

# CMC Computer Multi Control



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**CMC**

**Computer**

**Multi**

**Control:**



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# Chapter 1. Introduction

## 1.1. Welcome and Overview

Data losses and system failures in network and production equipment can involve enormous cost risks, and even threaten a companys very existence. For this reason, it is important to safeguard your companys life blood by ensuring stable information and production flows.

As the manufacturer of one of the worlds most comprehensive packaging and climate control ranges, Rittal now unveils the latest generation of monitoring technology: Rittal CMC Top Concept. Never before has rack security been so individual, so simple and so cost-effective.

The suitable software is the sophisticated version of a measurement system called StableNet<sup>®</sup> CMC-TC.

## 1.2. Contact

Infosim provides a variety of options to get understand the functions and handling of StableNet<sup>®</sup> CMC-TC, including printed guides, online help (see using the online help) and tool tips.

Infosim also provides software training and consulting.

If you are interested in one of these services on further information please contact the Infosim technical support at <support@infosim.net>.

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If you need support to our products, it is also possible to contact one of our regional partners. You find a current list of them at <http://www.infosim.net>.



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# Chapter 2. Requirements (HP OpenView)

## 2.1. Hardware recommendation

The following hardware is recommended for StableNet<sup>®</sup> CMC-TC:

- CPU >1GHz
- Memory >256 MB
- Free disk space: 150 MB

## 2.2. Operating Systems

- till HP OpenView 7.0 : Microsoft Windows (2000, NT)
- up to HP Openview 7.0: Microsoft Windows (2000, NT, XP, 2003)

## 2.3. Rittal components

- Master Units
- Processing Units (PU)
- I/O Units
- Climate Units
- Access Units
- All Sensor Units (e.g. door sensor, smoke sensor, ...)



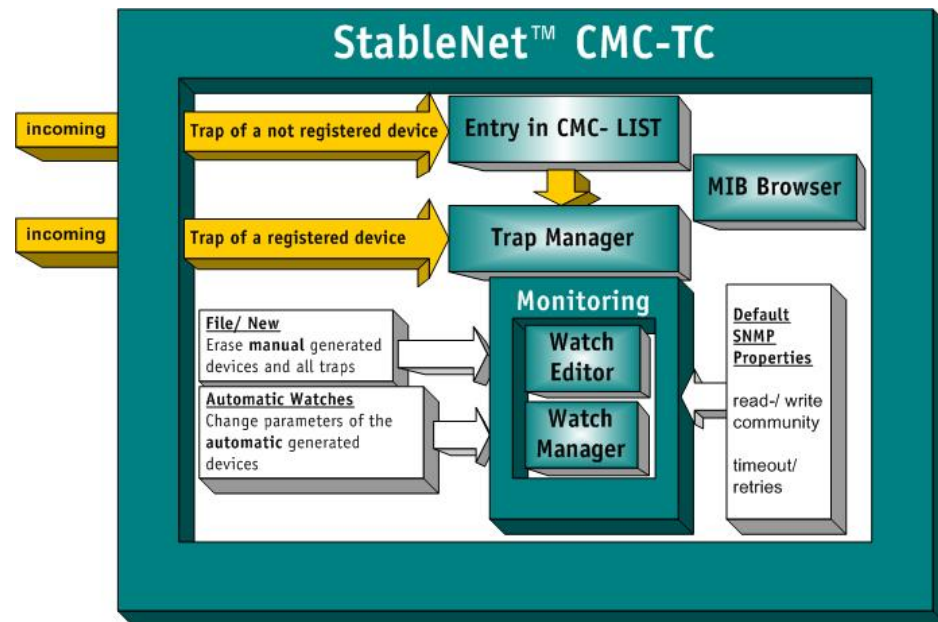
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# Chapter 3. Overview

The current version of StableNet<sup>®</sup> CMC-TC is a plugin for HP OpenView. It handles SNMP traps which are created from Rittal CMC Processing Units.

After a successful installation you can find it in HP OpenView in the Toolbar "Tools -> CMC-TC Manager".

If HP OpenView receives a Trap from a CMC Unit, it opens the StableNet<sup>®</sup> CMC-TC automatically and you can monitor the Error Unit to solve the problem.



**Figure 3.1. CMC-TC Architecture**

**The following Features are integrated:**

- Display received Traps form RITTAL CMC Processing Units
- Save and load received trapinformation
- Integrate new CMC-Devices manual or automatically
- Get Unitinformation with a SNMP Walk in the MIB-Browser
- Monitor all integrated CMC Devices

- Create 9 Watchtypes to monitor CMC Unit values
- Generate automatically Watches for Unittypes
- Select what information should be shown for each Unittype by the automatically generation
- Create manual Watches for specified informations

---

# Chapter 4. StableNet<sup>®</sup> CMC-TC and HP OpenView

The current Version of StableNet<sup>®</sup> CMC-TC is a plugin for HP OpenView.

During the installation, you have to choose the directory of the installed HP OpenView Network Node Manager and StableNet<sup>®</sup> will be integrated with a script.

After that, HP OpenView opens this program with each incoming SNMP trap.

The StableNet<sup>®</sup> CMC-TC can be used without HP OpenView. In this case, it doesn't receive traps from a CMC Unit, but you can monitor CMC Devices if you create the IP addresses manually.

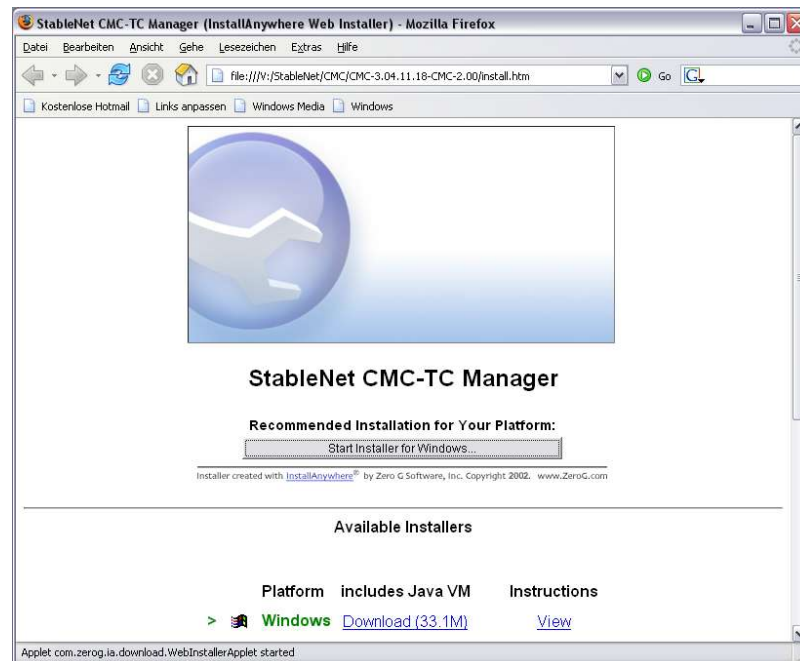




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# Chapter 5. Installing StableNet<sup>®</sup> CMC-TC

To install StableNet<sup>®</sup> CMC-TC place the CD in the CD-Rom of the computer and open the install.htm file with a web browser.

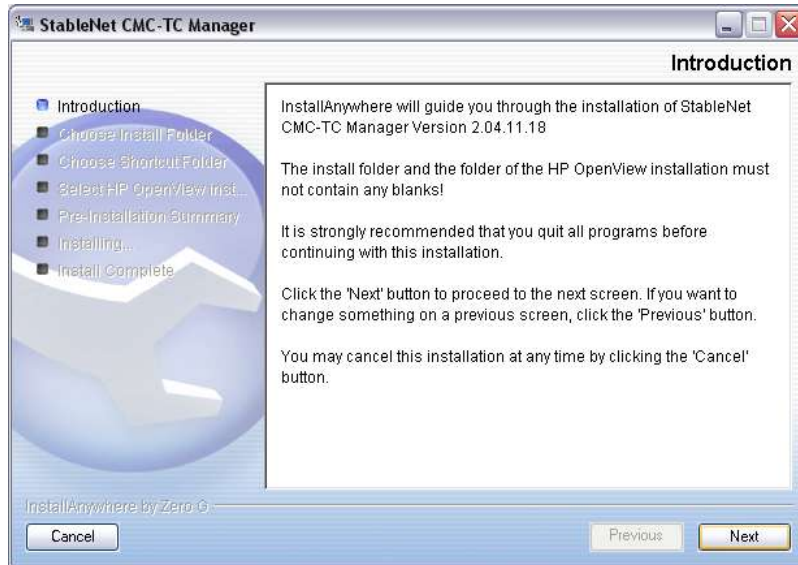


**Figure 5.1. Start Screen**

If a security pop up appears, please accept the execution of the program. Download the CMC-Installer for your operating system with a click on the link. Now, execute the program.

## Note

Follow the hints in the start screen, to start the installer in your system.



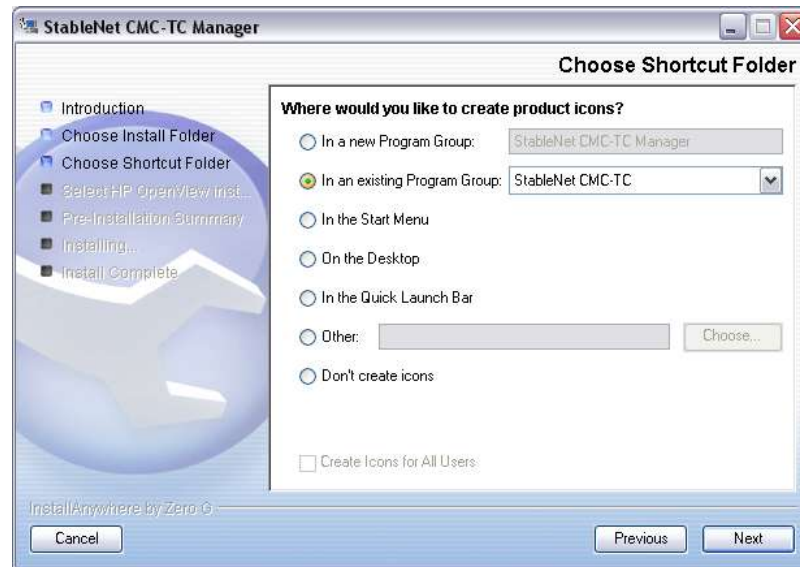
**Figure 5.2. Installation Process**

Follow the Instructions displayed by the installation program.



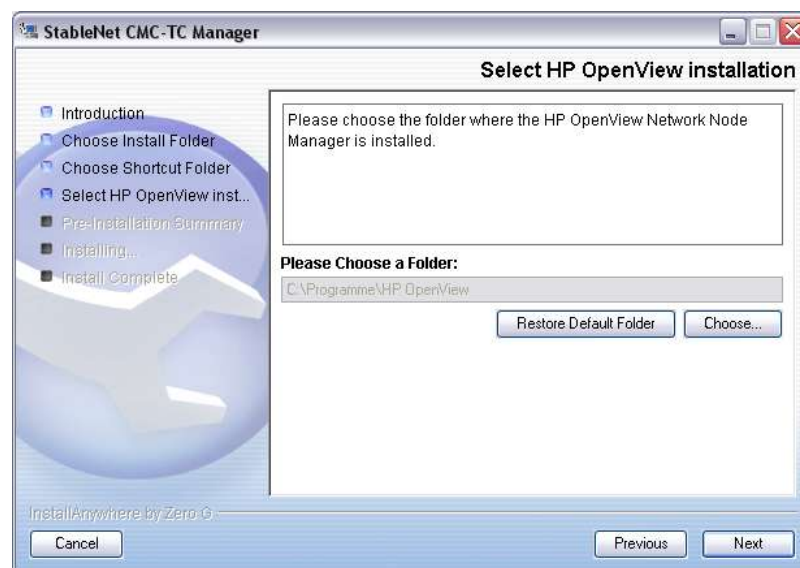
**Figure 5.3. Step 1 - Install Folder**

Step 1: Choose Install Folder and press the “next” – Button.



**Figure 5.4. Step 2 - Shortcut**

Step 2: Choose a Shortcut Folder and press the “next” – Button.



**Figure 5.5. Step 3 - HP OpenView**

Step 3: Choose the folder where the HP OpenView Network Node Manager is installed.



**Figure 5.6. Failure Screen**

A failure screen will be shown if the HP OpenView installation is not found in the folder. You can choose it again with the Button "OK" or exit the Installation with the "Cancel" - Button.

### Note

If you "ignore" the failure, the program can be used without HP OpenView but the "Trap Manager" will not run.



**Figure 5.7. Step 4 - Summary**

Step 4 : A pre-installation summary will be shown. Please check this before continuing. Now, click the "Install" - Button to finish the installation.

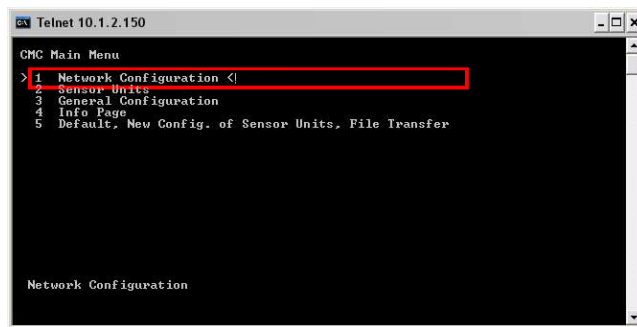


Figure 5.8. Processing Unit Menu

Next, you have to allow StableNet<sup>®</sup> CMC-TC and HP OpenView to access the RITTAL processing units. Thus, you have to log into all processing units ( e.g. using telnet ) and select the Menu-Item “Network Configuration”

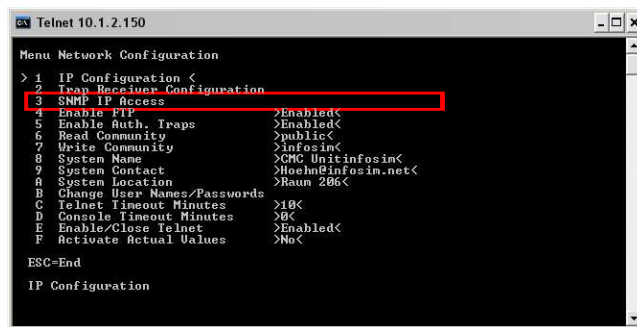


Figure 5.9. SNMP IP Access

In the next step you select SNMP IP Access.

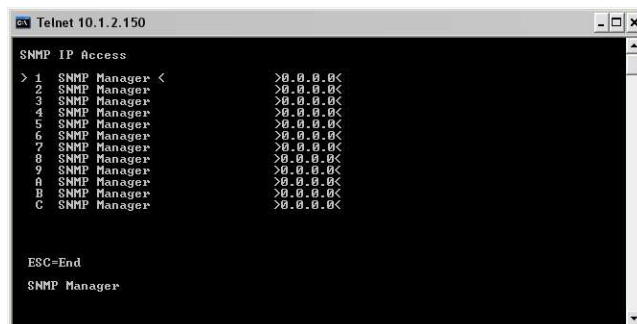


Figure 5.10. IP Address which will get access to the processing unit.

Here you have to extend the Access List with the IP address of the StableNet<sup>®</sup> CMC-TC and HP OpenView machine.

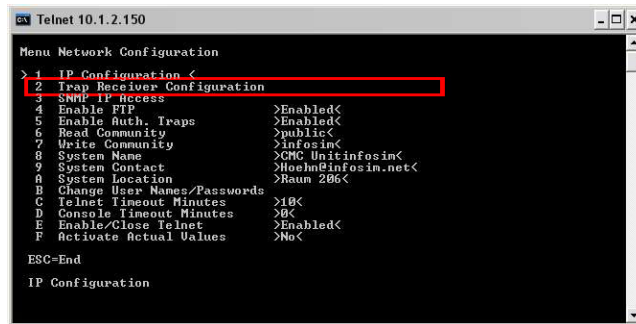


Figure 5.11. Trap Receiver Configuration

Now go back to the Network Configuration and choose the "Trap Receiver Configuration".

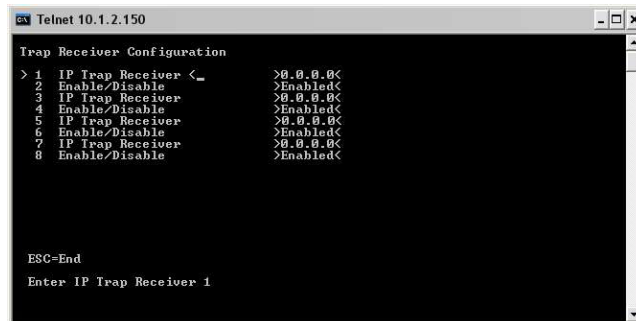


Figure 5.12. IP Address which received the SNMP Traps

Here you have to extend the List with the StableNet<sup>®</sup> CMC-TC IP again and "enable" this receiver.

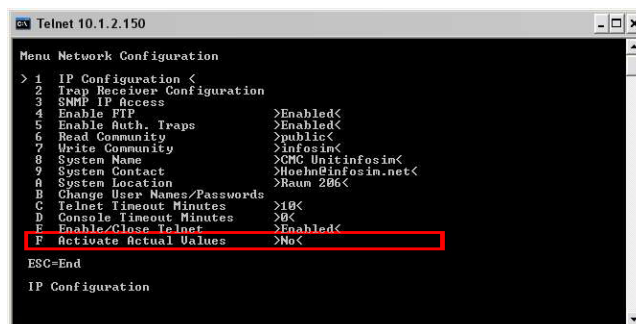


Figure 5.13. Save Configuration

To save the changed values at the Processing Unit, go back to the Network Configuration and choose "Activate Actual Values". The Unit will reboot and store the Settings.

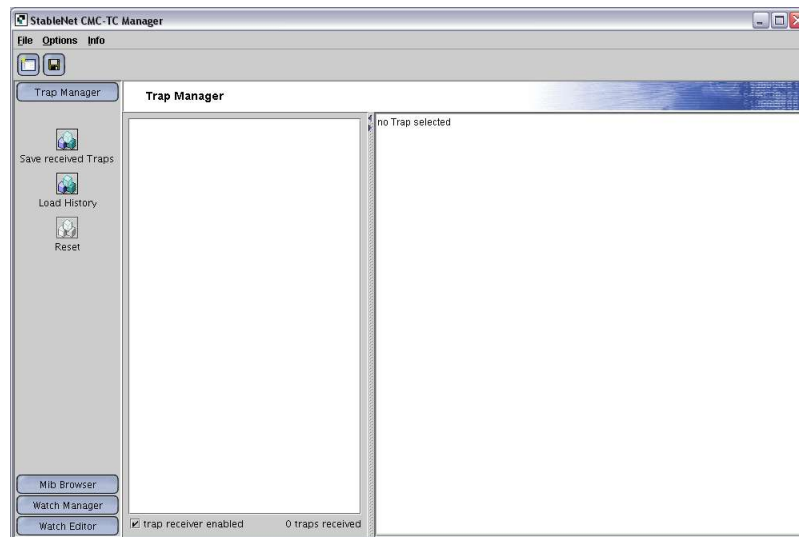
At last start the StableNet<sup>®</sup> CMC-TC from HP OpenView. (Tools-> CMC-TC Manager).



**Figure 5.14. License Dialog**

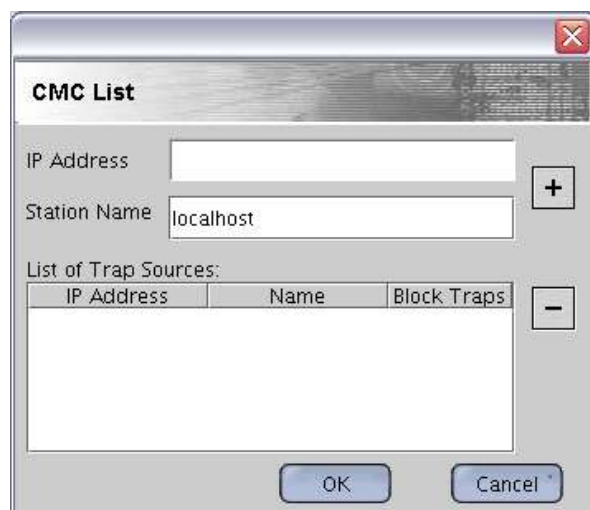
A Licence Dialog appears. Now insert the license key. If you don't have a Key, contact <support@infosim.net>.

For using the program please restart the StableNet<sup>®</sup> CMC-TC after the license settings .



**Figure 5.15. Start Screen**

In the last step, select the menu bar item "Option – CMC List" and a dialog appears. After specifying the IP address of the processing unit and a station name, click the "+ –Button" and the processing unit can be watched.



**Figure 5.16. CMC-List**

If a SNMP - Trap, received from a Processing Unit, which is not yet created in the CMC-List, it will be added (until the maximum limit of devices is not reached).



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# Chapter 6. Getting familiar with the work area

## 6.1. The Menu Bar

The Menu Bar contains the File, the Options and the Info menu item.

### 6.1.1. Menu File

When you look at the File menu, the main buttons stand out. The following functions can be selected:

- **New**

The StableNet<sup>®</sup> CMC-TC will set back to start configurations. This remove all manual created tabs and watches after a Message box. Shortcut (STRG-N).

- **Save**

This Option saves all settings (Watches, Tabs, automatic watch settings, SNMP properties, device list,...). Shortcut (STRG-S).

- **Quit**

Exit the program. If any changes remain unsaved, a Messagedialog appears. Shortcut (STRG-Q).



**Figure 6.1. Menu File**

### 6.1.2. Menu Options

When you look at the Options menu, the settings buttons stand out. The following functions can be selected:

- **CMC-List**

The CMC-List settings is an important dialog. This list contains all CMC processing units which are applied manual or by a trap. You can only create watches about Units of this list. For more information look at Chapter 7.1. (Shortcut STRG-M)

- **SNMP Properties**

You can define the SNMP default values for the System. These Parameters applies for all watches, but of course, the user has the possibility to choose different values at each watch at their creation. For more Information please have a look at Chapter 7.2. (Shortcut STRG-P)

- **Automatic Watches**

The user can define the kind of watches for each type of CMC-Unit in this appearing Dialog. (potential CMC-units are I/O Unit, Access Unit, Climate Unit, RTT Unit and FCS Unit ). To get a precise description go to Chapter 7.3. (Shortcut STRG-W)

- **License Settings**

This dialog shows the current license key. If your License timed out here you have to insert a new valid key. For more information read Chapter 7.4. (Shortcut STRG-L)



**Figure 6.2. Menu Option**

### 6.1.3. Menu Info

When you look at the Information menu, the info buttons stand out. The following functions can be selected:

- **Local IP**

You need the computer IP - address for the SNMP configuration of the CMC-Processing Units. To get the local IP - address you can use this function. A dialog with the local IP appears.

- **About**

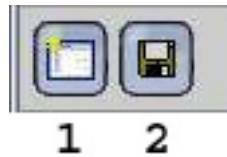
This dialog shows all useful information of StableNet<sup>®</sup> CMC-TC. You can read the copyright, the current version, the number of licensed devices and the end time of the license key.



**Figure 6.3. Menu Info**

## 6.2. The Option Bar

The Option Bar is placed on top of the GUI and is designed for two functions. You can activate them with a mouse click on the accordant icon.



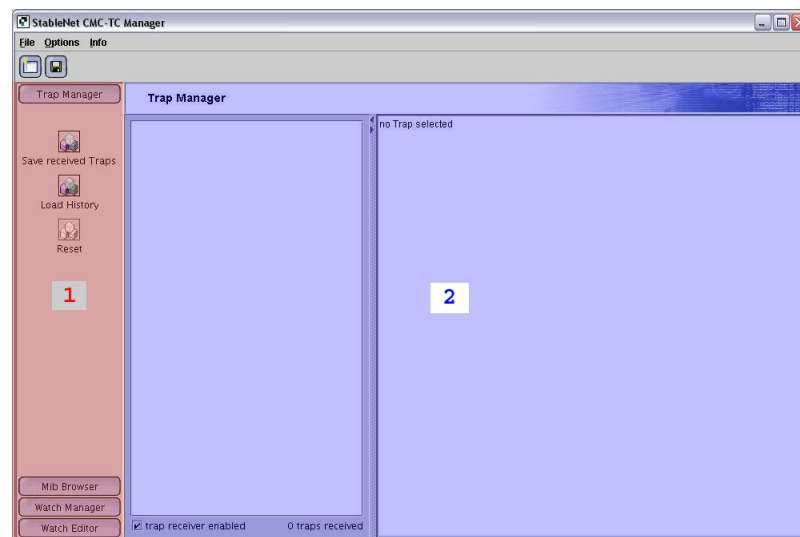
**Figure 6.4. Option Bar**

These functions can also be called over the menu bar. **1:** Sets a new status (menu file -> new), **2:** Saves changes (menu file -> save)

## 6.3. The Main window

The main window is split in two sections (look at the picture below). The first section (here: red) is used as selection bar for the 4 basic functions of StableNet<sup>®</sup> CMC-TC (Trap Manager, Mib Browser, Watch Manager, Watch Editor).

The second section (here: blue) is the work panel. It displays all information of the selected basic function. If you refer to the following chapters, you get a precise description of these basic functions.



**Figure 6.5. Main Window**

## 6.3.1. Trap Manager

The Trap Manager can be used to get information about the received Traps. To have a look at the basic function of Trap Manager, click the button "Trap Manager" in the selection bar of the main window. In the selection bar appear three Buttons with the following methods:



**Figure 6.6. Trap Manager Select Bar**

- **Save received Traps**

This method can be used to save all the received traps displayed in the work panel.

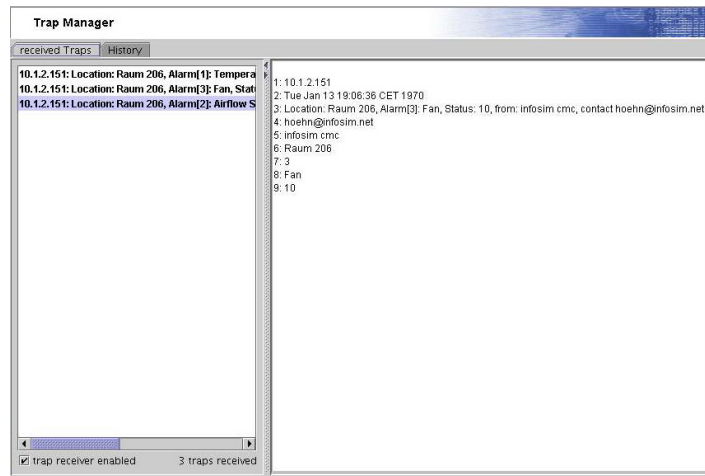
- **Load History**

This method can be used to load saved traps in the StableNet<sup>®</sup> CMC-TC.

- **Reset**

This method clear the work panel and delete all received Traps without saving.

The work panel of the Trap Manager shows all information of the received traps. This panel is split in two areas. The left area informs about all Traps in a scrollable list. You can select one and the trap details will be shown in the right area.



**Figure 6.7. Trap Manager Work Panel**

If you load history traps, a new "History" - tab appears and you can select any trap to show its details.

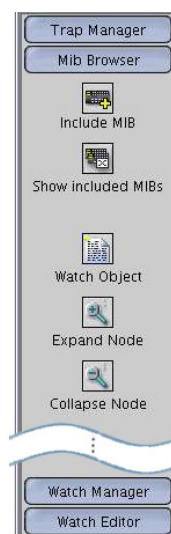
If a Trap occurs in a CMC Device, a message box appears and the new trap will be shown in the work area. Regardless of which basic function is selected, every time a trap is received the program jumps in the trap manager. If you want to stop this, check "trap receiver enabled" in the bottom left corner of the checkbox .

### Note

If this toggle is unchecked, the program ignores all incoming traps.

## 6.3.2. Mib Browser

The Mib Browser gives an review of the CMC - Mibtree and allows for a walk over a selected OID. To get the basic function of the Mib Browser, click the button "Mib Browser" in the selection bar of the main window. Now five buttons appear with the following methods:



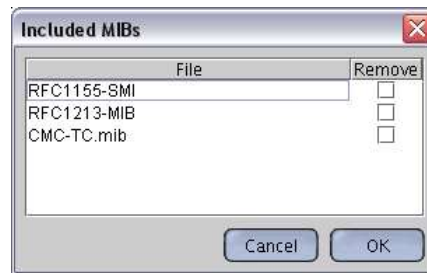
**Figure 6.8. Mib Browser Select Bar**

- **Include MIB**

This method can include additional MIB- trees. This is maybe useful if you want to control Units which are different from the CMC-TC's with SNMP queries. All included MIB trees are shown in the work panel.

- **Show included MIB's**

A dialog appears and gives an review of all included MIB- trees. In the startconfiguration, three files are included for the Rittal CMC-TC. They are important to create all watches.



**Figure 6.9. Included MIB Trees**

Here you can also delete all included MIB trees. Therefor select the appropriate files and push the "OK"-button.

### **Note**

If you delete the three files for the CMC- MIB tree, they are recreated when the program is started again.

- **Watch Object**

With this method you can do a SNMP walk over a selected OID in the MIB- tree. A detailed description of this method follows below.

- **Expand Node**

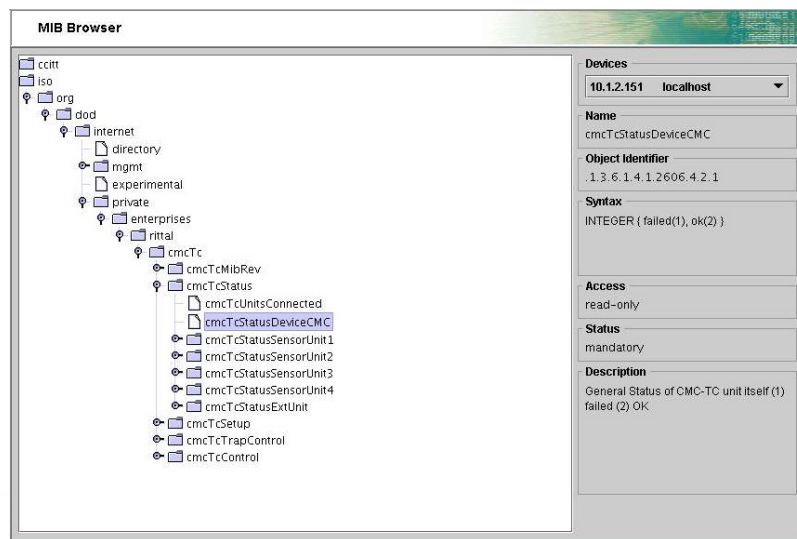
You can use this method to expand the current selected MIB- tree. All collapsed nodes below the selected position will expand.

- **Collapse Node**

You can use this method to collapse the current selected MIB tree. All expand nodes below the selected position will collapse.

The work panel of the MIB Browser shows all information of the integrated MIBs. This panel is split into two areas. The left area shows all integrated MIBs. You can select one OID and all detail information will be shown in the right area.

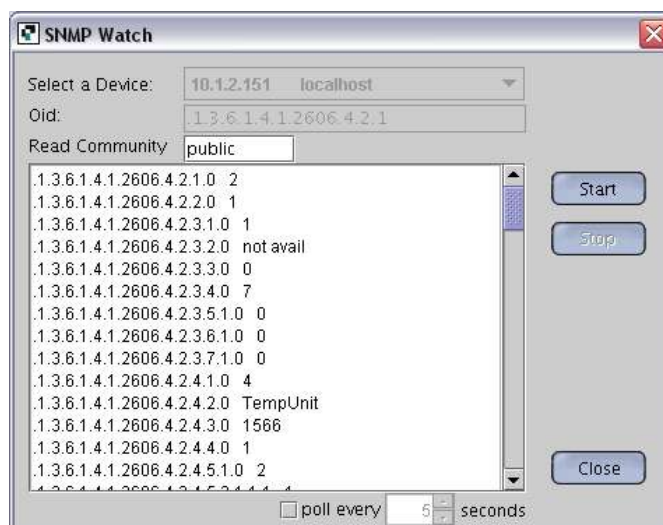
The following details are displayed: Name, Object Identifier, Syntax, Access ( read-only, read-write ), status and OID-description.



**Figure 6.10. Mib Browser Work Panel**

The first information of the right Panel is a select box with all CMC- devices created in the system. If you want to do a walk over the selected OID, choose the required Unit and push the Button " Watch Object" in the select bar. A dialog appears and the walk can be started.

But before starting a walk you should control the parameter of this SNMP - request. Is the selected CMC - device and the Walk OID not correct, close this dialog and choose the correct values, else insert a valid SNMP-read community and press the "start button".



**Figure 6.11. SNMP Walk Dialog**

While the SNMP Request is running, the "Start" button is disabled. If you like to abort the request, click on the "Stop" - Button. The walk over the OID will abort and all received values up to the abort will be shown.

Another feature is the Walk loop. If you want to get the OID information in an interval, activate the check box "poll every ... seconds". If you start the walk with selected check box, the walk will receive all information in the chosen interval. You can change this poll time manual. To stop the loop, press the "Stop" button.

If you press the "close" Button, a started loop or single request will be stopped and the dialog disappears.

### 6.3.3. Watch Manager

The Watch Manager can be used to monitor Units with manual- or auto- generated Watches. To get the basic function of Watch Manager, click the button "Watch Manager" in the selection bar of the main window. Five buttons with the following methods will appear:



**Figure 6.12. Watch Manager Select Bar**

- **Poll Tab Now**

You can use this method to invoke all Watches to poll there values immediately. This applies only to the watches of the current selected tab in the work panel. This method can be called for all tabs in the work panel.

- **Set Tab Interval**

You can use this method to set the poll interval for all Watches to a new value. This applies only for the watches of the current selected tab in the work panel. If you press this button a dialog appears and you can choose the new poll value. By clicking on "OK", all watches will be updated. This method can be called for all tabs in the work panel.



- **Receive All Devices**

This method can be used to receive the connected Units of all CMC-Devices. This is important to generate watches automatically. Because, after it is done, the StableNet<sup>®</sup> CMC-TC has identified how much and what kind of unit are connected. With this information an automatic generation of Watches is possible. This method can only be called for the "trap watches" tab in the work panel.

- **Receive One Device**

This method is similar to the "receive all watches" method, but here you can receive only one specified CMC - Device. To use this method, select a device in the traptree of the trapwatches tab first and then press the button. Now, the CMC- device information will be received new. This method can only be called for the "trap watches" tab in the work panel.

- **Clear Trapwatches**

If watches are generated automatically for a connected unit, with this method you can delete all of them. It is called automatic, if the user wants to generate automatic Watches for another Unit. This method can only be called for the "trap watches" tab in the work panel.

The work panel of the Watch Manager shows all created watches which can be selected with selection tabs. These tabs are created in the Watch Editor.



**Figure 6.13. Selection Tabs**

The first Tab is always the "trapwatches" Tab. If you select it, you can create and monitor automatic watches of a specified unit. The other tabs are optional. They must be created manually in the Watch Editor. All manual tabs can also be removed in the watch editor. Only the trapwatches tab is mandatory. For more information, please have a look at chapter 3.4. Each watch, displayed in the Watch Manager, has three shortcut buttons on the top. With these methods the watch handling is very easy.

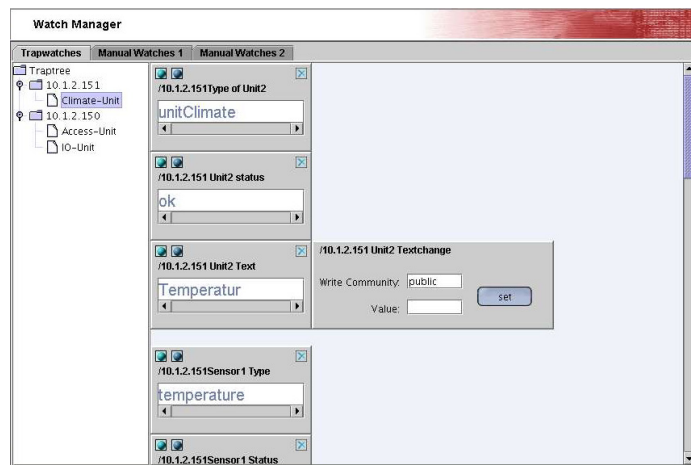


**Figure 6.14. Watch Shortcuts**

- **1** - This button starts the SNMP request of the appropriate watch immediately.
- **2** - This button sets a new poll interval for this watch. A dialog appears and you can choose another interval.
- **3** - This button resets the display of this watch.

### 6.3.3.1. The Trapwatches Tab

The trapwatches tab is split into two areas. The left area is a selection tree. It contains all CMC- devices and shows besides the "receive Device" methods, all connected Units of one or all devices. The right area shows the automatically generated watches of the selected unit.



**Figure 6.15. Watch Manager Work Panel**

In the example above, a climate unit connected on the CMC- Device "10.1.2.151" is selected. In the right area all watches chosen for this unit type are generated. To specify the automatic watchtypes, use the "Automatic Watch Dialog" in Chapter 8.3.

After starting the program, the traptree in the right area contains only the CMC- devices of the CMC- list.



**Figure 6.16. Traptree before receiving**

To get the connected units use the "Receive All Devices" or "Receive One Device" methods. Now, you can generate the automatic watches for the located Units by section.

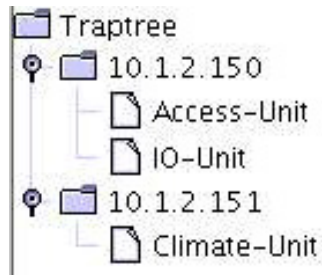


Figure 6.17. Traptree after receiving

### 6.3.3.2. The manual Watches

To monitor manual Watches, you have to create and modify them in the Watch Editor. To control them (e.g. erase values or initiate the watches to poll the values immediately), please use the Watch Manager.

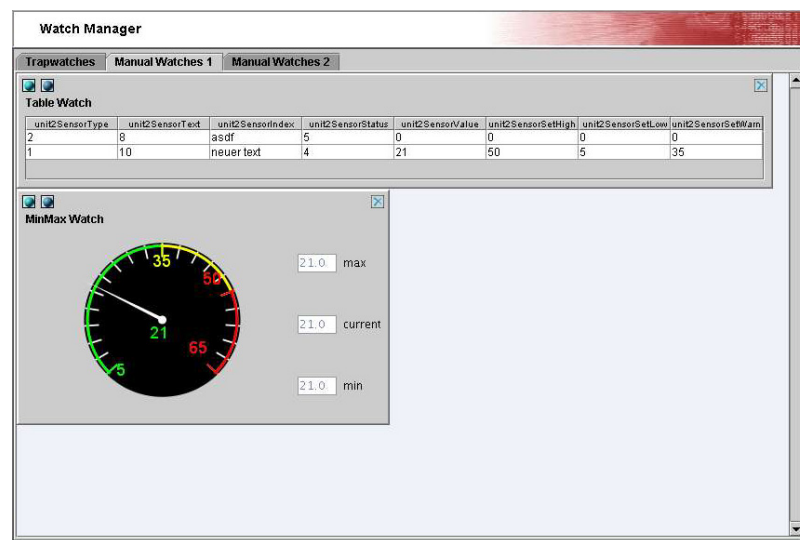


Figure 6.18. Manual Watches

In this example, two manual tabs are created with the name "Manual Watches 1" and "Manual Watches 2". You can see the "Manual Watches 1" with its two watches. The first watch is a table watch with two connected sensors and the second one is a minmax watch (gauge).

### 6.3.4. Watch Editor

The Watch Editor can be used to create manual watches for CMC- Units. To get the basic function of the Watch Editor, click the button "Watch Editor" in the selection bar of the main window. Three buttons with the following methods appear:



**Figure 6.19. Watch Editor Select Bar**

- **Set Global IP**

You can use this method to change the IP- address of the manual watches. This is useful to monitor many devices with the same manual watches quickly. If you press this button a dialog appears and you can choose a new IP- address in the select box.



**Figure 6.20. Global IP Dialog**

The user can also choose, whether the selected IP changes all Watches in the selected tab of the work panel or all manual tabs. To complete the changes, press the "OK" button.

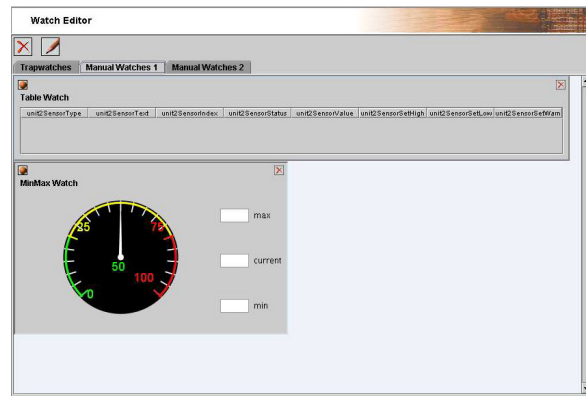
- **Add new Tab**

This method creates a new tab for manual watches. If you press this button, a dialog appears and you can define a name for the new tab. To accept the name, click on "OK". The dialog disappears and the new tab will be created (also in Watch Manager).

- **Add new Watch**

This method creates a new watch in the current selected Tab. If you press this button, a dialog appears and you can define all parameters. A detailed description of this complex dialog you can find in Chapter 8.5.

The work panel of the Watch Editor is similar to the work panel of the Watch Manager: both show all created watches. But the Watch Editor concentrates on arranging the size and position of each watch.



**Figure 6.21. Work Panel Watch Editor**

In the Watch Editor there is a trapwatches tab too. This tab is always empty, because it is only for automatic watches which are set in the Watch Manager. In all other tabs you can create new manual watches.

After creating a watch, you can change the size and the position. That is very easy:

- **Change position**

To change the position of a watch, click in the top of a watch and keep the mouse button pressed. Now when you move your mouse, the watch will follow.

- **Resize watch**

To resize a watch, move your mouse:

- to the left margin. The cursor changes his form and you can make the watch wider.
- to the bottom margin. The cursor changes his form and you can make the watch higher.
- to the left bottom corner. The cursor changes his form and you can make the watch higher and wider.

For each change you have to keep the mouse button pressed.

The work panel also has an option bar with two buttons which can erase or rename a selected tab.



**Figure 6.22. Watch Editor Option Bar**

- **1** - delete the current selected tab with all created watches
- **2** - rename the current selected tab. A dialog appears and you can change the current name.

Each created watch have two shortcut buttons on the top (in the watch editor). With these methods the watch handling is very easy.



**Figure 6.23. Watch Shortcut**

- **1** - This button opens the settingsdialog for the watchdata. You can change and save the settings (see Chapter 8.5).
- **2** - This button deletes this watch.

---

# Chapter 7. Watch Types

In the StableNet<sup>®</sup> CMC, five different watch types can be created. This chapter describes each type and their intention.

## 7.1. Single Watch

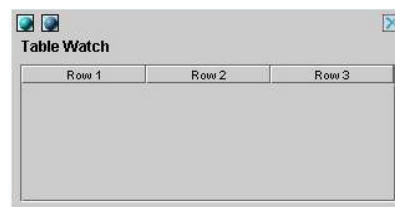
The single watch is a display watch. You can monitor one OID. Whatever the SNMP -request returns, it displays the result in a text area.



**Figure 7.1. Single Watch**

## 7.2. Table Watch

The table watch is also a display watch. You can monitor a lot of OIDs with many sensors which are implemented in the Table- OID. Whatever the SNMP -request returns, it displays the result in a table.

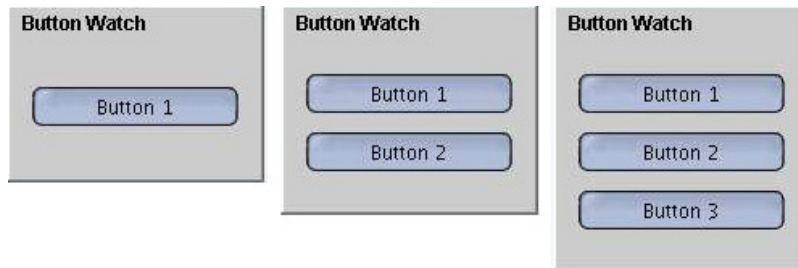


**Figure 7.2. Table Watch**

Each row of the result table is equivalent to one Sensor and each column to one OID of the table OIDs.

## 7.3. Button Watch

The button watches can change values for one or more OIDs with a button. By the creation of this watch, you can define, which value should be set to which OID. If you push the button in the Watch Manager, the values will be set.



**Figure 7.3. Button Watches**

This watch exists in three variations (with one, two or three buttons). To prevent misunderstanding and wrong settings, the user must choose a meaningful name for each button, that he knows what kind of change every button will cause.

## 7.4. MinMax Watch

The minmax Watches are display watches. You can monitor an OID with an history. This watch exist in three possible variations:

- **The simple MinMax Watch**



**Figure 7.4. Simple MinMax Watch**

This Watch have three displays (Max, Current, Min).

- The "Max" display shows the highest value since starting the monitoring.
- The "Current" display shows always the current value of the OID. If this value is the highest or lowest value, the corresponding values will change.
- The "Min" display shows the lowest value since starting the monitoring.

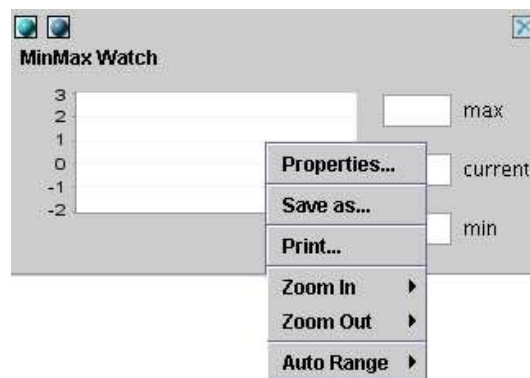


- **The MinMax Graph Watch**



**Figure 7.5. MinMax Graph Watch**

This Watch is similar to the simple MinMax Watch, but in addition an history graph will be shown. It displays the values as red line.

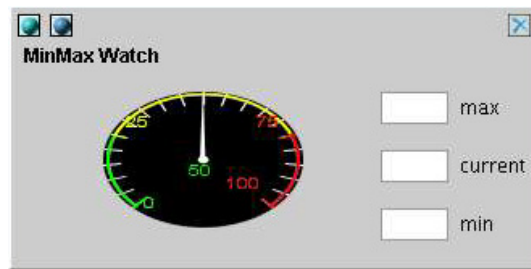


**Figure 7.6. MinMax Graph Watch settings**

A click on the right mouse button opens a setting window with the following functions:

- Properties (Title, Legend, Plot, Other)
- Save as... (\*.png)
- Print
- Zoom in (With each click the default display range of 2 hours can be scaled down until seconds.)
- Zoom out (With each click the default display range can be enlarged until the last 24 hours.)
- Auto Range (Resets all changes in display range to default.)

- **The MinMax Gauge Watch**



**Figure 7.7. MinMax Gauge Watch**

This Watch is similar to the simple MinMax Watch, but in addition a gauge will be shown. It displays the values as gauge. Here you can see three different regions(green, yellow and red).

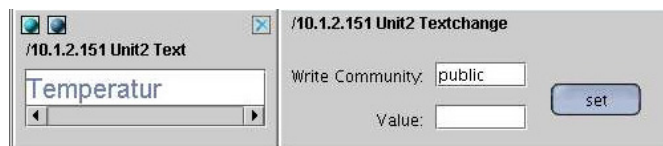
### Caution

Beware. This Watch is really tricky. You can only see the right values if the OID of a "SensorValue" is chosen, because in addition you need the low-, warn-, and highValue.

- The normal range (green) is defined for lowValue till warnValue.
- The warn range (yellow) is defined for warnValue till high Value.
- The critical range (red) is defined for highValue till higValue + 15.

## 7.5. SetValue Watch

This watch is, as well as the button watch, a 'setter Watch'. Here you've got the possibility to change the value of the automatically generated watches. This watchtype can't be created manually. It will be created for each singlewatch by the automatic generated watches which can be changed.



**Figure 7.8. SetValue Watch**

Each changeable single watch have a setvalue watch on the left margin. You can input a SNMP write community and a value. If you press the set button, the value will be set and after the poll time of the singlewatch is expired the new value will be displayed.

## **Caution**

Be carefull of setting a valid type of value (String or Integer). Otherwise no following changes will be visualized.

The SNMP write community is initialised with the default setting of the SNMP properties (see Chapter 8.2) .



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# Chapter 8. Setting dialogues

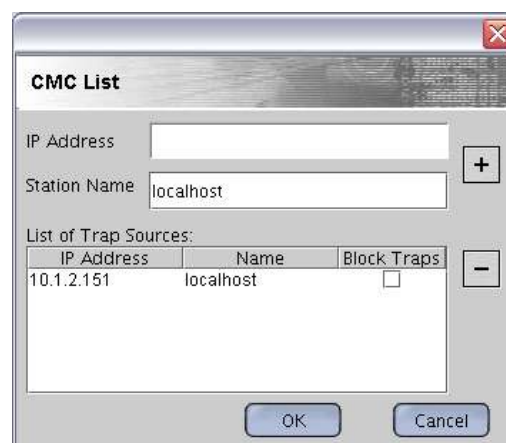
These dialogues are responsible for the program settings. They can be called in the menu bar.

(See Chapter 6.1.2 or Chapter 6.3.4).

You can add and remove Devices, set SNMP properties, select the view types for the automatic watch generation, change the license key and create watches. A detailed description follows in the next sections.

## 8.1. CMC- List

This dialog is responsible for the device handling of the StableNet<sup>®</sup> CMC-TC. When a Trap is received from HP OpenView, the trap device, if it doesn't exist already, will be created in this list. Now the controlling via watches can start for all contained devices.



**Figure 8.1. Device dialog**

You can also add or remove CMC-devices manually as long as the maximum devicecount is reached (the maximum devicecount is stored in the license). If the maximum is reached the new device can't be created and an error message appears. To get around this, you have to remove a device manually. Choose a device in the list and press the delete button ("-") and the selected Unit will be removed.

To create a device manually, you have to insert two values. First insert an **IP-address** of a Rittal CMC-TC Unit which should be controlled. Then give it a meaningful **name** and press the add button ("+" ). Now the new device appears in the list.

You have the possibility to ignore incoming traps of any device by clicking on "block traps" behind the correspondent CMC Unit. To save the changes click "OK" and the dialogue disappears.

## 8.2. SNMP Properties

With this Dialogue you can set the following SNMP Properties:

- **Read community**

This is important to get Data from a CMC - Unit.( default: "public")

- **Write community**

Without a correct write community you can't set values on a Unit.

- **Number of retries**

If a SNMP connection failed, this integer value set the number of retries.

- **Timeout**

This time value (in seconds) set the time period of an SNMP query. If there is no response after that period, the SNMP connection failed.

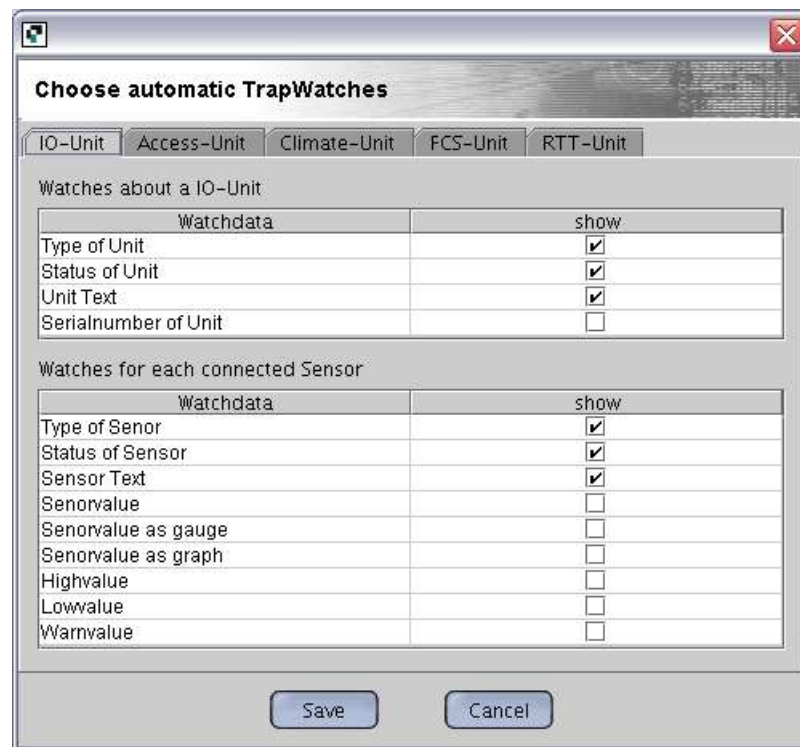


**Figure 8.2. SNMP Properties**

This values are considered for all SNMP connections of all watches. For special configurations, the properties could be changed manually for each watch.

## 8.3. Automatic Watches

In the basic function "Watch Manager" you can create watches automatically for each device. To offer individual and flexible settings, you can choose for each of the five unit types (Access Unit, Climate Unit, I/O Unit, RTT Unit and FCS Unit) other settings in the following dialogue.



**Figure 8.3. Automatic Watches Settings**

In each typetab you can choose two different watchtypes. The first table offers the watches of the deviceunit, the second table is responsible for the watchtypes of each connected sensor on a device.

The following types can be selected for these kinds of units:

- **Type of Unit**

Five device types

- **Status of Unit**

Current status of the unit

- **Unit Name**

Description of the Unit. This value can be changed manually.

- **Serial number of Unit**

The unit serial.

The following types can be selected for connected sensors:

- **Type of Sensor**

Type of the connected sensors

- **Status of Sensor**

Status of the connected sensors

- **Sensor Text**

The description of the connected sensors. This value can be changed manually.

- **Sensor value**

The current value of the sensor. This watch have a history and shows the highest and the lowest value since the watch has started.

- **Sensor Value as gauge**

The current value of the sensor in a gauge. This watch have a history and shows the highest and the lowest value since the watch has started.

- **Sensor Value as graph**

The current value of the sensor as graph. This watch have a history and shows the highest and the lowest value since the watch has started.

- **High Value of sensor**

The high value of the sensor. This value can be changed manually.

- **Low Value of sensor**

The low value of the sensor. This value can be changed manually.

- **Warn vale of Sensor**

The warn value of the sensor. This value can be changed manually.

## 8.4. License Settings

This dialogue type displays the current licence key. If you change the key, it will be checked. Only valid keys can saved. If a non valid key is checked, a error message appears and the old key doesn't change.



**Figure 8.4. License Settings**

If the license timed out, this dialog appears with the next program start. Now you have to insert a valid license key, without the program cannot start again.



## 8.5. Watch Creation

This is one of the most important dialogues. Here you can create a manual Watch. This dialog can be reached in the Watch Editor with the button "Add new Watch" or with the "edit" button of each created watch.

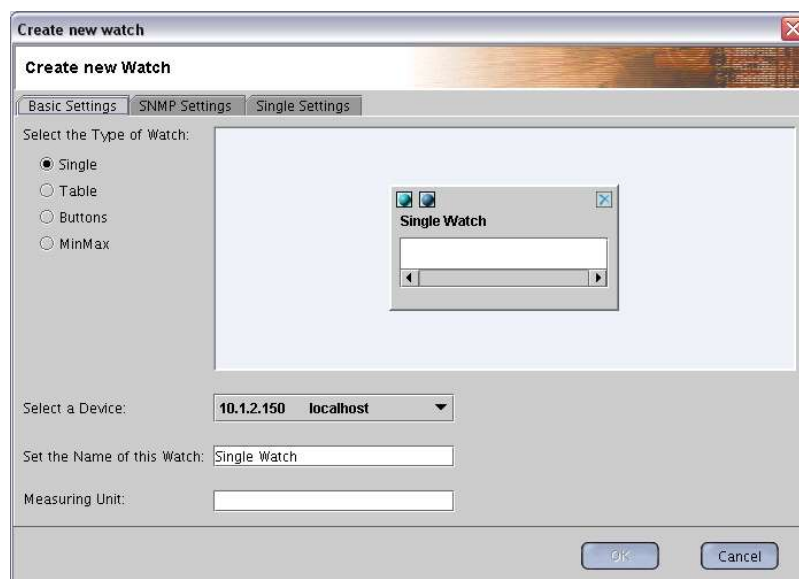


**Figure 8.5. Basic Settings**

The dialog is split in three parts (Basic Settings, SNMP Settings, Special Settings). Each part can be selected with a click on the tabs at the top of the dialog.

### 8.5.1. The Basic Settings

In the first part you have to select the basic settings.



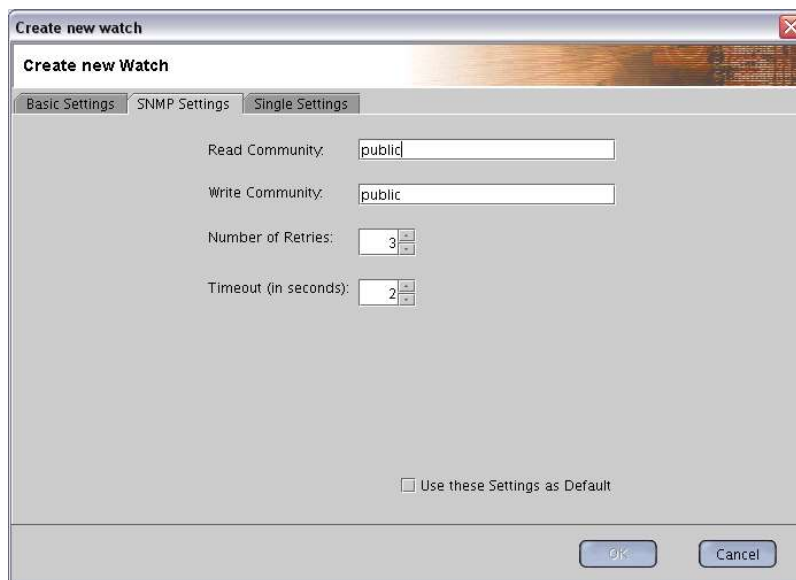
**Figure 8.6. Basic Settings**

- Select the Watchtype with radio buttons. If you select a type the preview display and the special settings will be changed to the right type.
- Select a CMC- device in the select box which be monitored. All entries are created automatically from the CMC-List.

- You can select a meaningful Watch name.
- Choose a Measuring Unit if you want. This string will be added the received value to the display. This field is optional.

## 8.5.2. The SNMP Settings

In the second part, you can choose new SNMP settings if they differ from the default one.



**Figure 8.7. SNMP Settings**

- You can insert a new SNMP read community
- You can insert a new SNMP write community
- You can select a new number of retries
- You can select a new SNMP timeout

If you want to set these SNMP settings as default, open the checkbox "use these settings as default". After you have created this Watch the SNMP default settings will change.

### 8.5.3. The Special Settings

In the third part, you can choose the monitored OID. This is necessary for all types, apart from the button type.

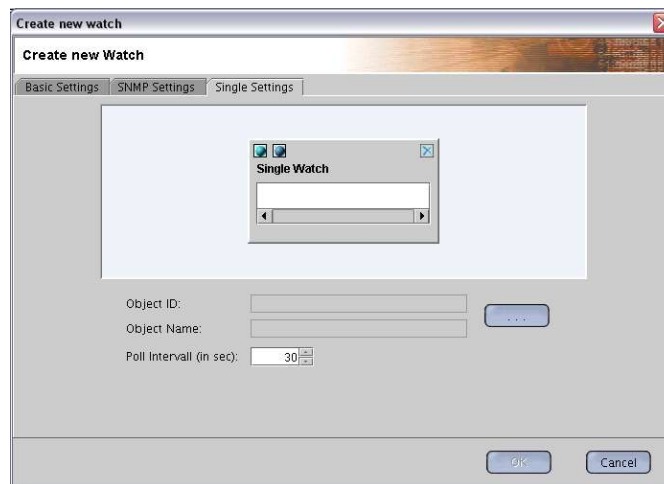


Figure 8.8. Special Settings

- To choose an OID, click on the ". . ." button and an other dialog with the mibtree appears.

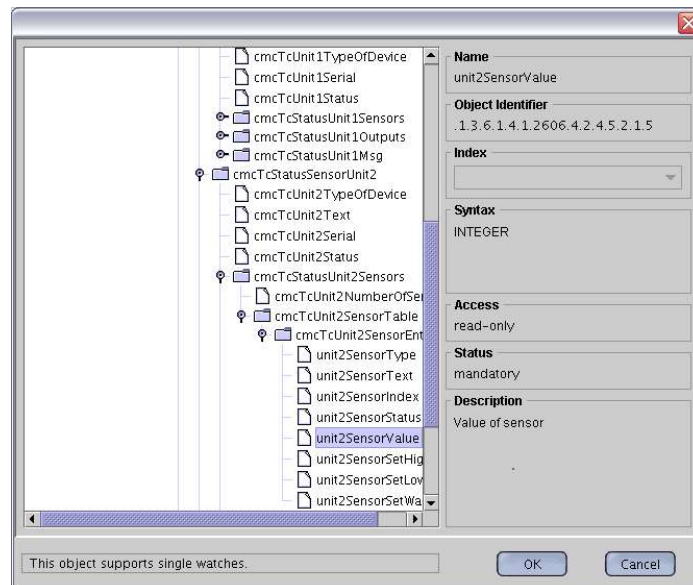
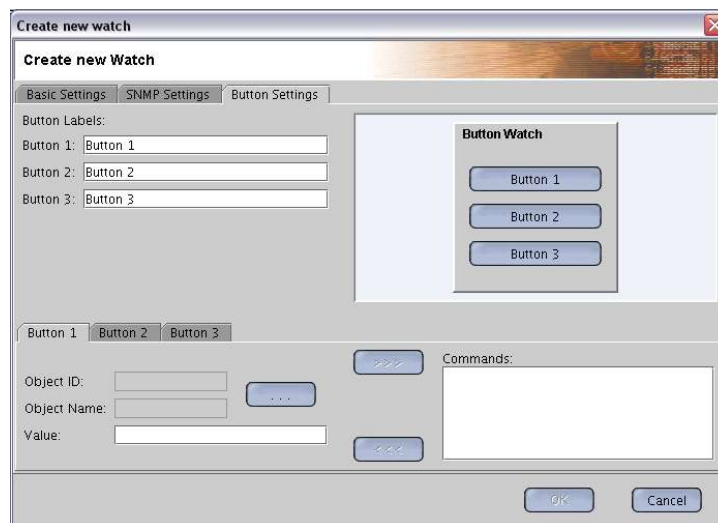


Figure 8.9. MibTree Panel

Here, you can select the accordant OID. If the value is valid for the chosen Watchtype in the basic settings (e.g. for a Table Watch you can only select a Table OID), the "OK" button is enabled. After pressing it, the OID information will be shown in the Special Setting dialog.

- Select a poll interval for the watch.

The button type is different in the some special settings. The user have to assigne a value to one or more OID's.



**Figure 8.10. Special Settings for Button Type**

- Choose a meaningful name for each button.
- Choose a OID with the ". . ." button. You can only select a OID with the write access.
- Insert a set value for the selected OID in the textarea and press the ">>>" Button to add the SNMP SET Command to the command list.

You can build more than one SNMP command for a button, but at least you have to create one command for a button before creating this watch with the "OK" button.

## Note

If you press the button of this buttonwatch, all SNMP commands (in the Watch Manager ) will be send.  
If a value was not correct ( e.g. a String value to an Integer OID) the old OID value will not be changed.

If you want to edit a button command, select it in the command list and press the "<<<" button. Now, you can change the OID or the value. To accept the changed values, press the ">>>" button.

---

# Appendix A. Troubleshooting

## A.1. GUI troubleshooting

Java sometimes has problems with some PCs which cannot display the GUI or cause a "Blue screen".

Installing DirectX8 or higher (available e.g. at <http://www.windows.com>) solves this problem. Sometimes it is necessary to update the display adaptor driver.

## A.2. No Licensekey

If you have downloaded the demo of StableNet<sup>®</sup> CMC-TC or the old Licensekey timed out, please contact the Infosim support at <[support@infosim.net](mailto:support@infosim.net)>.

