DART®
DATA CENTER

USER MANUAL

INDEX

BORIN* Manufacturing, *Inc.
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1. Start Page

1.1 Navigation

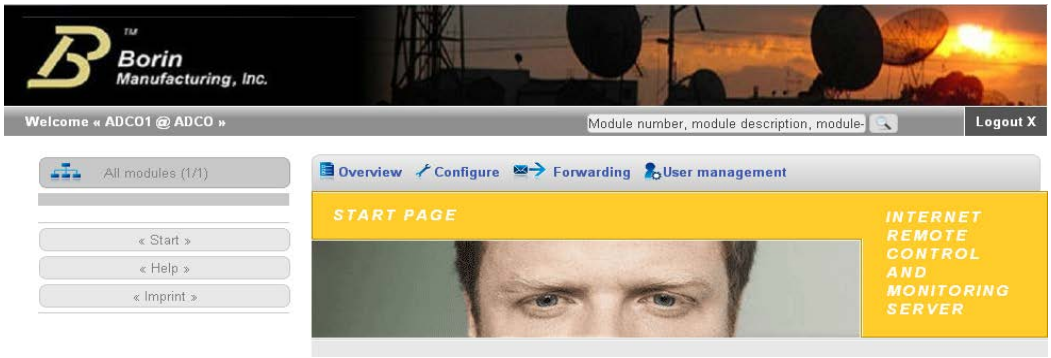

Figure 1: Start page

On this page you have access to the following functionalities:

Search	Quick search a module by module number or label
Logout	Leave the Datacenter

Overview	Overview of all modules and messages etc.
Configure	Configure your installations
Forwarding	Setup message forwarding and destinations
User management	User configuration and management

<< Start >>	Return to the start page
<< Help >>	This help document
<< Imprint >>	Imprint

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2. Overview “All Modules”

When you select “**All Modules**” in the navigation menu on the left, you will get an overview of all your devices which are registered with our Datacenter.

2.1 Overview

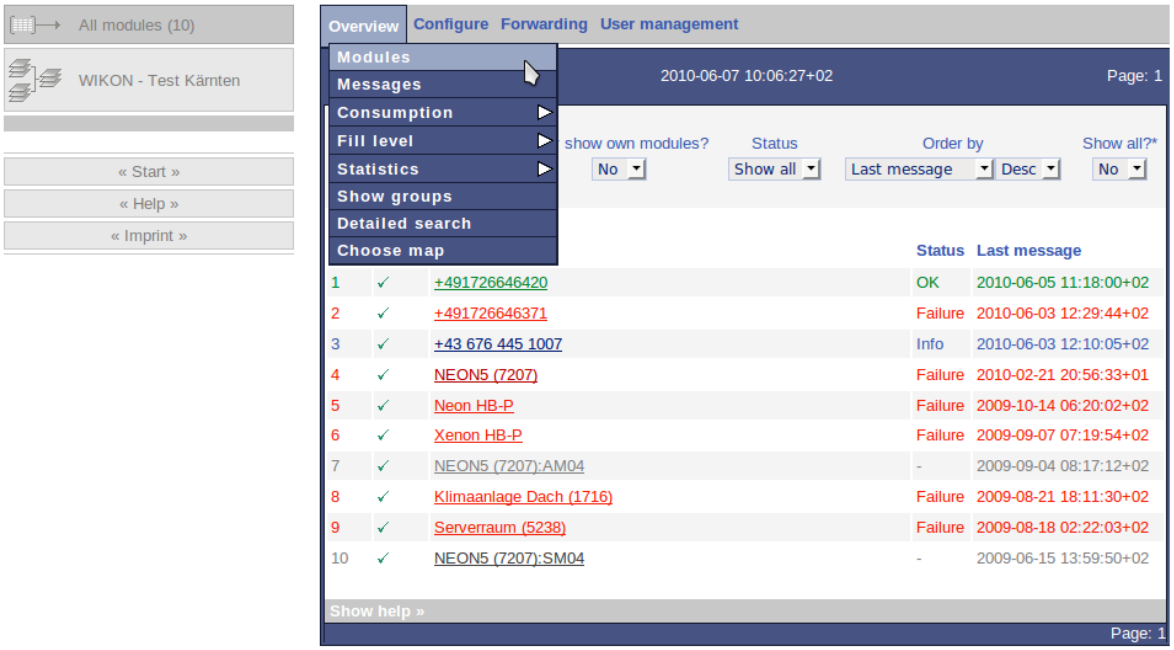

Figure 2: Overview (all modules)

Information which is being shown on this page:

- The Label of each module
- The timestamp of the most recent message of each module received by our Datacenter
- State of each module
- Active-Flag which indication if the customer has marked the module as inactive or not

Modules which have not yet sent a message to the Datacenter are not shown by default.

►To display modules not having sent a message yet set the filter box on the right

"show all" to "yes" (Fig.12)

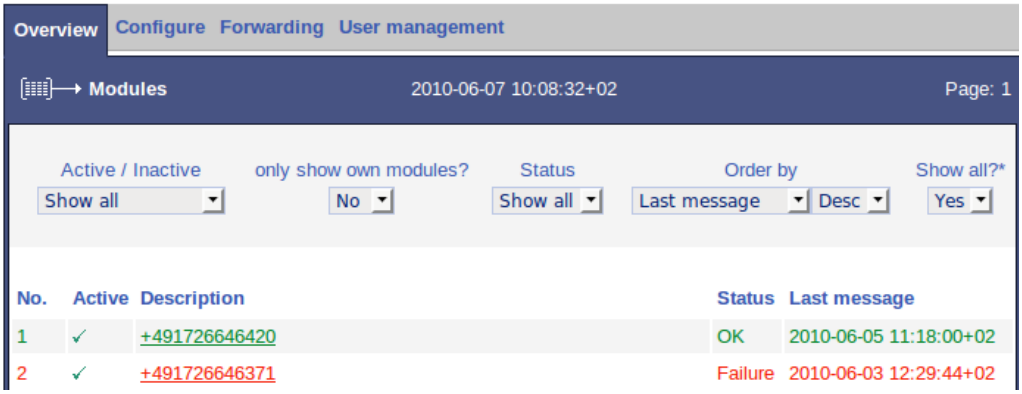

Figure 3: Module overview including modules not having sent messages yet

By clicking on a device you get the detailed module overview for this single module. The current module state is colored as follows:

- Blue Info
- Green O.K.
- Purple Alert
- Red Error
- Yellow Warning

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2.2 Messages

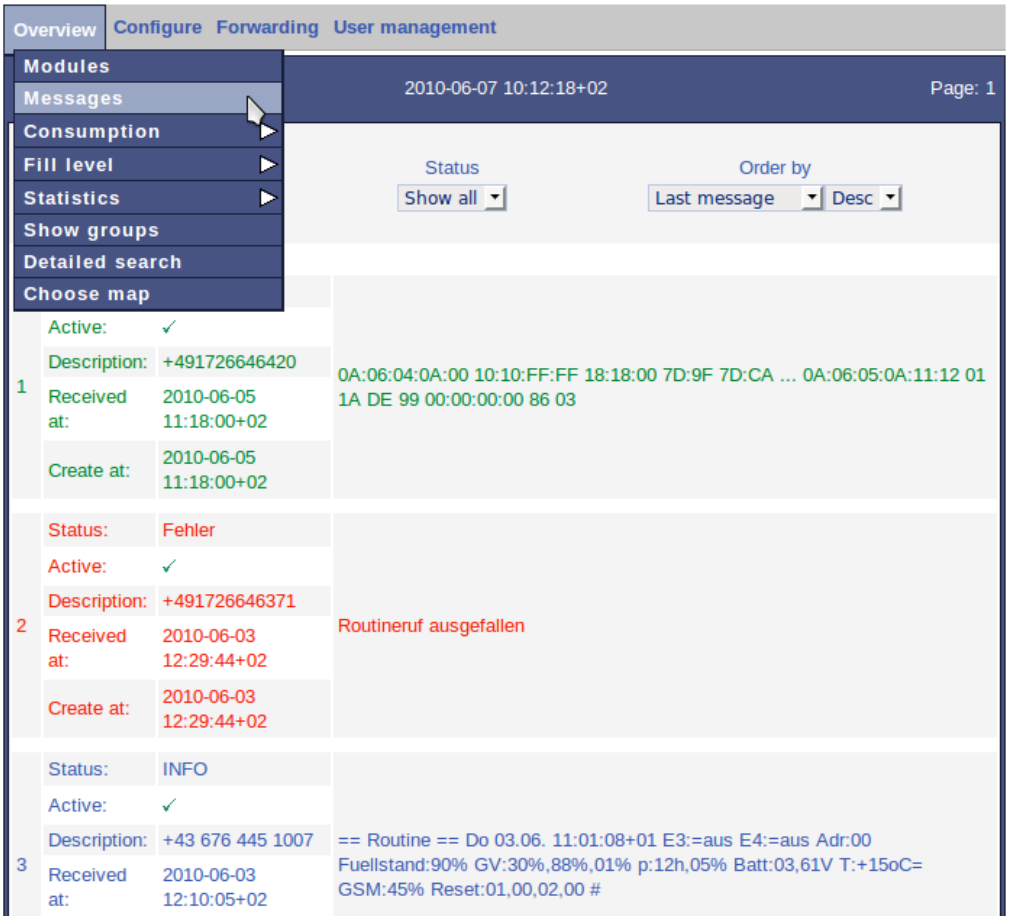

Figure 4: Recent messages of each module

The most recent message of each of your devices is shown on this page.
When you click on a message, you get to the detailed message overview of the selected module.
There are several filters available which enable you to adapt the view to your needs. You can change the sort order as well as filter by modules having a predefined state.

3. Module Overview “Single Module”

Select a module in the module overview and you will get to the detailed module view page.

3.1 Module Details

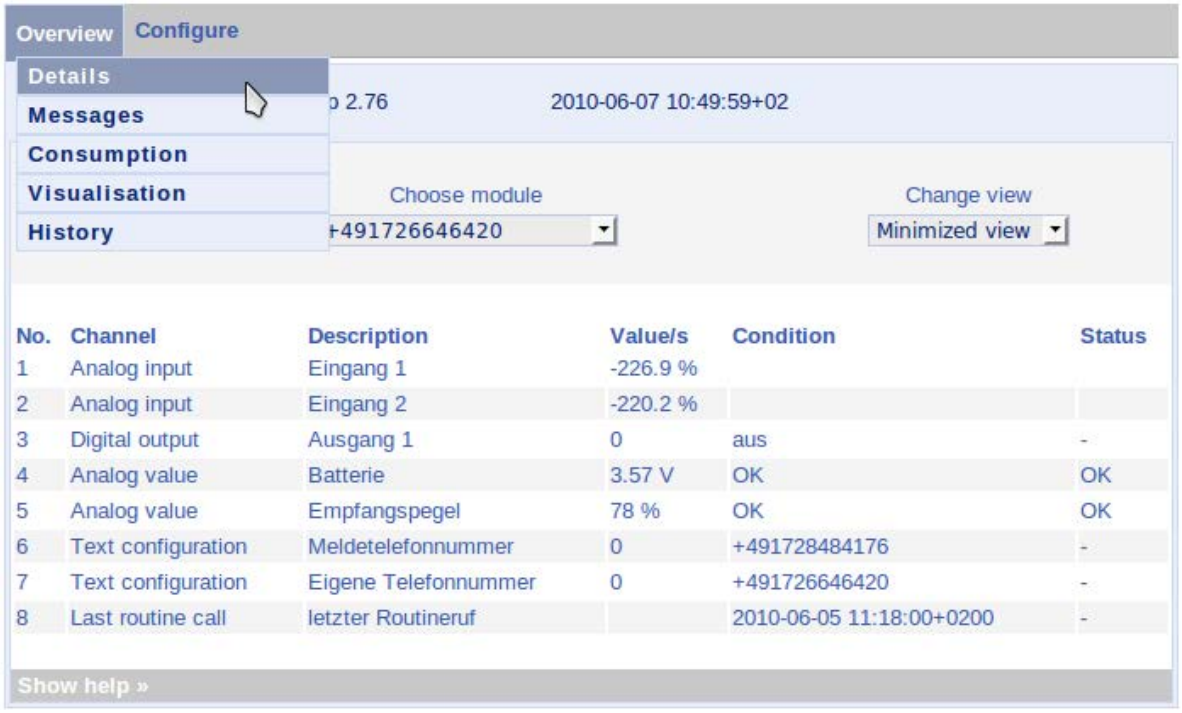

Figure 5: detailed module view

All the data which belongs to the selected module is shown on this page, by default in a compact view (“minimized”). If you want to see some more information, change the according filter to “maximized”.

3.2 Messages

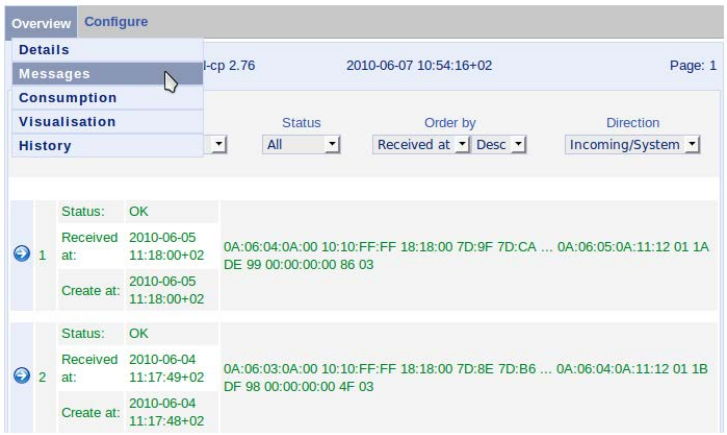

Figure 6: Messages of a single module

This will show you all the messages of the selected module. By default only those messages which have been received by our Datacenter from the device are shown. By using the filter box you can also display system messages and outgoing messages from our Datacenter to the device.

3.3 Send Commands

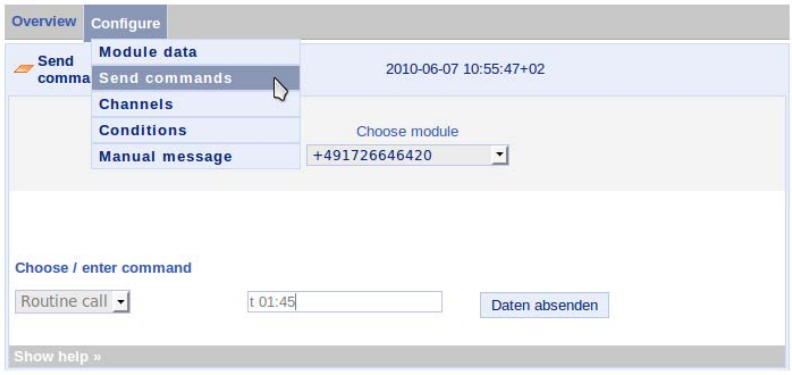

Figure 7: Send a routine call configuration to a device

Here you send configuration messages to your device. Choose a command, enter optional parameters and submit the form. Most devices support the following commands:

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	Status request
	Configuration request
	Query analog configuration
	Reset counters
	Automatic time setup
	Configure Routine call
	Configure the mobile number to which messages are sent by default (“No. 1”)
	Configure authorized mobile phones which are enabled to send commands
	Query GSM mobile number of your device
	Switch demo mode (on by default)

Example for a routine call configuration(fig. 25):

1. set the dropdown box to “routine call”
2. enter parameters for the desired routine call interval

Format**: h [blank] XX:45h**

h	01:45h	= hourly at xx:45
h	04:45h	= every 4 hours at xx:45h
t	23:00h	= daily at 11 pm
w	135 08:30h	= Monday (1), Wednesday (3), Friday (5) at 08:30h am

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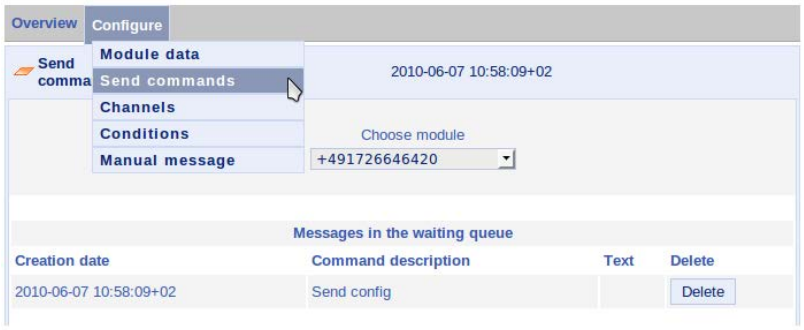

Figure 8: Message queue

Some of your commands, especially those to battery-powered devices won't be sent out immediately, because the devices reside in energy-save mode most of the time.

You can see commands which are not sent yet in the message queue. As long as messages are waiting for being sent, you can still delete them (fig.27).

NOTE: You will find more precise information about supported device commands in your device manual.

3.4 History

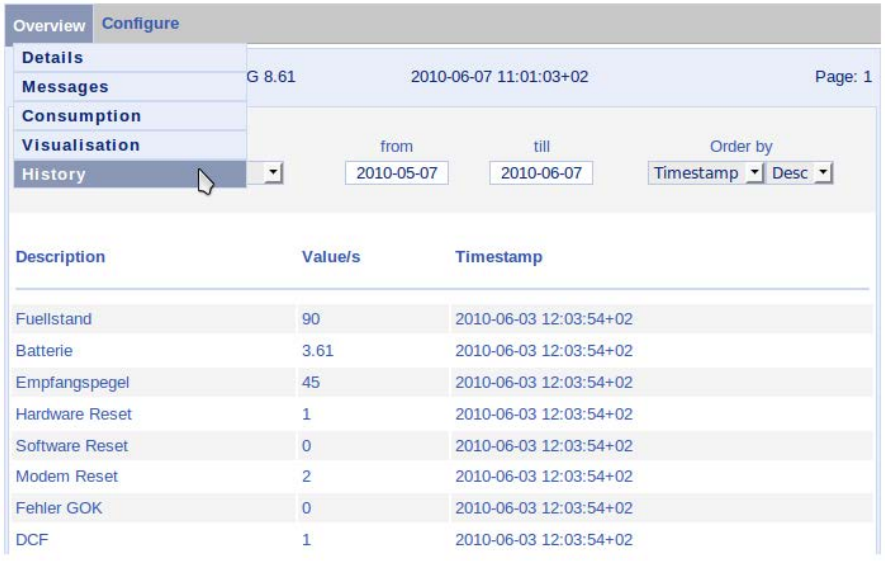

Figure 9: History

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The history view provides module data for a selected period of time. This period of time can be selected by using the dropdown boxes shown above (surrounded by the black box).

3.5 Drawing / Visualization

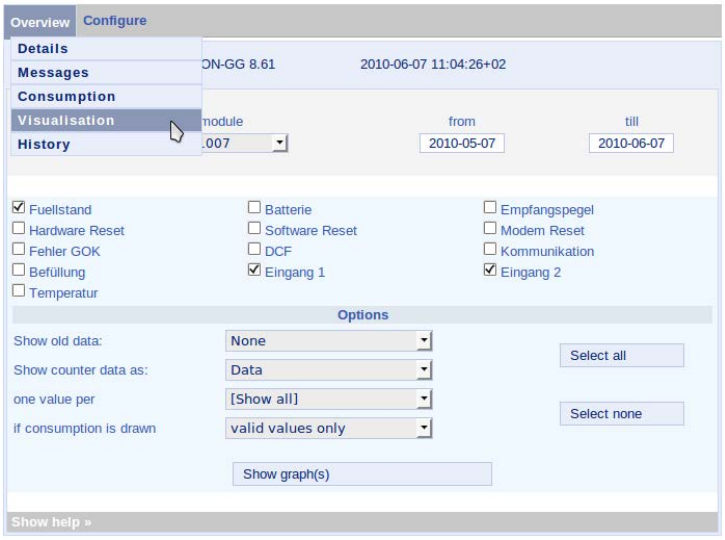

Figure 10: Prepare data visualization

"Draw" / "Visualization" provides a graphical evaluation of all collected module data. Select the desired period of time and the channels of your device which you want to have displayed graphically. As a reference you can also enable former data to be displayed at the same time (e.g. last month / last year data). Hit the "show graphs" button to create the dynamic graphs.

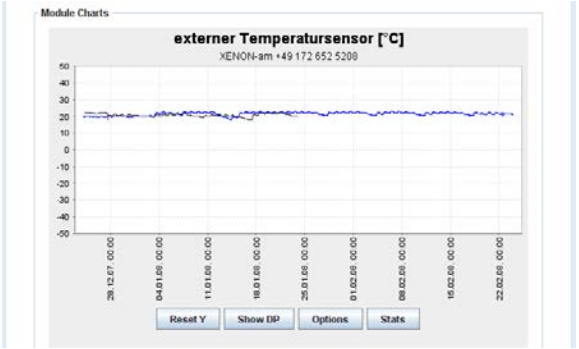

Figure 11: Reference values from last month

Here you see a graph (blue) with reference values from the preceding month (grey).

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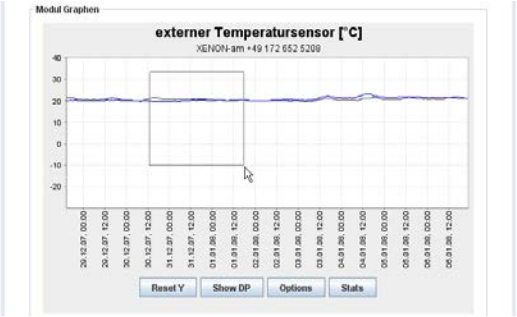

Figure 12: Zoom into particular sections of

Enlarge a section of the graph by holding down the left mouse button while drawing a frame from upper left to the lower right of the area of interest.

With the inverted gesture (movement from lower right to upper left while holding down mouse button) you can return to the original view.

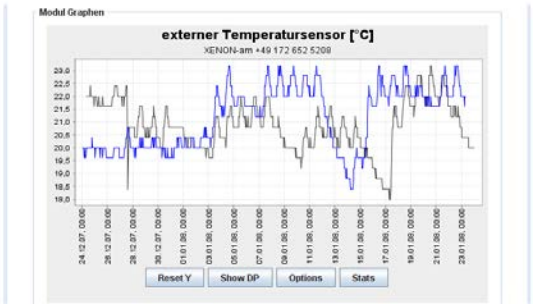

Figure 13: Zoomed-in view

Here you see an enlarged section of the original graph above.

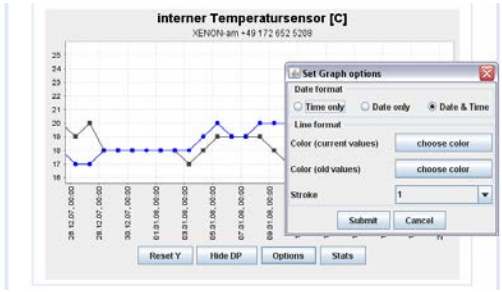

Figure 14: Export functions

The graphs are interpolated. To see the exact measurement points, click on "show DP" (Fig.34).

Access the context menu with the right mouse button to find print and export functions.

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3.6 Configuration

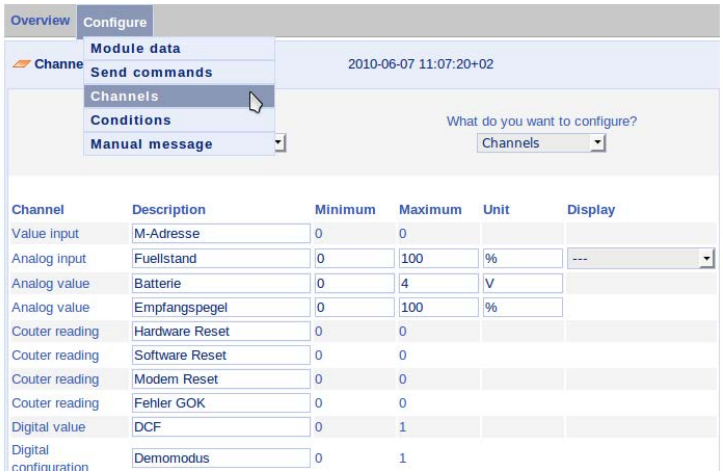

Figure 15: Configure data points

After having set up a new module, you have to configure its data points (fig.35) and internal states (fig.36).

Enter a label, set up a minimum and maximum value and the correct unit for each data point.

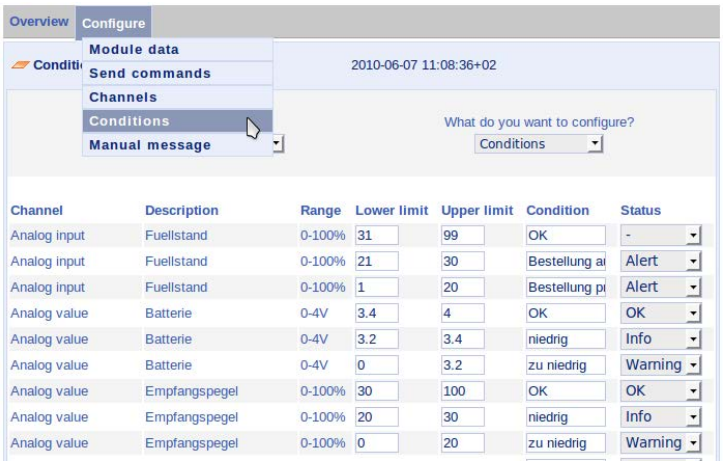

Figure 16: Configure states

We have preset the ranges which can be parameterized for each data point. Assign a label to the state (e.g. “Temperature, 40°C, hot”) and additionally assign an internal state like “warning”.

This state will be used later to setup state-dependent message forwarding (see

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chapter “Forwarding”).

Figure 36 shows the configuration of a manual message. This feature can be used to generate a customized message which should appear in the devices “Messages” section. The manual message will only be inserted locally in our database, there will be no message sent to the device itself.

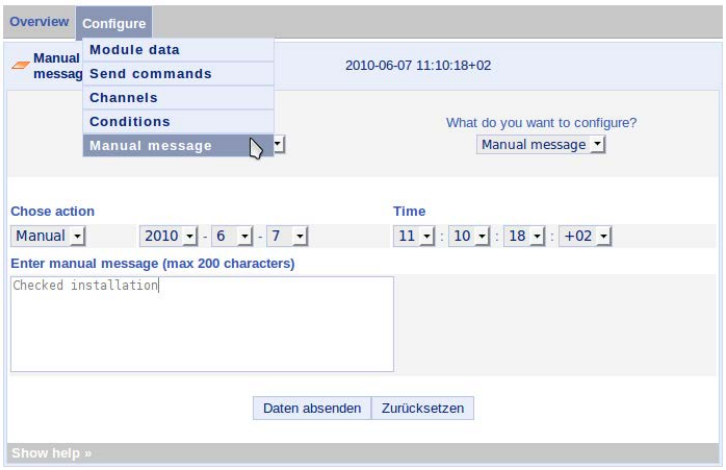

Figure 17: Set up a manual message

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3.7 Module Data

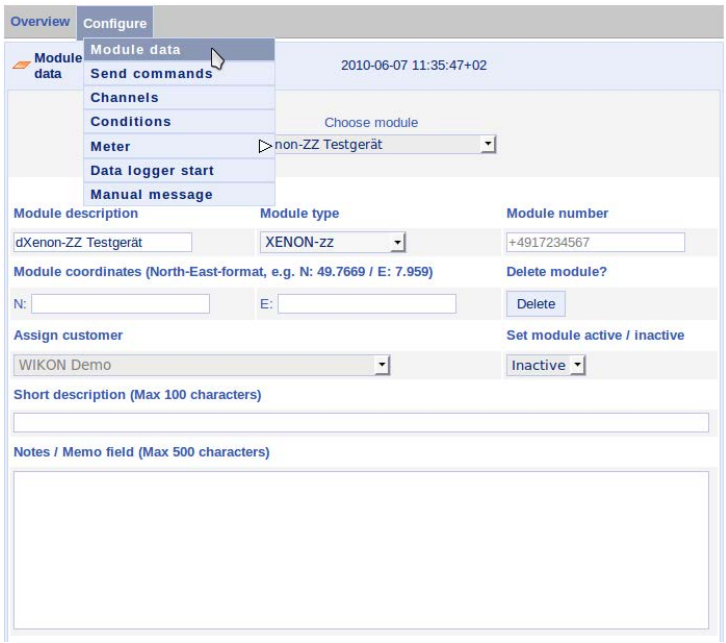

Figure 18: Module data / delete module

Here you have all relevant data of the selected module at a glance. Fill out or change the text fields to supply additional information about the currently selected module or if you want to enter a new mobile number (e.g. because the GSM sim card was exchanged).

Setting the device to “inactive” state does not influence the functionality of the module itself. It is just a flag the customer can set to mark the module as unused.

Inactive modules are excluded by default from the “All modules overview” page.

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4. Message Forwarding

Choose “Forwarding” from the navigation menu on the left to access message forwarding functions.
Note: You must have forwarding privilege assigned to use this function. Otherwise, you can't setup forwarding rules, they won't be working.
The first step when setting up a message forwarding rule is to create a new message destination, which means a device the message will be sent to. It can be a facsimile, a mobile phone or a mail address.

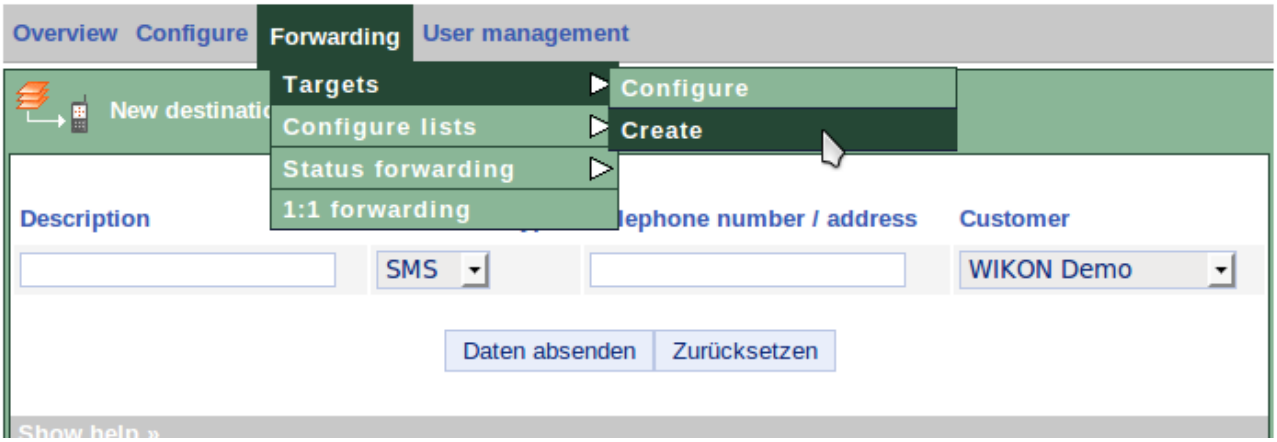

Figure 19: New Destination

4.1 Configure Targets

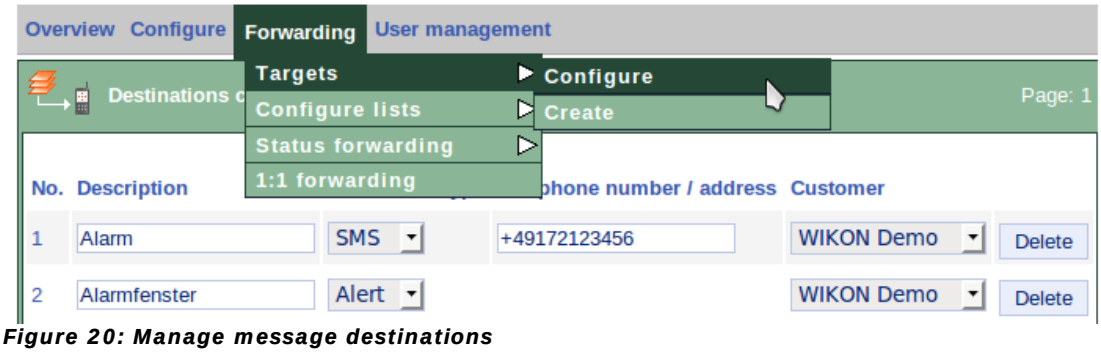

Figure 20: Manage message destinations

Check your targets you have already set up to proceed to the next step.

Please use only valid addresses and telephone numbers. Do not enter a mobile number when the device type is “Mail” or a mail address when device type is “SMS”!

To create another destination, select “New destination” from the above menu.

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4.2 New Destination

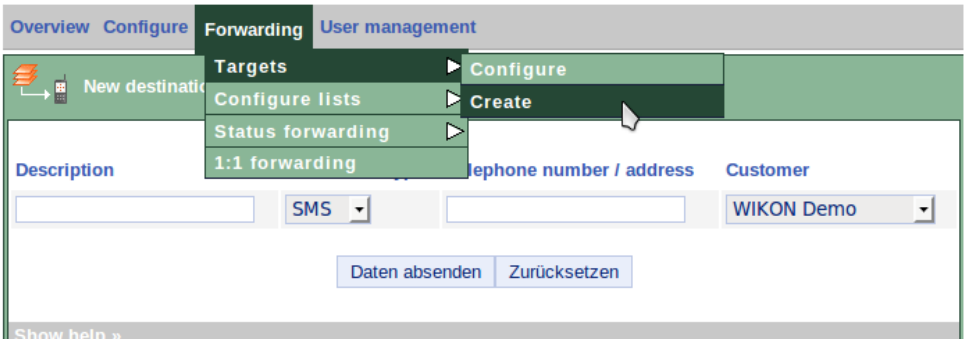

Figure 21: Create a new destination

As a possible target, a SMS capable mobile phone, a mail address or a fax number can be used.

If you like to have messages forwarded to your mobile phone, configure the destination type “SMS” and enter your mobile number as follows: “+CCNNNNNNNNN” where CC is your country code, e.g. “1” for USA and the 'N' letters stand for the rest of your mobile number. Do not use any blanks or whitespaces.

The next step will be to assign the destinations to an alarm list. To do this, use the menu item “list” or “configure new list”.

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4.3 Configure Lists

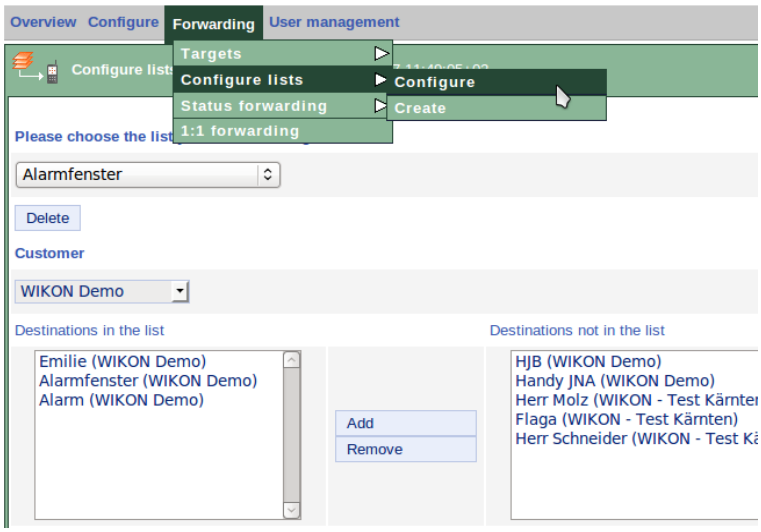

Figure 22: Edit lists

With an alarm list you can combine multiple targets in one list, this enables you to send notifications to one or more recipients.

Configure, edit or delete you alarm lists here on this page. Choose the list you want to configure from the dropdown box and assign destinations to the list with the “Add” and “Remove” buttons. Hold down the CTRL key on your keyboard to select more than one entry at once.

4.4 Create a New Forwarding List

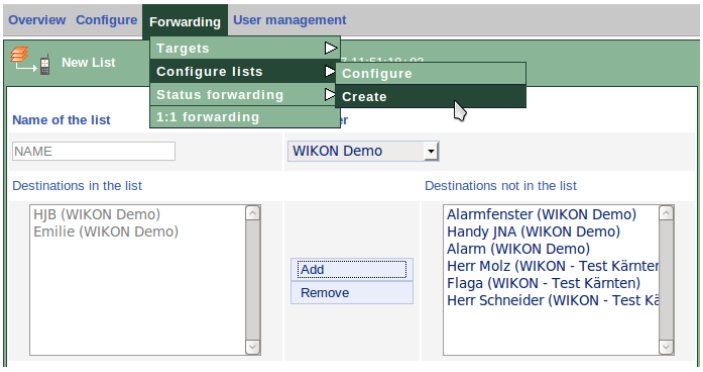

Figure 23: Create a new list

Set up new alarm lists on this page. First, enter a name for the list to create, then add some of the available destinations to the new list and submit the form. Now the list is ready for use with the “Forwarding” function.

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4.5 Set Up Message Forwarding

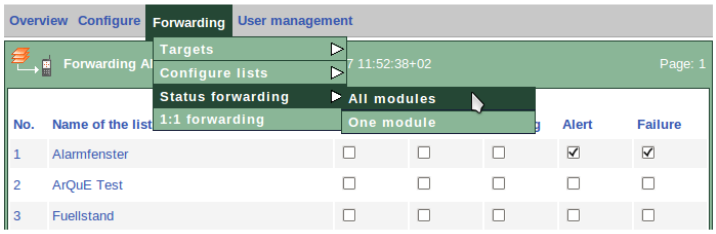

Figure 24: Message forwarding

Prerequisite for setting up a forwarding rule is at least one existing alarm list with existing destinations. There are two ways to set up a forwarding rule:

- state-dependent forwarding for all modules
- module-dependent forwarding rule which overrides the state-dependent settings

By creating a forwarding rule you enable your preferred destination device to receive forwarded messages of your installations by our Datacenter whenever they are in an alert condition. As an example, if you want to have “error”-state messages forwarded to your mobile phone, add your mobile phone to an alarm list an then check the “error“ state box in the line with your list containing your mobile phone.

State - dependent forwarding is available for the following internal states:

- OK
- Info
- Warning
- Alert
- Error

To set up a module specific forwarding rule, go to the module specific forwarding page (“Forwarding module”).

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4.6 Module Dependent Forwarding

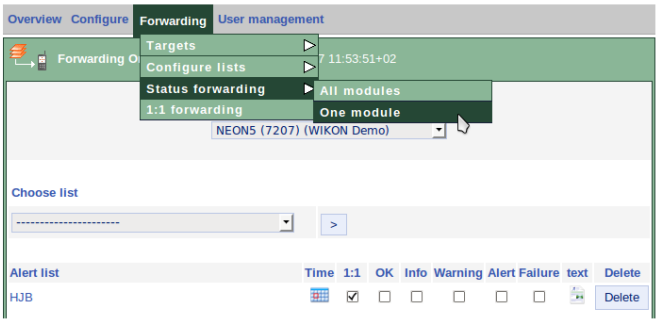

Figure 25: Module dependent forwarding

A 1:1 forwarding can be used to see all messages on your receiving device exactly as they appear on our Datacenter. Choose a module and an alarm list, make sure that the “1:1” checkbox is selected and submit the form.

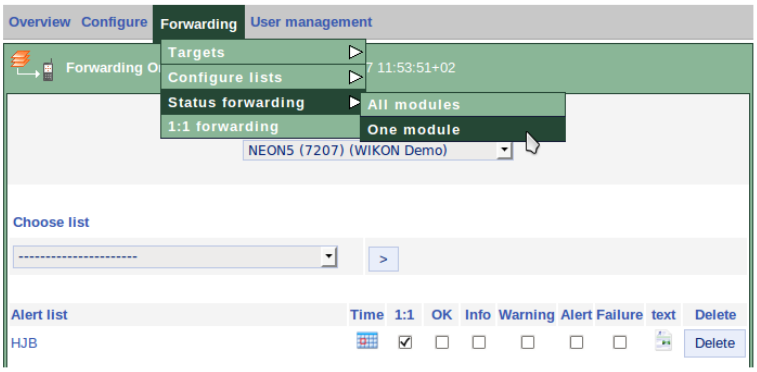

Figure 26: Module and state dependent forwarding at once

You can also set up forwarding rules which are specific for one selected device and additionally only apply to selected states. Proceed as described above and select the state condition checkboxes for which you want the messages to be forwarded. The “1:1” checkbox is not necessarily needed at this point, but you can enable 1:1 forwarding additionally.

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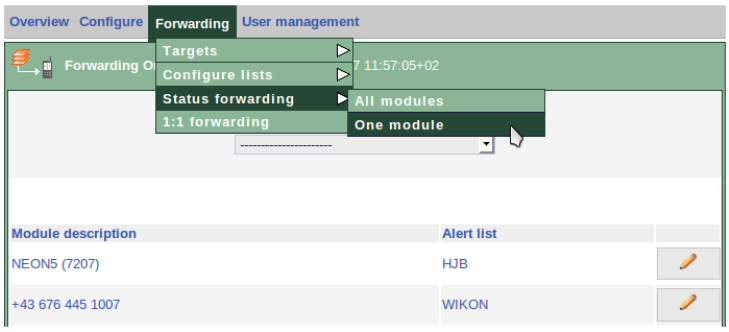

Figure 27: edit existing forwarding rules

Click the pen icon on the overview page to validate and edit your rules.

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5. Data Export

5.1 XML – Export

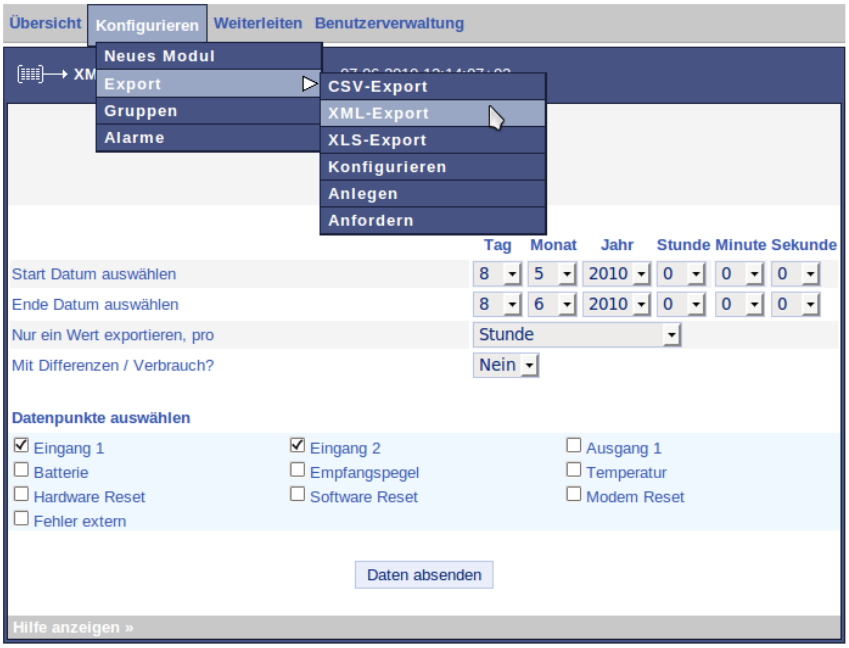

Figure 28: XML - Export

For use with external software, we provide some export functions to get the data from our Datacenter to your local computer. XML is a structured data format which is support by many current software products. Choose the module for which you want to export the data and set up the period of time which is of interest for you. Then select the data points you want to export and submit the form.

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5.2 CSV – Export

	A	B	C
1	Timestamp	M-Adresse	Difference (M-Adresse)
2	2008-01-01 00:00:00+01	75	NaN
3	2008-01-01 06:00:00+01	75	0.0
4	2008-01-02 00:00:00+01	68	-7.0
5	2008-01-02 06:00:00+01	68	0.0
6	2008-01-02 12:00:00+01	75	7.0
7	2008-01-03 06:00:00+01	68	-7.0
8	2008-01-04 06:00:00+01	75	7.0
9	2008-01-04 12:00:00+01	50	-25.0
10	2008-01-05 00:00:00+01	99	49.0
11	2008-01-05 06:00:00+01	50	-49.0
12	2008-01-05 12:00:00+01	50	0.0
13	2008-01-06 00:00:00+01	68	18.0
14	2008-01-06 06:00:00+01	68	0.0
15	2008-01-06 12:00:00+01	50	-18.0
16	2008-01-07 06:00:00+01	68	18.0
17	2008-01-07 12:00:00+01	99	31.0
18	2008-01-07 13:00:00+01	93	-6.0
19	2008-01-08 06:00:00+01	93	0.0
20	2008-01-08 12:00:00+01	93	0.0
21	2008-01-09 00:00:00+01	83	-10.0
22	2008-01-09 06:00:00+01	68	-15.0

Figure 29: CSV-Export

The use of CSV export is similar as the way described above. CSV is more suitable for applications such as Microsoft Excel or Open Office Calc. When using the CSV export function, be sure to select the correct text separator character for your application.