



BAB TECHNOLOGIE GmbH

# **FACILITYMASTER**

## Documentation

Version 1.0.0  
Item no.: 10310

Manual version IV  
Version of 07/2015  
Date: 18 July 2016

EN



BAB TECHNOLOGIE GmbH

im INHOUSE Dortmund  
Rosemeyerstr. 14  
44139 Dortmund

[info@bab-tec.de](mailto:info@bab-tec.de)

Phone: +49 (0) 231 – 476 425 - 30  
Fax.: +49 (0) 231 – 476 425 - 59  
[www.bab-tec.de](http://www.bab-tec.de)



# TABLE OF CONTENTS

<b>1</b>	<b>Introduction.....</b>	<b>5</b>
1.1	Range of functions.....	6
	Internal layout.....	6
	Detailed product information .....	6
1.2	Technical data .....	7
1.3	Scope of delivery .....	8
1.4	Updates .....	8
1.5	Important information on the operating instructions .....	8
<b>2</b>	<b>Assembly.....</b>	<b>9</b>
2.1	Switching on the device.....	9
2.2	Switching off the device.....	9
2.3	LED status.....	9
2.4	Initial operation .....	10
	Factory settings.....	10
2.4.1	Bus system communication .....	11
	KNX connection .....	11
	Communication of the <b>FACILITYMASTER</b> devices among each other .....	11
2.4.2	Establishing a connection .....	12
2.4.2.1	Establishing a connection in delivery condition .....	12
	Adjusting the network settings of your computer.....	12
	Changing the IP address of the FACILITY MASTER.....	14
	Changing the IP address of the EIBPORT.....	16
	Changing the IP address of the DATA LOGGER.....	16
	Changing the IP address of the KNX EASY.....	16
	Changing the IP address of the APP MODULE .....	16
	Changing the IP address of the AUDIO SERVER .....	17
2.4.2.2	Establishing a connection If the IP address is not known .....	18
<b>3</b>	<b>FACILITY MASTER Main Menu .....</b>	<b>19</b>
3.1	Management.....	19
	Status.....	19
	Update .....	19
	Service .....	20
3.2	Configuration.....	21
	General.....	21
	Network.....	21
	User administration.....	21
3.3	Information .....	22
	System information.....	22
	System monitor.....	22
	Software licences.....	22
<b>4</b>	<b>Update.....</b>	<b>23</b>
<b>5</b>	<b>Remote maintenance .....</b>	<b>23</b>
<b>6</b>	<b>Help.....</b>	<b>24</b>
6.1	Discovery Tool.....	24
6.2	Java settings / preparations on the client PC .....	25
6.3	STARTER.....	26



# TABLE OF FIGURES

Figure 1: FACILITY MASTER .....	5
Figure 2: FACILITY MASTER – Functional Overview .....	6
Figure 3: FACILITY MASTER Rear Side .....	9
Figure 4: Windows Network and Sharing Center.....	12
Figure 5: "LAN Connection" status .....	13
Figure 6: Properties of the LAN connection .....	13
Figure 7: TCP/IPv4 properties .....	14
Figure 8: FACILITY MASTER Main Menu .....	15
Figure 9: FACILITY MASTER Main Menu - Network Configuration .....	15
Figure 10: AUDIO SERVER Start Page .....	17
Figure 11: AUDIO SERVER Network Configuration.....	17
Figure 12: FACILITY MASTER Main Menu - Management .....	19
Figure 13: FACILITY MASTER Main Menu - Update .....	20
Figure 14: FACILITY MASTER Main Menu - Service.....	20
Figure 15: FACILITY MASTER Main Menu - General .....	21
Figure 16: FACILITY MASTER Main Menu - User Administration .....	21
Figure 17: DiscoveryTool icon.....	24
Figure 18: Discovery Tool.....	24
Figure 19: Updating Java.....	25
Figure 20: Deactivating temporary files .....	25
Figure 21: Expanding Java main memory .....	26



# 1 INTRODUCTION

Congratulations on your purchase of the new **FACILITYMASTER** and thank you for your trust. In order to be able to use the full range of functions and to ensure quick and easy handling, please read these operating instructions carefully.



Figure 1: FACILITY MASTER

Product name:	<b>FACILITYMASTER</b>
Intended use:	Server for building automation
Design:	19" rack 2 RU
Interfaces:	RJ-45
Item number:	10310

## 1.1 RANGE OF FUNCTIONS

The **FACILITYMASTER** is a server for building automation. It includes the functions of several BAB devices as well as high-performance hardware to meet the requirements of large-scale projects. The following devices form part of the **FACILITYMASTER**:

- **EIBPORT** – automation and visualisation gateway
- **DATALOGGER** – logging of KNX communication
- **KNXEASY** – bidirectional KNX/ASCII communication
- **APPMODULE** – platform for execution of applications from the BAB APP MARKET
- **AUDIOSERVER** – music server for **AUDIOMODULE** and Squeezebox Player
- **CONTROL W** – desktop client for **EIBPORT**
- **CONTROL R** – licence for using the **EIBPORT** terminal diagram function

### INTERNAL LAYOUT

The individual devices of the **FACILITYMASTER** are designed as virtual machines. This makes the devices independent of each other, and a malfunction of one device does not affect the other devices. The devices are implemented with their full scope of functions. Thanks to the high-performance hardware of the server, the devices offer a capacity that is many times higher than the capacity of the real counterpart. Contrary to the real devices, the **FACILITYMASTER** does not have direct interfaces with the corresponding bus systems, but RJ45 interfaces for Ethernet communication. Connection to the various bus systems is made via TCP/IP and/or KNXnet/IP.



Figure 2: FACILITY MASTER – Functional Overview

### Function description of the individual devices

As complete description of the functions of all devices cannot be integrated into a single document, please consult the documentations of the individual devices/software. For any current information, please go to our website at "Service" > "Downloads" or access the enclosed CD.

### Download area of the website:

[http://www.bab-tec.de/index.php/download\\_de.html](http://www.bab-tec.de/index.php/download_de.html)

### DETAILED PRODUCT INFORMATION

#### EIBPORT

[http://bab-tec.de/index.php/eibport\\_v3\\_de.html](http://bab-tec.de/index.php/eibport_v3_de.html)

#### DATALOGGER

[http://bab-tec.de/index.php/datalogger\\_de.html](http://bab-tec.de/index.php/datalogger_de.html)

#### KNXEASY

[http://bab-tec.de/index.php/knx-easy\\_v2\\_de.html](http://bab-tec.de/index.php/knx-easy_v2_de.html)

#### APPMODULE

<http://bab-tec.de/index.php/app-module.html>



#### CONTROL W

[http://bab-tec.de/index.php/control\\_w\\_de.html](http://bab-tec.de/index.php/control_w_de.html)

#### CONTROL R

[http://bab-tec.de/index.php/control\\_r\\_de.html](http://bab-tec.de/index.php/control_r_de.html)

#### AUDIOSERVER

[Link]

## 1.2 TECHNICAL DATA

---

#### Item no.: 10310

- Operating voltage: 230 V AC
- Processor: Intel® Core™ i5 processor 3.4 GHz
- Memory: 4 GB 1600 MHz DDR3
- HDD: 2 x 500 GB SATA RAID 1

#### Mechanical data:

- Assembly: 19 inch rack 2 RU
- Front plate: 3 mm aluminium, anodised
- Chassis: Hot-dip galvanised sheet steel, RAL 9006 white aluminium

#### Interfaces:

- KNX® via KNXnet/IP
- LAN: 2 x gigabit Ethernet
- Serial: COM 1

#### Operating system:

- Linux® OS with Xen VM



## 1.3 SCOPE OF DELIVERY

---

The scope of delivery of **FACILITYMASTER** includes the following content:

- 1x CD with the corresponding documentation and auxiliary programs
- 1x **FACILITYMASTER**

Like any 19" server, the **FACILITYMASTER** is equipped with an integrated power supply unit and is connected to the 230 V mains supply via a C13 IEC connection cable.

## 1.4 UPDATES

---

We reserve the right to offer firmware updates free of charge for the **FACILITYMASTER**. In our newsletter, you will be informed of any possible firmware updates. The update files are made available in the download section on our homepage.

## 1.5 IMPORTANT INFORMATION ON THE OPERATING INSTRUCTIONS

---

The present documentation provides information on the specific hardware and software of the **FACILITYMASTER**. As the individual devices of the **FACILITYMASTER** are real devices, they also have their own documentations that must be used for configuration. The current documentations are also available on the enclosed CD as well as on our website at "Service" > "Downloads".

All information and illustrations / figures of this manual are non-binding. In the interests of our customers, the software described in these operating instructions is being constantly developed further. Therefore, the information provided in these operating instructions may no longer be up to date under certain circumstances. Information on the current **FACILITYMASTER** software, including the corresponding devices and their documentations are available at [www.bab-tec.de](http://www.bab-tec.de).





## 2 ASSEMBLY

### FACILITY MASTER connections

- (1) 230 V connector & mains switch
- (2) ON/OFF button for switching on & automatic shut-down
- (3) LAN ports 1 & 2



Figure 3: FACILITY MASTER Rear Side

### 2.1 SWITCHING ON THE DEVICE

Proceed as follows to start the **FACILITYMASTER**:

- Connect a 230 V C13 IEC connection cable (1)
- Connect at least 1 network cable to LAN 1 or LAN 2 (3)
- Set the mains switch to ON (1) and use the front LEDs to check the status of the device

### 2.2 SWITCHING OFF THE DEVICE

Shortly press the ON/OFF button to shut down the device in a controlled way. The device will shut down automatically.

### 2.3 LED STATUS

The **FACILITYMASTER** is equipped with two LEDs: "Power" and "HDD".

#### POWER LED

LED display	Status
OFF	The device is not ready for operation. Mains voltage is not connected, or the device is not switched on.
GREEN	The device is ready for operation.

#### HDD LED

LED display	Status
OFF	The hard drive is not accessed, or the device is switched off.
FLASHING	The LED lights up every time the hard drive is accessed.



## 2.4 INITIAL OPERATION

If the **FACILITYMASTER** has been mounted and started as described in section "Assembly", commissioning will be continued as specified below. The **FACILITYMASTER** consists of various virtual machines that are accessed via different IP addresses:

### FACTORY SETTINGS

Virtual machine (VM)	Default IP address
<b>FACILITYMASTER</b>	192.168.2.110
<b>EIBPORT</b>	192.168.2.100
<b>AUDIOSERVER</b>	192.168.2.101
<b>DATALOGGER</b>	192.168.2.102
<b>APPMODULE</b>	192.168.2.103
<b>KNXEASY</b>	192.168.2.104

Virtual machine (VM)	Default user name/password
<b>FACILITYMASTER</b>	admin / admin
<b>EIBPORT</b>	admin / eibPort
<b>AUDIOSERVER</b>	admin / admin
<b>DATALOGGER</b>	admin / admin
<b>APPMODULE</b>	admin / admin
<b>KNXEASY</b>	admin / admin

**Note: The password must be changed immediately with all devices when logging in for the first time. Attention: If the password is lost, the device cannot be reset!**

Virtual machine (VM)	Physical KNX addresses
<b>FACILITYMASTER</b>	–
<b>EIBPORT</b>	15.15.0
<b>AUDIOSERVER</b>	–
<b>DATALOGGER</b>	15.15.2
<b>APPMODULE</b>	15.14.0
<b>KNXEASY</b>	15.15.4



## 2.4.1 BUS SYSTEM COMMUNICATION

---

As the devices in the **FACILITYMASTER** run in virtual machines on a physical hardware, the devices are not equipped with own connection terminal, but communicate via the Ethernet/LAN-port. Thus it is necessary that the Bus system is Ethernet-enabled, or an Ethernet-coupler of the Bus system is connected to the **FACILITYMASTER**.

### KNX CONNECTION

---

For connecting KNX there are several opportunities:

**1. Usage of the FACILITYMASTER in the KNXnet/IP 'Backbone' of the installation**

Please activate "KNXnet/IP Routing" in the desired, virtual device of the **FACILITYMASTER**. Because the "KNXnet/IP Routing" Protocol is also used in the KNXnet/IP Backbone, the desired device could communicate directly with the installation. Please consider the correct allocation of the physical address referred to the hierarchical structure of the facility. How you activate KNXnet/IP Routing and how the correct physical address is assigned, you can learn from the corresponding device documentation.

**Note: Please consider, that KNXnet/IP Routing is based on multicast and the network communication has to comply with that.**

**2. Usage of the FACILITYMASTER in KNX/TP-Installation with a KNXnet/IP Router**

With the help of KNXnet/IP Routing and a KNX/TP-enabled KNXnet/IP-Router the virtual **FACILITYMASTER** devices can connect to the KNX/TP Bus system. If the KNXnet/IP-Router is correctly installed, please activate the "KNXnet/IP Routing" Function and assign the correct physical address (in correspondence to the hierarchical structure of the facility). How you activate KNXnet/IP Routing and how the correct physical address is assigned, you can learn from the corresponding device documentation.

**Note: Please consider, that KNXnet/IP Routing is based on multicast and the network communication has to comply with that.**

**3. Usage of the FACILITYMASTER in a KNX/TP installation with LINKMODULE**

In order to connect the **EIBPORT** of the **FACILITYMASTER** to the KNX/TP installation you can also use the **LINKMODULE**. In doing so, in the **EIBPORT** as well as in the **LINKMODULE** the "linking facilities"-Job must be activated. In the result **EIBPORT** and **LINKMODULE** communicate over an unicast-based UDP-Protocol. Optionally **SECURELINK**, an additional security layer, can be established for the linking facilities-connection. The communication of the facility link is group address-based and does not depend on physical addresses like it is with KNXnet/IP Routing. How to enable **SECURELINK** and linking facilities you can learn from the corresponding device documentation.

### COMMUNICATION OF THE FACILITYMASTER DEVICES AMONG EACH OTHER

---

From the sight of the network communication, the KNX-enabled, virtual devices of the **FACILITYMASTER** (**EIBPORT**, **DATALOGGER**, **APPMODULE**, **KNXEASY**) are separate devices. This offers the advantage that the device can operate independently from each other. In order to establish a connection among the devices, they are using the KNXnet/IP Routing protocol. Please enable "KNXnet/IP Routing" in all desired devices and consider the correct assignment of physical addresses (in correspondence to the hierarchical structure of the facility). How you enable KNXnet/IP Routing and how the correct physical address is assigned, you can learn from the corresponding device documentation.

## 2.4.2 ESTABLISHING A CONNECTION

Configuration of the **FACILITYMASTER** and all integrated machines requires an up-to-date browser, an up-to-date Java machine, and a network connection to the device.

### 2.4.2.1 ESTABLISHING A CONNECTION IN DELIVERY CONDITION

If the **FACILITYMASTER** is in delivery condition, the individual machines can be accessed by using the above IP addresses. If your computer uses another network than "192.168.2.X", you should set your PC to the same network address before adjusting the settings.

#### ADJUSTING THE NETWORK SETTINGS OF YOUR COMPUTER

In order to adjust the network settings of your computer and establish a connection to the device, please proceed as described below:

- Open the IP address settings (under Windows 7):
- Click "Start Button" --> "Control Panel" --> "Network"
- Select "Change adapter settings", then "Ethernet".

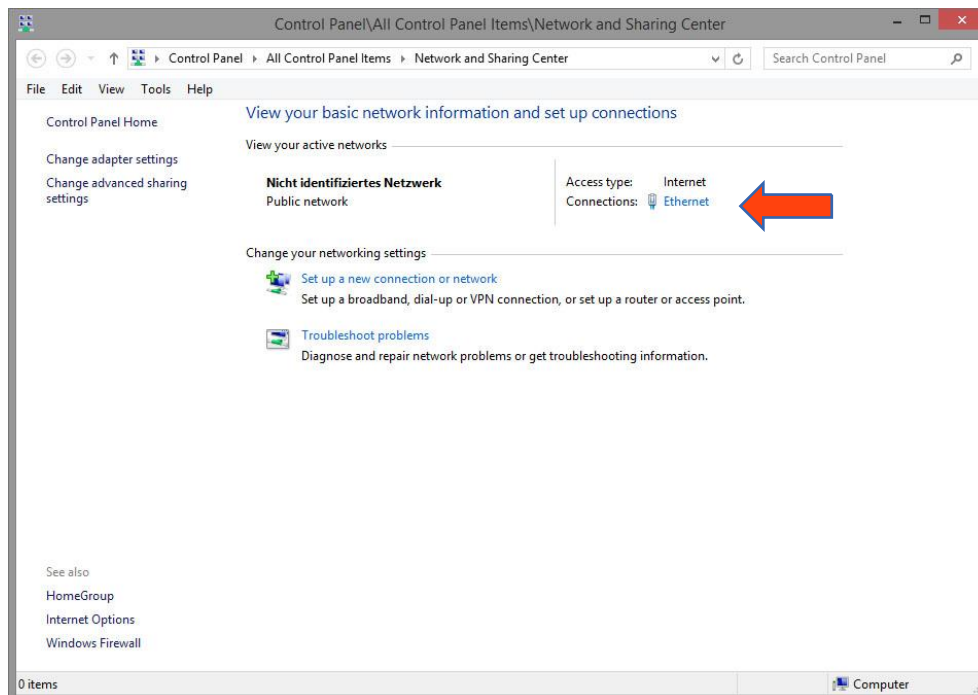


Figure 4: Windows Network and Sharing Center

- Then click "Properties":

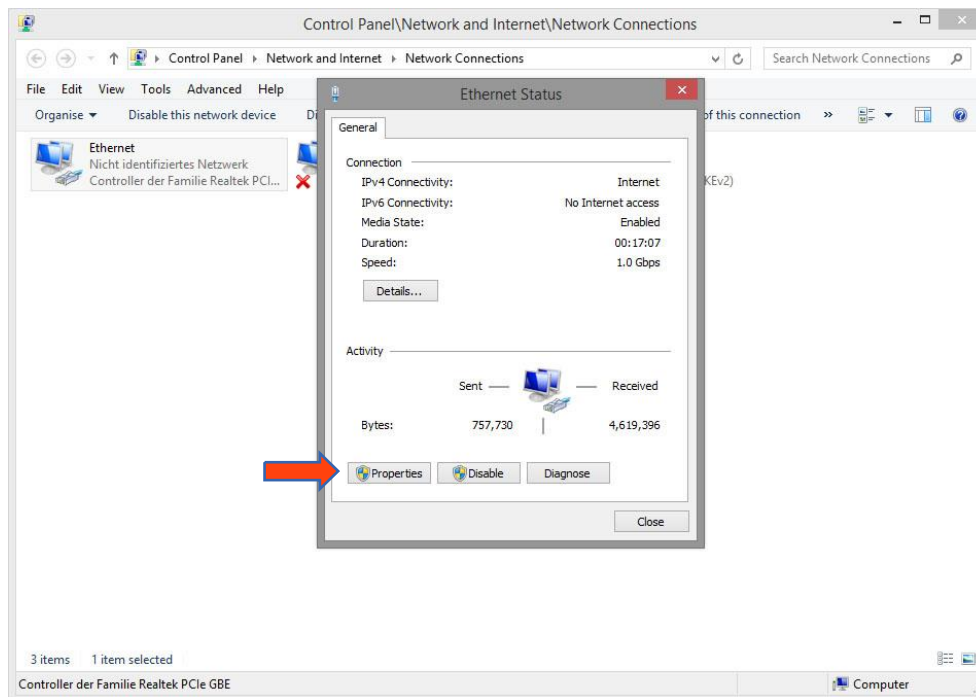


Figure 5: "LAN Connection" status

- Select "Internet protocol Version 4 (TCP/IPv4)" and click "Properties" again:

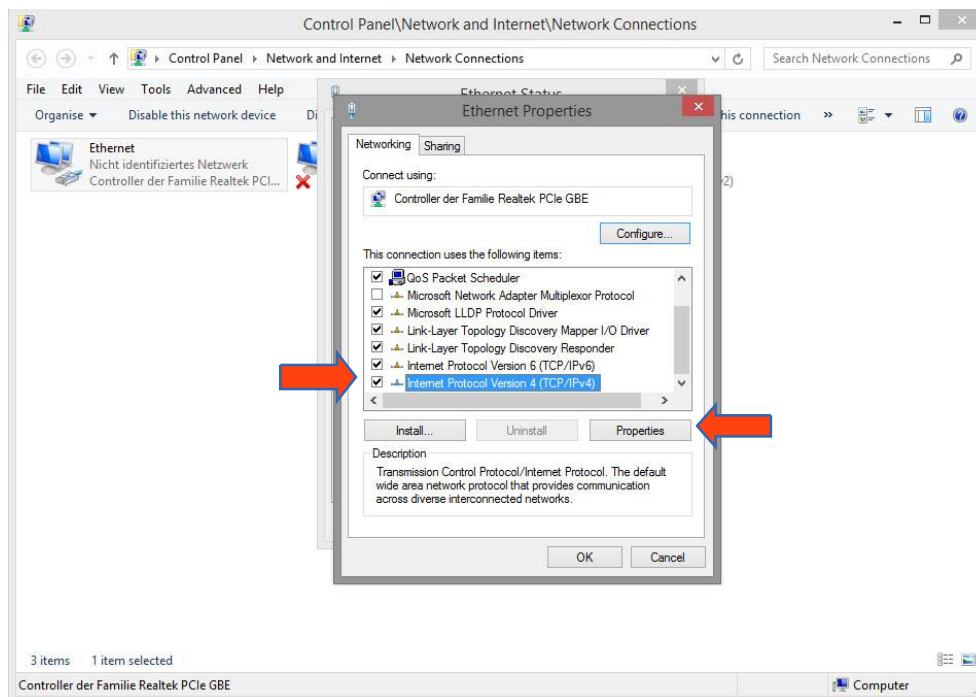


Figure 6: Properties of the LAN connection

- Now note down the current IP address settings or take a screen shot in order to ensure that you can reset the IP address setting following the configuration of the **FACILITYMASTER**.
- Now change the IP address settings (IP address and subnet mask) as required:

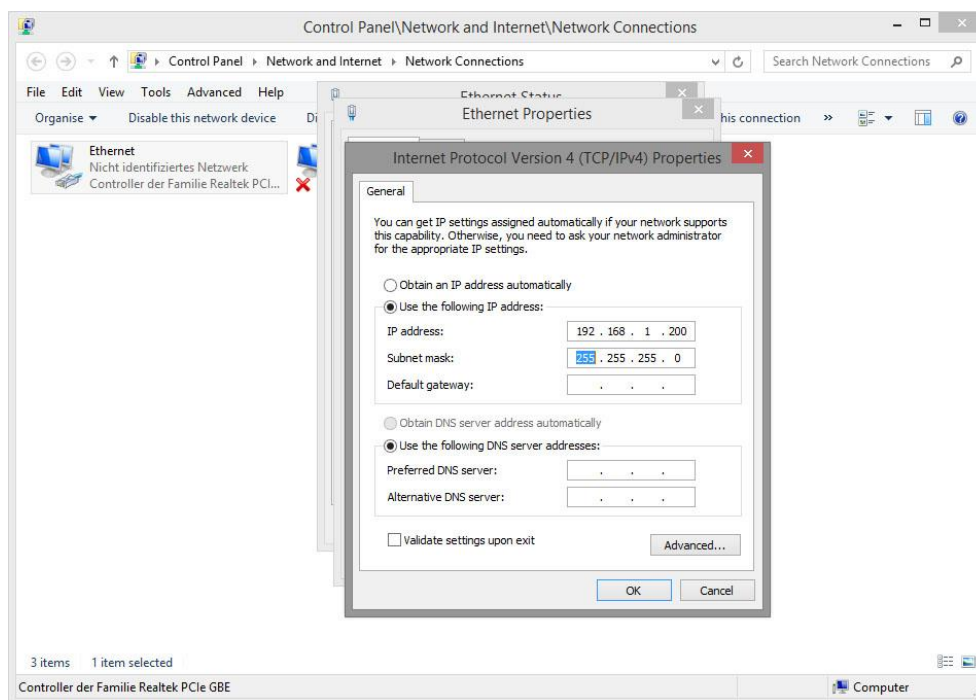


Figure 7: TCP/IPv4 properties

Example of a valid configuration for the factory settings of the **FACILITYMASTER**:

- Free IP address: 192.168.2.222
- Subnet mask: 255.255.255.0

**Note: Please make sure that the IP address selected here is free. The address must not be equal to the addresses of any of the FACILITY MASTER machines or to any other address that is used in the same network.**

- Now confirm your input with "OK".
- Close all windows until the "Windows Network and Sharing Center Settings" window is shown.

Then, **FACILITYMASTER** and your computer will use the same network. Now, if the device is in delivery condition, you can access all configurations masks of the **FACILITYMASTER** to set the desired network addresses.

## CHANGING THE IP ADDRESS OF THE FACILITY MASTER

Enter the factory-set IP address of the **FACILITYMASTER** in your browser. (**factory setting: http://192.168.2.110**)

**Note: Please be careful not to use identical addresses when assigning IP addresses to the individual virtual devices. The virtual devices will otherwise not be reachable anymore. Please check the *Status* view of the FACILITY MASTER to find out which addresses have been assigned. A conflict between virtual devices can be resolved by disabling one of the devices in the *Status* view and changing the IP address of the other.**

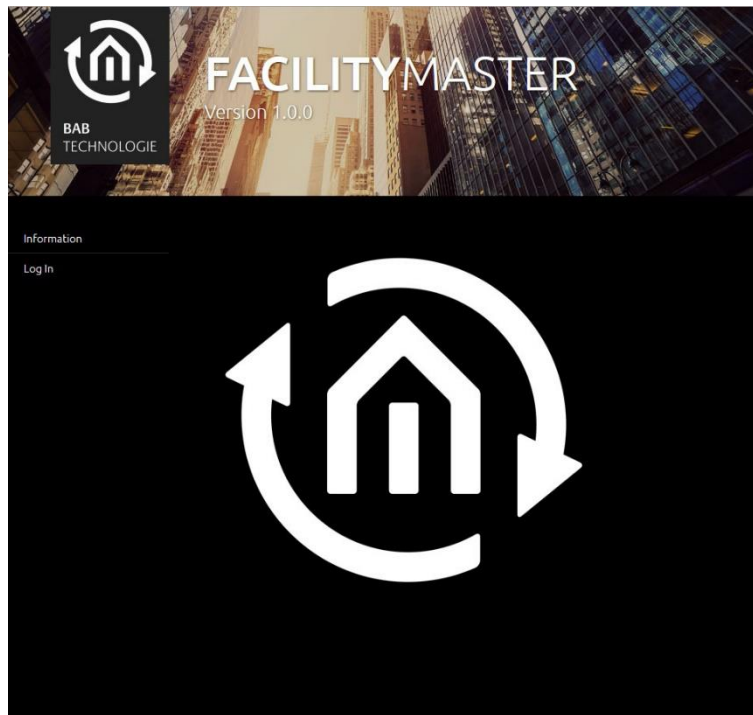


Figure 8: FACILITY MASTER Main Menu

Login using the pre-set user data (admin/admin) and switch into the "Network" menu in the "Configuration" tab.

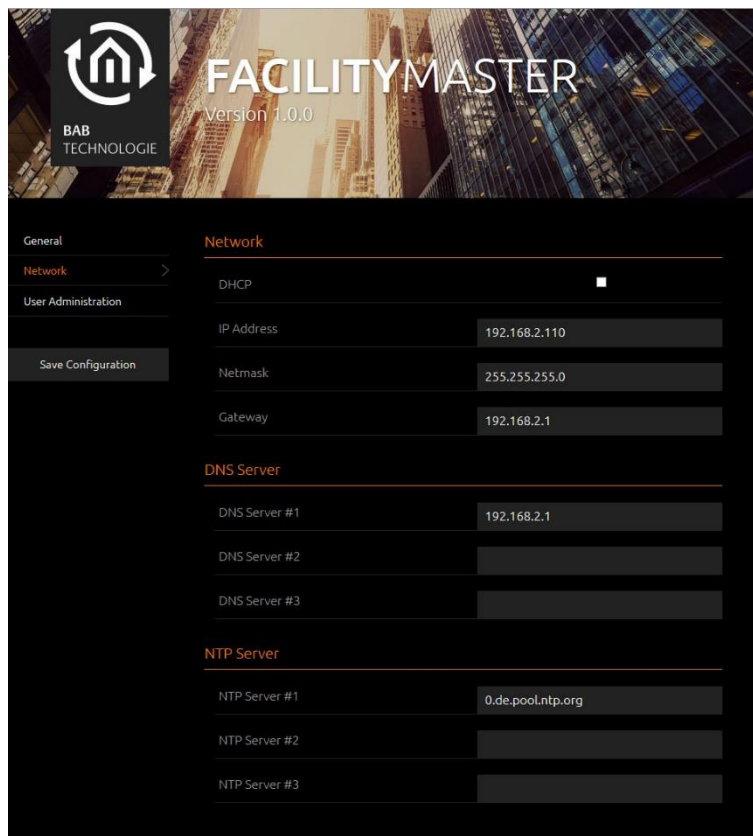


Figure 9: FACILITY MASTER Main Menu - Network Configuration

Change the network settings to the desired parameters and click "Save Configuration". The interface automatically tries to connect to the new IP address; this will not be successful if you have defined a differing IP address range for the **FACILITYMASTER**. Only if your computer uses the same network, can you access the main menu again.





**Note: If you also want to change the network settings of other FACILITY MASTER machines, do not change the settings of your PC yet.**

#### CHANGING THE IP ADDRESS OF THE EIBPORT

---

Consult the current EIBPORT documentation or use the DiscoveryTool to change the IP address settings (factory setting: <http://192.168.2.100>).

[http://www.bab-tec.de/index.php/eibport\\_v3\\_de.html](http://www.bab-tec.de/index.php/eibport_v3_de.html)

**Note: Please be careful not to use identical addresses when assigning IP addresses to the individual virtual devices. The virtual devices will otherwise not be reachable anymore. Please check the *Status* view of the FACILITY MASTER to find out which addresses have been assigned. A conflict between virtual devices can be resolved by disabling one of the devices in the *Status* view and changing the IP address of the other.**

#### CHANGING THE IP ADDRESS OF THE DATA LOGGER

---

Consult the current DATALOGGER documentation and change the IP address settings as described (factory setting: <http://192.168.2.102>).

[http://www.bab-tec.de/index.php/datalogger\\_de.html](http://www.bab-tec.de/index.php/datalogger_de.html)

**Note: Please be careful not to use identical addresses when assigning IP addresses to the individual virtual devices. The virtual devices will otherwise not be reachable anymore. Please check the *Status* view of the FACILITY MASTER to find out which addresses have been assigned. A conflict between virtual devices can be resolved by disabling one of the devices in the *Status* view and changing the IP address of the other.**

#### CHANGING THE IP ADDRESS OF THE KNX EASY

---

Consult the current KNXEASY documentation and change the IP address settings as described (factory setting: <http://192.168.2.104>).

[http://www.bab-tec.de/index.php/knx-easy\\_v2\\_de.html](http://www.bab-tec.de/index.php/knx-easy_v2_de.html)

**Note: Please be careful not to use identical addresses when assigning IP addresses to the individual virtual devices. The virtual devices will otherwise not be reachable anymore. Please check the *Status* view of the FACILITY MASTER to find out which addresses have been assigned. A conflict between virtual devices can be resolved by disabling one of the devices in the *Status* view and changing the IP address of the other.**

#### CHANGING THE IP ADDRESS OF THE APP MODULE

---

Consult the current APPMODULE documentation and change the IP address settings as described (factory setting: <http://192.168.2.103>).

<http://www.bab-tec.de/index.php/app-module.html>

**Note: Please be careful not to use identical addresses when assigning IP addresses to the individual virtual devices. The virtual devices will otherwise not be reachable anymore. Please check the *Status* view of the FACILITY MASTER to find out which addresses have been assigned. A conflict between virtual devices can be resolved by disabling one of the devices in the *Status* view and changing the IP address of the other.**





## CHANGING THE IP ADDRESS OF THE AUDIO SERVER

Enter the IP address of the **AUDIOSERVER** into your browser and login using the factory-set user data (**factory setting: http://192.168.2.101**).

**Note: Please be careful not to use identical addresses when assigning IP addresses to the individual virtual devices. The virtual devices will otherwise not be reachable anymore. Please check the *Status* view of the FACILITY MASTER to find out which addresses have been assigned. A conflict between virtual devices can be resolved by disabling one of the devices in the *Status* view and changing the IP address of the other.**



Figure 10: AUDIO SERVER Start Page

Login using the pre-set user data (admin/admin) and switch into the "Network" menu in the "Configuration" tab.

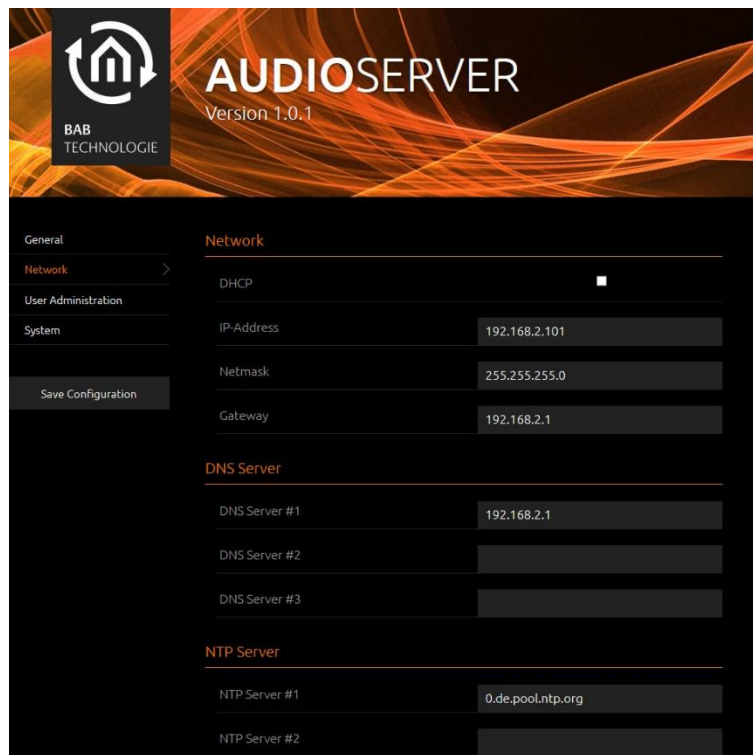


Figure 11: AUDIO SERVER Network Configuration



Change the network settings to the desired parameters and click "Save Configuration". The interface automatically tries to connect to the new IP address; this will not be successful if you have defined a differing IP address range for the **AUDIOSERVER**. Only if your computer uses the same network, can you access the **AUDIOSERVER** again.

**Note: Please note that the address range of your computer will not correspond any more to the address range of the device after performing the above changes. Readjust the address range to get access again.**

#### **2.4.2.2 ESTABLISHING A CONNECTION IF THE IP ADDRESS IS NOT KNOWN**

---

- Start the DiscoveryTool as described in [section 6.1](#). Then you will know the network range of the **FACILITYMASTER**.
- Adjust the network settings of your computer as described in section [Adjusting the network settings](#) of your computer.
- Then, change the IP addresses of all virtual machines. See section [Changing the IP address of the FACILITY MASTER et seqq.](#)



## 3 FACILITY MASTER MAIN MENU

The **FACILITYMASTER** main menu is used for monitoring and maintenance of the individual virtual machines within **FACILITYMASTER**. After logging in, you can access the interfaces "Management", "Configuration" and "Information".

### 3.1 MANAGEMENT

The "Management" interface of the **FACILITYMASTER** contains the most important status information, the update function, and a service area for the support.

#### STATUS

Shows an overview of all installed virtual machines, including the most important status information.

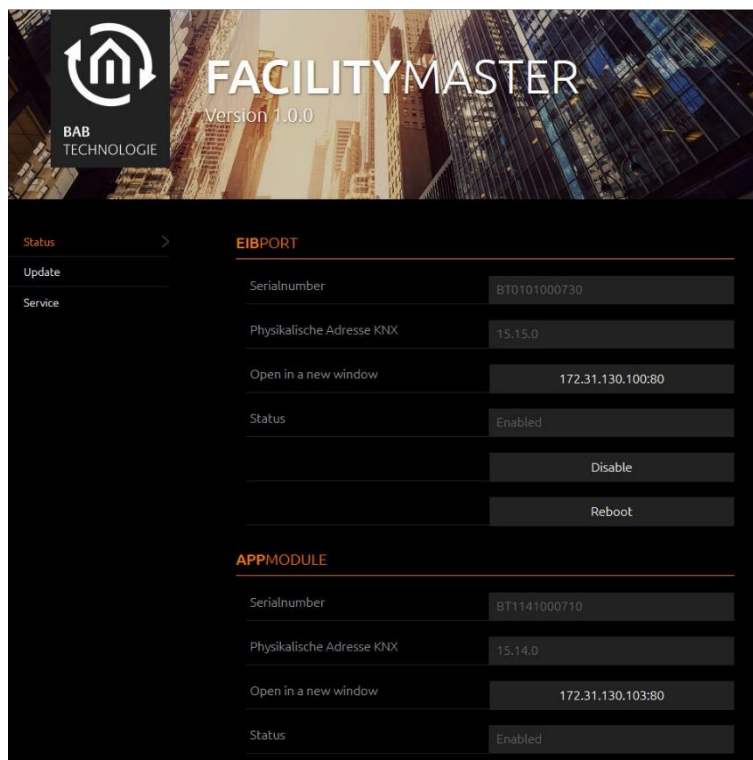


Figure 12: FACILITY MASTER Main Menu - Management

- *Serial number*
- *Physical address KNX*: Is read; can be changed for the corresponding device configuration.
- *Start page*: Displays current IP address and port number where the device is available. When clicking the IP address, the start page of the corresponding device will be opened in a new window.
- *Status*: Displays the current status of the virtual machine. The buttons below can be used to "Deactivate" or "Restart" the machine.

#### UPDATE

A special update routine is used to update the firmware of the virtual machine.

**Note: The individual devices used in the FACILITY MASTER are not updated using their respective own update procedures!**

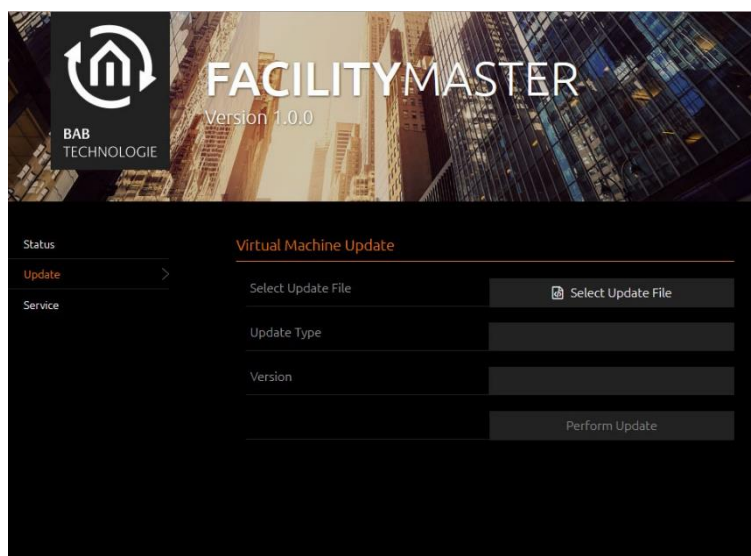


Figure 13: FACILITY MASTER Main Menu - Update

Proceed as follows to perform an update:

- Download the current update file of the corresponding machine from the website [<http://bab-tec.de/index.php/facility-master.html>]
- Unpack the downloaded file in a folder.
- Open the interface "Management" – "Update" in the **FACILITYMASTER** main menu.
- In "Select Update File", select the desired firmware file.
- Click "Start Update" and follow the instructions on the screen.

## SERVICE

The **FACILITYMASTER** includes a remote maintenance solution to enable the technical support to access the device via the Internet in case of emergency. The solution design usually does not require any adjustment to the local firewall (port redirection).



Figure 14: FACILITY MASTER Main Menu - Service

### Activate service access

- Use "Deactivate After" to set the hours after which the service access should be deactivated automatically.
- Click "Activate Service Access".



## 3.2 CONFIGURATION

The "Configuration" contains general settings, network parameters and the use administration of the **FACILITYMASTER**.

### GENERAL

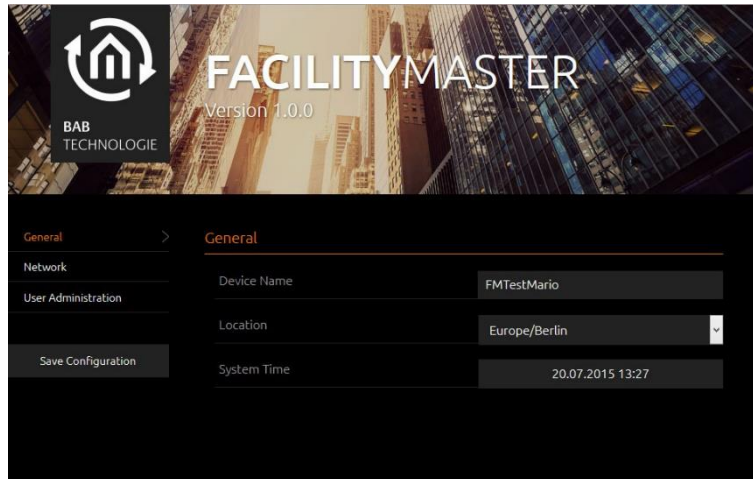


Figure 15: FACILITY MASTER Main Menu - General

- *Device name:* This name is used to display the **FACILITYMASTER** in the network
- *Installation site:* The installation site is used by the **FACILITYMASTER** to determine its time zone.
- *System time:* Click the time field to adjust the system time. The interface automatically synchronises the system time with the time of the operating PC.

In order to save the changes, click the "Save Configuration" button.

### NETWORK

See section *Changing the IP address of the FACILITY MASTER!*

### USER ADMINISTRATION

The "User Administration" can be used to control the rights on the **FACILITYMASTER** main menu.

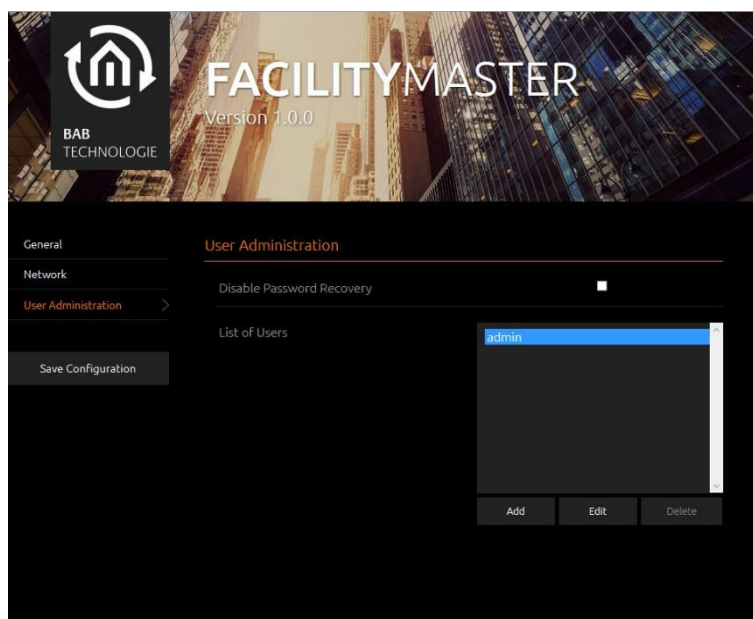


Figure 16: FACILITY MASTER Main Menu - User Administration



### Deactivate Password Recovery

If activated, the admin password cannot be reset any more. If the password is lost, the device should be put into service again; this requires shipment of the device to the manufacturer.

### List of users

Use "Add" to create a new user. Use "Edit" to change the previously marked user account. The "Change Login" option can be used to force a user to change their own password at the time of the first login.

Clicking "Save Configuration" implements the changes.

## 3.3 INFORMATION

---

The "Information" menu displays important system parameters.

### SYSTEM INFORMATION

---

- *Product*
- *Manufacturer*
- *Version*
- *Serial number*
- *Temperature (system):* Currently not enquired

### SYSTEM MONITOR

---

- *Processor utilisation:* Displays a graphical analysis of the processor utilisation.
- *Java memory utilisation:* Displays the currently used memory of the internal Java service.

### SOFTWARE LICENCES

---

Provides information on the software licences used for the device.



---

## 4 UPDATE

---

The **FACILITYMASTER** main menu is updated with the same update routine as the other machines. See section [Update](#) !

---

## 5 REMOTE MAINTENANCE

---

Activation of the remote maintenance is described in section [Service](#)

## 6 HELP

### 6.1 DISCOVERY TOOL

If you do not know the network settings of the device, the DiscoveryTool can help you to find out with which IP address the device is available. The "DiscoveryTool" software is platform-independent and can be run on any operating system. It can be found on the supplied CD or in the download section at [www.bab-tec.de](http://www.bab-tec.de).

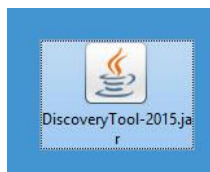


Figure 17: DiscoveryTool icon

Double-click the program icon in order to start the software. All devices available in the network are shown in the program window with their respective device names and serial numbers.

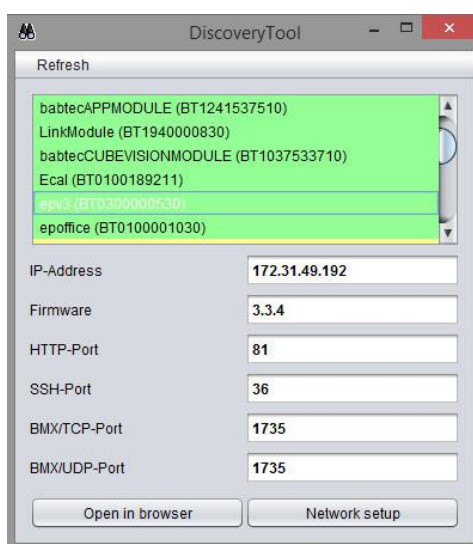


Figure 18: Discovery Tool

The colour marking of the devices shown in the DiscoveryTool has the following meaning:

- Grey = Information is being retrieved
- Green = Device is in the same network area as the PC
- Yellow = Device is NOT in the same network area as the PC

Mark the required device in the list. The device information available is displayed in the fields below. If the device is marked green, you can immediately call up the start page of the device by pressing the "Open in Browser" button. If the device is marked yellow, change the network settings of your PC correspondingly (see section *Adjusting the network settings of your computer*).





## 6.2 JAVA SETTINGS / PREPARATIONS ON THE CLIENT PC

**Note:** When using the EIBPORT configuration, the following JAVA settings should be considered in any case.

### PC requirements

In order to be able to use the EIBPORT Editor, you need Java and a browser. Thus, the editor is independent of the operating system.

### Java and browser versions

We recommend using a current version of Google Chrome, Apple Safari or Mozilla Firefox as a browser. Please make sure that a current Java version has been installed and that the Java browser plug-in is up-to-date. If Java has not been installed yet, you will find a current version at [www.java.com](http://www.java.com). Please check the following settings of your computer before starting any work in the EIBPORT Editor.



Figure 19: Updating Java

### Deleting and deactivating temporary files

Please close all browser windows (also download windows etc.) and switch to the Java Control Panel via "Start" > "System Control" > "Java". On the first tab, "General", there are the "Settings" of the "Temporary Internet Files". Please remove the tick at "Leave Temporary Files on Computer" and delete all files using the "Delete files" button.

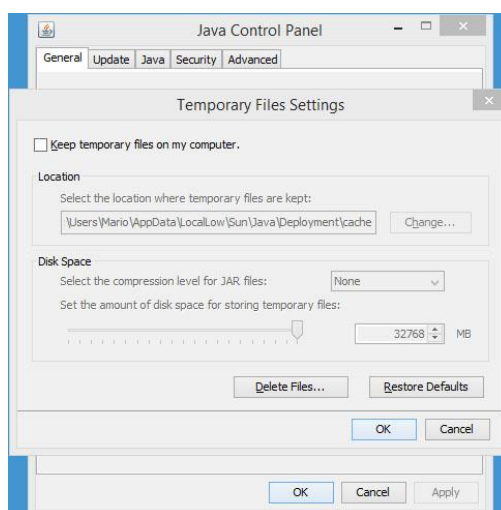


Figure 20: Deactivating temporary files

### Expanding main memory for Java / deactivating old Java versions

Switch from the "General" tab to the "Java" tab. Please open the settings for the Java Runtime Environment via "Displays". The window shows you all Java versions installed on the computer; if several versions are installed, please de-install all versions except the current version. Double click into the "Java Runtime Parameters" field and enter "-Xmx256M" (pay attention to the minus sign). Then press "Enter" and leave the window using "OK".

In the "Java Control Panel" window below, it is important that you click "Apply" before closing the window with "OK".

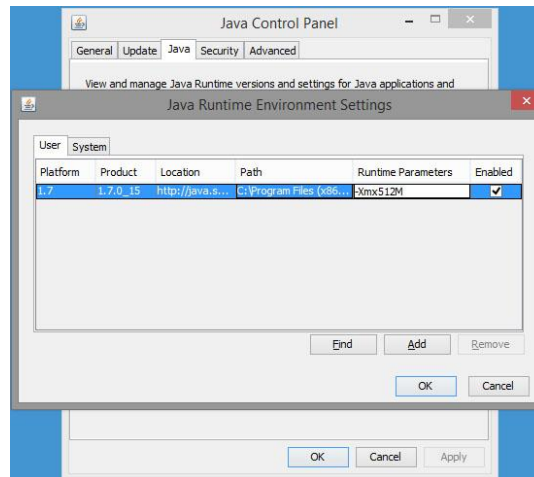


Figure 21: Expanding Java main memory

Afterwards, please also empty the cache data of your browser. Instructions on how to do this can be found on the Internet or in the help file of the browser. After all steps have been carried out and completed, the browser must be restarted.

## 6.3 STARTER

New browsers may produce problems if Java applets (like they are used by EIB**PORT**) are to be started. In such case, the browser is no longer authorised to start the Java machine. You can use the new "BAB STARTER" software to avoid this problem. Please request this software at [info@bab-tec.de](mailto:info@bab-tec.de).