery status can also be executed through the device. There is a small button on the front, which can be pushed with a pointed object. This button activates the *Set system defaults*. For this, proceed as follows:

- Turn off the IP user module
- Press and hold the button
- Turn on IP user module
- Wait until the status LED flashes rapidly.
- Release the button.

The IP user module is set to the delivery status. The rapid flashing stops after several seconds. The device will now start.

3.2.4.3 Default values of the IP user module

This chapter shows the factory settings of IP user module in form of a table:

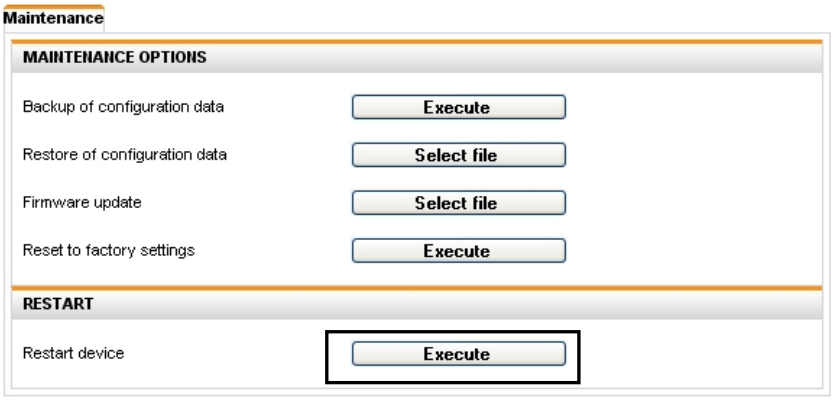
Login name: Admin
Password: 4658

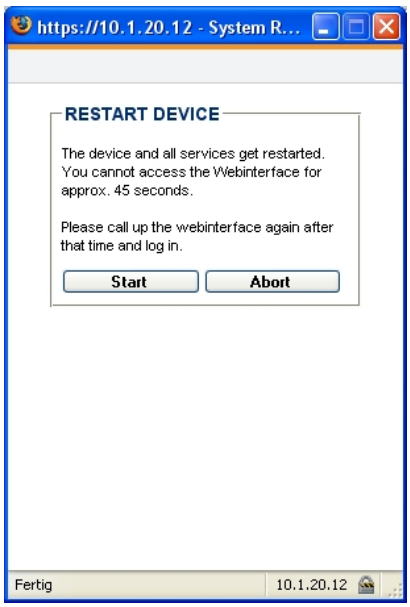
Menu	Section	Line	Default value
Configuration	Server	IP assignment	**Static**
		IP address	**192.168.0.1**
		Net mask	**255.255.255.0**
		Connection type	**Auto**
		Assignment of global settings	**Static**
		Host name	**EcoV3**
	system	User name	**Admin**
		Timeout WebIF	**30**
		Standard language	**German**
		Access Java-Client	**Activated**
		Timeout client	**10**
		TCP port	**27998**
		Issue date/ time	**manually**
		time zone	**Berlin**
	Syslog	Local syslog	**Deactivated**
		Log Level	**Info**

Menu	Section	Line	Default value
		Syslog server 1	**Deactivated**
		LogLevel	**Info**
		Port	**514**
		Protocol	**UPD**
		Syslog server 2	**Deactivated**
		LogLevel	**Info**
		Port	**514**
		Protocol	**UPD**

3.2.5 Restarting the IP user module

If you want to restart the IP user module and the operating system, click **Execute** in the field **Restart device**.





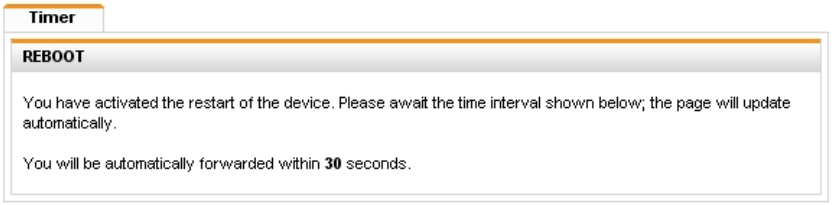
The following message opens after clicking on **Restart device**.

End the process by clicking on **Cancel**.

If you click on **OK**, the restore process is continued and the following message pops up:

You can now close this window.

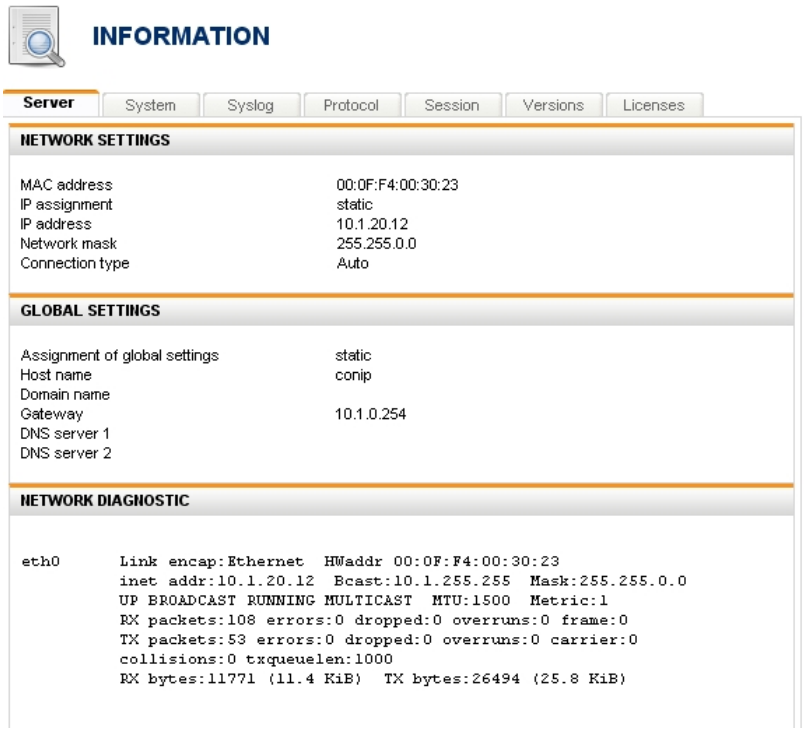
The web interface displays a message indicating how long the restart process will still take.



After restarting, you have to log in to the **web interface** again with your login and password.

3.3 System information inquiry

With the mouse click on the menu item **Information** in the menu navigation or symbol navigation. The following menu is displayed:



This menu item shows information on the IP user module.

Among other things, the information refers to:

- your current network settings
- logging of the events in the IP user module
- system configuration of the IP user module
- current IP user module sessions (whose session it is, that person's IP address and the duration of the session).

3.4 Ending a web interface session

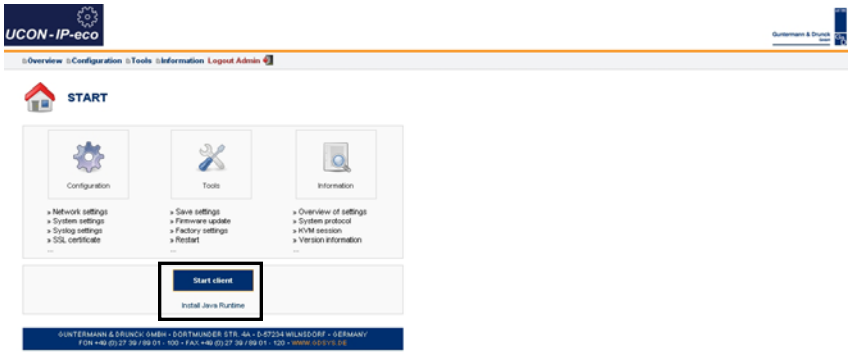
Clicking on **Logout** will immediately end the session at the **web interface** and the welcome screen of the web interface will is displayed.

4 Starting the Java client

You can access the Java client two different ways:

- Via the welcome screen
  This access is only possible when these have been activated like in **Chapter 3.1.2** (access Java client on welcome page). No access option will appear on the welcome page if it has been deactivated.

- Via the start page of the web interface



Note:
For the Java applet to work, you must have a Java virtual machine of the version 1.5.0 or higher installed on your computer.

If you do **not** have the required version of the Java Virtual Machine available, you need to download it in the active window by clicking the hyperlink **Install Java runtime**.

The system automatically takes you to the corresponding Website, where you can download the file suitable for your operating system. For this purpose, please follow the instructions of the installation program.

To start the Java client, please proceed as follows:

Click on **Start client** in one of the two web interface windows.

Confirm the warning messages by clicking on **Yes**!

Subsequent to the last warning message, the following window opens:

Enter your user name and password. Obtain this information from your administrator.

See the separate manual for information on how to operate the Java client.

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