



Morfeas WEB User Guide Configuration

1 License

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2 Change History

Jan 20,12022 : Sam Harry Tzavaras – Initial Work.

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3 Introduction

This reference guide will introduce the utilities that are related to configuration of the Morfeas system and network.

The “Morfeas WEB” is published under the AGPLv3 or later.

4 Morfeas System Loggers

The Morfeas System Loggers utility is made to show information related to the Morfeas System’s components. It’s can be accessed for the Morfeas WEB front page by the button with this  symbol.

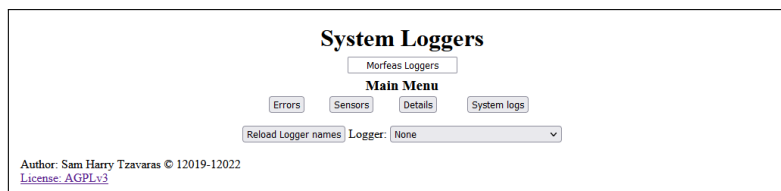


Figure 1: Morfeas System Loggers

At table 1 present the functionality of the utility’s tabs.

Tab Name	Purpose
Errors	Table with Sensors that reporting error.
Sensors	Table with all the available sensor.
Details	Table with report of component’s status.
System Logs	Loggers from Morfeas’ system components (Default).

Table 1: Morfeas System Loggers values

The “System logs” is the tab that shown by default at the opening of the utility. For the drop-down list at the bottom right it’s can be selected the logger of the component on interest. Each “Morfeas Component loggers”, is a human readable output (ASCII text) of the component. The “Reload Logger names” button refresh the list of components, by request from the device server. The Components of the “Morfeas system” configured from the “Morfeas System configuration” utility (section 6).

The “Details” tab shows all the status reports from the components. The “Sensors” tab present a list of the active sensors from all components. And the “Error” all the sensors that reporting error at status.

5 Morfeas ISO Channel Linker

The “Morfeas ISO Channel Linker” is an utility made to create ISO channels and link them with sensors. It’s can be accessed by the Morfeas WEB front page from the button with the anchor (🔗). At figure 2 shown an example of the “Morfeas ISO Channel Linker” utility.

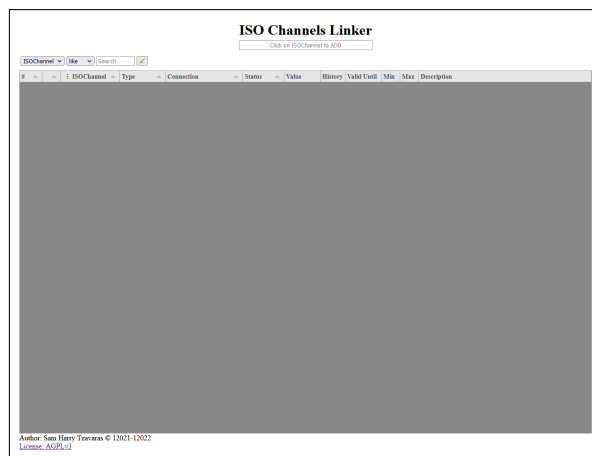


Figure 2: Morfeas ISO Channel Linker Utility

The utility window split in three sections: the status bar, the filters section, and the ISO Channels table.

The status bar show the last update date if at least one channel exist, or a message that informing the user to add channel(s).

The filter section, is filtering the ISO channels table, accordingly to the command from the user. The filtering command is specified from the two drop-down lists and the text input field. The first drop-down is selecting the column that the filtering will applied. The second drop-down select the filter type; for most of the columns (except “Min” and “Max”) is “like” and “regex”. The “Like” filter type is filter and show all the elements in the specified column, that contains the word in the search field, and similarly the “regex” the fields that agree with the regular expression phrase. For “Min” and “Max” the filter type change to a set of numerical comparing orders. The button with the broom clean the filter.

The ISO Channels table is the configuration and presentation tool of the “Morfeas ISO Channel Linker” utility. It consist by 12 columns, with data for each ISO Channel. The first column (from left) is show the order number of the ISO Channel. The second column show with a color (table 2) the status of each ISO Channel. The third column contain the ISO Channel’s name. The forth and fifth contains the Connection type and path of the sensor that anchored to the ISO Channel. Continue the sixth show the status of the anchored sensor, seventh the current value. The eighth (History) contains a historical graph of past values of the sensors value, this graph show two minutes in past. Next column show (if supported) the last valid date of the sensor. The last three columns is the attributes of the ISO Channel; “Min”, “Max” and ISO Channel’s description.

Columns up to sixth can be shorted using the arrow at column name. The shorting can be restored by clicking the filter clean button (broom).

Color	Explanation
Green	Okay
Orange	Calibration not valid
Red	Sensor warning
Black	OFF-Line/Disconnected

Table 2: Colors status

5.1 Add new ISO Channel

To add a new ISO Channel the ISOChannels menu can be used (figure 3) or the shortcut **Ctrl+Alt+A**.

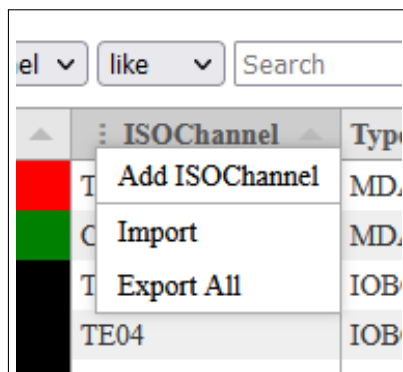


Figure 3: ISOChannel's column menu

By giving the “Add ISOChannel” command (from menu or shortcut) a new window with the “Link Creator” will appear (figure 4).

Figure 4: ISO Channel Link Creator

The “Link Creator” window request from the user to enter the information and attributes that related to the ISO Channel. That’s are: Type, Sensor’s Path, ISO Code, Description, Min, Max and Unit. The “Type” entry is determinate the type of the sensor. The “Sensor’s Path” is the logical path to the sensor, this determinated accordingly to the type of it. For example for SDAQ type the path is constructed like “CAN-f.Addr:XX.CH:XX”. In any case the “Link Creator” will provide a hint related to the “Type”, or a message in case that no devices are available. If the entry of “Sensor’s Path” is invalid will become red. Also at the right of the “Sensor’s Path” entry is a button with a magnification glass on, where if it clicked will open the “Device Search” utility window (figure 5). The “Device Search” utility provide a tree with the available sensors of the selected “Type”. Any valid selection from the “Device Search” utility will fill the “Sensor’s Path” entry.

The “ISO Code” entry is specified the name of the ISO Channel. The utility also hinting and autofill this and the following entries with values from the “ISO Standard”. However, in manual entry the user is responsible to fill all the entries.

The “Unit” entry is some of the values of the “Type” entry will autofilled with the value that the sensor reporting.

If all the entries is validly filled the “Send” button will become available, and on click will send and the ISOChannel.

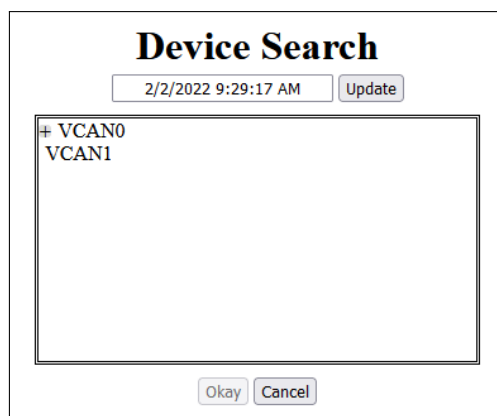


Figure 5: Device Search utility

5.2 Edit ISO Channels

The request of edit for an ISO Channel can be done by two ways. Either by double click on the ISO Channel name, or by right click (figure 6) on the ISOChannel name and then click "Edit".

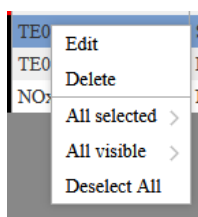


Figure 6: ISO Channel Right Click menu

After the request of ISO Channel Edit, a new window (figure 7) with the "Edit Link" utility will be open.

The screenshot shows a window titled "Edit Link". It contains several input fields: "Type:" with a dropdown menu showing "SDAQ"; "Sensor's Path:" with a text box containing "VCAN0.ADDR:01.CH:01" and a search icon; "ISO Code:" with a text box containing "TE00"; "Description:" with a text box containing "Test for SDAQ"; "Min:" with a spinner box showing "0"; and "Max:" with a spinner box showing "0". At the bottom are "Send" and "Cancel" buttons.

Figure 7: ISO Channel Edit Link Utility

6 Morfeas System configuration

7 Network configuration

The network configuration utility is accessed by the front page of the Morfeas WEB from the button with this ↔ symbol. At figure 8 shown an example of the network configuration utility.

Figure 8: Morfeas WEB Utility for Network Configuration

Value	Purpose
Hostname	Name for discovery services (avahi, samba, etc)
MAC Address	Identifier of the Ethernet interface
Mode	Internet address configuration mode (Static, DHCP)
Network IP	IP address and subnet range bits (In static mode only)
Gateway	Gateway's IP address (In static mode only)
NTP IP	IP address of the local network time protocol server
SDAQNet(CAN-ifs)	Configuration of the bitrate for each available native can-if

Table 3: Network configuration values

At table 3 present the values and purpose of the configuration fields of the utility. The two buttons at the bottom of the utility window(Load last, Set), have purpose to send the current configuration to the device (Set), and reload the last configuration from the device (Load Last).