1-Wire Automation Server GUI
v1.1.0

User Manual

June 2015

Table of Contents

Revision History

Date	Authors	Description
2015-03-06	Peter S'heeren	Initial release.
2015-06-16	Peter S'heeren	Second release.

1 Overview
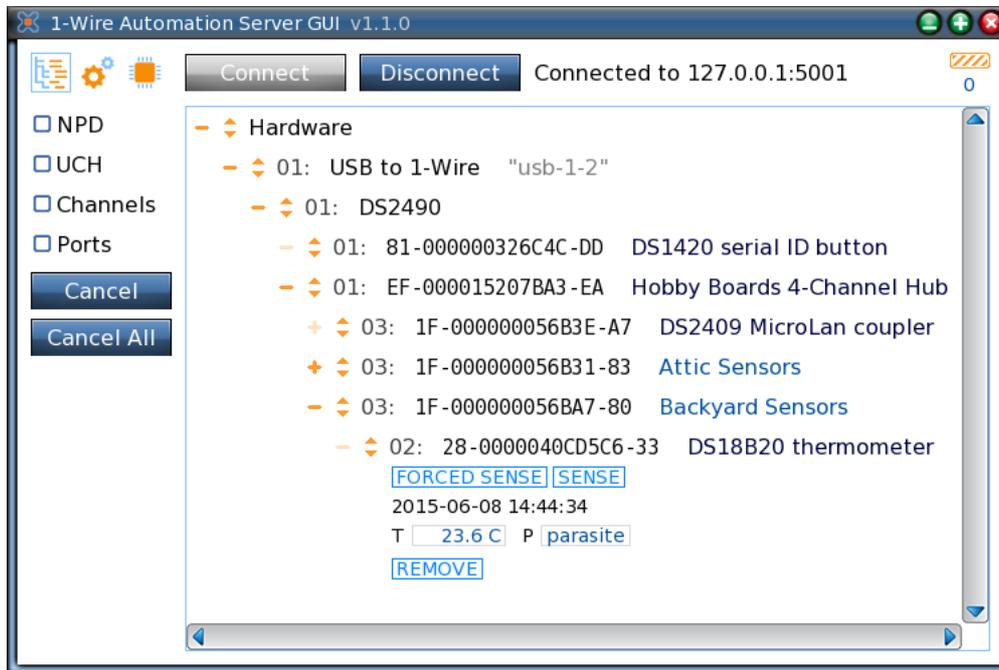
The 1-Wire Automation Server GUI visualizes the 1-Wire topology and other information managed by the server. The primary function of this tool is to aid you with setting up and configuring your physical 1-Wire networks and to get them up-and-running with a perfect understanding of what's going on.

2 Command Line

Parameter	Description
-console	Open a console.
-nosmooth	Turn off smooth graphics. Specify this parameter if the application window lags when you move or resize it.
-v	Enable verbose output.
-h	Display help and exit.
-cfg FILE **-cfg** FILE ENC	Specify configuration file. You can optionally specify a character encoding that will be applied if the given configuration file is to be created: **utf8**, **utf16le**, or **utf16be**.

Parameter **-console** is specific to the Windows version of the program.

Parameter **-nosmooth** is specific to the Linux version of the program.

The **-cfg** parameter overrules the default configuration file. The given filename may include an absolute or relative path. If the filename doesn't exist, the program will start up anyway. When the program quits, the configuration is always written to the given filename. As such, you can use the **-cfg** parameter to create a non-existing configuration file. With the optional ENC parameter you can instruct the program to use a specific character encoding when creating the configuration file.

The **-cfg** parameter is great for running multiple instances of the program. For example, you can create a link for each instance you plan to run. Each link contains a **-cfg** parameter with a unique configuration file name.

3 User Interface

Main Interface
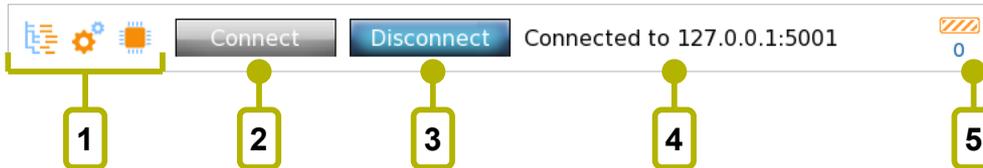
Mark	Description
1	Select page.
2	Click to connect with the 1-Wire server.
3	Click to disconnect from the 1-Wire server.
4	Connection status.
5	Activity indicator. Shown the number of active client commands. The max. number is 256.

1-Wire Topology Page
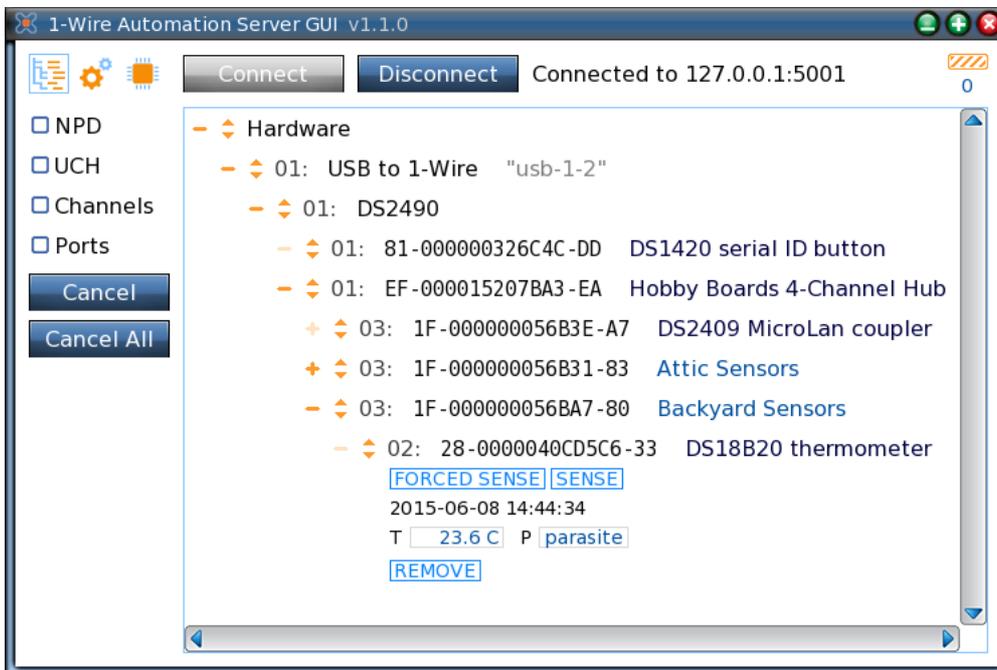
This page is a window on the 1-Wire topology managed by the server. It presents the topology as a tree with multiple root nodes. Besides inspecting the topology you can send client commands by clicking the many buttons that come with the tree nodes. Each tree node is equipped with base controls and can be unfolded to reveal additional information and functionality.

Click the orange plus/minus icon to expand or collapse the node. Double-clicking the

node has the same effect. The icon is dark orange when child nodes are present, light orange when the node has no child nodes.

Click the orange up/down icons to unfold or fold up the node. In doing so the node's height changes and more or less contents are shown.

Check boxes let you change the appearance of the tree nodes:

- "NPD": Show or hide the non-present devices.

- "UCH": Show or hide the unallocated channels.

- "Channels": Show 1-Wire channels, or hide 1-Wire channels and display channel numbers in front of ROM codes instead.

- "Ports": Show hub ports, or hide hub ports and display port numbers in front of ROM codes instead.

The "Cancel" button cancels all pending commands.

The "Cancel All" commands asks the server to cancel all outstanding commands.

Connection Page
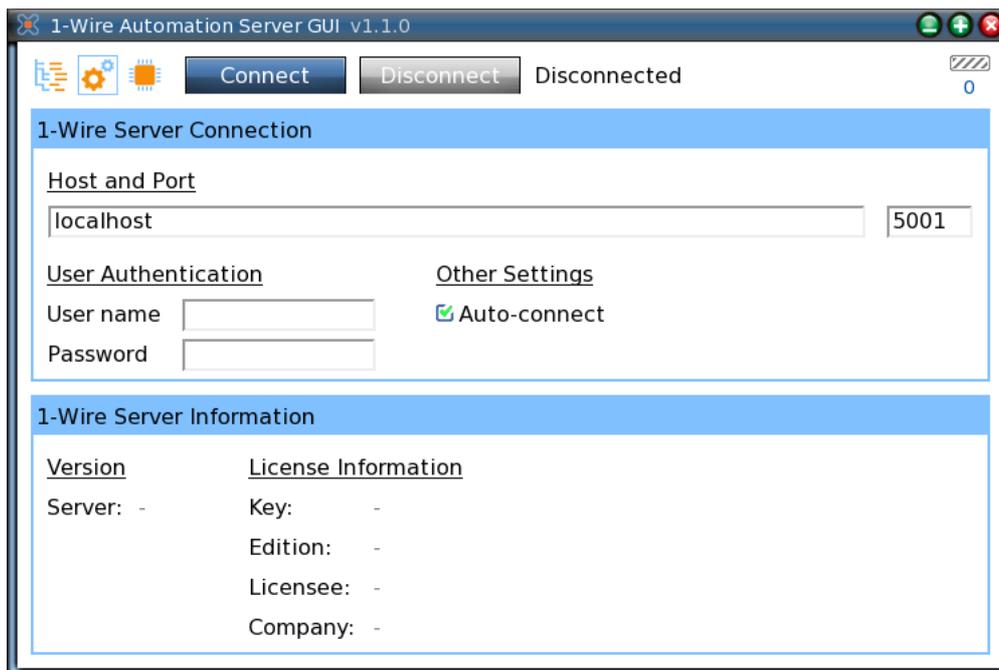
This page handles the connection details with the 1-Wire server.

1-Wire Server Connection

The program accepts three representations in the host entry:

- An Ipv4 address. For example: "192.168.1.115".

- The word "localhost". It's interpreted as IPv4 address 127.0.0.1.

- A domain name. Upon connection, the program will perform a DNS look up to determine the corresponding IPv4 address.

If the server is configured to authenticate client connections, you've the set up a user

name and password. The program issues an authentication client command when the user name field is non-empty.

1-Wire Server Information

When the program has established a connection, this panel shows the version and the license information of the server.

Settings Page
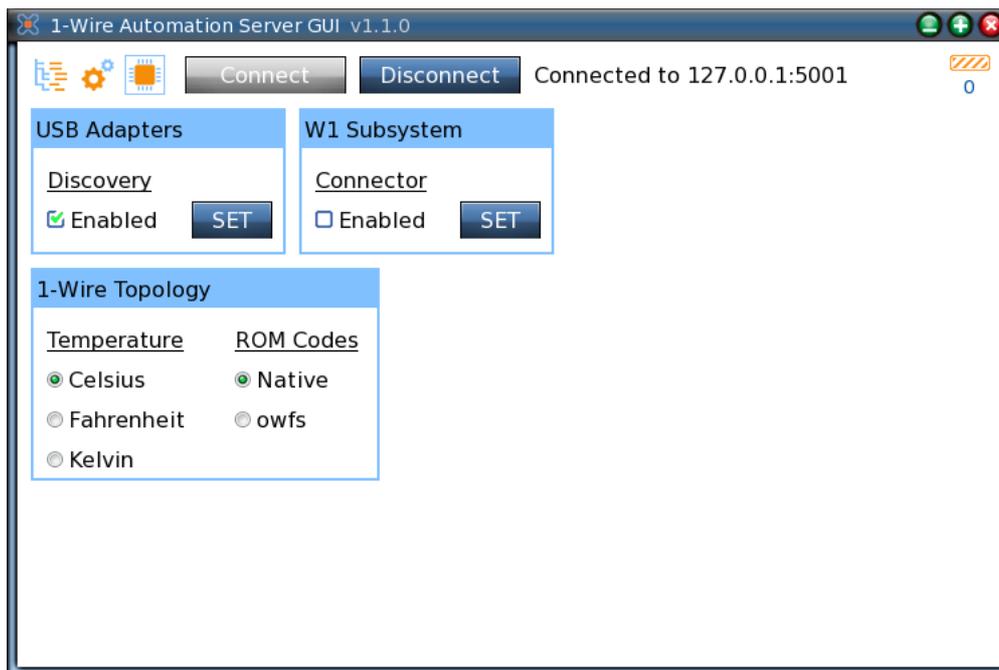
This page allows you the change settings in the 1-Wire server as well as the 1-Wire topology page.

USB Adapters

Enable and disable discovery of USB adapters in the 1-Wire server. The server will only add new USB adapters when discovery is enabled.

Note that disabling discovery has no influence on USB adapters that are already present in the 1-Wire topology.

W1 Subsystem

Here you can enable and disable the server's connector to the W1 subsystem (Linux only).

Note that disabling the W1 subsystem takes immediate effect; all present W1 adapters are instantly removed from the topology.

1-Wire Topology

These settings are visible in the 1-Wire topology page.

The temperature scale is applied to all fields that display a temperature value. Such fields are located in tree nodes of 1-Wire slaves that incorporate a temperature sensor.

The ROM code formatting style affects the way the unique identifier of a 1-Wire slave is displayed. Here's a comparison of the available formatting styles:

Native formatting style   owfs formatting style

4 Software Revision History

Version	Description
1.0.0	▪ Initial release.
1.1.0	▪ Fixed a crash that occurred when tree nodes were being removed. ▪ Added displaying of address pins field on the tree node of MAX31850 slaves. ▪ Added command line parameter -nosmooth. ▪ Moved selection of temperature scale. ▪ Added enabling and disabling of W1. ▪ Added selection of ROM code formatting style.

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