Reference Guide
D301654X412
April 2012

OpenEnterprise ROC Configuration Tool Reference Guide (V2.83)

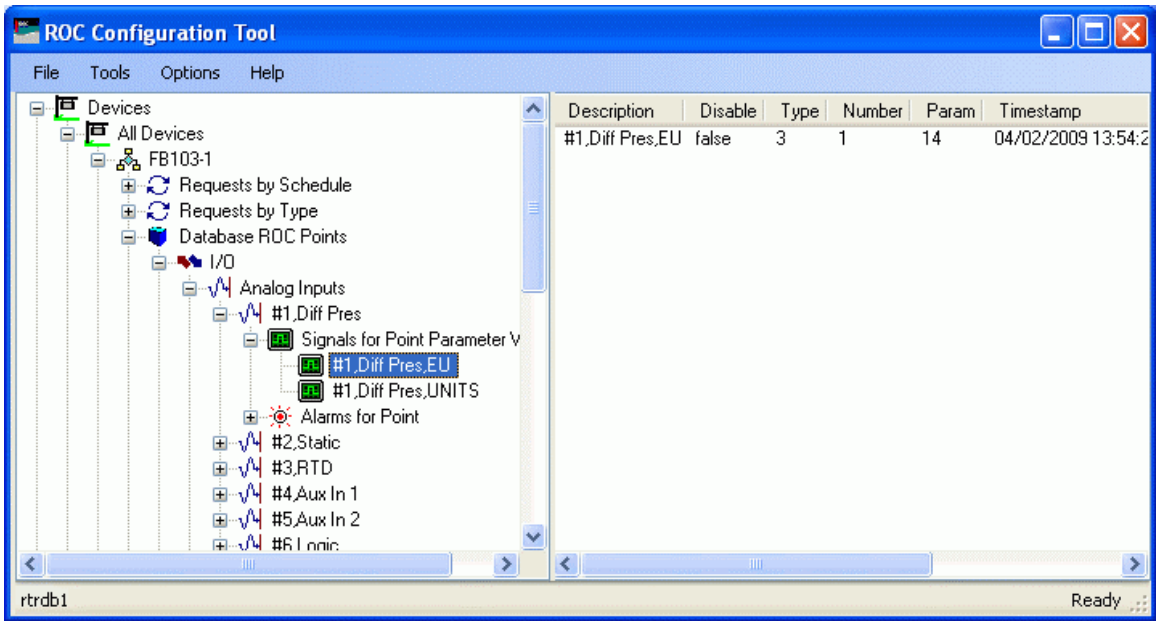
Remote Automation Solutions

Website: www.EmersonProcess.com/Remote

Contents

1 ROC Configuration Overview

The ROC Configuration Tool allows users to add ROC Devices, Points and Signals to the OpenEnterprise database. The data can then be collected by timed schedule or initiated manually on a 'one shot' basis from within the Configuration Tool.



Whilst configuration is accomplished using the ROC Configuration Tool, communication with Devices, insertion of Devices, Points, Signals into the database, and data collection is achieved through the OpenEnterprise ROC RDI (Remote Device Interface).

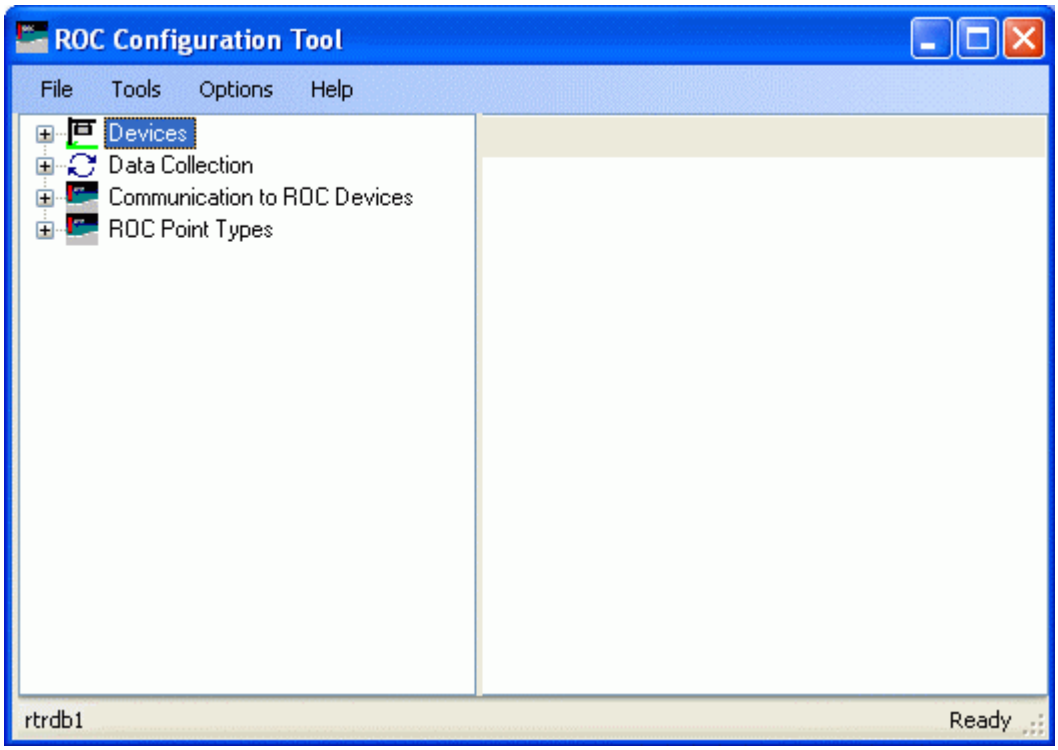
The ROC RDI runs as a task on the OpenEnterprise Server and uses the configuration details provided in the Configuration Tool to communicate with ROC Devices through Internet, Serial or Dial-Up connections.

This document is divided into three main sections:

1. User Interface – gives a detailed description of the User Interface.
2. Tasks – a list of important tasks, showing how to configure ROC devices and set up data collection in the OpenEnterprise database, and also how to view the data using the ROC Configuration Tool.
3. Understanding – provides extra information that may be of help in understanding how OpenEnterprise works with ROC data.

2 User Interface

The user interface of the ROC Configuration Tool consists of two panes - The Tree View pane and the Details pane. The Tree View pane lists ROC Devices, Data Collection, Communication and Point Types objects under four parent nodes in a tree view format. The Details pane displays details of objects that are select in the Tree View pane.



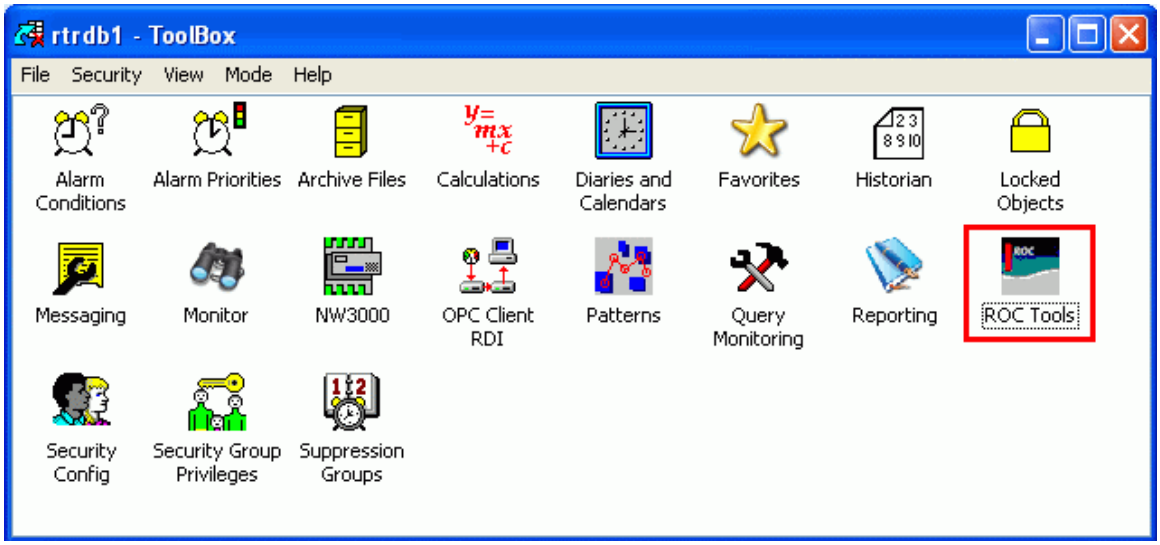
2.1 Starting the ROC Configuration Tool

The ROC Configuration Tool is found in the OpenEnterprise Toolbox. The Toolbox is opened by selecting:-

Start | All Programs | OpenEnterprise | Toolbox

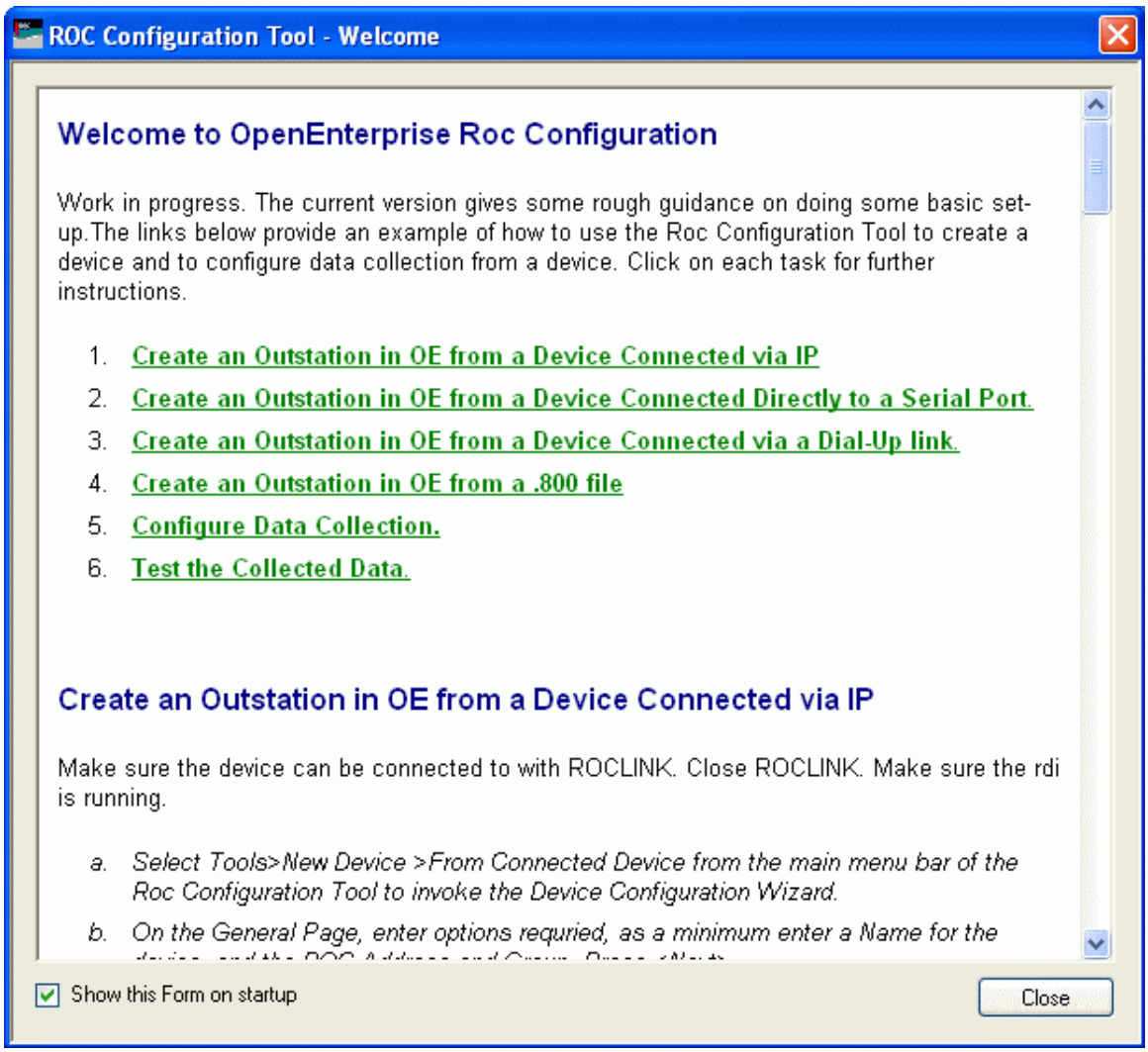
Then double click on the 'ROC Tools' icon:-

Here It is shown inside the Toolbox window:-



2.2 The Welcome Page

When the ROC Configuration Tool is first opened this Welcome page will appear. It provides instructions on how to perform basic tasks with the ROC Configuration Tool. Click the links on the image below for further help.



2.2.1 Show this Form on startup

You can prevent the Welcome Page from appearing when the ROC Configuration Tool is started by removing the check from this box.

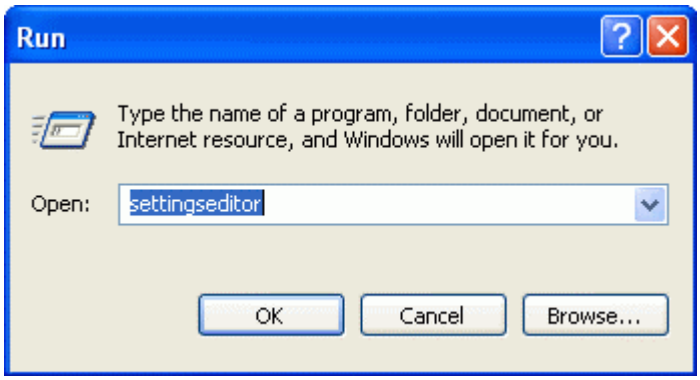
The Welcome page can be enabled again by using the Settings Editor to change the '**Show Welcome Page**' data value to **1** on the following key:-

`OpenEnterprise\Tasks\OEToolbox\Editors\ROCConfiguration`

To open the Settings Editor select:-

Start>Run

Then type 'SettingsEditor' into the text box:-



3 Menu Bar

The menu bar provides access to the functionality of the ROC Configuration Tool.

3.1 File Menu

The file menu provides two options:-

- Export
- Exit

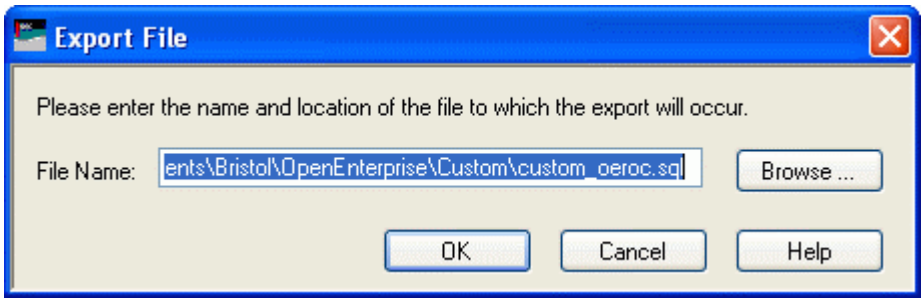
3.1.1 Export

This option allows you to save all ROC configuration currently in the OpenEnterprise database to an SQL script file. This can be used at any time to restore the current ROC configuration to the OpenEnterprise database.

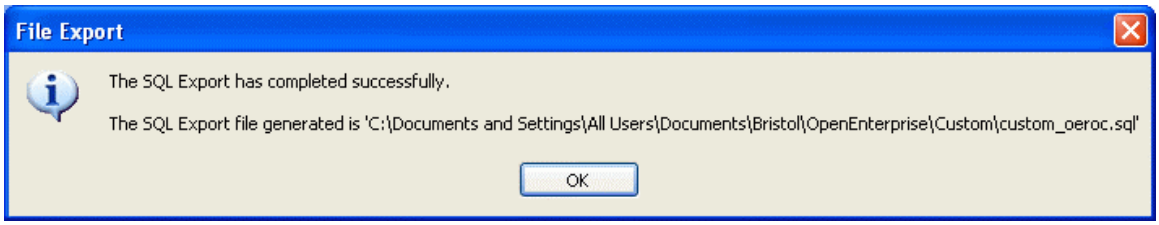
3.1.1.1 The Export File Dialog

The dialog opens with a fully qualified path-filename already in the 'File Name' field. It points to the default OpenEnterprise SQL History directory. This default directory can be changed using the View>Options menu from the Toolbox. The suggested name of the file will be 'custom_oeroc.sql'.

The name of the file can be changed. If you do this, you should leave the '.sql' extension, which marks it as an SQL script file. The directory can also be changed by using the [Browse...] button to search for a new directory.



When [OK] is selected, OpenEnterprise will write the current ROC configuration from the OpenEnterprise database to the file. A message will inform you that the file has been exported successfully.



3.1.1.2 Restoring ROC Configuration

You can use the export file created with this operation to restore ROC configuration by doing the following:

1. Open the SQL Client (Start>Programs>OpenEnterprise>SQL Client)
2. Type into the SQL Client the following SQL command on one line:

```
include 'C:\Documents and Settings\All
Users\Documents\Bristol\OpenEnterprise\Custom\custom_oeroc.sql';
```

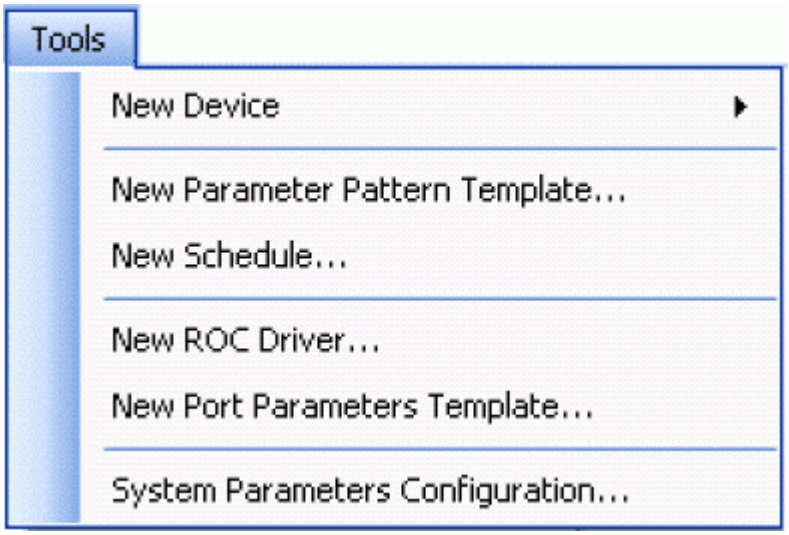
   - where the path and file name refer to the original .SQL file created by the Export operation.

3.1.2 Exit

Exits the ROC Configuration Tool and returns you to the Toolbox.

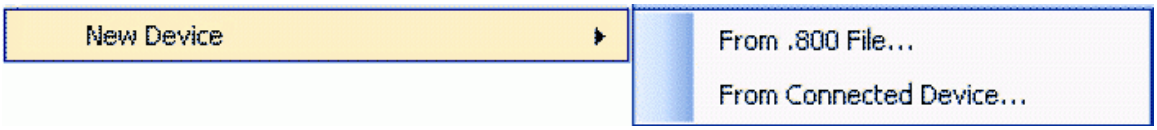
3.2 Tools Menu

The Tools menu allows you to create new Devices. Parameter Pattern Templates, Schedules, ROC Drivers, Port Parameter Templates. It also has an option which allows you to configure global defaults for these objects.



3.2.1 New Device Menu

New devices can be added to the OpenEnterprise database by either adding them from a relevant ROC.800 file, or from a device that is connected.



The 'New Device' menu item leads to two hanging menu items:-

- From .800 File...
- From Connected Device

3.2.1.1 From .800 File

This option opens the 'ROC 800 File Selection' dialog, which enables you to select a new device to add from the appropriate ROC.800 configuration file.

ROC devices use database files to store their default configuration. These database files have an extension of .800. For instance, 'ROC364 Default.800' is the name of the database file that stores the default configuration for the ROC 364 device. The first part of the file name indicates the actual ROC device.

3.2.1.2 From Device

This option opens the 'Device Configuration Wizard', which enables you to add a ROC device which is already physically connected to the host computer by supplying the connection details. The ROC RDI is then able to discover the connection and retrieves the device configuration from the device.

3.2.2 New Parameter Pattern Template

This option opens the 'Parameter Pattern Template' page, which enables you to configure a new Parameter Pattern Template.

3.2.3 New Schedule

This option opens the 'Schedule Configuration' dialog, which enables new schedules to be created.

3.2.4 New ROC Driver

This option opens the 'Driver Configuration' dialog. Some large systems may benefit from running more than one ROC RDI.

3.2.5 New Port Parameters Template

This menu item enables Port Parameter Templates for 'Serial' and 'Dial-up' ports to be configured.

3.2.6 System Parameters Configuration

This menu item opens the 'System Parameters Configuration ' Pages, which enable you to configure global options for use when adding new devices .

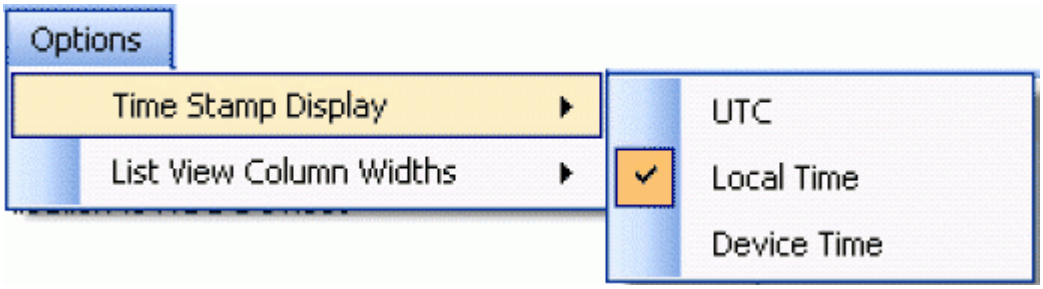
System Parameters Configuration

3.3 Options Menu

Enables you to set defaults for timestamps and column widths in the List View Pane.

3.3.1 Time Stamp Display

Options under the 'Time Stamp Display' menu enable you to select the time that will be used for timestamps that appear in the List View Pane.



3.3.1.1 UTC

If checked, timestamp values in the List View Pane will be shown in UTC (Co-ordinated Universal Time).

3.3.1.2 Local Time

If checked, timestamp values in the List View Pane will be shown in Local Time.

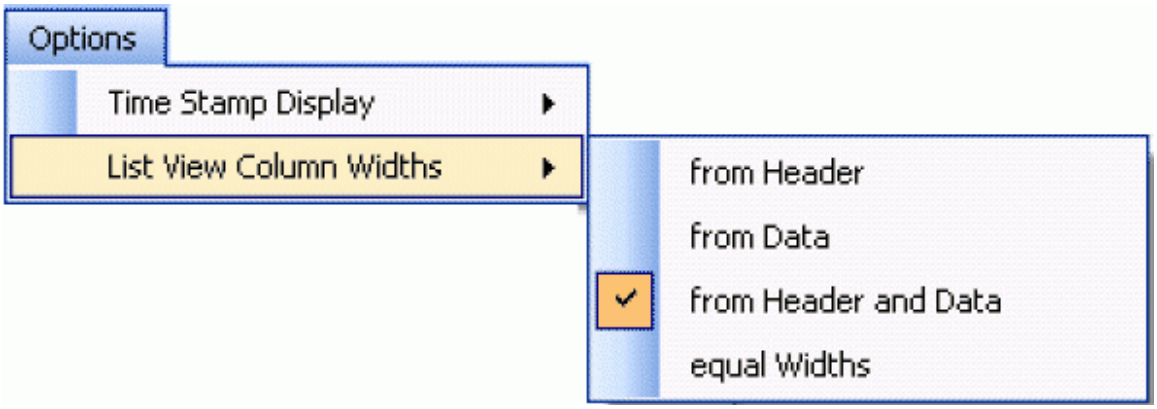
3.3.1.3 Device Time

If checked, timestamp values in the List View Pane will be shown in the time set at the Device.

3.3.2 List View Column Widths

3.3.2.1 List View Column Widths

Options under the 'List View' menu enable you to select the time that will be used for timestamps that appear in the List View Pane.



3.3.2.2 From Header

If checked, column widths in the List View will be set according to header widths.

3.3.2.3 From Data

If checked, column widths in the List View will be set according to the data width.

3.3.2.4 From Header and Data

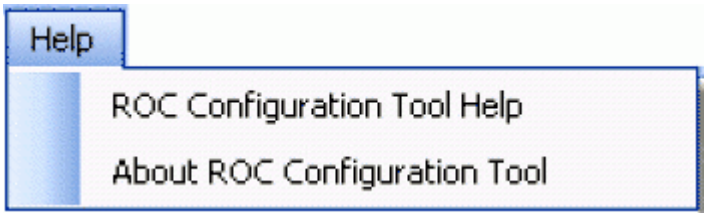
If checked, column widths in the List View will be set according to header and data widths.

3.3.2.5 Equal Widths

If checked, column widths in the List View will be set to equal widths.

3.4 Help Menu

The Help Menu has two options.



3.4.1 ROC Configuration Tool Help

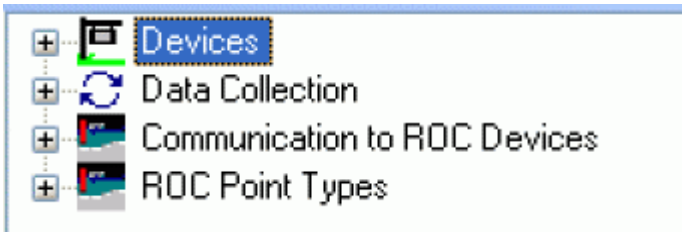
Displays the help file for the ROC Configuration Tool at the opening page.

3.4.2 About ROC Configuration Tool

Displays a box that shows the current version and build of the software, and also provides contact details.

4 Tree View Pane

The Tree View Pane displays ROC Configuration as nodes in a tree like hierarchy. The four main parent nodes are: Devices, Data Collection, Communication to ROC Devices and ROC Point Types.



4.1 Devices

The Devices node is the parent of all Device nodes and the associated Requests, Points and Signals that have been entered into the database.

It opens out to reveal four child nodes that display the Devices that are added in different arrangements - alphabetically, by type, by ROC Group and by Plant Area.

The Devices node has its own context menu.

4.1.1 Devices Context Menu

The 'Devices' node context menu enables users to:-

- Redraw the node and refresh all device data under it
- Create a new Device

4.1.1.1 ReDraw node and Refresh All Data

Refreshes all data for all devices under the Devices node and redraws the Tree View..

4.1.1.2 From .800 File

This option opens the 'ROC 800 File Selection' dialog, which enables you to select a new device to add from the appropriate ROC.800 configuration file.

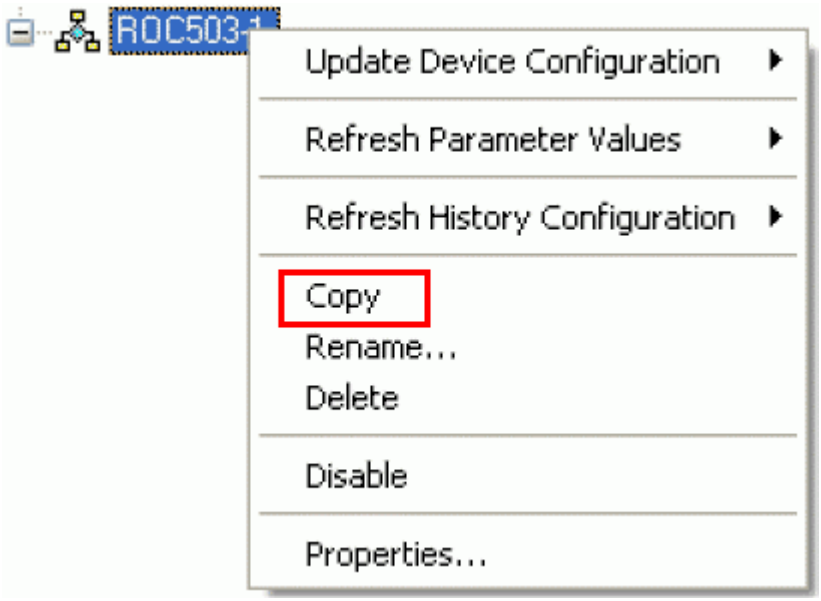
ROC devices use database files to store their default configuration. These database files have an extension of .800. For instance, 'ROC364 Default.800' is the name of the database file that stores the default configuration for the ROC 364 device. The first part of the file name indicates the actual ROC device.

4.1.1.3 From Device

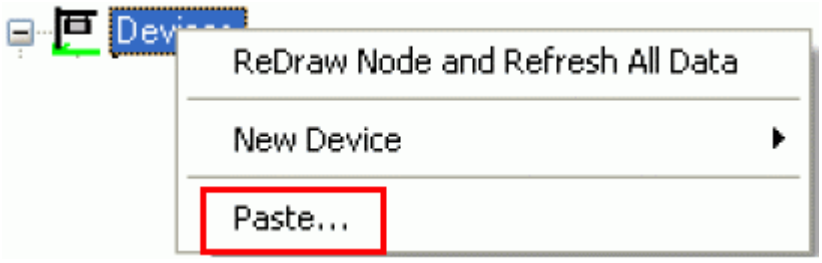
This option opens the 'Device Configuration Wizard', which enables you to add a ROC device which is already physically connected to the host computer by supplying the connection details. The ROC RDI is then able to discover the connection and retrieves the device configuration from the device.

4.1.1.4 Paste

This option is only enabled if a Device has first been copied using the 'Copy' item from the context menu obtained when a Device has been selected:-



The 'Paste' option will then be enabled on this context menu for selection:-



When selected, the 'Copy Device from...' dialog will prompt you to enter a name for the new Device. The Device that is being copied is named in the title bar:-

The user must type in a unique name for the new Device before the copy can take place. Once the new Device has been copied, it will take its place under the 'All Devices', 'Devices by Type', 'Devices by ROC Group' and 'Devices by Plant Area' nodes.

The source Device can then be marked as a Device Template by linking with it from this new Device's 'General' property page. This means that the new Device can then be updated automatically when any changes occur to the Template that it is linked to.

4.1.2 Devices Sub Nodes

The Devices Sub nodes are used to group installed devices in different ways. They are shown here hanging under the Devices node:-

All Devices Sub nodes have the same context menu.

4.1.2.1 Devices Sub Nodes Context Menu

The Devices Sub nodes are used to group installed devices in different ways. They are shown here hanging under the Devices node:-

They all have this context menu, which enables users to add new devices from any of those nodes:-

4.1.2.1.1 From .800 File

This option opens the 'ROC 800 File Selection' dialog, which enables you to select a new device to add from the appropriate ROC.800 configuration file.

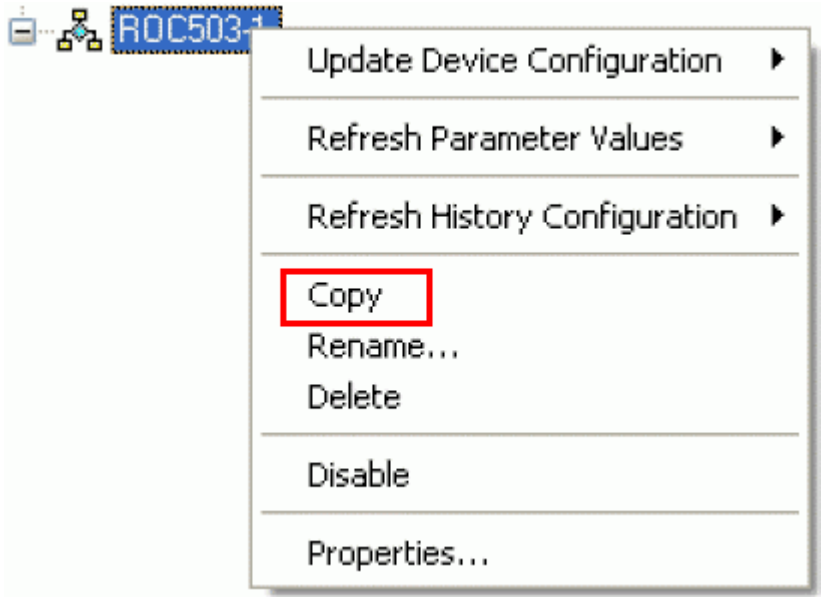
ROC devices use database files to store their default configuration. These database files have an extension of .800. For instance, 'ROC364 Default.800' is the name of the database file that stores the default configuration for the ROC 364 device. The first part of the file name indicates the actual ROC device.

4.1.2.1.2 From Device

This option opens the 'Device Configuration Wizard', which enables you to add a ROC device which is already physically connected to the host computer by supplying the connection details. The ROC RDI is then able to discover the connection and retrieves the device configuration from the device.

4.1.2.1.3 Paste

This option is only enabled if a Device has first been copied using the 'Copy' item from the context menu obtained when a Device has been selected:-



The 'Paste' option will then be enabled on this context menu for selection:-

When selected, the 'Copy Device from...' dialog will prompt you to enter a name for the new Device. The Device that is being copied is named in the title bar:-

The user must type in a unique name for the new Device before the copy can take place. Once the new Device has been copied, it will take its place under the 'All Devices', 'Devices by Type', 'Devices by ROC Group' and 'Devices by Plant Area' nodes.

The source Device can then be marked as a Device Template by linking with it from this new Device's 'General' property page. This means that the new Device can then be updated automatically when any changes occur to the Template that it is linked to.

4.1.2.2 All Devices

The 'All Devices' node lists added Devices in alphabetical order.

The 'All Devices' node has a context menu that is also shared by the following nodes:-

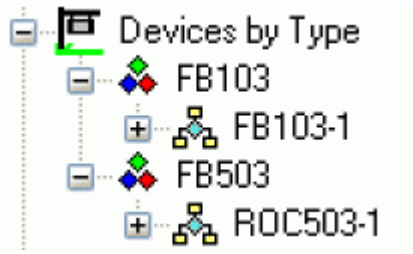
- All Devices
- Devices by Type
- Devices by ROC Group
- Devices by Plant Area

4.1.2.3 Devices by Type

The 'Devices by Type' node lists Devices in alphabetical order according to Device Type that they belong to:-

There is no context menu available on the 'ROC Device Type' nodes themselves.

The 'ROC Device Types' nodes are the direct parent of any Devices that are added.



The 'Devices by Type' node has a context menu that is also shared by the following nodes:-

- All Devices
- Devices by Type
- Devices by ROC Group
- Devices by Plant Area

4.1.2.4 Devices by ROC Group

The 'Devices by ROC Group' node lists Devices in alphabetical order according to the ROC Group that they belong to:-

There is no context menu available on the 'ROC Group' nodes themselves.

The 'ROC Group' nodes are the direct parent of any Devices that are added.

The 'Devices by ROC Group' node has a context menu that is also shared by the following nodes:-

- All Devices
- Devices by Type
- Devices by ROC Group
- Devices by Plant Area

4.1.2.5 Devices by Plant Area

The 'Devices by Plant Area' node lists Devices in alphabetical order according to the Plant Area that they belong to:-

There is no context menu available on the 'ROC Plant Area' nodes themselves.

The 'ROC Plant Area' nodes are the direct parent of any Devices that are added.

The 'Devices by Plant Area' node has a context menu that is also shared by the following nodes:-

- All Devices
- Devices by Type
- Devices by ROC Group
- Devices by Plant Area

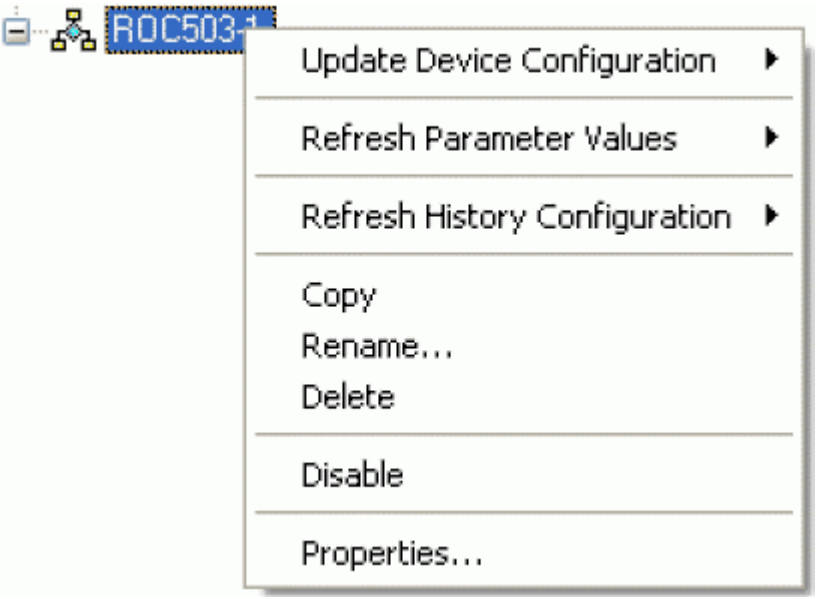
4.1.2.6 Device Node

This is the parent node for all device explicit configuration.

These nodes represent Requests, ROC Points and OpenEnterprise signals that are exclusively associated with the particular device.

4.1.2.6.1 Device Context Menu

The Device context menu enables you to perform various operations on the selected device. .



4.1.2.6.1.1 Update Device Configuration

Enables you to update the configuration for the selected device, either from a ROC 800 database file, from a connected device or from a Device Template.

From 800 File

If this option is selected, the "ROC 800 File Selection" dialog will enable you to select the ROC 800 file that you want to use to update the device configuration.

From Connected Device

If this option is chosen, the ROC RDI will attempt to update the selected device from a currently connected device using the same communications channel.

From Device Template

If this option is selected a then the selected Device can be updated from another Device which will be used as a Device Template.

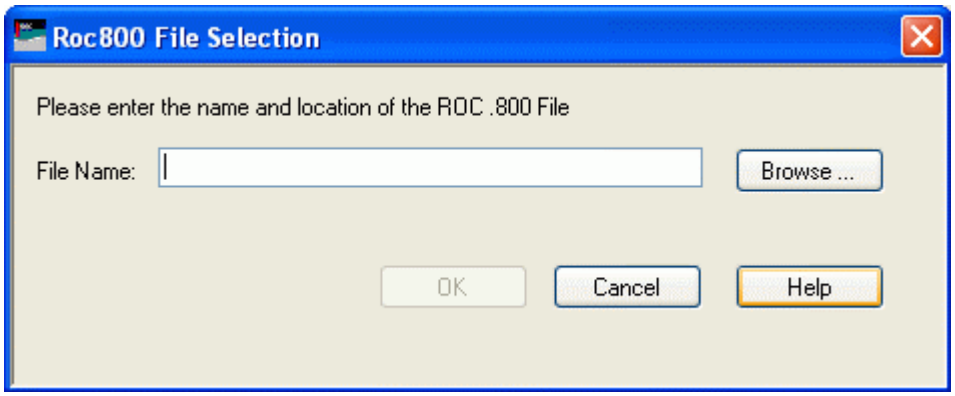
The user will be presented with the 'Update from a Database Device Template' dialog so they can choose a Device Template, and specify what will be updated.

4.1.2.6.1.2 Refresh Parameter Values

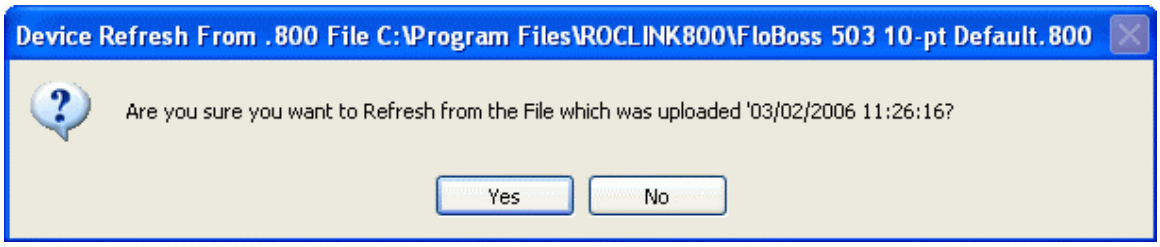
This menu item enables you to refresh all Parameter values associated with the selected Device. There are two options which enable the Parameter values to be refreshed from a ROC .800 file, or directly from the Connected Device.

From .800 File

If the 'From .800 File' option is selected, the 'ROC 800 File Selection' dialog will appear, prompting you to indicate the .800 file that is to be used. For more help on this dialog, click on the image below.

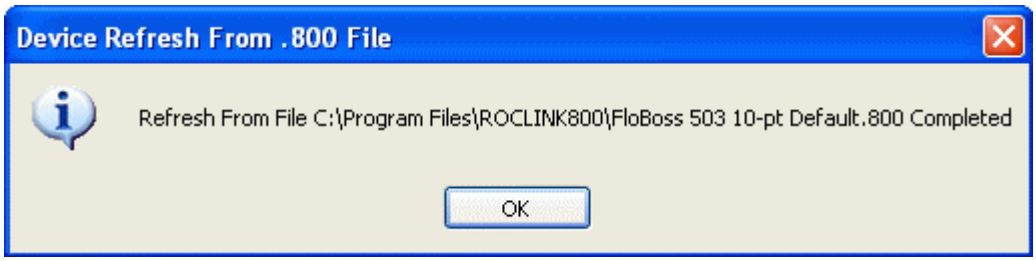


Once the file has been chosen, this message will appear, requiring the user to select the [Yes] or [No] button before proceeding.



The date and time of the file are given to help with this decision. If the current values are likely to be more recent than those in the file, then you may abort the operation by selecting the [No] button. If you selects the [Yes] button, then the values will be updated from the selected file.

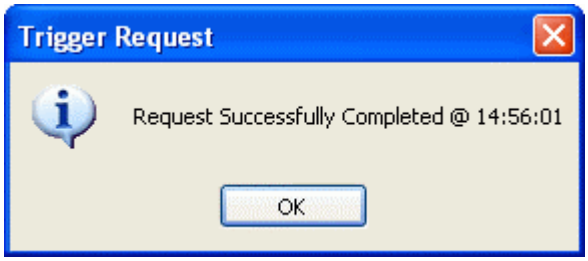
Something like the following message will inform you when the operation is completed.



From Connected Device

If the 'From Connected Device' option is selected, this message will inform you that the a 'ReadPointParameters.All' Request has been triggered.

Another message will then inform you when the Request has completed, and whether it was successful or not.

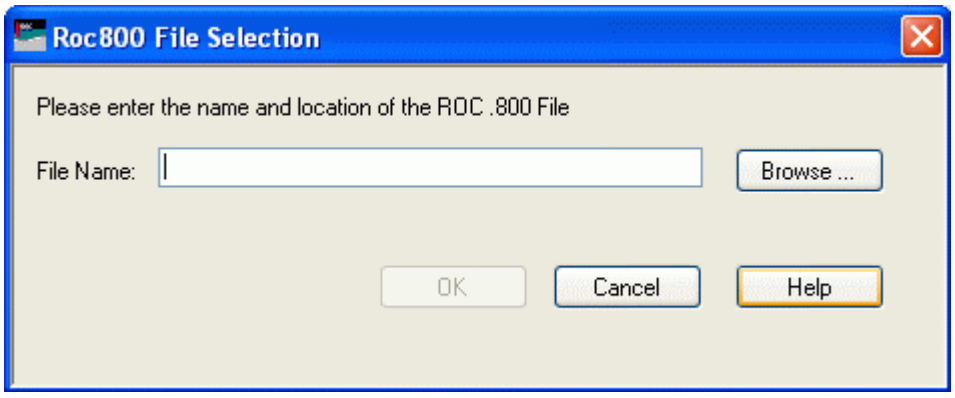


4.1.2.6.1.3 Refresh History Configuration

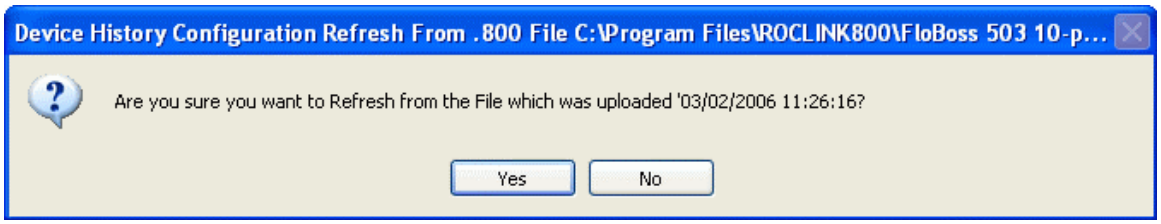
This menu item enables you to refresh the History Configuration associated with the selected Device. There are two options which enable the History Configuration to be refreshed from a ROC .800 file, or directly from the Connected Device.

From .800 File

If the 'From .800 File' option is selected, the 'ROC 800 File Selection' dialog will appear, prompting you to indicate the .800 file that is to be used. For more help on this dialog, click on the image below.

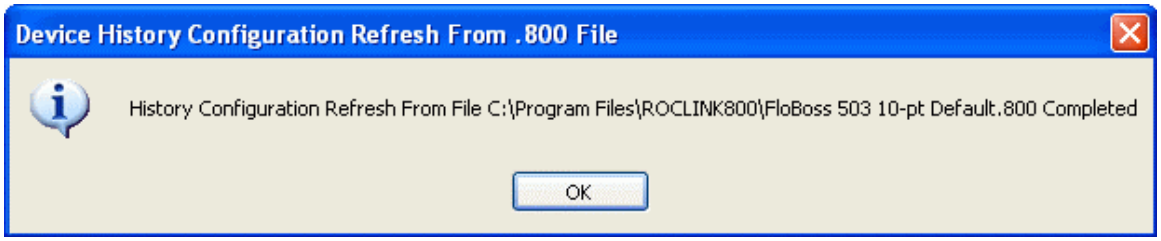


Once the file has been chosen, this message will appear, requiring the user to select the [Yes] or [No] button before proceeding.



The date and time of the file are given to help with this decision. If the current History configuration is likely to be more recent than those in the file, then you may abort the operation by selecting the [No] button. If you selects the [Yes] button, then the values will be updated from the selected file.

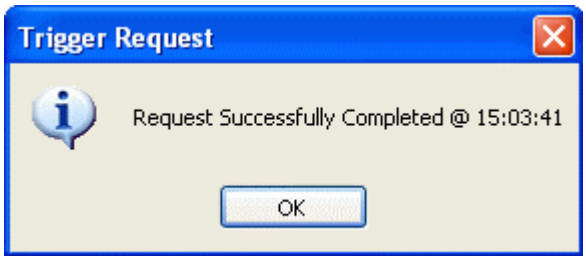
Something like the following message will inform you when the operation is completed.



From Connected Device

If the 'From Connected Device' option is selected, this message will inform you that the a 'ReadHistoryPointsConfig' Request has been triggered.

Another message will then inform you when the Request has completed, and whether it was successful or not.

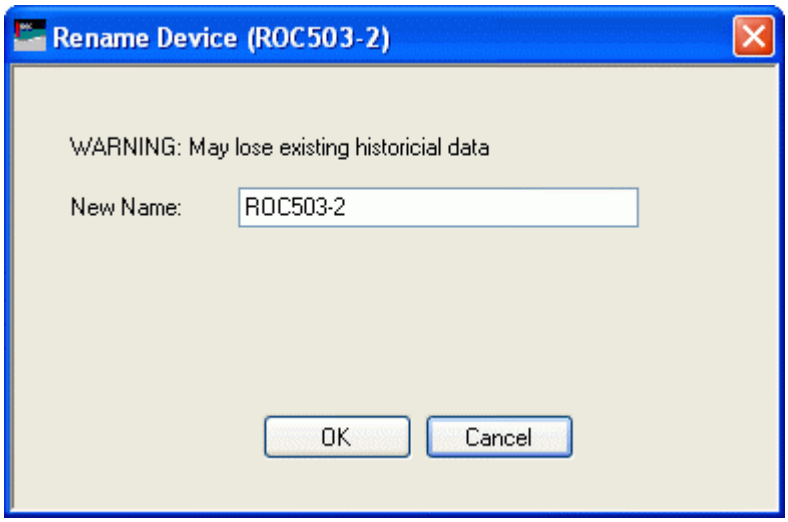


4.1.2.6.1.4 Copy

Copies the selected Device configuration to memory. The Device can then be pasted from any of the Devices Sub nodes.

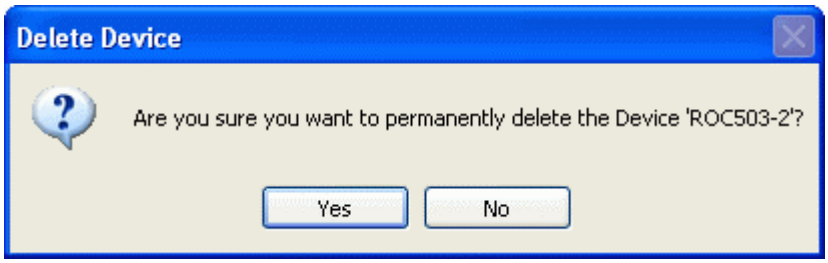
4.1.2.6.1.5 Rename

Enables you to enter a new name for the selected Device.



4.1.2.6.1.6 Delete

Deletes the selected Device. The user will be asked for confirmation before the Device is deleted.



4.1.2.6.1.7 Disable

If this box is checked, the Device is disabled. It will then appear with a red cross through it in the Tree View.

4.1.2.6.1.8 Properties

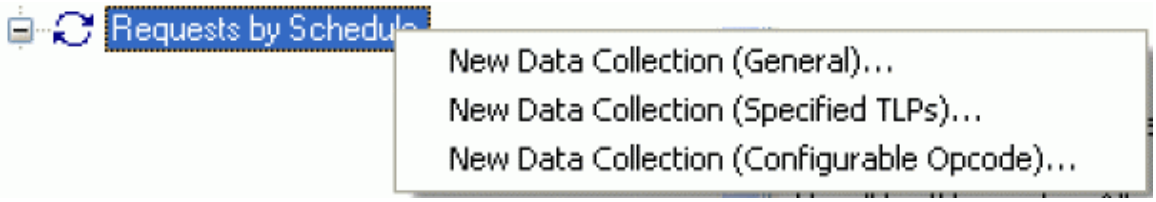
This option opens the Device Configuration Wizard at the General Page.

4.1.2.6.2 Requests by Schedule

This node lists Requests according to whether or not they are associated with a Schedule.

4.1.2.6.2.1 Requests by Schedule Context Menu

When you right clicks on the 'Requests by Schedule' node, this context menu appears. It enables you to create new Requests with an associated Schedule.



New Data Collection (General)

Opens the ROC Request Wizard so that you can configure a new ROC Request.

The ROC Request Wizard consists of two pages. This option opens the Request Wizard in a mode that will open the 'General' Request Parameters Page.

- General Page
- General Data Collection Request

New Data Collection (Specified TLPs)

Opens the ROC Request Wizard so that you can configure a new ROC Request.

The ROC Request Wizard consists of two pages. This option opens the Request Wizard in a mode that will open the 'Specified TLPs' Request Parameters Page.

- General Page
- TLP Data Collection Request

New Data Collection (Configurable Opcode)

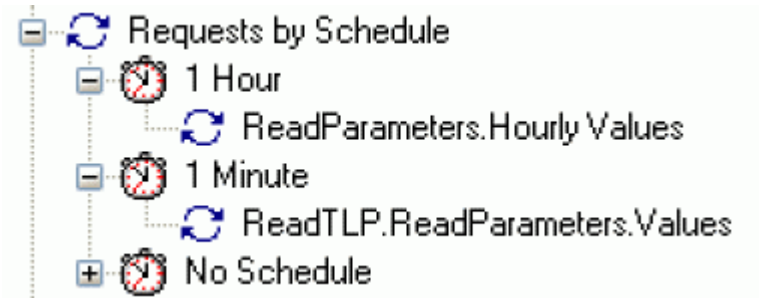
Opens the ROC Request Wizard so that you can configure a new ROC Request.

The ROC Request Wizard consists of two pages. This option opens the Request Wizard in a mode that will open the 'Configurable Opcode' Request Parameters Page.

- General Page
- Configurable Opcode Request

4.1.2.6.2.2 Scheduled Requests

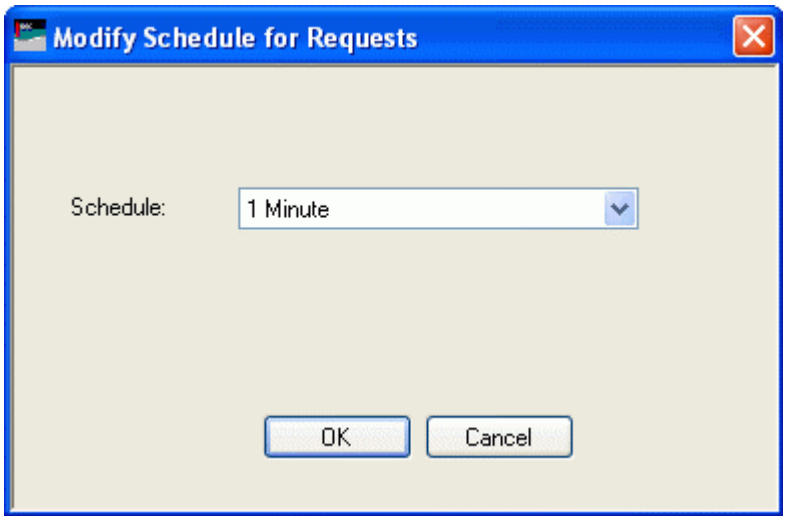
When a user created Request is associated with a Schedule it is placed under a new Schedule node which has the name of the Schedule.



Scheduled Requests Context Menu

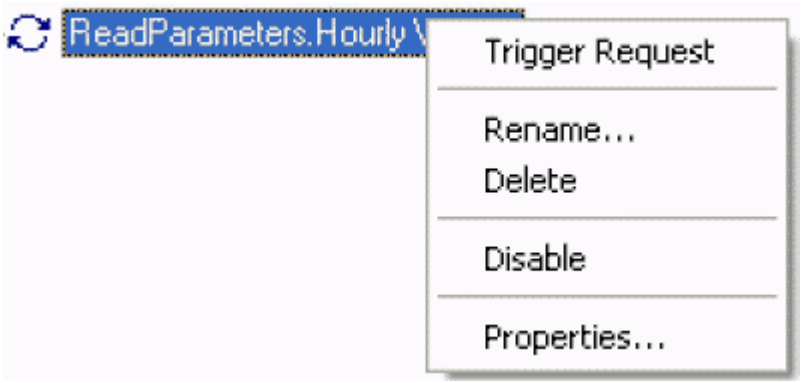
The context menu that appears on all Scheduled Request nodes enables you to change the Schedule for the Request.

A new Schedule can be selected from the drop-down list on the 'Modify Schedule for Requests' dialog:



Individual Request Context Menu

This context menu appears on any individual Request. It enables the user to trigger the Request manually, rename, delete or disable it and also to view its Property pages.

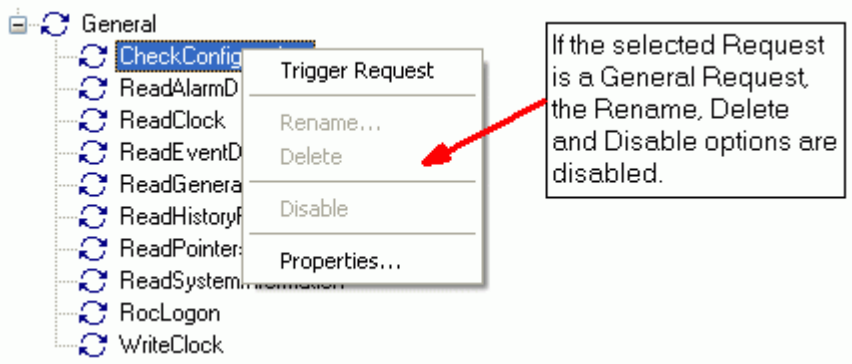


Trigger Request

The ROC RDI is activated to send this Request to the device immediately.

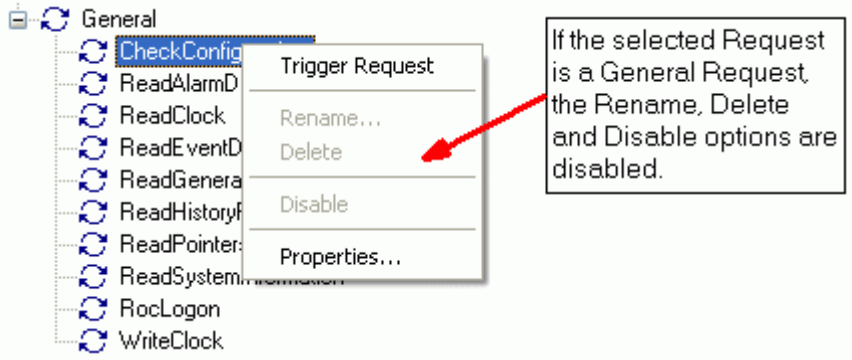
Rename

Selection of this option allows you to change the name of a user created Request. If the Request is a general one, this option is not enabled.



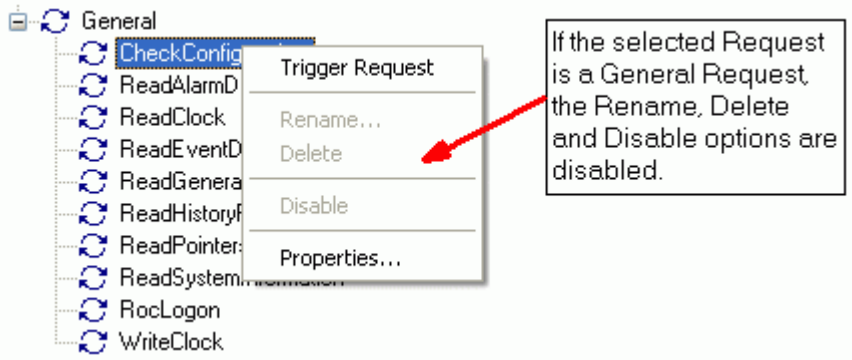
Delete

Selection of this option allows you to delete a user created Request. If the Request is a general one, this option is not enabled.



Disable Request

Selection of this option allows you to disable a user created Request. If the Request is a general one, this option is not enabled.

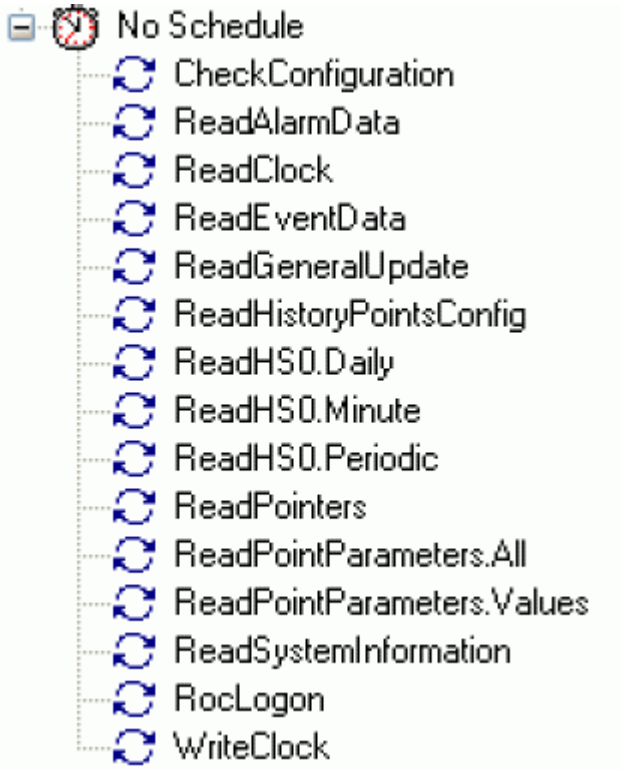


Properties

Displays the Request Wizard Pages for this Request. Changes can then be made to this Request.

4.1.2.6.2.3 No Schedule

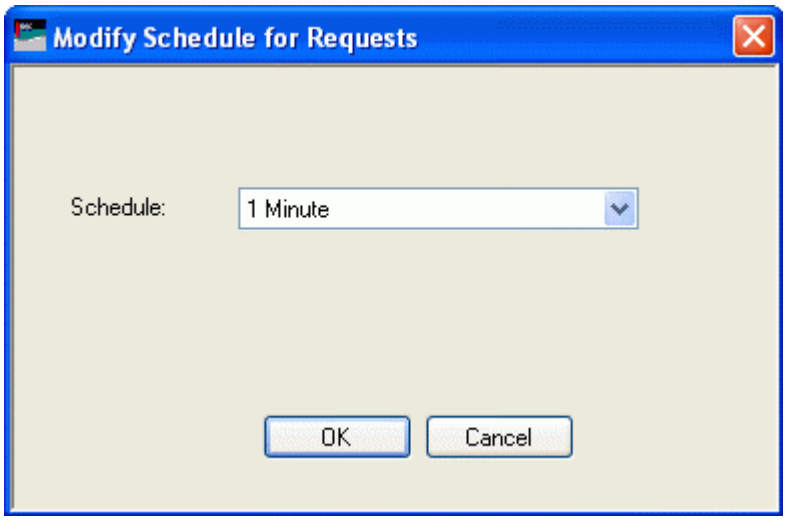
Requests under the 'No Schedule' node have not yet been associated with a Schedule.



Scheduled Requests Context Menu

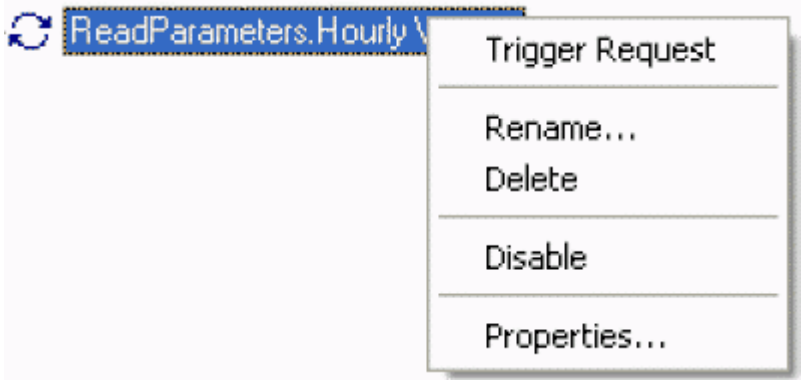
The context menu that appears on all Scheduled Request nodes enables you to change the Schedule for the Request.

A new Schedule can be selected from the drop-down list on the 'Modify Schedule for Requests' dialog:



Individual Request Context Menu

This context menu appears on any individual Request. It enables the user to trigger the Request manually, rename, delete or disable it and also to view its Property pages.

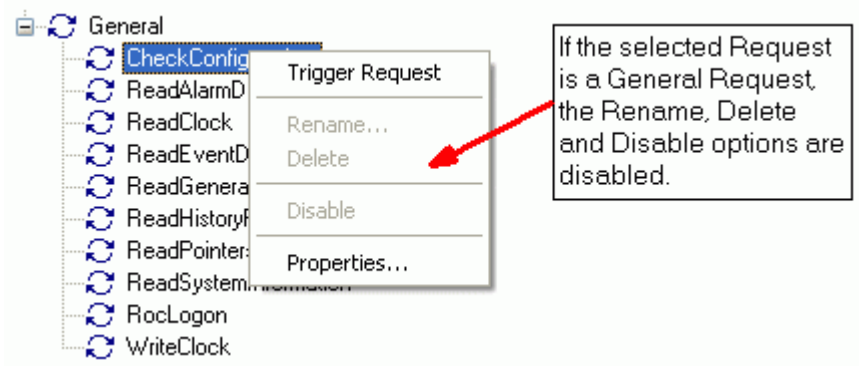


Trigger Request

The ROC RDI is activated to send this Request to the device immediately.

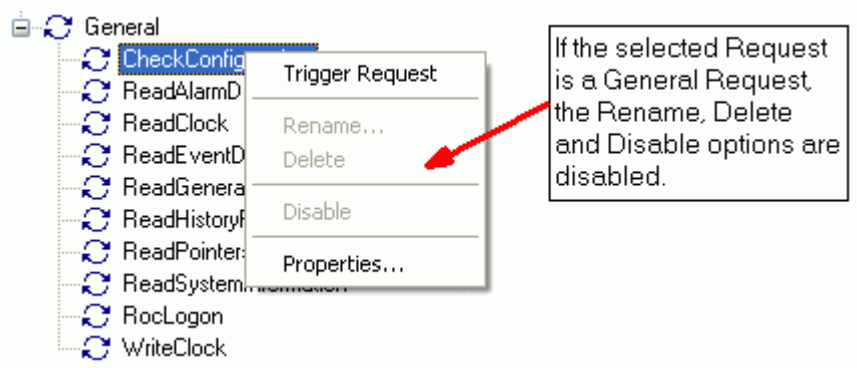
Rename

Selection of this option allows you to change the name of a user created Request. If the Request is a general one, this option is not enabled.



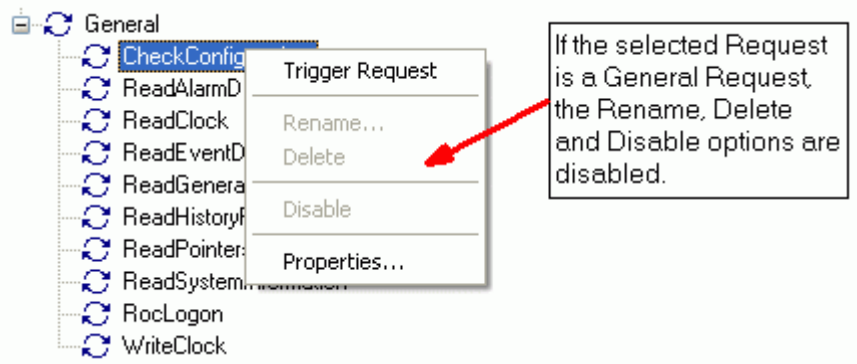
Delete

Selection of this option allows you to delete a user created Request. If the Request is a general one, this option is not enabled.



Disable Request

Selection of this option allows you to disable a user created Request. If the Request is a general one, this option is not enabled.

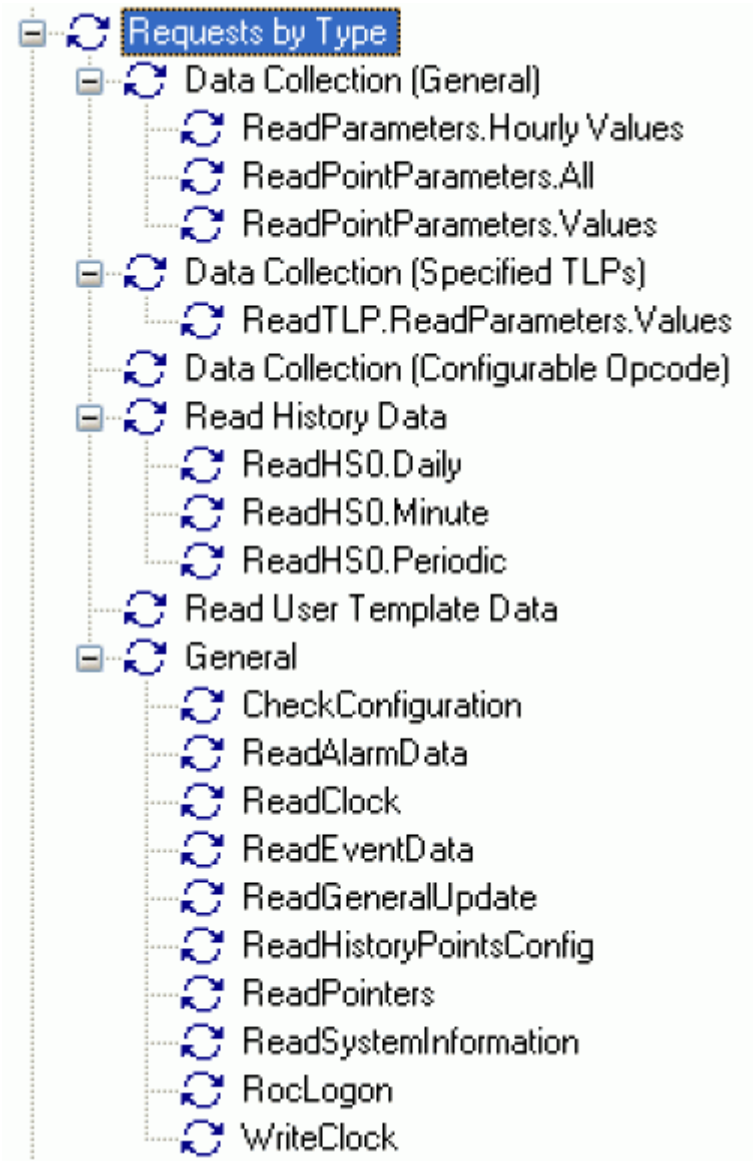


Properties

Displays the Request Wizard Pages for this Request. Changes can then be made to this Request.

4.1.2.6.3 Requests by Type

The Requests by Type node displays all available Requests (whether General or user created) sorted by Request Types.



4.1.2.6.3.1 User Created Requests

User Created Request nodes have an individual Request Context menu that enables users to trigger the Request manually and view its configuration pages.

4.1.2.6.3.2 General Requests

General Request nodes have an individual Request Context menu that enables users to trigger the Request manually and view its configuration pages.

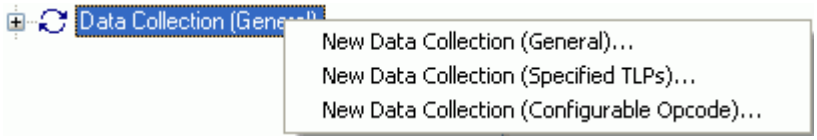
4.1.2.6.3.3 Read History Requests

Read History Request nodes have an individual Request Context menu that enables users to trigger the Request manually and view its configuration pages.

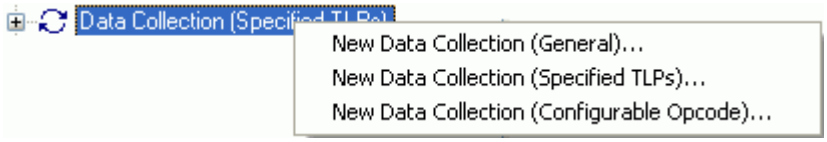
4.1.2.6.3.4 Request by Type Sub node Context Menus

As well as the 'Request By Type' node, all its immediate Request Type sub nodes have the same context menu that enables you to create new Requests:-

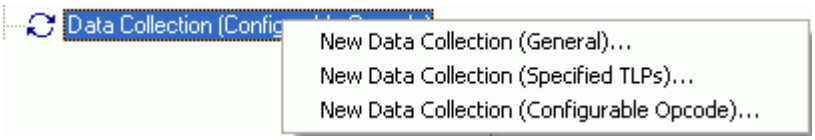
- Data Collection (General)



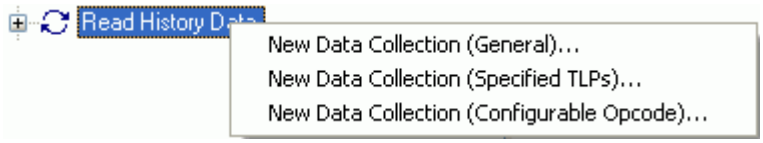
- Data Collection (Specified TLPs)



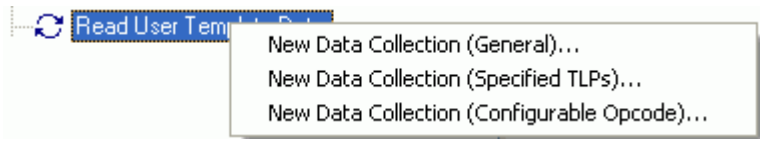
- Data Colection (Configurable Opcode)



- Read History Data



- Read User Template Data



- General

4.1.2.6.3.5 Requests By Type Context Menu

The Requests by Type node and its immediate sub nodes have this context menu that enables you to create their own Requests.

New Data Collection (General)

Opens the ROC Request Wizard so that you can configure a new ROC Request.

The ROC Request Wizard consists of two pages. This option opens the Request Wizard in a mode that will open the 'General' Request Parameters Page.

- General Page
- General Data Collection Request

New Data Collection (Specified TLPs)

Opens the ROC Request Wizard so that you can configure a new ROC Request.

The ROC Request Wizard consists of two pages. This option opens the Request Wizard in a mode that will open the 'Specified TLPs' Request Parameters Page.

- General Page
- TLP Data Collection Request

New Data Collection (Configurable Opcode)

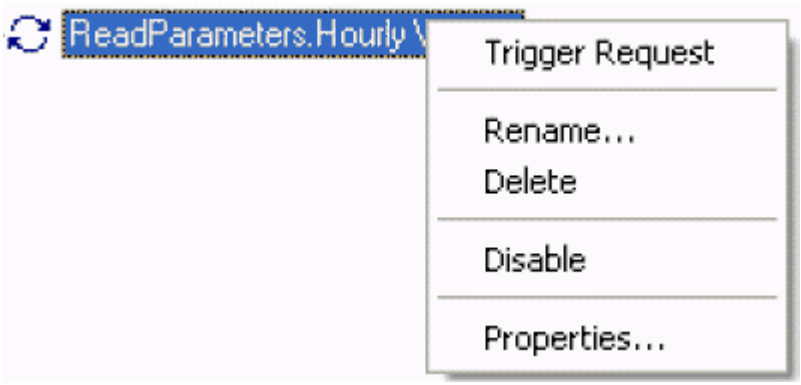
Opens the ROC Request Wizard so that you can configure a new ROC Request.

The ROC Request Wizard consists of two pages. This option opens the Request Wizard in a mode that will open the 'Configurable Opcode' Request Parameters Page.

- General Page
- Configurable Opcode Request

4.1.2.6.3.6 Individual Request Context Menu

This context menu appears on any individual Request. It enables the user to trigger the Request manually, rename, delete or disable it and also to view its Property pages.

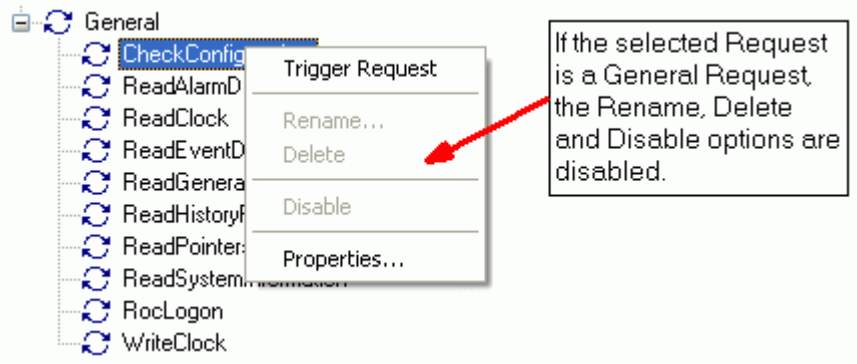


Trigger Request

The ROC RDI is activated to send this Request to the device immediately.

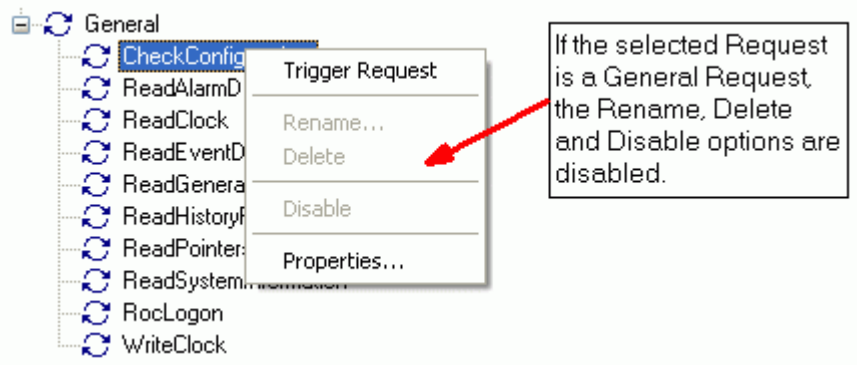
Rename

Selection of this option allows you to change the name of a user created Request. If the Request is a general one, this option is not enabled.



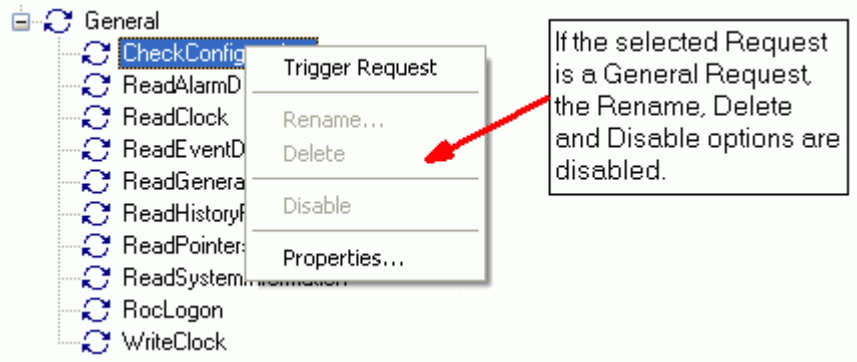
Delete

Selection of this option allows you to delete a user created Request. If the Request is a general one, this option is not enabled.



Disable Request

Selection of this option allows you to disable a user created Request. If the Request is a general one, this option is not enabled.



Properties

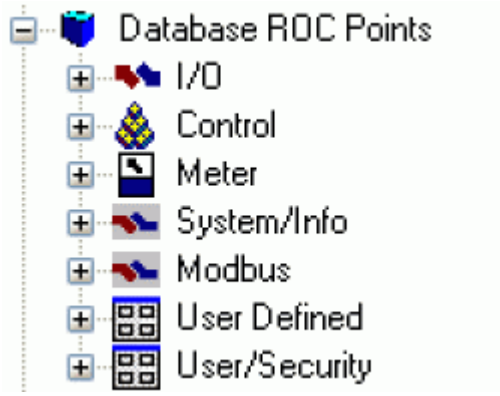
Displays the Request Wizard Pages for this Request. Changes can then be made to this Request.

4.1.2.6.4 Database ROC Points

This is the parent node for all ROC Points within the device. Each actual ROC Point is mapped to an OpenEnterprise database object in its specific ROC Point table.

In addition, selected Point Parameters may have also been mapped to the conventional OpenEnterprise signal tables. These are listed under each specific Point that they refer to, and also under the main 'Signals for Point Parameters' node.

OpenEnterprise ROC Signals are also listed separately under the 'Signals for Point Parameter Values' node which follows the 'Database ROC Points' node in the Tree View pane of the ROC Configuration Tool.



4.1.2.6.4.1 Database ROC Points Node Context Menu

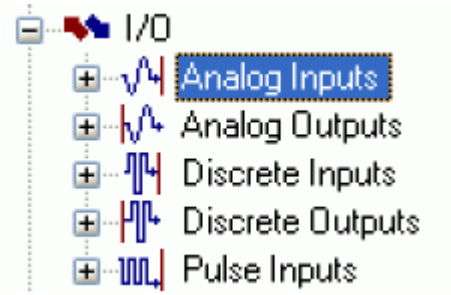
The context menu that appears when you clicks the right mouse button whilst this node is selected. It enables you to map extra ROC Point Parameters to the OpenEnterprise ROC Signal tables in the database.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

4.1.2.6.4.2 I/O Node

The ROC I/O node contains the parent nodes for all ROC Points that are used for Input and Output to sensors that control or measure plant processes. These are 'Analog Inputs', 'Analog Outputs', 'Discrete Inputs', 'Discrete Outputs' and 'Pulse Inputs'.



I/O Node Context Menu

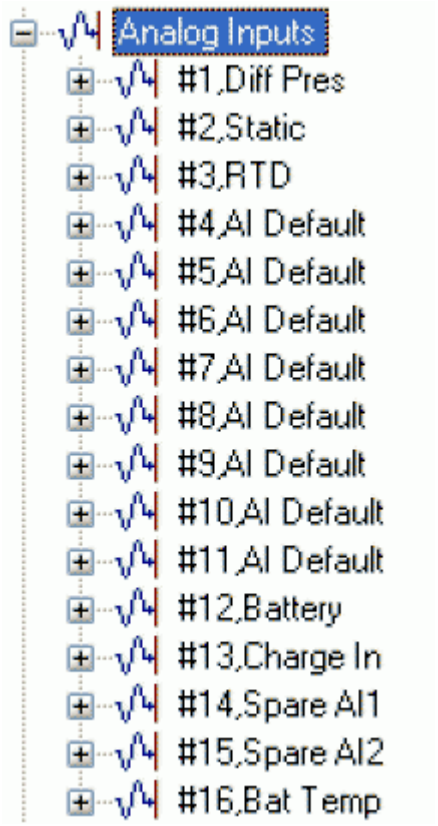
The context menu that appears when you clicks the right mouse button whilst this node is selected. It enables you to map more ROC Points to the OpenEnterprise database.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Analog Inputs

The Analog Inputs node is the parent of all ROC Analog Input Points found within the selected device. When the plus sign to the left of the Analog Inputs node is selected, it expands to reveal the available Points.



Analog Inputs Context Menu

The context menu that appears when you clicks the right mouse button whilst this node is selected. It enables you to map more ROC Points to the OpenEnterprise database.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

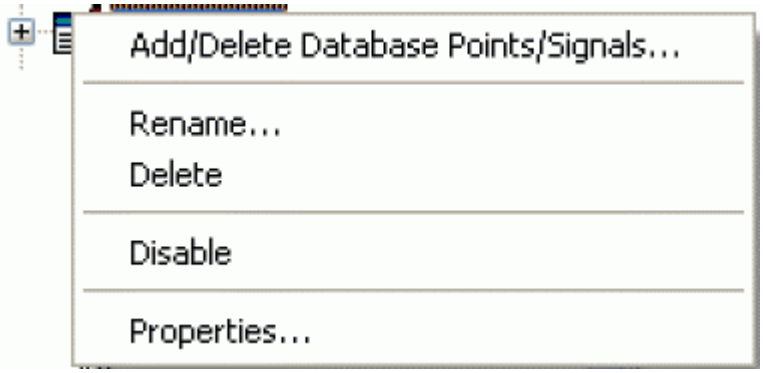
Analog Input Point

If the Analog Input Point has any specific Parameters mapped to the appropriate OpenEnterprise ROC signal table, it will have a plus sign to the left of it, which when selected will reveal the signals that have been mapped to Parameters for the selected ROC Point.

Any alarms for the Point will also be shown.

Analog Input Point Context Menu

This context menu belongs to individual ROC Analog Input Points.



Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Rename

Opens the 'Point Rename Dialog', which enables you to rename this Point.

Delete Point

The selected Point will be deleted.

Disable Point

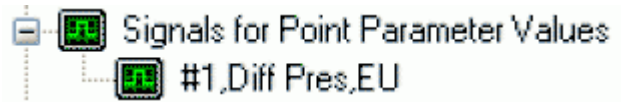
The selected Point will be disabled.

Properties

Opens the 'Point Properties Dialog', which enables you to associate a 'Parameter Pattern Template' with the Point.

Signals for Point Parameter Values

The 'Signals for Point Parameter Values' node is the parent for any ROC Signals that have been created from the Point. The parent node and each Point node have context menus.



Signals for Point Parameter Values Context Menu

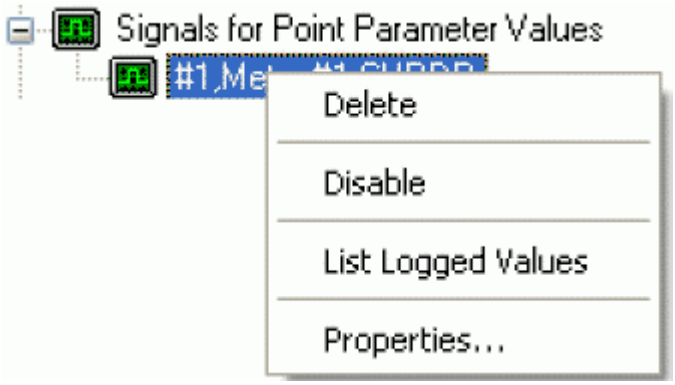
The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

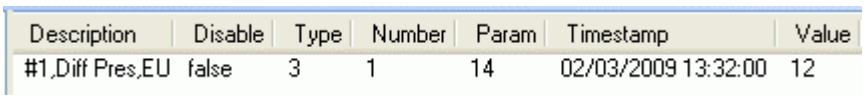
The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

List Logged Values

Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.



Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

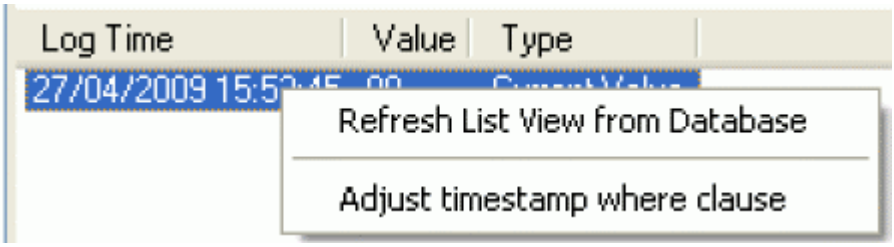
When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.

Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Logged Values List Context Menu

The Logged Values list context menu has two options.



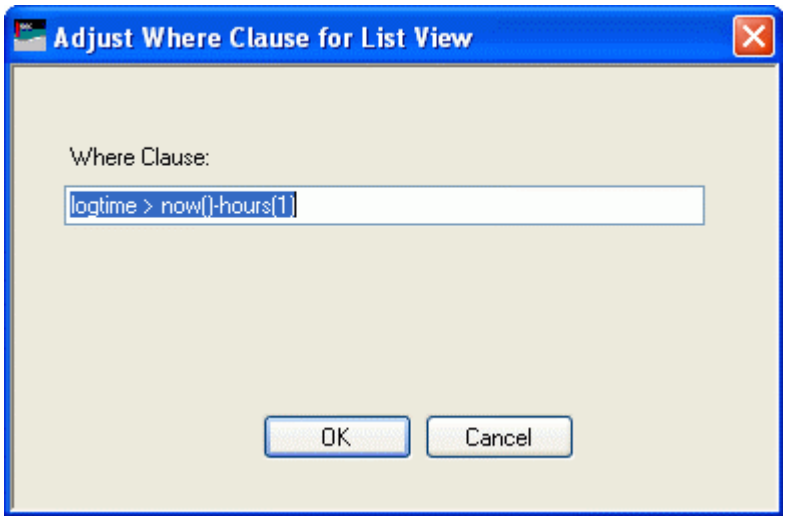
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

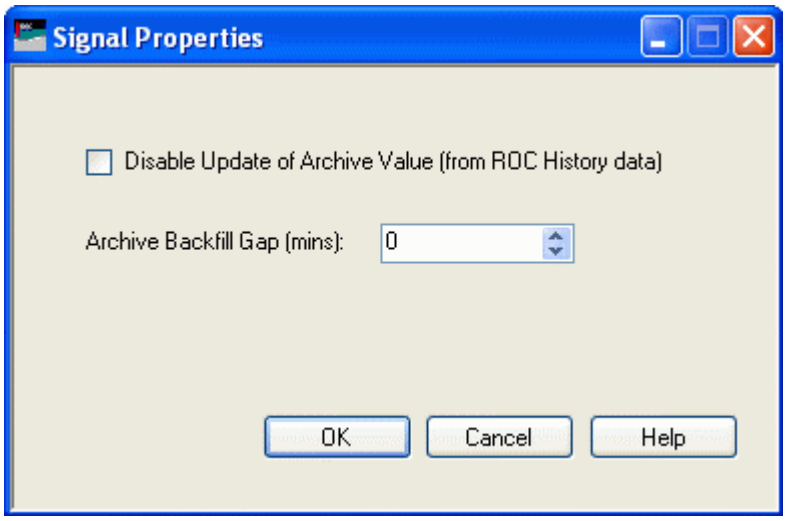
Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

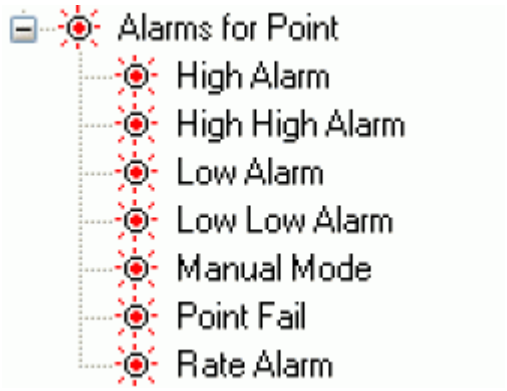
If this value is greater than zero, then the RDI will attempt to only update history values if there is a ‘gap’ in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a ‘gap’ - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

Alarms for Point

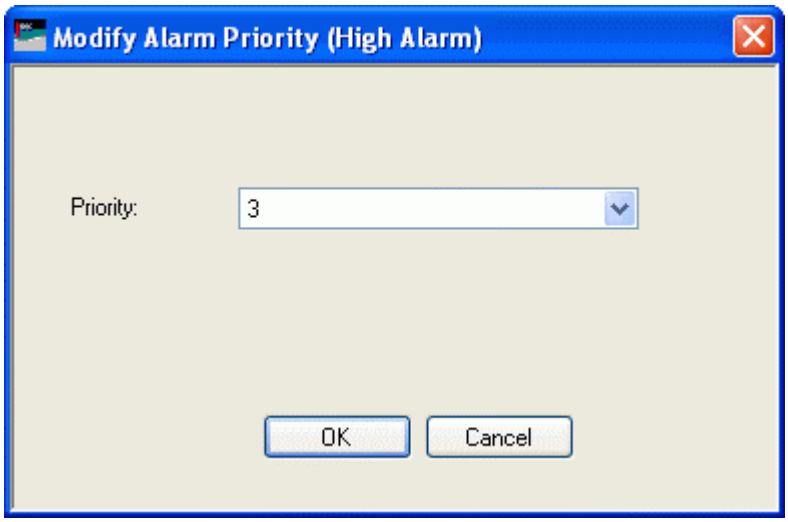
If there are alarms associated with the selected Point and the 'On add a ROC Point to the database automatically add associated alarm conditions' option is checked on the 'System Parameters Wizard General Page', then they will be listed immediately under the Point in the Tree View window.

There is a context menu available on each Alarm Condition.

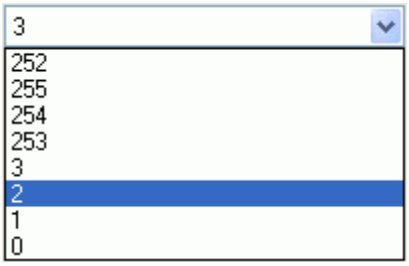


Modify Alarm Priority

If the 'Modify Alarm Priority' option on any Alarm Condition is selected, the priority of the Alarm Condition can be changed using this dialog.

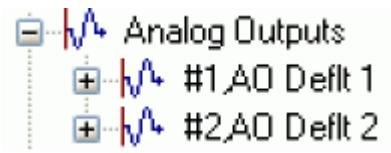


The new priority is chosen from the drop-down list:



Analog Outputs

The Analog Outputs node is the parent of all ROC Analog Output Points found within the selected device. When the plus sign to the left of the Analog Outputs node is selected, it expands to reveal the available Points of that type in the Device.



Analog Outputs Context Menu

The context menu on the 'Analog Outputs' node allows you to add or delete ROC Points and Signals.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Signals for Point Parameter Values Context Menu

The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

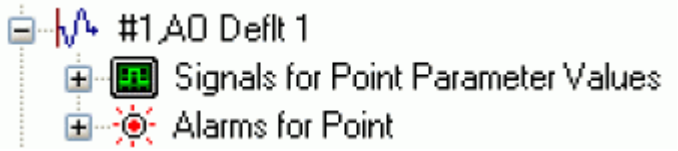
Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Analog Output Point

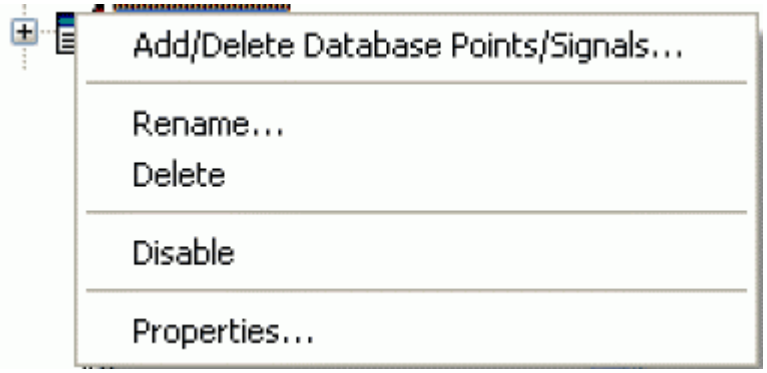
If the Analog Output Point has any specific Parameters mapped to the appropriate OpenEnterprise ROC signal table, it will have a plus sign to the left of it, which when selected will reveal the signals that have been mapped to Parameters for the selected ROC Point.

Any alarms for the Point will also be shown.



Analog Output Point Context Menu

This context menu appears on individual ROC Analog Output Points.



Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Rename

Opens the 'Point Rename Dialog', which enables you to rename this Point.

Delete Point

The selected Point will be deleted.

Disable Point

The selected Point will be disabled.

Properties

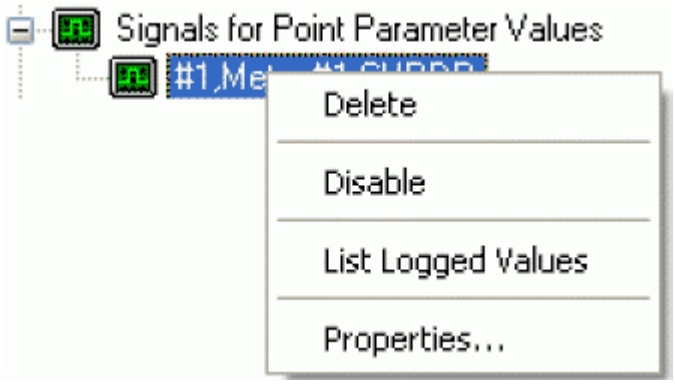
Opens the 'Point Properties Dialog', which enables you to associate a 'Parameter Pattern Template' with the Point.

Signals For Point Parameter Values

The 'Signals for Point Parameter Values' node is the parent for any ROC Signals that have been created from the Point. The parent node and each Point node have context menus.

Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

List Logged Values

Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.

Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.

Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Logged Values List Context Menu

The Logged Values list context menu has two options.

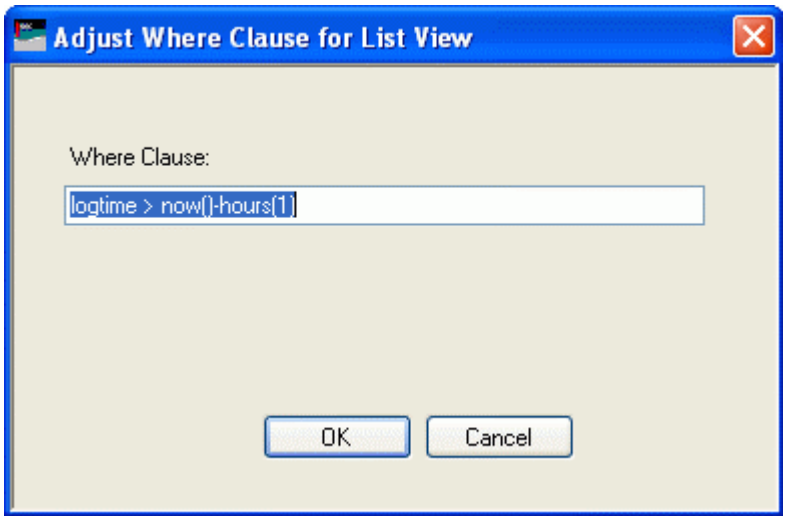
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

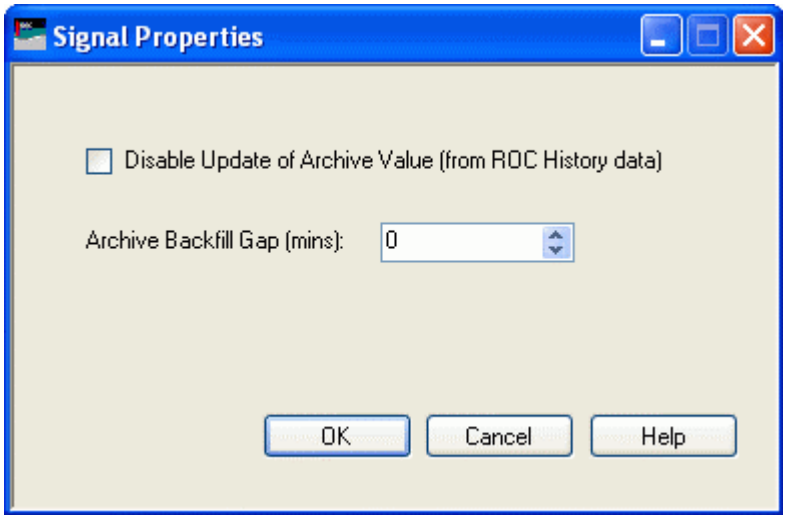
Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

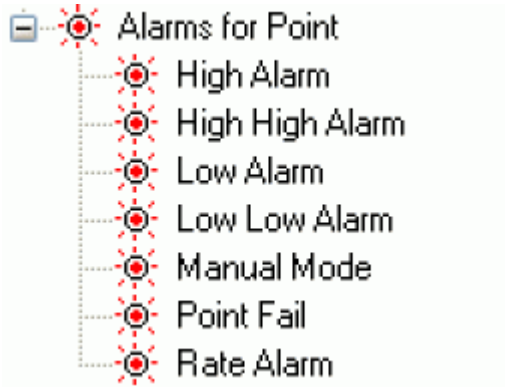
If this value is greater than zero, then the RDI will attempt to only update history values if there is a ‘gap’ in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a ‘gap’ - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

Alarms for Point

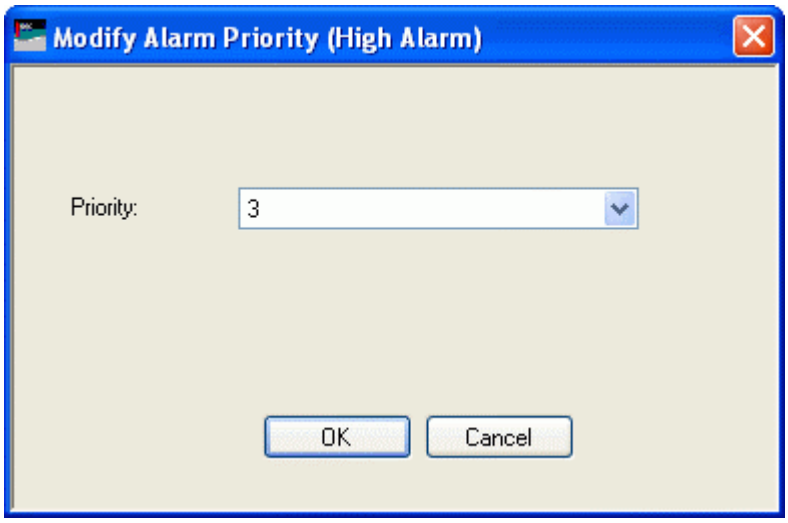
If there are alarms associated with the selected Point and the 'On add a ROC Point to the database automatically add associated alarm conditions' option is checked on the 'System Parameters Wizard General Page', then they will be listed immediately under the Point in the Tree View window.

There is a context menu available on each Alarm Condition.

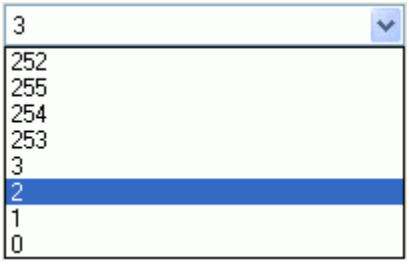


Modify Alarm Priority

If the 'Modify Alarm Priority' option on any Alarm Condition is selected, the priority of the Alarm Condition can be changed using this dialog.

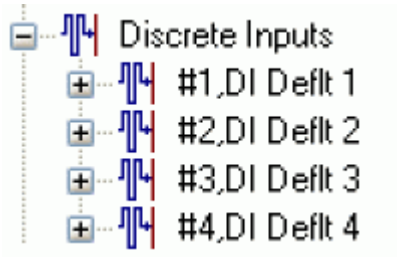


The new priority is chosen from the drop-down list:



Discrete Inputs

The Discrete Inputs node is the parent of all ROC Discrete Input Points found within the selected device. When the plus sign to the left of the Discrete Inputs node is selected, it expands to reveal the available Points of that type in the Device.



Discrete Inputs Context Menu

The context menu on the 'Discrete Inputs' node allows you to add or delete ROC Points and Signals.

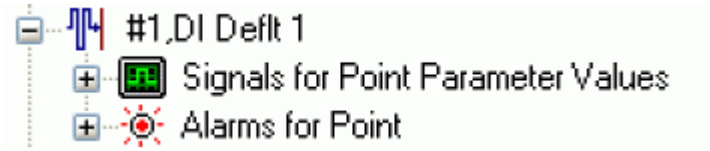
Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Discrete Input Point

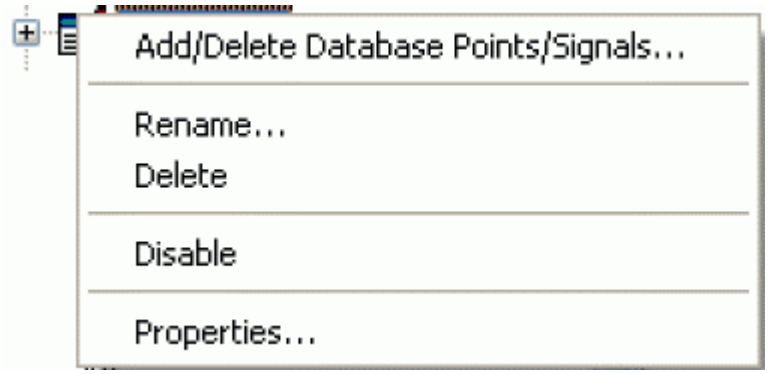
If the Discrete Input Point has any specific Parameters mapped to the appropriate OpenEnterprise ROC signal table, it will have a plus sign to the left of it, which when selected will reveal the signals that have been mapped to Parameters for the selected ROC Point.

Any alarms for the Point will also be shown.



Discrete Input Point Context Menu

This context menu appears on individual ROC Discrete Input Points.



Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Rename

Opens the 'Point Rename Dialog', which enables you to rename this Point.

Delete Point

The selected Point will be deleted.

Disable Point

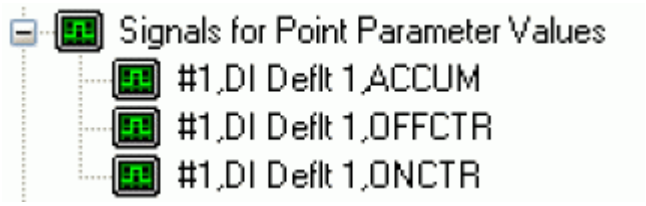
The selected Point will be disabled.

Properties

Opens the 'Point Properties Dialog', which enables you to associate a 'Parameter Pattern Template' with the Point.

Signals For Point Parameter Values

The 'Signals for Point Parameter Values' node is the parent for any ROC Signals that have been created from the Point. The parent node and each Point node have context menus.



Signals for Point Parameter Values Context Menu

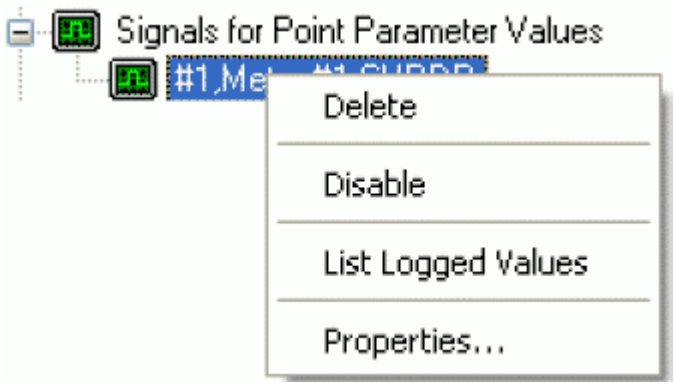
The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

List Logged Values

Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.

Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

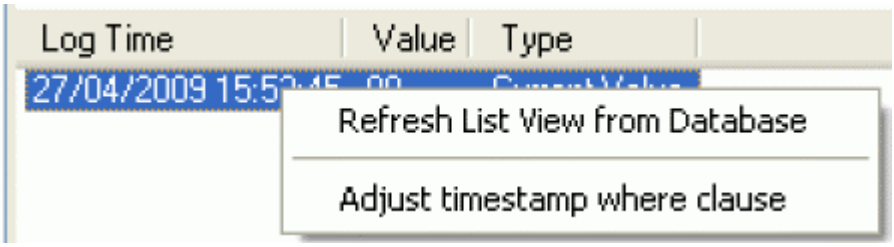
When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.

Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Logged Values List Context Menu

The Logged Values list context menu has two options.



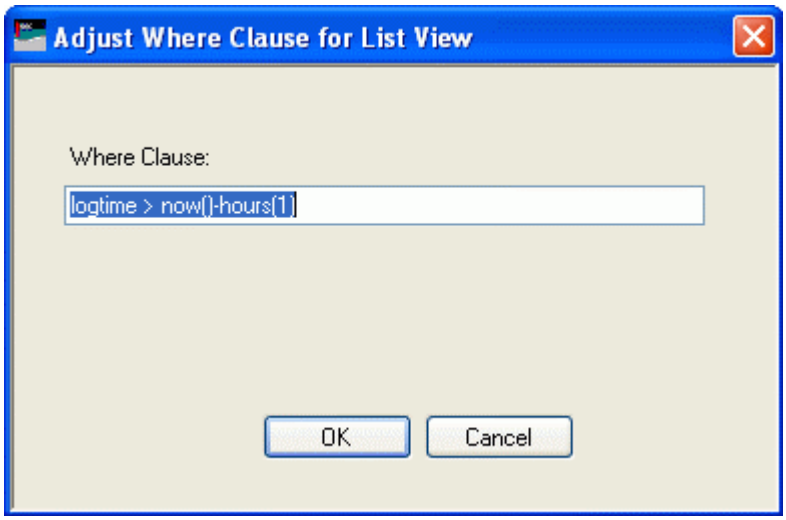
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

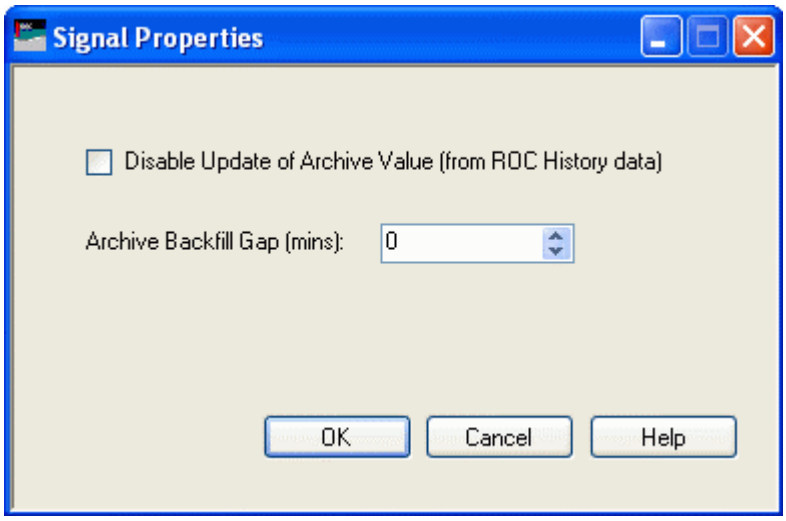
Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

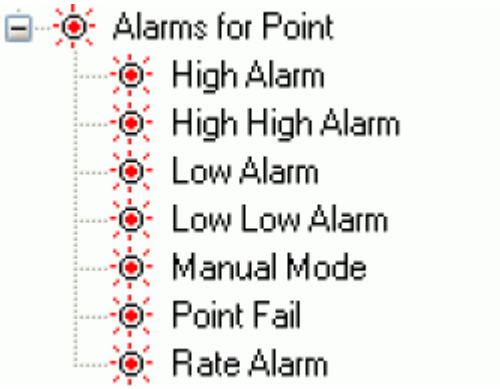
If this value is greater than zero, then the RDI will attempt to only update history values if there is a 'gap' in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a 'gap' - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

Alarms for Point

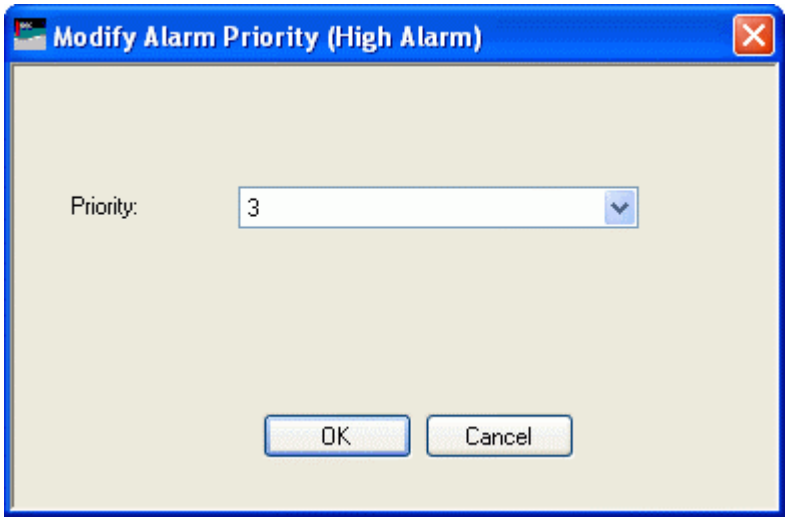
If there are alarms associated with the selected Point and the 'On add a ROC Point to the database automatically add associated alarm conditions' option is checked on the 'System Parameters Wizard General Page', then they will be listed immediately under the Point in the Tree View window.

There is a context menu available on each Alarm Condition.

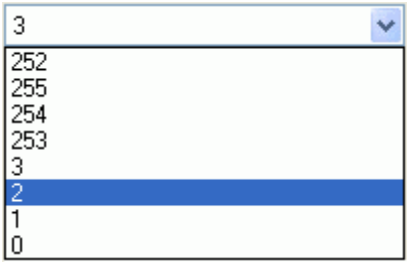


Modify Alarm Priority

If the 'Modify Alarm Priority' option on any Alarm Condition is selected, the priority of the Alarm Condition can be changed using this dialog.

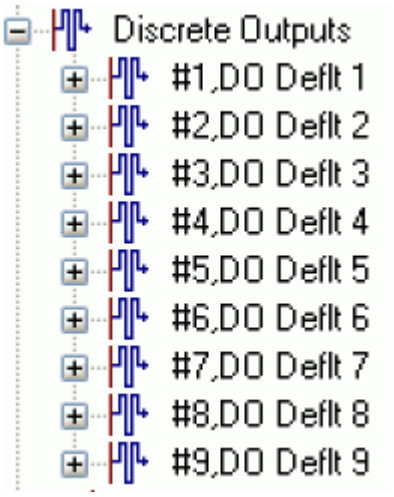


The new priority is chosen from the drop-down list:



Discrete Outputs

The Discrete Outputs node is the parent of all ROC Discrete Output Points found within the selected device. When the plus sign to the left of the Discrete Outputs node is selected, it expands to reveal the available Points of that type in the Device.



Discrete Outputs Context Menu

The context menu on the 'Discrete Outputs' node allows you to add or delete ROC Points and Signals.

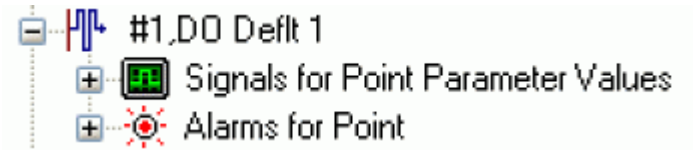
Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Discrete Output Point

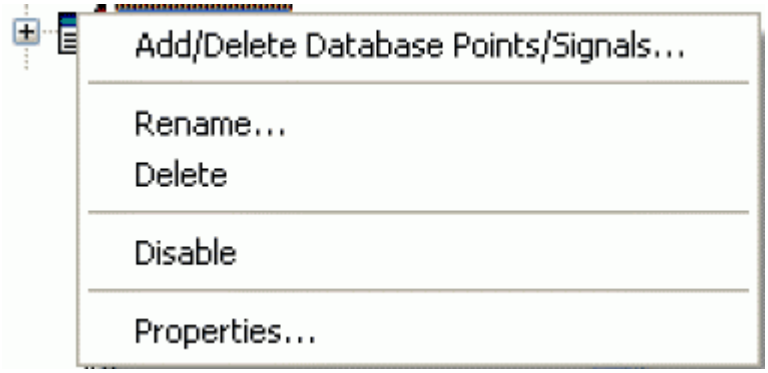
If the Discrete Output Point has any specific Parameters mapped to the appropriate OpenEnterprise ROC Signal table, it will have a plus sign to the left of it, which when selected will reveal the signals that have been mapped to Parameters for the selected ROC Point.

Any alarms for the Point will also be shown.



Discrete Output Point Context Menu

This context menu appears on individual ROC Discrete Output Points.



Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Rename

Opens the 'Point Rename Dialog', which enables you to rename this Point.

Delete Point

The selected Point will be deleted.

Disable Point

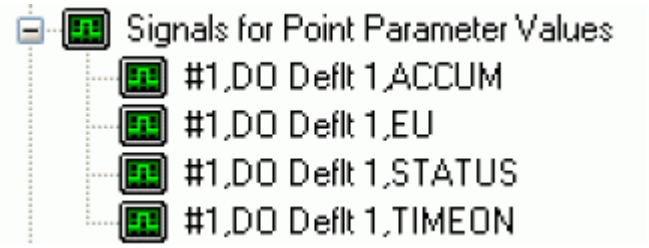
The selected Point will be disabled.

Properties

Opens the 'Point Properties Dialog', which enables you to associate a 'Parameter Pattern Template' with the Point.

Signals For Point Parameter Values

The 'Signals for Point Parameter Values' node is the parent for any ROC Signals that have been created from the Point. The parent node and each Point node have context menus.



Signals for Point Parameter Values Context Menu

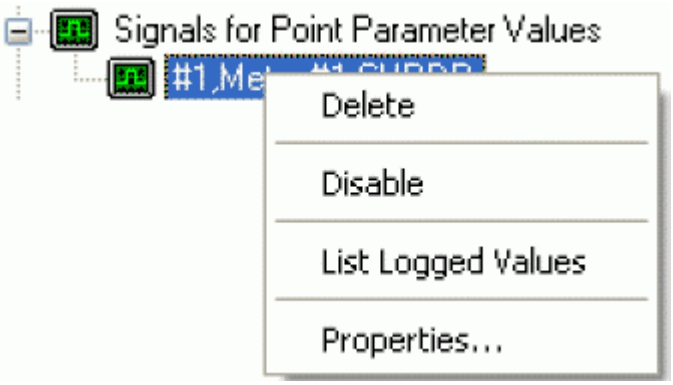
The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

List Logged Values

Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.

Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.

Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Logged Values List Context Menu

The Logged Values list context menu has two options.

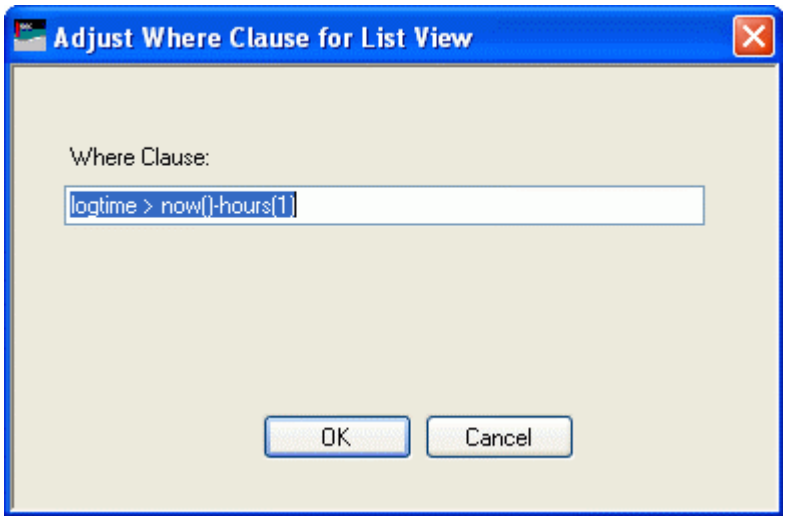
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

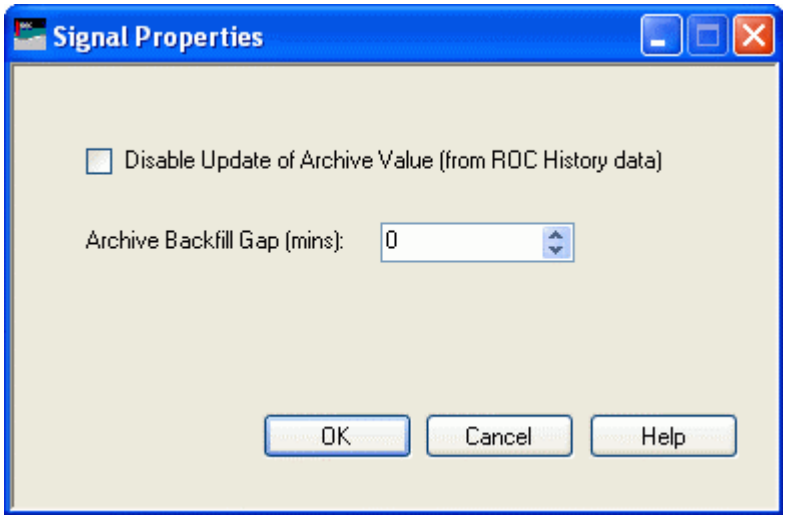
Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

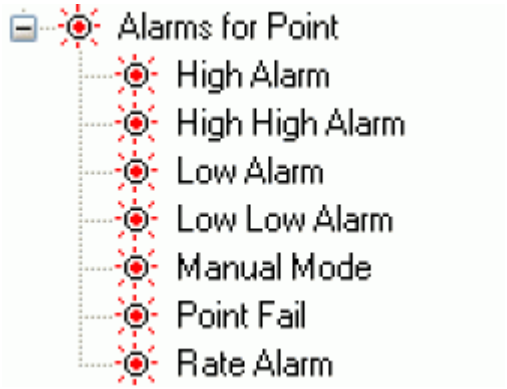
If this value is greater than zero, then the RDI will attempt to only update history values if there is a ‘gap’ in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a ‘gap’ - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

Alarms for Point

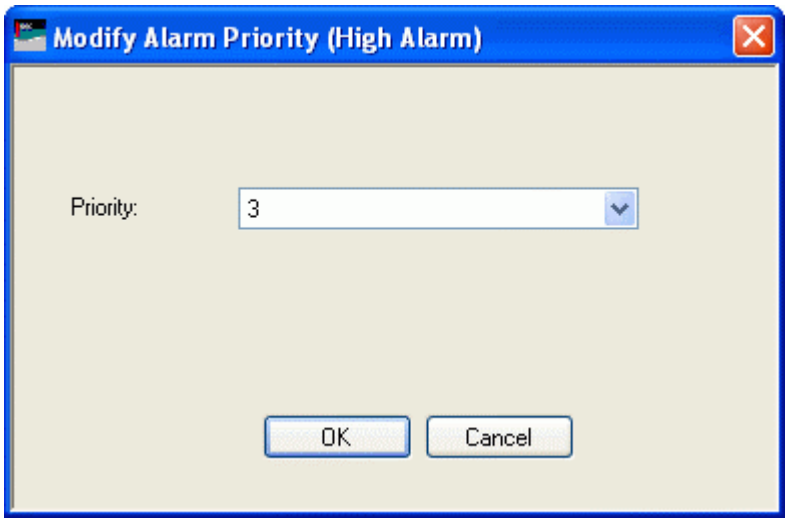
If there are alarms associated with the selected Point and the 'On add a ROC Point to the database automatically add associated alarm conditions' option is checked on the 'System Parameters Wizard General Page', then they will be listed immediately under the Point in the Tree View window.

There is a context menu available on each Alarm Condition.

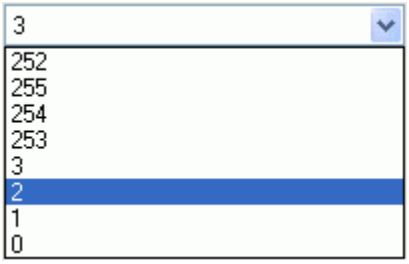


Modify Alarm Priority

If the 'Modify Alarm Priority' option on any Alarm Condition is selected, the priority of the Alarm Condition can be changed using this dialog.

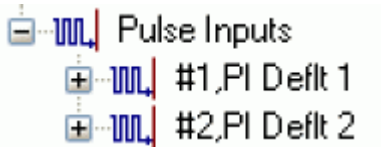


The new priority is chosen from the drop-down list:



Pulse Inputs

The Pulse Inputs node is the parent of all ROC Pulse Input Points found within the selected device. When the plus sign to the left of the Pulse Inputs node is selected, it expands to reveal the available Points of that type in the Device.



Pulse Inputs Context Menu

The context menu on the 'Pulse Inputs' node allows you to add or delete ROC Points and Signals.

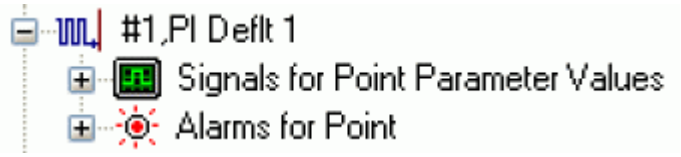
Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Pulse Input Point

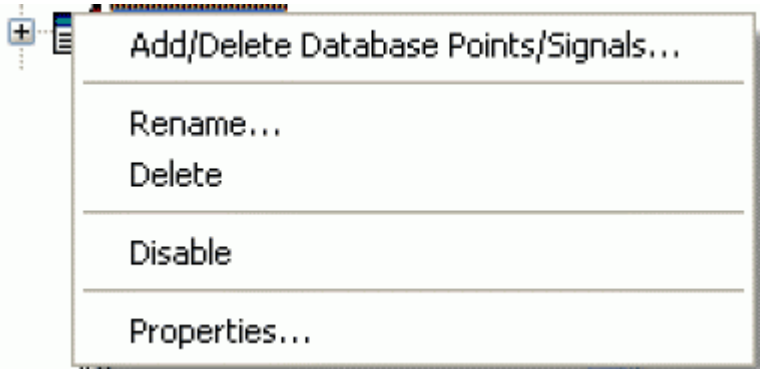
If the Pulse Input Point has any specific Parameters mapped to the appropriate OpenEnterprise ROC signal table, it will have a plus sign to the left of it, which when selected will reveal the signals that have been mapped to Parameters for the selected ROC Point.

Any alarms for the Point will also be shown.



Pulse Input Point Context Menu

This context menu appears on individual ROC Pulse Input Points.



Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Rename

Opens the 'Point Rename Dialog', which enables you to rename this Point.

Delete Point

The selected Point will be deleted.

Disable Point

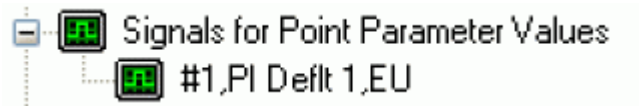
The selected Point will be disabled.

Properties

Opens the 'Point Properties Dialog', which enables you to associate a 'Parameter Pattern Template' with the Point.

Signals for Point Parameter Values

The 'Signals for Point Parameter Values' node is the parent for any ROC Signals that have been created from the Point. The parent node and each Point node have context menus.



Signals for Point Parameter Values Context Menu

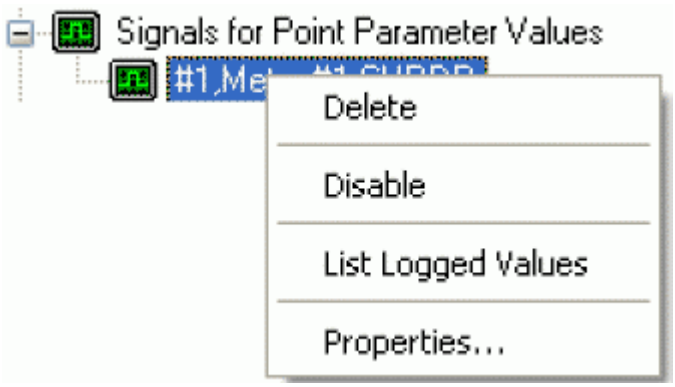
The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

List Logged Values

Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.

Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

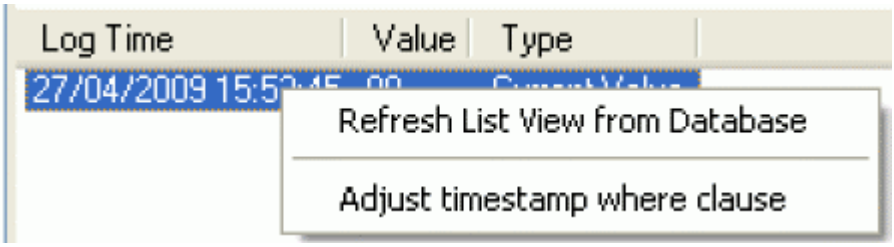
When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.

Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Logged Values List Context Menu

The Logged Values list context menu has two options.



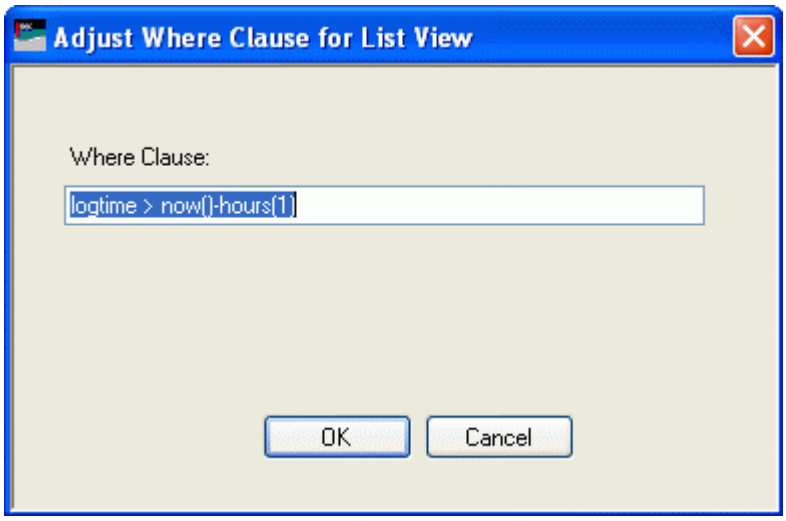
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

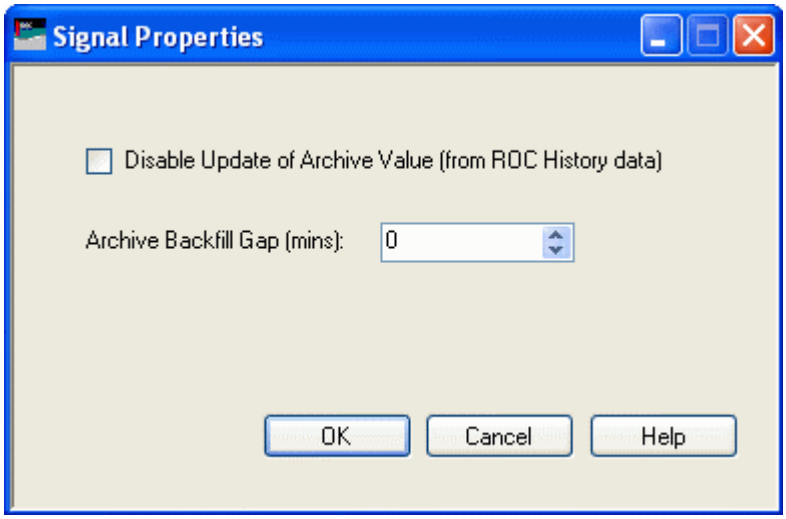
Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

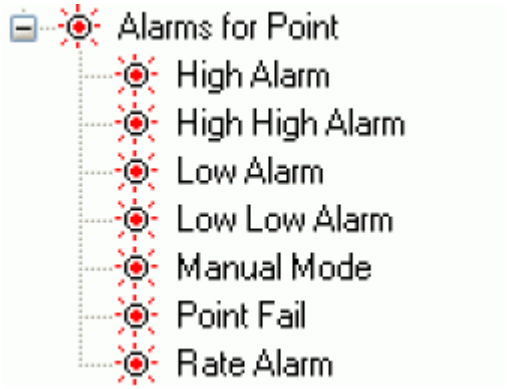
If this value is greater than zero, then the RDI will attempt to only update history values if there is a 'gap' in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a 'gap' - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

Alarms for Point

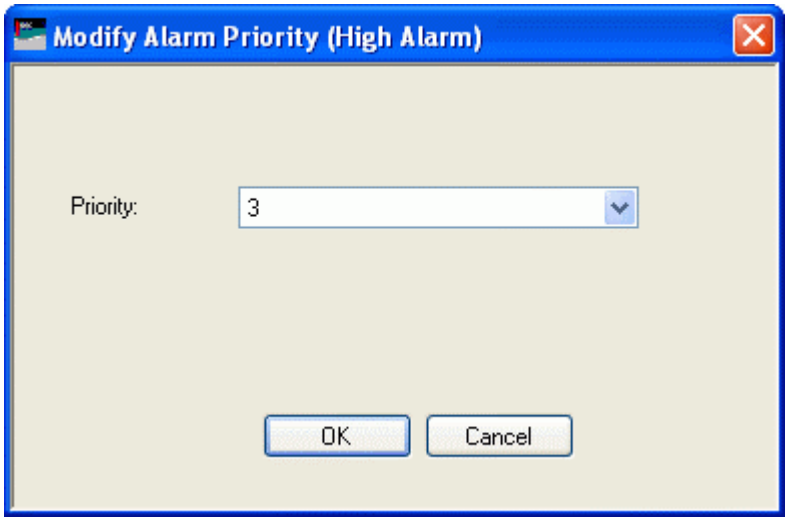
If there are alarms associated with the selected Point and the 'On add a ROC Point to the database automatically add associated alarm conditions' option is checked on the 'System Parameters Wizard General Page', then they will be listed immediately under the Point in the Tree View window.

There is a context menu available on each Alarm Condition.

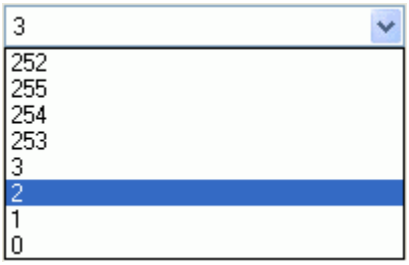


Modify Alarm Priority

If the 'Modify Alarm Priority' option on any Alarm Condition is selected, the priority of the Alarm Condition can be changed using this dialog.



The new priority is chosen from the drop-down list:



4.1.2.6.4.3 Control Node

The Control node contains the parent nodes for all ROC Points that are used for control within the ROC Device. These are 'FST Registers', 'PID Control Parameters', 'PID Parameters' and 'Power Control Parameters'.

Control Node Context Menu

The context menu that appears when you clicks the right mouse button whilst this node is selected. It enables you to map more ROC Points to the OpenEnterprise database.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

FST Registers

The FST Registers node is the parent of all FST Registers Points found within the selected device. When the plus sign to the left of the FST Registers node is selected, it expands to reveal the available Points.

FST Registers Context Menu

The context menu that appears when you clicks the right mouse button whilst this node is selected. It enables you to map more ROC Points to the OpenEnterprise database.

Add/Delete Database Points/Signals

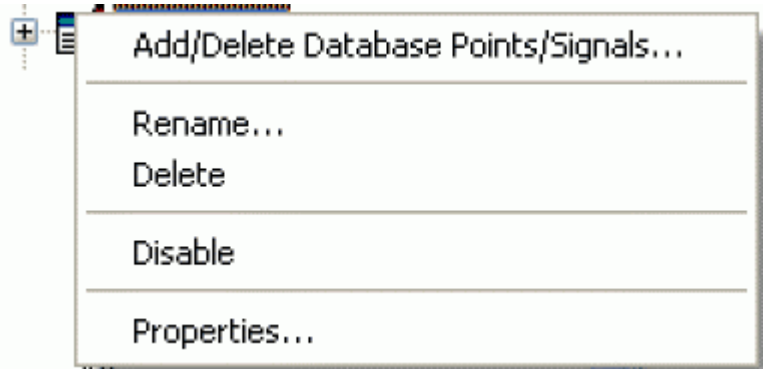
This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

FST Registers Point

If the FST Registers Point has any specific Parameters mapped to the appropriate OpenEnterprise ROC signal table, it will have a plus sign to the left of it, which when selected will reveal the signals that have been mapped to Parameters for the selected ROC Point..

FST Registers Point Context Menu

This context menu belongs to all individual ROC Points.



Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Rename

Opens the 'Point Rename Dialog', which enables you to rename this Point.

Delete Point

The selected Point will be deleted.

Disable Point

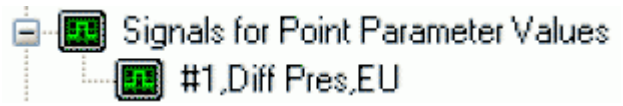
The selected Point will be disabled.

Properties

Opens the 'Point Properties Dialog', which enables you to associate a 'Parameter Pattern Template' with the Point.

Signals for Point Parameter Values

The 'Signals for Point Parameter Values' node is the parent for any ROC Signals that have been created from the Point. The parent node and each Point node have context menus.



Signals for Point Parameter Values Context Menu

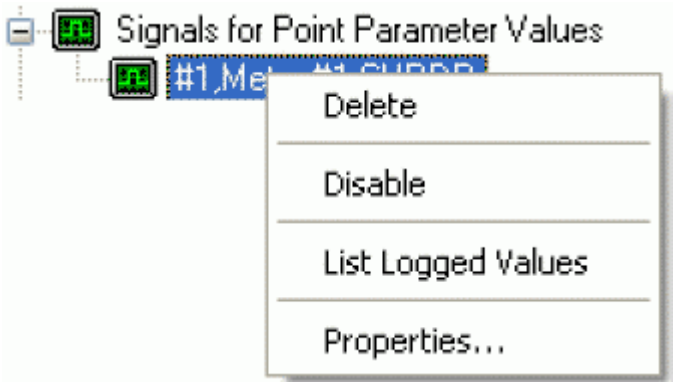
The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

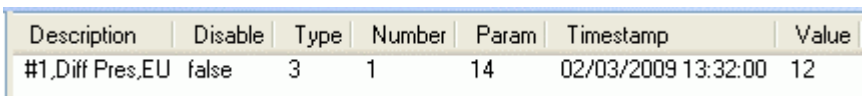
The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

List Logged Values

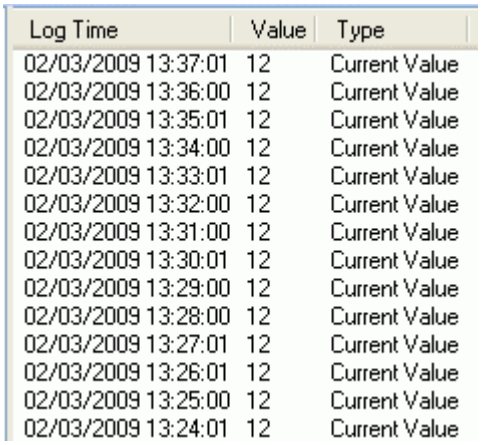
Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.



Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

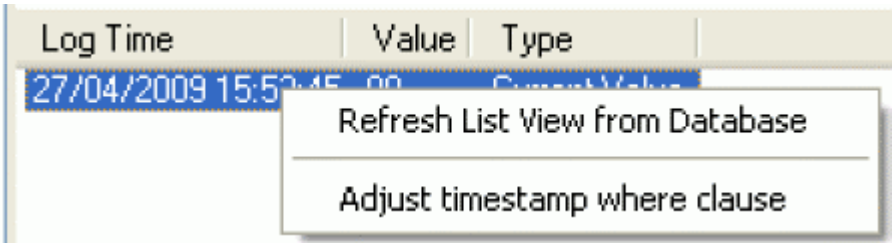
The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.



Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Logged Values List Context Menu

The Logged Values list context menu has two options.



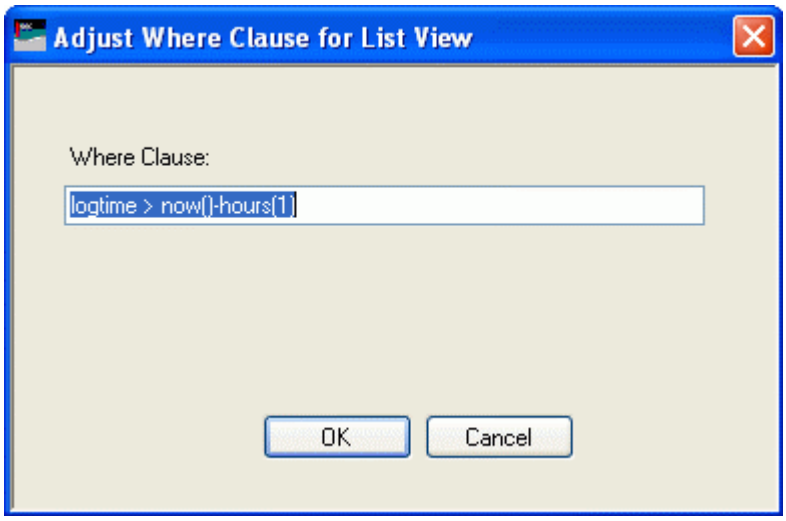
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

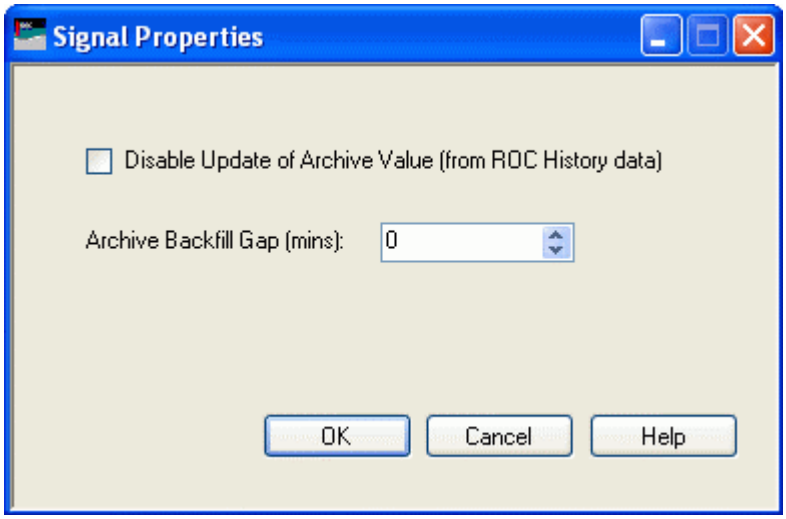
Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

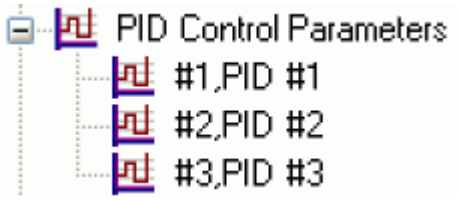
If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

If this value is greater than zero, then the RDI will attempt to only update history values if there is a ‘gap’ in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a ‘gap’ - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

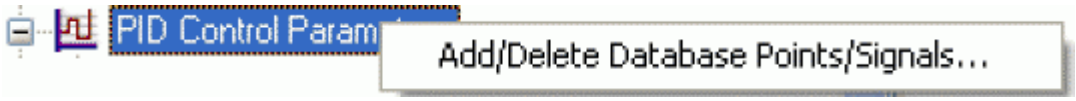
PID Control Parameters

The PID Control Parameters node is the parent of all PID Control Parameters Points found within the selected device. When the plus sign to the left of the PID Control Parameters node is selected, it expands to reveal the available Points.



PID Control Parameters Node Context Menu

The context menu that appears when you clicks the right mouse button whilst this node is selected. It enables you to map more ROC Points to the OpenEnterprise database.



Add/Delete Database Points/Signals

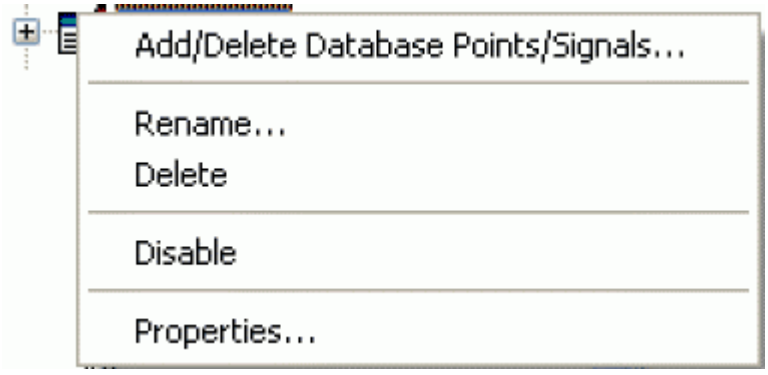
This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

PID Control Parameters Point

If the PID Control Parameters Point has any specific Parameters mapped to the appropriate OpenEnterprise ROC signal table, it will have a plus sign to the left of it, which when selected will reveal the signals that have been mapped to Parameters for the selected ROC Point.. Insert the image to be used here....

PID Control Parameters Point Context Menu

This context menu belongs to all individual ROC Points.



Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Rename

Opens the 'Point Rename Dialog', which enables you to rename this Point.

Delete Point

The selected Point will be deleted.

Disable Point

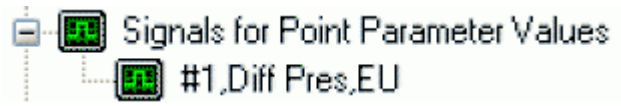
The selected Point will be disabled.

Properties

Opens the 'Point Properties Dialog', which enables you to associate a 'Parameter Pattern Template' with the Point.

Signals for Point Parameter Values

The 'Signals for Point Parameter Values' node is the parent for any ROC Signals that have been created from the Point. The parent node and each Point node have context menus.



Signals for Point Parameter Values Context Menu

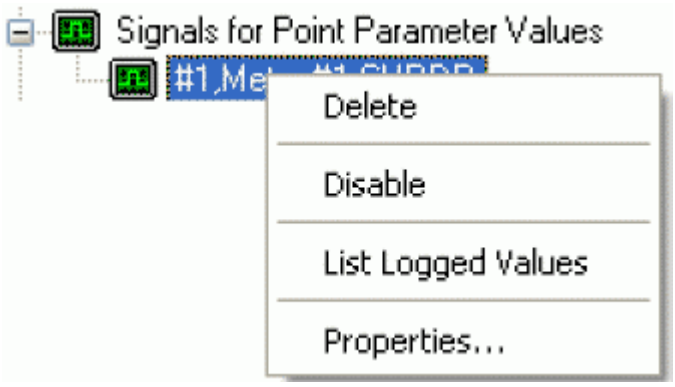
The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

List Logged Values

Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.

Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

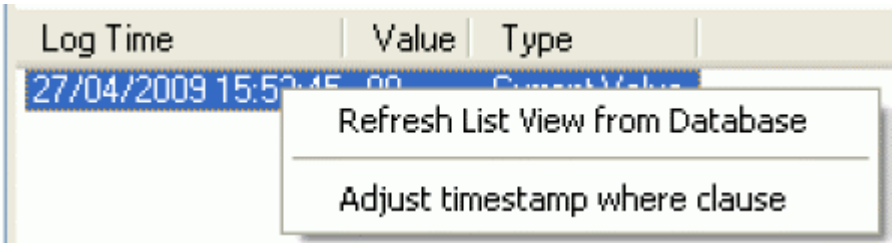
When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.

Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Logged Values List Context Menu

The Logged Values list context menu has two options.



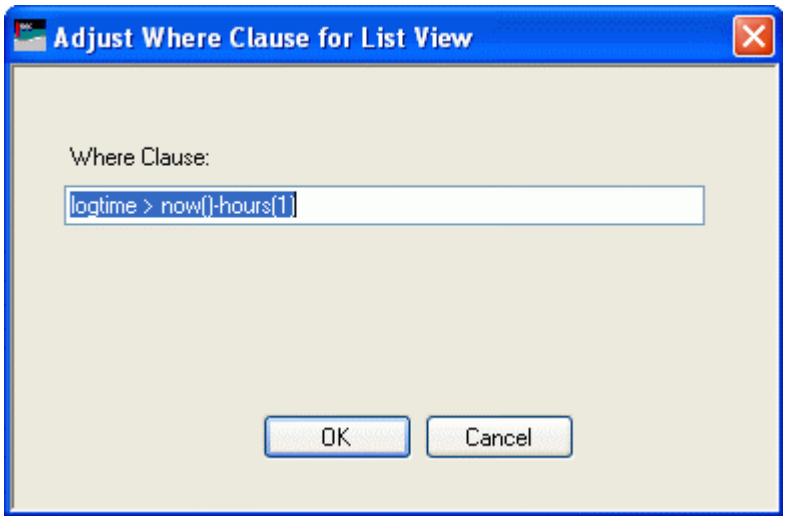
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

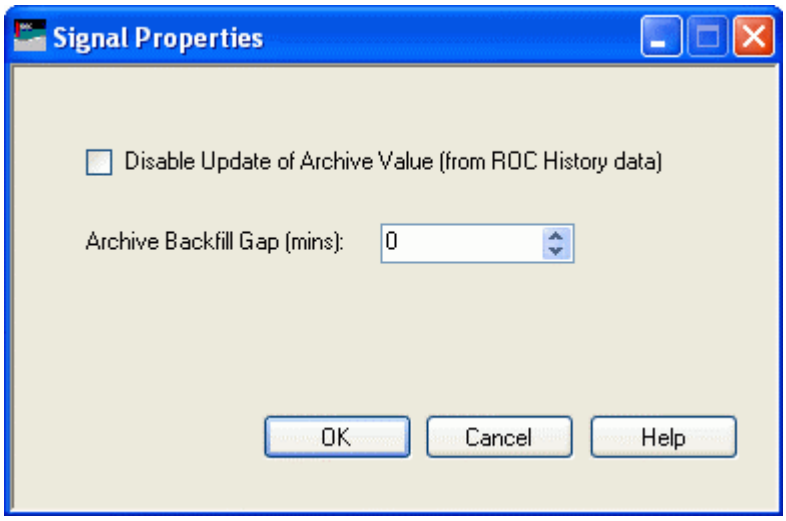
Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

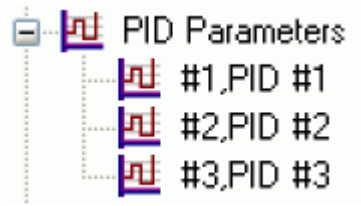
If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

If this value is greater than zero, then the RDI will attempt to only update history values if there is a 'gap' in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a 'gap' - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

PID Parameters

The PID Parameters node is the parent of all PID Parameters Points found within the selected device. When the plus sign to the left of the PID Parameters node is selected, it expands to reveal the available Points.



PID Parameters Context Menu

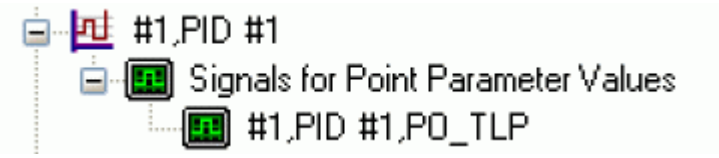
The context menu that appears when you clicks the right mouse button whilst this node is selected. It enables you to map more ROC Points to the OpenEnterprise database.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

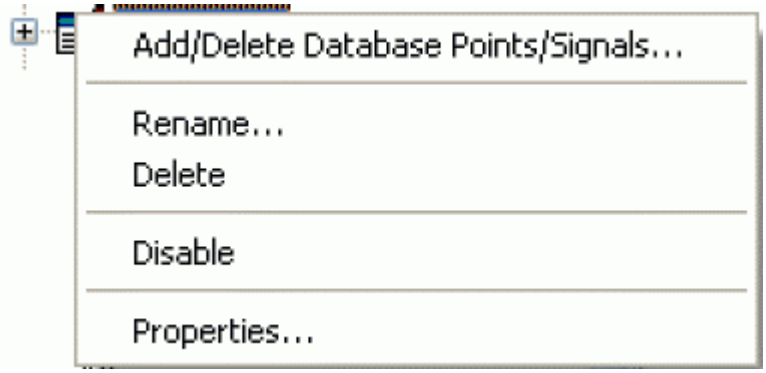
PID Parameters Point

If the PID Parameters Point has any specific PID Parameters mapped to the appropriate OpenEnterprise ROC signal table, it will have a plus sign to the left of it, which when selected will reveal the signals that have been mapped to Parameters for the selected ROC Point..



PID Parameters Point Context Menu

This context menu belongs to all individual ROC Points.



Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Rename

Opens the 'Point Rename Dialog', which enables you to rename this Point.

Delete Point

The selected Point will be deleted.

Disable Point

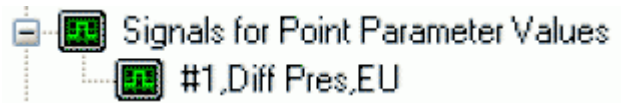
The selected Point will be disabled.

Properties

Opens the 'Point Properties Dialog', which enables you to associate a 'Parameter Pattern Template' with the Point.

Signals for Point Parameter Values

The 'Signals for Point Parameter Values' node is the parent for any ROC Signals that have been created from the Point. The parent node and each Point node have context menus.



Signals for Point Parameter Values Context Menu

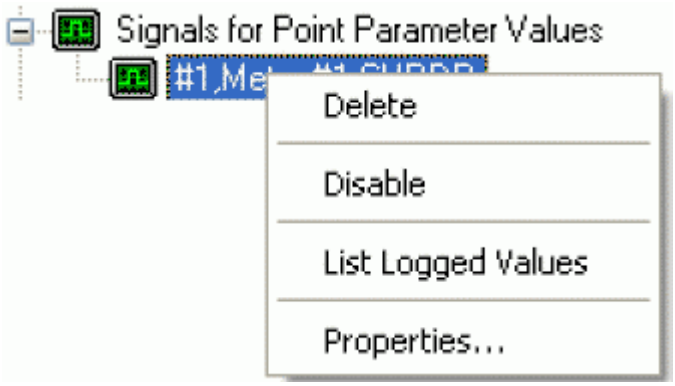
The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

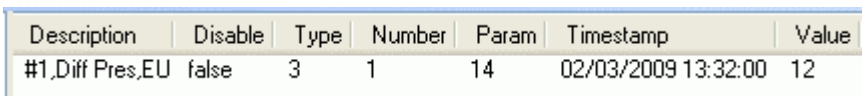
The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

List Logged Values

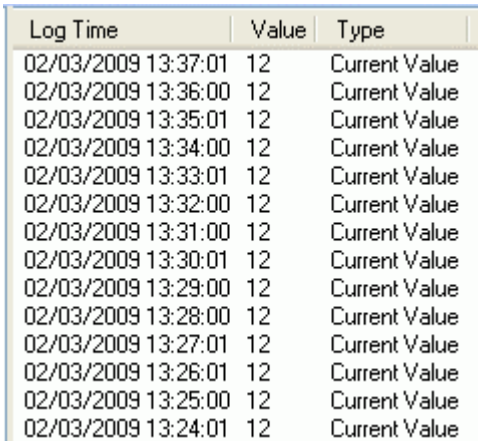
Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.



Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

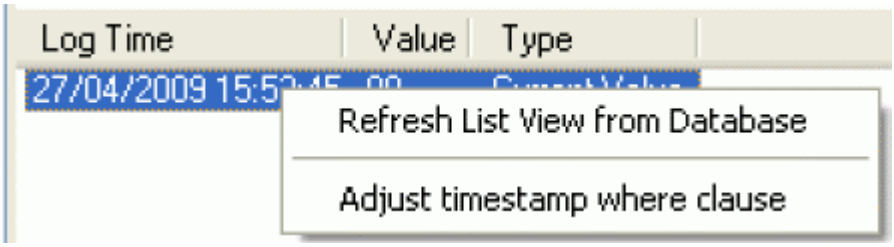
The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.



Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Logged Values List Context Menu

The Logged Values list context menu has two options.



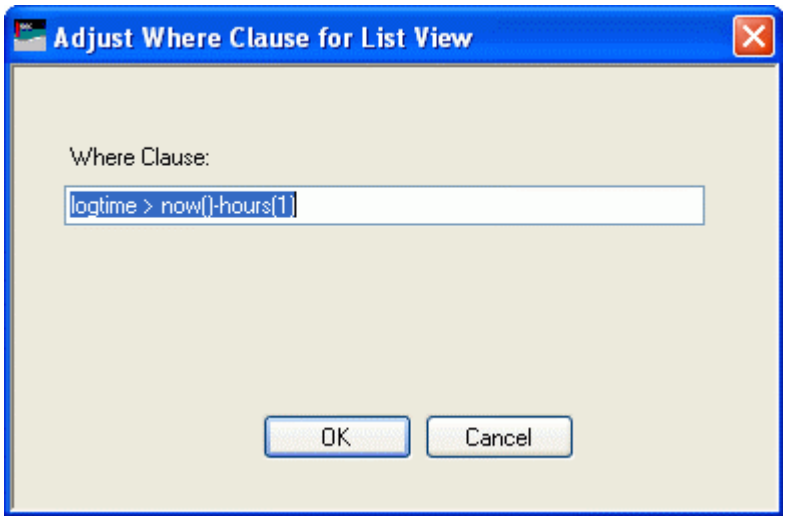
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

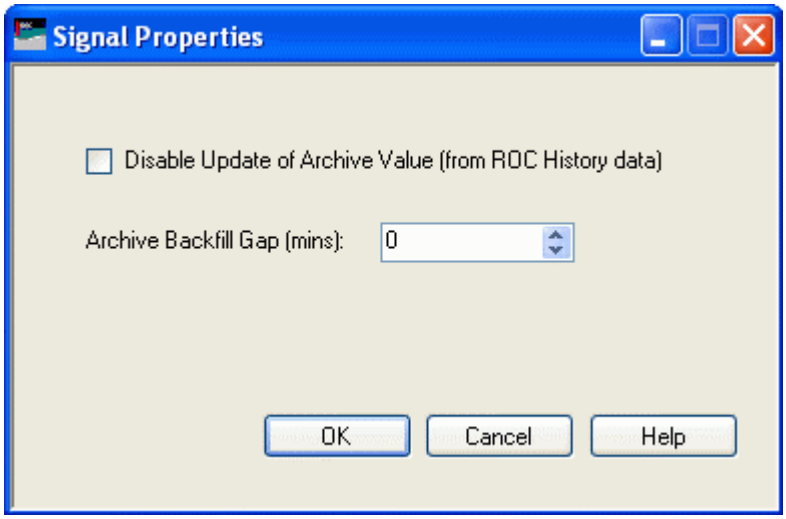
Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

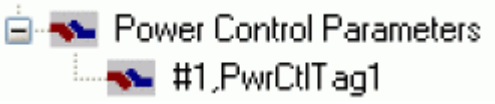
If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

If this value is greater than zero, then the RDI will attempt to only update history values if there is a ‘gap’ in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a ‘gap’ - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

Power Control Parameters

The Power Control Parameters node is the parent of all Power Control Parameters Points found within the selected device. When the plus sign to the left of the Power Control Parameters node is selected, it expands to reveal the available Points.



Power Control Parameters Context Menu

The context menu that appears when you clicks the right mouse button whilst this node is selected. It enables you to map more ROC Points to the OpenEnterprise database.

Add/Delete Database Points/Signals

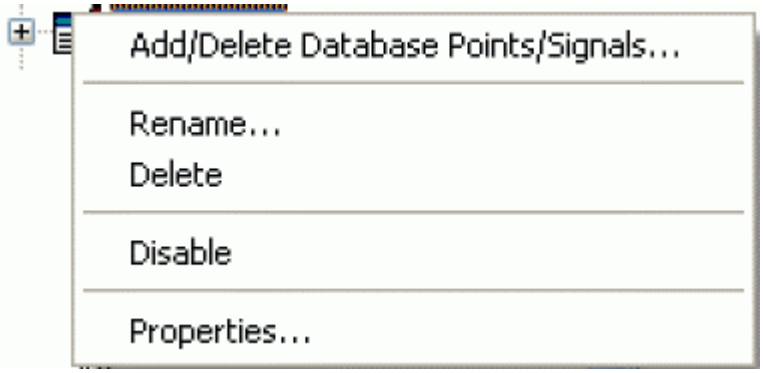
This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Power Control Parameters Point

If the Power Control Parameters Point has any specific Parameters mapped to the appropriate OpenEnterprise ROC signal table, it will have a plus sign to the left of it, which when selected will reveal the signals that have been mapped to Parameters for the selected ROC Point..

Power Control Parameters Point Context Menu

This context menu belongs to all individual ROC Points.



Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Rename

Opens the 'Point Rename Dialog', which enables you to rename this Point.

Delete Point

The selected Point will be deleted.

Disable Point

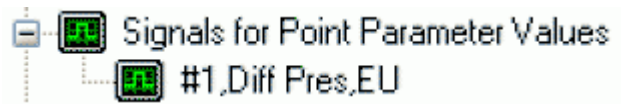
The selected Point will be disabled.

Properties

Opens the 'Point Properties Dialog', which enables you to associate a 'Parameter Pattern Template' with the Point.

Signals for Point Parameter Values

The 'Signals for Point Parameter Values' node is the parent for any ROC Signals that have been created from the Point. The parent node and each Point node have context menus.



Signals for Point Parameter Values Context Menu

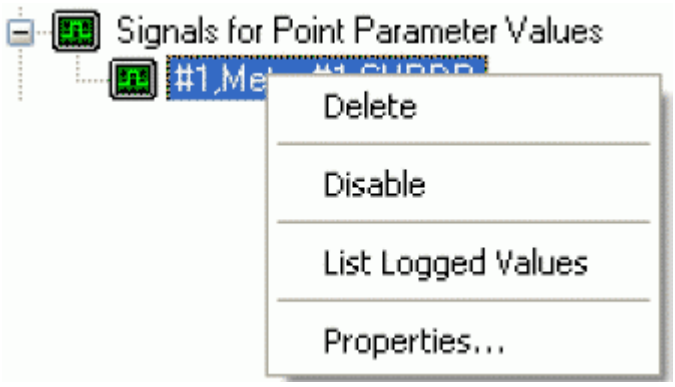
The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.

Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

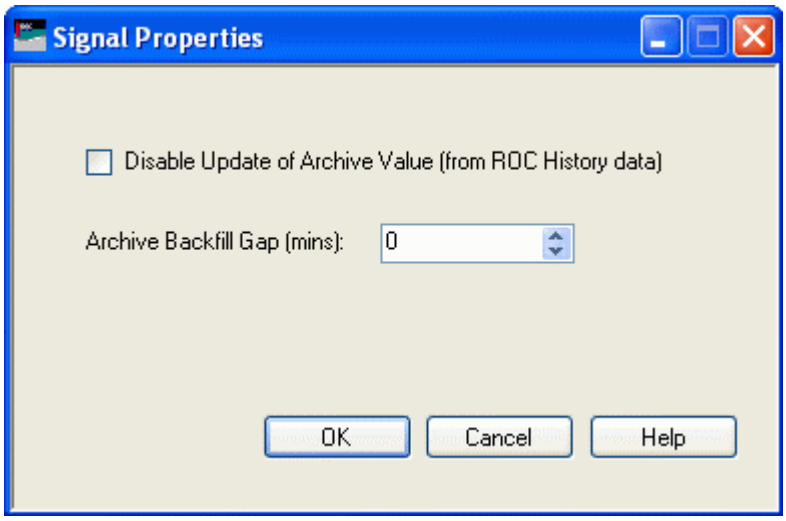
When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.

Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

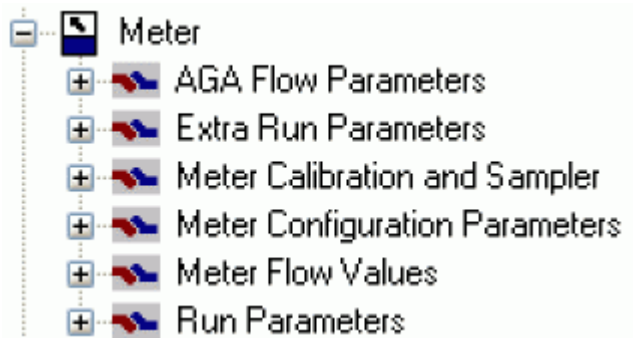
If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

If this value is greater than zero, then the RDI will attempt to only update history values if there is a 'gap' in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a 'gap' - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

4.1.2.6.4.4 Meter Node

The Meter node contains the parent nodes for all ROC Points that are used for Meter calibration, configuration, control and flow measurement within the ROC Device.



Meter Context Menu

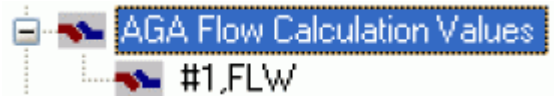
The context menu that appears when you clicks the right mouse button whilst this node is selected. It enables you to map more ROC Points to the OpenEnterprise database.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Meter Point Types

The Meter Point Type nodes are the parent nodes for all Points to do with Meters found within the selected Device. When the plus sign to the left of the Meter Sub node is selected, it expands to reveal any available Points.



Meter Point Type Context Menu

This is the context menu that is available on any of the Meter Point Type nodes. It enables you to add or delete Points and Signals of this type to the OpenEnterprise database.

Add/Delete Database Points/Signals

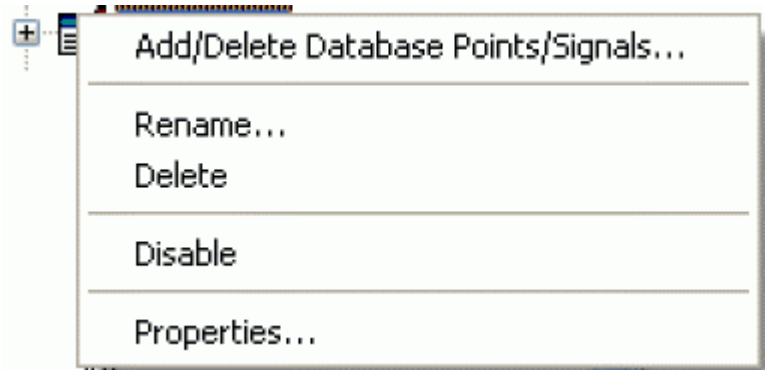
This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Meter Point

If the Meter Point has any specific Meter Parameters mapped to the appropriate OpenEnterprise ROC signal table, it will have a plus sign to the left of it, which when selected will reveal the signals that have been mapped to Parameters for the selected ROC Point. ype topic text here.

Meter Point Context Menu

This context menu belongs to all individual ROC Points.



Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Rename

Opens the 'Point Rename Dialog', which enables you to rename this Point.

Delete Point

The selected Point will be deleted.

Disable Point

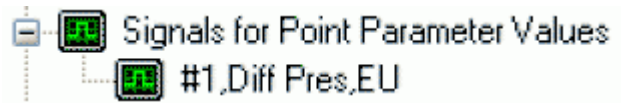
The selected Point will be disabled.

Properties

Opens the 'Point Properties Dialog', which enables you to associate a 'Parameter Pattern Template' with the Point.

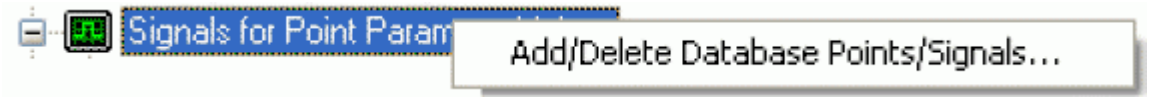
Signals for Point Parameter Values

The 'Signals for Point Parameter Values' node is the parent for any ROC Signals that have been created from the Point. The parent node and each Point node have context menus.



Signals for Point Parameter Values Context Menu

The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

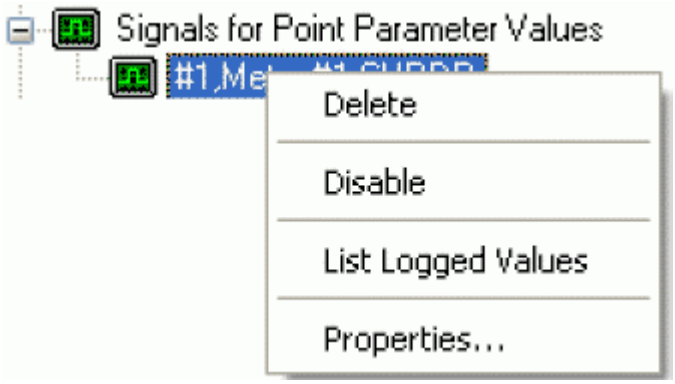


Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

List Logged Values

Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.

Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

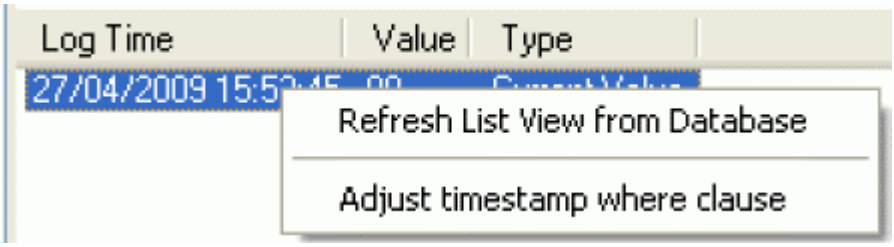
When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.

Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Logged Values List Context Menu

The Logged Values list context menu has two options.



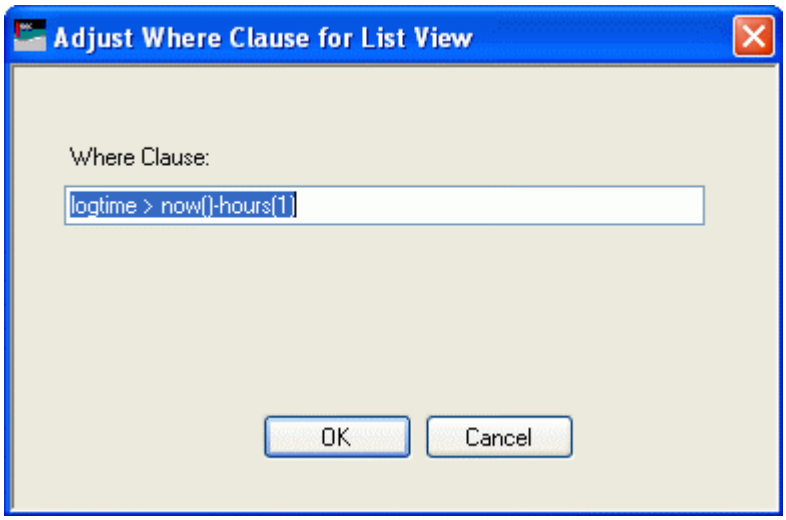
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

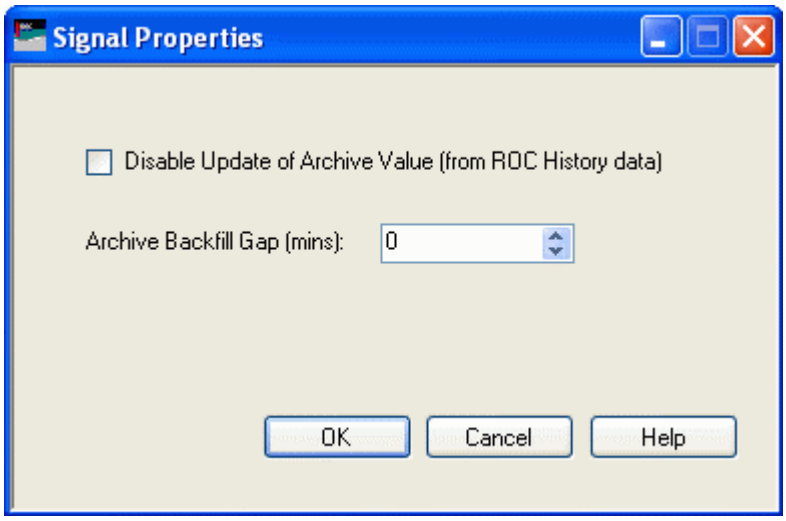
Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

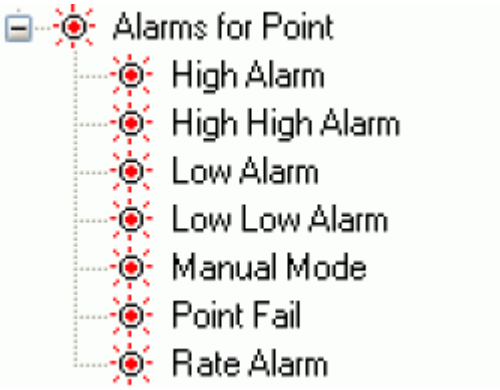
If this value is greater than zero, then the RDI will attempt to only update history values if there is a 'gap' in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a 'gap' - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

Alarms for Point

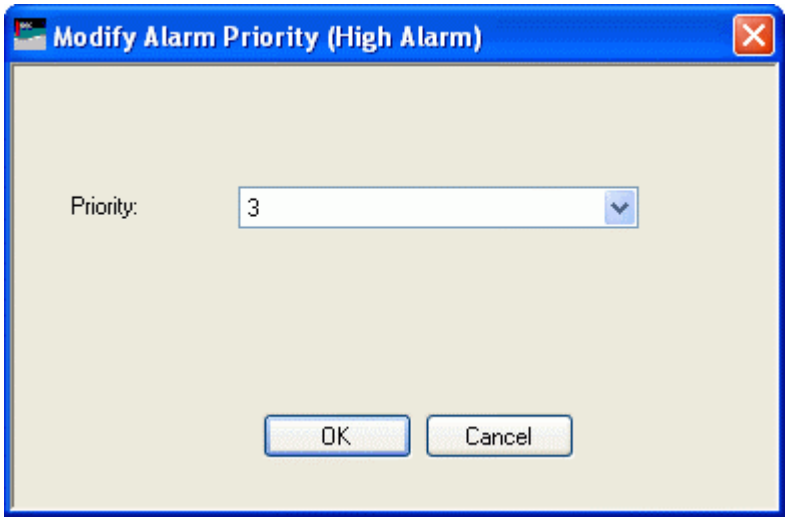
If there are alarms associated with the selected Point and the 'On add a ROC Point to the database automatically add associated alarm conditions' option is checked on the 'System Parameters Wizard General Page', then they will be listed immediately under the Point in the Tree View window.

There is a context menu available on each Alarm Condition.

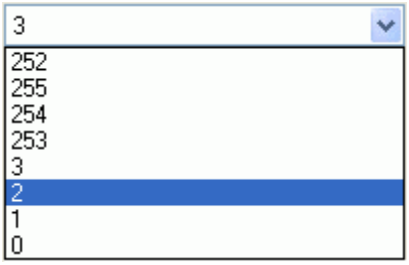


Modify Alarm Priority

If the 'Modify Alarm Priority' option on any Alarm Condition is selected, the priority of the Alarm Condition can be changed using this dialog.

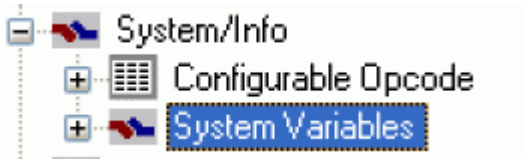


The new priority is chosen from the drop-down list:



4.1.2.6.4.5 System Info Node

The System/Info node contains the parent nodes for all System/Info Type Points that are used within the ROC Device.



System Info Context Menu

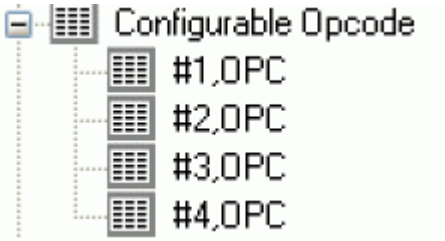
The context menu that appears when you clicks the right mouse button whilst this node is selected. It enables you to map more ROC Points to the OpenEnterprise database.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

System Info Point Types

The System Info Point Type nodes are the parent nodes for all System Info Type Points within the selected Device. This includes 'Configurable Opcode' Type Points also. When the plus sign to the left of the System Info Point Type node is selected, it expands to reveal any available Points.



System Info Point Type Context Menu

This is the context menu that is available on any of the System Info Point Type nodes. It enables you to add or delete Points and Signals of this type to the OpenEnterprise database.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

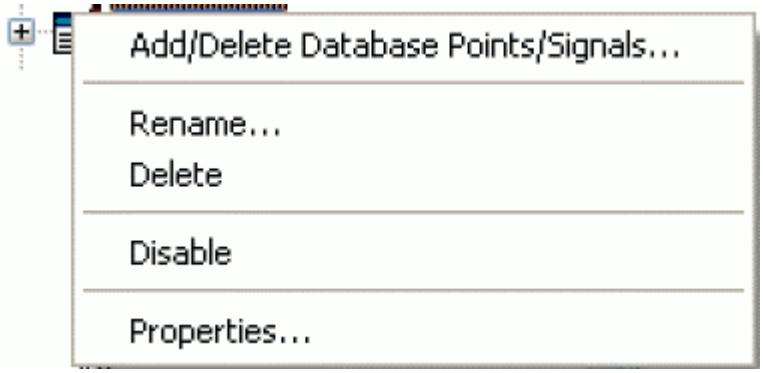
System Info Point

If the System Info Point has any specific Parameters mapped to the appropriate OpenEnterprise ROC signal table, it will have a plus sign to the left of it, which when selected will reveal the signals that have been mapped to Parameters for the selected ROC Point.

System Info Point Types

System Info Point Context Menu

This context menu belongs to all individual ROC Points.



Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Rename

Opens the 'Point Rename Dialog', which enables you to rename this Point.

Delete Point

The selected Point will be deleted.

Disable Point

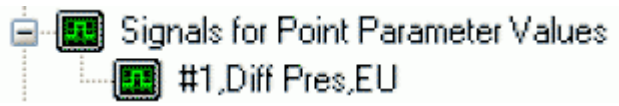
The selected Point will be disabled.

Properties

Opens the 'Point Properties Dialog', which enables you to associate a 'Parameter Pattern Template' with the Point.

Signals for Point Parameter Values

The 'Signals for Point Parameter Values' node is the parent for any ROC Signals that have been created from the Point. The parent node and each Point node have context menus.



Signals for Point Parameter Values Context Menu

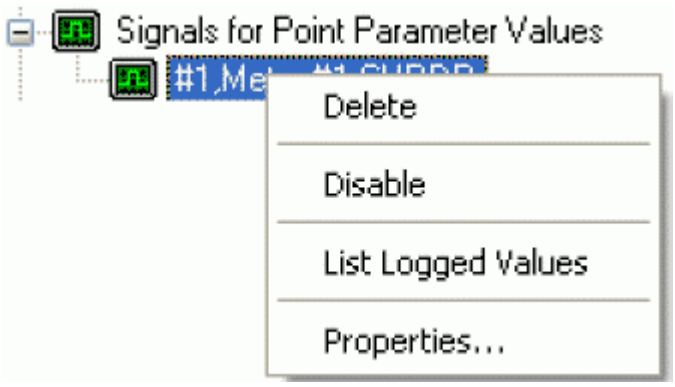
The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

List Logged Values

Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.

Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

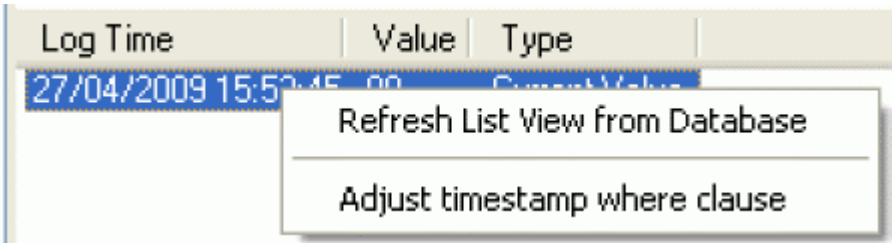
When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.

Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Logged Values List Context Menu

The Logged Values list context menu has two options.



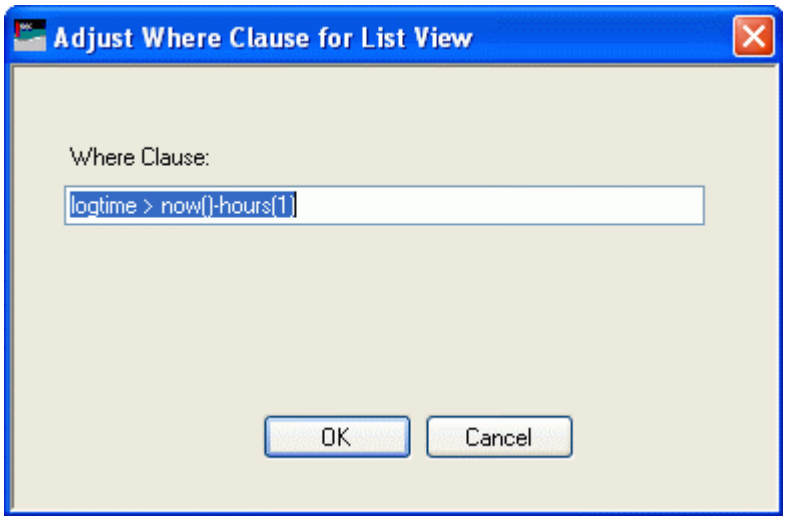
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

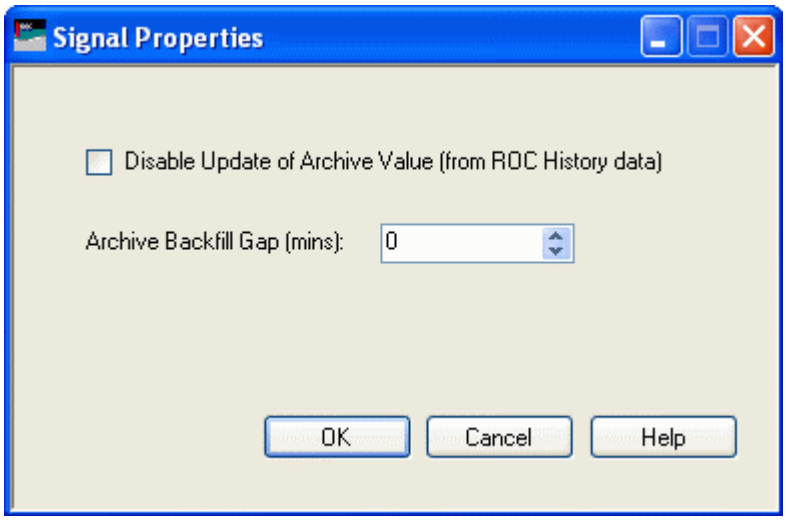
Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

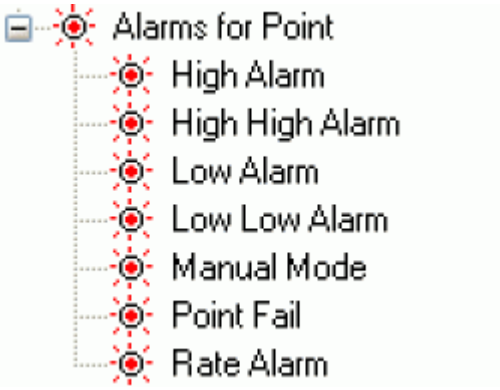
If this value is greater than zero, then the RDI will attempt to only update history values if there is a 'gap' in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a 'gap' - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

Alarms for Point

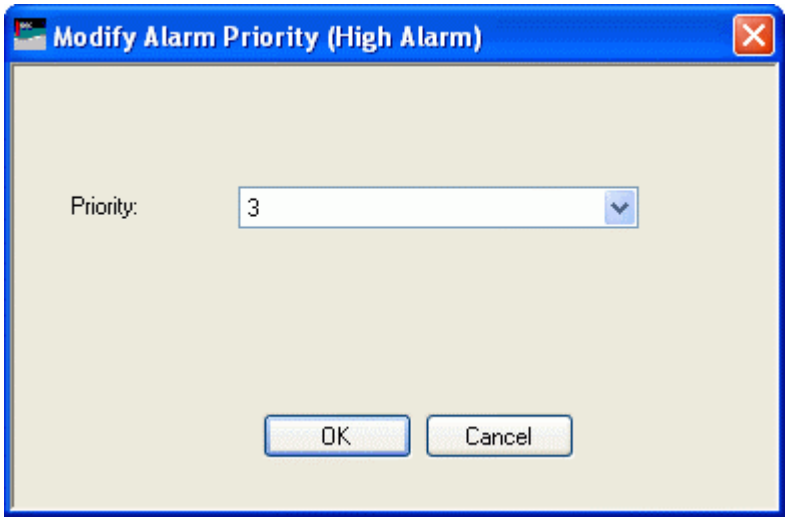
If there are alarms associated with the selected Point and the 'On add a ROC Point to the database automatically add associated alarm conditions' option is checked on the 'System Parameters Wizard General Page', then they will be listed immediately under the Point in the Tree View window.

There is a context menu available on each Alarm Condition.

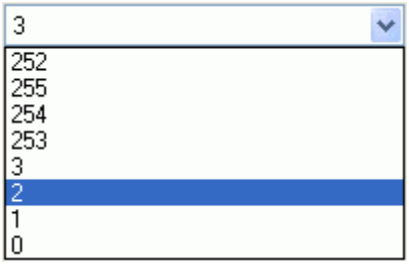


Modify Alarm Priority

If the 'Modify Alarm Priority' option on any Alarm Condition is selected, the priority of the Alarm Condition can be changed using this dialog.

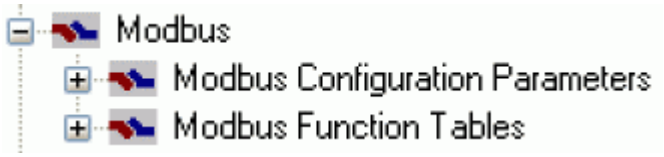


The new priority is chosen from the drop-down list:



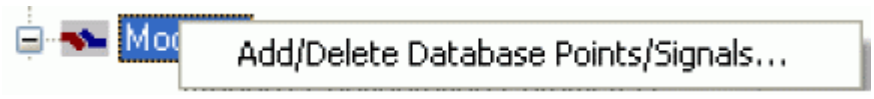
4.1.2.6.4.6 Modbus Node

The Modbus node contains the parent nodes for all Modbus Type Points that are used within the ROC Device.



Modbus Context Menu

The context menu that appears when you clicks the right mouse button whilst this node is selected. It enables you to map more ROC Points to the OpenEnterprise database.

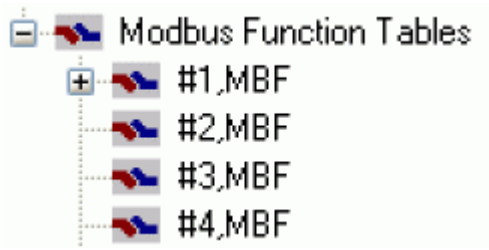


Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

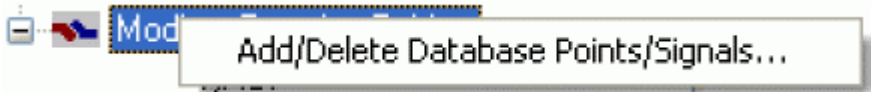
Modbus Point Types

The Modbus Point Type nodes are the parent nodes for all Modbus Type Points within the selected Device. This includes 'Modbus Configuration Parameters' and 'Modbus Function Tables' Type Points also. When the plus sign to the left of the specific Modbus Point Type node is selected, it expands to reveal any available Points.



Modbus Point Type Context Menu

This is the context menu that is available on any of the System Info Point Type nodes. It enables you to add or delete Points and Signals of this type to the OpenEnterprise database.



Add/Delete Database Points/Signals

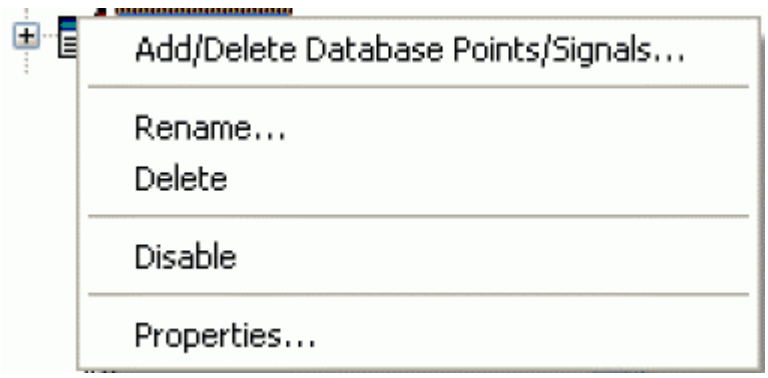
This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Modbus Point

If the Modbus Point has any specific Parameters mapped to the appropriate OpenEnterprise ROC signal table, it will have a plus sign to the left of it, which when selected will reveal the signals that have been mapped to Parameters for the selected ROC Point.

Modbus Point Context Menu

This context menu belongs to all individual ROC Points.



Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Rename

Opens the 'Point Rename Dialog', which enables you to rename this Point.

Delete Point

The selected Point will be deleted.

Disable Point

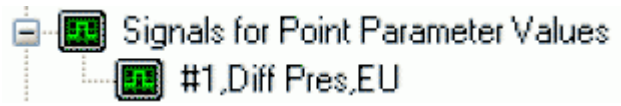
The selected Point will be disabled.

Properties

Opens the 'Point Properties Dialog', which enables you to associate a 'Parameter Pattern Template' with the Point.

Signals for Point Parameter Values

The 'Signals for Point Parameter Values' node is the parent for any ROC Signals that have been created from the Point. The parent node and each Point node have context menus.



Signals for Point Parameter Values Context Menu

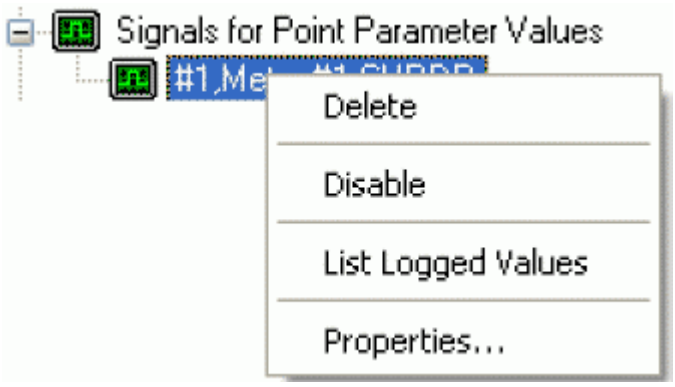
The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

List Logged Values

Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.

Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

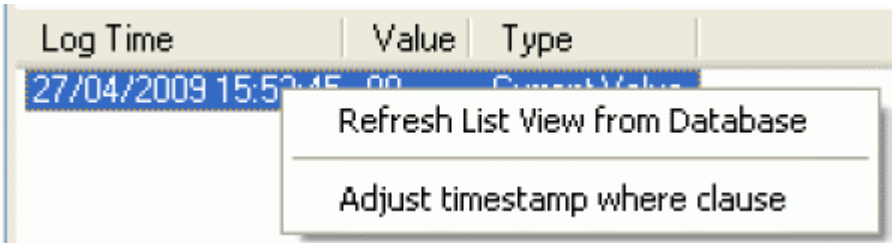
When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.

Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Logged Values List Context Menu

The Logged Values list context menu has two options.



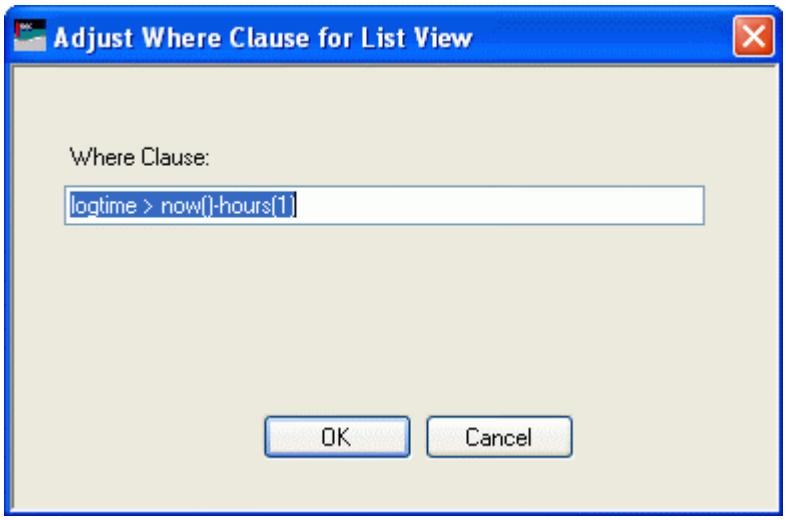
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

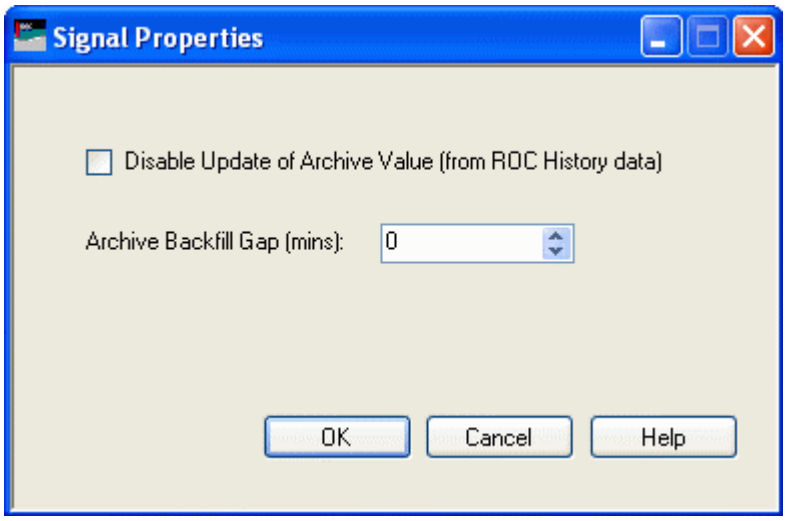
Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

If this value is greater than zero, then the RDI will attempt to only update history values if there is a 'gap' in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a 'gap' - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

4.1.2.6.4.7 User Defined Node

The User Defined node contains the parent nodes for all User Defined Type Points that are used within the ROC Device.

User Defined Context Menu

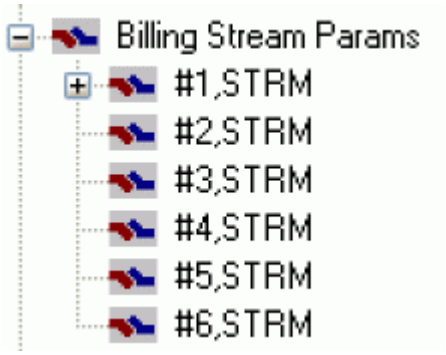
The context menu that appears when the user clicks the right mouse button whilst this node is selected. It enables the user to map more ROC Points to the OpenEnterprise database.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

User Defined Point Types

User Defined Point Type nodes are the parent nodes for all User Defined Type Points within the selected Device. When the plus sign to the left of the specific User Defined Point Type node is selected, it expands to reveal any available Points.



User Defined Point Type Context Menu

This is the context menu that is available on any of the User Defined Point Type nodes. It enables the user to add or delete Points and Signals of this type to the OpenEnterprise database.

Add/Delete Database Points/Signals

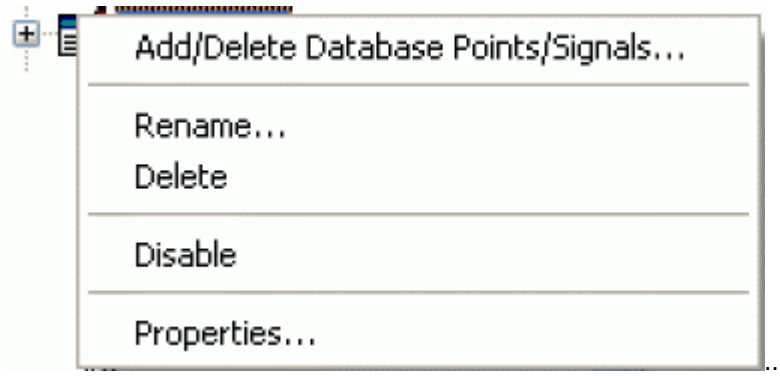
This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

User Defined Point

If the User Defined Point has any specific Parameters mapped to the appropriate OpenEnterprise ROC signal table, it will have a plus sign to the left of it, which when selected will reveal the signals that have been mapped to Parameters for the selected ROC Point.

User Defined Point Context Menu

This context menu belongs to all individual ROC Points.



Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Rename

Opens the 'Point Rename Dialog', which enables you to rename this Point.

Delete Point

The selected Point will be deleted.

Disable Point

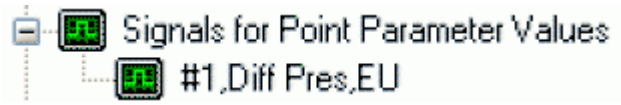
The selected Point will be disabled.

Properties

Opens the 'Point Properties Dialog', which enables you to associate a 'Parameter Pattern Template' with the Point.

Signals for Point Parameter Values

The 'Signals for Point Parameter Values' node is the parent for any ROC Signals that have been created from the Point. The parent node and each Point node have context menus.



Signals for Point Parameter Values Context Menu

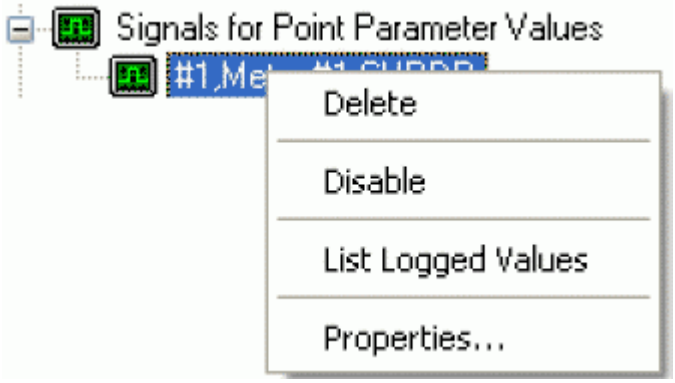
The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

List Logged Values

Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.

Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

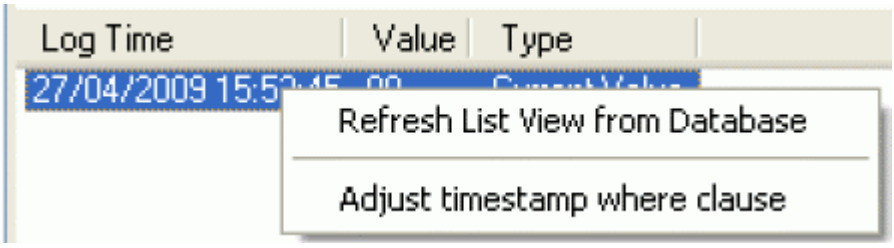
When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.

Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Logged Values List Context Menu

The Logged Values list context menu has two options.



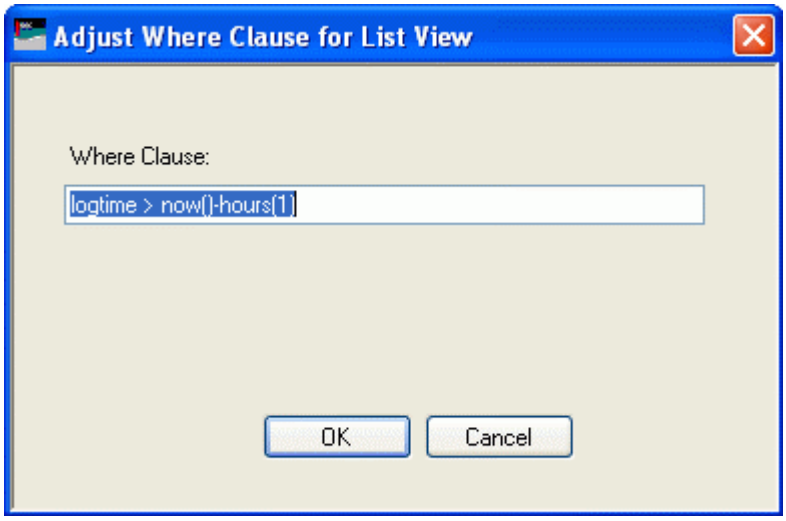
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

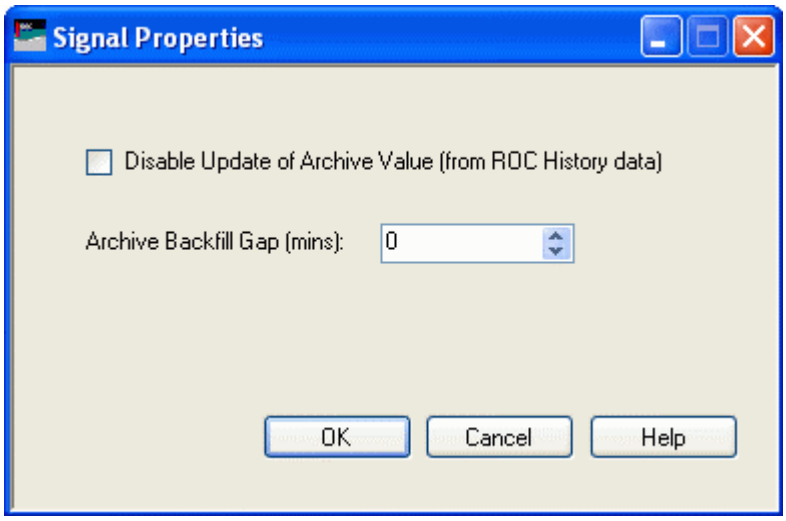
Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

If this value is greater than zero, then the RDI will attempt to only update history values if there is a 'gap' in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a 'gap' - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

4.1.2.6.4.8 User/Security Node

The User/Security node contains the parent nodes for all User/Security Type Points that are used within the ROC Device.

User/Security Context Menu

The context menu that appears when the user clicks the right mouse button whilst this node is selected. It enables the user to map more ROC Points to the OpenEnterprise database.

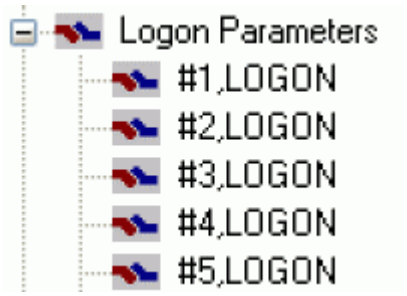
Insert text here...

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

User/Security Point Types

User/Security Point Type nodes are the parent nodes for all User/Security Type Points within the selected Device. When the plus sign to the left of the specific User/Security Point Type node is selected, it expands to reveal any available Points.



User/Security Point Type Context Menu

This is the context menu that is available on any of the User/Security Point Type nodes. It enables the user to add or delete Points and Signals of this type to the OpenEnterprise database.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

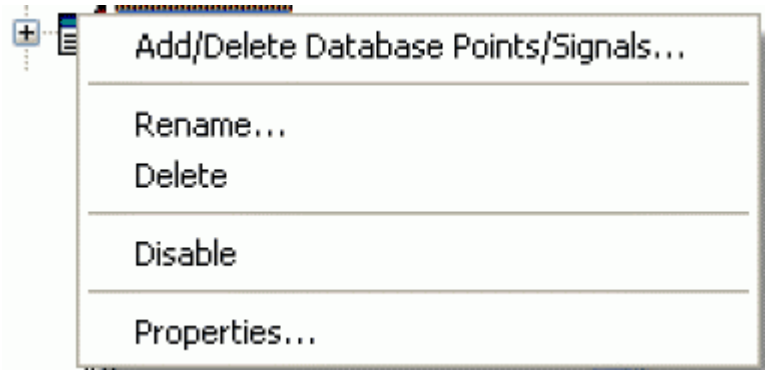
User/Security Point

If the User Defined Point has any specific Parameters mapped to the appropriate OpenEnterprise ROC signal table, it will have a plus sign to the left of it, which when selected will reveal the signals that have been mapped to Parameters for the selected ROC Point.

User/Security Point Context Menu

User/Security Point Context Menu

This context menu belongs to all individual ROC Points.



Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Rename

Opens the 'Point Rename Dialog', which enables you to rename this Point.

Delete Point

The selected Point will be deleted.

Disable Point

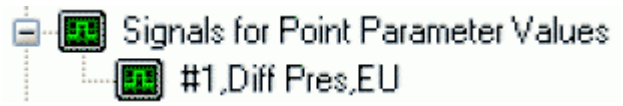
The selected Point will be disabled.

Properties

Opens the 'Point Properties Dialog', which enables you to associate a 'Parameter Pattern Template' with the Point.

Signals for Point Parameter Values

The 'Signals for Point Parameter Values' node is the parent for any ROC Signals that have been created from the Point. The parent node and each Point node have context menus.



Signals for Point Parameter Values Context Menu

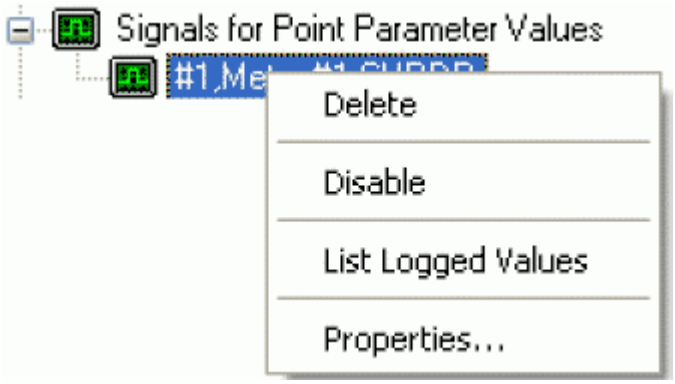
The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

List Logged Values

Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.

Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

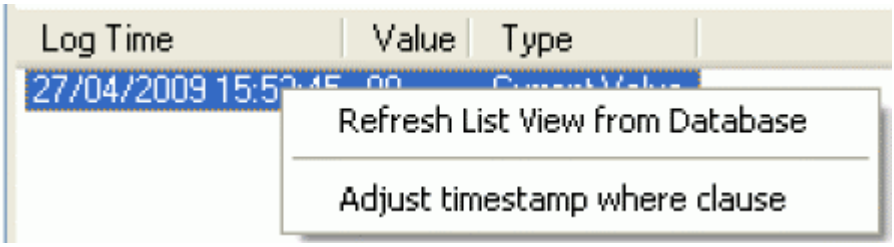
When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.

Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Logged Values List Context Menu

The Logged Values list context menu has two options.



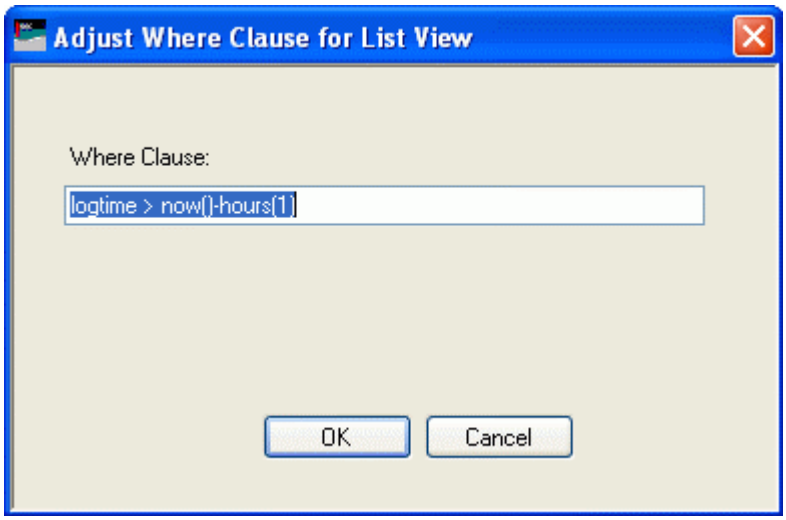
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

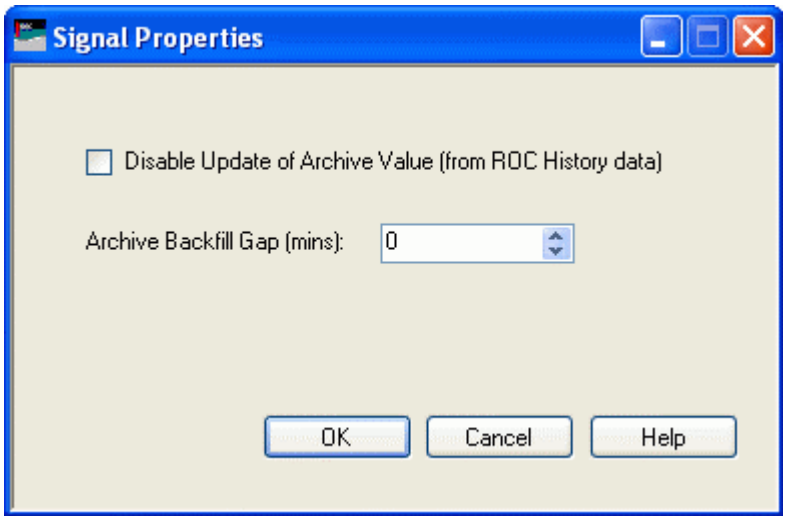
Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

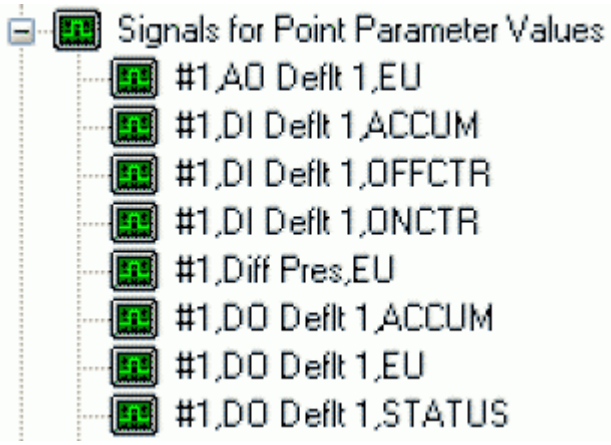
If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

If this value is greater than zero, then the RDI will attempt to only update history values if there is a 'gap' in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a 'gap' - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

4.1.2.6.5 Signals for Point Parameter Values

This node is the parent node for viewing all Signals that have been created for all Points in the Device. They can be viewed under this node or under the node of the Point for which they were created.



4.1.2.6.5.1 Signals for Point Parameter Values Context Menu

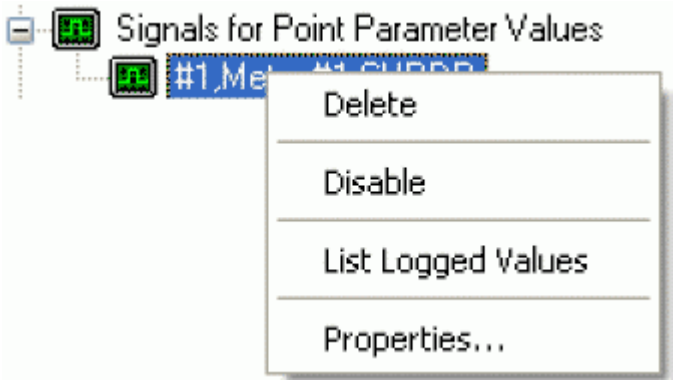
The 'Signals for Point Parameter Values' parent node has this single context menu. Click on it below for more help.

Add/Delete Database Points/Signals

This option enables you to add or delete ROC Points or Signals from the OpenEnterprise database. It opens the 'Points Selection' page of the 'ROC Device Wizard' so that you can select the Points and Parameters required.

4.1.2.6.5.2 Signal Context Menu

This context menu is available from any Signal node that appears under the 'Signals for Point Parameter Values' node that comes under any Point node.



Delete

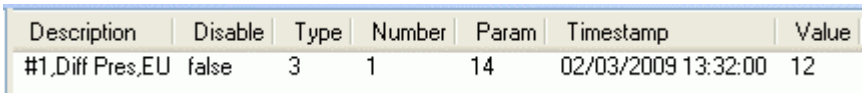
The selected ROC Signal will be deleted from the OpenEnterprise database.

Disable

The selected ROC Signal will be disabled.

List Logged Values

Overwrites the List View Pane which prior to using this menu item contains the single selected Signal object.



Description	Disable	Type	Number	Param	Timestamp	Value
#1,Diff Pres,EU	false	3	1	14	02/03/2009 13:32:00	12

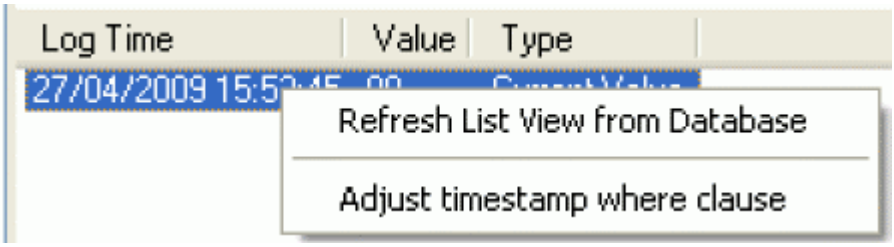
When the 'List Logged Values' menu item is selected from the object on the Tree View context menu the last hours worth of sampled data for the selected Signal appears in the List View Pane.

The Logged Values list has a context menu which appears when you selects any value and right clicks the mouse.

Log Time	Value	Type
02/03/2009 13:37:01	12	Current Value
02/03/2009 13:36:00	12	Current Value
02/03/2009 13:35:01	12	Current Value
02/03/2009 13:34:00	12	Current Value
02/03/2009 13:33:01	12	Current Value
02/03/2009 13:32:00	12	Current Value
02/03/2009 13:31:00	12	Current Value
02/03/2009 13:30:01	12	Current Value
02/03/2009 13:29:00	12	Current Value
02/03/2009 13:28:00	12	Current Value
02/03/2009 13:27:01	12	Current Value
02/03/2009 13:26:01	12	Current Value
02/03/2009 13:25:00	12	Current Value
02/03/2009 13:24:01	12	Current Value

Logged Values List Context Menu

The Logged Values list context menu has two options.



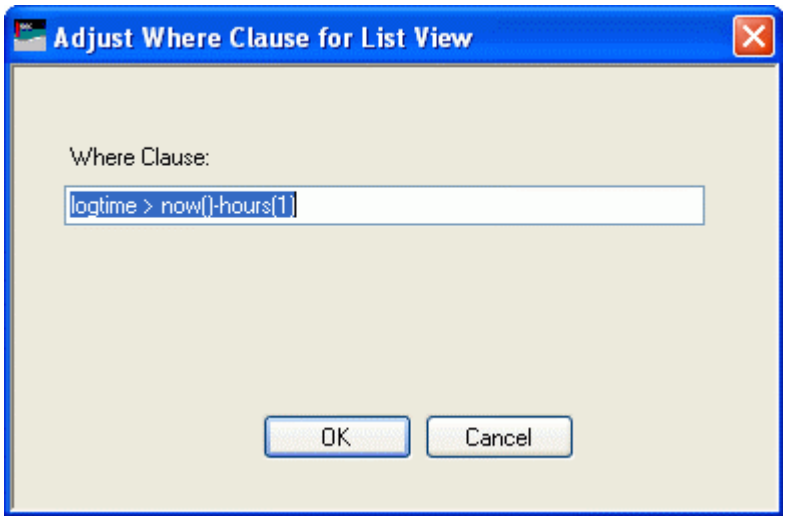
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

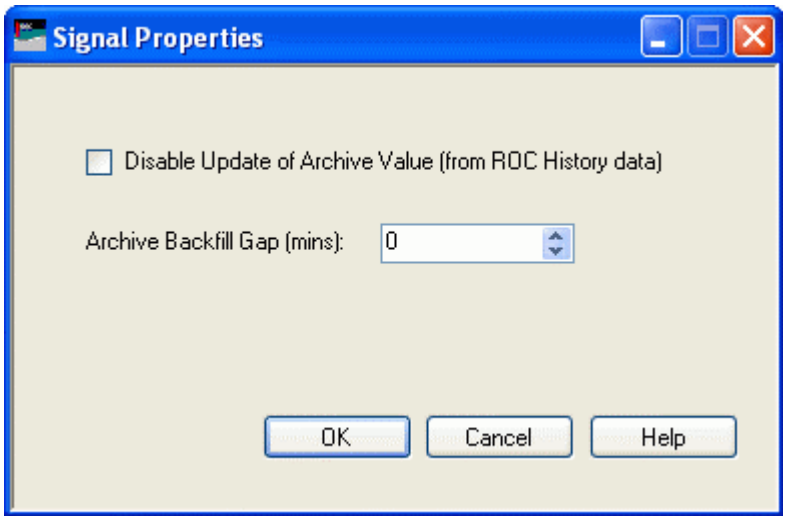
Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



Signal Properties

The 'Signal Properties' dialog enables you to configure how the ROC RDI updates the ArchiveValue and ArchiveTimestamp fields of the selected ROC Signal on receipt of history values from the ROC Device.



Disable Update of Archive Value

If this box is checked then history values retrieved from the Device will not be written to the ArchiveValue and the ArchiveTimestamp fields of the ROC Realanalog or ROC Digital tables.

If it remains unchecked (the default) then the ArchiveValue and ArchiveTimestamp field for the selected Signal will be updated from the ROC Device.

Archive Backfill Gap

If the value in this field is 0 (zero), then history values retrieved from the Device will always be written to the selected Signal's ArchiveValue and ArchiveTimestamp fields (unless the 'Disable Update of Archive Value' field is checked.

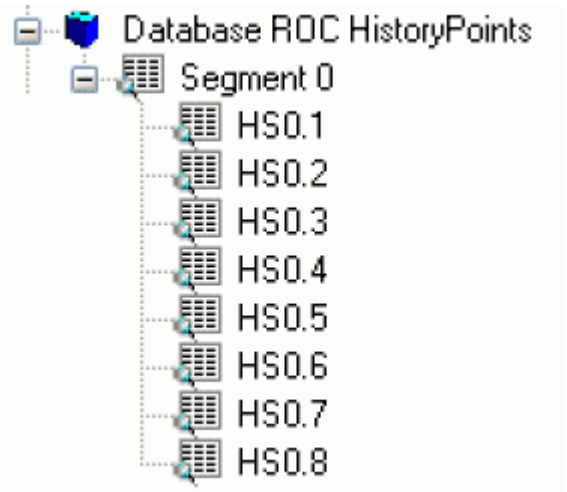
If this value is greater than zero, then the RDI will attempt to only update history values if there is a ‘gap’ in the receipt of the Current Values.

No special RDI processing will trigger a read of history on detecting a ‘gap’ - gaps will only be filled if the request to read the history values is configured and scheduled (or manually triggered).

4.1.2.6.6 Database ROC History Points

This node is the parent of all ROC History Points that are configured in the device. ROC devices can collect historical samples for any of the Points within the device. The samples are stored in areas of memory within the device known as History Segments. A device may have one or more History Segments assigned, each having a number of sub segments. The total number of History Segments possible is limited by the amount of memory available within the device.

Each sub segment (e.g. HS0.1) can be set up to sample a selected ROC parameter (defined by its Type, Logical Number and Parameter Number). Each Historical Segment then is configured to collect samples for that Parameter in 3 ways: a Daily rate (this records a compressed value - e.g. average, minimum, maximum), a Periodic rate (a specific period defined by you) and a Minute/Current rate (this records the current value at one minute intervals).

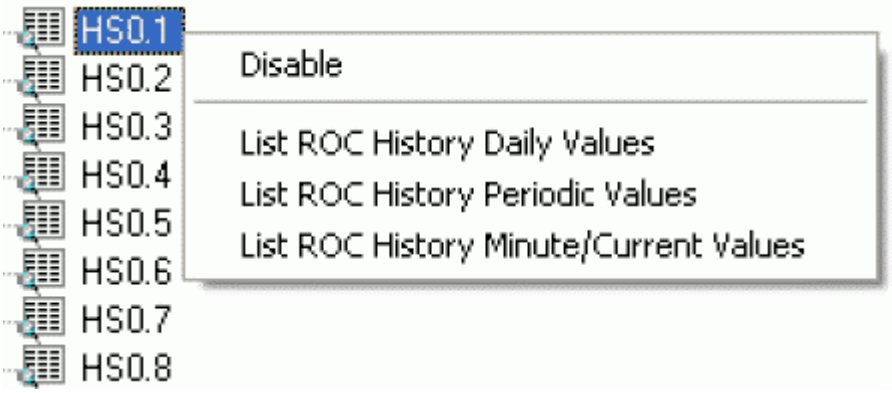


4.1.2.6.6.1 Database ROC History Points Context Menu

This context menu enables you to clear all History Points.

4.1.2.6.6.2 HSO Point Context Menu

When you selects any Historical Segment a context menu is available. Click the context menu items on the image below for help.



Disable

Disables the selected Historical Segment point.

List ROC History Daily Values

Refreshes the List View Pane with a list of daily values for the selected History Segment .

The list now has a context menu which appears when you selects any value and right clicks the mouse.

Timestamp	Log Point	Value	Type
28/04/2009 09:00:00	42,0,6	1440.06665039063	History (daily)
27/04/2009 09:00:00	42,0,6	725.383361816406	History (daily)
26/04/2009 09:00:00	42,0,6	0	History (daily)
25/04/2009 09:00:00	42,0,6	0	History (daily)
24/04/2009 09:00:00	42,0,6	0	History (daily)
23/04/2009 09:00:00	42,0,6	0	History (daily)
22/04/2009 09:00:00	42,0,6	0	History (daily)
21/04/2009 09:00:00	42,0,6	0	History (daily)
20/04/2009 09:00:00	42,0,6	0	History (daily)
19/04/2009 09:00:00	42,0,6	0	History (daily)

Logged Values List Context Menu

The Logged Values list context menu has two options.

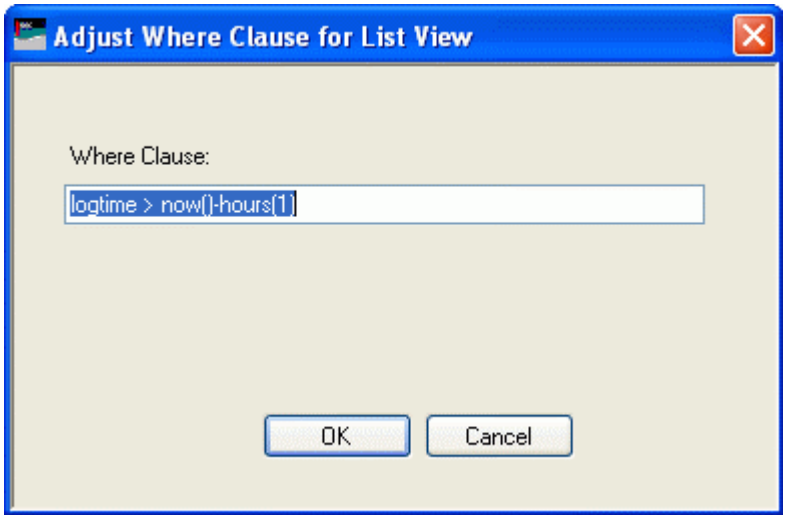
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

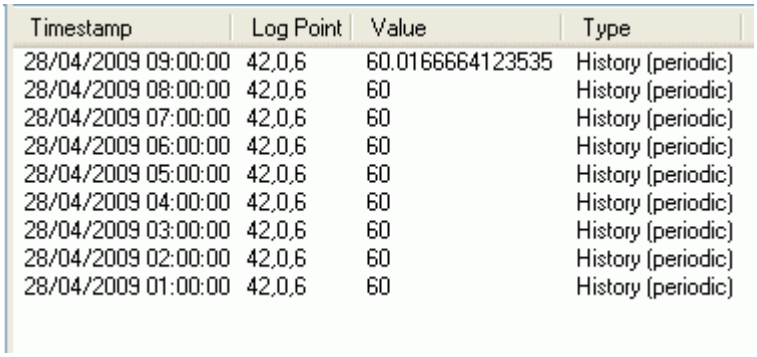
The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



List ROC History Periodic Values

Refreshes the List View Pane with a list of periodic values for the selected History Segment .

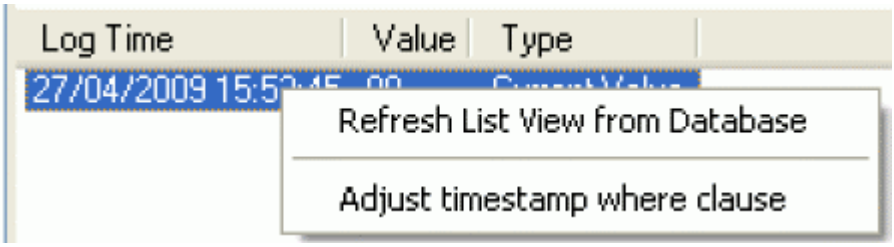
The list now has a context menu which appears when you selects any value and right clicks the mouse.



Timestamp	Log Point	Value	Type
28/04/2009 09:00:00	42,0,6	60.0166664123535	History (periodic)
28/04/2009 08:00:00	42,0,6	60	History (periodic)
28/04/2009 07:00:00	42,0,6	60	History (periodic)
28/04/2009 06:00:00	42,0,6	60	History (periodic)
28/04/2009 05:00:00	42,0,6	60	History (periodic)
28/04/2009 04:00:00	42,0,6	60	History (periodic)
28/04/2009 03:00:00	42,0,6	60	History (periodic)
28/04/2009 02:00:00	42,0,6	60	History (periodic)
28/04/2009 01:00:00	42,0,6	60	History (periodic)

Logged Values List Context Menu

The Logged Values list context menu has two options.



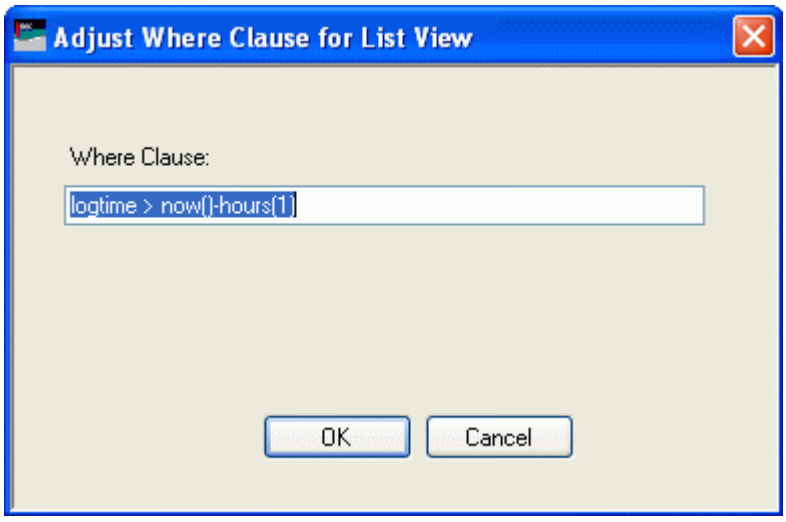
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



List ROC History Minute/Current Values

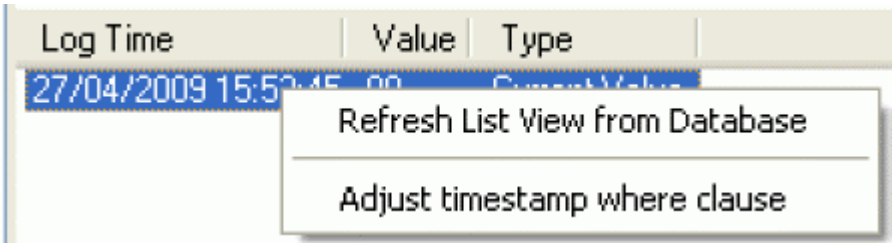
Refreshes the List View Pane with a list of minute/current values for the selected History Segment .

The list now has a context menu which appears when you selects any value and right clicks the mouse.

Timestamp	Log Point	Value	Type
28/04/2009 10:35:00	42,0,6	1	History (minute)
28/04/2009 10:34:00	42,0,6	1	History (minute)
28/04/2009 10:33:00	42,0,6	1	History (minute)
28/04/2009 10:32:00	42,0,6	1	History (minute)
28/04/2009 10:31:00	42,0,6	1	History (minute)
28/04/2009 10:30:00	42,0,6	1.01666665077209	History (minute)
28/04/2009 10:29:00	42,0,6	1	History (minute)
28/04/2009 10:28:00	42,0,6	1	History (minute)
28/04/2009 10:27:00	42,0,6	1	History (minute)
28/04/2009 10:26:00	42,0,6	1	History (minute)
28/04/2009 10:25:00	42,0,6	1	History (minute)
28/04/2009 10:24:00	42,0,6	1	History (minute)
28/04/2009 10:23:00	42,0,6	1	History (minute)
28/04/2009 10:22:00	42,0,6	1	History (minute)
28/04/2009 10:21:00	42,0,6	1	History (minute)
28/04/2009 10:20:00	42,0,6	0.983333349227905	History (minute)
28/04/2009 10:19:00	42,0,6	1	History (minute)
28/04/2009 10:18:00	42,0,6	1	History (minute)
28/04/2009 10:17:00	42,0,6	1	History (minute)
28/04/2009 10:16:00	42,0,6	1	History (minute)
28/04/2009 10:15:00	42,0,6	1	History (minute)
28/04/2009 10:14:00	42,0,6	1	History (minute)

Logged Values List Context Menu

The Logged Values list context menu has two options.



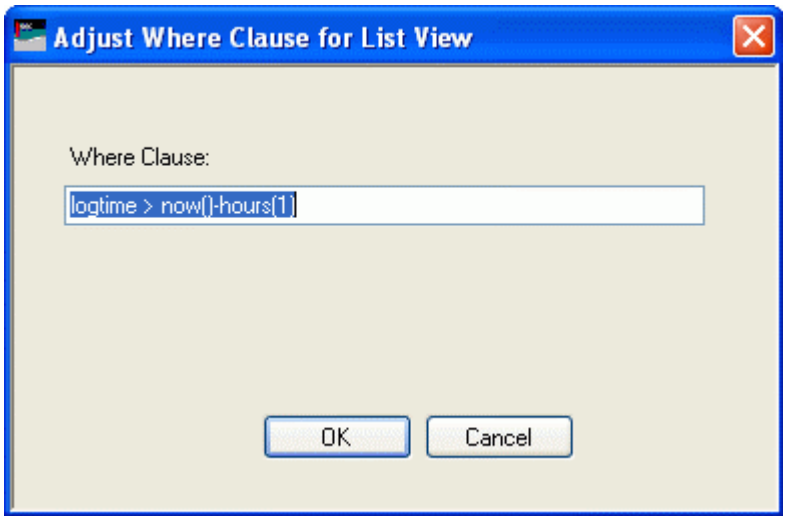
Refresh List View from Database

Refreshes the list with the most recent values found in the database.

Adjust timestamp where clause

Enables you to retrieve more historical data for a selected signal by changing the amount of time requested by the query. The default query retrieves the last hours worth of data.

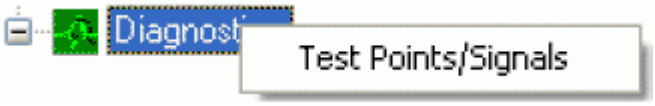
The simplest way to do this is to type a new value into the brackets after the named time (could be 'hours' or 'days') - e.g. 'logtime > now()-hours(5)'. This would retrieve the last five hours worth of data for the selected signal from the OpenEnterprise database.



4.1.2.6.7 Diagnostics

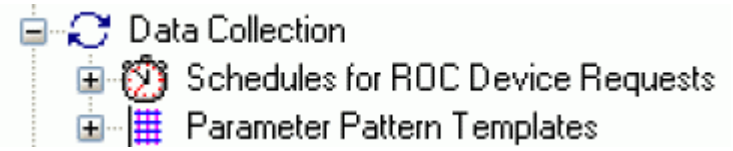
This node enables you to test ROC Points and Signals. The Diagnostics node has a single context menu that opens the 'Points/Signals Test Page' for this purpose.

This context menu opens the 'Points/Signals TEST PAGE', which enables you to test that the ROC RDI can read and write to all ROC Points and Signals.



4.2 Data Collection

This is the parent node for the Schedules and Parameter Pattern Template nodes.

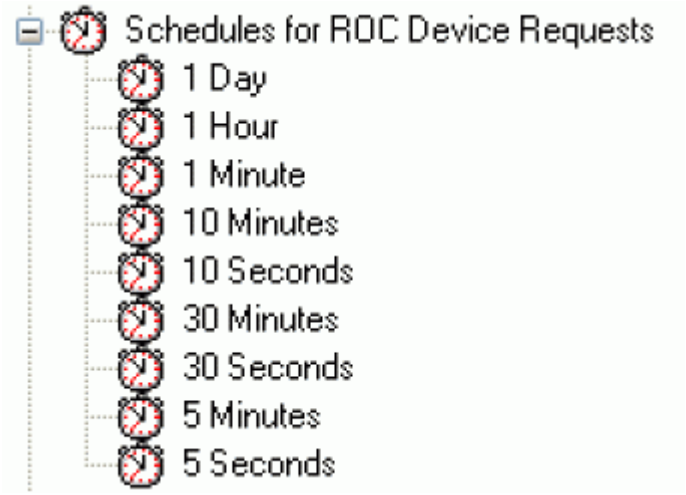


4.2.1 Data Collection Context Menu

This context menu enables you to redraw and refresh all the data in this node.

4.2.2 Schedules for ROC Device Requests

Schedules can be associated with Requests to poll data from Devices on a regular basis. The default Schedules are shown in the image below, but new ones can be created using the context menus from the Schedules node or from individual Schedules.



4.2.2.1 Schedules Context Menu

The Schedules context menu enables you to create a new Schedule or paste one that has been copied.

4.2.2.1.1 New Schedule

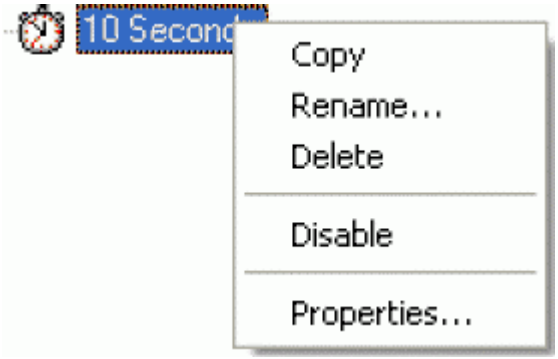
This option opens the 'Schedule Configuration' dialog, which enables new schedules to be created.

4.2.2.1.2 Paste

This option enables you to paste a new Schedule from one that has been copied.

4.2.2.2 Schedule Context Menu

This context menu enables you to copy, rename, delete or disable a configured Schedule. It also provides access to the Property page for the selected Schedule.

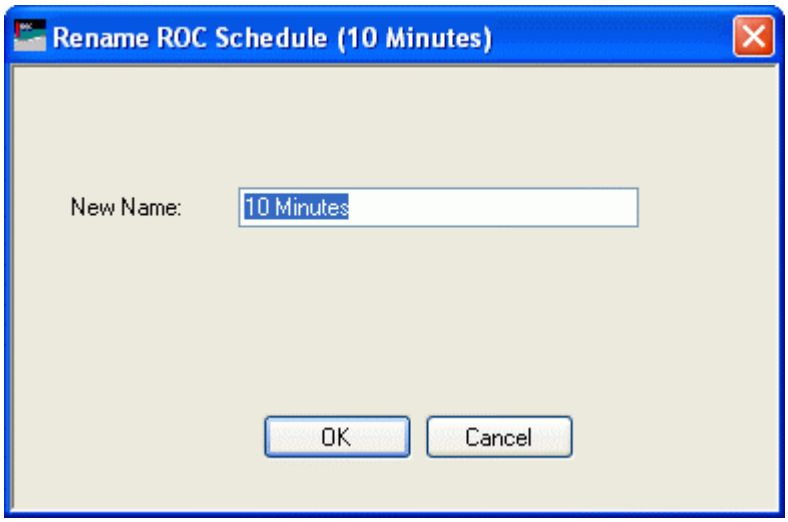


4.2.2.2.1 Copy

Copies the selected Schedule so that it can be pasted from the 'Schedules for ROC Requests' context menu.

4.2.2.2.2 Rename

Enables you to rename the selected Schedule. This dialog appears:



The user must type a new name for the Schedule into the 'New Name' field and click the [OK] button. If the 'Cancel' button is selected, the renaming is aborted.

4.2.2.2.3 Delete

Enables you to delete the selected Schedule.

4.2.2.2.4 Disable

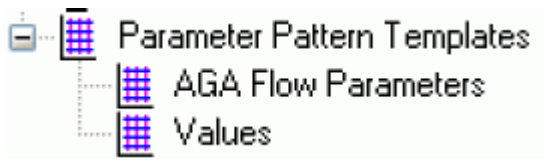
Disables the selected Schedule. It will not be able to run until it is enabled.

4.2.2.2.5 Properties

Opens the 'Schedule Configuration Wizard' property page.

4.2.3 Parameter Pattern Templates

This is the parent node for all Parameter Pattern Templates that are created.



4.2.3.1 Parameter Pattern Tempates Context Menu

This context menu enables you to create a new 'Parameter Pattern Template' or paste a new one from a previously copied Template.

Parameter Pattern Templates node

4.2.3.1.1 New Parameter Pattern Template

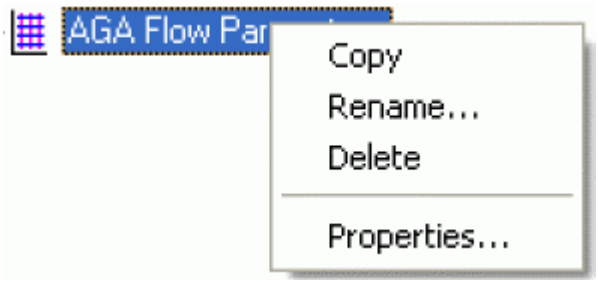
This option opens the 'Parameter Pattern Template' page, which enables you to configure a new Parameter Pattern Template.

4.2.3.1.2 Paste

Enables you to paste a previously copied Parameter Pattern Template.

4.2.3.2 Parameter Pattern Template Context Menu

This context menu enables you to copy, rename or delete the selected Template or view its properties.



4.2.3.2.1 Copy

Enables you to copy the currently selected Parameter Pattern Template for pasting.

4.2.3.2.2 Rename

Enables you to rename the currently selected Parameter Pattern Template.

4.2.3.2.3 Delete Parameter Pattern

Enables you to delete the currently selected Parameter Pattern Template.

4.2.3.2.4 Properties

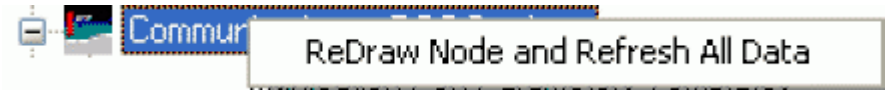
Displays the properties of the currently selected Parameter Pattern Template from the General page of the Parameter Pattern Template Wizard.

4.3 Communication to ROC Devices

This node is the parent for templates to do with communication. It contains two sub nodes - the 'Communication Port Parameters Templates' node and the 'ROC Drivers' node.

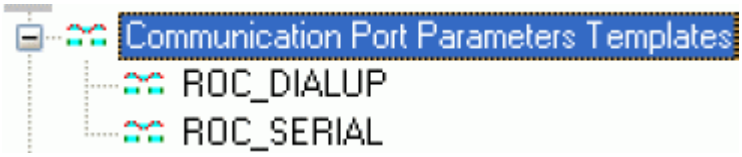
4.3.1 Communication to ROC Devices Context Menu

This context menu enables you to redraw and refresh all the data in this node.



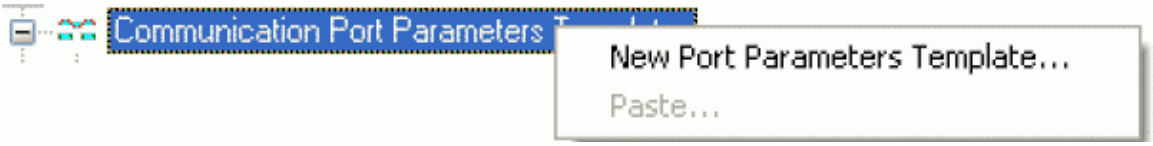
4.3.2 Communication Port Parameters Templates

This node enables you to create templates that can be used when creating new DialUp or Serial communication ports.



4.3.2.1 Port Parameters Templates Context Menu

This node enables you to configure new 'Port Parameters' templates.

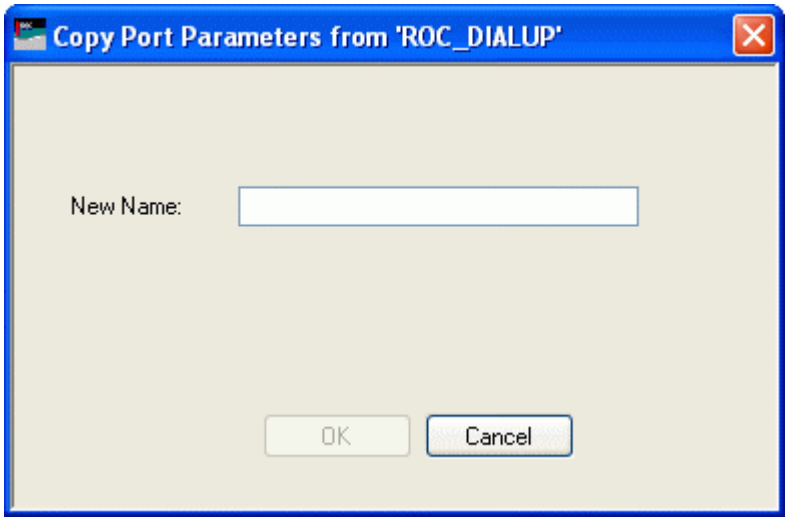


4.3.2.1.1 New Port Parameters Template

This menu item enables Port Parameter Templates for 'Serial' and 'Dial-up' ports to be configured.

4.3.2.1.2 Paste

Enables you to paste a new Port Parameter template from a previously copied one. This dialog will prompt you to enter a name for the new Port Parameter template.



4.3.2.2 ROC Dialup/Serial node Context

The context menu on each Dialup/Serial node enables you to copy, delete or view the properties of that node.

4.3.2.2.1 Copy

Copies the selected Dialup or Serial node for pasting.

4.3.2.2.2 Delete

Deletes the selected Dialup or Serial node. The user will be asked to confirm the deletion.

4.3.2.2.3 Properties

Displays the 'Port Parameters Template Configuration' page for the selected node.

4.3.3 ROC Drivers

This node is the parent of ROC Driver nodes. Each ROC Driver node represents a separate ROC Driver being used by the system to update the database concerning ROC device data. Most systems will use only one ROC driver (RDI), but some systems may benefit from having two or more drivers.

Each driver contains its own Serial, DialUp and Modem Pool nodes that define the communication configuration that is used by that driver when connecting to ROC Devices.

4.3.3.1 ROC Drivers Context Menu

The context menu on the ROC Drivers node enables you to add a new ROC Driver.

4.3.3.2 New ROC Driver...

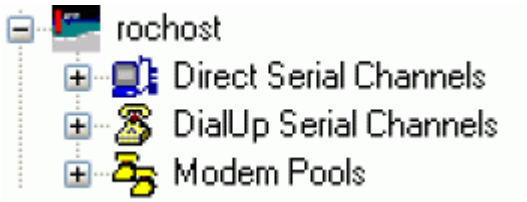
This option opens the ROC Driver Wizard.

4.3.3.3 ROC Driver

Under each ROC driver there are three communication nodes that are used to configure direct and dialup serial communications for that driver. Multiple dialup communication channels need further configuration using modem pools, so that the RDI can pair dialup channels with different modems when necessary.

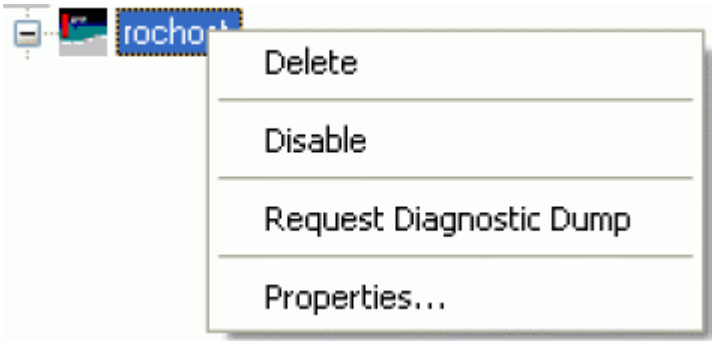
The screen below shows the default ROC driver with the 'Direct Serial', 'DialUp Serial Channels' and 'Modem Pools' nodes visible.

Some channels and modem pools have been configured, as indicated by the plus signs to the left of each of these nodes.



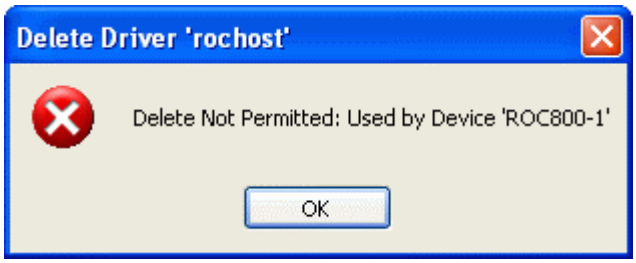
4.3.3.3.1 ROC Driver Context Menu

The ROC Driver node context menu enables you to delete, disable or view properties for the selected ROC Driver. It also enables you to initiate a diagnostic dump for the selected item.



4.3.3.3.2 Delete

Deletes the selected ROC Driver. If the ROC Driver is being used by a Device, you cannot delete it. This message will be displayed:



4.3.3.3.3 Disable

Disables the selected ROC Driver. When disabled, the driver will appear in the Tree View with a red cross through it.

4.3.3.3.4 Request Diagnostic Dump

Dumps a log file (a text file with an extension of .log) of the ROC RDI's activities for each Port. The directory for the files is indicated by the ROC RDI command line parameter '**-l**' (letter L in lower case).

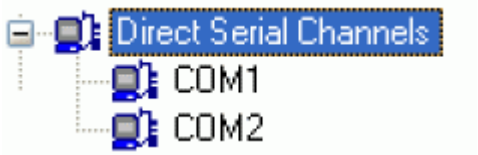
For instance a command line parameter of **-l\rdilog** would cause the ROC RDI to dump the log file into a directory named 'rdilog' found within the ROC RDI's working directory ('C:\Program Files\Bristol\OpenEnterprise\Bin' by default). If the directory does not exist, it must be created by the user.

4.3.3.3.5 Properties

Opens the ROC Driver Wizard, which enables you to modify the driver properties.

4.3.3.3.6 Direct Serial Channels

Right click on the Direct Serial Channels node to access a context menu that enables you to configure serial channel communications to your ROC Device.



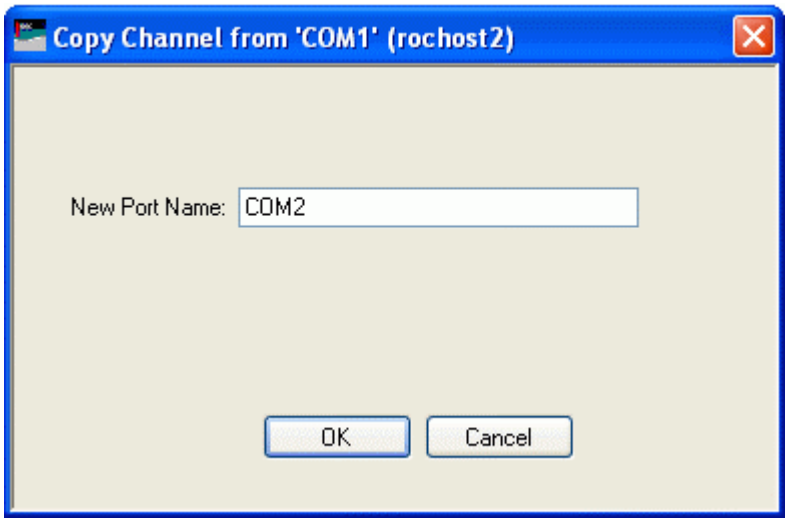
4.3.3.3.6.1 Direct Serial Channels Context Menu

4.3.3.3.6.2 New Direct Serial Channel

This context menu opens the Direct Serial Channel Configuration Wizard.

4.3.3.3.6.3 Paste

This option is only available if a previously configured Direct Serial Channel is copied. If the option is available, you will be prompted for a new name for the pasted channel.



The copied Direct Serial Channel will be pasted as a new node under the Direct Serial Channels node.

4.3.3.3.7 DialUp Serial Channels

Right click on the DialUp Serial Channels node to access a context menu that enables you to configure serial channel communications to your ROC Device.

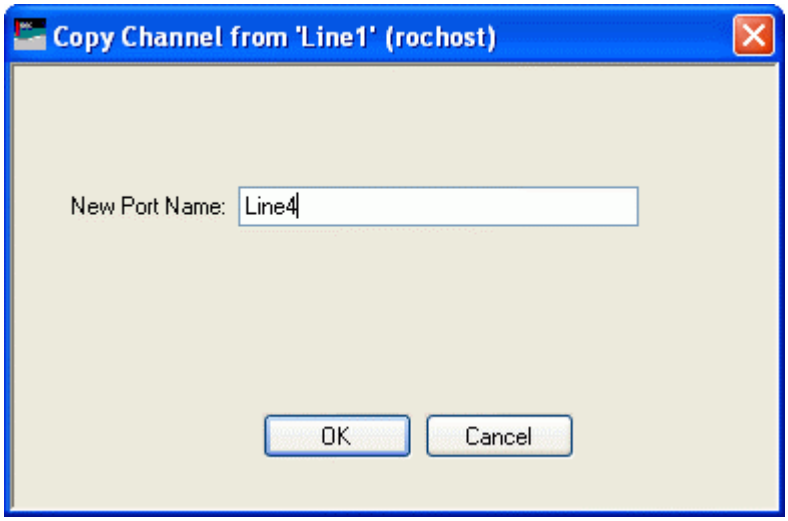
4.3.3.3.7.1 Direct Serial Channels Context Menu

4.3.3.3.7.2 New DialUp Serial Channel

This context menu opens the DialUp Serial Channel Configuration Wizard.

4.3.3.3.7.3 Paste

This option is only available if a previously configured DialUp Serial Channel is copied. If the option is available, you will be prompted for a new name for the pasted channel.



The copied DialUp Serial Channel will be pasted as a new node under the Direct Serial Channels node.

4.3.3.3.8 Modem Pools

Right click on the Modem Pools node to access a context menu that enables you to configure Modem Pools for use with dial up serial channels.

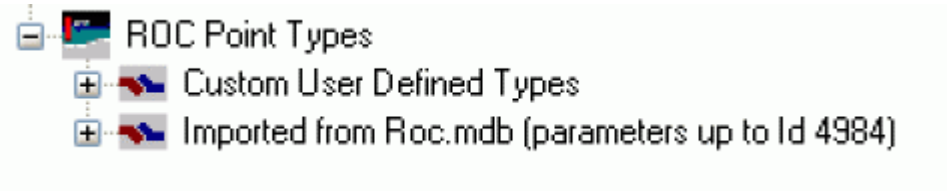
4.3.3.3.8.1 Modem Pools Context Menu

4.3.3.3.8.2 New Modem Pool

This context menu opens the Modem Pool Configuration Wizard.

4.4 ROC Point Types

This node displays all ROC Point Types that are in the OpenEnterprise database.



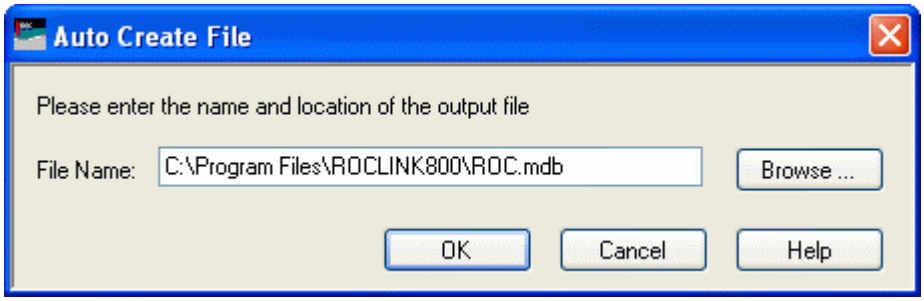
4.4.1 ROC Point Types Context Menu

The 'ROC Point Types' node has this context menu. It can be used to create SQL script files that will update the OpenEnterprise database from a new ROC.mdb file.

4.4.1.1 Update Database from new Roc.mdb

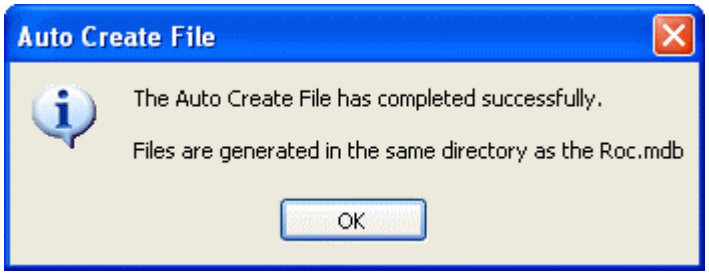
The 'Create SQL files for new parameters from new ROC.mdb file' context menu enables the ROC Configuration Tool to create SQL files for ROC Parameters from a new ROC.mdb database file.

First, you will be prompted for the location of the new ROC.mdb file with the 'Auto Create File' dialog:-



If the ROCLink800 folder is not specified in the 'File Name' field you may need to use the [Browse...] button to find the new ROC.mdb file. This is because the ROC Configuration Tool needs supporting files found in the ROCLink800 folder.

Click the [OK] button to begin creating the SQL files. If the files were created successfully you will see this message:-



For an explanation of the files that are created and instructions on how to apply these updates to the OpenEnterprise database see the 'Updating the database from auto-created SQL files' topic.

4.4.1.1.1 Updating the database from auto-created SQL files

Important: ***The tasks described in this topic should only be attempted by a senior administrative user or systems engineer who is very familiar with all aspects of the OpenEnterprise database, and is also experienced in using Structured Query Language (SQL) via the SQL Client.***

It is recommended that an export of all database configuration using the 'Export' functionality of the OEToolbox is completed before beginning this operation.

4.4.1.1.1.1 The created SQL files

If you now look in the directory that contained the new ROC.mdb file, you should find some or all of the following SQL script files:-

- mdb_roclinkparameterroctypeversion_all.sql - This will exist even if there are no new tables or attributes in the ROC.mdb file. It contains all entries from the ROC.mdb file for the roclinkparameterroctypeversion table in the OpenEnterprise database.
- mdb_rocversion_All.sql - This will also exist even if there are no new tables or attributes in the ROC.mdb file. It contains all entries from the ROC.mdb file for the rocversion table in the OpenEnterprise database.
- mdb_RocParameters_Update.sql - This will only exist if the new ROC.mdb file contains new entries for the RocParameters table. It will contain all new entries for this table.
- mdb_RocPointTypes_Update.sql - This will only exist if the new ROC.mdb file contains new entries for the RocPointTypes table. It will contain all new entries for this table.
- RocPointExistingTables_Update - This will only exist if the new ROC.mdb file contains new fields to add to existing RocPoint tables in the database. It will add the new fields and update the RocParameters table.
- RocPointNewTables_Update.sql - This will only exist if the new ROC.mdb file contains new RocPoint tables to add to the database. It will add the new tables and update RocParameters table

4.4.1.1.1.2 How to use the files

1. Firstly, you may want to edit the file mdb_RocPointTypes_Update.sql file, and specify the TagNamePointType, and the PointTypeGroup fields. The TagNamePointType field specifies which PointType (if any) contains the PointTagId for this point. The PointTypeGroup field is used to group the PointTypes in the ROC configuration tool.

2. Now, using the SQL Client, include the mdb_RocParameters_Update.sql, mdb_rocversion_All.sql, mdb_RocParameters_Update.sql, and mdb_roclinkparameterroctypeversion_all.sql files (ignore duplicates; these files could then be used for future builds.

3. Include the RocPointExistingTables_Update.sql file. This adds fields to existing RocPoint tables, and updates the corresponding entry in RocParameters table with the OeDbFieldName. The field names are generated from the ‘name’ field in the ROC.mdb tParameters table and it is likely that they will need editing (to avoid illegal chars, duplicated fieldnames etc). If fields already exist in the table, then the field may not be required (if there is already a RocParameters table entry for the parameter, which has already specified the field). Similarly the RocPointNewTables_Update table adds any new tables required (derived from RocPoint_Table) and updates the corresponding entries in RocParameters table with the OeDbFieldNames. After any edits to fix errors, the SQL files can then be used for future builds. Note that for version 1.82, the new History tables are not added, as these define History Points, (RocHistoryPoint_Table, not RocPoint_Table).

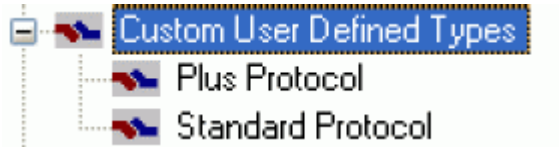
4. After re-start of the ROC configuration tool, select context menu option “Create CL file for tables imported from ROC.mdb” (node”ROC Point Types” - “Imported from ROC.mdb”). This creates a file which contains all the CL required for the tables imported from ROC.mdb that are currently defined in the OE database. The output file name can be specified (recommend RocMdbParam appended with the ROC.mdb version, eg RocMdbParam1_82.cl).

5. Edit the CL file RocAdditionalTypes.cl (function RocCreatePointForAdditionalTypes) to add the creation of the new table (in a similar way to the ‘case’ for RocEnhancedCommModuleConfiguration_table which was added for ROC.mdb version 1.82).

6. Re-start the database with the new CL (replacing the existing RocMdbParam CL). Functionality for the new fields and tables from the new ROC.mdb should now be the same as existing fields.

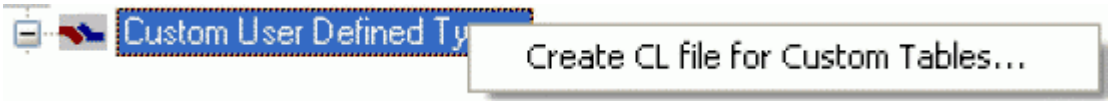
4.4.2 Custom User Defined Types

This node is the parent for Plus and Standard Protocol user defined point types.



4.4.2.1 Custom User Defined Types Context Menu

The 'Custom User Defined Types' node has this context menu.



When selected, the 'Auto Create File' dialog appears, allowing us to define the location for the file that will be created.

4.4.2.2 Plus Protocol

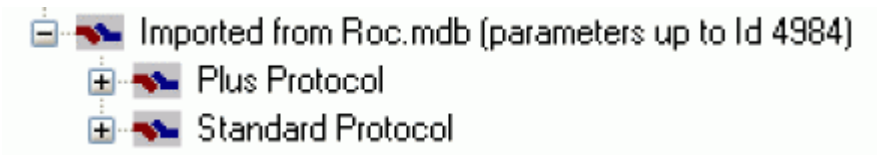
This node contains any ROC Custom User Defined point types that belong to the Plus Protocol.

4.4.2.3 Standard Protocol

This node contains any ROC Custom User Defined point types that belong to the Standard Protocol.

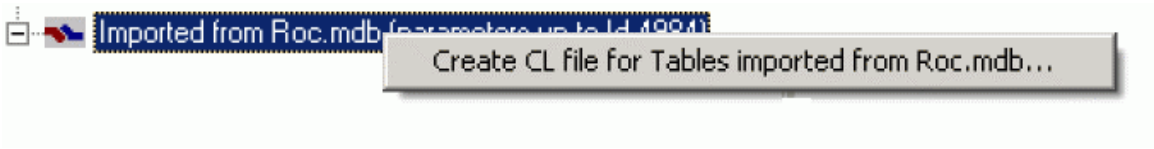
4.4.3 Imported from ROC.mdb

This node contains the Plus and Standard Protocol nodes which contain all ROC Parameters that have been imported into the OpenEnterprise database.



4.4.3.1 Imported from ROC.mdb Context Menu

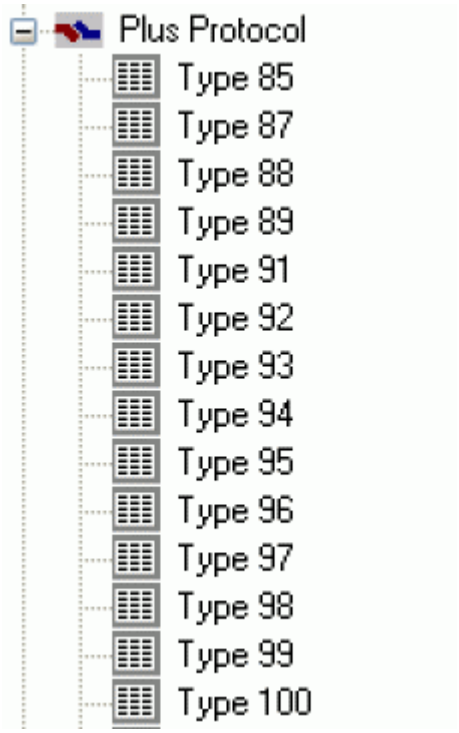
The 'Imported from ROC.mdb' node has this context menu, which enables us to automatically create a new CL file when updating the database from a new ROC.mdb file.



When selected, the 'Auto Create File' dialog appears, allowing us to define the location for the file that will be created.

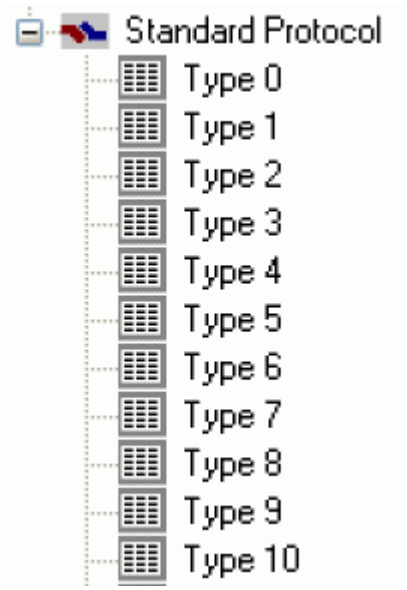
4.4.3.2 Plus Protocol

Each sub node represents a ROC Plus point type. Detailed information on the parameters that are associated with the point type is displayed in the List View Pane when any point type node is selected.

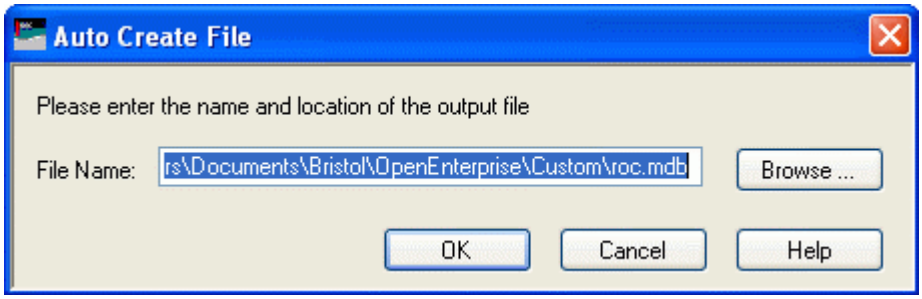


4.4.3.3 Standard Protocol

Each sub node represents a ROC Standard point type. Detailed information on the parameters that are associated with the point type is displayed in the List View Pane when any point type node is selected.



We must confirm the path and filename of the output file. We can use the [Browse] button to search for the location.



4.4.4 File Name

This field will contain a suggested location based on the installation directories and the type of file that will be output. Depending on the context, the file name will be:-

- ROC.mdb - If using the 'Create SQL for Parameters from new ROC.mdb' context menu.
- CustomParam.cl - If using the 'Create CL file for Custom Tables' context menu.
- RocMdbParam.cl - If using the 'Create CL file for Tables imported from ROC.mdb' context menu.
- PointType<Type Number>.sql - If using the 'Create SQL File for this Type' context menu.
- PointType<Type Number>.cl - If using the 'Create CL file for this Type' context menu.

The file name and location can be changed manually or by using the [Browse] button.

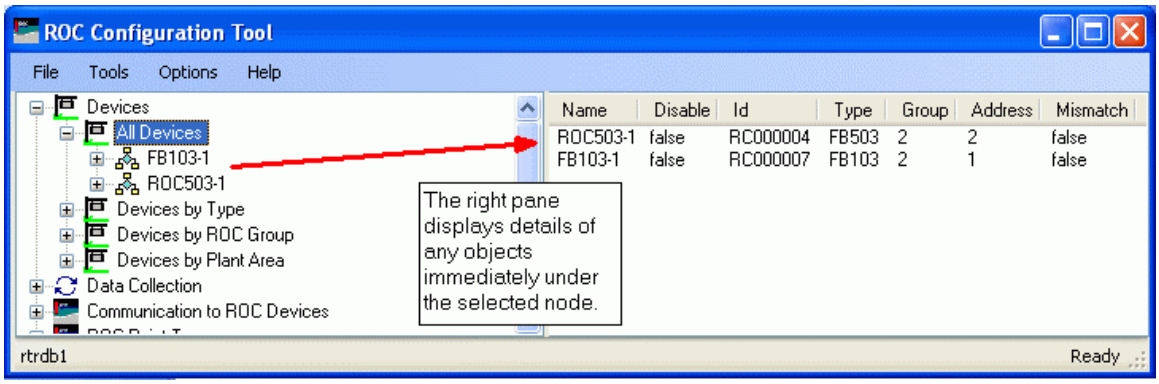
4.4.5 Browse Button

We can use this to browse the file system for an alternative location for the file that will be created. The selected location will be returned to the 'File Name' field.

For more information on the whole process of updating the Database from a new ROC.mdb file see the 'Update Database from new ROC.mdb' topic.

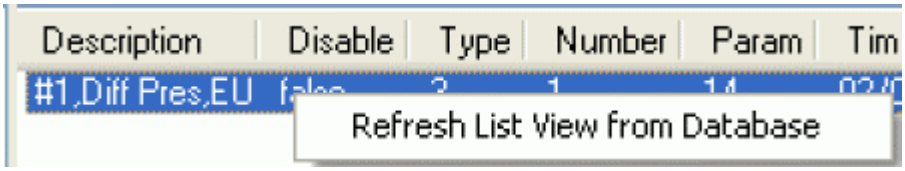
5 List View Pane

The List View Pane displays details of the objects under the selected node in the Tree View Pane. Click the List View Pane in the image below for help on the context menus that appear in the List View.



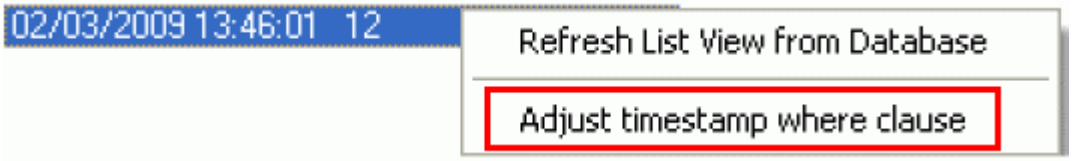
5.1 Standard Context Menu

For almost all object types viewed in the List View Pane, this context menu enables you to refresh the data that is displayed for the objects that are currently on display.



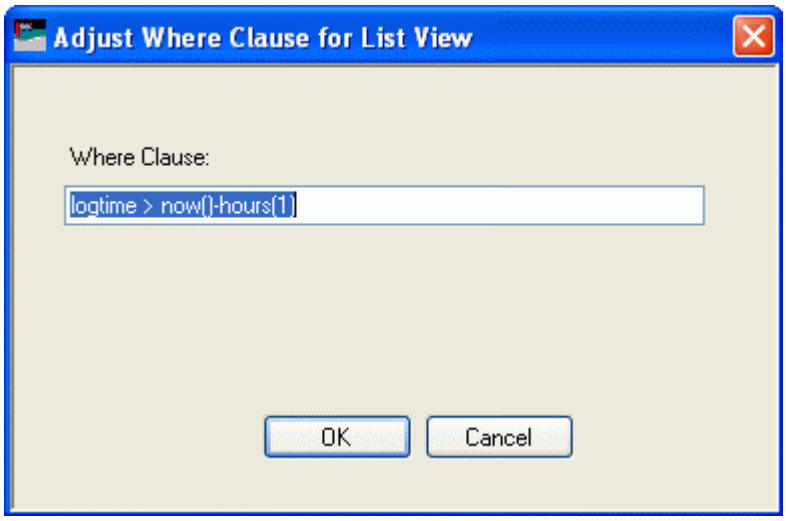
5.2 Logged Values Context Menu

If the List View is displaying logged historical values, then the context menu available on the logged values displayed in the List View has an 'Adjust timestamp where clause' option.



5.2.1 Adjust Timestamp Where Clause

If this option is selected, the 'Adjust Where Clause for List View' dialog appears. The user can change the time period in the 'Where Clause:' field. For instance the 'hours(1)' part of the clause could be changed to hours(3), meaning that instead of one hour's worth of logged values being displayed, three hours worth of data would be displayed in the List View window.



6 Wizards

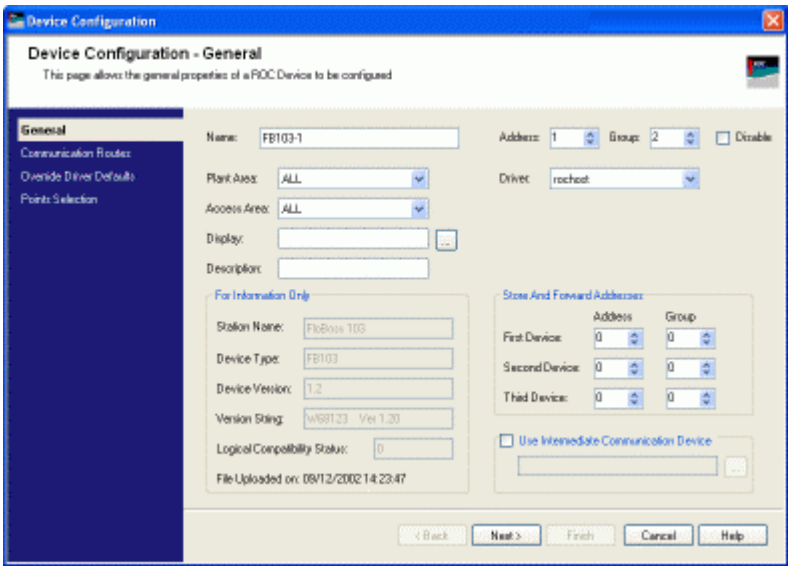
Some configuration processes take more than one step to complete. When this is the case, the ROC Configuration tool uses what are called "wizards". Wizards consist of a series of dialogs that are displayed one after the other to complete the steps required to configure an aspect of ROC configuration within the OpenEnterprise database. Here is a list of the wizards that are available from the ROC Configuration tool's user interface:-

1. ROC Device Wizard
2. ROC Device Update Wizard
3. ROC Driver Wizard
4. Port Parameters Template Wizard
5. Parameter Pattern Template Wizard
6. Schedule Configuration Wizard
7. System Parameters Wizard
8. Request Wizard
9. Channel Configuration Wizards

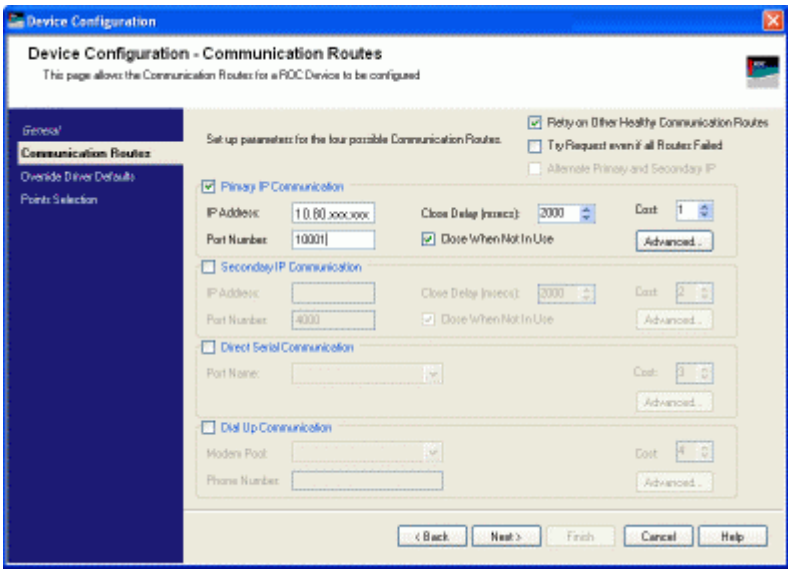
6.1 Device Configuration Wizard

The Device Configuration Wizard enables you to add a new ROC device. The wizard has four configuration pages.

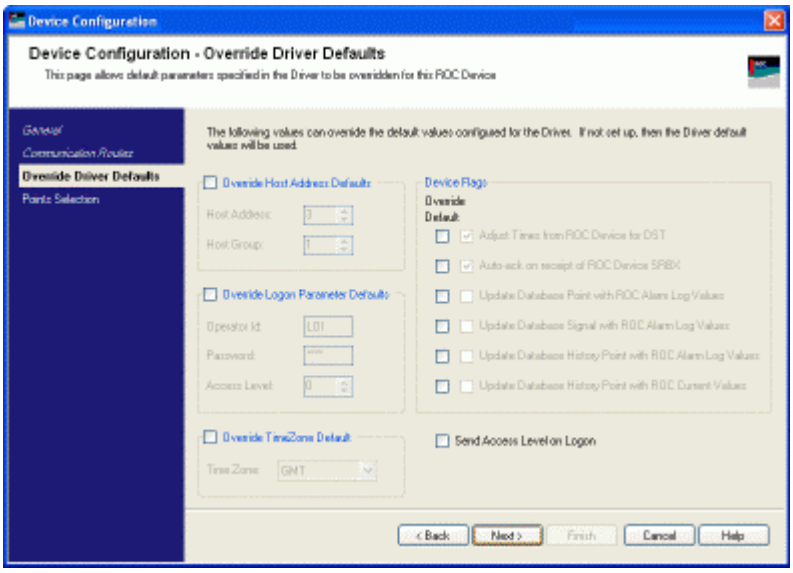
1. General



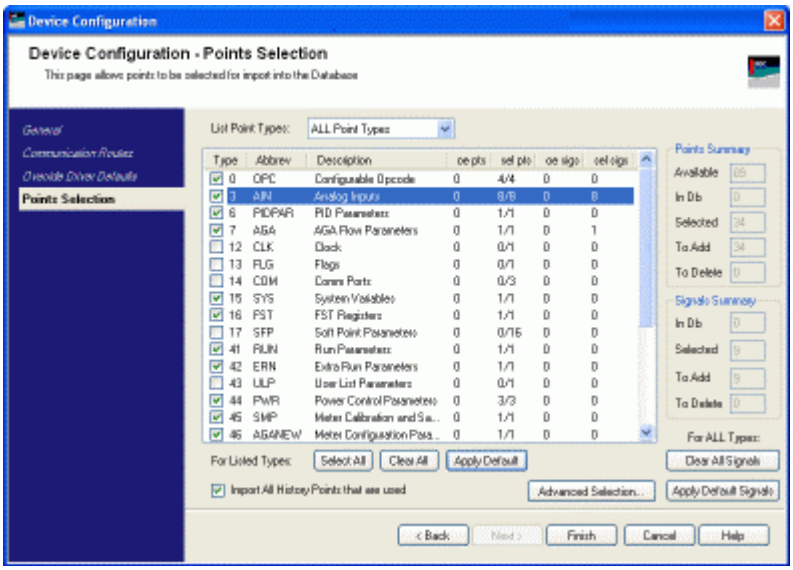
2. Communication Routes



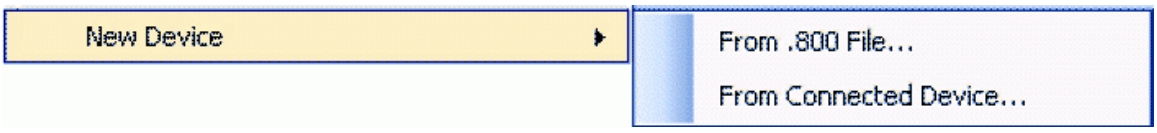
3. Override Driver Defaults



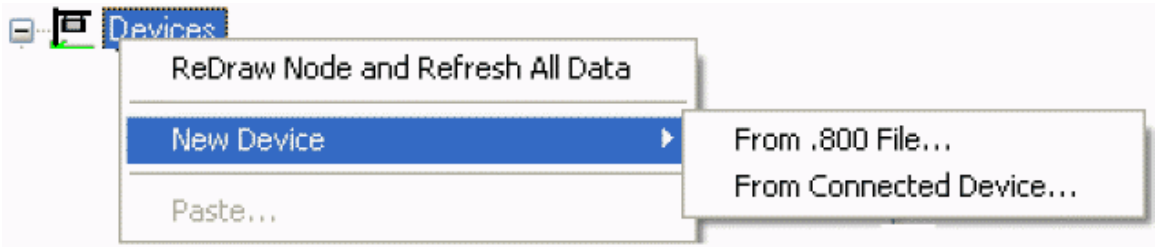
4. Points Selection



The ROC Device Wizard is initiated when you selects the 'New Device' option from the Tools menu:

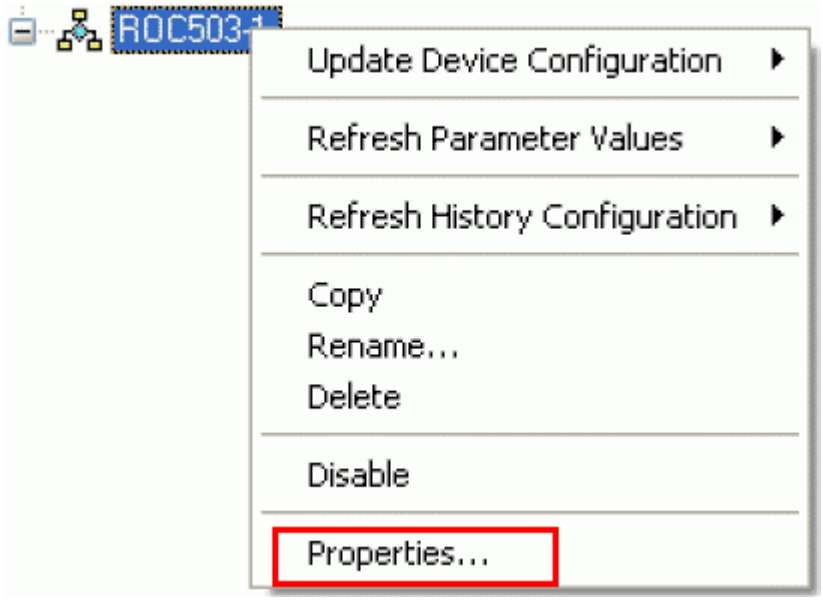


Or from the Devices context menu in the Tree View Pane:

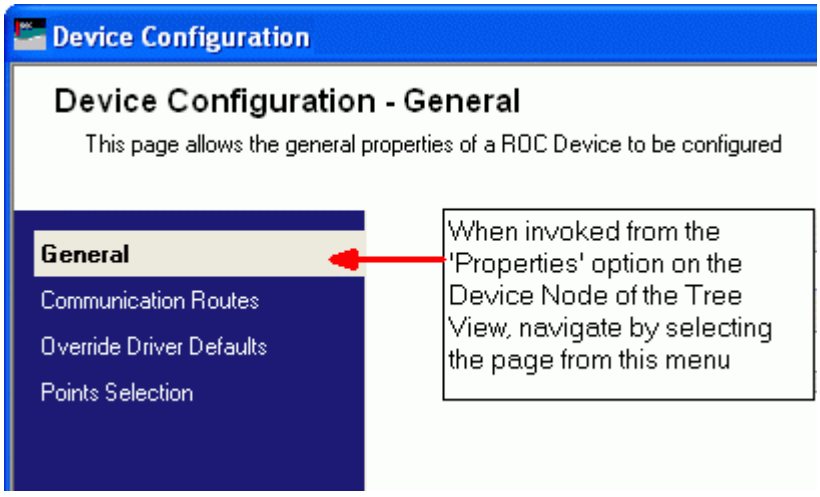


From the context menu on the 'All Devices', 'Devices by Type', 'Devices by ROC Group' and 'Devices by Plant Area' nodes in the Tree View Pane:

Or from the 'Properties' option of the context menu on the actual Device node in the Tree View:

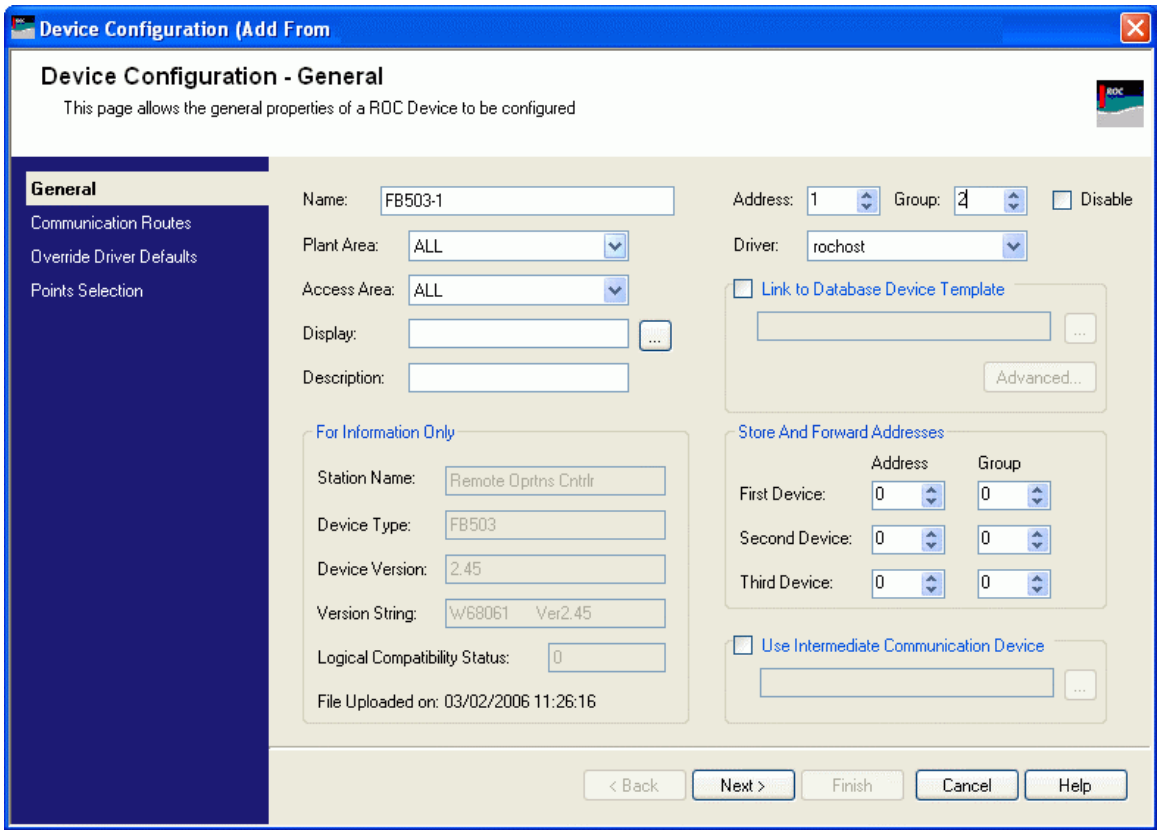


When the ROC Device Wizard is opened from this menu, the [Next] and [Back] buttons are not available, and the pages are navigated from the menu on the left of the dialog.



6.1.1 General Page

The General Page enables users to define or view basic configuration parameters for a ROC device.



6.1.1.1 Title Bar

The Title Bar will also display the selected mode of adding the Device (e.g. 'From 800 File' or 'From Connected Device'.

6.1.1.2 Name

The name of the Device to be added. If you is adding the Device from a ROC 800 file, the name will already be filled in. If adding from a connected Device, you will have to supply the name.

6.1.1.3 Plant Area

The Plant Area of the Device. The Plant Area can be selected from those available in this drop-down list.

6.1.1.4 Access Area

The Access Area assigned to the Device. The Access Area can be selected from those available in this drop-down list.

6.1.1.5 Display

The name of the main display for this Device.

6.1.1.6 Description

An extended description of the Device can be given here.

6.1.1.7 Device Information

This section provides information about the Device. The information cannot be edited by you. When adding a Device, it will only be populated if adding a Device from a ROC 800 file.

6.1.1.7.1 Station Name

The generic description for the type of Device that is being added or modified.

6.1.1.7.2 Device Type

The specific type of ROC Device that is being added or modified.

6.1.1.7.3 Device Version

The version number of the Device that is being added or modified.

6.1.1.7.4 Version String Info

A string displaying information about the Device Version.

6.1.1.7.5 Logical Compatibility Status

Relevant for RocPlus Protocol only. Used to specify 8 or 16 points per slot.

6.1.1.7.6 File Uploaded Date/Time

Only displayed when adding a Device from a ROC 800 file. Gives the time when the file was loaded into memory.

6.1.1.8 Address

The address of the Device expressed as an integer (0 - 255).

6.1.1.9 Group

The Group that the Device belongs to expressed as an integer (0 - 255).

6.1.1.10 Disable

When checked, the Device is added, but disabled. OpenEnterprise will not send Requests for data from a disabled Device.

6.1.1.11 Driver

The driver that is being used to connect to the ROC Device. Defaults to 'rochost'.

6.1.1.12 Link to Database Device Template

When selected, the [...] button in this section is enabled, and the user can use it to open the 'Database Device Template Selection' dialog in order to select a Device to use as the linked Template for this new Device.

Then, when updating this Device, it can be updated from the Template selected here.

6.1.1.12.1 If Selected Device is a Template

If the Device that you have selected has already been used as a Device Template to update another Device, then this whole section will be disabled. It will contain a message explaining that this is a Device Template:

A Device that is a Template cannot be linked to another Device Template.

6.1.1.13 Selected Template

This field displays the Device that has been selected as the Template for the update. If no Device Template appears in this field, you can click the [...] button to the right of the field to open the 'Database Device Template Selection' dialog.

This will enable them to select a Device to be the Template when updating the selected target Device.

6.1.1.14 Advanced

This button opens the 'Device Template Options' dialog, which enables you to define what things to update from the Device Template.

6.1.1.15 Store and Forward Addresses

6.1.1.15.1 Store and Forward Addresses

This group of controls define the Address and Group numbers of up to three intermediate ROC or FloBoss units which will be used in a store and forward action to reach the Device that is being added.

6.1.1.15.2 Address

The Address of the first device used in a store and forward operation.

6.1.1.15.3 Group First Device

The Group of the first device used in a store and forward operation.

6.1.1.15.4 Address Second Device

The Address of a second device used in a store and forward operation.

6.1.1.15.5 Group Second Device

The Group of a second device used in a store and forward operation.

6.1.1.15.6 Address Third Device

The Address of a third device used in a store and forward operation.

6.1.1.15.7 Group Third Device

The Group of a third device used in a store and forward operation.

6.1.1.16 Use Intermediate Communication Device

6.1.1.16.1 Use Intermediate Communication Device

If the ROC RDI is going to communicate with the current Device via an intermediate Device, then this box should be checked. This will enable the **[...]** button in this section, and you can click on the button to select the Intermediate Device.

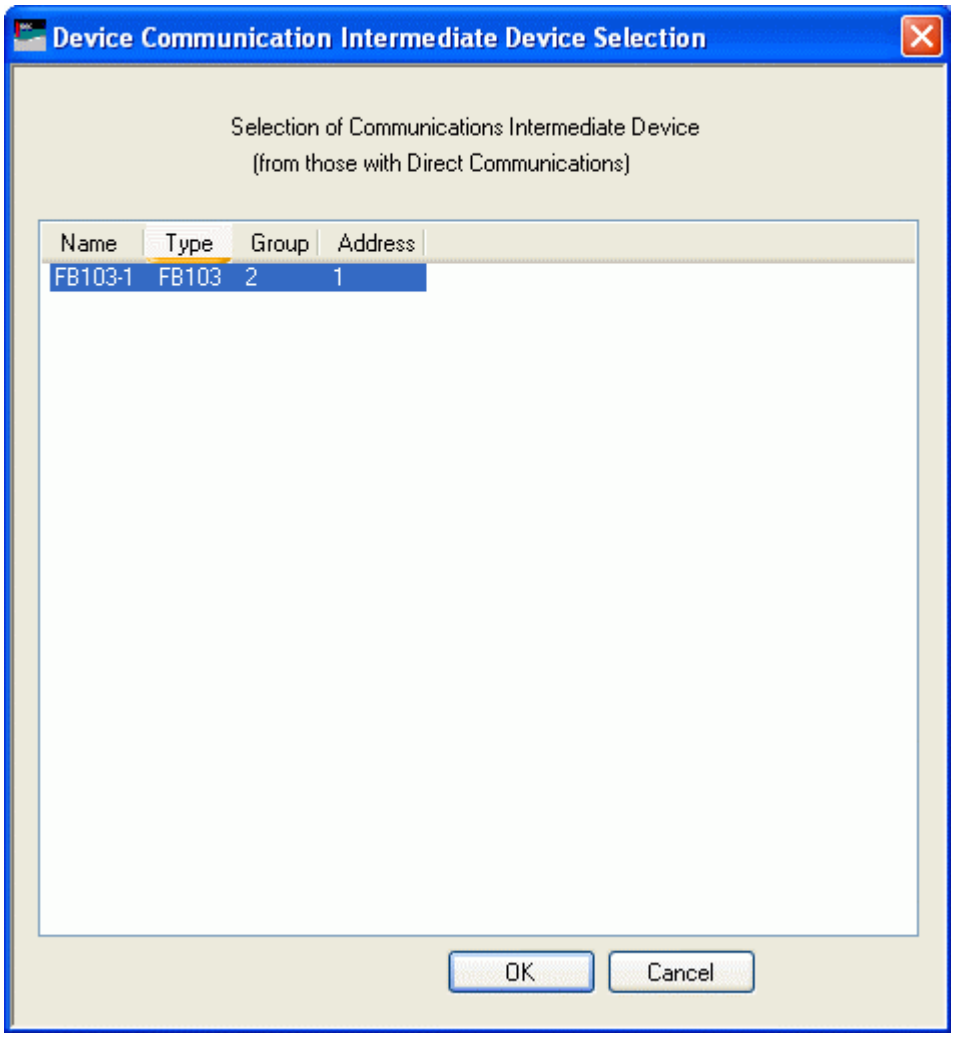
If the ROC RDI is going to address the Device that is being added or modified using 'Store and Forward', then the Address and Group for the first Device should also be configured using the 'Store and Forward Addresses' section of the 'General Page' of the 'Device Wizard'.

6.1.1.16.2 Intermediate Communication Device

When the ellipsis button **[...]** is selected, the 'Device Communication Intermediate Device Selection' dialog is opened, listing all the available Devices that might be used as an intermediary to the Device that is being added or modified.

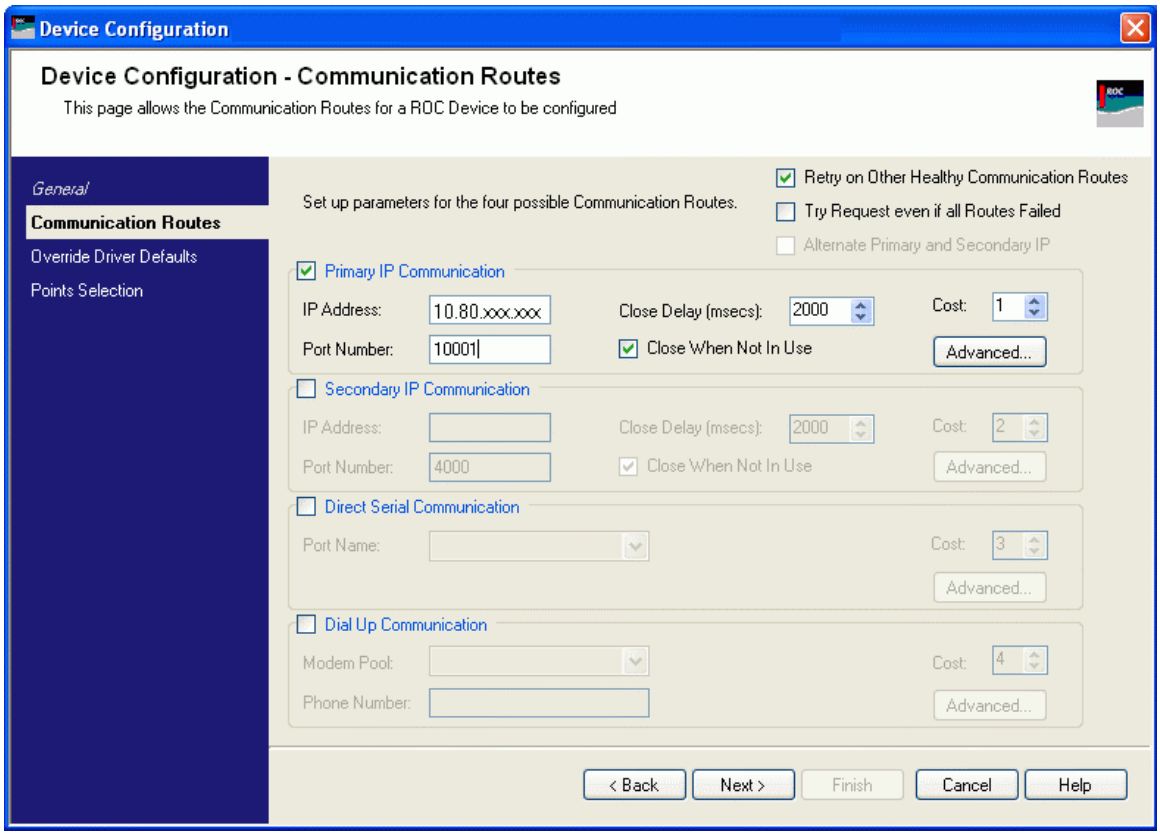
When a Device has been selected, followed by the **[OK]** button, the selected Device will entered into the field to the left of the ellipsis button on the Device Wizard General Page.

The 'Intermediate Device' is only useful if there is a concern about communications contention and recovery to the device, in which case you should set up the Intermediate Device link, which will mean that the Communication Routes for the Intermediate Device will be used rather than any configured for the target device.



6.1.2 Communications Route Page

This page enables you to configure communications to the Device. Four Communication Routes may be configured, including 'Primary IP', 'Secondary IP', 'Direct Serial' and 'Dial Up' types.



6.1.2.1 Title Bar

The Title Bar will also display the selected mode of adding the Device (e.g. 'From 800 File' or 'From Connected Device'.

6.1.2.2 Retry on Other Healthy Comms Routes

If this box is checked, the ROC RDI will retry on other healthy communication routes if the communication route fails.

6.1.2.3 Try Request even if all Routes Failed

If this box is checked the ROC RDI will still attempt to send a Request even though all communication routes have failed.

6.1.2.4 Alternate Primary and Secondary IP

When checked the ROC RDI will alternate between the Primary and Secondary IP route if the costs of the routes are the same.

6.1.2.5 Primary IP Communication

When checked, this allows you to configure a Primary IP Communication Route.

6.1.2.5.1 IP Address

The IP Address of the Device that is being connected to.

6.1.2.5.2 Port Number

The IP Port Number to use when connecting to the Device.

6.1.2.5.3 Close Delay

A time in milliseconds defining the maximum period of inactivity allowed before closing the socket. Only applies if the 'Close When Not in Use' box is checked.

6.1.2.5.4 Close When Not In Use

Tells the ROC RDI to close the socket when not being used after a period of inactivity defined in the ‘Close Delay’ field. This allows other utilities to use the Communications Route. Default is true.

6.1.2.5.5 Cost

The cost of the Communications Route, 1,2,3,4 (1 is lowest cost/preferred route).

6.1.2.5.6 Advanced

Opens up the 'Communication Route Configuration' dialog.

6.1.2.6 Secondary IP Communication

When checked, allows you to configure a Secondary IP Communication Route.

6.1.2.6.1 IP Address

The IP Address of the Device that is being connected to.

6.1.2.6.2 Port Number

The IP Port Number to use when connecting to the Device.

6.1.2.6.3 Close Delay

A time in milliseconds defining the maximum period of inactivity allowed before closing the socket. Only applies if the 'Close When Not in Use' box is checked.

6.1.2.6.4 Close When Not In Use

Tells the ROC RDI to close the socket when not being used after a period of inactivity defined in the ‘Close Delay’ field. This allows other utilities to use the Communications Route. Default is true.

6.1.2.6.5 Cost

The cost of the Communications Route, 1,2,3,4 (1 is lowest cost/preferred route).

6.1.2.7 Direct Serial Communication

When checked, enables you to configure a Direct Serial Communication Route.

6.1.2.7.1 Port Name

The Port name (e.g. COM11) for a Direct Serial Communication Route.

6.1.2.7.2 Cost

The cost of the Communications Route, 1,2,3,4 (1 is lowest cost/preferred route).

6.1.2.7.3 Advanced

Opens up the 'Communication Route Configuration' dialog.

6.1.2.8 Dial Up Communication

When checked, enables you to configure a Dial Up Communication Route.

6.1.2.8.1 Modem Pool

Select one of the Modem Pools from the drop-down list. This will make any of the Modems that belong to the Modem Pool available for use by the Device.

6.1.2.8.2 Phone Number

The phone number to use when dialling out.

6.1.2.8.3 Cost

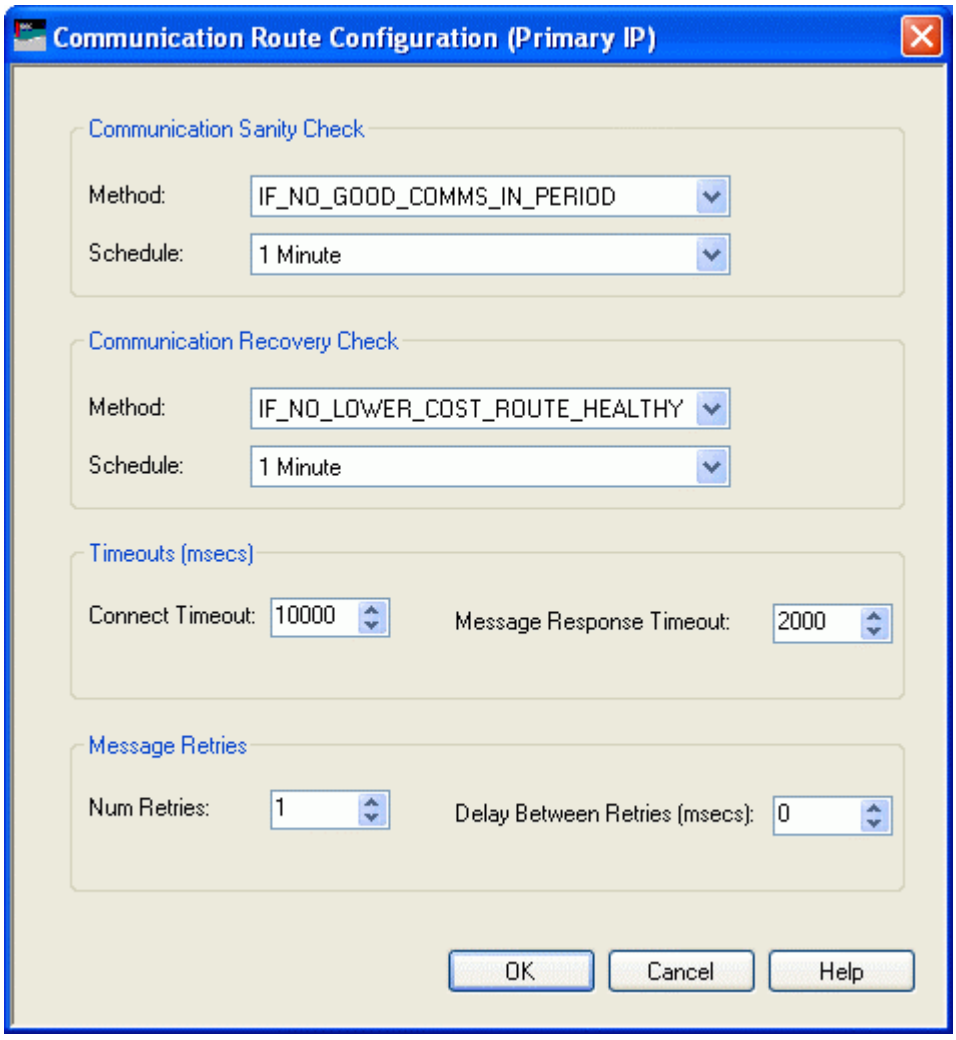
The cost of the Communications Route, 1,2,3,4 (1 is lowest cost/preferred route).

6.1.2.8.4 Advanced

Opens up the 'Communication Route Configuration' dialog.

6.1.2.9 Communication Route Configuration

This dialog enables you to set up Methods and Schedules for Sanity Checking and Recovery on each Communication Route. Timeouts and Message retry times can also be configured.



6.1.2.9.1 Title Bar

The Title Bar will also include the Communications Route in its name (e.g. in this example 'Primary IP').

6.1.2.9.2 Method

Select a method for Sanity Checking of the selected Communications Route from the drop-down list. The options are:-

- IF_NO_GOOD_COMMS_IN_PERIOD (Default) - If no good communications are established during the Schedule period, then a Sanity Check will be performed.
- ALWAYS - A Sanity Check will be performed every period indicated by the Schedule for the Communication Route.
- NONE - No Sanity Check will be performed.

6.1.2.9.3 Schedule

Select a Schedule from the list that will apply to Sanity Checking for this Communication Route.

6.1.2.9.4 Method

Select a method for Recovery of the selected Communications Route from the drop-down list. The options are:-

- IF_NO_LOWER_COST_ROUTE _HEALTHY (Default) - If no lower cost Communication Route is available, then Recovery will be performed using this Route. If a lower cost Route is available, then Recovery will take place using that Route.
- ALWAYS - Recovery will always be performed using only this Communication Route.
- DEADLIST_TYPE - Failed Devices placed are on a round-robin deadlist and recovered using dead-time on the channel used by the Device. Applicable to Direct Serial route only.

6.1.2.9.5 Schedule

Select a Schedule from the list that will apply to Recovery for this Communication Route.

6.1.2.9.6 Connect Timeout

Time (in milliseconds) to allow for connection establishment

6.1.2.9.7 Message Response Timeout

Time (in milliseconds) to allow for response message

6.1.2.9.8 Num Retries

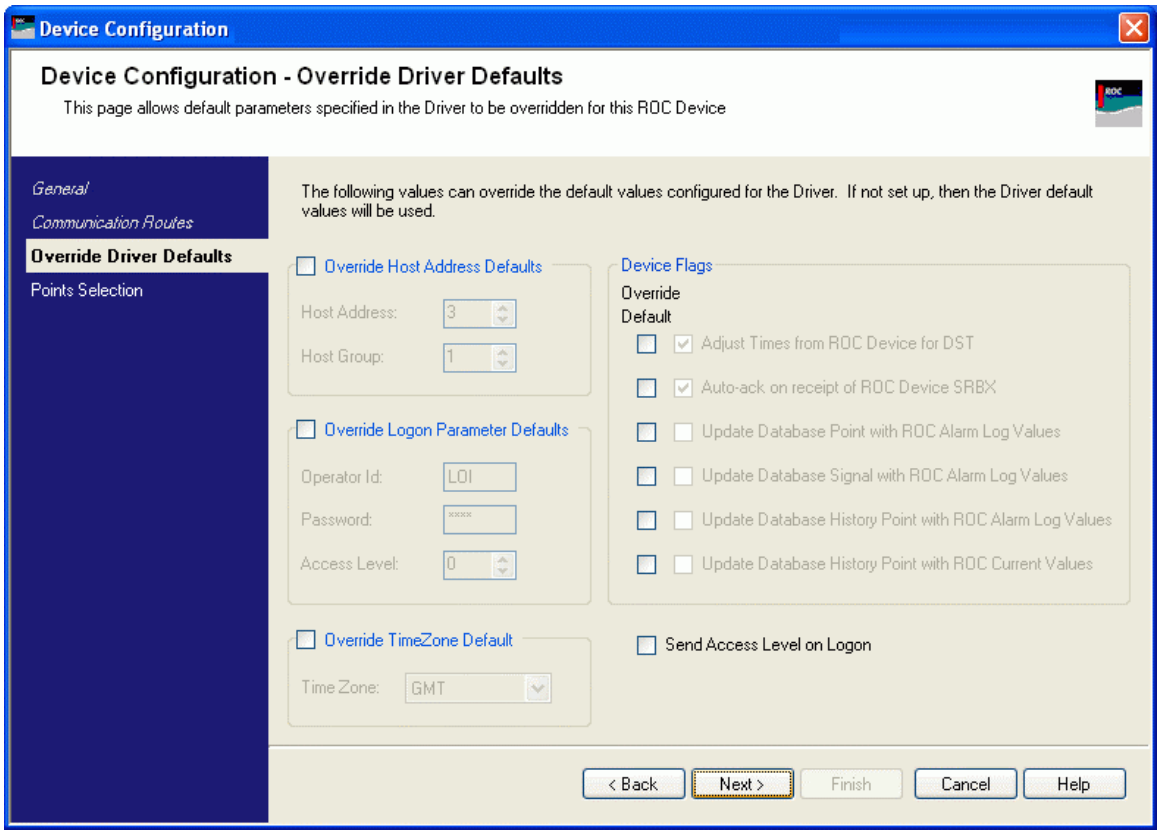
Number of retries to be performed of each ROC message. Default 1.

6.1.2.9.9 Delay Between Retries

Delay (in milliseconds) before attempting retry. Default is 0.

6.1.3 Override Driver Defaults Page

This page enables default values used by the ROC RDI to be overridden for this Device.



6.1.3.1 Title Bar

The 'Device Configuration' Title Bar. When adding a Device it also includes the method of addition ('From 800 File' or 'From Device').

6.1.3.2 Override Host Address Defaults

The Host Address and Host Group default settings for the ROC Driver (the ROC RDI) can be overridden here.

6.1.3.2.1 Host Address

The Host Address at the PC has a default value of Address 3 and Group 1. If more than one computer running the OpenEnterprise ROC RDI will be communicating with a group of devices, either by radio or by other multi-drop communications, the Host Address of each Device Directory setup must be unique to avoid multiple responses.

6.1.3.2.2 Host Group

The Host Group at the PC has a default value of '1'. When using ROC Protocol, the Group address must match the address setup at the destination device in order for communications to properly transmit

6.1.3.3 Override Logon Parameter Defaults

The default Logon and Password for ROC Devices can be overridden from this section.

6.1.3.3.1 Operator Id

Overrides the default name used by the ROC RDI to log on to the ROC Device.

6.1.3.3.2 Password

Overrides the default password used by the ROC RDI to log on to the ROC Device.

6.1.3.3.3 Access Level

Overrides the default Access Level afforded when the ROC RDI logs on to the Device. There are five Access Levels - 0 to 5, with 0 being the lowest and 5 being the highest.

6.1.3.4 Override TimeZone Default

This section enables you to override the default time zone used by the ROC RDI for Devices.

6.1.3.4.1 TimeZone

A list of time zones for selection, if overriding the default value used by the ROC RDI.

6.1.3.5 Device Flags

This section enables you to override the ROC RDI Device Flag default settings.

6.1.3.5.1 Adjust Times from ROC Device for DST

When set, this flag causes timestamps from the Device to be adjusted for DST.

6.1.3.5.2 Auto-ack on Receipt of ROC Device SRBX

When checked, causes the ROC RDI to automatically send an acknowledgement on receipt of an SRBX (Spontaneous Report By Exception) from a ROC Device.

6.1.3.5.3 Update Database Point with ROC Alarm Log Values

If checked, the ROC RDI will update the database Point with ROC Alarm Log Values.

6.1.3.5.4 Update Database Signal with ROC Alarm Log Values

When checked causes the ROC RDI to update the database Signal with ROC Alarm Log Values.

6.1.3.5.5 Update Database History Point with ROC Alarm Log Values

If checked, the ROC RDI will update the database History Point with ROC Alarm Log Values.

6.1.3.5.6 Update Database History Point with ROC Current Values

When checked causes the ROC RDI to update the database History Point with ROC Current Values.

6.1.3.6 Send Access Level on Logon

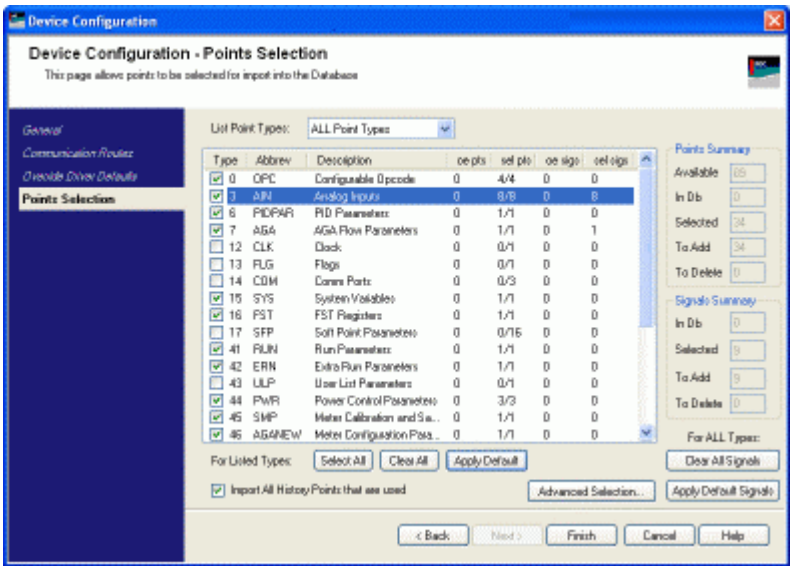
Instructs the ROC RDI to send the Access Level of the ROC Operator when logging on to the Device.

6.1.4 Points Selection Page

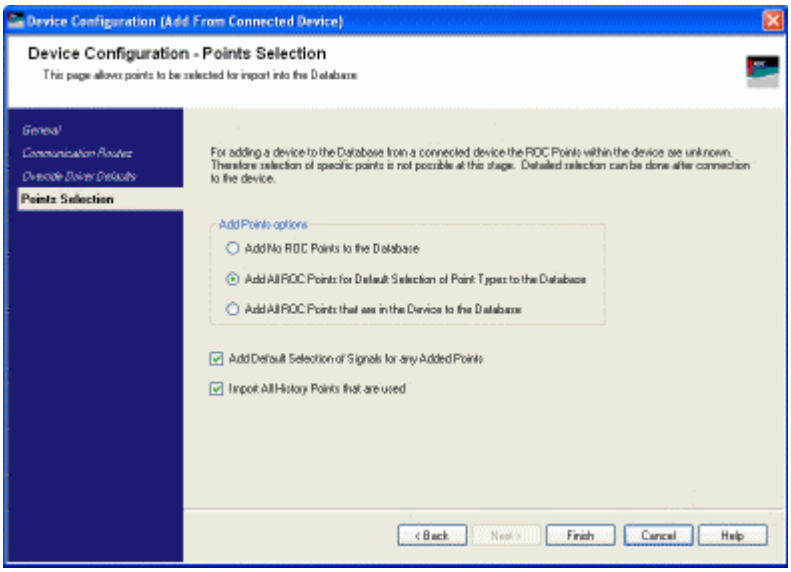
This page of the wizard differs depending on whether you are adding the device from an .800 file or from a physically connected device.

If you have opened the ROC Device Wizard from the 'Properties' option on the Device node in the Tree View, you will only see the first 'Points Selection' page shown below.

- From .800 File



- From Device

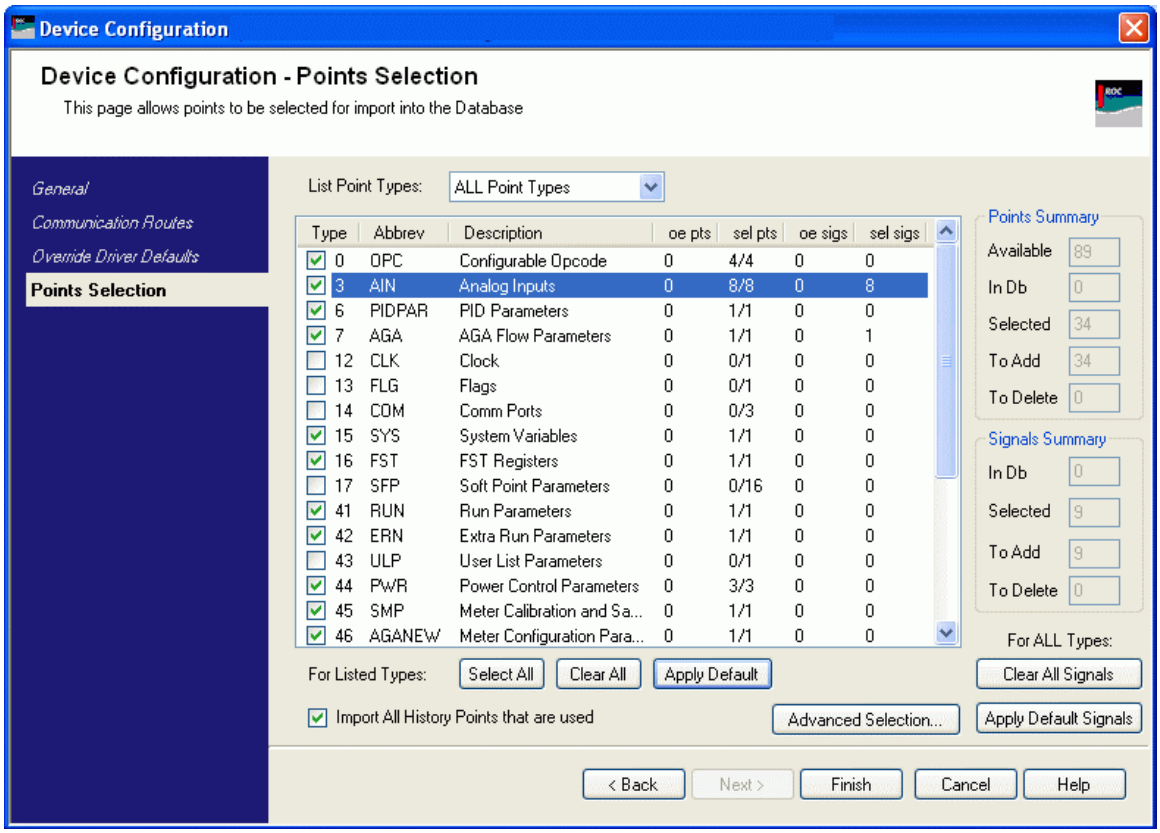


6.1.4.1 Point Selection Page

ROC Points are entered into the appropriate ROC Points table in the OpenEnterprise database. In addition, ROC Signals may be entered into the appropriate ROC Signal table for certain Parameters. Creating ROC Signals enables OpenEnterprise Reporting, Historical logging and Calculations to be applied to these Parameters.

This page enables you to select the Points and Parameters from the device that will be mapped to ROC Points and Signals in the OpenEnterprise Database.

When the page is called from the 'Add/Delete Database Points/Signals' context menu which is available on in the Tree View Pane, the other pages of the 'ROC Device Wizard' are not available.

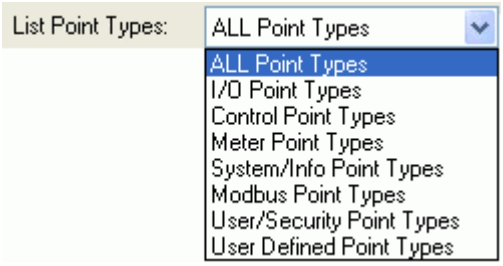


6.1.4.1.1 Title

When adding a Device, the Title Bar will also contain a description of the method that is being used to add the Device (e.g. 'From ROC 880 file' or 'From Device').

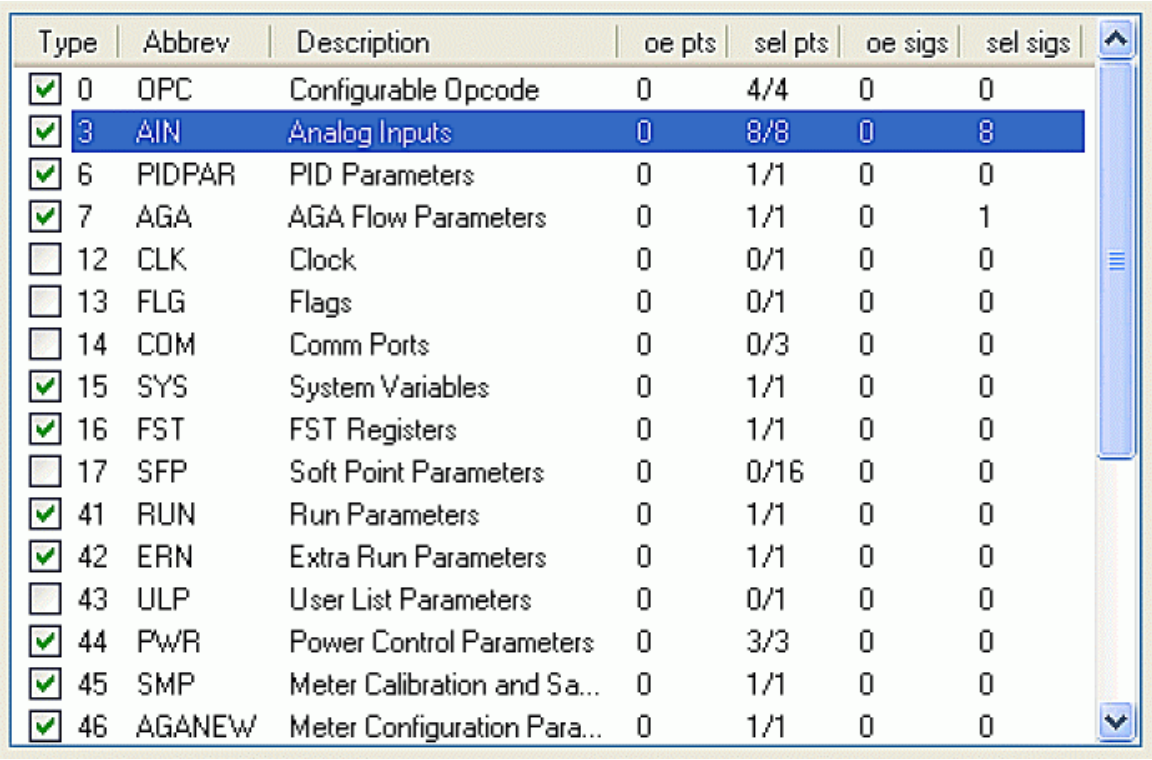
6.1.4.1.2 Point Types

This list enables you to filter the 'Point Types Selection List' by a selected Point Type. The default is 'ALL Point Types'.



6.1.4.1.3 Point Types Selection List

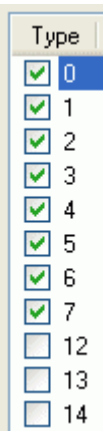
The Points Type Selection List enables users to specify what ROC Point Types will be added to the OpenEnterprise database from a ROC device, or what Points will be defined within a Parameter Pattern Template. The user should select the point types that are required by checking the box in the 'Type' column.



Type	Abbrev	Description	oe pts	sel pts	oe sigs	sel sigs
0	OPC	Configurable Opcode	0	4/4	0	0
3	AIN	Analog Inputs	0	8/8	0	8
6	PIDPAR	PID Parameters	0	1/1	0	0
7	AGA	AGA Flow Parameters	0	1/1	0	1
12	CLK	Clock	0	0/1	0	0
13	FLG	Flags	0	0/1	0	0
14	COM	Comm Ports	0	0/3	0	0
15	SYS	System Variables	0	1/1	0	0
16	FST	FST Registers	0	1/1	0	0
17	SFP	Soft Point Parameters	0	0/16	0	0
41	RUN	Run Parameters	0	1/1	0	0
42	ERN	Extra Run Parameters	0	1/1	0	0
43	ULP	User List Parameters	0	0/1	0	0
44	PWR	Power Control Parameters	0	3/3	0	0
45	SMP	Meter Calibration and Sa...	0	1/1	0	0
46	AGANEW	Meter Configuration Para...	0	1/1	0	0

6.1.4.1.3.1 Selected Point Types

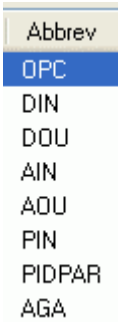
The Point Types that exist in the Device are already checked for inclusion in the OpenEnterprise database.



Type
0
1
2
3
4
5
6
7
12
13
14

6.1.4.1.3.2 Abbrev

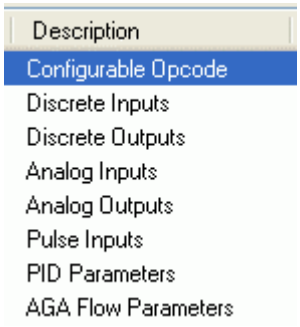
Point Type abbreviations are listed in this column.



Abbrev
OPC
DIN
DOU
AIN
AOU
PIN
PIDPAR
AGA

6.1.4.1.3.3 Description

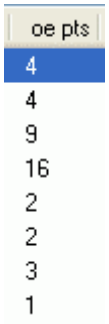
Point Type descriptions are listed in this column.



6.1.4.1.3.4 oe pts

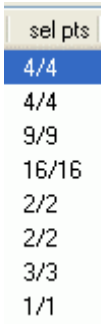
This column displays the number of Points for this Device that have already been inserted into the OpenEnterprise database for each Point Type. When a Device is being added, all rows of this column will say 0 (zero).

The image below shows a Device that is being modified, so Points are already in the database for this Device.



6.1.4.1.3.5 sel pts

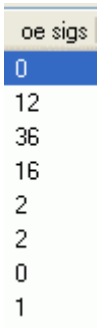
This column displays how many of the available Points in the Device are currently selected for inclusion in the OpenEnterprise database.



6.1.4.1.3.6 oe sigs

Entries are insertedThis column shows how many of the ROC Signals have already been inserted into the database for the Device. When a Device is being added, all rows of this column will say 0 (zero).

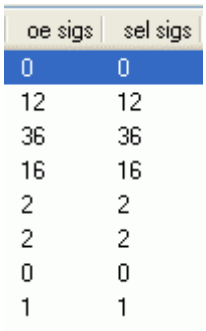
The image below shows a Device that is being modified, so Signals are already in the database for this Device.



oe sigs
0
12
36
16
2
2
0
1

6.1.4.1.3.7 sel sigs

The 'sel sigs' column displays how many of the available Point Parameters are currently selected for inclusion as ROC Signals in the OpenEnterprise database. This is determined initially by the 'Value' Parameter Pattern Template which is applied by default when adding new Devices.



oe sigs	sel sigs
0	0
12	12
36	36
16	16
2	2
2	2
0	0
1	1

6.1.4.1.4 Select All Point Types

If this button is selected all Point Types will be selected, regardless of whether they occur in the Device.

6.1.4.1.5 Clear All Point Types

If this button is selected all Point Types will be cleared.

6.1.4.1.6 Apply Default

If this button is selected, the default Point Types for the Device will be selected.

6.1.4.1.7 Import All History Points that are Used

When this box is checked any ROC History Points that exist in the Device are imported to the ROCHistoryPoint Table.

6.1.4.1.8 Points Summary

This section summarizes the number of Points that will be added or deleted based on the current Points selected if you selects the [Finish] button.

6.1.4.1.8.1 Available

The number of ROC Points that are supported by the Device.

6.1.4.1.8.2 In DB

The number of ROC Points from those that are currently selected that have been inserted into the OpenEnterprise database. When modifying the Device this will refer to the number of new Points that have been selected.

6.1.4.1.8.3 Selected

The number of ROC Points that have been selected to be inserted into the OpenEnterprise database. When modifying a Device, this will refer to any new Points that have been selected.

6.1.4.1.8.4 To Add

The number of ROC Points that will be added based on the current selection to the OpenEnterprise database if you selects the [Finish] button.

6.1.4.1.8.5 To Delete

The number of ROC Points that will be deleted from the OpenEnterprise database if you selects the [Finish] button.

6.1.4.1.9 Signals Summary

This section summarizes the number of ROC Signals that will be added or deleted based on the current Parameters selected if you were to select the [Finish] button.

6.1.4.1.9.1 In DB

The number of ROC Signals based on the Parameters that are currently selected that have been inserted into the OpenEnterprise database. When modifying the Device this will refer to the number of new Parameters that have been selected.

6.1.4.1.9.2 Selected

The number of Parameters that have been selected to be inserted into the OpenEnterprise database as ROC Signals. When modifying a Device, this will refer to any new Parameters that have been selected.

6.1.4.1.9.3 To Add

The number of ROC Signals that will be added to the OpenEnterprise database based on the current selection of Parameters.

6.1.4.1.9.4 To Delete

The number of ROC Signals that will be deleted from the OpenEnterprise database based on any Parameters that may have been cleared using the 'Point Selection Configuration' dialog.

6.1.4.1.10 Clear All Signals

Clears all ROC Point Parameters, so that no ROC Signals will be created if you clicks the [Finish] button.

6.1.4.1.11 Apply Default Signals

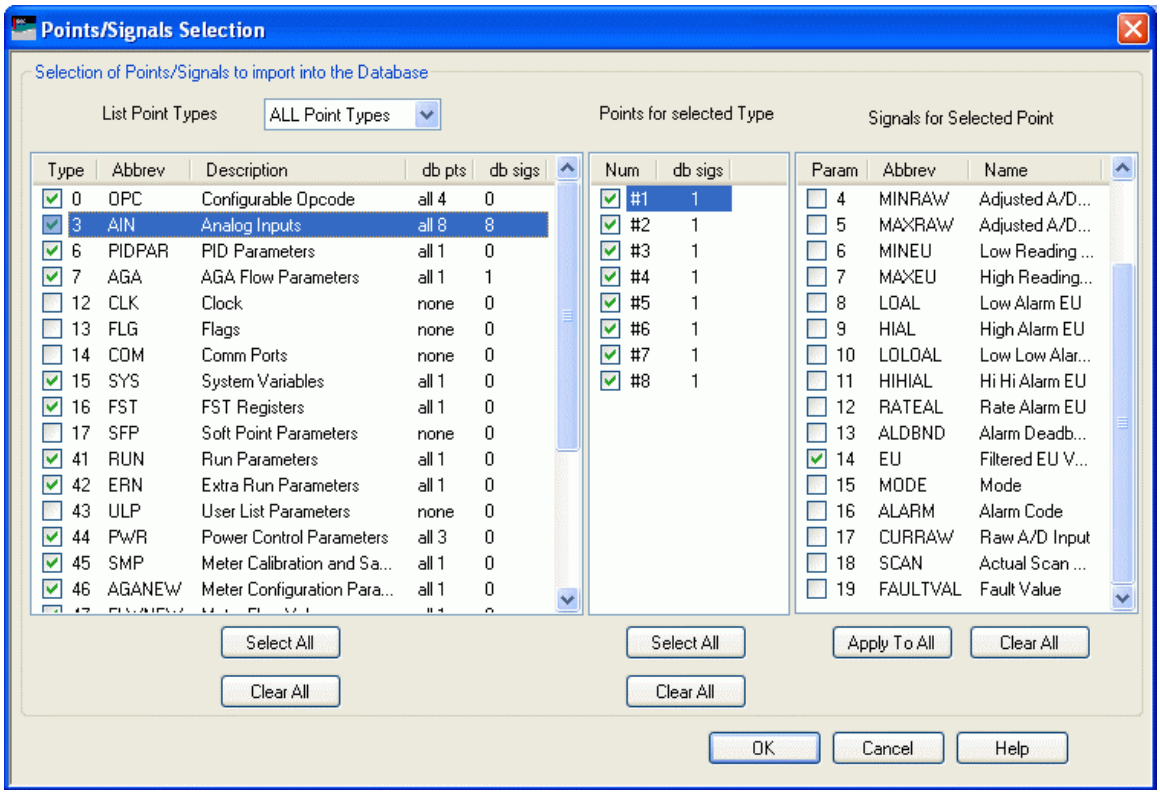
Selects default Parameters for the Device. This usually means the 'Filtered EU Value' Parameter, plus a few others. These are taken from the 'Value' Parameter Pattern Template. If you selects the [Finish] button then ROC Signals will be created in the OpenEnterprise database for these Parameters.

6.1.4.1.12 Advanced Selection

This opens the 'Point Selection Configuration' dialog, which enables you to select specific Points and Parameters for inclusion in the OpenEnterprise database.

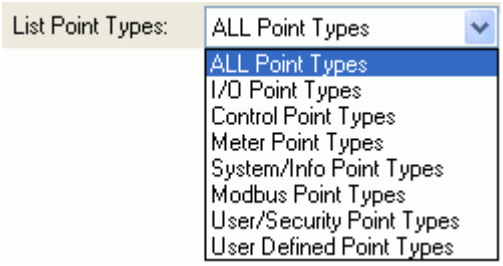
6.1.4.1.13 Point Selection Configuration

From this page users can select Point Types, individual Points and Point Parameters for insertion into the OpenEnterprise database.



6.1.4.1.13.1 Point Types

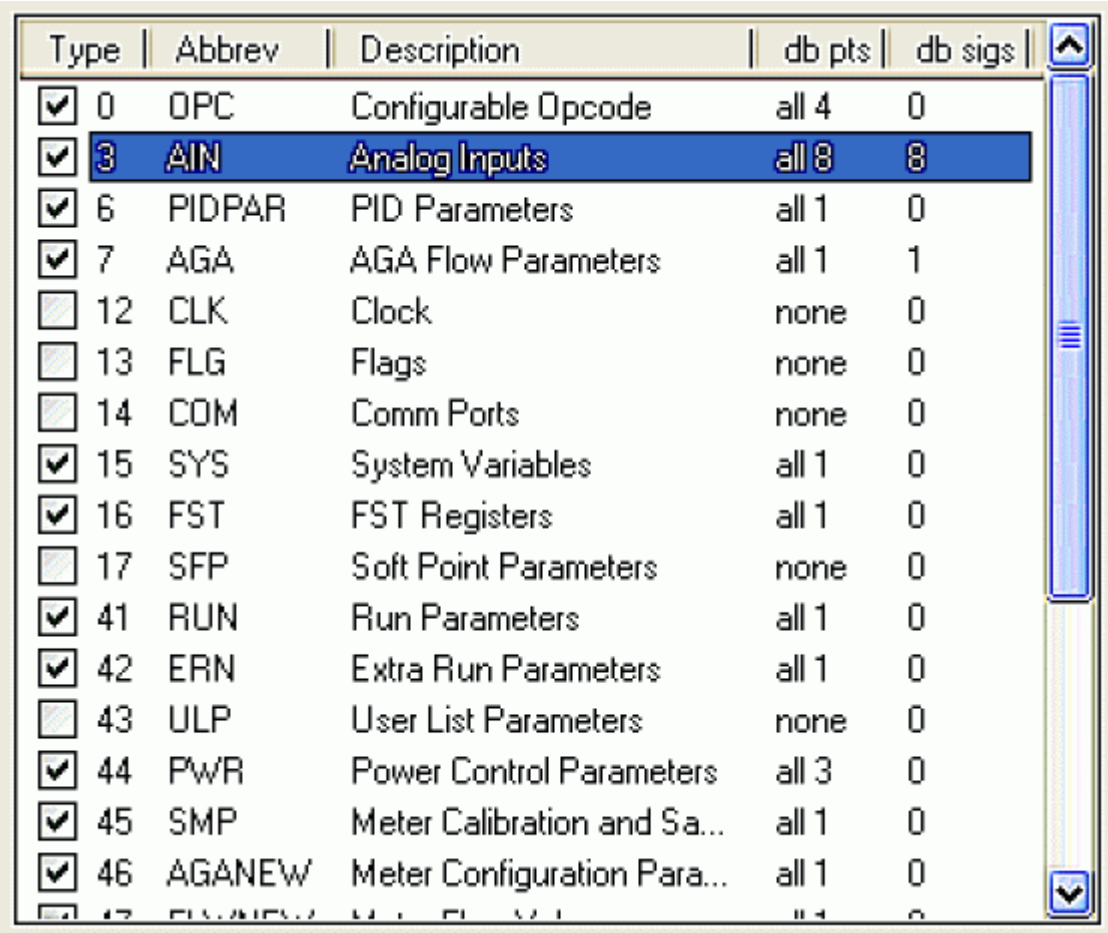
This list enables you to filter the 'Point Types Selection List' by a selected Point Type. The default is 'ALL Point Types'.



6.1.4.1.13.2 Point Types List

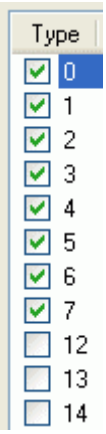
Point Types List

A list of point types, showing their availability for the device. The user can select available point types for adding to the OpenEnterprise database.



Selected Point Types

The Point Types that exist in the Device are already checked for inclusion in the OpenEnterprise database.

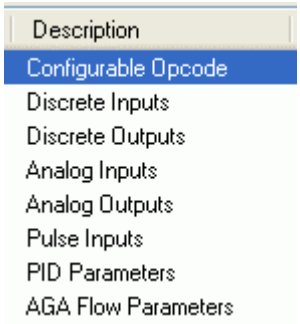


Abbrev

Point Type abbreviations are listed in this column.

Description

Point Type descriptions are listed in this column.



db pts

The number of ROC Points of each Point Type that have been selected for insertion into the OpenEnterprise database.

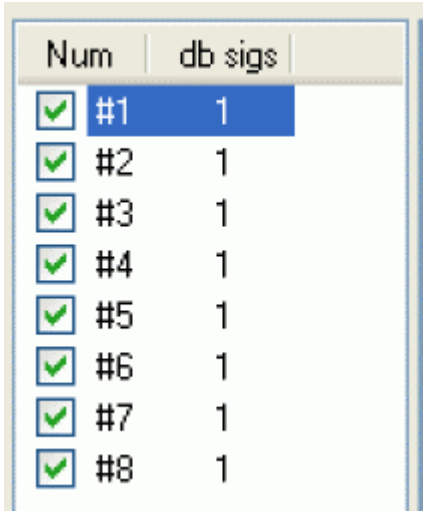
db sigs

The number of ROC Signals that will be created for selected Parameters of the selected ROC Point.

6.1.4.1.13.3 Points for selected Type

Points for selected Type

The 'Points for selected Type' list displays the number of points of the selected type that are available in the selected device.



Selected Points

Type topic text here.

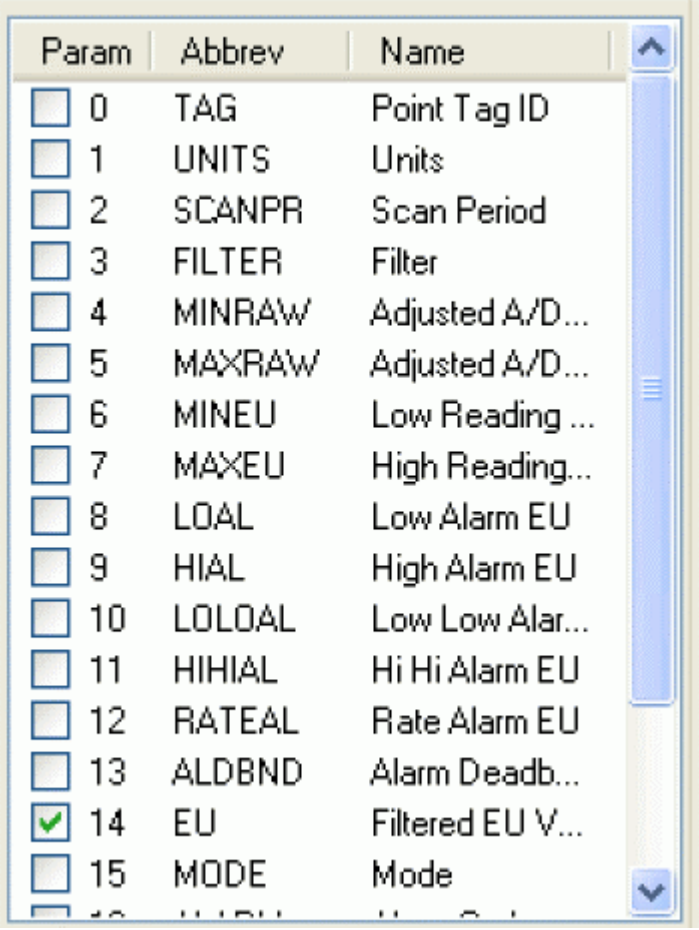
db sigs

The number of ROC Signals that will be created for selected Parameters of the selected ROC Point.

6.1.4.1.13.4 Signals for Selected Point

Signals for Selected Point

The 'Signals for Selected Point' list displays the parameters that are available for the selected Point. The user can select what parameters are to be logged by OpenEnterprise.



Param

Type topic text here.

Abbrev

Type topic text here.

Name

Type topic text here.

6.1.4.1.13.5 Select All Point Types

If this button is selected all Point Types will be selected, regardless of whether they occur in the Device.

6.1.4.1.13.6 Clear All Point Types

If this button is selected all Point Types will be cleared.

6.1.4.1.13.7 Select All Points

Type topic text here.

6.1.4.1.13.8 Clear All Points

Type topic text here.

6.1.4.1.13.9 Apply To All

Type topic text here.

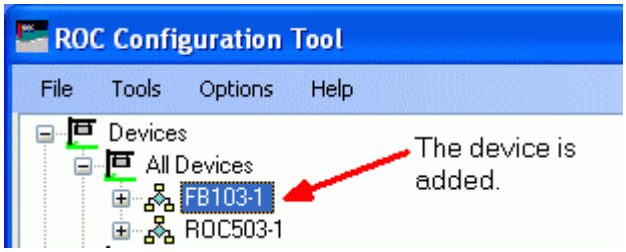
6.1.4.1.13.10 Clear All Selected Params

Type topic text here.

6.1.4.1.14 Finish

When the [Finish] button is selected from either the 'Points Selection Page' or the 'Add Points From Device' Page, the ROC RDI will immediately begin adding the Device, Points and Signals to the OpenEnterprise database.

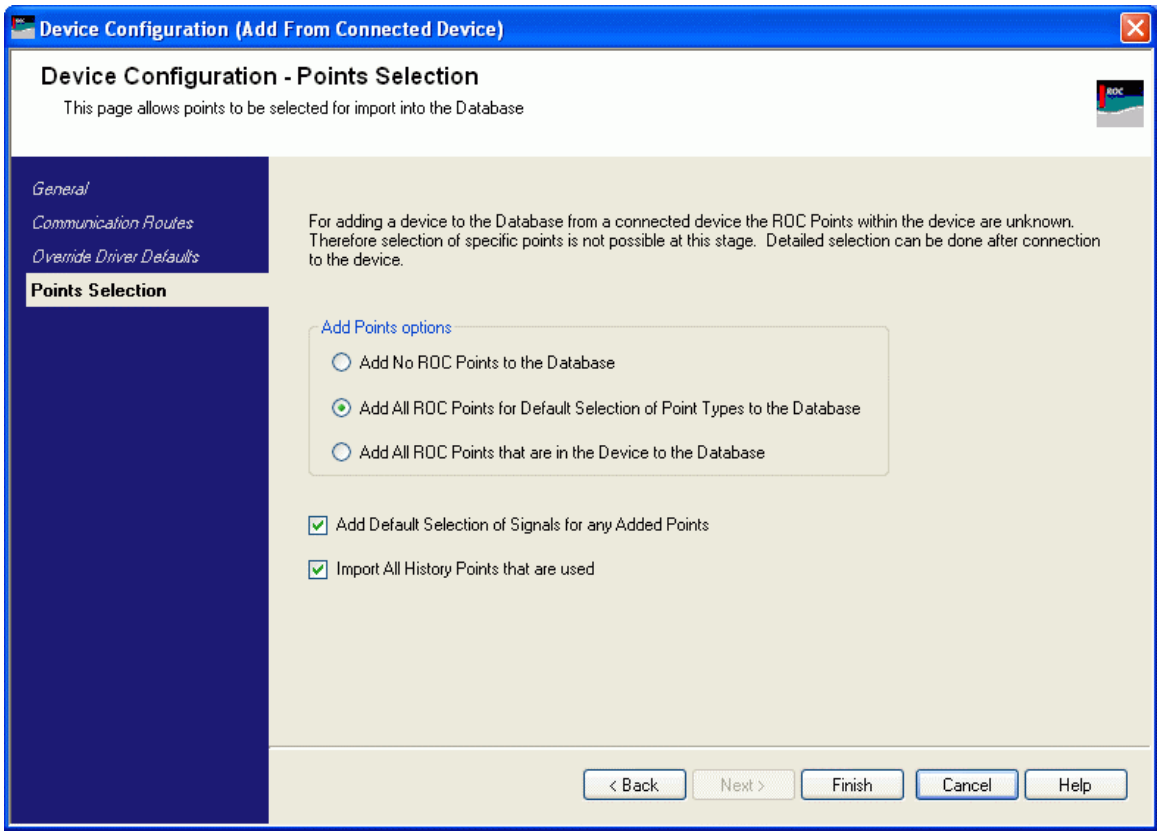
Then the added Device will be shown as an object under the Devices sub nodes. The image below shows a new Device that has just been added under the 'All Devices' node.



6.1.4.2 Add Points from Device Page

ROC Points are entered into the appropriate ROC Points table in the OpenEnterprise database. In addition, ROC Signals may be entered into the appropriate ROC Signal table for certain Parameters. Creating ROC Signals enables OpenEnterprise Reporting, Historical logging and Calculations to be applied to these Parameters.

This page enables you to decide what Points and Signals to import into the OpenEnterprise database from the connected Device.



6.1.4.2.1 Title

The Title Bar shows the method being used to add the ROC Device. In this case it is adding a Device from an actual connected Device.

6.1.4.2.2 Add No ROC Points

When this option is selected, the ROC RDI will add the Device to the OpenEnterprise database, but will add no Points from the Device. Points can be added or removed later.

6.1.4.2.3 Add All ROC Points for Default Selection

Selecting this option will cause the ROC RDI to add all available Points from a default selection of Point Types to the OpenEnterprise database. Points can be added or removed later.

6.1.4.2.4 Add All ROC Points in Device

Selection of this option causes the ROC RDI to add all ROC Points that are found in the Device to the OpenEnterprise Database. Points can be added or removed later.

6.1.4.2.5 Add Default Selection of Signals for any Added Points

Causes the ROC RDI to add a default selection of ROC Signals to the OpenEnterprise database for any ROC Points that have been added.

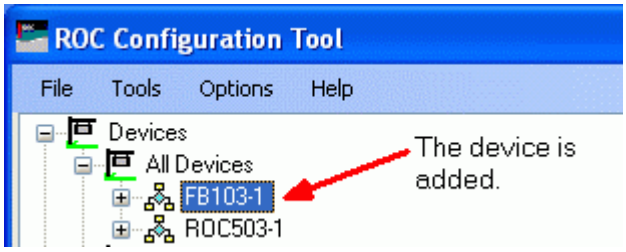
6.1.4.2.6 Import All History Points that are Used

When this box is checked any ROC History Points that exist in the Device are imported to the ROCHistoryPoint Table.

6.1.4.2.7 Finish

When the [Finish] button is selected from either the 'Points Selection Page' or the 'Add Points From Device' Page, the ROC RDI will immediately begin adding the Device, Points and Signals to the OpenEnterprise database.

Then the added Device will be shown as an object under the Devices sub nodes. The image below shows a new Device that has just been added under the 'All Devices' node.

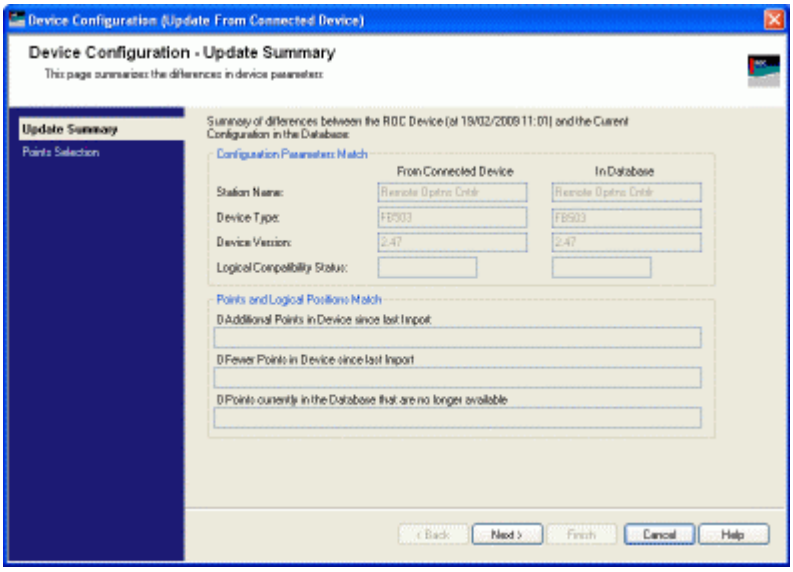


6.2 ROC Device Update Wizard

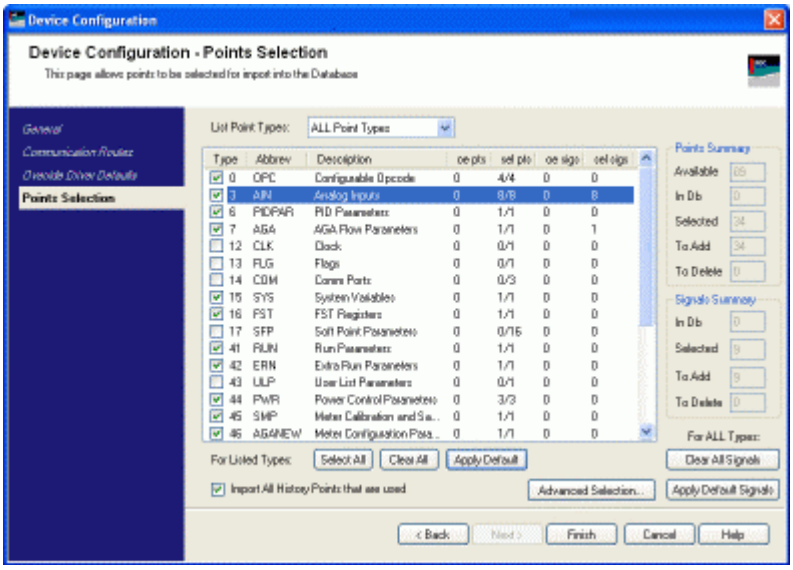
Wizard is used when you selects 'From Connected Device' under the 'Update Device Configuration' option from the context menu on any of the Device nodes in the Tree View pane.

The ROC Device Update Wizard enables you to update the configuration for a ROC device. The wizard has two configuration pages.

- ROC Device Update Page

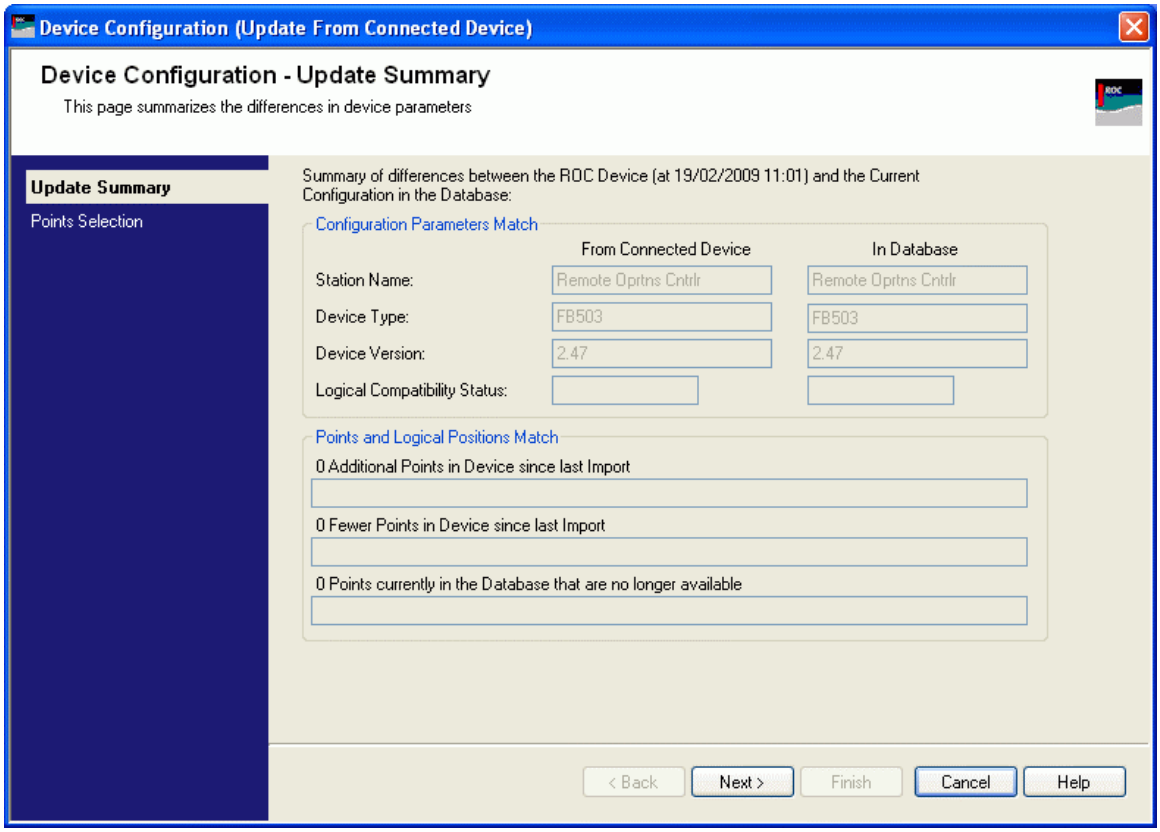


- Points Selection Page



6.2.1 Roc Device Update Page

This Page displays to you the differences that have been found in Point configuration between the device and the OpenEnterprise database since the last update.



6.2.1.1 Title bar

The Title bar will display the context from which the dialog was called (whether updating from ROC 800 file or from Connected Device).

6.2.1.2 Station Name

The generic description for the type of Device that is being updated.

6.2.1.3 Device Type

The specific type of ROC Device that is being updated.

6.2.1.4 Device Version

The version number of the Device that is being updated.

6.2.1.5 Logical Compatibility State

Used to specify 8 or 16 points per slot. Only relevant for 'Plus' protocol Devices.

6.2.1.6 Station Name (Database)

Shows the Station Name as recorded in the OpenEnterprise database for this Device.

6.2.1.7 Device Type (Database)

The Device Type as recorded in the OpenEnterprise database for this Device.

6.2.1.8 Device Version (Database)

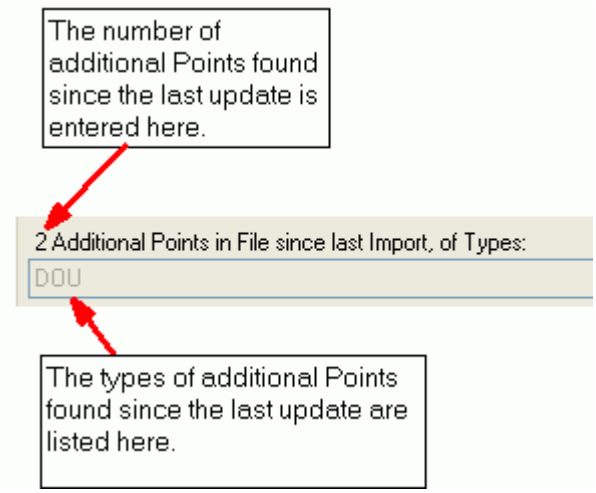
The Device Version as recorded in the OpenEnterprise database for this Device.

6.2.1.9 Logical Compatibility State (Database)

Used to specify 8 or 16 points per slot. Only relevant for 'Plus' protocol Devices.

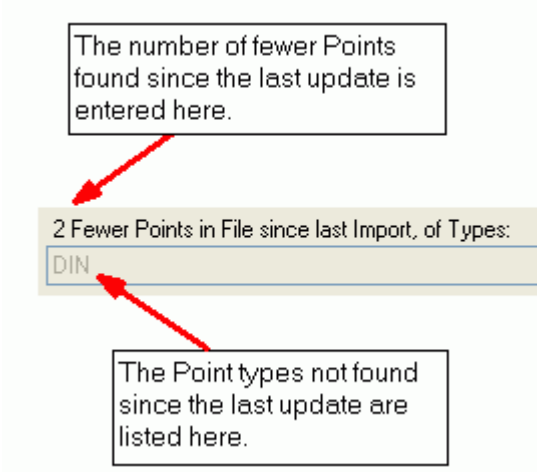
6.2.1.10 Additional Points in Device

This field shows if there are any new Points found in the Device since the last import. The number and type of Points found are displayed.



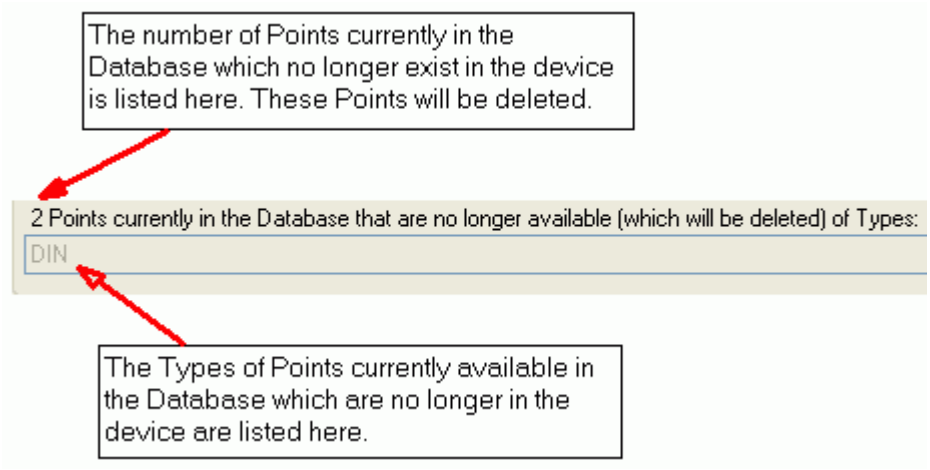
6.2.1.11 Fewer Points in Device

This field shows if there are any fewer Points found in the ROC 800 File since the last import. The missing number and type of Points found are displayed.



6.2.1.12 Points in Database that are no longer available

This field shows if there are Points found in the Database that are no longer available in the Device since the last import. The number and Type of Points no longer available in the Device are displayed. These Points will be deleted from the Database.

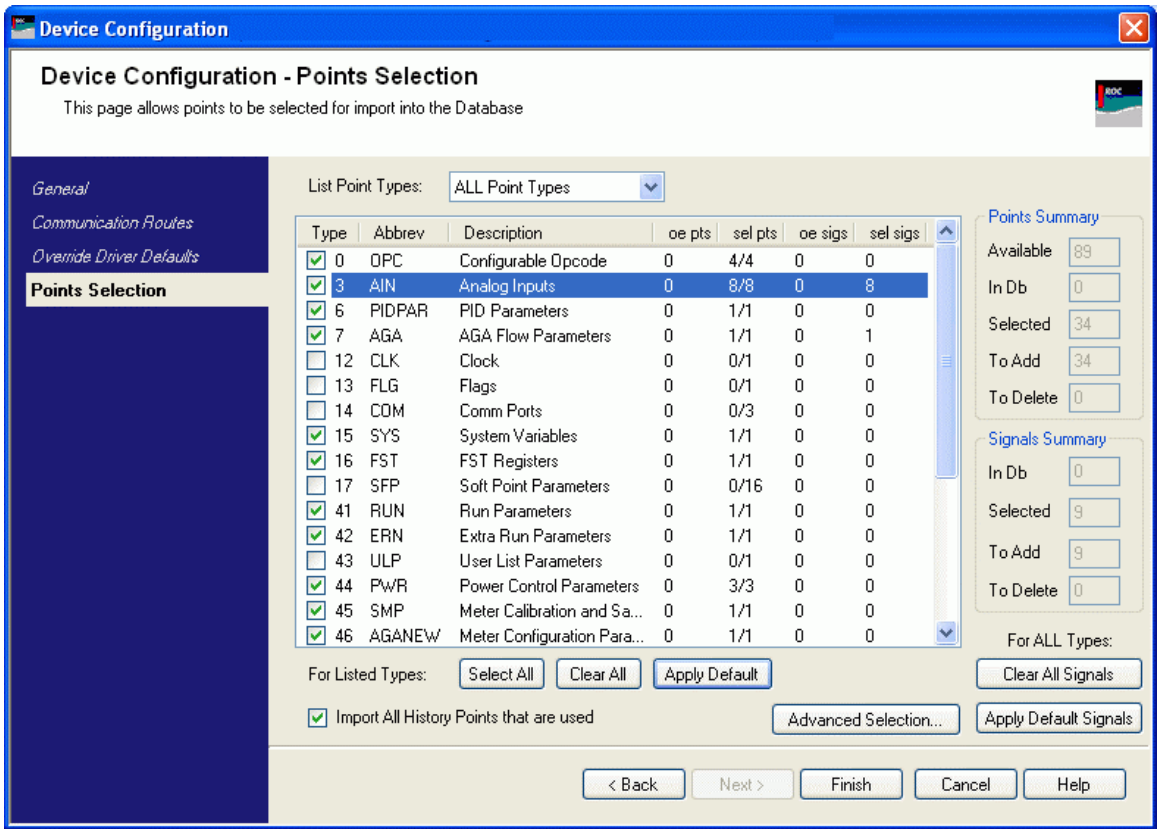


6.2.2 Point Selection Page

ROC Points are entered into the appropriate ROC Points table in the OpenEnterprise database. In addition, ROC Signals may be entered into the appropriate ROC Signal table for certain Parameters. Creating ROC Signals enables OpenEnterprise Reporting, Historical logging and Calculations to be applied to these Parameters.

This page enables you to select the Points and Parameters from the device that will be mapped to ROC Points and Signals in the OpenEnterprise Database.

When the page is called from the 'Add/Delete Database Points/Signals' context menu which is available on in the Tree View Pane, the other pages of the 'ROC Device Wizard' are not available.

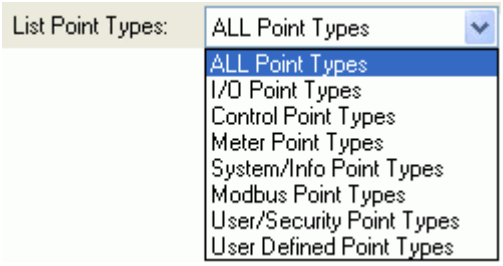


6.2.2.1 Title

When adding a Device, the Title Bar will also contain a description of the method that is being used to add the Device (e.g. 'From ROC 880 file' or 'From Device').

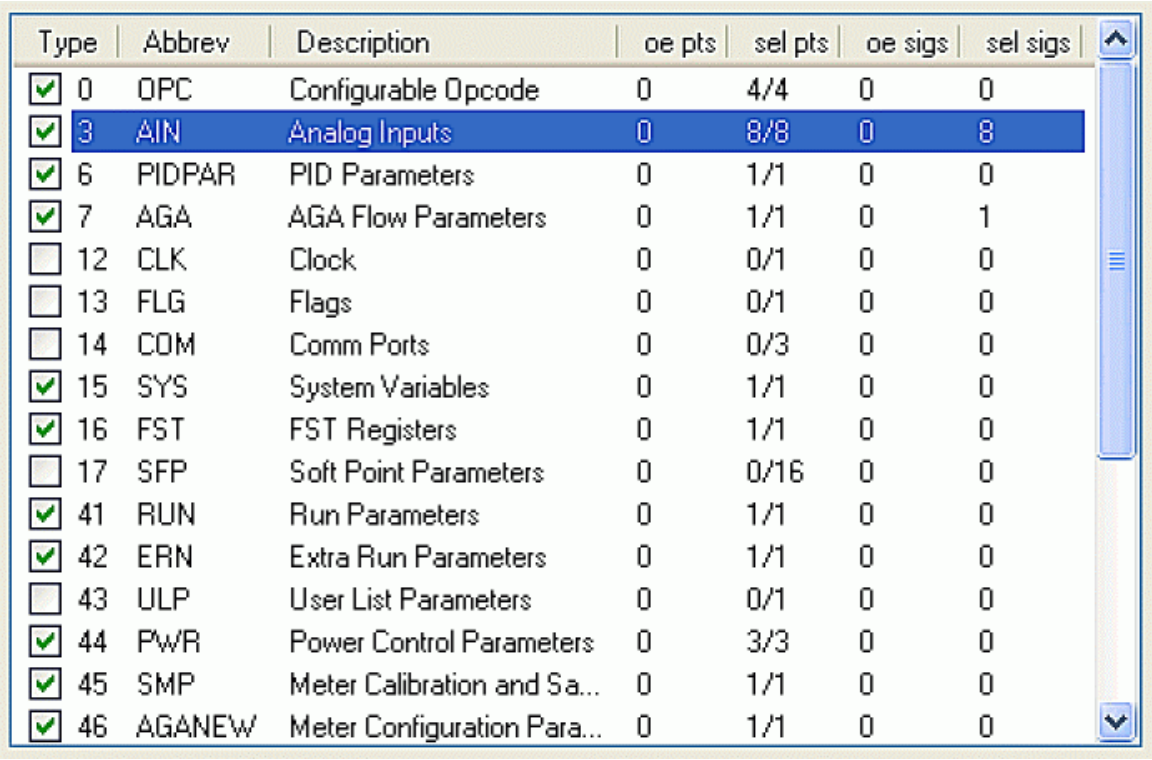
6.2.2.2 Point Types

This list enables you to filter the 'Point Types Selection List' by a selected Point Type. The default is 'ALL Point Types'.



6.2.2.3 Point Types Selection List

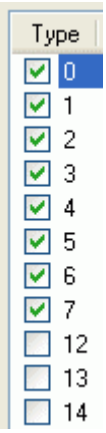
The Points Type Selection List enables users to specify what ROC Point Types will be added to the OpenEnterprise database from a ROC device, or what Points will be defined within a Parameter Pattern Template. The user should select the point types that are required by checking the box in the 'Type' column.



Type	Abbrev	Description	oe pts	sel pts	oe sigs	sel sigs
0	OPC	Configurable Opcode	0	4/4	0	0
3	AIN	Analog Inputs	0	8/8	0	8
6	PIDPAR	PID Parameters	0	1/1	0	0
7	AGA	AGA Flow Parameters	0	1/1	0	1
12	CLK	Clock	0	0/1	0	0
13	FLG	Flags	0	0/1	0	0
14	COM	Comm Ports	0	0/3	0	0
15	SYS	System Variables	0	1/1	0	0
16	FST	FST Registers	0	1/1	0	0
17	SFP	Soft Point Parameters	0	0/16	0	0
41	RUN	Run Parameters	0	1/1	0	0
42	ERN	Extra Run Parameters	0	1/1	0	0
43	ULP	User List Parameters	0	0/1	0	0
44	PWR	Power Control Parameters	0	3/3	0	0
45	SMP	Meter Calibration and Sa...	0	1/1	0	0
46	AGANEW	Meter Configuration Para...	0	1/1	0	0

6.2.2.3.1 Selected Point Types

The Point Types that exist in the Device are already checked for inclusion in the OpenEnterprise database.



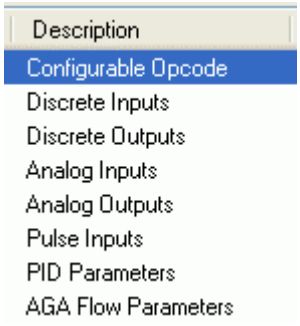
Type
0
1
2
3
4
5
6
7
12
13
14

6.2.2.3.2 Abbrev

Point Type abbreviations are listed in this column.

6.2.2.3.3 Description

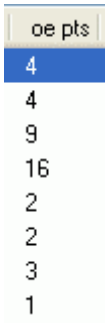
Point Type descriptions are listed in this column.



6.2.2.3.4 oe pts

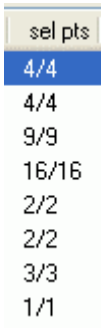
This column displays the number of Points for this Device that have already been inserted into the OpenEnterprise database for each Point Type. When a Device is being added, all rows of this column will say 0 (zero).

The image below shows a Device that is being modified, so Points are already in the database for this Device.



6.2.2.3.5 sel pts

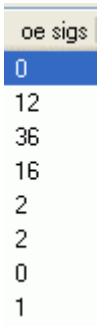
This column displays how many of the available Points in the Device are currently selected for inclusion in the OpenEnterprise database.



6.2.2.3.6 oe sigs

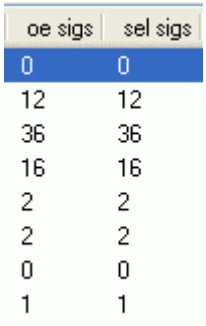
Entries are insertedThis column shows how many of the ROC Signals have already been inserted into the database for the Device. When a Device is being added, all rows of this column will say 0 (zero).

The image below shows a Device that is being modified, so Signals are already in the database for this Device.



6.2.2.3.7 sel sigs

The 'sel sigs' column displays how many of the available Point Parameters are currently selected for inclusion as ROC Signals in the OpenEnterprise database. This is determined initially by the 'Value' Parameter Pattern Template which is applied by default when adding new Devices.



6.2.2.4 Select All Point Types

If this button is selected all Point Types will be selected, regardless of whether they occur in the Device.

6.2.2.5 Clear All Point Types

If this button is selected all Point Types will be cleared.

6.2.2.6 Apply Default

If this button is selected, the default Point Types for the Device will be selected.

6.2.2.7 Import All History Points that are Used

When this box is checked any ROC History Points that exist in the Device are imported to the ROCHistoryPoint Table.

6.2.2.8 Points Summary

This section summarizes the number of Points that will be added or deleted based on the current Points selected if you selects the [Finish] button.

6.2.2.8.1 Available

The number of ROC Points that are supported by the Device.

6.2.2.8.2 In DB

The number of ROC Points from those that are currently selected that have been inserted into the OpenEnterprise database. When modifying the Device this will refer to the number of new Points that have been selected.

6.2.2.8.3 Selected

The number of ROC Points that have been selected to be inserted into the OpenEnterprise database. When modifying a Device, this will refer to any new Points that have been selected.

6.2.2.8.4 To Add

The number of ROC Points that will be added based on the current selection to the OpenEnterprise database if you selects the [Finish] button.

6.2.2.8.5 To Delete

The number of ROC Points that will be deleted from the OpenEnterprise database if you selects the [Finish] button.

6.2.2.9 Signals Summary

This section summarizes the number of ROC Signals that will be added or deleted based on the current Parameters selected if you were to select the [Finish] button.

6.2.2.9.1 In DB

The number of ROC Signals based on the Parameters that are currently selected that have been inserted into the OpenEnterprise database. When modifying the Device this will refer to the number of new Parameters that have been selected.

6.2.2.9.2 Selected

The number of Parameters that have been selected to be inserted into the OpenEnterprise database as ROC Signals. When modifying a Device, this will refer to any new Parameters that have been selected.

6.2.2.9.3 To Add

The number of ROC Signals that will be added to the OpenEnterprise database based on the current selection of Parameters.

6.2.2.9.4 To Delete

The number of ROC Signals that will be deleted from the OpenEnterprise database based on any Parameters that may have been cleared using the 'Point Selection Configuration' dialog.

6.2.2.10 Clear All Signals

Clears all ROC Point Parameters, so that no ROC Signals will be created if you clicks the [Finish] button.

6.2.2.11 Apply Default Signals

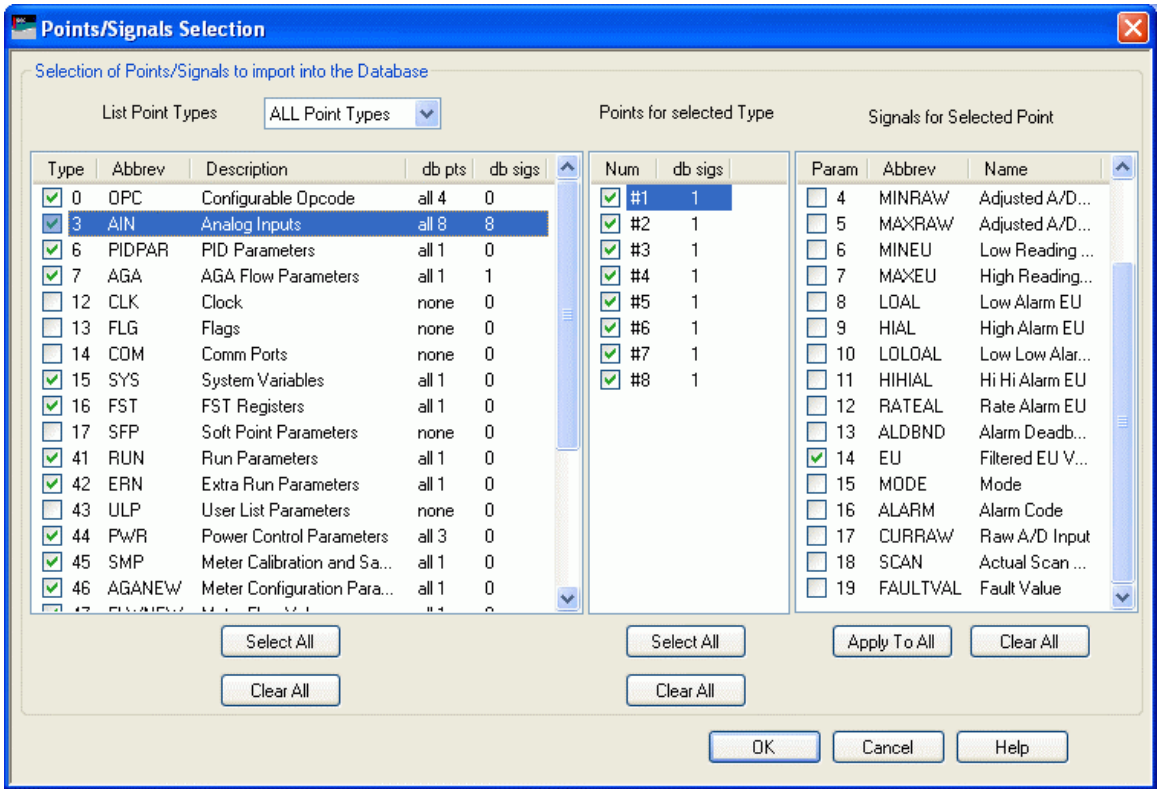
Selects default Parameters for the Device. This usually means the 'Filtered EU Value' Parameter, plus a few others. These are taken from the 'Value' Parameter Pattern Template. If you selects the [Finish] button then ROC Signals will be created in the OpenEnterprise database for these Parameters.

6.2.2.12 Advanced Selection

This opens the 'Point Selection Configuration' dialog, which enables you to select specific Points and Parameters for inclusion in the OpenEnterprise database.

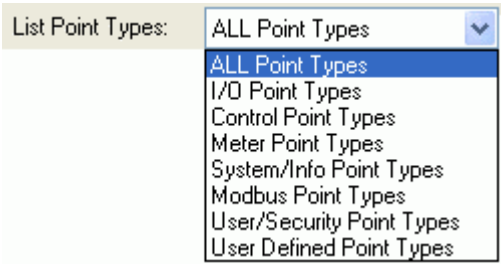
6.2.2.13 Point Selection Configuration

From this page users can select Point Types, individual Points and Point Parameters for insertion into the OpenEnterprise database.



6.2.2.13.1 Point Types

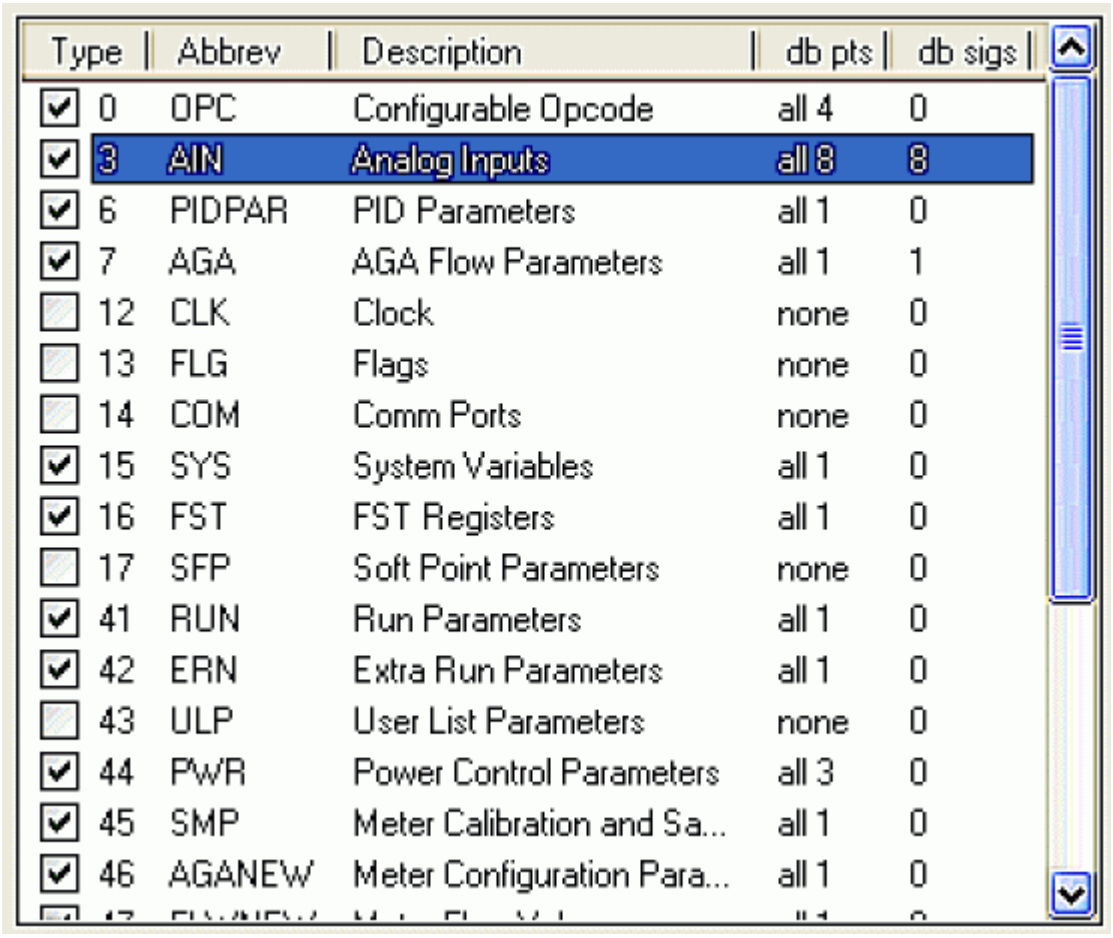
This list enables you to filter the 'Point Types Selection List' by a selected Point Type. The default is 'ALL Point Types'.



6.2.2.13.2 Point Types List

6.2.2.13.2.1 Point Types List

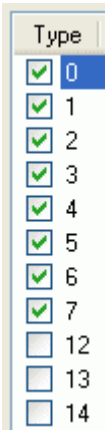
A list of point types, showing their availability for the device. The user can select available point types for adding to the OpenEnterprise database.



Type	Abbrev	Description	db pts	db sigs
☑ 0	OPC	Configurable Opcode	all 4	0
☑ 3	AIN	Analog Inputs	all 8	8
☑ 6	PIDPAR	PID Parameters	all 1	0
☑ 7	AGA	AGA Flow Parameters	all 1	1
☐ 12	CLK	Clock	none	0
☐ 13	FLG	Flags	none	0
☐ 14	COM	Comm Ports	none	0
☑ 15	SYS	System Variables	all 1	0
☑ 16	FST	FST Registers	all 1	0
☐ 17	SFP	Soft Point Parameters	none	0
☑ 41	RUN	Run Parameters	all 1	0
☑ 42	ERN	Extra Run Parameters	all 1	0
☐ 43	ULP	User List Parameters	none	0
☑ 44	PWR	Power Control Parameters	all 3	0
☑ 45	SMP	Meter Calibration and Sa...	all 1	0
☑ 46	AGANEW	Meter Configuration Para...	all 1	0

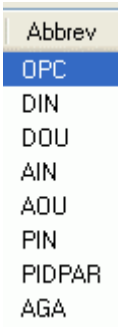
6.2.2.13.2.2 Selected Point Types

The Point Types that exist in the Device are already checked for inclusion in the OpenEnterprise database.



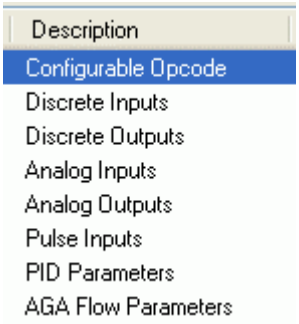
6.2.2.13.2.3 Abbrev

Point Type abbreviations are listed in this column.



6.2.2.13.2.4 Description

Point Type descriptions are listed in this column.



6.2.2.13.2.5 db pts

The number of ROC Points of each Point Type that have been selected for insertion into the OpenEnterprise database.

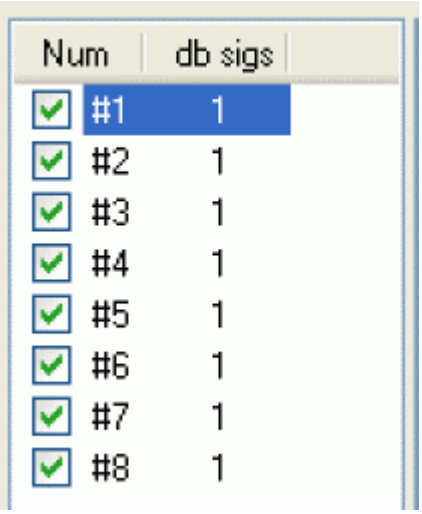
6.2.2.13.2.6 db sigs

The number of ROC Signals that will be created for selected Parameters of the selected ROC Point.

6.2.2.13.3 Points for selected Type

6.2.2.13.3.1 Points for selected Type

The 'Points for selected Type' list displays the number of points of the selected type that are available in the selected device.



6.2.2.13.3.2 Selected Points

Type topic text here.

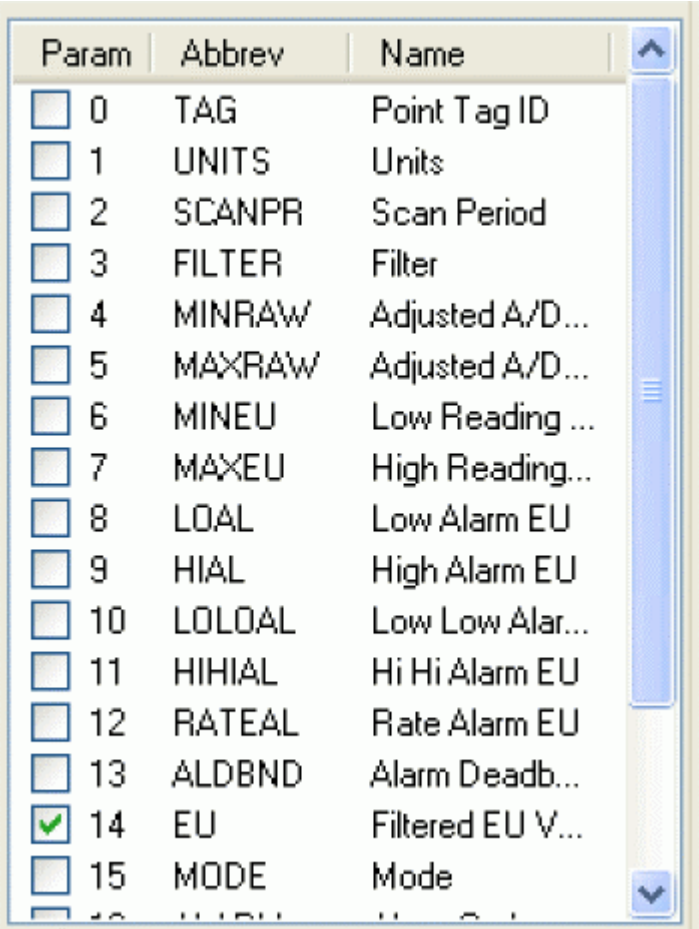
6.2.2.13.3.3 db sigs

The number of ROC Signals that will be created for selected Parameters of the selected ROC Point.

6.2.2.13.4 Signals for Selected Point

6.2.2.13.4.1 Signals for Selected Point

The 'Signals for Selected Point' list displays the parameters that are available for the selected Point. The user can select what parameters are to be logged by OpenEnterprise.



6.2.2.13.4.2 Param

Type topic text here.

6.2.2.13.4.3 Abbrev

Type topic text here.

6.2.2.13.4.4 Name

Type topic text here.

6.2.2.13.5 Select All Point Types

If this button is selected all Point Types will be selected, regardless of whether they occur in the Device.

6.2.2.13.6 Clear All Point Types

If this button is selected all Point Types will be cleared.

6.2.2.13.7 Select All Points

Type topic text here.

6.2.2.13.8 Clear All Points

Type topic text here.

6.2.2.13.9 Apply To All

Type topic text here.

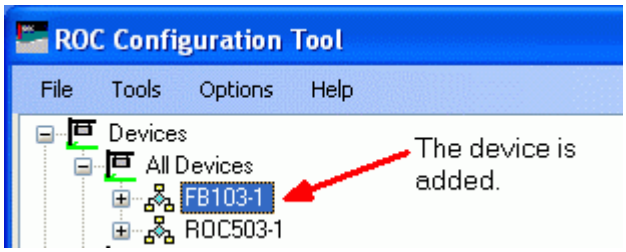
6.2.2.13.10 Clear All Selected Params

Type topic text here.

6.2.2.14 Finish

When the [Finish] button is selected from either the 'Points Selection Page' or the 'Add Points From Device' Page, the ROC RDI will immediately begin adding the Device, Points and Signals to the OpenEnterprise database.

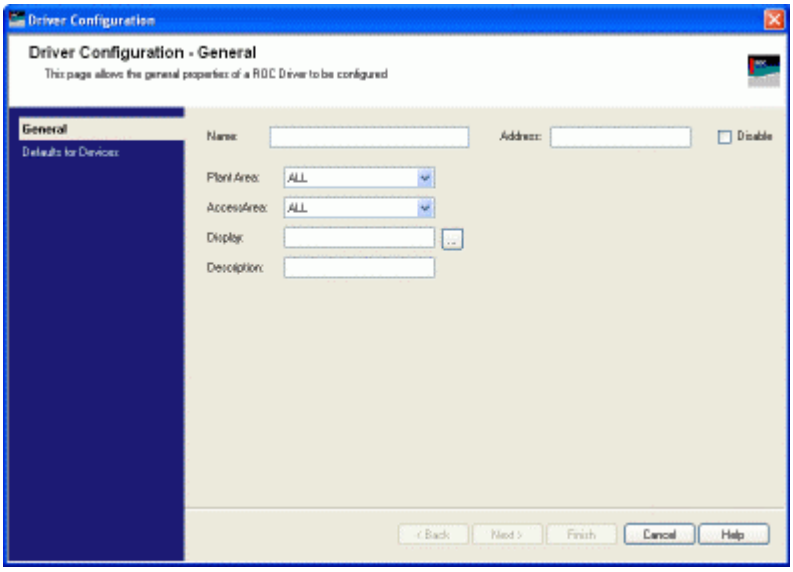
Then the added Device will be shown as an object under the Devices sub nodes. The image below shows a new Device that has just been added under the 'All Devices' node.



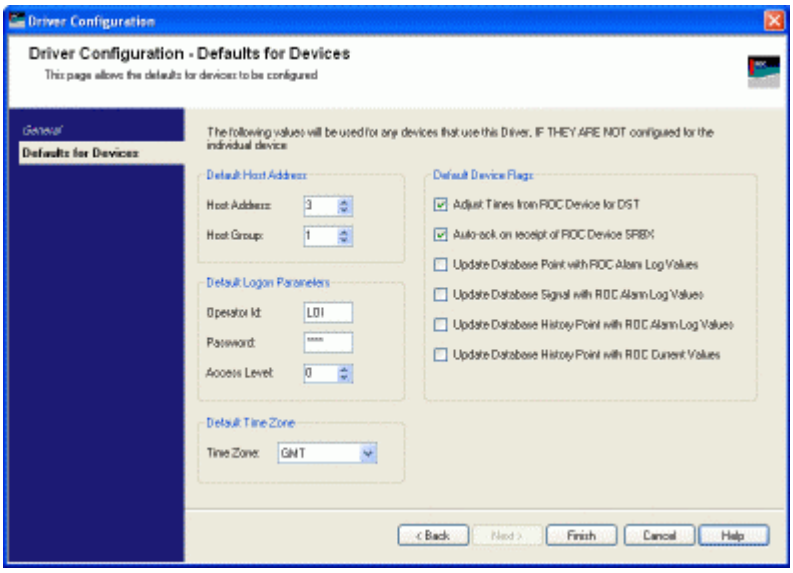
6.3 ROC Driver Wizard

The ROC Driver Wizard enables you to add a new ROC Driver to the OpenEnterprise system. It consists of two configuration pages:-

- General Page

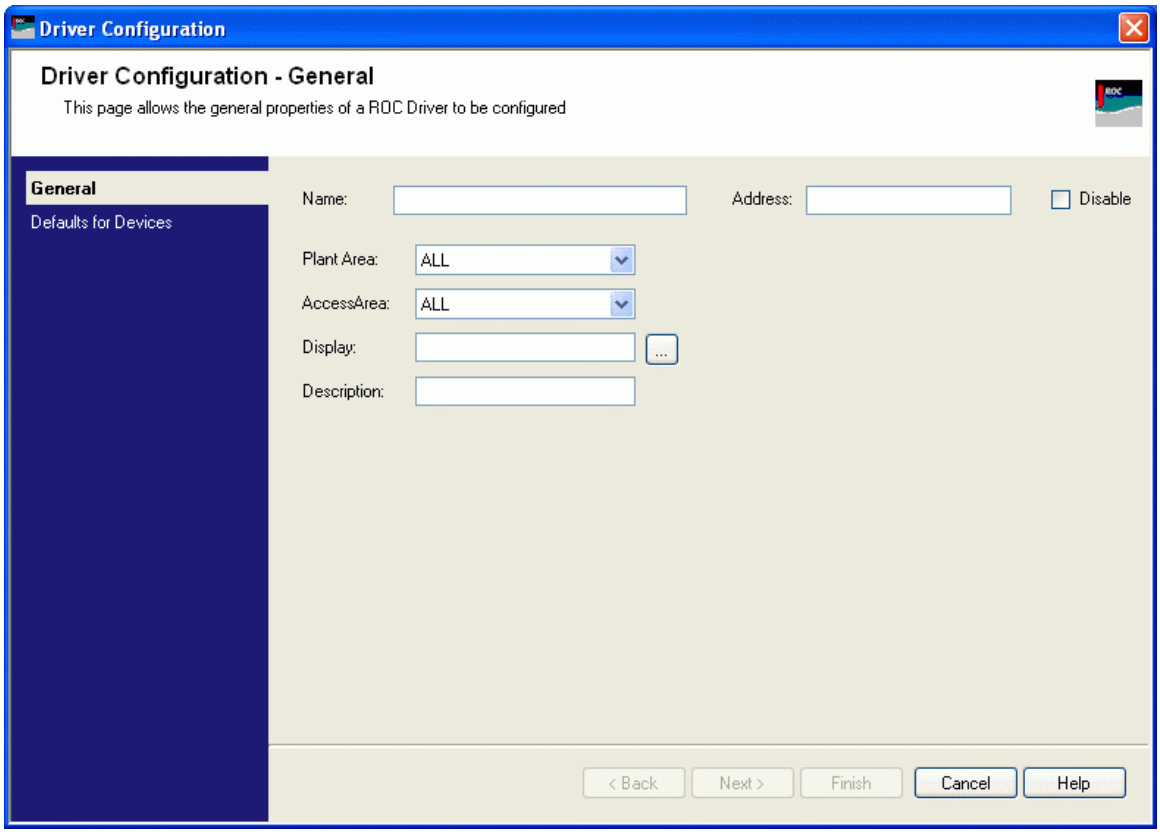


- Device Defaults Page



6.3.1 Driver Configuration General Page

The 'Driver Configuration' General Page requires you to enter at minimum a name and Address for the new ROC Driver.



6.3.1.1 Name

Type the name of the new ROC Driver into this field.

6.3.1.2 Address

Type the address of the new ROC Driver in here. This will be the name of the executable file without the .EXE extension.

6.3.1.3 Disable

If checked the new ROC Driver will be disabled.

6.3.1.4 Plant Area

The Plant Area to which the new ROC Driver will be assigned.

6.3.1.5 Access Area

The Access Area to which the new ROC Driver will be assigned.

6.3.1.6 Display

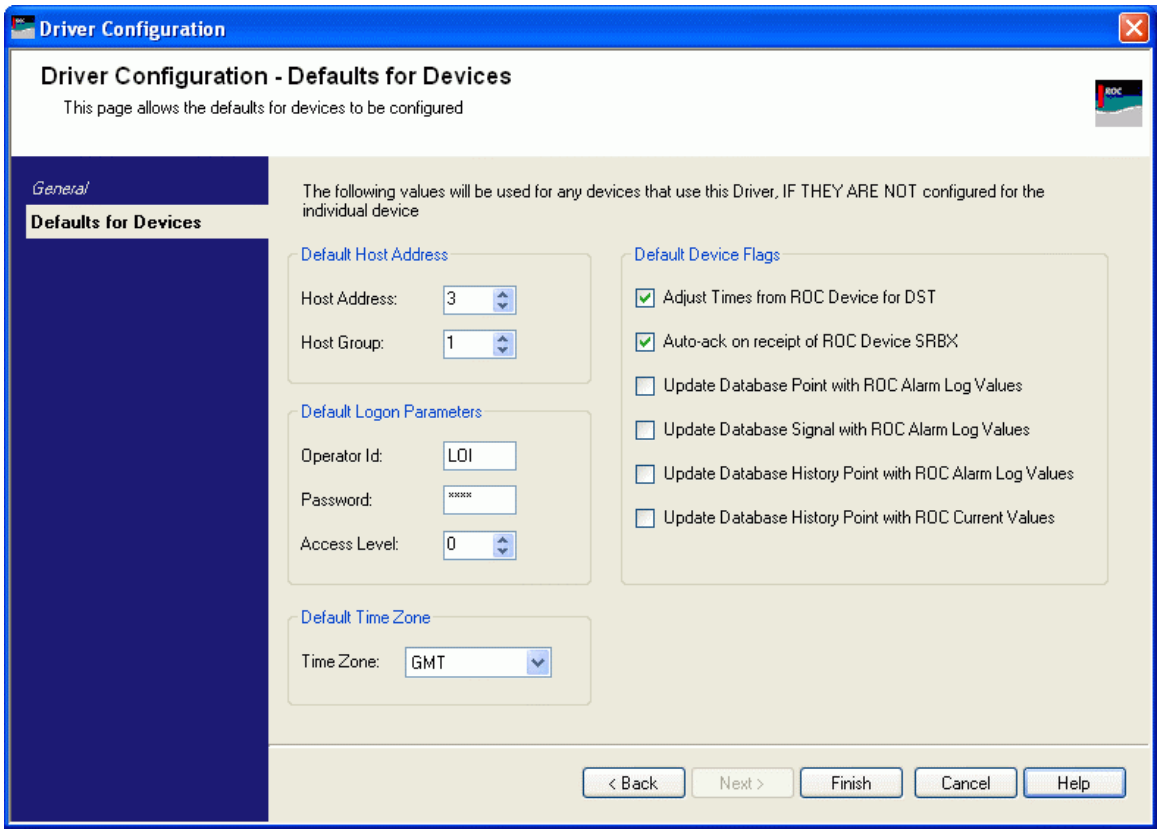
The Display which will be assigned to the new ROC Driver.

6.3.1.7 Description

A description given to the new ROC Driver that may provide extra useful information.

6.3.2 Driver Configuration Device Defaults Page

This page enables you to configure default values for any devices that use the new Driver. The default values only apply if no values are configured for the individual device.



6.3.2.1 Host Address

The Host Address for the ROC Driver. Defaults to 3, but can be given another value provided it is also changed in the Device from the 'Override Driver Defaults Page' of the configuration pages for the Device.

6.3.2.2 Host Group

The Host Group for the ROC Driver. Defaults to 1, but can be given another value provided it is also changed in the Device from the 'Override Driver Defaults Page' of the configuration pages for the Device.

6.3.2.3 Operator ID

The Operator Id that will be used by the ROC RDI to logon to the Device.

6.3.2.4 Password

The Password that will be used by the ROC RDI to logon to the Device.

6.3.2.5 Access Level

The Access Level that will be granted to the ROC RDI when it logs on to the Device using these credentials.

6.3.2.6 Time Zone

A drop-down list of time zones. Defaults to GMT, but any available time zone can be selected to apply to the new ROC Driver.

6.3.2.7 Adjust Times from ROC Device for DST

When set, this flag causes timestamps from the Device to be adjusted for DST.

6.3.2.8 Auto-ack on Receipt of ROC Device SRBX

When checked, causes the ROC RDI to automatically send an acknowledgement on receipt of an SRBX (Spontaneous Report By Exception) from a ROC Device.

6.3.2.9 Update Database Point with ROC Alarm Log Values

If checked, the ROC RDI will update the database Point with ROC Alarm Log Values.

6.3.2.10 Update Database Signal with ROC Alarm Log Values

When checked causes the ROC RDI to update the database Signal with ROC Alarm Log Values.

6.3.2.11 Update Database History Point with ROC Alarm Log Values

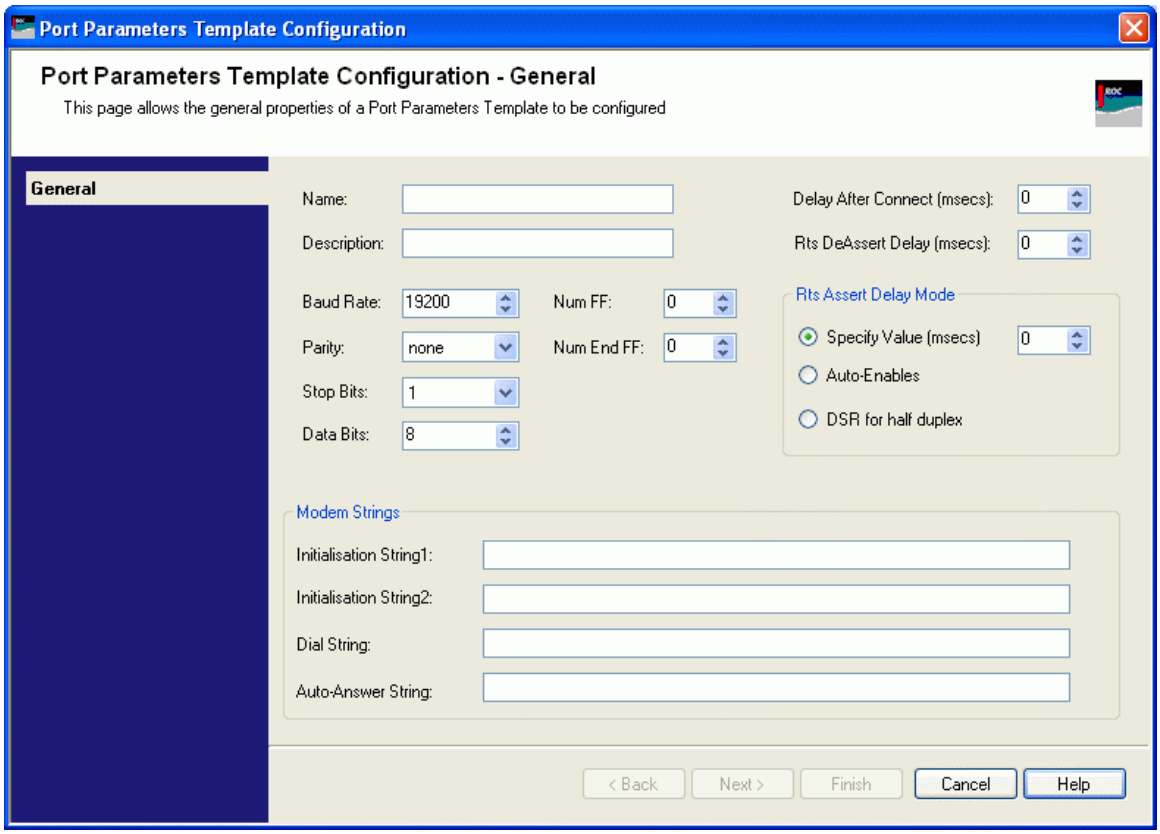
If checked, the ROC RDI will update the database History Point with ROC Alarm Log Values.

6.3.2.12 Update Database History Point with ROC Current Values

When checked causes the ROC RDI to update the database History Point with ROC Current Values.

6.4 Port Parameters Template Wizard

The Port Parameters Template Wizard consists of this single page. This page enables you to define a Port Parameter Template that can be used when adding new Serial or Dial Up Ports. The user must define a unique Port name for the new Port Parameter Template.



6.4.1 Name

The name for the new Port.

6.4.2 Description

A more verbose description for the new Port Parameter Template can be entered here.

6.4.3 Baud Rate

The Baud rate that will be used for the new Port Parameter Template. Select one from those available.

6.4.4 Parity

The Parity setting that will be used for the new Port Parameter Template. Select one of the available settings.

6.4.5 Stop Bits

The Stop Bits setting that will be used for the new Port Parameter Template. Select one of those available.

6.4.6 Data Bits

The Data Bits to be used for the new Port Parameter Template. Select one of the options available in the drop-down list.

6.4.7 Num FF

Number of FFs put on start of ROC message. Default is 0.

6.4.8 Num End FF

Number of FFs put on end of ROC message. Default is 0.

6.4.9 Delay After Connect

The delay in milliseconds after connection before a ROC message is sent. Default 0.

6.4.10 Rts DeAssert Delay

Gives the time (in milliseconds) between the end of the message being sent 'AllSent', and the DeAssertion of RTS. The default value is 0 (zero). A value of -1 indicates use of 'auto-enables' mode, where RTS handling is carried out automatically by Win32.

6.4.11 Specify Value

If selected, the delay after asserting RTS is defined by the spin control to the right of this radio button.

This value provides the time delay (in milliseconds) between asserting RTS and sending the start of the outgoing data. A value of -1 will indicate that the ROC RDI will use the automatic timing of RTS within Win32.

6.4.12 Auto-enables

If checked, indicates that the ROC RDI will use the automatic timing of RTS within Win32.

6.4.13 DSR for half duplex

This option may be used for half-duplex links to control the sending and receiving of data.

6.4.14 Initialisation String1

The Hayes AT string used to initialize the modem. Default is ATV1E0S0=0

6.4.15 Initialisation String2

An extra field for the Hayes AT string required to initialize the modem.

6.4.16 Dial String

The Hayes AT string used to precede phone number in dial-out attempt. Default is ATQ0M0S0=0DT

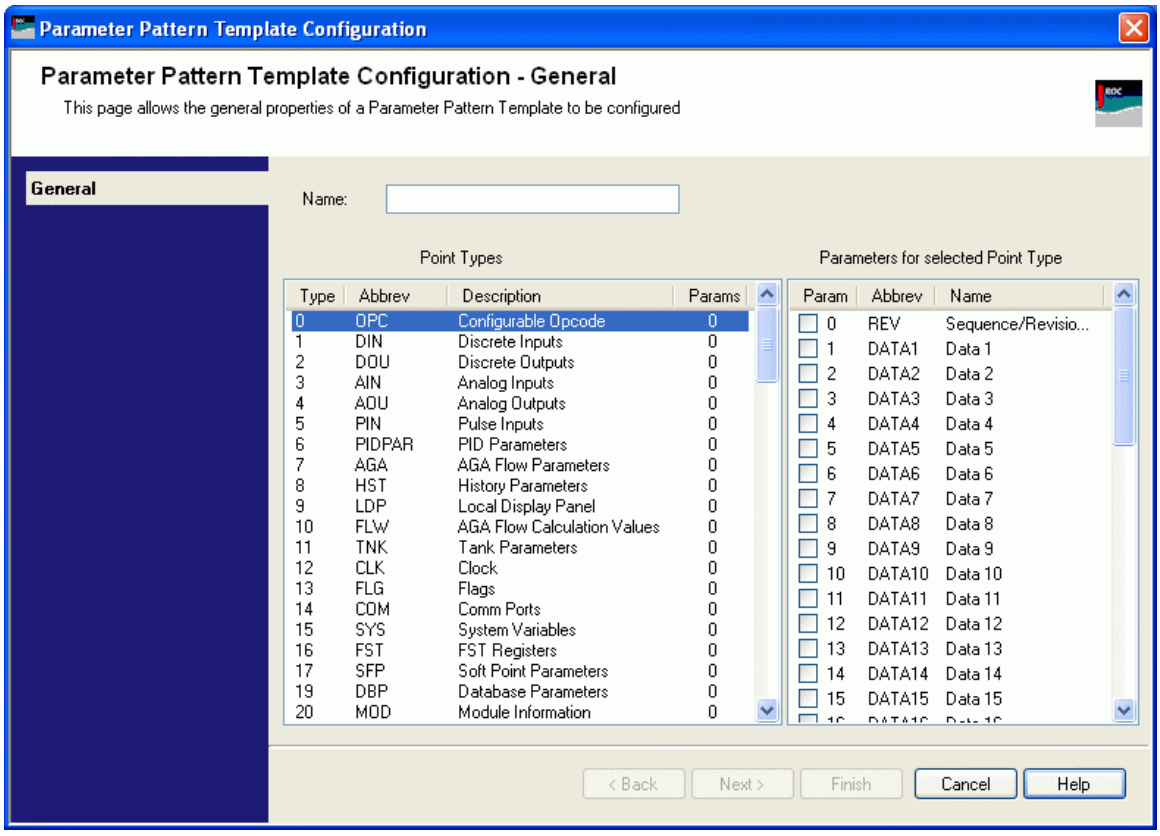
6.4.17 Auto-Answer String

The Hayes AT string used to initialize the modem to auto answer. The default is ATS0=2Q0M0 (two rings before answering).

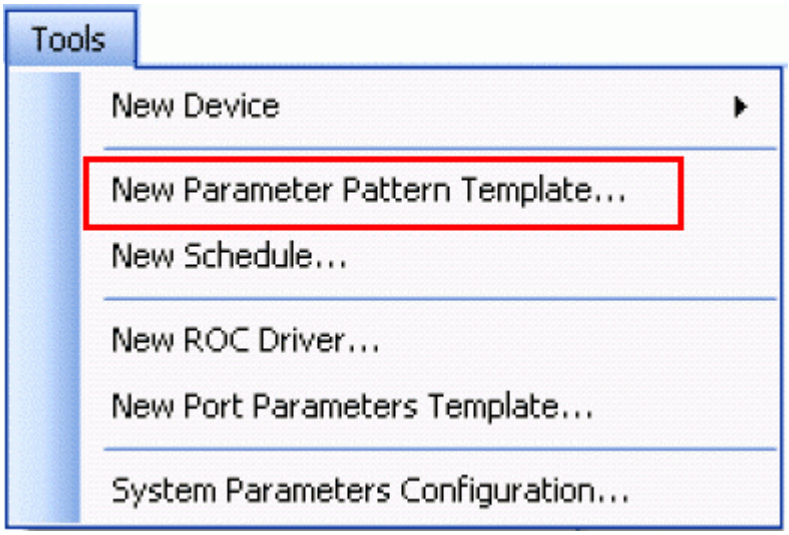
6.5 Parameter Pattern Template Wizard

The Parameter Pattern Template Wizard consists of this single page. Parameter Pattern Templates can be used when adding new ROC devices. Each ROC Point Type can be configured to have zero or more of its Parameters mapped to the OpenEnterprise database.

To create a new Parameter Pattern Template, you must select each Point Type and then select the Parameters that they want to be used to create ROC Signals when a new Device is added.



This page is opened when you select the 'New Parameter Pattern Template...' item from the 'Tools' menu:

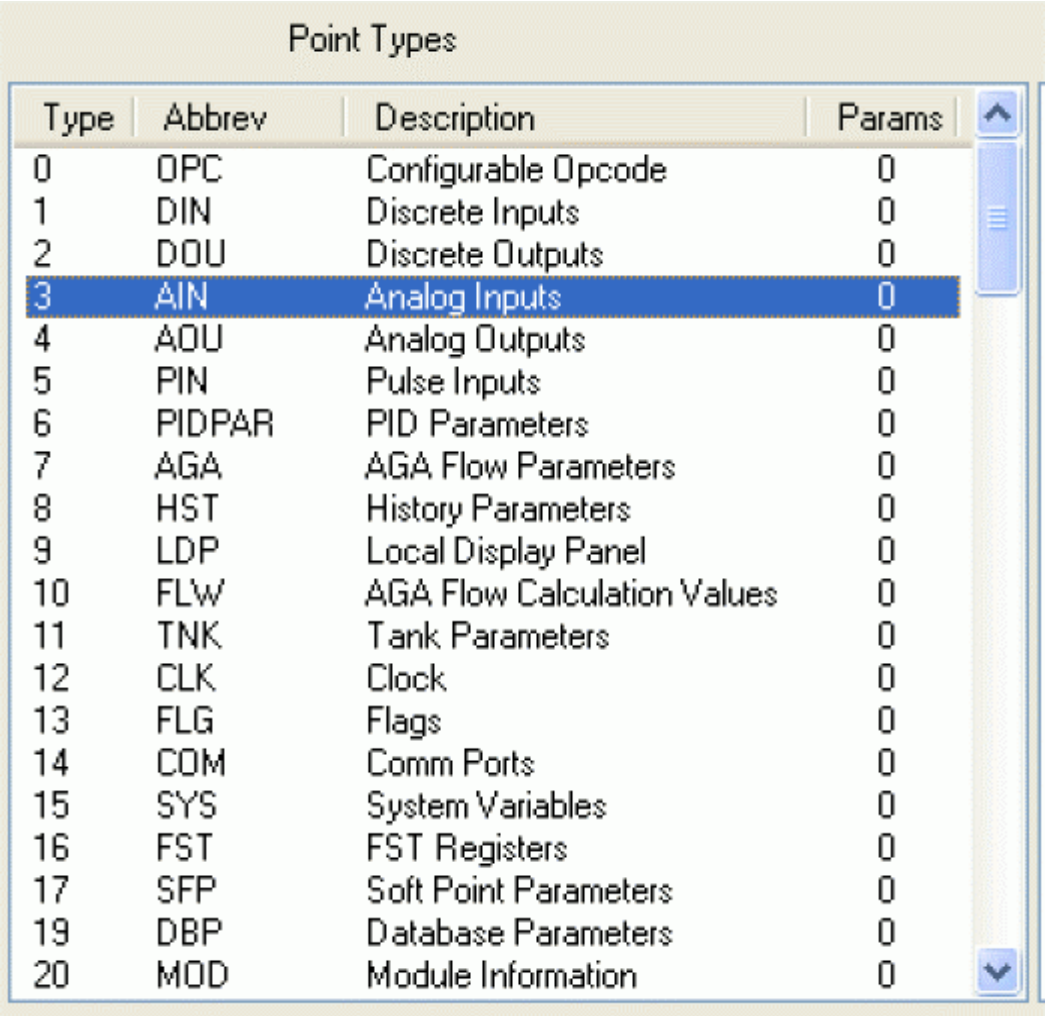


6.5.1 Name

Type a unique name for the new Parameter Pattern Template. The name can contain spaces.

6.5.2 Point Types

The Point Types list enables you to select a single Point Type in order to configure the Parameters that will be required for the Point Type when this Parameter Pattern Template is applied.



6.5.2.1 Point Type

This column shows the ROC Point Type number.

6.5.2.2 Abbrev

This column shows the unique abbreviation used for each Point Type.

6.5.2.3 Description

This column displays the description commonly used for each Point Type.

6.5.2.4 Params

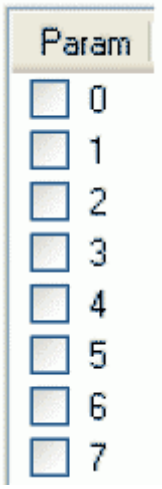
This columns displays the number of Parameters for each Point that have been selected for inclusion in the Parameter Pattern Template.

6.5.3 Parameters for Selected Point Type

The user selects the required Parameters for the selected Point Type that will be applied when this Parameter Pattern Template is used for adding signals from a ROC device.

6.5.3.1 Param

The user can select the Parameters belonging to the selected Point by checking the boxes in this column. If this new Parameter Pattern is used when a new Device is added, then for each Parameter selected here the ROC RDI will create a ROC Signal in the OpenEnterprise database.

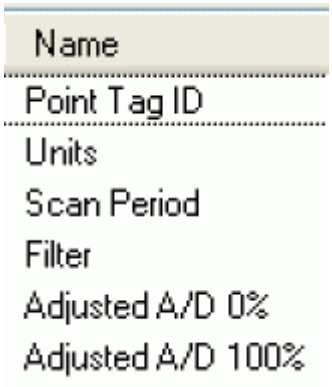


6.5.3.2 Abbrev

This column contains the abbreviations commonly used for these Parameters.

6.5.3.3 Name

This column contains the name of each Parameter in the Parameters list.

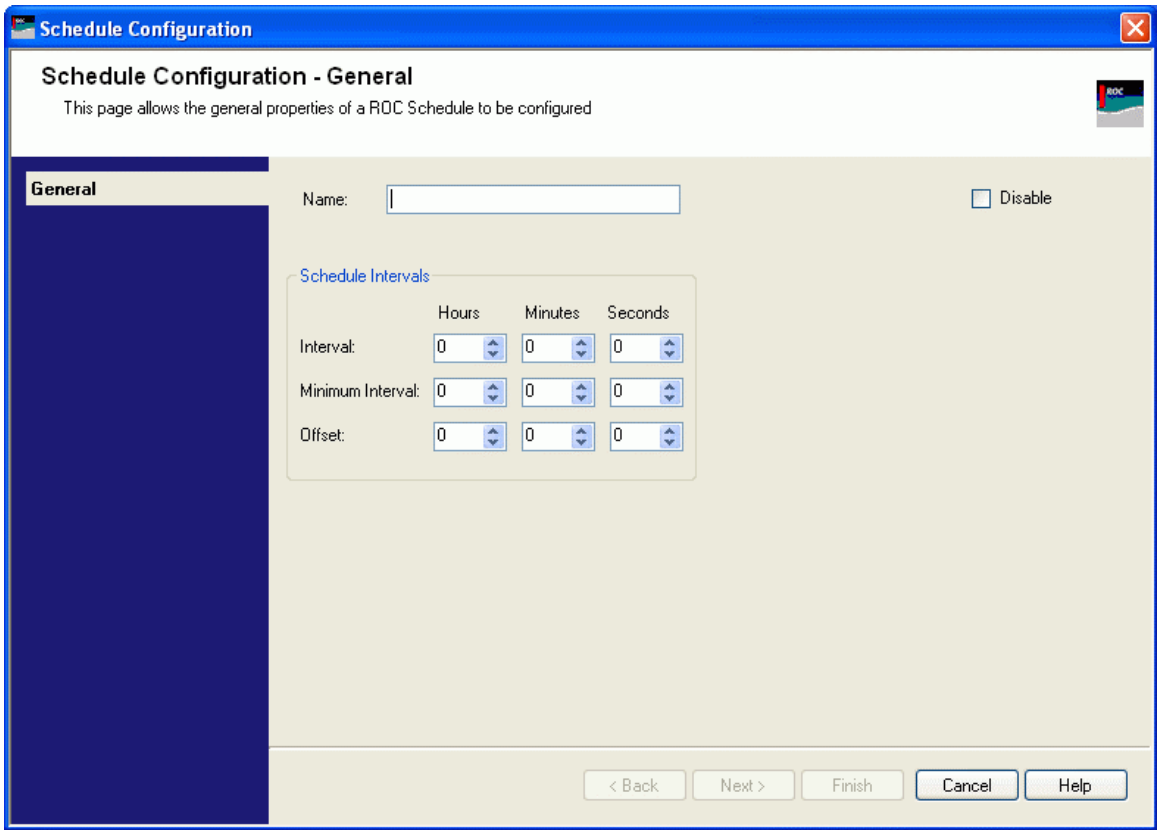


6.5.4 Finish Button

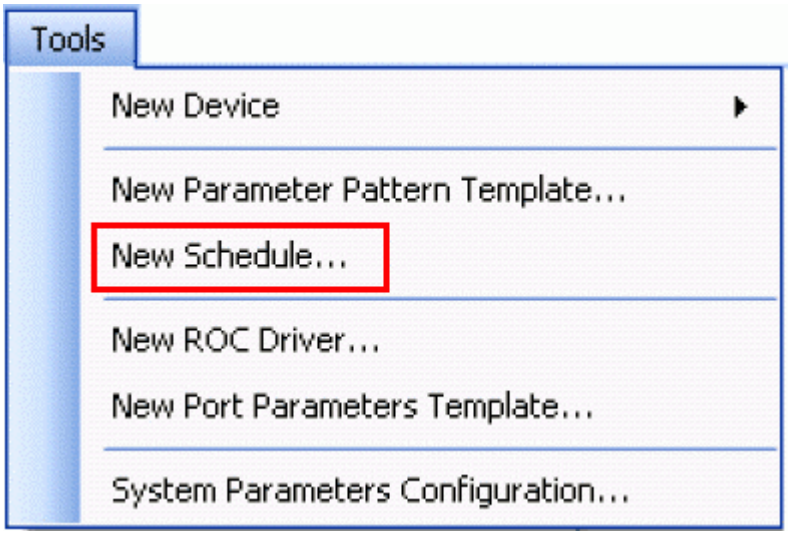
The [Finish] button on the 'Parameter .Pattern Template Page' is disabled until a name is typed into the 'Name' field.

6.6 Schedule Configuration Wizard

The Schedule Configuration Wizard consists of this single page. The 'Schedule Configuration' page enables users to create a new Schedule for use with Data Collection Requests.



This page is displayed when you selects the 'New Schedule...' item from the 'Tools' menu:



6.6.1 Name

Type the name of the new Schedule here. The name can contain spaces.

6.6.2 Disable

When this box is checked, the new Schedule will be disabled.

6.6.3 Interval

The Schedule Interval should be defined by typing into the Hours, Minutes and Seconds fields or using the spin controls. This will define the interval for the Schedule.

6.6.4 Minimum Interval

The Minimum Interval should be defined here if there is a need to ensure that the Schedule does not run again before a specified interval has passed.

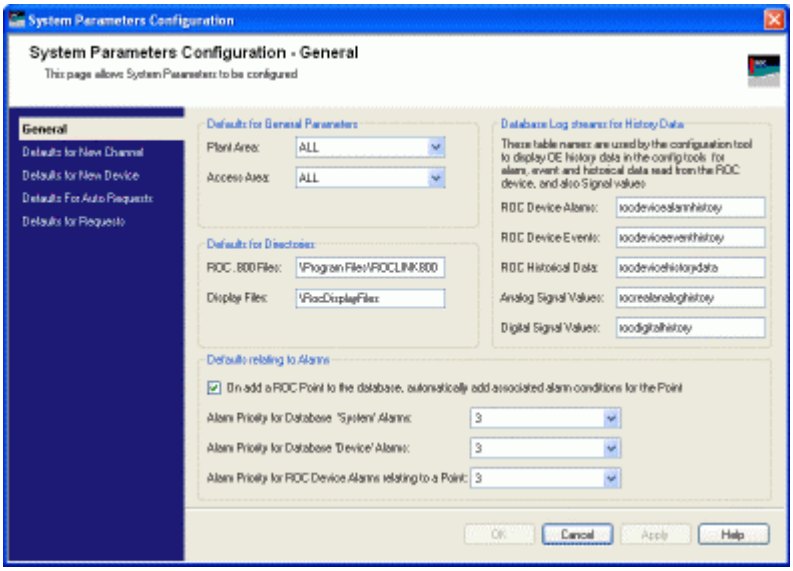
6.6.5 Offset

An offset can be configured here for the Schedule. The default offset for a Schedule is exactly on the hour, minute or second defined in the Schedule. However, the Schedule can be run with an offset. For instance an hourly Schedule can be run with an offset of 5 minutes, which causes it to run at 5 minutes past each hour.

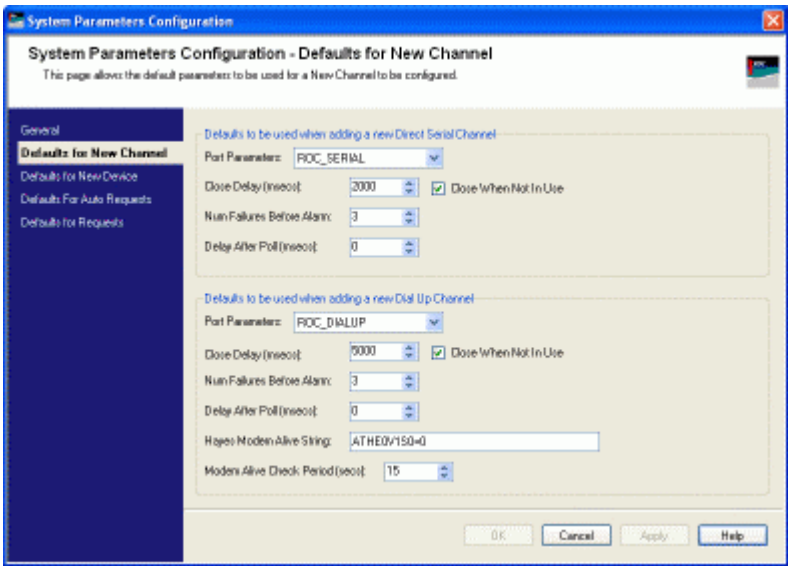
6.7 System Parameters Wizard

The ROC System Parameters Wizard enables you to configure default settings that will be used when adding ROC devices. This wizard consists of the following pages:

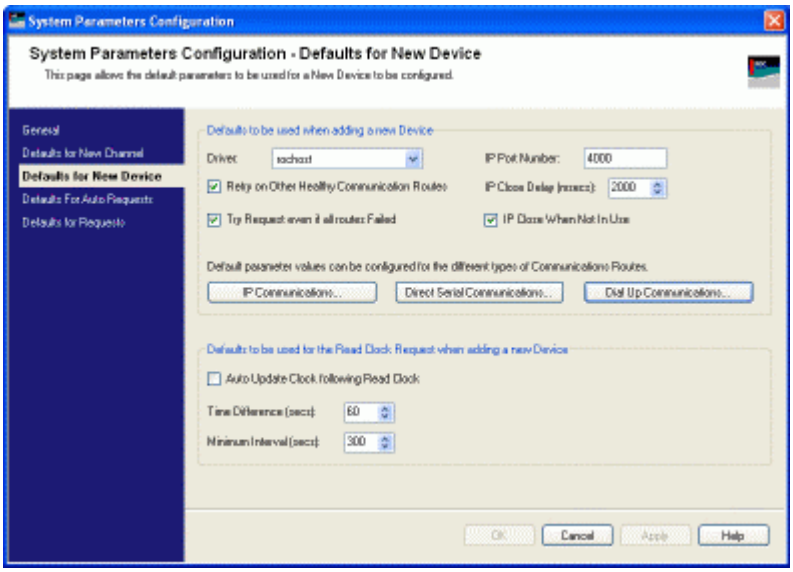
- General Page



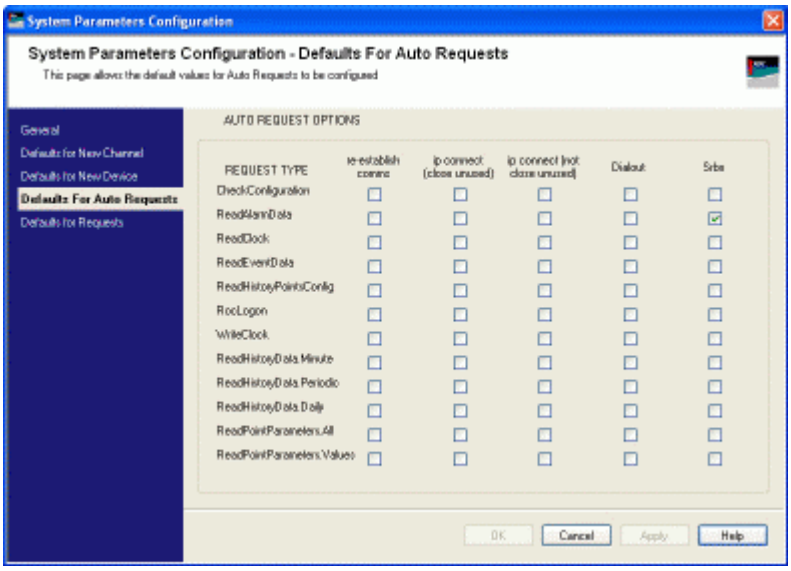
- Defaults for New Channel



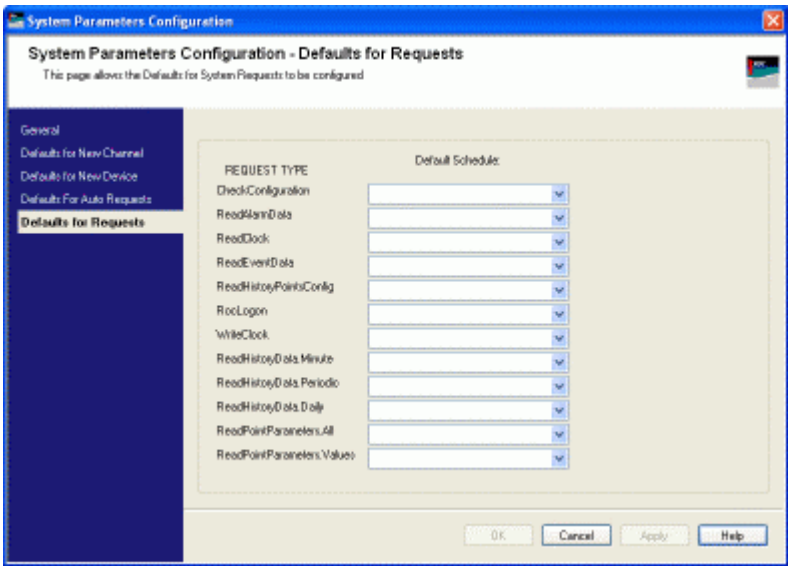
- Defaults for New Device



- Defaults for Auto Requests

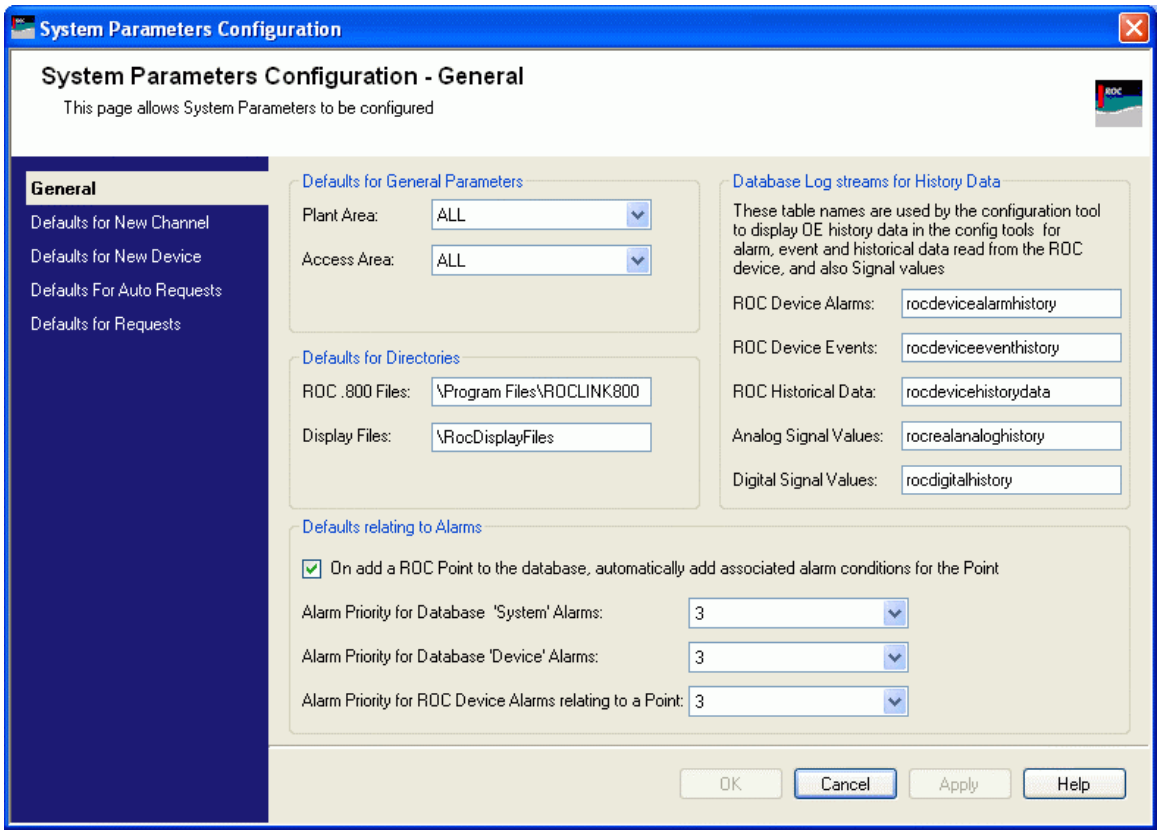


- Defaults for Requests



6.7.1 General Page

This Page enables you to configure general default settings when adding new ROC devices.



6.7.1.1 Plant Area

Specifies the default Plant Area value to use.

6.7.1.2 Access Area

Specifies the default Plant Area value to use.

6.7.1.3 ROC .800 File Directory

Specifies the default directory to use when searching for ROC .800 files.

6.7.1.4 Display File Directory

Specifies the default directory to use when searching for displays.

6.7.1.5 Device Alarm History

The default source table to be used by the ROC Configuration Tool for displaying historical Device Alarms.

6.7.1.6 Device Event History

The default source table to be used by the ROC Configuration Tool for displaying historical Device Events.

6.7.1.7 Device Historical Data

The default source table to be used by the ROC Configuration Tool for displaying historical data from the Device.

6.7.1.8 Real Analog History

The default source table to be used by the ROC Configuration Tool for displaying historical Real Analog Signal data for the Device.

6.7.1.9 Digital History Stream

The default source table to be used by the ROC Configuration Tool for displaying historical Digital Signal data for the Device.

6.7.1.10 Auto Add Associated Alarm Conditions

Instructs the ROC RDI to automatically add associated Alarm Conditions for ROC Points when adding them to the OpenEnterprise database.

6.7.1.11 Default Alarm Priority for System Alarms

The default priority for ROC System Alarms.

6.7.1.12 Default Alarm Priority for Device Alarms

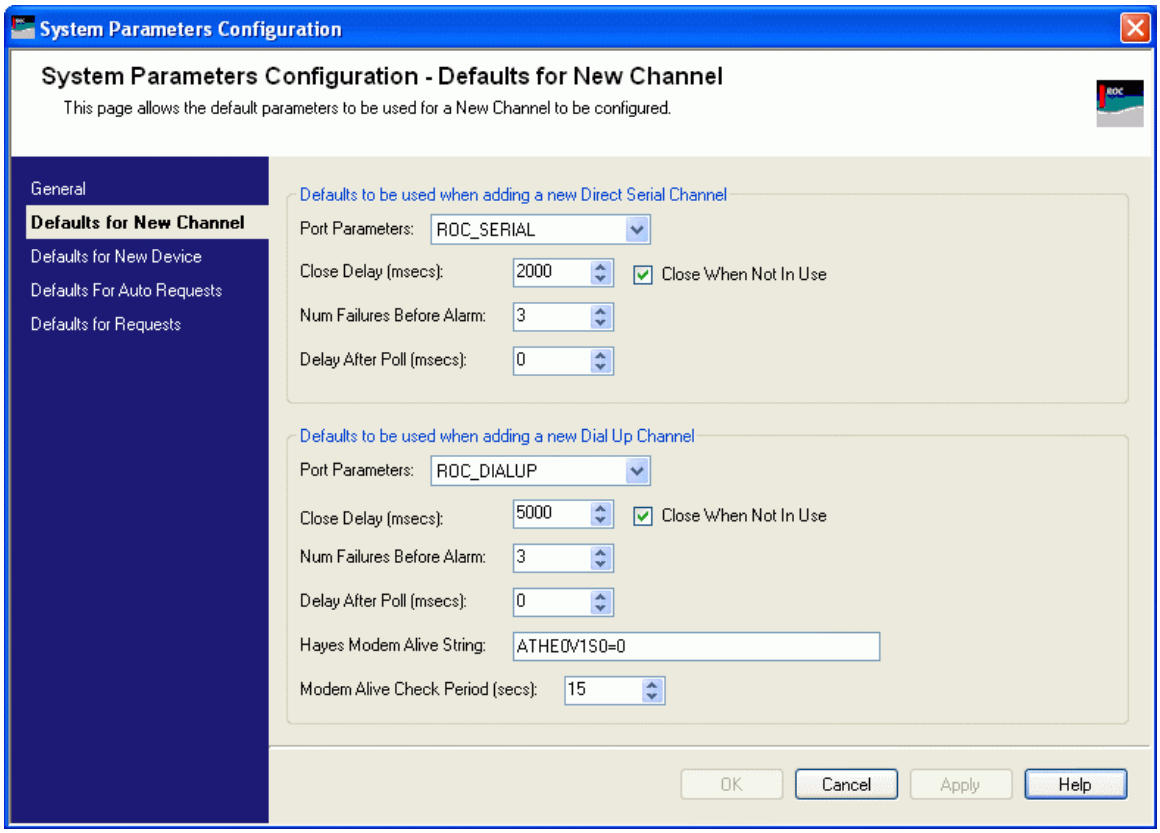
The default priority for ROC Device Alarms.

6.7.1.13 Default Alarm Priority for Points

The default priority for ROC Point Alarms.

6.7.2 Defaults for New Channel Page

This Page enables you to configure default settings when adding new ROC Serial and Dial Up Channels.



6.7.2.1 Port Parameters (Serial)

The default Port Parameter Template to use when adding a new Direct Serial Port. The default is 'ROC_SERIAL'.

6.7.2.2 Close Delay (Serial)

A period (in milliseconds), used by the RDI if the 'Close When Not in Use' option is checked. Determines a period of inactivity after which the socket will be closed.

6.7.2.3 Close When Not In Use

Tells the ROC RDI to close the socket when not being used after a period of inactivity defined in the 'Close Delay' field. This allows other utilities to use the Communications Route. Default is true.

6.7.2.4 Num Failures Before Alarm (Serial)

Number of consecutive failures to different devices on this channel before the channel is alarmed as 'failed'. 0 means no alarm generated. The default is 3.

6.7.2.5 Delay After Poll (Serial)

The delay (in milliseconds) after accessing each outstation (Device) on a Direct Serial channel. Default is 0.

6.7.2.6 Dial Up Port Parameters (Dial Up)

The default Port Parameter Template to use when adding a new Dial Up Port. The default is 'ROC_DIALUP'.

6.7.2.7 Close Delay (Dial Up)

A period (in milliseconds), used by the RDI if the 'Close When Not in Use' option is checked. Determines a period of inactivity after which the socket will be closed.

6.7.2.8 Close When Not In Use

Tells the ROC RDI to close the socket when not being used after a period of inactivity defined in the 'Close Delay' field. This allows other utilities to use the Communications Route. Default is true.

6.7.2.9 Num Failures Before Alarm (Dial Up)

Number of consecutive failures to different devices on this channel before the channel is alarmed as 'failed'. 0 means no alarm generated. The default is 3.

6.7.2.10 Delay After Poll (Dial Up)

The delay (in milliseconds) after accessing each outstation (Device) on a Diial Up channel. Default is 0.

6.7.2.11 Hayes Modem Alive String

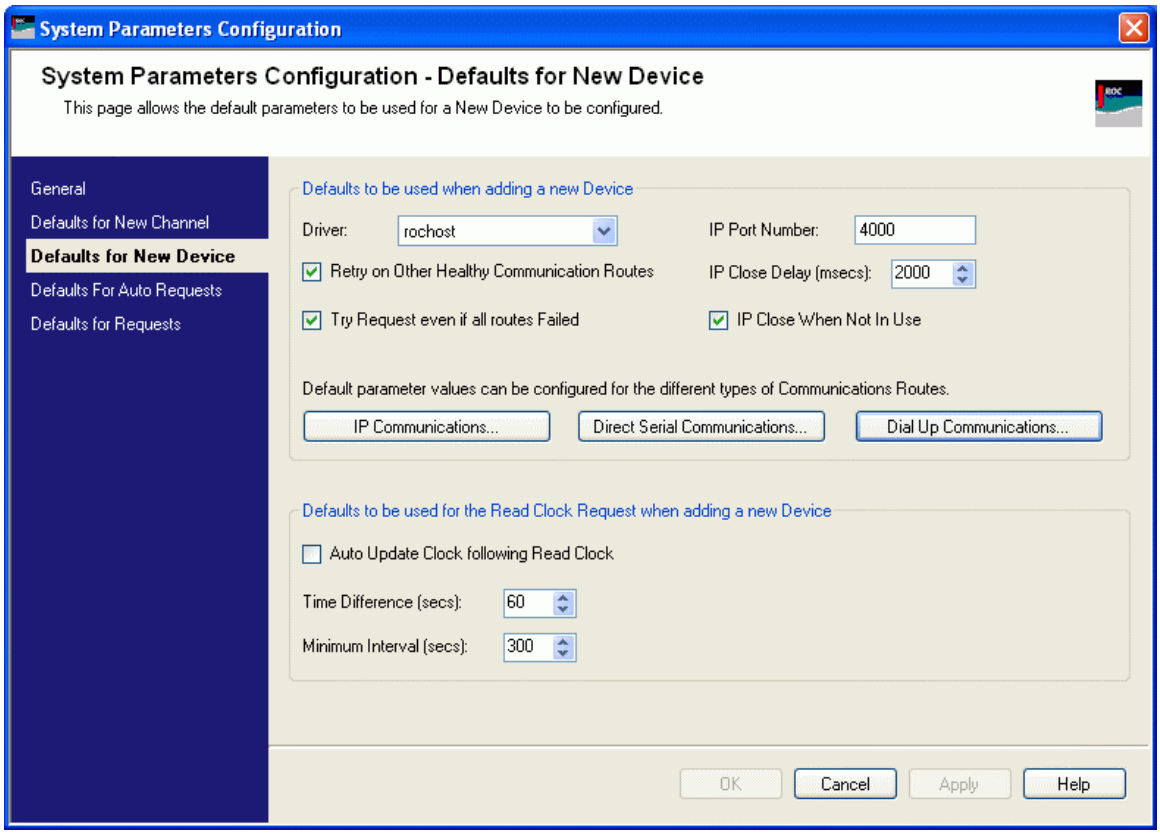
This is the Hayes AT string used to 'sanity' check an attached modem (where the Channel Type is ROC_DIALUP). The default string is ATHE0V1S0=0.

6.7.2.12 Modem Alive Check Period

The period after which the RDI will check the modem is alive (in seconds).

6.7.3 Defaults for New Device

This Page enables you to configure default Driver and Port settings when adding new ROC devices.



6.7.3.1 Driver

Type topic text here.

6.7.3.2 Retry on Other Healthy Communication Routes

Type topic text here.

6.7.3.3 Try Request even if all routes Failed

Type topic text here.

6.7.3.4 IP Port Number

Type topic text here.

6.7.3.5 IP Close Delay

Type topic text here.

6.7.3.6 IP Close When Not in Use

Type topic text here.

6.7.3.7 IP Communications...

Type topic text here.

6.7.3.8 Direct Serial Communications

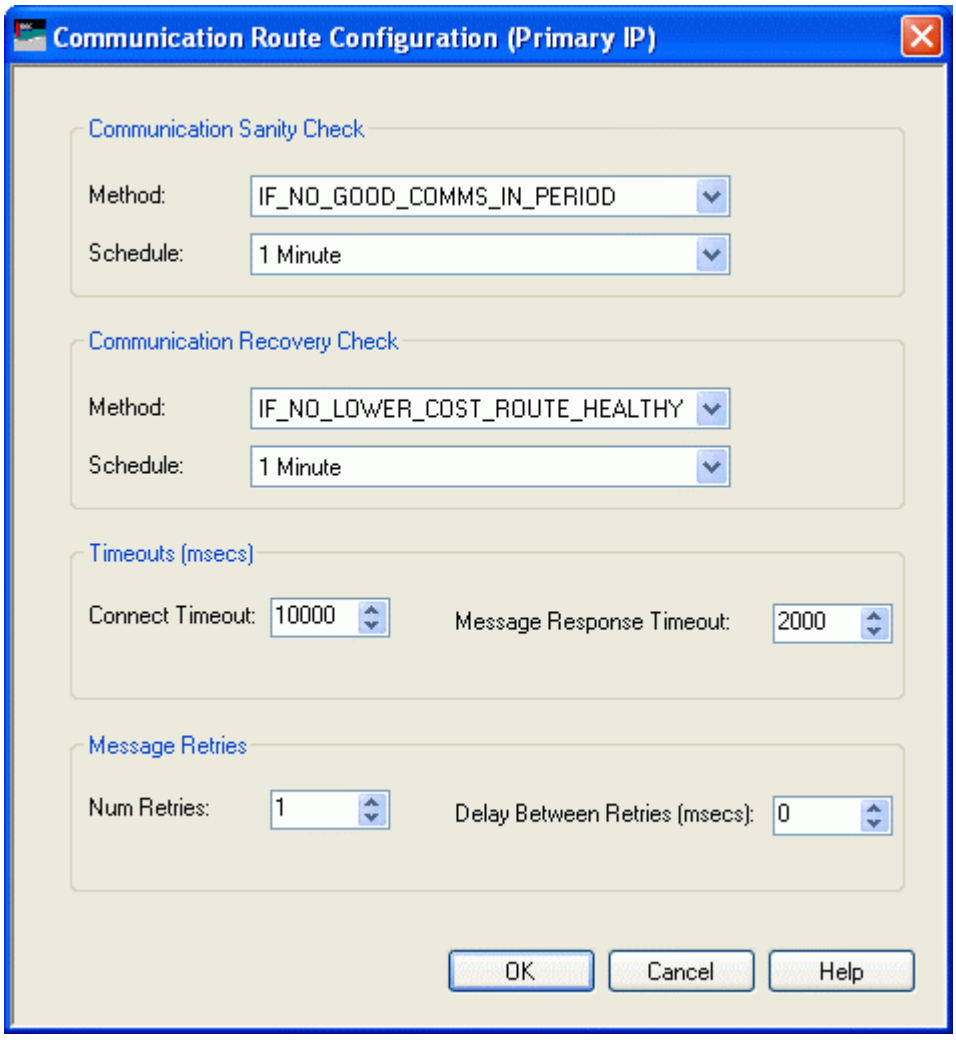
Type topic text here.

6.7.3.9 Dial Up Communications...

Type topic text here.

6.7.3.10 Communication Route Configuration

This dialog enables you to set up Methods and Schedules for Sanity Checking and Recovery on each Communication Route. Timeouts and Message retry times can also be configured.



6.7.3.10.1 Title Bar

The Title Bar will also include the Communications Route in its name (e.g. in this example 'Primary IP').

6.7.3.10.2 Method

Select a method for Sanity Checking of the selected Communications Route from the drop-down list. The options are:-

- IF_NO_GOOD_COMMS_IN_PERIOD (Default) - If no good communications are established during the Schedule period, then a Sanity Check will be performed.

- ALWAYS - A Sanity Check will be performed every period indicated by the Schedule for the Communication Route.
- NONE - No Sanity Check will be performed.

6.7.3.10.3 Schedule

Select a Schedule from the list that will apply to Sanity Checking for this Communication Route.

6.7.3.10.4 Method

Select a method for Recovery of the selected Communications Route from the drop-down list. The options are:-

- IF_NO_LOWER_COST_ROUTE _HEALTHY (Default) - If no lower cost Communication Route is available, then Recovery will be performed using this Route. If a lower cost Route is available, then Recovery will take place using that Route.
- ALWAYS - Recovery will always be performed using only this Communication Route.
- DEADLIST_TYPE - Failed Devices placed are on a round-robin deadlist and recovered using dead-time on the channel used by the Device. Applicable to Direct Serial route only.

6.7.3.10.5 Schedule

Select a Schedule from the list that will apply to Recovery for this Communication Route.

6.7.3.10.6 Connect Timeout

Time (in milliseconds) to allow for connection establishment

6.7.3.10.7 Message Response Timeout

Time (in milliseconds) to allow for response message

6.7.3.10.8 Num Retries

Number of retries to be performed of each ROC message. Default 1.

6.7.3.10.9 Delay Between Retries

Delay (in milliseconds) before attempting retry. Default is 0.

6.7.3.11 Auto Update Clock following Read Clock

Type topic text here.

6.7.3.12 Time Difference

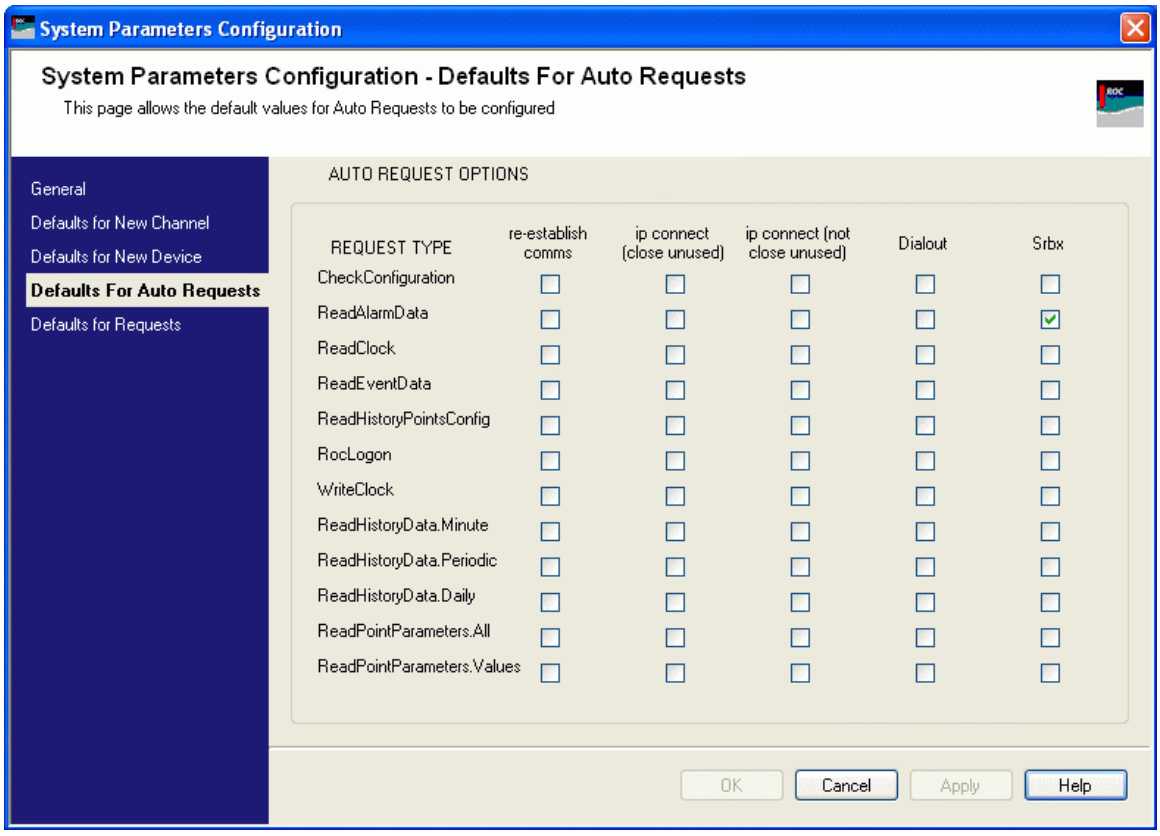
Type topic text here.

6.7.3.13 Minimum Interval

Type topic text here.

6.7.4 Defaults for Auto Requests

This Page enables you to configure default options for Auto Requests when adding new ROC devices.



6.7.4.1 CheckConfiguration

Checks the configuration details for the Device. This Request is probably a good candidate for setting up as an Auto Request.

6.7.4.2 ReadAlarmData

Reads any outstanding alarms in the Device. This Request is probably a good candidate for setting up as an Auto Request.

6.7.4.3 ReadClock

Reads the date and time set at the Device.

6.7.4.4 ReadEventData

Reads any outstanding events in the Device. This Request is probably a good candidate for setting up as an Auto Request.

6.7.4.5 ReadHistoryPointsConfig

The ROC RDI will read the history point configuration parameters from the ROC device.

6.7.4.6 RocLogon

Logs on to the ROC Device. This Request is probably a good candidate for setting up as an Auto Request.

6.7.4.7 WriteClock

Writes the current date and time at the OpenEnterprise Server to the ROC Device. This Request is probably a good candidate for setting up as an Auto Request.

6.7.4.8 ReadHistoryData.Minute

Reads the History Data for the selected Ram Area from the ROC device.

6.7.4.9 ReadHistoryData.Periodic

Reads the History Data for the selected Ram Area from the ROC device.

6.7.4.10 ReadHistoryData.Daily

Reads the History Data for the selected Ram Area from the ROC device.

6.7.4.11 ReadPointParameters.All

Reads all Parameters for all Points found in the ROC Device.

6.7.4.12 ReadPointParameters.Values

Reads specific Parameters (defined by the 'Value Parameter Template') for Points in the ROC Device.

6.7.4.13 Re-establish comms

Instructs the ROC RDI to automatically perform a specific Auto Request after re-establishing communications with a Device.

6.7.4.14 Ip connect (close unused)

Instructs the ROC RDI to automatically perform a specific request the first time communications is established to a Device over an IP or Serial connection (where the connection is set to ‘Close Link When Not Used’).

6.7.4.15 Ip connect (not close unused)

Instructs the ROC RDI to automatically perform a specific request the first time communications is established to a Device over an IP or Serial connection (where the connection is set not set to ‘Close Link When Not Used’).

6.7.4.16 Dialout

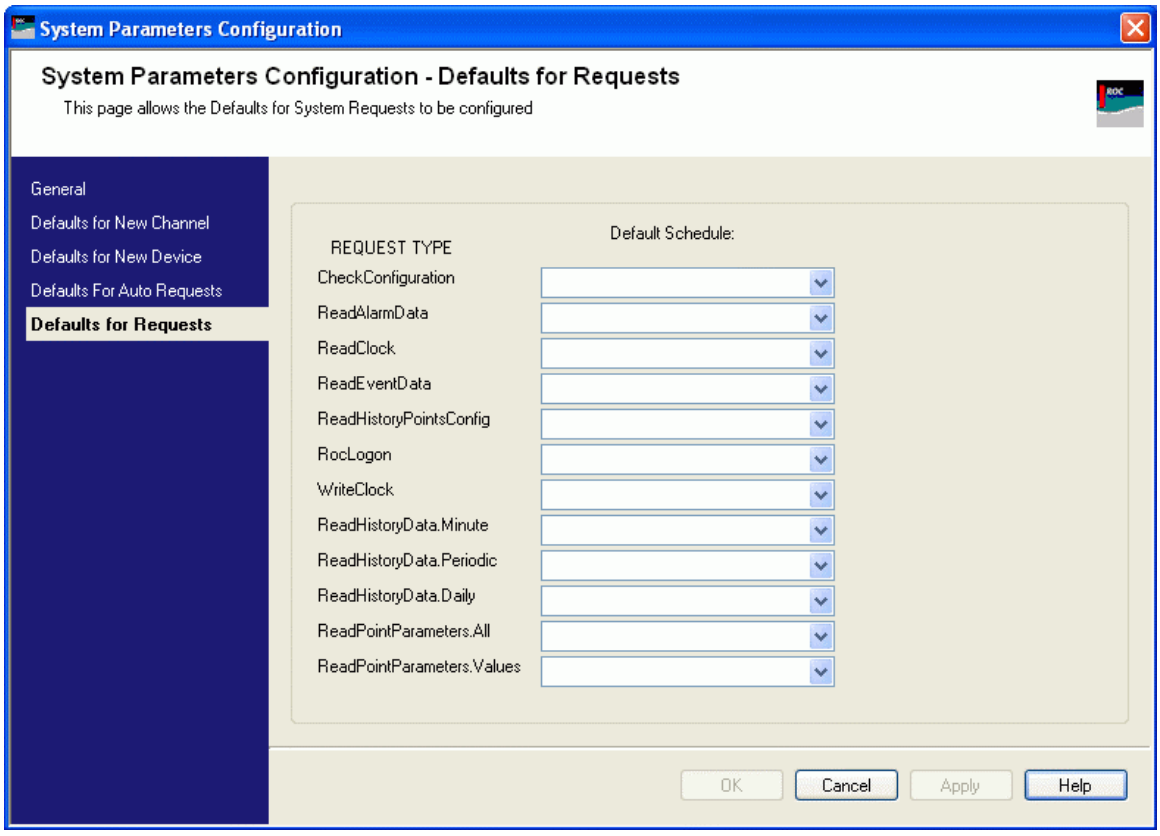
Instructs the ROC RDI to automatically perform a specific request after dial-up to a Device.

6.7.4.17 Srbx

Instructs the ROC RDI to automatically perform a specific request on receipt of an SRBX from a Device.

6.7.5 Default Schedules for Requests

This Page enables you to configure default Schedules for Requests when adding new ROC devices.



6.7.5.1 CheckConfiguration

Checks the configuration details for the Device. This Request is probably a good candidate for setting up as an Auto Request.

6.7.5.2 ReadAlarmData

Reads any outstanding alarms in the Device. This Request is probably a good candidate for setting up as an Auto Request.

6.7.5.3 ReadClock

Reads the date and time set at the Device.

6.7.5.4 ReadEventData

Reads any outstanding events in the Device. This Request is probably a good candidate for setting up as an Auto Request.

6.7.5.5 ReadHistoryPointsConfig

The ROC RDI will read the history point configuration parameters from the ROC device.

6.7.5.6 RocLogon

Logs on to the ROC Device. This Request is probably a good candidate for setting up as an Auto Request.

6.7.5.7 WriteClock

Writes the current date and time at the OpenEnterprise Server to the ROC Device. This Request is probably a good candidate for setting up as an Auto Request.

6.7.5.8 ReadHistoryData.Minute

Reads the History Data for the selected Ram Area from the ROC device.

6.7.5.9 ReadHistoryData.Periodic

Reads the History Data for the selected Ram Area from the ROC device.

6.7.5.10 ReadHistoryData.Daily

Reads the History Data for the selected Ram Area from the ROC device.

6.7.5.11 ReadPointParameters.All

Reads all Parameters for all Points found in the ROC Device.

6.7.5.12 ReadPointParameters.Values

Reads specific Parameters (defined by the 'Value Parameter Template') for Points in the ROC Device.

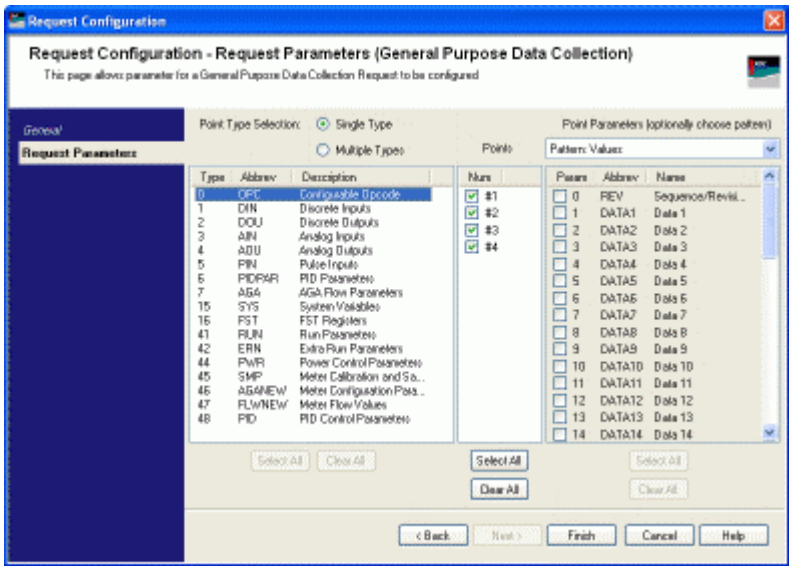
6.7.5.13 Request Default Schedule

For each Request type, a default Schedule can be selected from the drop-down list.

6.8 Request Wizard

The 'Request Wizard' enables users to define new Data Collection Requests. The Wizard has two pages:-

- General Page

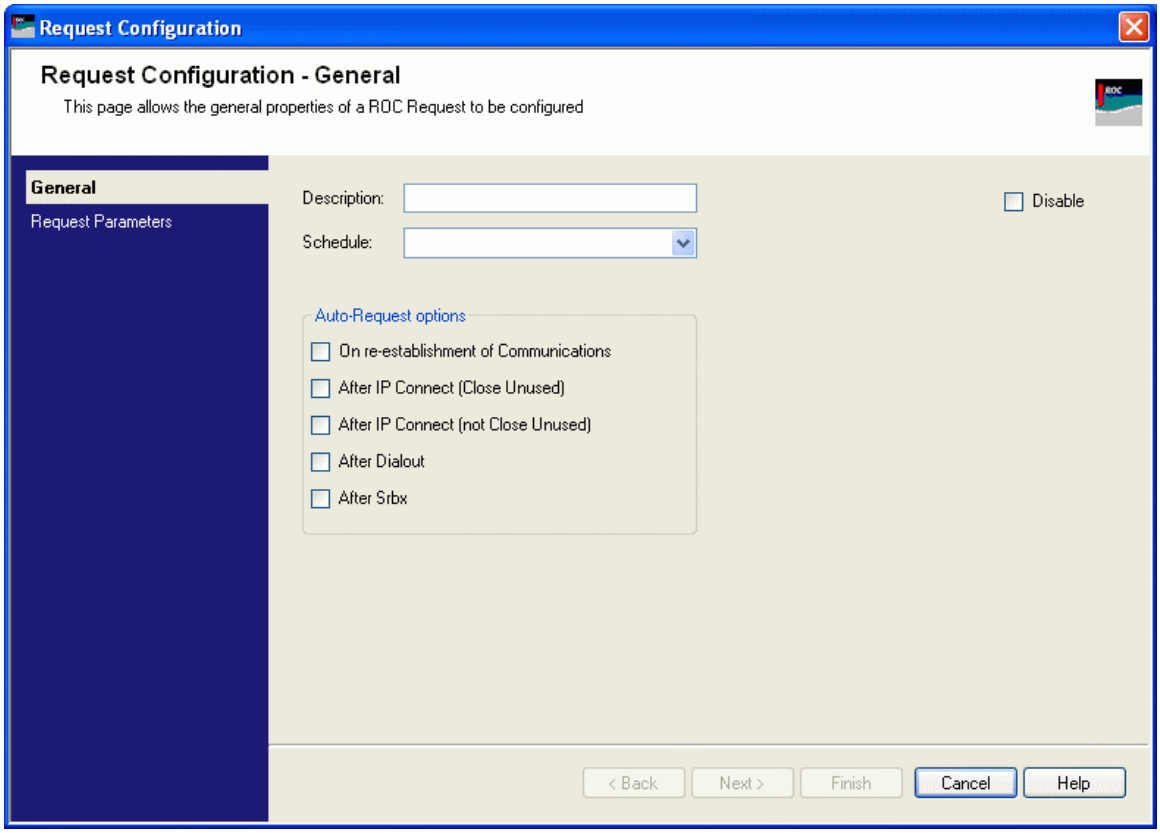


- Request Parameters Page - this will differ, depending on the context menu item selected. See the 'Request Parameters Page' to view the options.

6.8.1 Request General Page

This page enables you to provide a useful description for the Request. A Schedule may also be associated with the Request and the Request can be set to run automatically based on certain events.

If you clicked the 'Properties' context menu from a 'Read History' Request, the 'Request Parameters' page is not available.



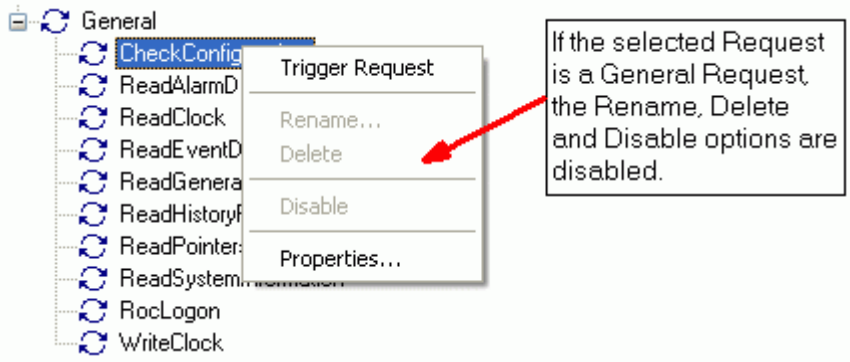
6.8.1.1 Description

A description of the Request must be entered here. The Configuration Tool will add the description in this field as an extension to the name.

For a General Request, the prefix for the name of the Request will be 'ReadParameters' so, if your description was 'MyRequest', the name of the new Request will be 'ReadParameters.MyRequest'.

6.8.1.2 Disable Request

Selection of this option allows you to disable a user created Request. If the Request is a general one, this option is not enabled.



6.8.1.3 Schedule

A Schedule may be selected for the Request..

6.8.1.4 On re-establishment of Communications

Forces the Request to run automatically whenever communications with the Device are re-established..

6.8.1.5 After IP Connect (Close Unused)

Forces the Request to run automatically after connection over IP when the connection has been marked as 'Close if unused'.

6.8.1.6 After IP Connect (not Close Unused)

Forces the Request to run automatically after connection over IP when the connection has been marked not to be closed if unused.

6.8.1.7 After Dialout

Forces the Request to be run automatically after Dialout.

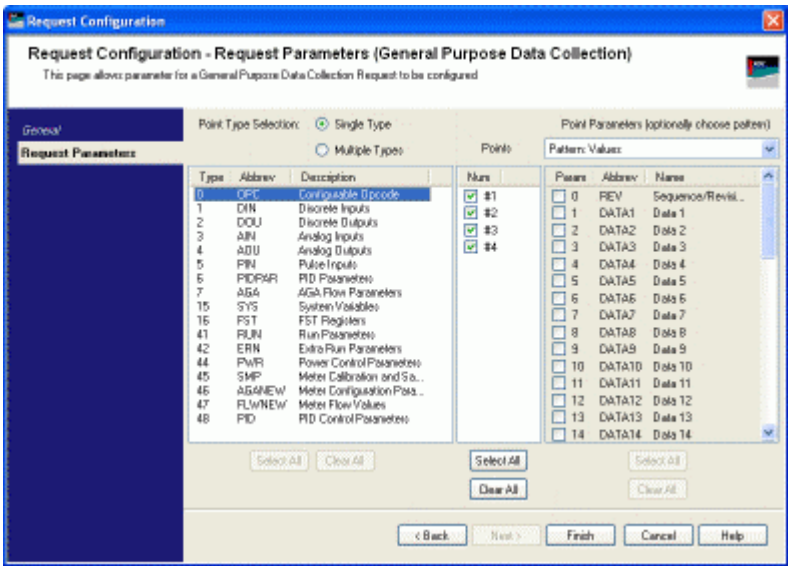
6.8.1.8 After Srbx

Forces the Request to be run automatically after an SRBX (Send Report By Exception) message has been received from the Device.

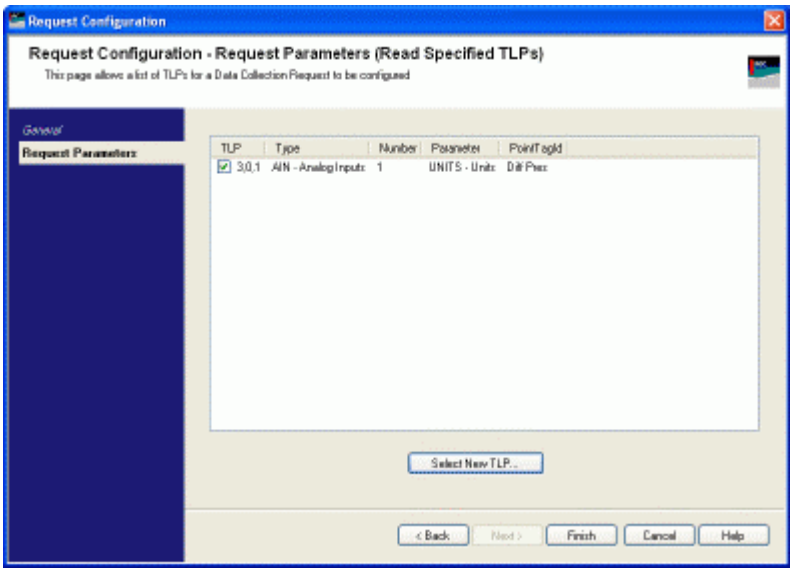
6.8.2 Request Parameters Page

The 'Request Parameters' Page differs depending on the context. These are the three context options:-

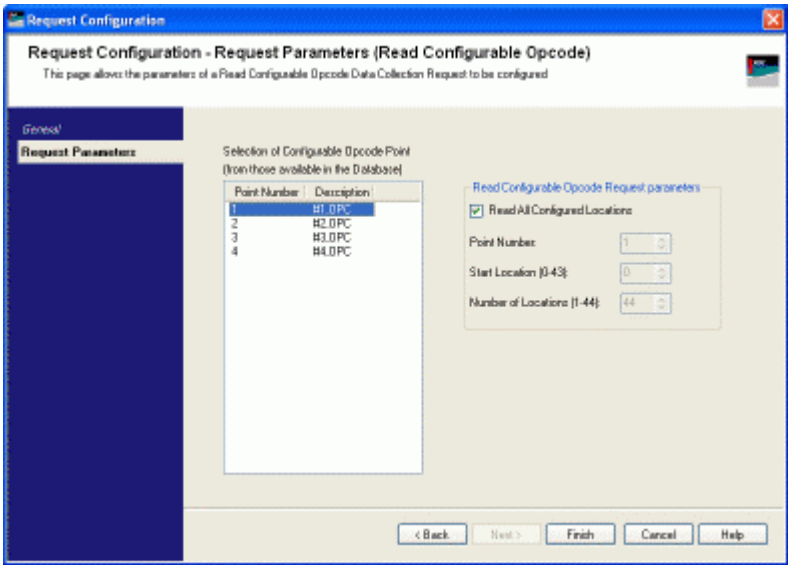
- General Data Collection Request



- TLP Data Collection Request

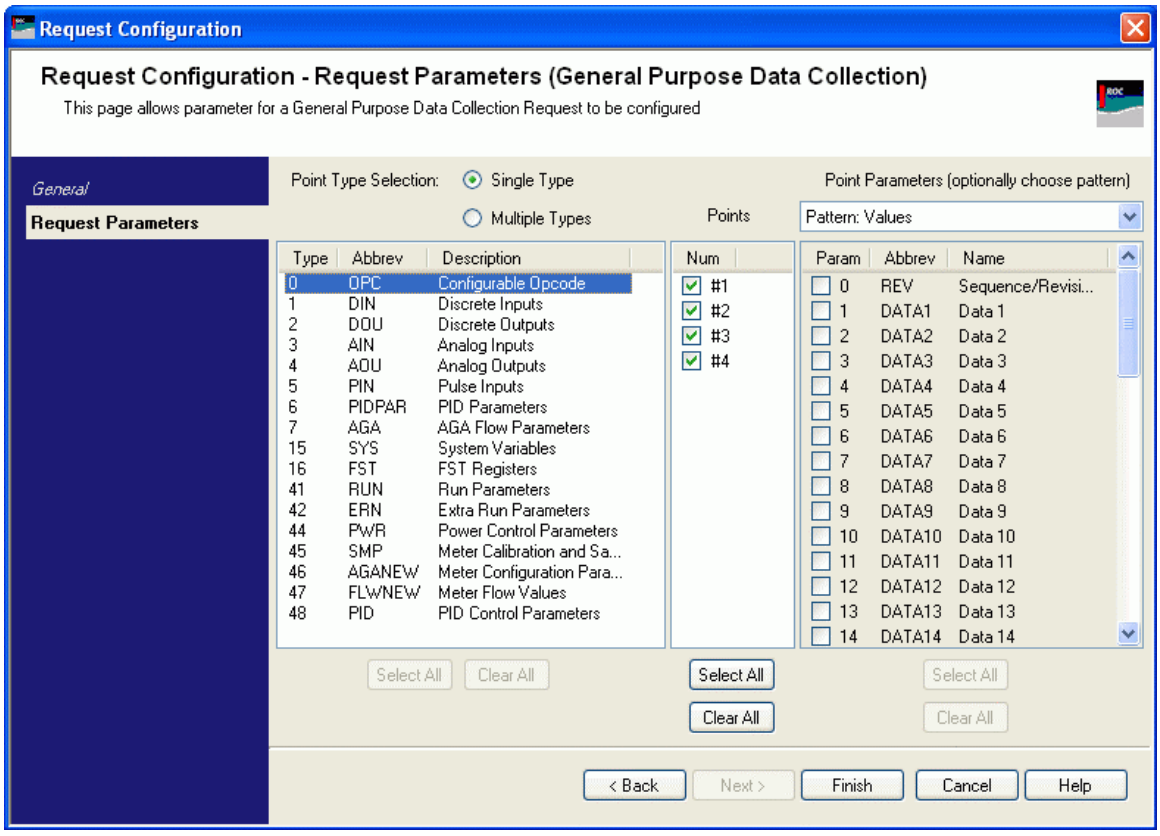


- Configurable Opcode Request



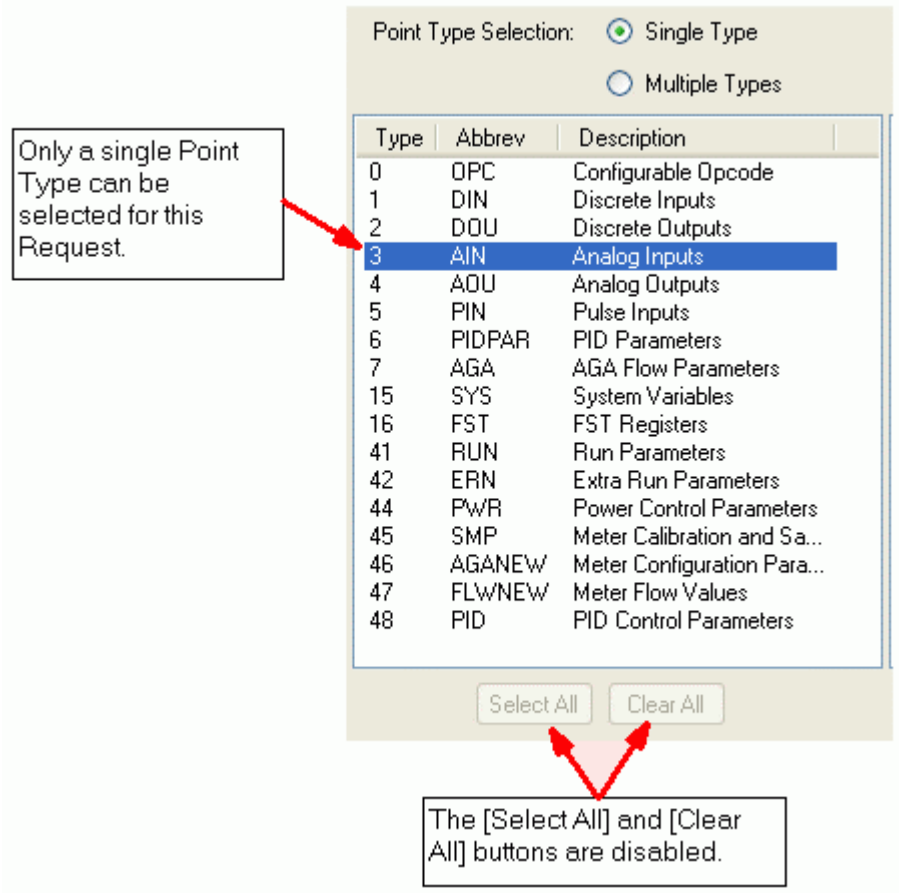
6.8.2.1 Request Parameters Page (General)

This page enables you to mark individual Parameters for a single or multiple Points for collection by the Request.



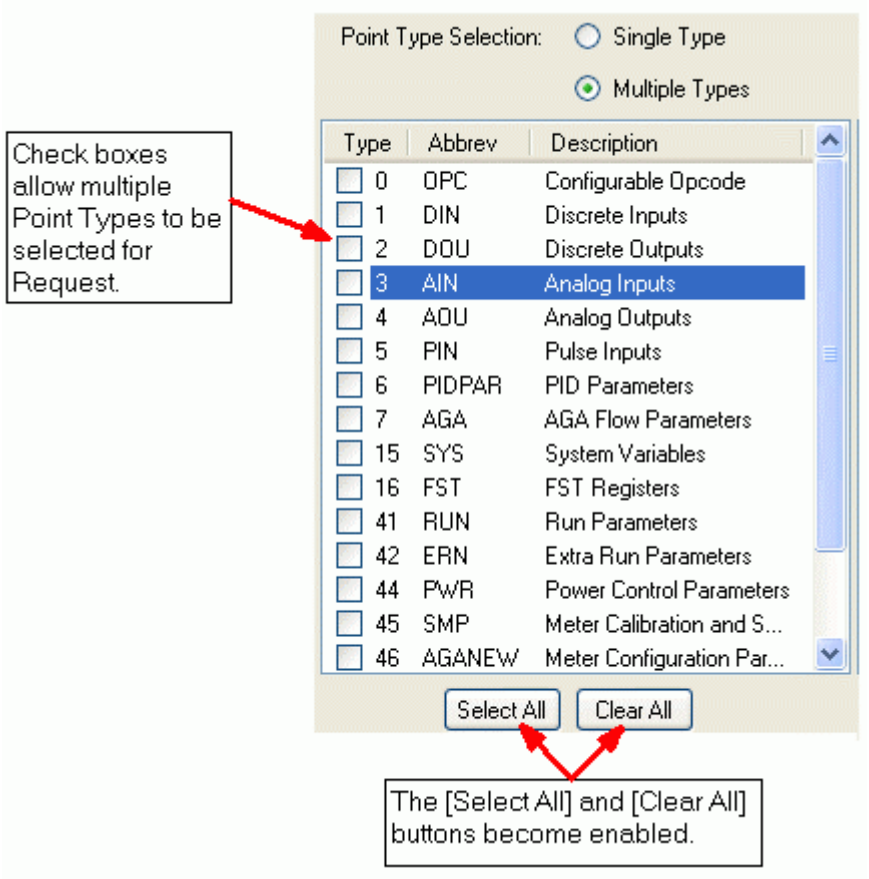
6.8.2.1.1 Single Type

If this option is selected, then you may only select a single Point Type from the 'Point Types Selection' list. The user may then select Parameters that belong to this Point for collection by the Request.



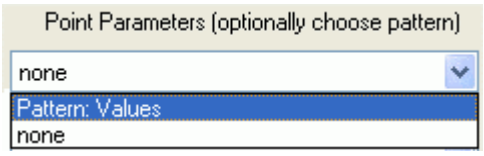
6.8.2.1.2 Multiple Types

If this option is selected, then you may select multiple Point Types from the 'Point Types Selection' list. The user may then select Parameters that belong to any of the selected Points for collection by the Request.



6.8.2.1.3 Pattern Select

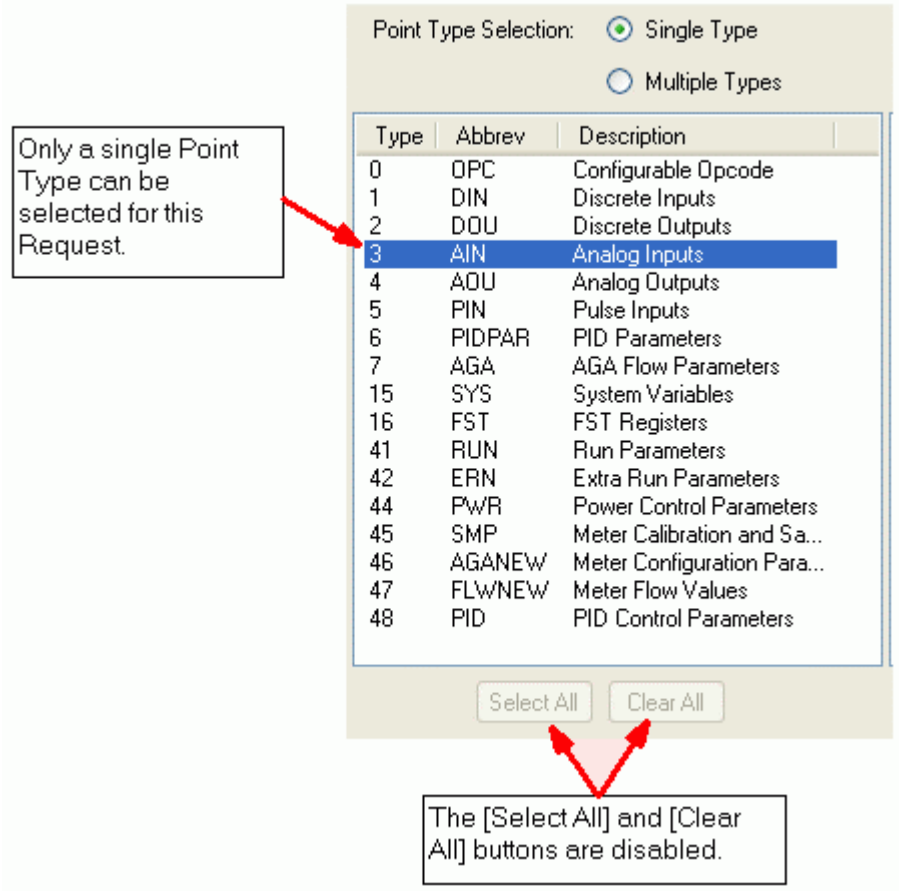
The user may select a Parameter Pattern Template to use with the Request. The default 'Values' template is available, but you may create other templates using the 'New Parameter Pattern Template' option from the Tools menu.



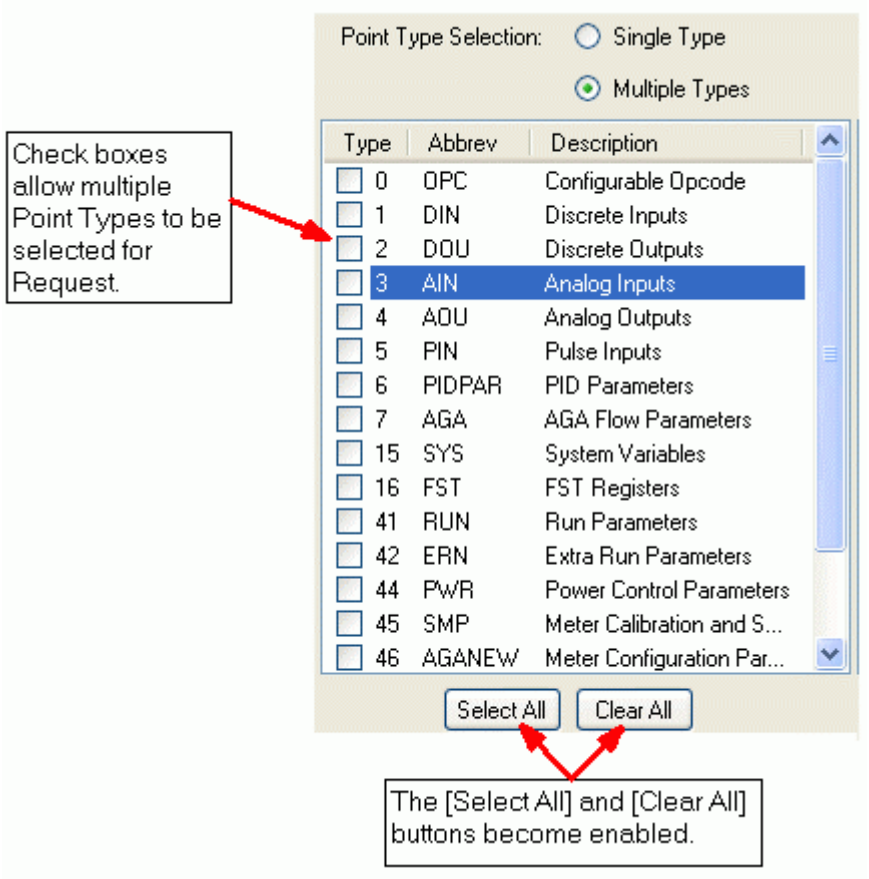
6.8.2.1.4 Point Types List

The user must select a single or multiple Points from the Point Types list, depending on whether the 'Single Type' or 'Multiple Types' button is selected.

6.8.2.1.4.1 Single Point Type List



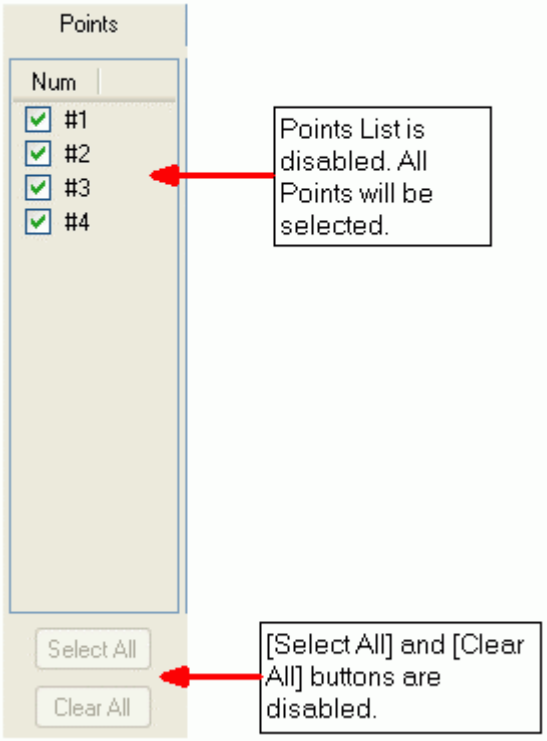
6.8.2.1.4.2 Multiple Point Type List



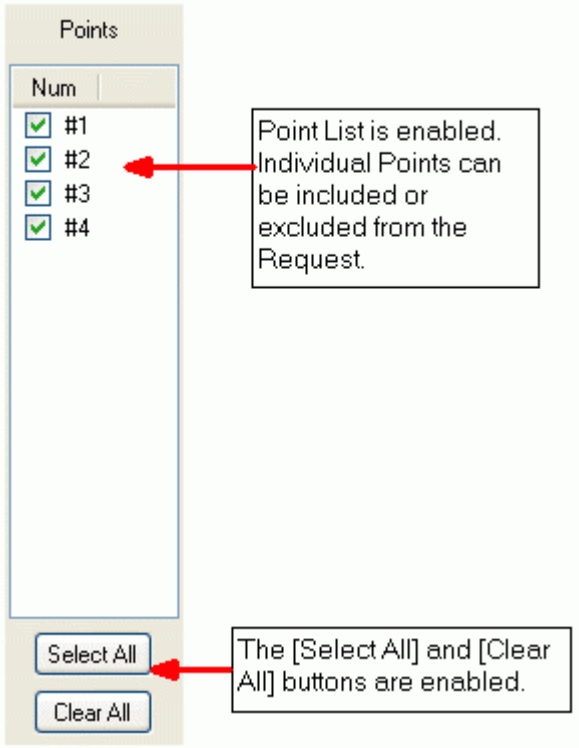
6.8.2.1.5 Points For Selected Type

The user may be able to select which Points to collect data from, depending on whether the 'Single Type' or 'Multiple Types' button is selected.

6.8.2.1.5.1 Multiple Point Type Selected



6.8.2.1.5.2 Single Point Type Selected

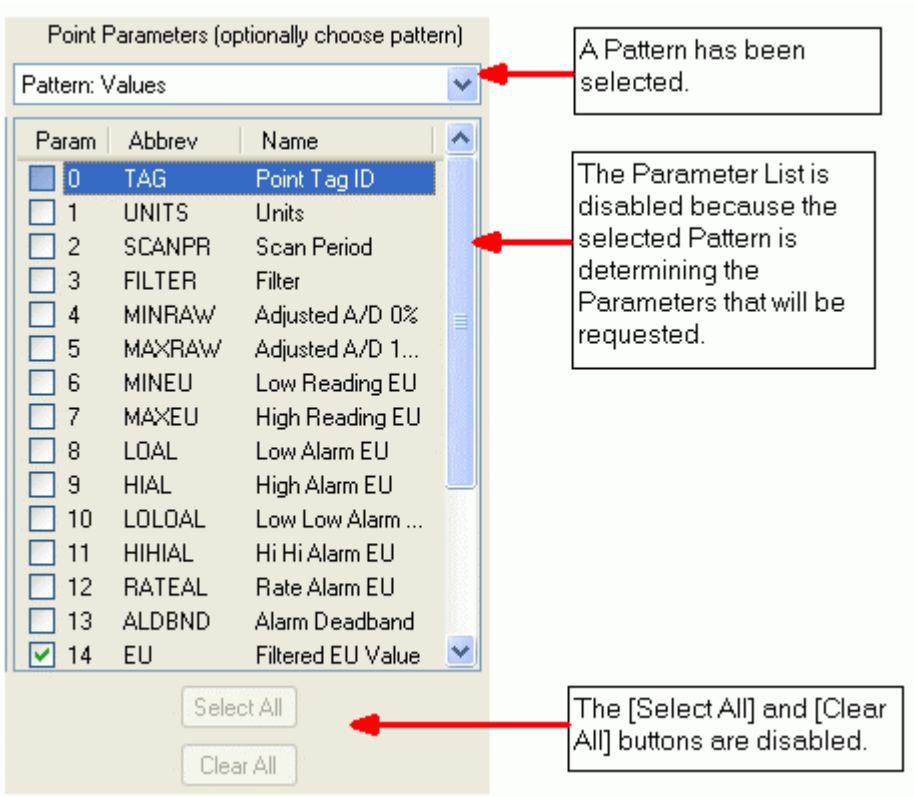


6.8.2.1.6 Parameter List

The user may select the Parameters for which data will be collected, depending on whether a Pattern has been selected, or if the 'Single Point' option was selected.

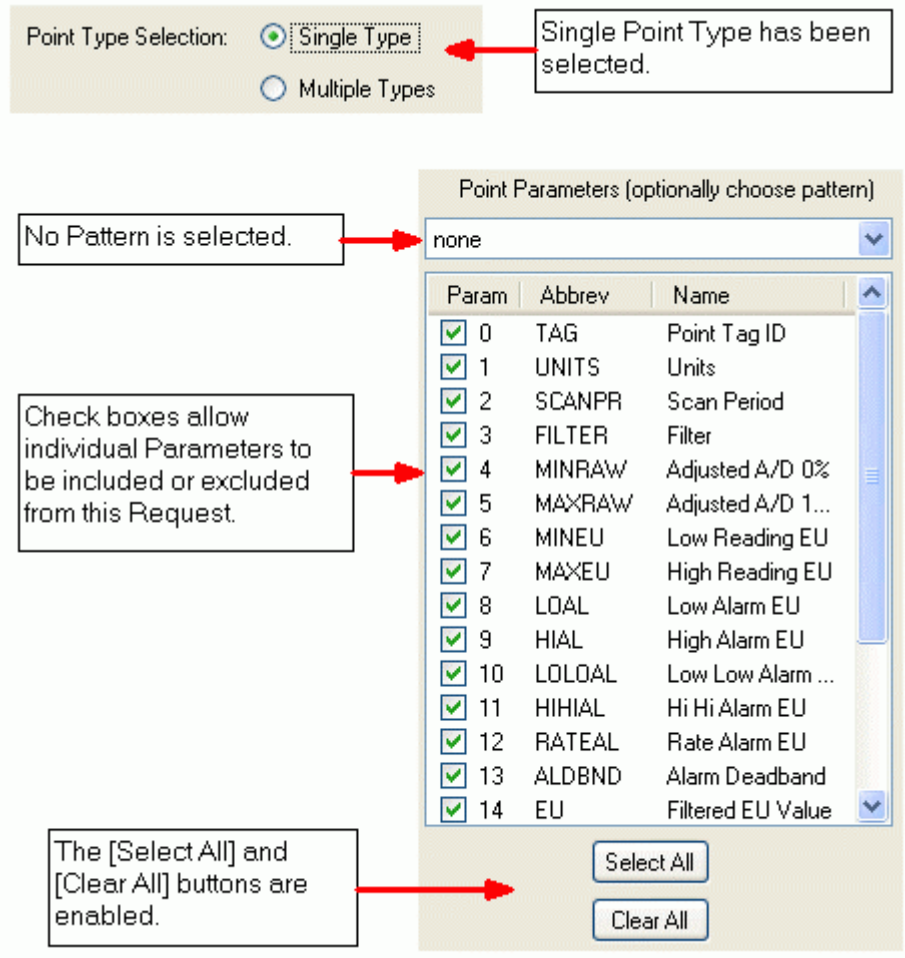
6.8.2.1.6.1 Pattern Selected

If a Pattern has been selected, you cannot select any Parameters, because the Pattern controls the selected Parameters.



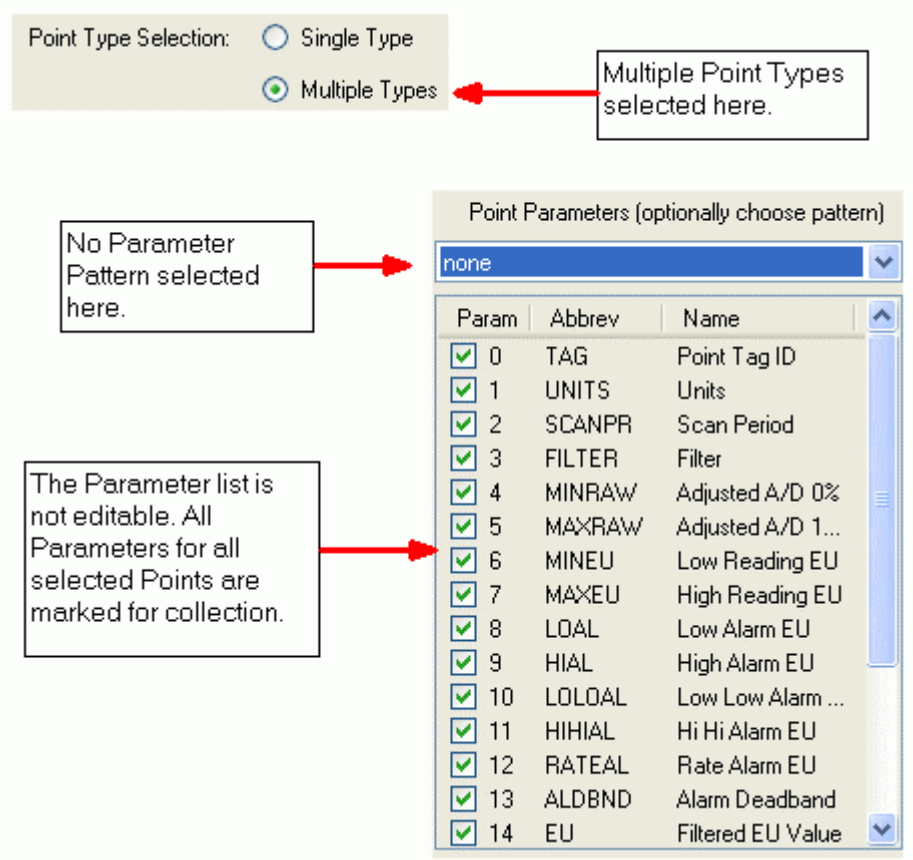
6.8.2.1.6.2 No Pattern Selected and Single Point Type Selected

If no Pattern is selected and the 'Single Type' button is also selected, you can select any Parameter for any Point from the Parameter list.



6.8.2.1.6.3 No Pattern Selected and Multiple Point Types Selected

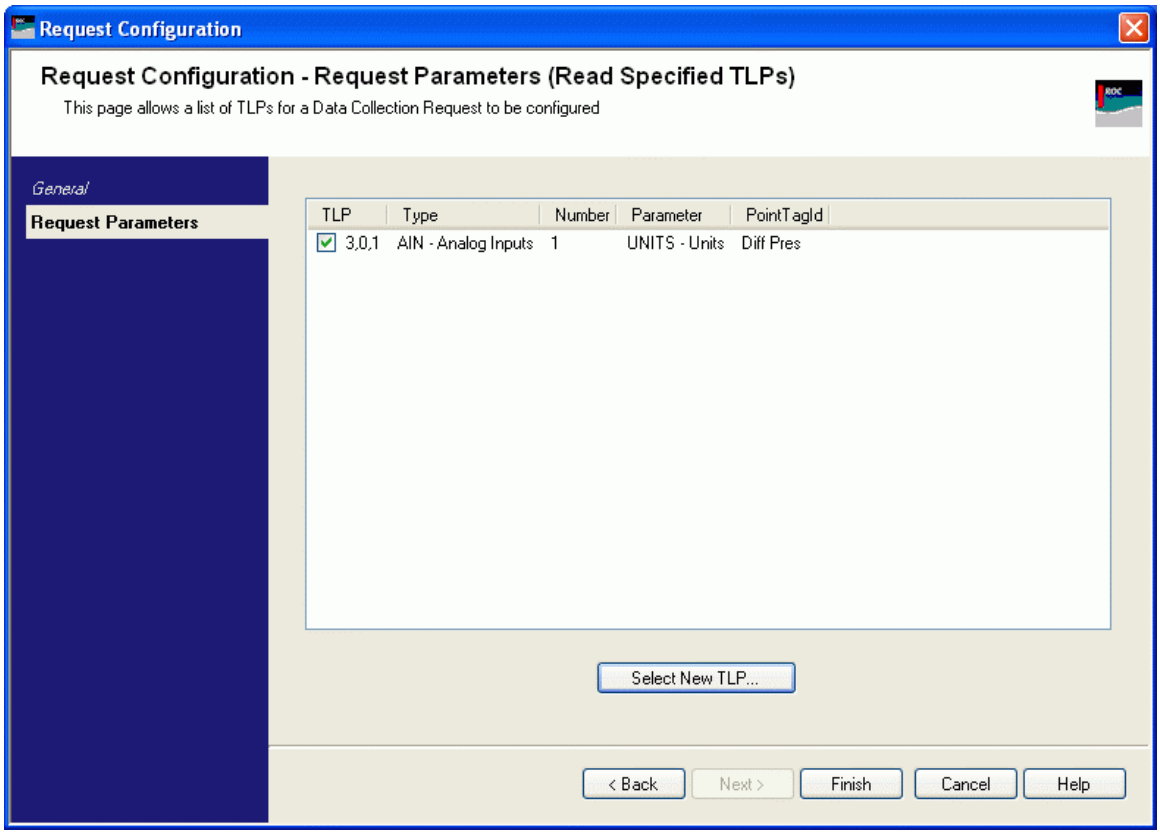
If no Pattern is selected and the Multiple Point Types button was selected, you cannot select or de-select any Parameters for a selected Point. All Parameters for all selected Points will be automatically marked for collection by the Request.



6.8.2.2 Request Parameters Page (Specified TLPs)

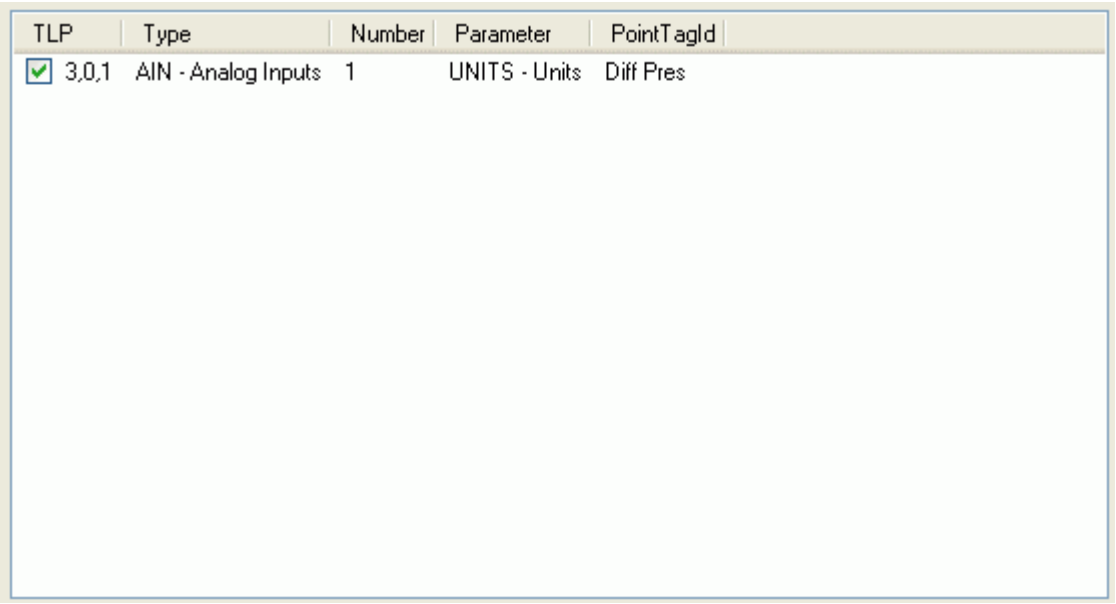
6.8.2.2.1 Request Parameters Page (Specified TLPs)

This page enables you to select specific Parameters for collection by the Request. The Parameters are defined by TLP (Type, Logical Point and Parameter) number.



6.8.2.2.2 Specified TLP List

This list displays the specific Parameters that have been defined by TLP for collection by the Request.



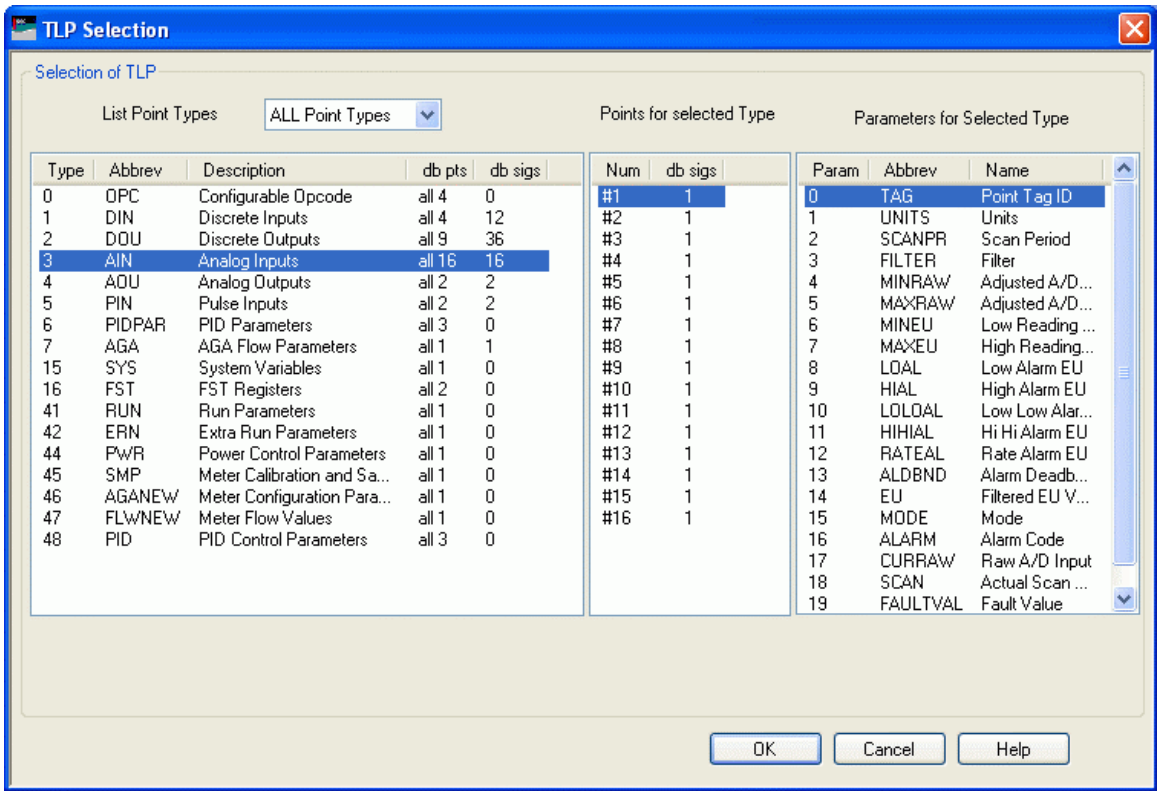
6.8.2.2.3 Select New TLP

This button opens the 'TLP Selection' Dialog, so you can define a new Parameter for collection by the Request.

6.8.2.2.4 TLP Selection

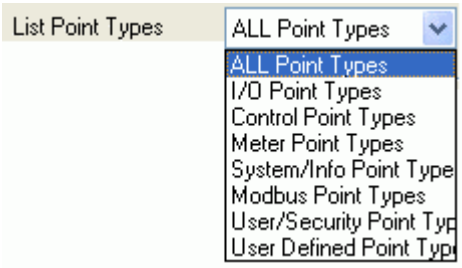
6.8.2.2.4.1 TLP Selection

This dialog enables you to select a specific Point Type, Point and Parameter for collection by the Request.



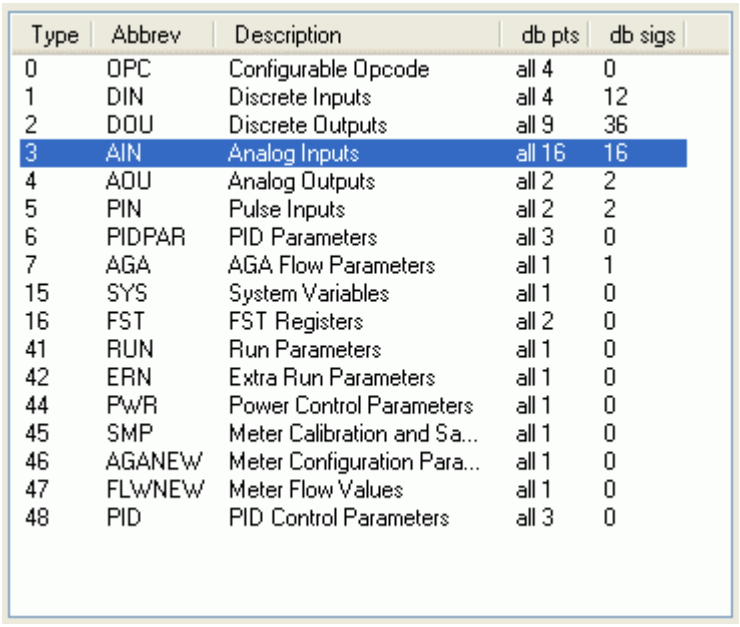
6.8.2.2.4.2 List Point Types

This option defaults to 'ALL Point Types', but you may filter the Point Types displayed by selecting other options from this drop-down menu.



6.8.2.2.4.3 Point Types List

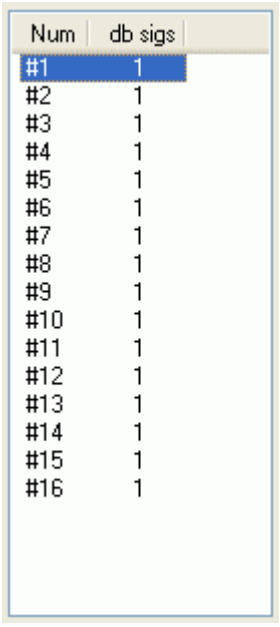
This list displays the Point Types that are available depending on the selection in the 'List Point Types' drop-down menu. Only one Point Type may be selected.



Type	Abbrev	Description	db pts	db sigs
0	OPC	Configurable Opcode	all 4	0
1	DIN	Discrete Inputs	all 4	12
2	DOU	Discrete Outputs	all 9	36
3	AIN	Analog Inputs	all 16	16
4	AOU	Analog Outputs	all 2	2
5	PIN	Pulse Inputs	all 2	2
6	PIDPAR	PID Parameters	all 3	0
7	AGA	AGA Flow Parameters	all 1	1
15	SYS	System Variables	all 1	0
16	FST	FST Registers	all 2	0
41	RUN	Run Parameters	all 1	0
42	ERN	Extra Run Parameters	all 1	0
44	PWR	Power Control Parameters	all 1	0
45	SMP	Meter Calibration and Sa...	all 1	0
46	AGANEW	Meter Configuration Para...	all 1	0
47	FLWNEW	Meter Flow Values	all 1	0
48	PID	PID Control Parameters	all 3	0

6.8.2.2.4.4 Points List

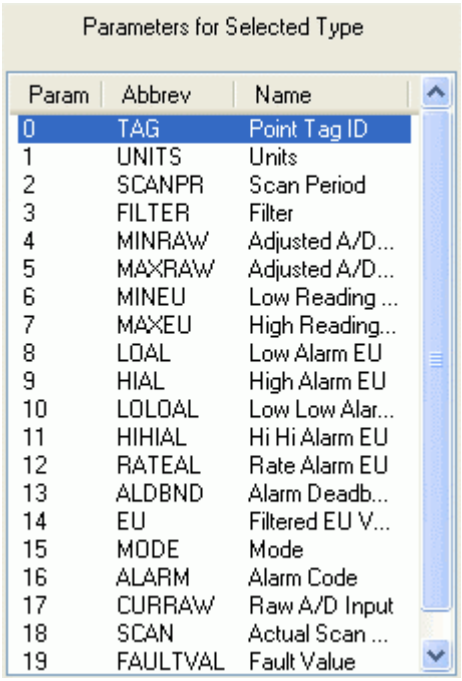
The available Points in the Device of the Type selected are listed here. Only one Point may be selected.



Num	db sigs
#1	1
#2	1
#3	1
#4	1
#5	1
#6	1
#7	1
#8	1
#9	1
#10	1
#11	1
#12	1
#13	1
#14	1
#15	1
#16	1

6.8.2.2.4.5 Parameters List

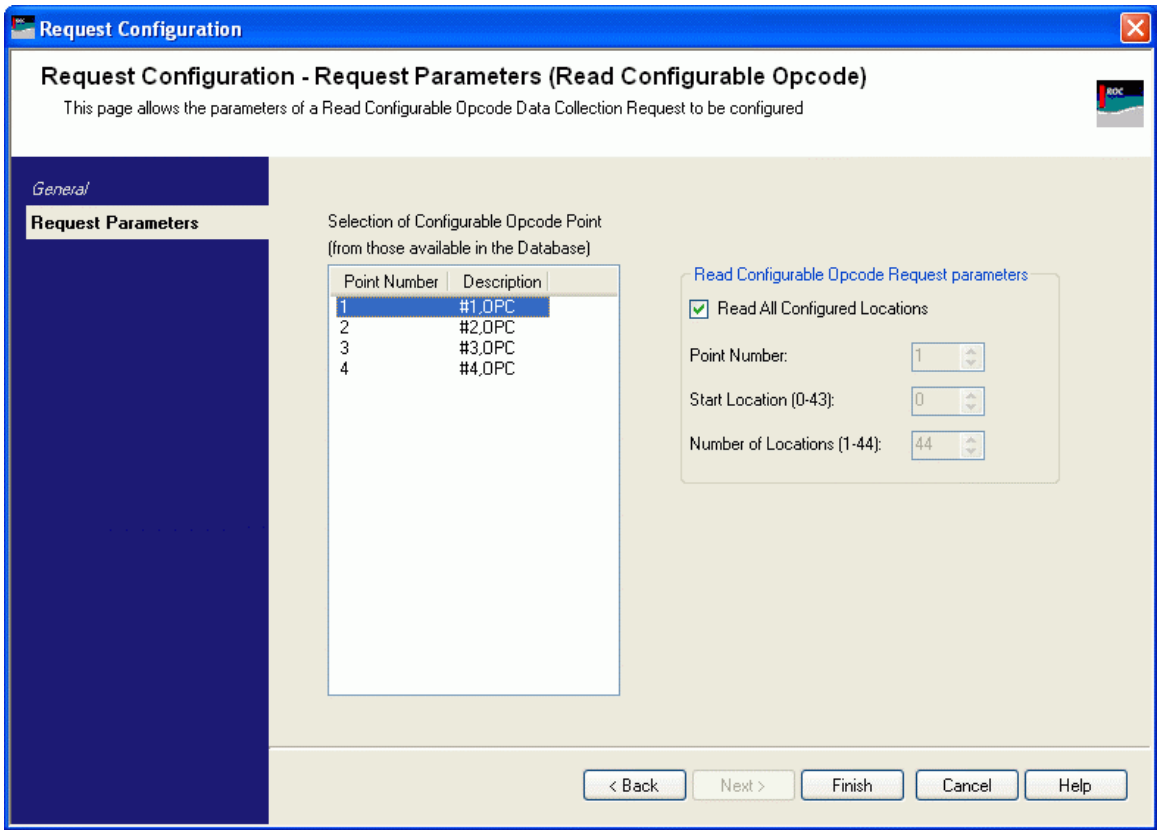
The Parameters belonging to the selected Point Type are displayed here. The user can select one Parameter only.



6.8.2.3 Request Parameters Page (Configurable Opcode)

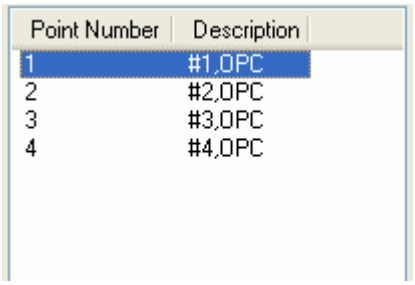
6.8.2.3.1 Request Parameters Page (Configurable Opcode)

This page enables you to select a Configurable Opcode Point for data collection with the Request.



6.8.2.3.2 Opcode Points List

The user must select one of the Configurable Opcode Points from this list.



6.8.2.3.3 Read All Configured Locations

If this box is checked the 'Start Location' and 'Number of Locations' controls will be disabled. In that case, the Request will collect data for all 44 Parameters.

However, if the box is not checked, the Start Location' and 'Number of Locations' controls will become enabled, and you must select values for these controls.

6.8.2.3.4 Point Number

The user must select one of the Configurable Opcode Points from the Opcode Points List for collection. The Point Number cannot be changed from this control.

6.8.2.3.5 Start Location

If the 'Read All Configured Locations' box is unchecked, you may choose the start location for the Parameters. If this value is changed, the ROC Configuration Tool will adjust the 'Number of Locations' field to include all locations from the 'Start Location' when the dialog is closed.

For instance if the 'Start Location' is changed to 5, the 'Number of Locations' will be adjusted to 39 when the dialog is closed.

6.8.2.3.6 Number of Locations

If the 'Read All Configured Locations' box is unchecked, you may modify this number. It represents the number of Parameters to include in the Request starting from the 'Start Location'. For instance, if the 'Number of Locations' was set to 10 and the 'Start Location' set to 5, then Locations 5 to 14 would be collected by the Request.

6.9 Channel Configuration Wizards

6.9.1 Channel Configuration Wizards

The Channel Configuration Wizards enable you to configure serial communications to your ROC Devices. To open these wizards, select Communication to ROC Devices→ROC Drivers→rochost nodes. There are three nodes under the rochost node:-

- Direct Serial Channels
- DialUp Serial Channels
- Modem Pools

Select the appropriate node then right click to open these Channel Configuration Wizards respectively:-

- Direct Serial Channel Configuration Wizard
- DialUp Serial Channel Configuration Wizard
- Modem Pool Configuration Wizard

6.9.2 Direct Serial Channel Configuration Wizard

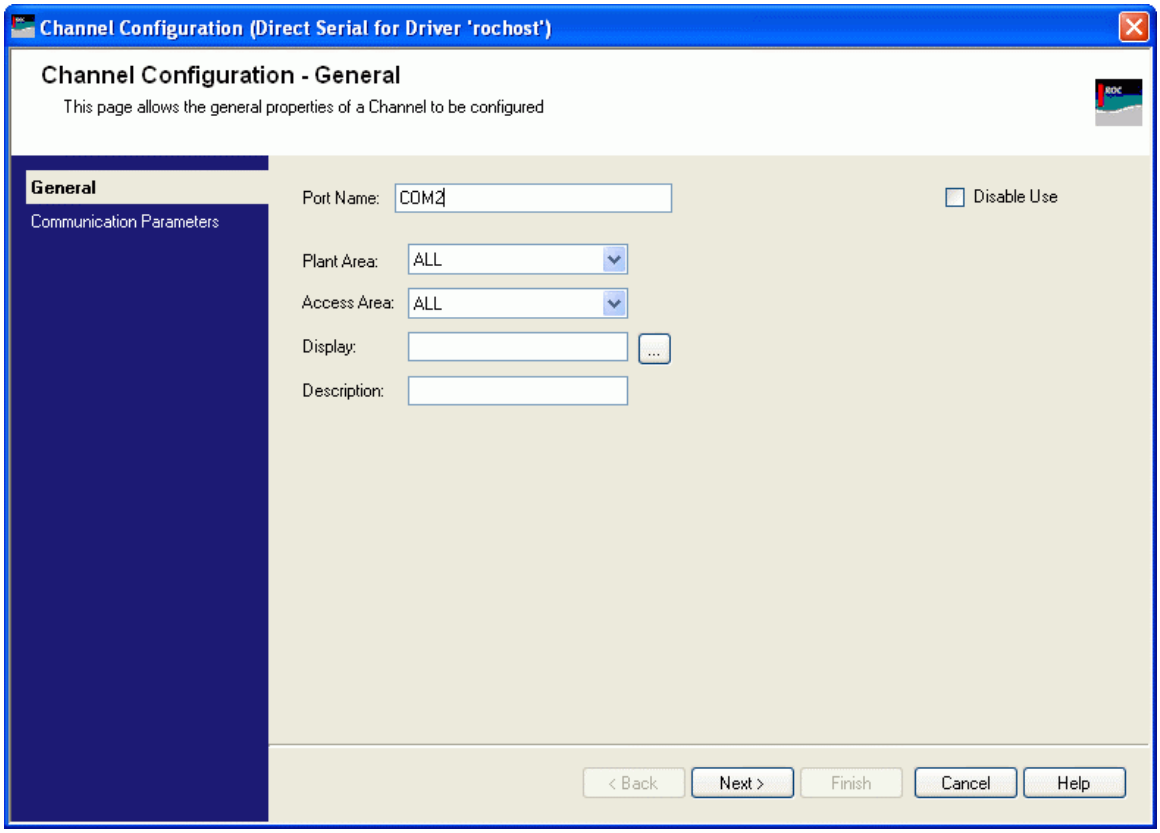
6.9.2.1 Direct Serial Channel Configuration Wizard

The Direct Serial Channel Configuration Wizard has two pages:-

1. General Page
2. Parameters Page

6.9.2.2 Channel Configuration General Page

The Channel Configuration Page enables you to give a name to the Serial communications port that you are configuring, and configure other general options for the channel.



6.9.2.2.1 Port Name

The port name should be a short descriptive string describing the channel, such as "COM2".

6.9.2.2.2 Plant Area

The Plant Area drop down list will display all available plant areas in the database. Select the appropriate one.

6.9.2.2.3 Access Area

Access Areas are used in OpenEnterprise as object security. This field defaults to the "ALL" access area, but others can be selected from the list. A Channel with an access area of "ALL" would be accessible by all users of the system.

6.9.2.2.4 Display

This field is for entering a graphics display on which this Serial Channel is shown. The ellipsis button [...] to the right of the field allows you to browse for the display.

6.9.2.2.5 Description

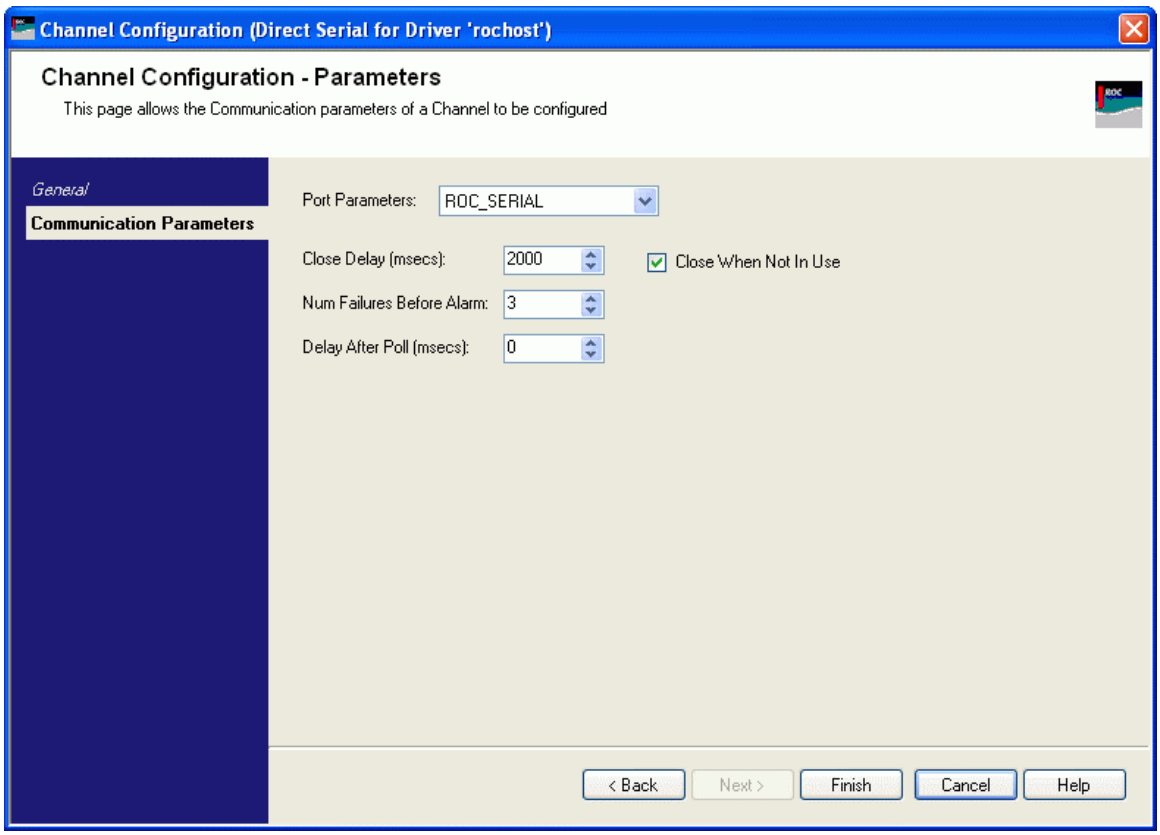
This can be a lengthier explanation of the channel that is being configured.

6.9.2.2.6 Disable Use

Check this box to disable the serial channel. The channel will be displayed in the ROC Configuration tool with a red cross on it.

6.9.2.3 Channel Configuration Parameters Page

This page enables you to configure parameters for the serial port.



6.9.2.3.1 Port Parameters

This drop down list displays all Communication Port Parameters Templates that are available. These are serial port parameters that have already been configured. The default for this channel type will be selected.

6.9.2.3.2 Close Delay

This is the delay (in milliseconds) that should be applied before closing the channel after communications have ceased.

6.9.2.3.3 Num Failures Before Alarm

This field enables you to set the number of times the RDI will attempt communications over this channel before initiating an alarm. The default is 3 times.

6.9.2.3.4 Delay After Poll

You can set a period (in milliseconds) that the RDI will delay after polling the device through this channel.

6.9.2.3.5 Close When Not In Use

When this box is checked, the RDI will close this channel when it is not in use. By default this box is checked.

6.9.3 DialUP Serial Channel Configuration Wizard

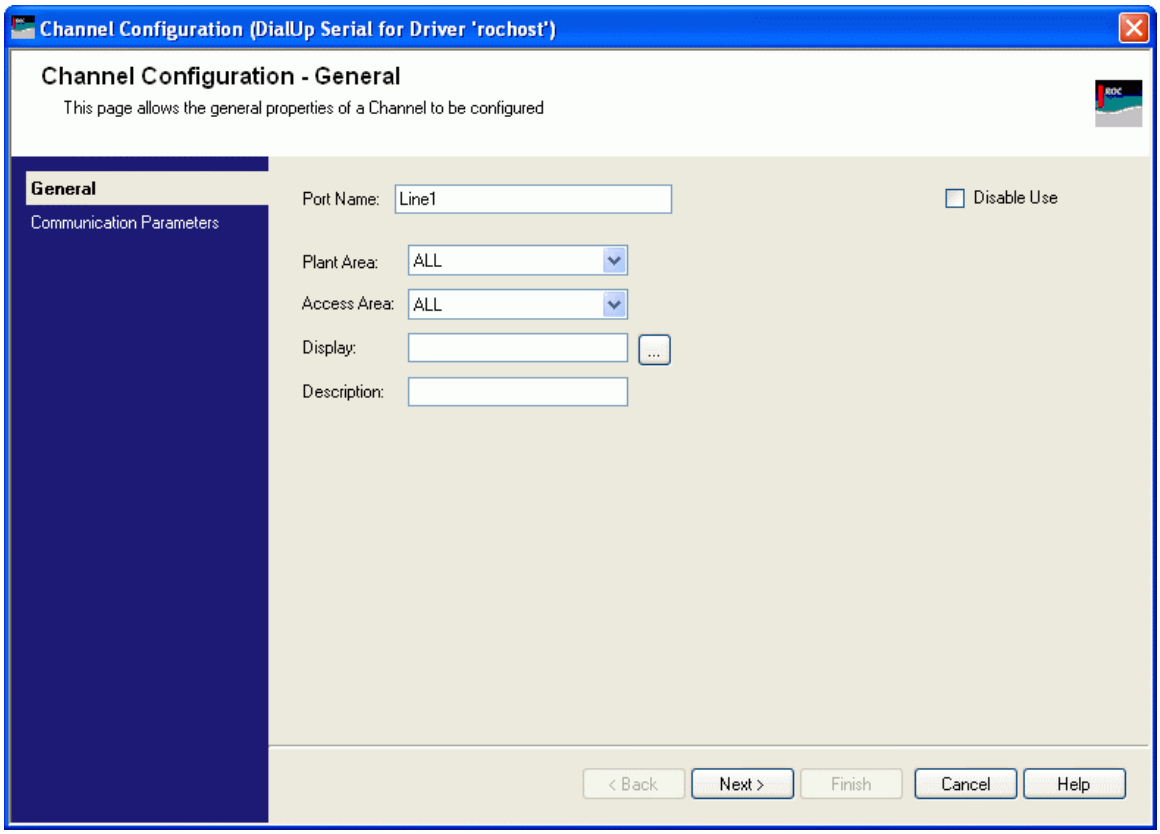
6.9.3.1 DialUP Serial Channel Configuration Wizard

The DialUp Serial Channel Configuration Wizard has two pages:-

1. General Page
2. Parameters Page

6.9.3.2 Channel Configuration General Page

The Channel Configuration Page enables you to give a name to the Serial communications port that you are configuring, and configure other general options for the channel.



6.9.3.2.1 Port Name

The port name should be a short descriptive string describing the channel, such as "Line1".

6.9.3.2.2 Plant Area

The Plant Area drop down list will display all available plant areas in the database. Select the appropriate one.

6.9.3.2.3 Access Area

Access Areas are used in OpenEnterprise as object security. This field defaults to the "ALL" access area, but others can be selected from the list. A channel with an access area of "ALL" would be accessible by all users of the system.

6.9.3.2.4 Display

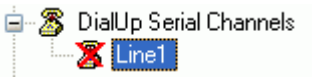
This field is for entering a graphics display on which this Serial Channel is shown. The ellipsis button [...] to the right of the field allows you to browse for the display.

6.9.3.2.5 Description

This can be a lengthier explanation of the channel that is being configured.

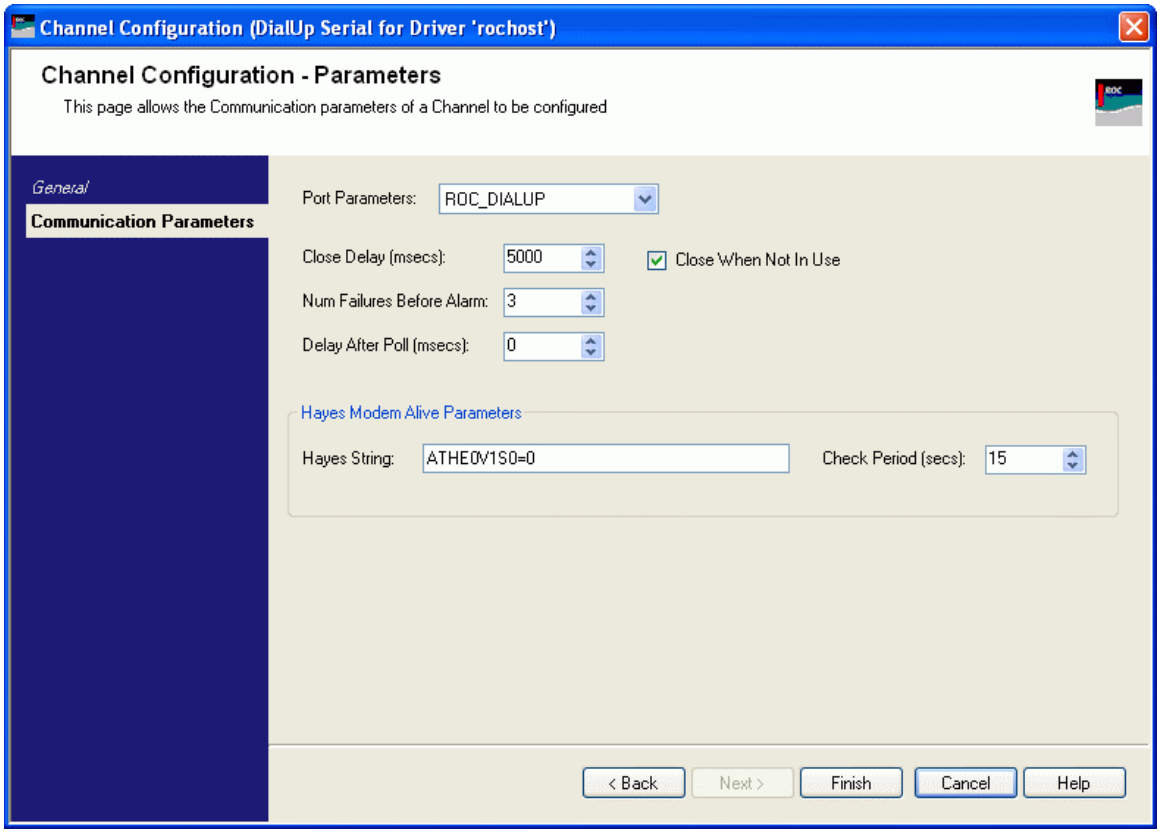
6.9.3.2.6 Disable Use

Check this box to disable the serial channel. The channel will be displayed in the ROC Configuration tool with a red cross on it.



6.9.3.3 Channel Configuration Parameters Page

This page enables you to configure parameters for the serial port.



6.9.3.3.1 Port Parameters

This drop down list displays all Communication Port Parameters Templates that are available. These are serial port parameters that have already been configured. The default for this channel type will be selected.

6.9.3.3.2 Close Delay

This is the delay (in milliseconds) that should be applied before closing the channel after communications have ceased.

6.9.3.3.3 Num Failures Before Alarm

This field enables you to set the number of times the RDI will attempt communications over this channel before initiating an alarm. The default is 3 times.

6.9.3.3.4 Delay After Poll

You can set a period (in milliseconds) that the RDI will delay after polling the device through this channel.

6.9.3.3.5 Close When Not In Use

When this box is checked, the RDI will close this channel when it is not in use. By default this box is checked.

6.9.4 Modem Pool Configuration Wizard

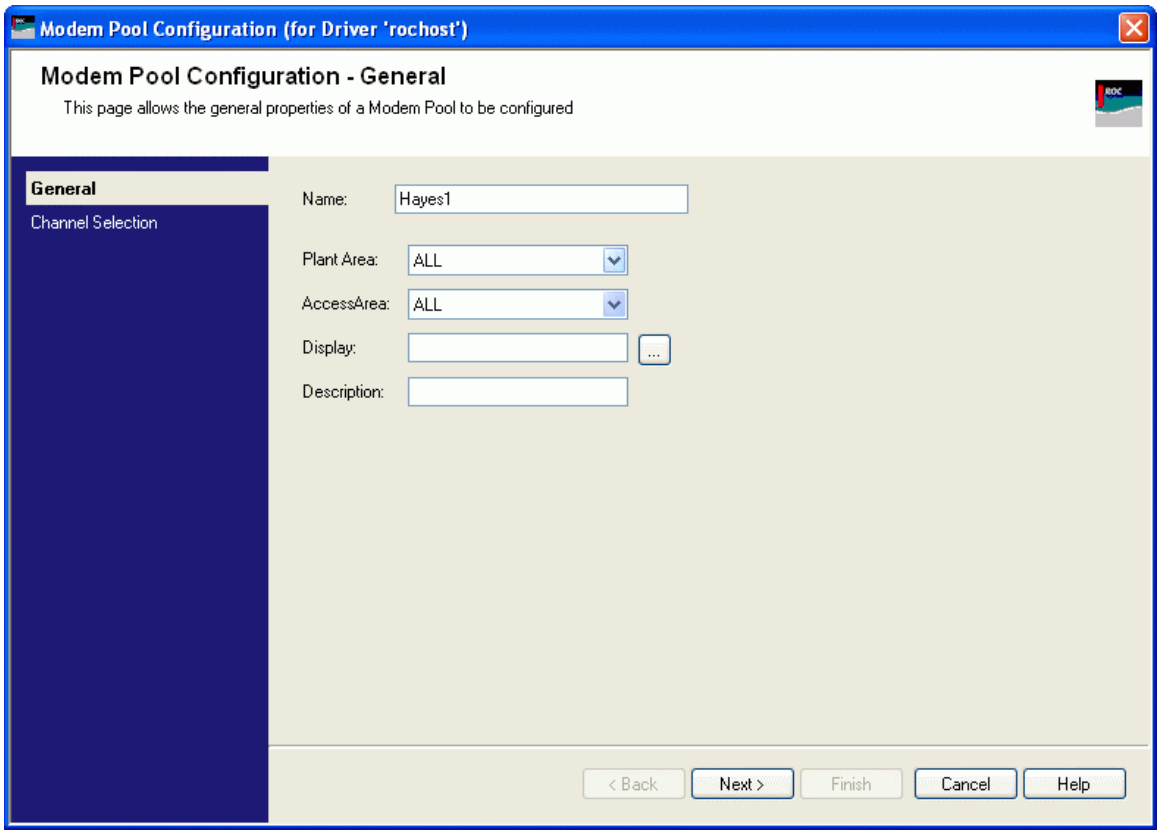
6.9.4.1 Modem Pool Configuration Wizard

The Modem Pool Configuration Wizard has two pages:-

1. General Page
2. Channel Selection Page

6.9.4.2 Modem Pool Configuration General Page

The Modem Pool General Page enables you to give a name to the Modem Pool, and configure other general options.



6.9.4.2.1 Name

The name should be a short descriptive string describing the modem such as "Hayes1".

6.9.4.2.2 Plant Area

The Plant Area drop down list will display all available plant areas in the database with which this modem will be associated. Select the appropriate one.

6.9.4.2.3 Access Area

Access Areas are used in OpenEnterprise as object security. This field defaults to the "ALL" access area, but others can be selected from the list. A modem with an access area of "ALL" would be accessible by all users of the system.

6.9.4.2.4 Display

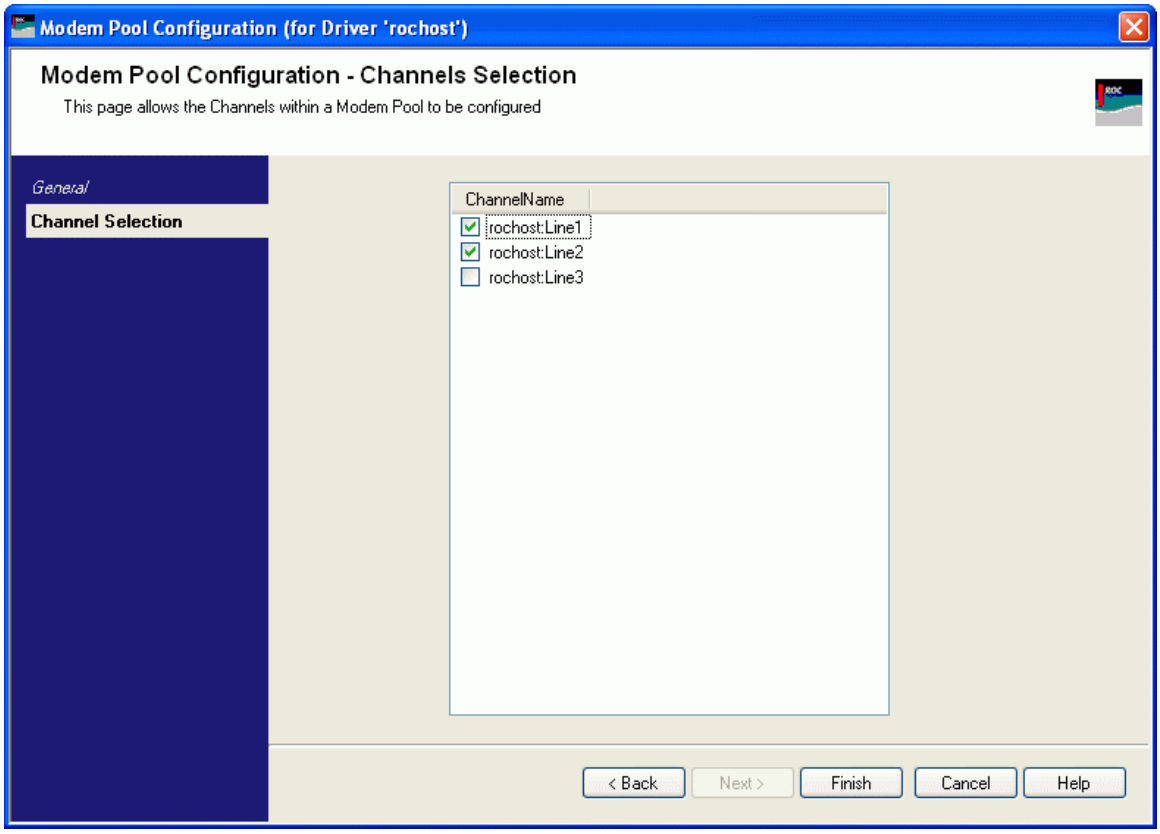
This field is for entering a graphics display on which this modem is shown. The ellipsis button [...] to the right of the field allows you to browse for the display.

6.9.4.2.5 Description

This can be a lengthier explanation of the modem pool that is being configured.

6.9.4.3 Modem Pool Configuration Channels Page

The Channel Selection page enables you to select the dial up channels that can be used by the modem. Select the channels that you want to be associated with this modem from the list of available channels by checking the box next to the channel as shown below.



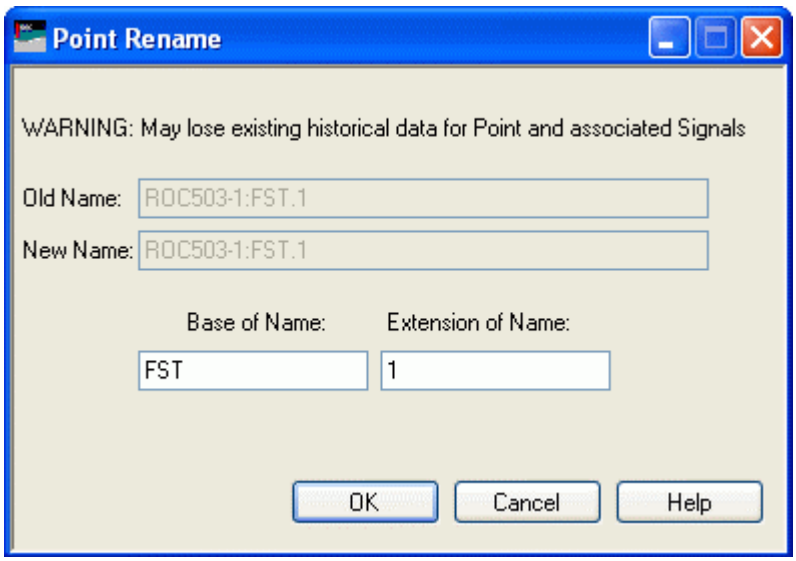
7 Dialogs

Here is a list of the dialogs that you may see in appropriate contexts whilst using the various Wizards:-

1. Point Rename Dialog
2. Point Properties Dialog
3. Update Device from Template
4. Database Device Template Selection
5. Device Template Options
6. ROC 800 File Selection

7.1 Point Rename Dialog

Enables you to rename a Point. The user is advised that if a Point is renamed, existing historical data for the Point and any associated Signals may be lost. Click the hotpots on the image below for more help.

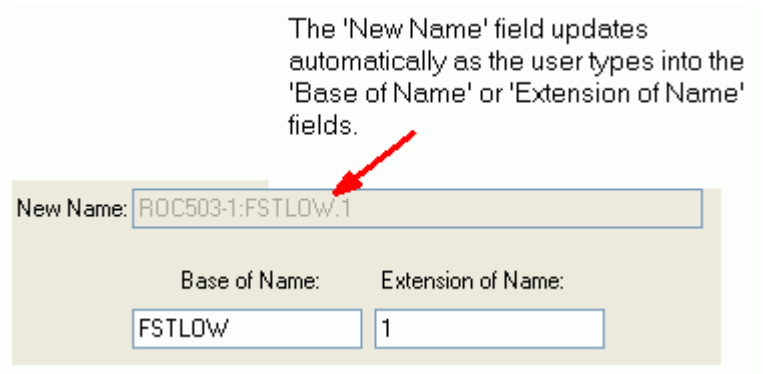


7.1.1 Old Name

The old name of the Point is displayed here.

7.1.2 New Name

As you types into the 'Base of Name' or 'Extension of Name' fields the 'New Name' field updates automatically to show the changes that will apply to the Point name.



7.1.3 Base of Name

The user should type the new Base part of name for the Point here, if required. The 'New Name' field should update as you types.

7.1.4 Extension of Name

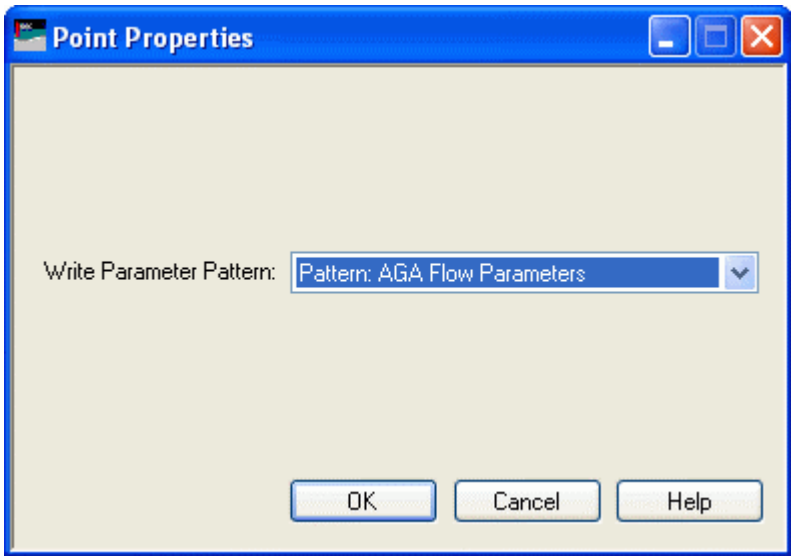
The user should type the new Extension part of the name for the Point here if required. The 'New Name' field should update as you types.

7.2 Point Properties Dialog

Enables you to apply a pre-configured Parameter Pattern to an individual Point. The associated Pattern will be used to write ROC Signals which are mapped to the selected Parameters in the Pattern to the OpenEnterprise Database.

The selected Parameter Pattern must map to specific Parameters for the selected Point.

The update will take place when the [OK] button is selected.

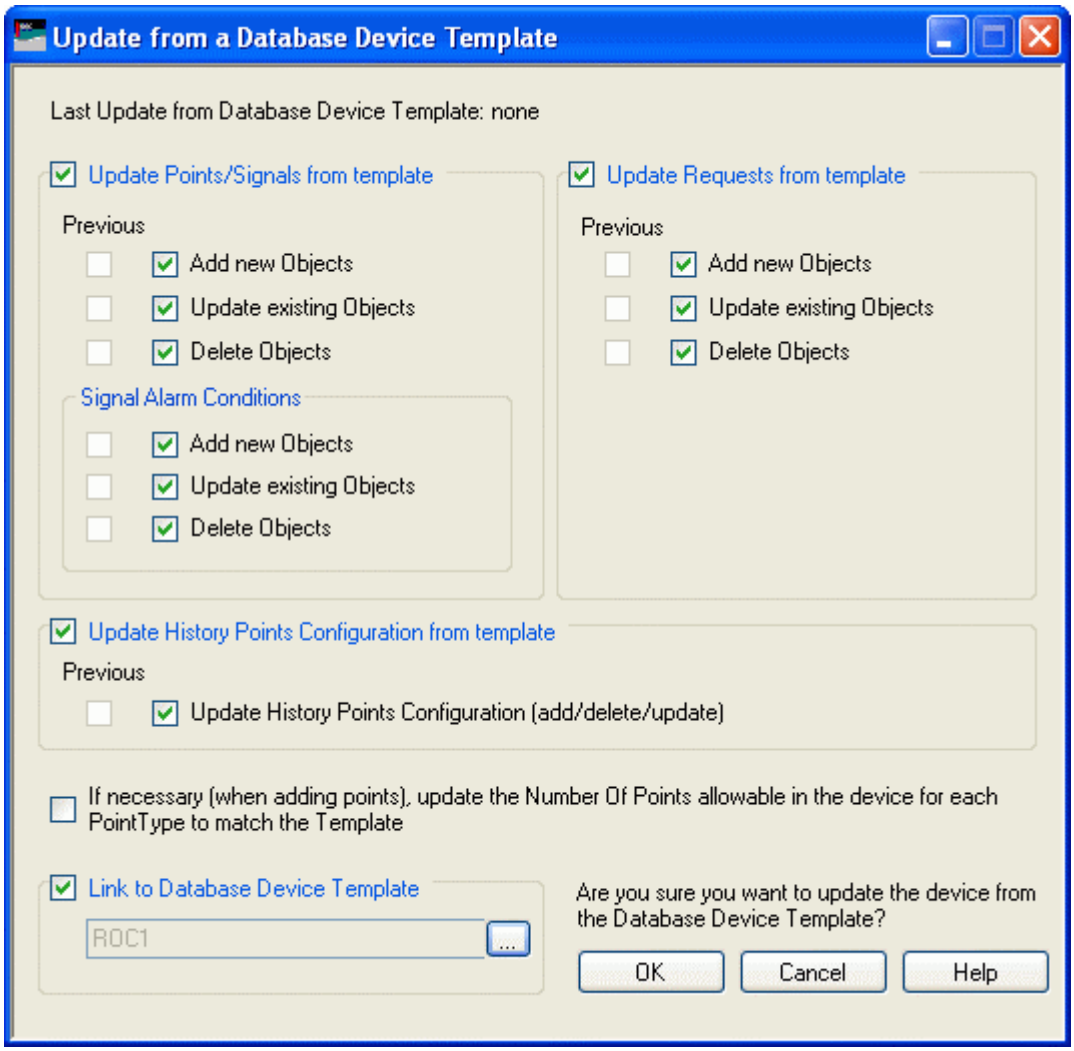


7.2.1 Parameter Pattern

Select a 'Parameter Pattern Template' from this list. The 'Parameter Template Pattern' should have been configured prior to this action, and the template should specify Parameters for the selected Point Type.

7.3 Update From Device Template

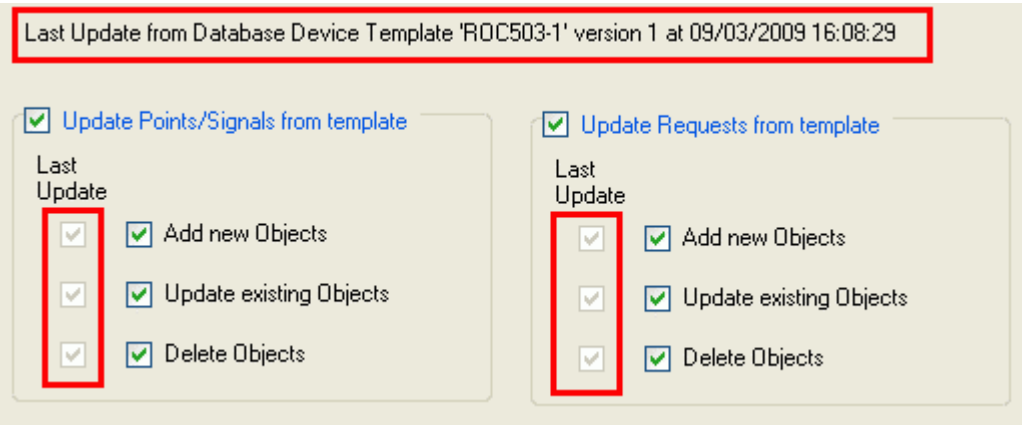
This dialog enables you to select a Device that is already in the OpenEnterprise database to use as the Template for the update. It also enables you to specify what things to update from the Device Template.



7.3.1 Last Update Message

This message tells you when the currently selected Device was last updated from the Device Template specified here.

If the currently selected Device has already been updated, the 'Last Update' boxes will be updated too, to show what options were updated last time.



7.3.2 Update Points/Signals from Template

When you check this box, the options for updating Points and Signals from the Device Template are enabled.

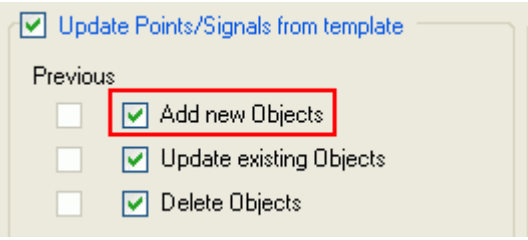
7.3.3 Update Requests from Template

When you check this box, the options for updating Requests from the Device Template are enabled.

7.3.4 Add New Objects

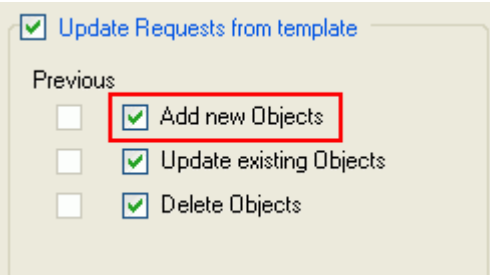
When you check this box, the configuration tool adds Points and Signals, Requests or Signal Alarm Conditions from the Device Template to the currently selected Device.

7.3.4.1 Adding New Points and Signals from the Template



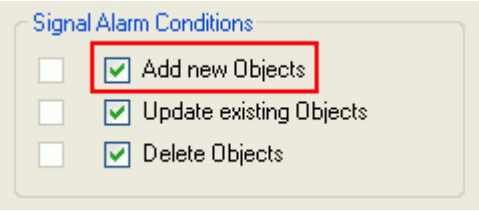
When you check this box, the configuration tool adds any new Points and Signals found in the Template to the selected device.

7.3.4.2 Adding New Requests from the Template



When you check this box, the configuration tool adds any new requests found in the Template to the selected device.

7.3.4.3 Adding New Signal Alarm Conditions from the Template



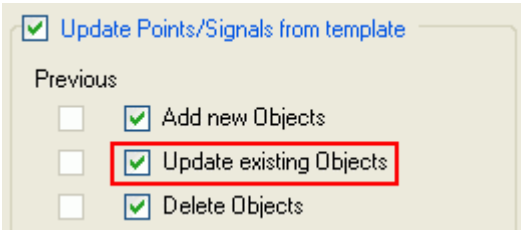
When you check this box, the configuration tool adds any new Signal Alarm Conditions found in the Template to the selected device.

7.3.5 Update Existing Objects

When you check this box, the configuration tool updates Points and Signals, Requests or Signal Alarm Conditions that are in the currently selected device from the Device Template.

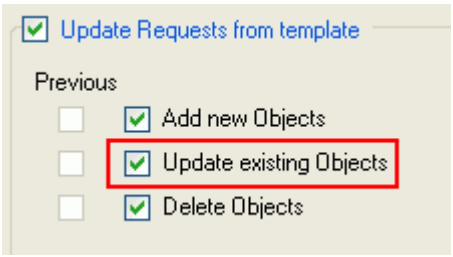
Note: User Defined Points are not updated with the template update.

7.3.5.1 Updating Points and Signals from the Template



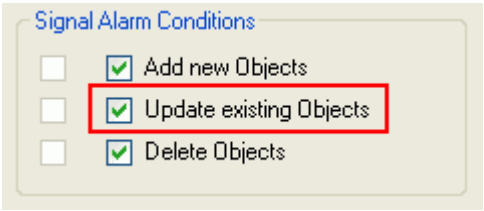
When you check this box, the configuration tool updates Points and Signals in the selected device that match those found in the Template.

7.3.5.2 Updating Requests from the Template



When you check this box, the configuration tool updates Requests in the selected device that match those found in the Template.

7.3.5.3 Updating Signal Alarm Conditions from the Template

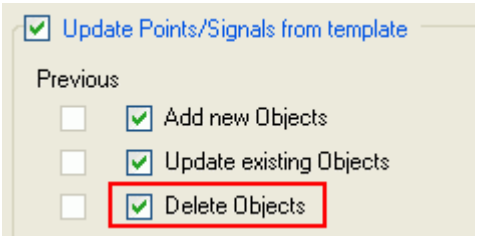


When you check this box, the configuration tool updates Signal Alarm Conditions in the selected device that match those found in the Template.

7.3.6 Delete Objects

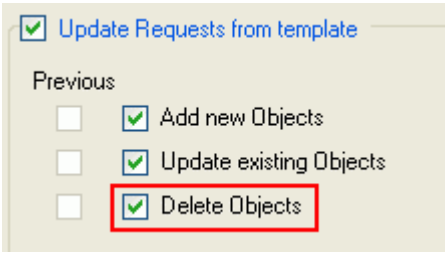
When you check this box, the configuration tool deletes Points and Signals, Requests or Signal Alarm Conditions from the selected device that do not match those found in the Device Template.

7.3.6.1 Deleting Points and Signals not in the Template



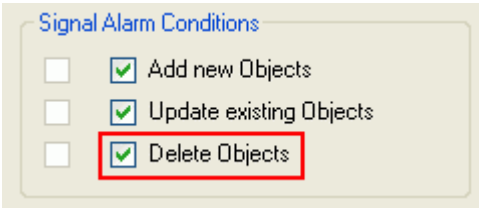
When you check this box, the configuration tool deletes Points and Signals in the selected device that do not match those found in the Template.

7.3.6.2 Deleting Requests not in the Template



When you check this box, the configuration tool deletes Requests in the selected device that do not match those found in the Template.

7.3.6.3 Deleting Signal Alarm Conditions not in the Template



When you check this box, the configuration tool deletes Signal Alarm Conditions in the selected device that do not match those found in the Template.

7.3.7 Last Update

The 'Last Update' check boxes indicate the type of updates that occurred during the last update from the Device Template.

7.3.8 Update History Configuration from Template

When this box is checked, the options for updating History Configuration from the Device Template will become enabled.

7.3.9 Update History Points Configuration

When this box is checked, the History Configuration for the selected Device will be updated from the History Configuration in the Device Template.

7.3.10 Update Number of Points Allowable

When checked, the number of Points allowable for each Point Type in the selected Device will be updated to match the configuration in the Device Template.

7.3.11 Link to Database Device Template

When selected, the [...] button in this section is enabled, and the user can use it to open the 'Database Device Template Selection' dialog in order to select a Device to use as the Template for the update.

If a Device Template has already been selected, it will be displayed in the 'Selected Template' field.

7.3.12 Selected Template

This field displays the Device that has been selected as the Template for the update. If no Device Template appears in this field, you can click the [...] button to the right of the field to open the 'Database Device Template Selection' dialog.

This will enable them to select a Device to be the Template when updating the selected target Device.

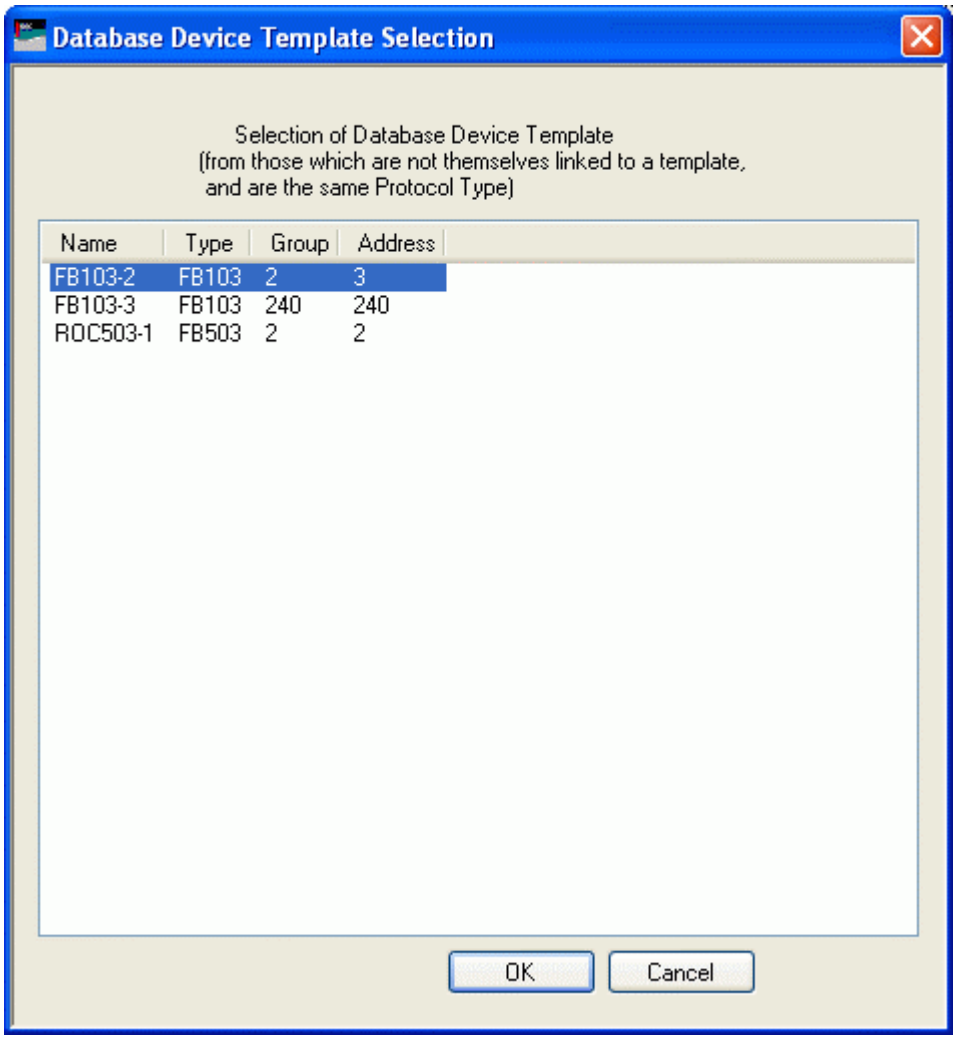
7.3.13 OK button

When this button is selected, the target Device will be updated from the selected Device Template.

When the update has completed for the first time, the Device that was selected as the Template will appear in the Tree View with red dots around, to mark it as a Device Template.

7.4 Database Device Template Selection

This dialog enables you to select a Device to be used as a Template for updating the target Device.



7.4.1 Possible Device Templates List

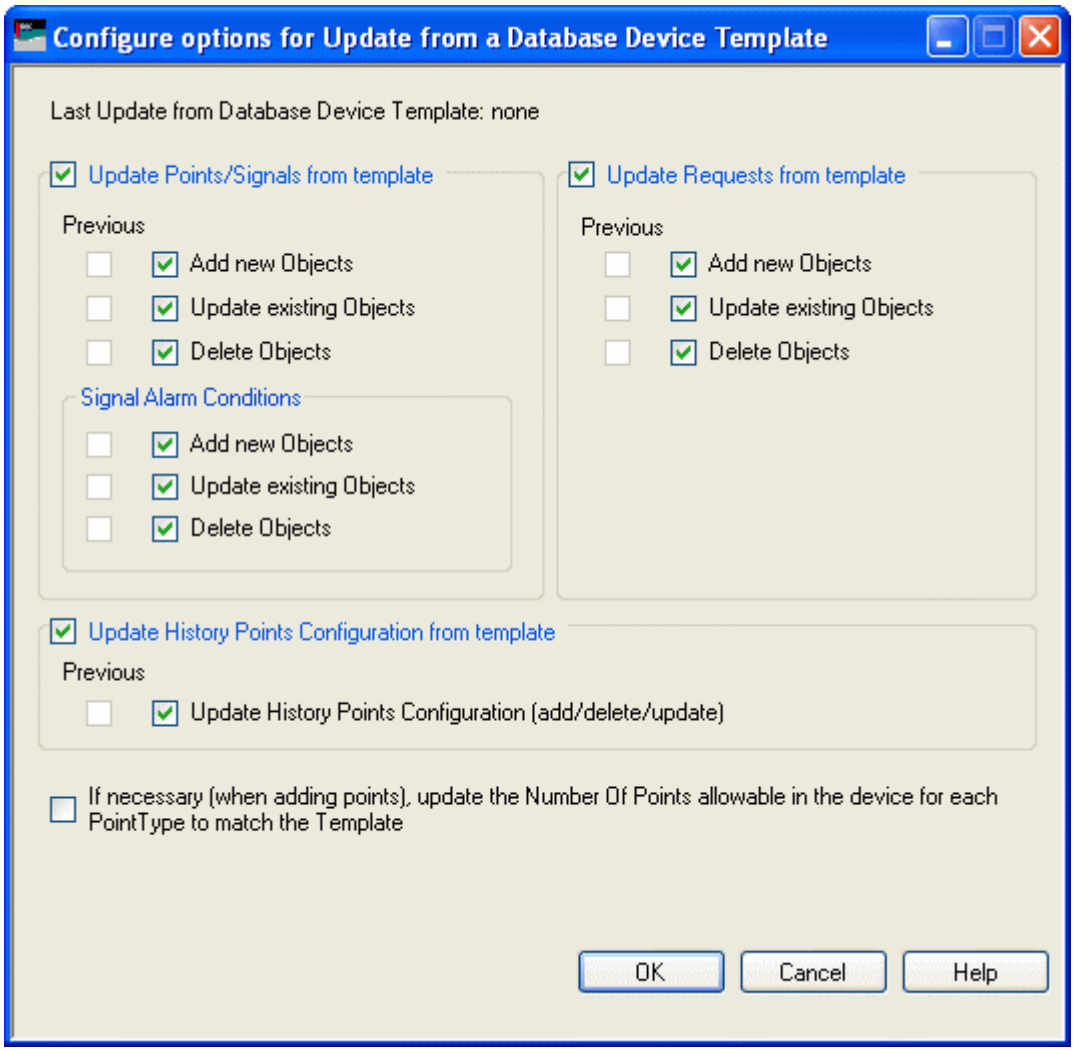
A list of Devices that can be used as the Template for the target Device.

The criteria for the Devices that can be selected as a Template for the target Device are:-

- They are Devices that are not themselves linked to a Template
- They are Devices which have the same ROC Protocol Type (Standard or Plus) as the target Device
- They do not have to be the same Device Type

7.5 Device Template Options

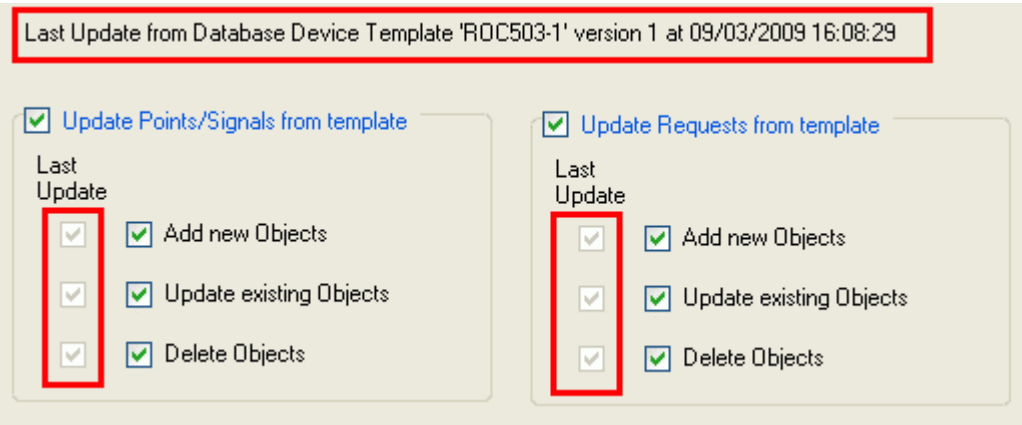
This dialog enables you to specify what things should be updated from a linked Device Template.



7.5.1 Last Update Message

This message tells you when the currently selected Device was last updated from the Device Template specified here.

If the currently selected Device has already been updated, the 'Last Update' boxes will be updated too, to show what options were updated last time.



7.5.2 Update Points/Signals from Template

When you check this box, the options for updating Points and Signals from the Device Template are enabled.

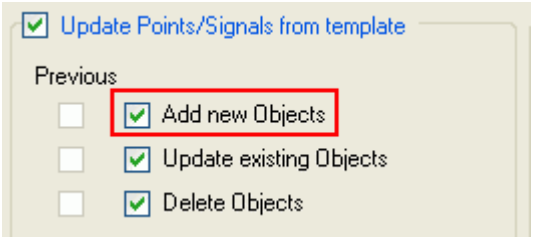
7.5.3 Update Requests from Template

When you check this box, the options for updating Requests from the Device Template are enabled.

7.5.4 Add New Objects

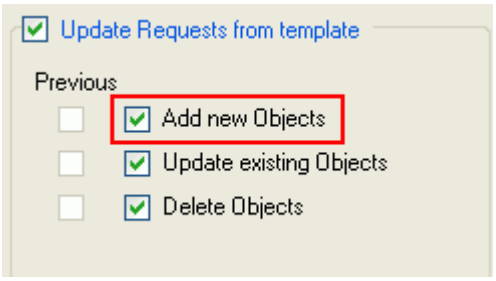
When you check this box, the configuration tool adds Points and Signals, Requests or Signal Alarm Conditions from the Device Template to the currently selected Device.

7.5.4.1 Adding New Points and Signals from the Template



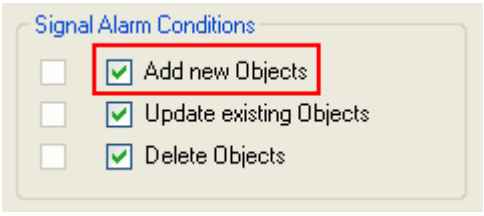
When you check this box, the configuration tool adds any new Points and Signals found in the Template to the selected device.

7.5.4.2 Adding New Requests from the Template



When you check this box, the configuration tool adds any new requests found in the Template to the selected device.

7.5.4.3 Adding New Signal Alarm Conditions from the Template



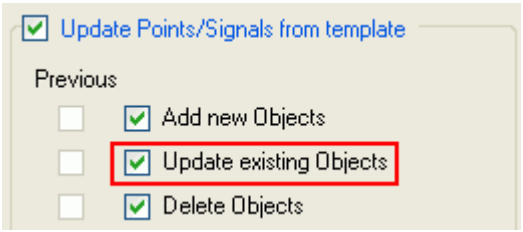
When you check this box, the configuration tool adds any new Signal Alarm Conditions found in the Template to the selected device.

7.5.5 Update Existing Objects

When you check this box, the configuration tool updates Points and Signals, Requests or Signal Alarm Conditions that are in the currently selected device from the Device Template.

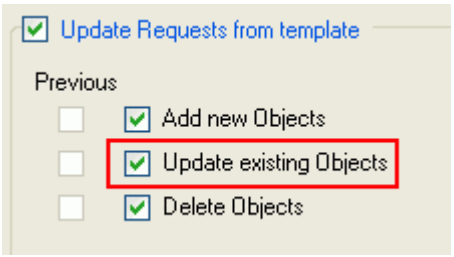
Note: User Defined Points are not updated with the template update.

7.5.5.1 Updating Points and Signals from the Template



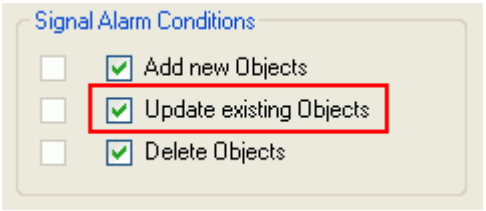
When you check this box, the configuration tool updates Points and Signals in the selected device that match those found in the Template.

7.5.5.2 Updating Requests from the Template



When you check this box, the configuration tool updates Requests in the selected device that match those found in the Template.

7.5.5.3 Updating Signal Alarm Conditions from the Template

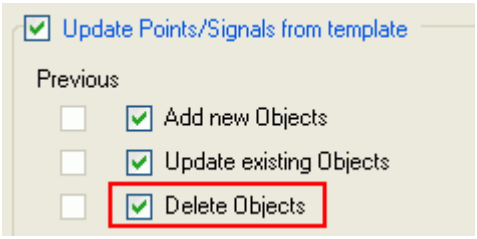


When you check this box, the configuration tool updates Signal Alarm Conditions in the selected device that match those found in the Template.

7.5.6 Delete Objects

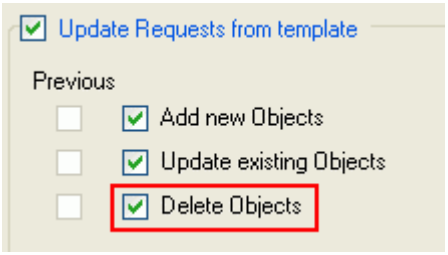
When you check this box, the configuration tool deletes Points and Signals, Requests or Signal Alarm Conditions from the selected device that do not match those found in the Device Template.

7.5.6.1 Deleting Points and Signals not in the Template



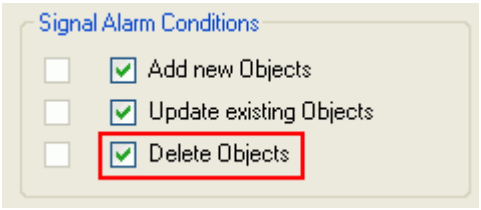
When you check this box, the configuration tool deletes Points and Signals in the selected device that do not match those found in the Template.

7.5.6.2 Deleting Requests not in the Template



When you check this box, the configuration tool deletes Requests in the selected device that do not match those found in the Template.

7.5.6.3 Deleting Signal Alarm Conditions not in the Template



When you check this box, the configuration tool deletes Signal Alarm Conditions in the selected device that do not match those found in the Template.

7.5.7 Last Update

The 'Last Update' check boxes indicate the type of updates that occurred during the last update from the Device Template.

7.5.8 Update History Configuration from Template

When this box is checked, the options for updating History Configuration from the Device Template will become enabled.

7.5.9 Update History Points Configuration

When this box is checked, the History Configuration for the selected Device will be updated from the History Configuration in the Device Template.

7.5.10 Update Number of Points Allowable

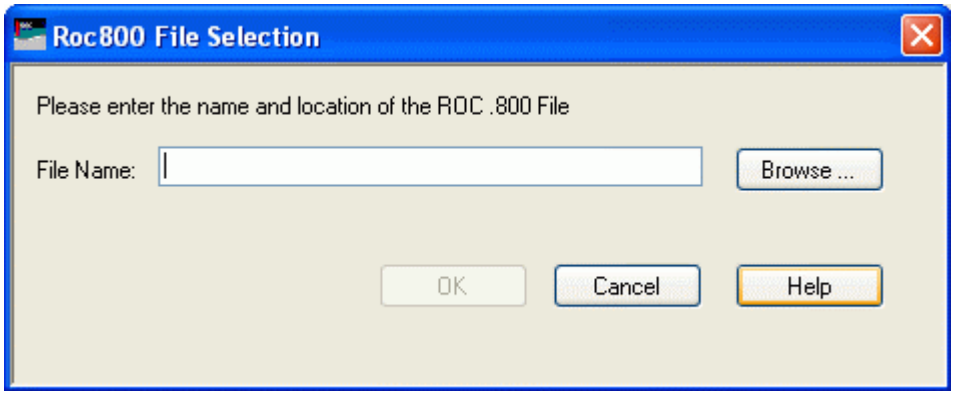
When checked, the number of Points allowable for each Point Type in the selected Device will be updated to match the configuration in the Device Template.

7.6 ROC 800 File Selection

7.6.1 ROC 800 File Selection

With this dialog, you can initiate adding a new ROC device by selecting an appropriate ROC.800 file.

The ROCLINK Configuration application uses database files to store ROC device configuration. These database files have an extension of .800. For instance, 'ROC364 Default.800' is the name of a database file that stores the default configuration for the ROC 364 device. The first part of the file name should indicate the actual ROC device type. The extension (.800) refers to the ROCLINK 800 application, which creates these files.

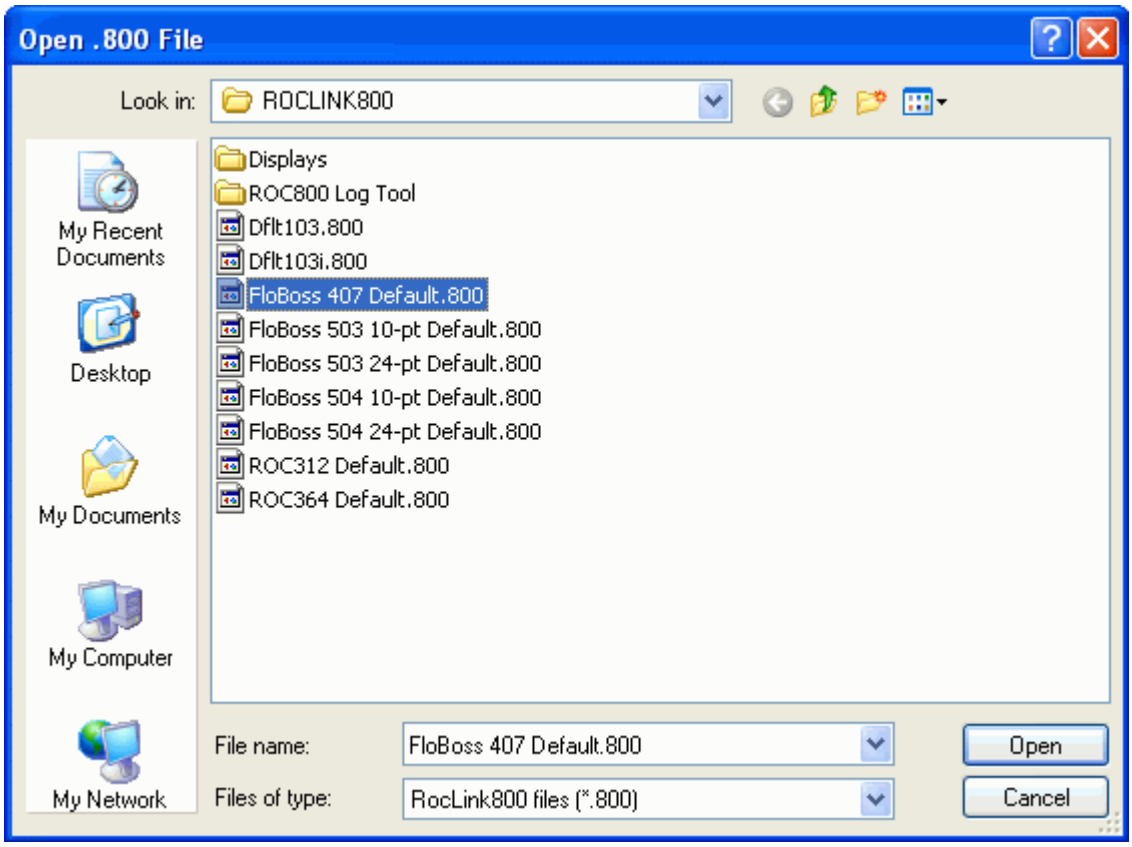


7.6.2 File Name

Type the the full path and name of a ROC.800 file here. Otherwise, use the [Browse] button to the right of this field to browse for the file.

7.6.3 Browse

Click this button to browse for a ROC.800 file on any drive. If you have ROCLINK800 installed, the browse button will open straight to the working directory of this application, where a selection of ROC.800 files will be ready for use.



Otherwise, you can search for the ROC.800 file elsewhere.

7.6.4 OK

When this button is selected, the ROC Device Wizard will begin. Depending on the context that the 'ROC 800 File Selection' dialog was opened from, the next page that is opened will depend on whether you is adding or updating a device respectively.

1. Adding a device will open the ROC Device Wizard Genaral Page
2. Updating a device will open the ROC Device Wizard Summary Page

8 Tasks

The links below provide an example of how to use the ROC Configuration Tool to create devices and to configure data collection for those devices.

- Create a ROC device that is connected via the Internet
- Create a ROC device that is connected directly to a Serial Port
- Create a ROC device that is connected via a dial-up link.
- Create a ROC device from a .800 file
- Configure data collection for a ROC device.
- Testing the collected data

8.1 Create a ROC Device from a .800 file

1. Select Tools>New Device >From .800 File from the main menu bar of the ROC Configuration Tool to invoke the Device Configuration Wizard.

2. Select the file required, Press OK.

3. On the General Page, enter options required, as a minimum enter a Name for the device. Press <Next>

4. On the Communications Routes page, enter options required. e.g. Deselect Primary IP Communication, Secondary IP Communication and Direct Serial communication. Select Direct Serial Communication. Select the port name from the Port Name drop-down list. Press <Next> .

5. On the Override Driver Defaults page, enter any options required or accept the defaults. Press <Next>

6. On the Points Selection Page, select required options.

7. Press the Finish Button.

8.2 Create a ROC Device when connected via Internet

Make sure the device can be connected to with ROCLINK. Close ROCLINK. Make sure the ROC RDI is running.

1. Select **Tools→New Device →From Connected Device** from the main menu bar of the ROC Configuration Tool to invoke the Device Configuration Wizard.

2. On the General Page, enter options required, as a minimum enter a Name for the device, and the ROC Address and Group.

3. Press the [Next >] button.

4. On the Communications Routes page, enter options required, as a minimum enter the IP Address (or network name e.g. as resolved by HOSTS file) and port number.

5. Press the [Next >] button.

6. On the Override Driver Defaults page, enter any options required or accept the defaults.
7. Press the [Next >] button.

8. On the Points Selection Page, select required options.

9. Press the [Finish] Button.

8.3 Create ROC Device when connected via Serial Port

Make sure the device can be connected to with ROCLINK. Close ROCLINK. Make sure the ROC RDI is running as part of the OpenEnterprise session on the server.

1. From the Tree View, select **Communications To ROC Devices→ Communication Port Parameters Templates**, then right click on the ROC_SERIAL node and select "Properties" from the context menu. This will open the Port Parameters Template Configuration dialog. Adjust the communications parameters as required for your device.

2. Press the **[OK]** button.

3. From the Tree View, select **Communications To ROC Devices→RocDrivers→RocHost**. Right Click on the Direct Serial Channels node and select "New Direct Serial Channel". Follow the instructions on the Wizard.

4. Select **Tools→New Device→From Connected Device** from the main menu bar of the ROC Configuration Tool to invoke the Device Configuration Wizard.

   On the General page, enter options required, as a minimum enter a Name for the device, and the ROC Address and Group.

5. Press the **[Next >]** button.

6. On the Communications Routes page, enter options required. Deselect Primary IP Communication, Secondary IP Communication and Dial Up communication. Select Direct Serial Communication. Select the port name from the Port Name drop-down list.

7. Press the **[Next>]** button.

8. On the Override Driver Defaults page, enter any options required or accept the defaults.

9. Press the **[Next >]** button.

10. On the Points Selection Page, select required options or accept defaults

11. Press the **[Finish]** Button.

8.4 Create a ROC Device that is connected via a dial-up link

Make sure the device can be connected to with ROCLINK. Close ROCLINK. Make sure the ROC RDI is running as part of the OpenEnterprise session on the server..

1. From the Tree View, select **Communications To ROC Devices→Communication Port Parameters Templates→ROCDIALUP**. Adjust the parameters as required for comms for your device.

2. Press the **[OK]** button.

3. From the Tree View, select **Communications To ROC Devices→RocDrivers→ RocHost→DialUp Serial Channels**. Right Click on DialUp Serial Channels, select 'New DialUpSerial Channel'. Follow the instructions on the Wizard.

4. Once added, right-click on the channel name, select AddTo Modem Pool. Choose Modem Pool 'TEST SET (DIAL UP)' from drop down list.

5. Select **Tools→New Device→From Connected Device** from the main menu bar of the ROC Configuration Tool to invoke the Device Configuration Wizard.

6. On the General Page, enter options requried, as a minimum enter a Name for the device, and the ROC Address and Group.

7. Press the **[Next >]** button.

8. On the Communications Routes page, enter options required. De-select Primary IP Communication, Secondary IP Communication and Direct Serial communication. Select Dial Serial Communication. Select the Modem Pool 'TEST SET (DIAL UP)' from dropdown list. Enter the phone number required.

9. Press the **[Next >]** button .

10. On the Override Driver Defaults page, enter any options required or accept the defaults.

11. Press the **[Next >]** button .

12. On the Points Selection page, select required options or accept defaults.

13. Press the **[Finish]** Button.

8.5 Configure Data Collection for a ROC Device

Here are a number of different ways of configuring data collection from ROC Devices using the ROC Configuration Tool.

8.5.1 To configure collection of analog and digital value data every 10 seconds

a. Expand the device required from the treeview. Right-Click On 'Requests by Schedule'. Select 'New Data Collection (General)'

b. Type in a description e.g. 'Collect Analog and Digtal Values'. Select schedule '10 seconds' from the dropdown list. Press Next.

c. Select 'Pattern: values' from the 'Point Parameters' dropdown menu.

d. Select 'Multiple Types' from the Point Type selection radio button.

e. Select tick box for point types required (AIN and DIN)

f. Press finish

8.5.2 To configure collection of alarms every 10 seconds

a. Expand the device required from the treeview. Expand 'Requests by Type'->General. Right Click on 'Read Alarm Data'. Select Properties.

b. Select schedule '10 seconds' from the dropdown list.

c. Press OK

8.5.3 To configure collection of events every 1 minute

a. Expand the device required from the treeview. Expand 'Requests by Type'->General. Right Click on 'Read Event Data'. Select Properties.

b. Select schedule '1 minute' from the dropdown list.

c. Press OK

8.5.4 To configure collection of history every 1 minute

a. Expand the device required from the treeview. Expand 'Requests by Type'->ReadHistoryData Right Click on history required Select Properties.

b. Select schedule '1 minute' from the dropdown list.

c. Press OK

8.5.5 To configure setting of device clock every 10 minutes

a. Expand the device required from the treeview. Expand 'Requests by Type'->General Right Click on WriteClock Select Properties.

b. Select schedule '10 minutes' from the dropdown list.

c. Press OK

8.6 Testing the Collected Data

Here are a number of ways to view and test the data that has been collected from within the ROC Configuration Tool.

8.6.1 To view all signals

a. Click on "Signals For Point Parameter Values"

b. Right click on the list view and select "Refresh List View From Database" to get the latest values..

8.6.2 To view analog signal data for a single device in database

a. From the tree view select the **All Devices** node, then a specific **device** node. Then expand it to view the following nodes:

Database ROC Points | **I/O** | **Analog Inputs** | **Point name** | **Signals For Point Parameter Values**. Then click on the signal required.

a. Right click on the list view and select "Refresh List View From Database" to get the latest values.

8.6.3 To view alarms in database

a. From the tree view expand the **Diagnostics** node. Click on the **ROC Alarms** node.

b. Right click on the list view and select 'Refresh List View From Database' and/or "Adjust Timestamp where clause" to get the latest values.

8.6.4 To view event data in database.

a. Expand the **Diagnostics** node. Click on the **ROC Events** node.

b. Right click the list view and select 'Refresh List View From Database' and/or t'Adjust Timestamp where clause' to get latest values.

8.6.5 To view history data in database

a. Expand the following nodes **Device** | **Database ROC History Points** | **Segment** | **Point**. Right click on the point required and select "List ROC History Values" from the context menu.

b. Right click the list view and select "Refresh List View From Database" and/or "Adjust Timestamp where clause" to get latest values

9 Understanding

The links on this page will help you to understand the basics of how ROC devices work and how the OpenEnterprise ROC Configuration tool works with ROC devices.

- ROC Point types
- ROC Points
- ROC Parameters
- ROC Point-Parameter referencing
- ROC Signals
- Breakdown of ROC RDI Requests

9.1 ROC Point Types

ROC Point Types define the types of Points that can be available in a ROC Device. There are two types of ROC Protocol, known as 'ROC Standard' and 'ROC Plus'. The 'ROC Standard' protocol defines Point Types from 0 to 84 plus Type 86, and the 'ROC Plus' protocol defines Point Types from 87 to 143 including Type 85.

Table 1 below shows the number, name and abbreviated reference of the first 20 ROC Point Types as defined in the 'ROC Standard' protocol.

ROC Point Types (0 – 19)		
No	**Name**	**Abbreviation**
0	Configurable Opcode	OPC
1	Discrete Inputs	DIN
2	Discrete Outputs	DOU
3	Analog Inputs	AIN
4	Analog Outputs	AOU
5	Pulse Inputs	PIN
6	PID Parameters	PIDPAR
7	AGA Flow Parameters	AGA
8	History Parameters	HST
9	Local Display Panel	LDP
10	AGA Flow Calculation Values	FLW
11	Tank Parameters	TNK
12	Clock	CLK
13	Flags	FLG
14	Comm Ports	COM
15	System Variables	SYS
16	FST Registers	FST
17	Soft Point Parameters	SFP
18	AI Calibration	CAL
19	Database Parameters	DBP

Table 1

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9.2 ROC Points

The actual ROCS Points installed in a ROC Device are mapped directly to entries in the appropriate ***RocPoint*** table in the OpenEnterprise database.

For instance if a ROC503 device were added to the OpenEnterprise database using the ROC Configuration Tool, and the device had 16 ROC Analog Inputs, they would be added to the ***RocStandardAnalogInputs*** table (referencing Point Type 3). The word 'Standard' in the table name refers to the 'ROC Standard' protocol.

All Parameters for these ROC Analog Input Points are mapped directly to attributes in this table. For instance the 'Filtered EU Value' Parameter is mapped to the 'filteredeuvalue' attribute of the ***RocStandardAnalogInputs*** table.

There is also a table called ***RocPlusAnalogInputs*** which contains entries for 'ROC Plus' Analog Input Points (referencing Point Type 103).

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9.3 ROC Parameters

Each ROC Point Type has a fixed number of Parameters that are associated with it. For example, Table 2 below shows the Parameters that belong to the Analog Input Point Type (Point Type 3):

Point Type 3 (Analog Input) Parameters			
Number	**Param Name**	**Number**	**Param Name**
0	Point Tag ID	**16.4**	High High Alarm
1	Units	**16.5**	Rate Alarm
2	Scan Period	**16.6**	Not Used
3	Filter	**16.7**	Point Fail
4	Adjusted A/D 0%	**16.8**	Manual Mode
5	Adjusted A/D 100%	**19**	Fault Value
6	Low Reading EU	**20**	Zero Raw
7	High Reading EU	**21**	Mid Point Raw #1
8	Low Alarm EU	**22**	Mid Point Raw #2
9	High Alarm EU	**23**	Mid Point Raw #3
10	Low Low Alarm EU	**24**	Span Raw
11	Hi Hi Alarm EU	**25**	Zero EU
12	Rate Alarm EU	**26**	Mid Point EU #1
13	Alarm Deadband	**27**	Mid Point EU #2
14	Filtered EU Value	**28**	Mid Point EU #3
15	Mode	**29**	Span EU
16	Alarm Code	**30**	Offset (Zero Shift)
17	Raw A/D Input	**31**	Set Value
18	Actual Scan Time	**32**	Manual Value
16.1	Low Alarm	**33**	Calibration Timer
16.2	Low Low Alarm	**34**	Calibration Mode
16.3	High Alarm	**35**	Calibration Type

Table 2

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9.4 ROC Point-Parameter Referencing

A single Parameter that exists in a ROC Device can be referenced by using the 'TLP' referencing system.

9.4.1 TLP

Configuration and communication software for ROC devices uses what is known as the TLP definition for defining an actual ROC parameter where:

- T = Point **Type** Number
- L = Actual Point or **Logical** number within the RTU
- P = **Parameter** Number.

For example, the 'Filtered EU' Parameter of the first Analog Input Point in a ROC Device can be referred to as '3, 0, 14', since:

- The Analog Input Type number is 3
- 0 (zero) refers to the first Analog Input Point in the Device
- The 'Filtered EU' Parameter is Parameter number 14 in the Analog Input Point.

The ROC Point Type, Point and Parameter numbering system is zero based, so the Logical Point Number in this example is given as 0 (zero) rather than 1.

9.4.2 Point Type and Parameter Abbreviations

Point Types and Parameters also have abbreviations which can be used to reference specific Points and Parameters in a Device. For instance, the abbreviation for Analog Inputs is AIN (see Table 1). The abbreviation for the 'Filtered EU' Parameter (Parameter 14) for an Analog Input Point is 'EU'. So the TLP for the Parameter example above 'AIN, A1, EU', where 'AIN' means 'Analog Input Type', 'A1' means it is the first Point in I/O rack A in the Device, and 'EU' means the 'Filtered EU' Parameter for the Point.

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9.5 ROC Signals

OpenEnterprise uses the ***RealAnalog***, ***Digital, Integer*** and ***String*** tables for configuring such things such as Reports, Historical logging and Calculations. Each of the above signal tables has a 'value' attribute which is used to provide the actual current value of the signal. The 'value' attribute has a different data type for each table, which matches the signal type.

The ***ROCPoint*** table is not compatible with the OpenEnterprise signal tables, in that it has no 'value' attribute, and is not derived directly from the base signal tables used by OpenEnterprise.

In order to enable Reports, Historical logging and Calculations to be configured for ROC Points, an entry must be created, mapping the 'EU Value' Parameter of the Point to the 'value' attribute of a ROC Signal.

'Parameter Pattern Templates' can be created which specify Parameters that may regularly be required for the above functionality when adding ROC Points. A 'Value' 'Parameter Pattern Template' is already provided by the ROC Configuration Tool. If this is used when adding ROC Devices, ROC Signals will be automatically created for every 'EU Value' Parameter. The Template also includes some other Parameters that may be required.

Using the 'Value' template when adding a ROC device means that as well as adding an object in the specific ***ROCPoint*** table for each ROC Point in the Device, the ROC RDI also adds a signal in the appropriate ROC Signal table that maps to the 'EU Value' for that ROC Point. For an Analog Input Point, the 'Filtered EU Value' Parameter would map to an entry in the ***ROCRealanalog*** table.

The name of the signal defines the Device, Point Type, Point Number and Parameter. For instance, the name of a signal mapping to the 'Filtered EU Value' of the first Analog Input Point in the first ROC 503 device would be '**FB103-1:AIN.1.EU**'. The 'value' attribute of that object will map to the 'Filtered EU Value' of the Point.

To create a Signal for a Parameter with a different data type, the ROC RDI creates a signal in the ROC Signal table that matches the Parameter data type rather than the ROC Point Type. For example, if we wanted to log the UNITS Parameter for the same Analog Input Point as in our previous example, an entry would be created in the ***ROCString*** table with the name '**FB103-1:AIN.1.UNITS**'..

The name given to the signal by the ROC RDI helps us to map the signal to its Device, ROC Point Type, Point Number and Parameter:

- '**ROC503-1**' followed by a colon: tells us this signal belongs to the first ROC503 device
- '**AIN**' followed by a period: tells us this is an Analog Input Point
- **1** followed by a period: it is the First Analog Input Point in this ROC device
- **UNIT**: tells us it is logging the Analog Input 'UNIT' Parameter in its 'value' field

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9.6 Breakdown of ROC RDI Requests

Here is a description of exactly what the ROC Remote Device Interface (RDI) does for a number of request types which are available from the ROC Configuration Tool.

9.6.1 CheckConfiguration request

The ROC RDI does an Opcode 6, Logs on, and then reads the DeviceType, Version, Station Name, Numbers of each point-type, Logical positions, size of alarm/event buffers etc.. This data is updated into the rocCheckConfiguration table in the OpenEnterprise database.

The RDI does not update the current OpenEnterprise (OE) configuration for the device, but raises an alarm if any differences are identified.

It does not check the History Points configuration, or read the parameters (ie it does not check point tagnames).

9.6.2 Update Device Configuration (from device context menu)

The ROC RDI performs a CheckConfiguration request, which updates the DeviceType, Version etc. in the rocCheckConfiguration table.

This is then displayed alongside the current OE configuration and the user can then choose whether to do the update.

If the user elects to update, then it updates the rocDevice table, and refreshes the parameter values for points that have been configured in the database (ie a ReadPointParameters.All request).

It then updates the History Points configuration (ie a ReadHistoryPointsConfig request).

9.6.3 Refresh Parameter Values (from device context menu)

The ROC RDI reads all the parameters for any points which are configured in OE. This is identical to ReadPointParameters.All request.

9.6.4 Refresh History Configuration (from device context menu)

This reads the configuration of all the history points in the device, and updates the database with any changes (adds, updates and deletes). This is identical to ReadHistoryPointsConfig request.

9.6.5 ReadPointers request

The ROC RDI does an Opcode 120 to read the current pointers (for history, alarms, events) from the device, and updates the data into the rocStandardReadPointers table for debug purposes. **Note:** Opcode 120 is not relevant for ROC plus.

This request is also done automatically when history data is read.

9.6.6 ReadSystemInformation request

The ROC RDI does an Opcode 103 to read system information, and updates this data in the rocStandardReadSystemInformation table for debug purposes. **Note:** Opcode 103 is not relevant for ROC plus.

10 Index

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DISCLAIMER

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