BNCS Utilities

Atos IT Solutions and Services

Paramtester

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Contents

1　Introduction

Paramtester is a tool to aid the testing of a v4.5 BNCS system that controls and monitors instances of devices. For full details about devices, device descriptions and instances refer to the relevant documentation. Paramtester allows the user to select a named instance, view the parameters, and from the parameter list select one parameter to view or modify the current value.

2　Configuration

There are no specific configuration files for this application, all details about instances and parameters are read from the normal system configuration files.
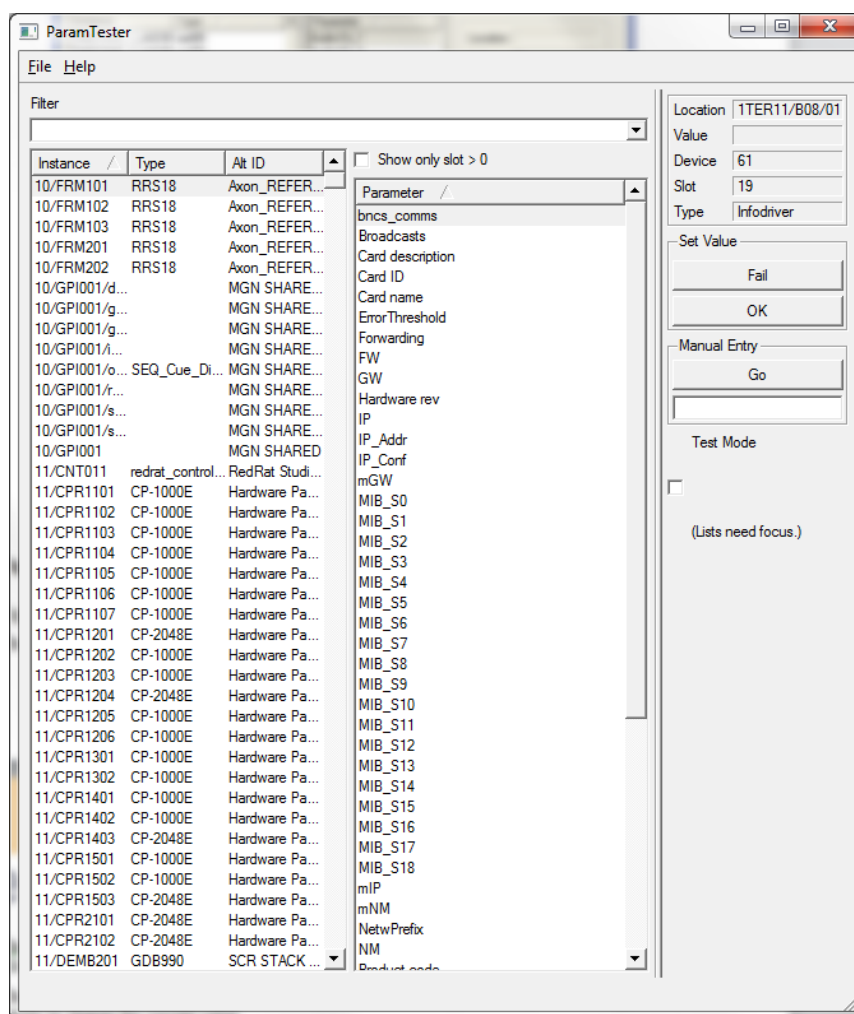
3　Application Layout

Figure 1Overview

Figure 1 shows that the application has 3 main columns.

The first column shows the available instances of devices – this is loaded from instances.xml of your particular project/installation.

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The second, shows the parameters available on the currently selected device instance. Version 4.5.9 and later allows you to show only those where the slot number is set in the device type.

The third column gives details of the currently selected instance/parameter pair including the ability to change the current value.

3.1 Operation

In the basic mode of operation the user selects the instance and parameter to be modified or view, details of this are shown in the third column. If the device is a complex one (where some parameters are presented via a 2nd device) the device and type may not be what you expect.

Once a valid parameter is selected the device is polled to get the current value, this is displayed as the raw value in the third column.

The user can manually enter a value by typing in to the manual entry field and pressing the "go" button, this will right to the device and should be reflected back to the current value display.

Depending on the type of control the rest of the third column will display relevant options.
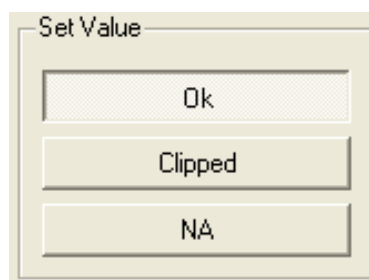
3.1.1 Enum Types

Figure 2 Enum display

From the device description all values will be extracted, and a button will be displayed for each option. The buttons show the caption for each value, not the value returned from the device, this is available as previously described. When the value from the device is decoded the relevant button will appear depressed. Pressing any of the buttons will cause the application to attempt to set the relevant value on the device.

Figure 2 shows the 3 possible values for the current parameter, currently the "Ok" state is active.
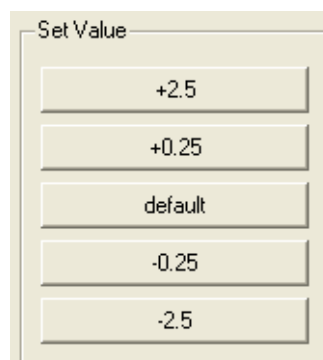
3.1.2 Range Types

Figure 3 Range display

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For a range there will be buttons to alter the current value up or down by the values specified in the device description, along with a button to set the default value. The current value is displayed as previously described.

Figure 3 shows a typical view for a range parameter.

3.2   Using Test mode

When testing a full system it is convenient to use the keyboard rather than having to keep moving the mouse across the screen, to allow this to happen the user can enable "test mode". Without "test mode" being enabled the user can use the up/down keys to select either instances of parameters, and use the mouse to set a value.

In "test mode" when the user presses the space bar, if the parameter is an enum, the tool will attempt to set the next value. Pressing return will cause the next parameter to be selected on the same instance. Once the last parameter has been reached pressing return will select the first parameter on the next instance. Note that the order of instance selection is determined by the sort order of the listview.

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4   Document Version Control

Version	Date	Author	Comments
0.1	6/11/06	Mark Baldry	Initial document
0.2	8/01/08	Mark Baldry	Added Alt ID column to version v4.5.5.0
0.3	24/05/10	David Yates	Added information wrt "show slots > 0" option for v4.5.9.0
0.4			