Accord Security Audit

User Guide

Document: **Accord Security Audit V1.7 User Guide.Docx**

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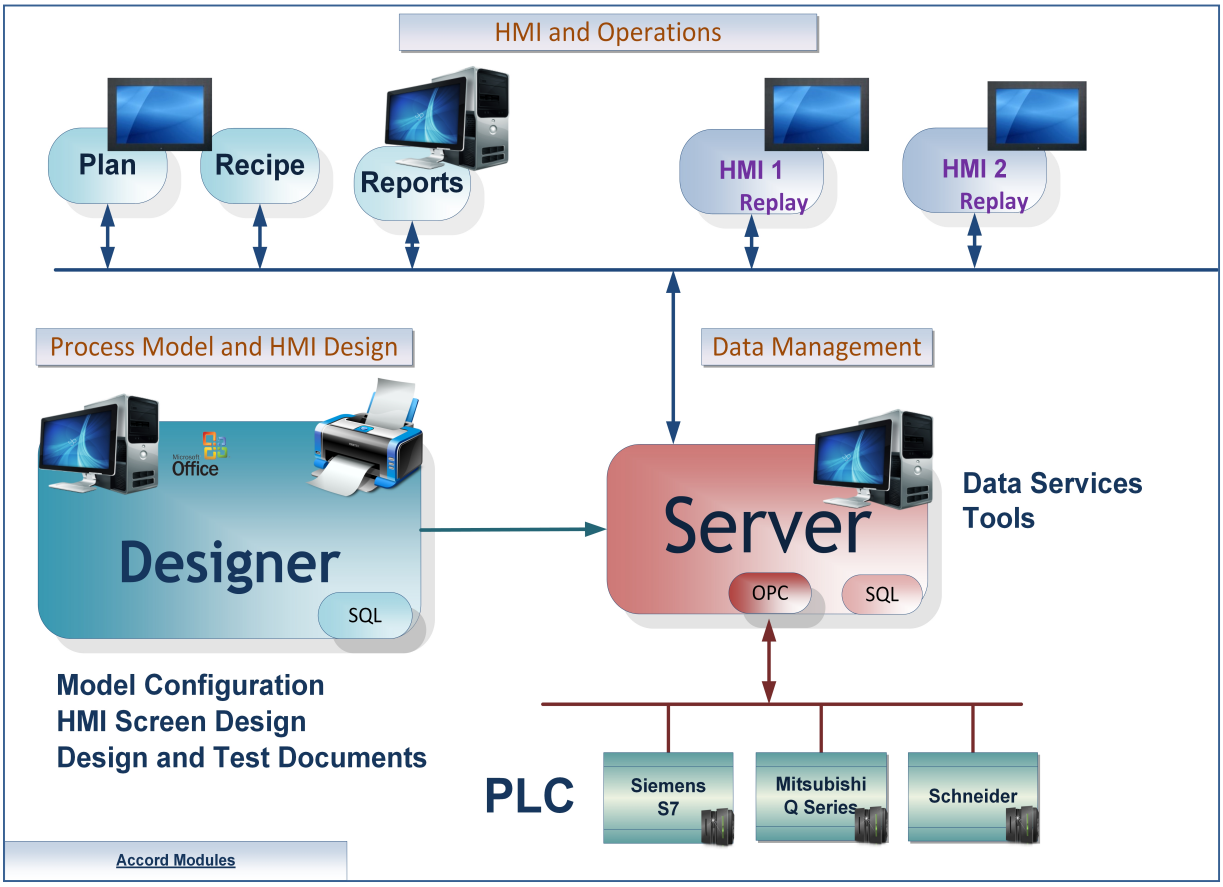
1 Introduction

Accord Designer provides a graphical environment for engineering personnel to develop process models and associated HMI screens for control systems.

Process Model development is carried out by configuring equipment and programs and HMI screens are developed by placing devices and programs onto the screens. All relevant linking and control is implemented automatically by the Accord Server service. Items are available in HMI, Recipe, Security Audit and other modules when initially configured in Designer.



Accord Platform Modules

The Accord Modules may be hosted on single PC or distributed across many PC's.

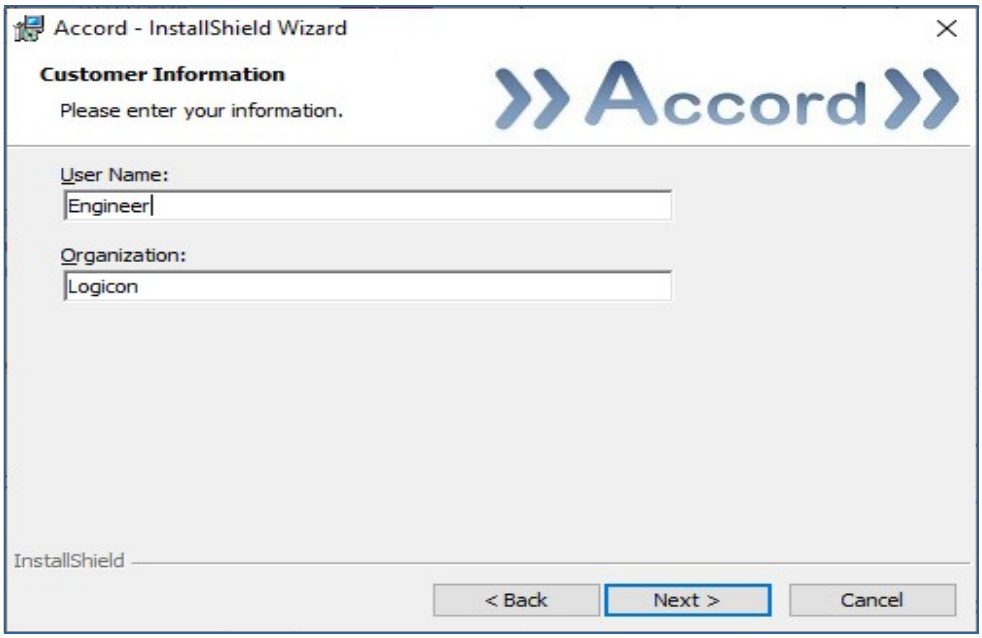
This document provides explanations for Security Audit.

Please see Accord Server User Guide for List of Modules and Definitions.

2 Installation

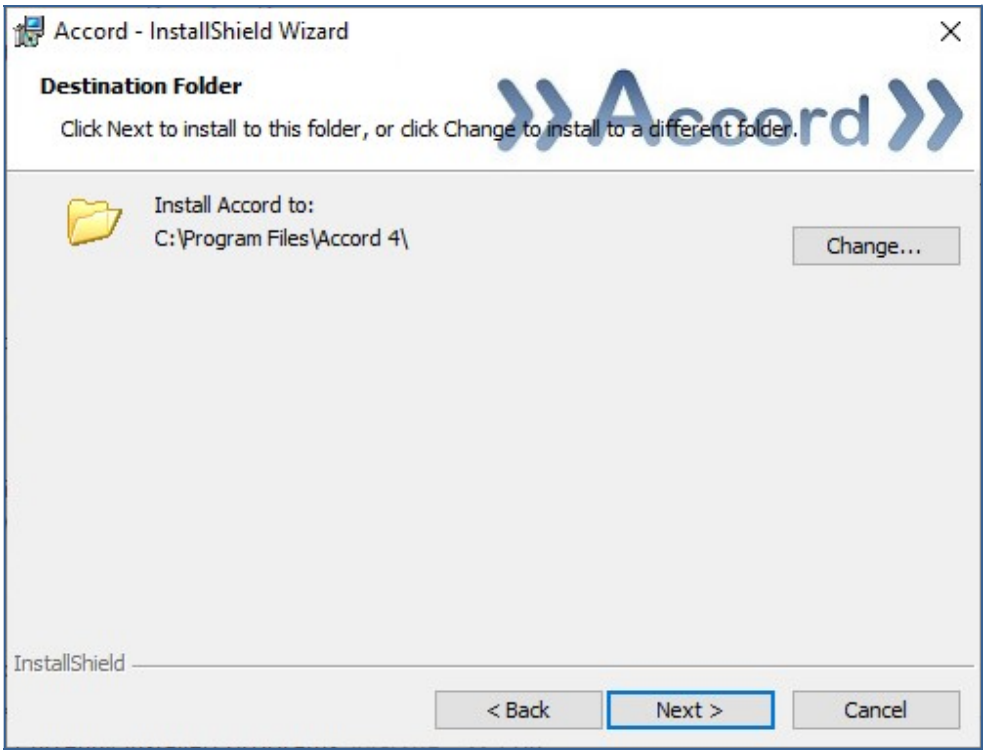
Accord Security Audit requires a standard PC. Accord Server may require a high performance PC, depending on applications sizes and system requirements.

Security Audit is installed from Accord Setup Installer. Server should be installed, either on this or a networked PC, to provide Database management.

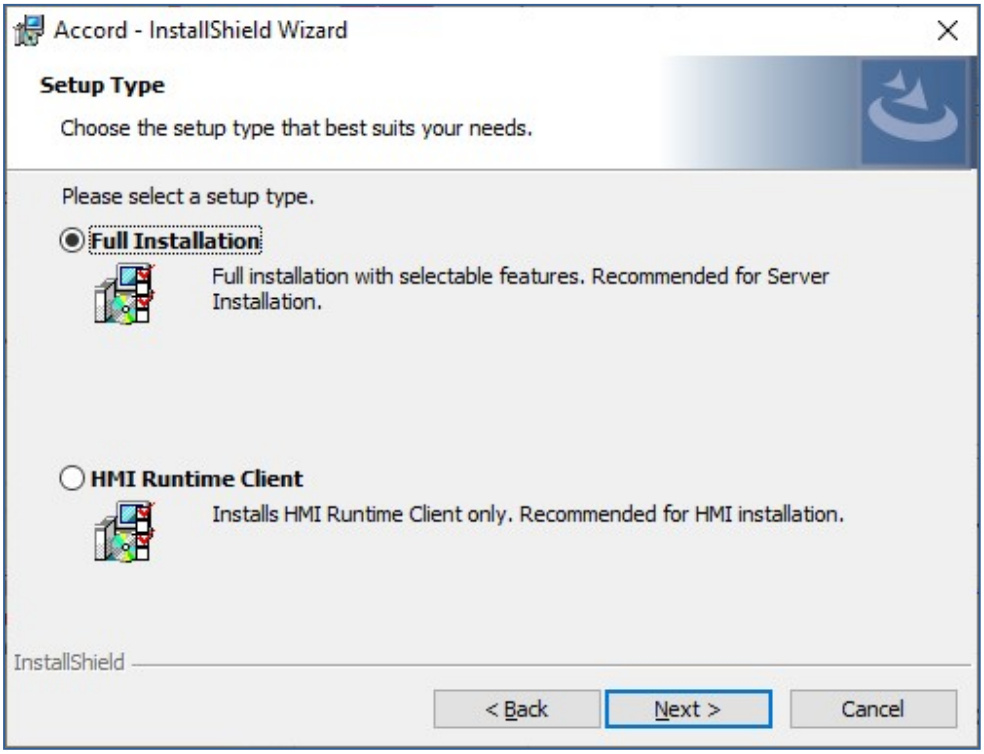


Accord Setup.exe

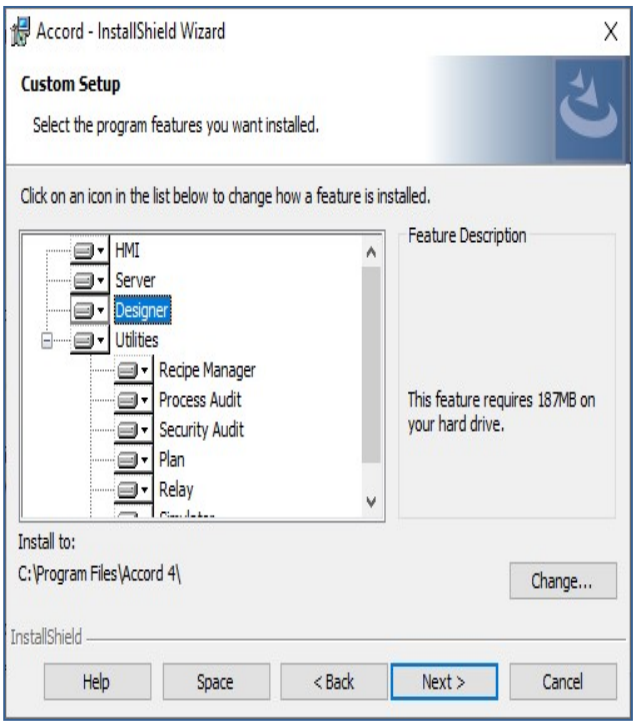
1. Entry of User Name and Organisation

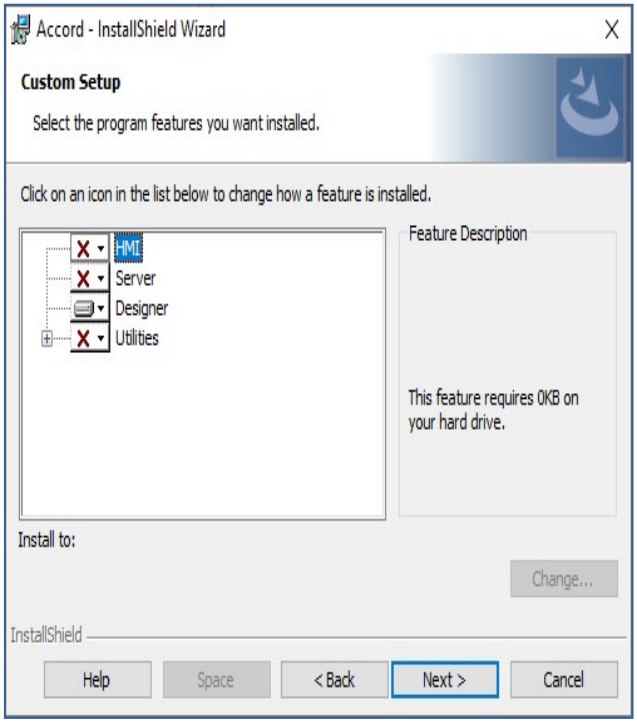


2. Installation Folder selection



3. Installation selection





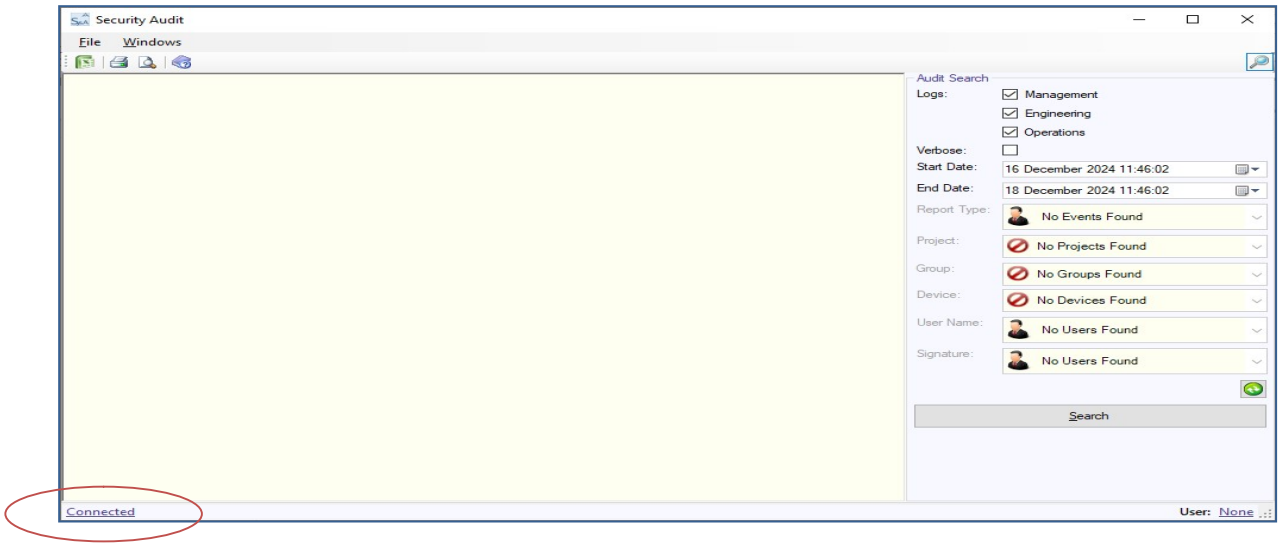
4. Selection of **HMI** and any other required modules. The installation is to a ProgramFiles folder but may be changed.

Note Modules are selected to be installed by default. Right-click on a module to deselect the installation of the module.

5. Installation is completed on pressing Install.

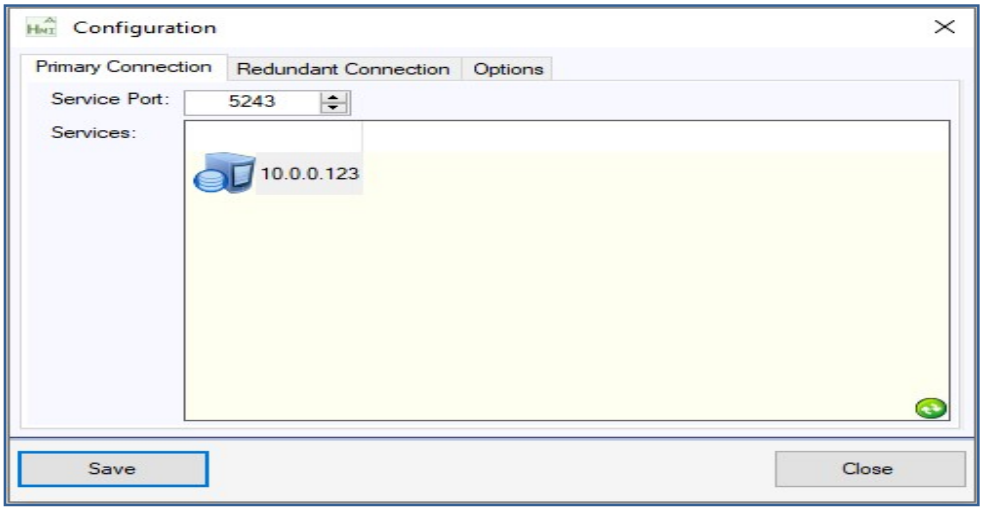
2.1 Initial connection to Accord Server.

Once installed the Security Audit module must connect to an Accord Server for data. Security Audit should find the Server module automatically if it is on the same PC.



Accord Security Audit Connection Status area

Clicking on Connected or Disconnected Status will cause Configuration popup to appear with Green Refresh button at the Bottom.



Connection Selection

Connections are selected from the list. If the required IP address is not available it may be searched for by clicking Refresh button. Logging in is carried out after connection, by clicking on the User: in the bottom of the Screen. The User must already be listed User in Server settings Security section.

3 Initial Configuration

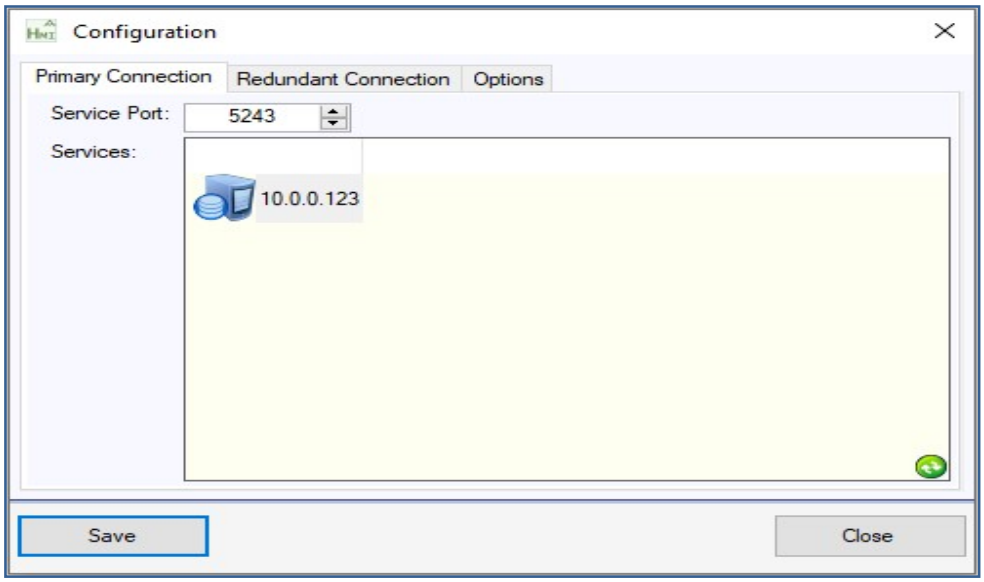
3.1 Server Connection

Start of Security Audit will show the status of connection to Server in the bottom of the panel.

Initial Screen showing Connected Status and no User Logged In

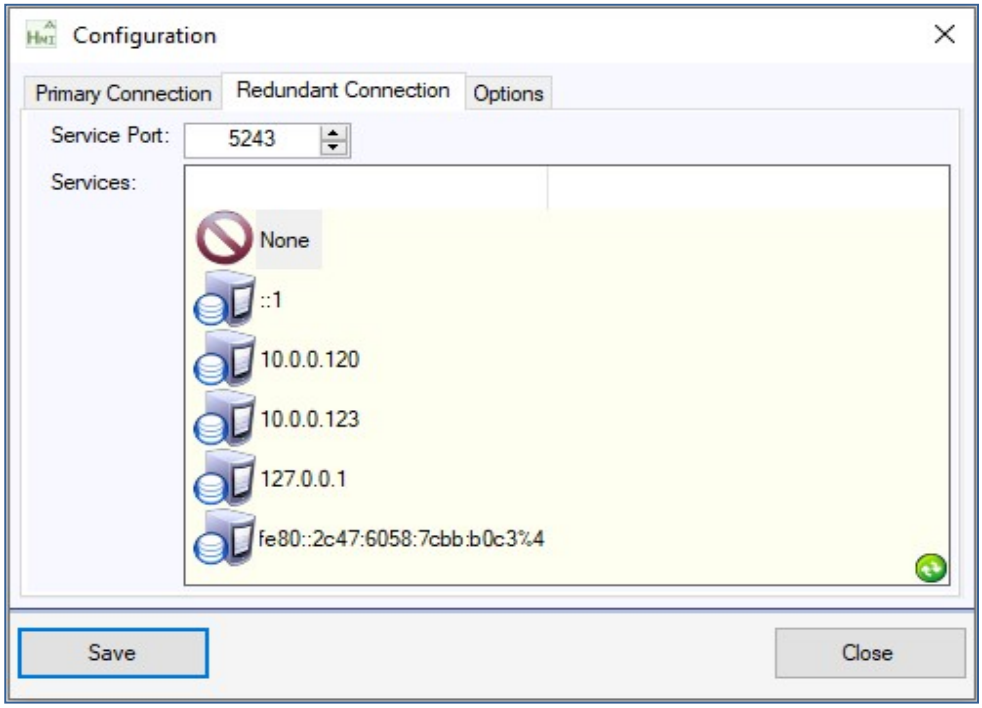
Primary Connection Selection

Connections are selected from the list. If the required IP address is not available it may be obtained by clicking Refresh button.



3.2 HMI Runtime Redundant Connection

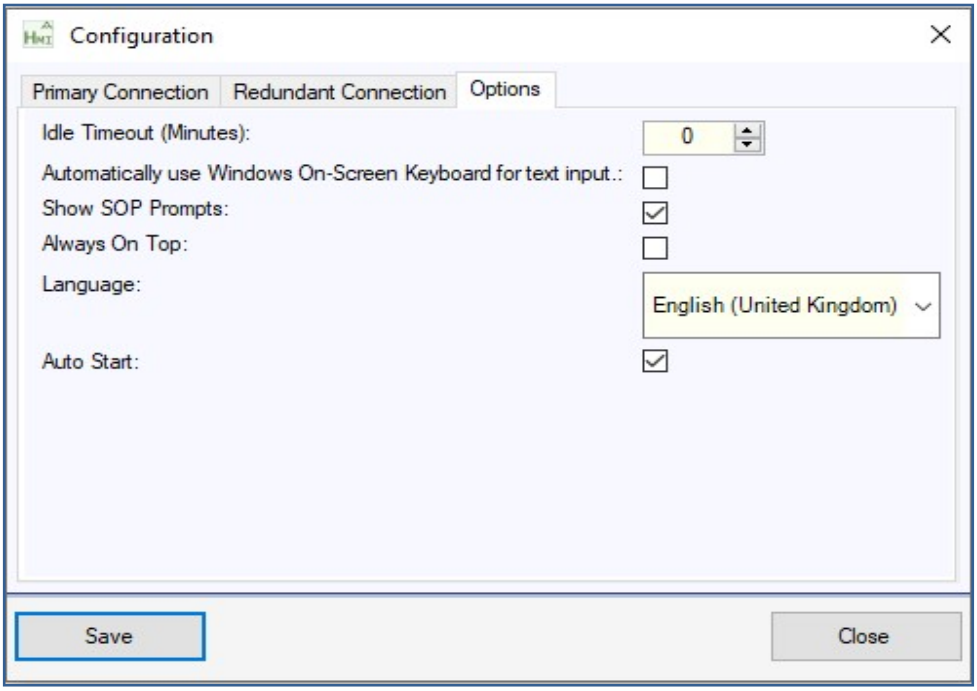
HMI Runtime started will cause Configuration popup to appear. Click on Redundant Connection, select required IP Address and click save. If IP address not in the list, click Green Refresh button at the bottom right of the form to start search for Accord Server by IP address.



Connection for Redundant Server

3.3 HMI Runtime Options

In HMI Runtime Configuration screen click Options. Popup with all available options is displayed.



HMI Options

3.3.1.1 Idle Timeout

Configure an idle timeout for users logged into the Accord Server service. If no actions are taken on the HMI in this time, then the user will be automatically logged out. This value can be set to 0 if no idle timeout is required.

3.3.1.2 Windows On-Screen Keyboard

When set, windows on screen keyboard will be presented when user required to enter text values into controls.

3.3.1.3 Show SOP Prompts

Displays SOP Prompts always set by default.

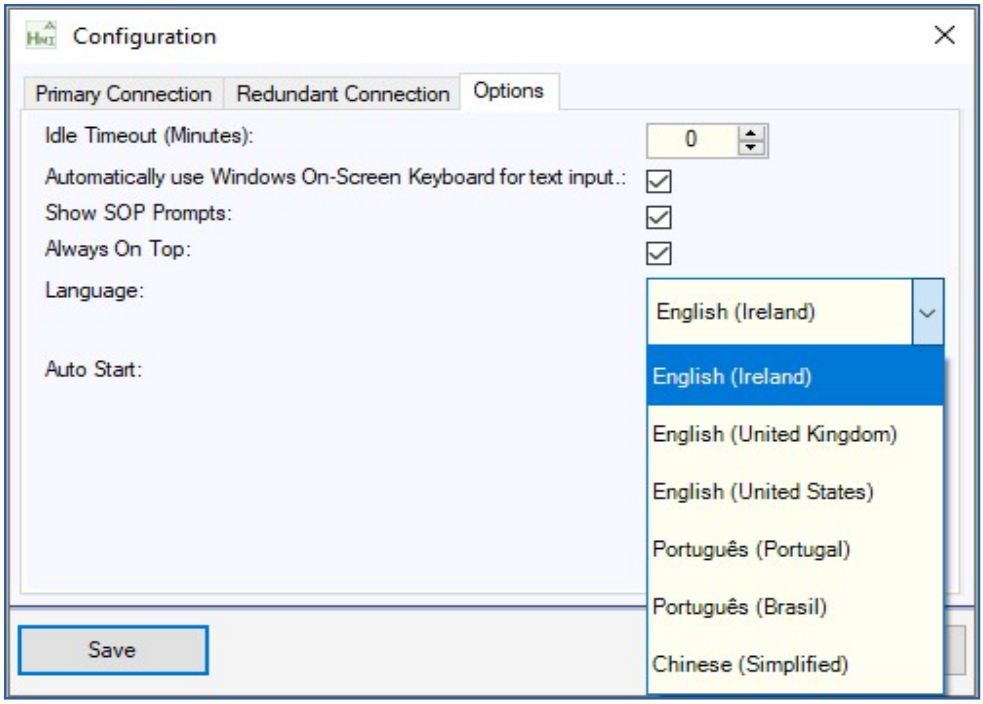
3.3.1.4 Always On Top

Sets the HMI Runtime to be the top form on the screen.

3.3.1.5 Language

Xxxx To be removed for now

User can select a language from the available language list. All the text after selection will be displayed in selected language.



HMI Language Option

3.3.1.6 Auto Start

If Auto Start is set, each time when computer is started, the HMI Runtime will be started as well.

3.3.1.7 Windowed Mode

Xxxx If Auto Start is set, each time when computer is started, the HMI Runtime will be started as well.

4 Main Controls

4.1 Alarm Reset

The Alarm Reset Control is used to acknowledge and attempt to reset all alarms within a project or across multiple projects.

When not logged in the Alarm Reset control is disabled. When a user logs in the button is enabled.

Clicking the control will then acknowledge and attempt to reset all alarms within the projects for which the control is configured.

4.2 Alarm Sound Player

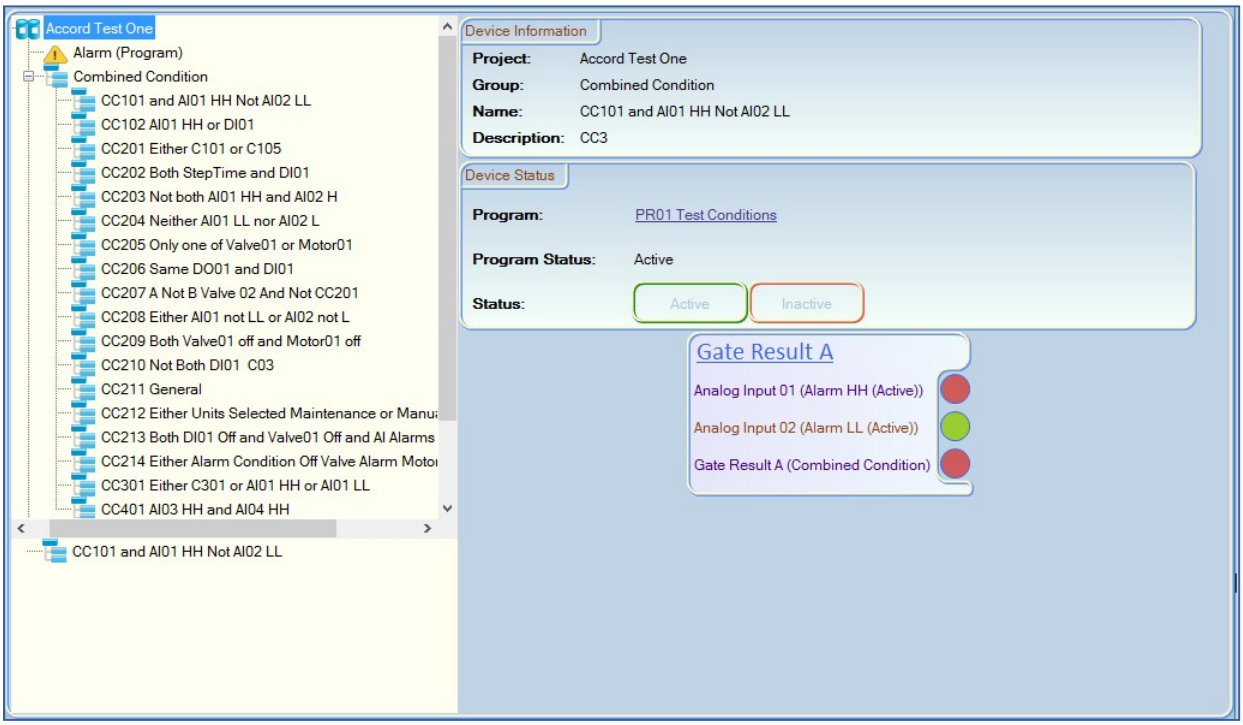
This provides for playing a .wav sound file if an Alarm or Event occurs in the controller.

4.3 Application Launcher

This allows an external application program to be launched on the PC

4.4 Check

The Check Control is used to drill down through the logic of a Device with a digital result to analyse the logical results of the affecting devices and components. This is for engineering personnel to troubleshoot a process.



Check Control

To select an item to analyse, navigate the tree menu at the left of the control and click on a Device name.

Once selected, relevant information about the Device will be displayed on the right of the control, along with a graphical representation of any logical operations.

4.5 Device

The Device Control is used to give a graphical representation of any device hosted by the Accord Server.

 - Example of a Device Control representing a motor.

 - Example of a Device Control representing a valve.

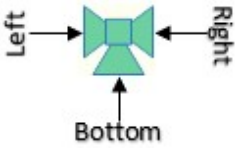
Clicking on a Device Control in Runtime will bring up the Device Faceplate associated with the device to which the control is bound.

See Section 6.11 – Device Faceplates below for more information regarding faceplates.

4.5.1 Device – Directional Valve

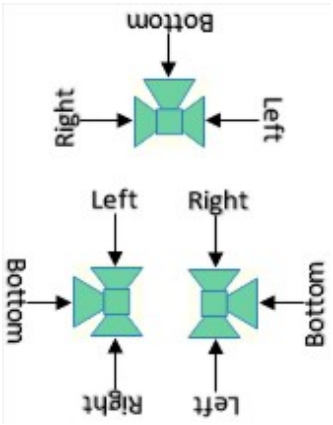
4.5.1.1 Default Orientation

By default, directional valve faces downwards, intake and outlet naming are important.



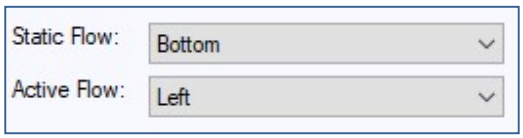
4.5.1.2 Other Orientations

Valve intake outlet naming does not change. Valve can be rotated any direction by the user, Bottom can be facing any direction, but still named Bottom as in examples below.



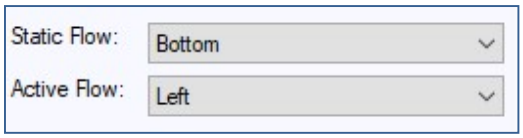
4.5.1.3 Directional Valve Setup

In Directional valve Static Flow indicates the direction in which flow will be constant if the valve is in either the ON or OFF state. Active flow is the direction of the flow during the ON state ONLY. The unconfigured outlet is the direction of the flow during the OFF State ONLY.

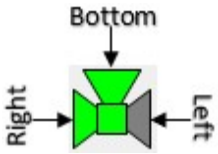


4.5.1.4 Active Bottom Left

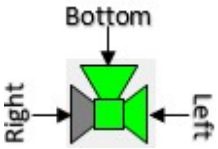
Select Bottom for Static Flow and Left for Active Flow.



While OFF, flow direction from Bottom to Right.



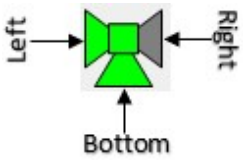
While ON, flow direction from Bottom to Left.



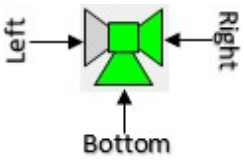
4.5.1.5 Active Bottom Right

Select Bottom for Static and Right for Active flow.

While OFF, flow direction from Bottom to Left.

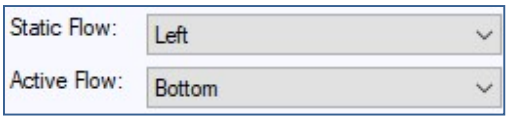


While ON, flow direction from Bottom to Right.

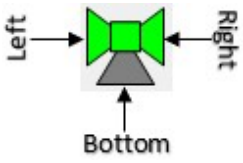


4.5.1.6 Active Left Bottom

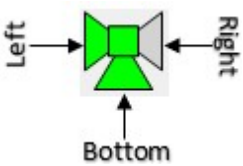
Select Left for Static Flow and Bottom for Active Flow.



While OFF, flow direction from Left to Right.

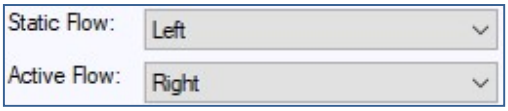


While ON, flow direction from Left to Bottom.

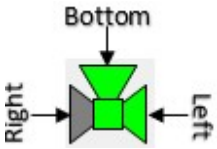


4.5.1.7 Active Left Right

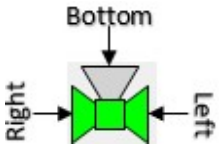
Select Left for Static Flow and Right for Active flow.



While OFF, flow direction from Left to Bottom.



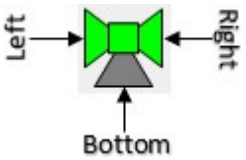
While ON, flow direction from Left to Right.



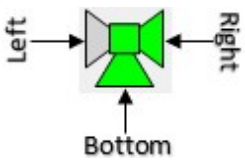
4.5.1.8 Active Right Bottom

Select Right for Static Flow and Bottom for Active Flow.

While OFF, flow direction from Right to Left.

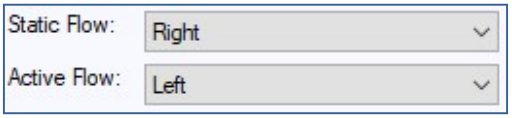


While ON, flow direction from Right to Bottom.

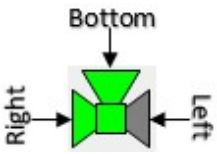


4.5.1.9 Active Right Left

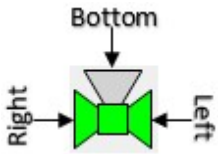
Select Right for Static flow and Left for Active flow.



While OFF, flow direction from Right to Bottom.



While ON, flow direction from Right to Left.



4.6 Device Faceplates

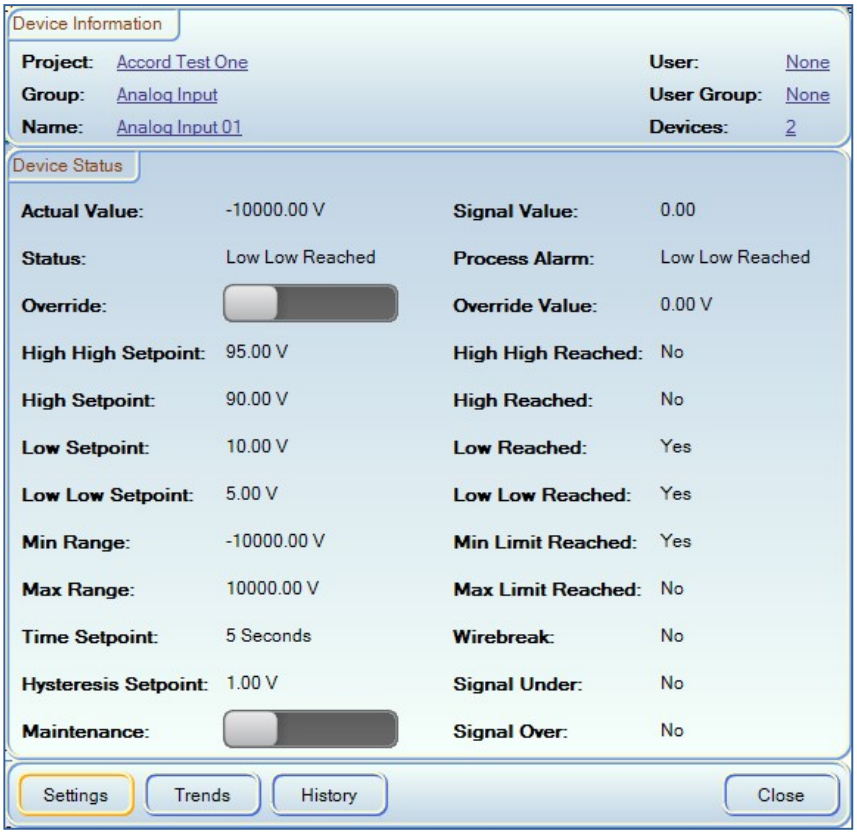
4.6.1 Analog Input

The Analog Input Faceplate shows the following information:

- **Actual Value:** The value returned from the instrument, scaled into Engineering Units.
- **Alarm:** The current device alarm, if any, which is active.
- **Status:** This shows the highest priority status of the item.
- **High High Reached:** The instrument value is above the High High Setpoint.
- **High Reached:** The instrument value is above the High Setpoint.
- **Low Reached:** The instrument value is below the Low Setpoint.
- **Low Low Reached:** The instrument value is below the Low Low Setpoint.
- **Min Limit Reached:** The instrument value is at the Lower Limit of the range.
- **Max Limit Reached:** The instrument value is at the Upper Limit of the range.
- **WireBreak:** An instrument failure has occurred, a faulty signal has been returned to the PLC.
- **Current Under:** The electrical signal returned to the PLC is below the lowest allowed value
- **Current Over:** The electrical signal returned to the PLC is above the highest allowed value

Once logged into the Accord Server service, the command buttons may be used to issue commands to the Analog Input.

- **Override:** This allows the value returned from the instrument to be over-written.
- **Override Value:** The over-write value if the instrument is being placed in Manual Override.
- **High High Setpoint:** The value for the instrument to register a High High Alarm.
- **High Setpoint:** The value for the instrument to register a High Alarm.
- **Low Setpoint:** The value for the instrument to register a Low Alarm.
- **Low Low Setpoint:** The value for the instrument to register a Low Low Alarm.
- **Min Range:** The lower limit of the range.
- **Max Range:** The upper limit of the range.
- **Maintenance:** The item may be put into maintenance here.
- **Time Setpoint:** The number of seconds required before the High High, High, Low or Low Low alarms are achieved or reset.
- **Hysteresis Setpoint:** The deadband value to release alarms.



Analog Input Faceplate

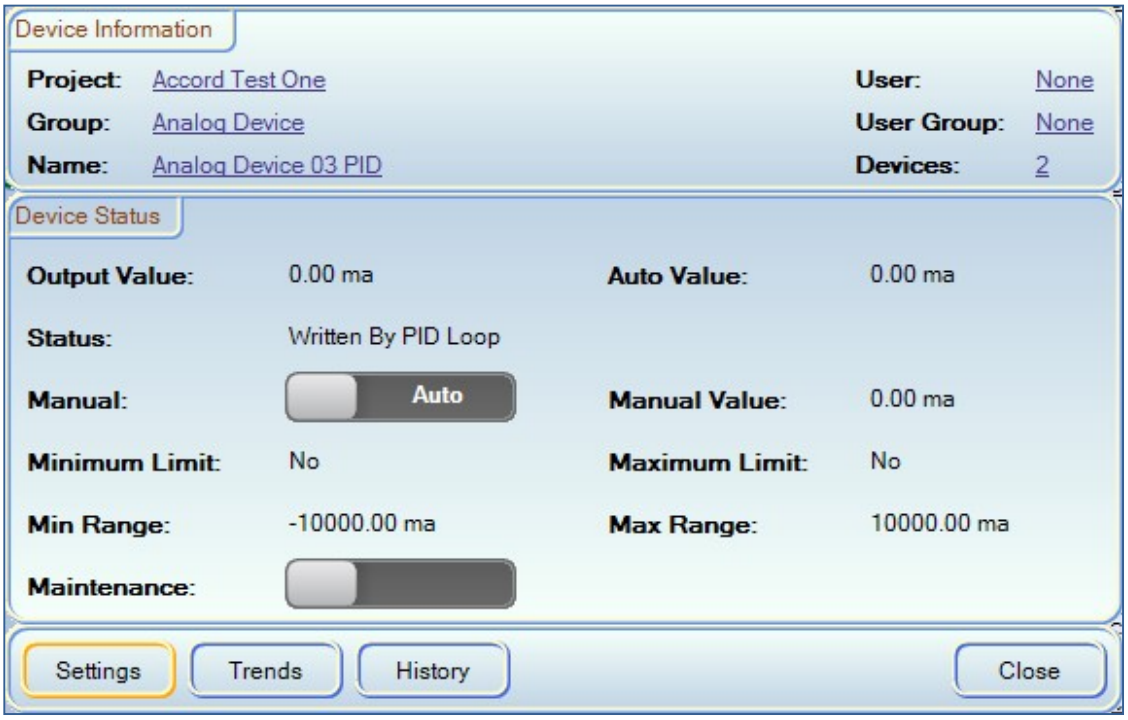
4.6.2 Analog Device

The Analog Device Faceplate shows the following information:

- **Output Value:** The current value being output by the Analog Device.
- **Auto Value:** The value to which the output is set once the device is in Automatic mode.
- **Status:** Indicates the current status of the device.

Once logged into the Accord Server service, the command buttons may be used to issue commands to the Analog Device.

- **Manual:** This allows the Device to be put into Manual Mode, overwriting the Automatic activation from the Program.
- **Manual Value:** This is the value to which the output is set once the Device is in Manual mode.
- **Min Range:** The minimum value to which the output of the Device can be set.
- **Max Range:** The maximum value to which the output of the Device can be set.
- **Maintenance:** This allows the device to be put into Maintenance.



Analog Device Faceplate

4.6.3 Digital Input

The Digital Input Faceplate shows the following information:

- **Status:** The current status of the Digital Input.
- **Result:** The display value of the result as configured within Accord Builder.

Once logged into the Accord Server service, the command buttons may be used to issue commands to the Digital Input.

- **Override Feedback:** Override the result of the device to the desired value.
- **Result Override:** The value to which the result is overridden once Override Feedback is active.
- **Delay Setpoint (On):** This is the number of seconds that the Device Output activation will be delayed for following an Automatic activation request.
- **Delay Setpoint (Off):** This is the number of seconds that the Device Output de-activation will be delayed for following loss of an Automatic activation request.

Digital Input Faceplate

4.6.4 Digital Output

The Digital Output Faceplate shows the following information:

- **Status:** The current status of the Digital Output.
- **Output:** The value of the output as configured within Accord Builder.
- **Interlock:** This shows that the item is currently interlocked by another device state. The list of interlocking devices can be found in the Equipment List document.
- **Pulse Active:** The device is being activated for a time as indicated in the Pulse Time setup.
- **Pulse Command:** This shows that the a Pulse activation command for the device is being generated by a Program.
- **Auto Reserved:** This shows that the item is part of a unit which is being reserved by a Program, but the Program is not activating the item.
- **Auto Reserved Enabled:** This shows if the device is enabled for reserved for automatic.

Once logged into the Accord Server service, the command buttons may be used to issue commands to the Digital Output.

- **Manual Mode:** This allows the item to be put into Manual Mode, overwriting the Automatic activation from the Program.
- **Manual Command:** This allows the item to be manually activated, overwriting the Automatic activation state. The item will be activated or deactivated immediately.
- **Interlock Override:** Enable this to allow the device to activate even when interlocked.
- **Delay Setpoint (On):** This is the number of seconds that the Device Output activation will be delayed for following an Automatic activation request.
- **Delay Setpoint (Off):** This is the number of seconds that the Device Output de-activation will be delayed for following loss of an Automatic activation request.
- **Override Reserve:** Enable this to allow the device to be set to manual mode even when reserved for automatic operation.
- **Maintenance:** Enable this to place the device into maintenance mode, preventing the device from activating.
- **Pulse Cycle Time:** This is the overall time in the Pulse Cycle.
- **Plus Time Setpoint:** This is the time that the item is activated for in the Pulse Cycle.

Digital Device Faceplate

4.6.5 Program

The Program Faceplate shows the following information:

- **Name:** The name of the Program.
- **Current Step:** The name of the step which is currently running. If logged in, a user may click the step name to step to a selected step.
- **Step Number:** The recipe position of the current step.
- **Status:** The status of the Program.
- **Recipe:** The name of the recipe currently running. If logged in, clicking this will allow a user to change the recipe.
- **Expected:** The step time setpoint which has been configured.
- **Remaining:** The duration remaining before the step time setpoint has elapsed.
- **Elapsed:** The amount of time for which the current step has been active.
- **Plan:** The name of the Plan of which the Program is currently a part, if applicable.

Once logged in, the command buttons may be used to issue commands to the Program.

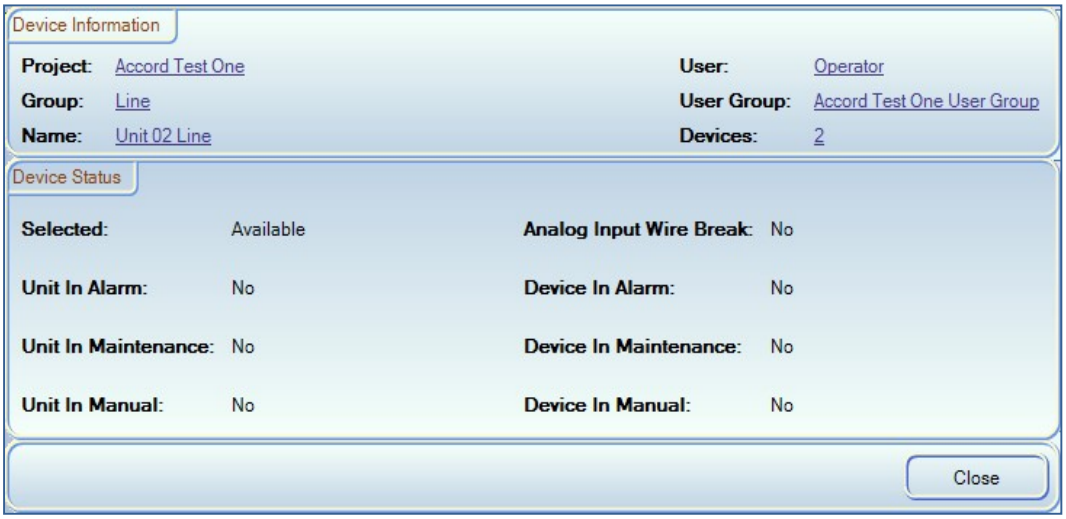
- **Start:** Start the Program if it is not running.
- **End:** End the Program if it is currently running.
- **Resume:** Resume the Program if it is currently in hold.
- **Hold:** Place the Program into hold if it is currently running.
- **Step On:** End the current step and start the next step in the recipe step order.
- **Step To:** End the current step and step to the selected step.
- **Timing / Time Held:** Toggle whether or not the step time will increment.

Program Faceplate

4.6.6 Equipment Unit

The Unit Faceplate shows the following information:

- **Selected:** Indicates whether a Unit can be selected for use by a Program.
- **Analog Input Wire Break:** Indicates whether an Analog Device within the Unit has a Wire Break alarm active.
- **Unit in Alarm:** Indicates whether a Unit is in an alarm state.
- **Device in Alarm:** Indicates whether a Device within the Unit is in an alarm state.
- **Unit in Maintenance:** Indicates whether a Unit is in maintenance mode.
- **Device in Maintenance:** Indicates whether a Device within the Unit is in maintenance mode.
- **Unit in Manual:** Indicates whether a Unit is in manual mode.
- **Device in Manual:** Indicates whether a Device within the Unit is in manual mode.



Unit Faceplate

4.7 Digital

The Digital Control is used to give a graphical representation of the state of a device or multiple devices with digital results.

Lines represented by the digital control will take on a preset colour is a bound device is active.

Clicking on a Digital control will bring up the list of devices and the control of the devices may be accessed from here.

4.8 List

The List Control is used to show a list of devices. There are multiple list types and filter options which can be used to customise the control.

4.8.1 Program List

A Program List will show all programs currently configured in the Accord Server to which the control is bound. This may be filtered to include/exclude specific projects or programs.

	Program	Current Step	Remaining	Elapsed	Status
1	PR01 Test Conditions	Step 2: PR01 S01 DO01 Valve 01 Motor 01 Always On	00:02:47:25	00:00:12:35	Active
2	PR02 Test Combined Conditions	None	00:00:00:00	00:00:00:00	Inactive
3	PR03 Test Alarms	None	00:00:00:00	00:00:00:00	Inactive
4	PR04 Test Operations	None	00:00:00:00	00:00:00:00	Inactive
5	PR05 Program A	None	00:00:00:00	00:00:00:00	Inactive
6	PR06 Program B Auto Step On	None	00:00:00:00	00:00:00:00	Inactive
7	PR07 Write Variables	Step 2: Write Variables	00:00:00:00	00:00:15:49	Active

Program List

4.8.2 Device List

A Device List will show all devices currently configured in the Accord Server to which the control is bound. This may be filtered to include/exclude specific projects, device groups, device types or device names.

Name	Value
Setpoint 101	2.00
Setpoint 102	10.00
Setpoint 103	5.00
Setpoint 201	0.00
Setpoint 202	0.00
Setpoint 203	0.00
Setpoint 301	0.00
Setpoint 401	0.00
Setpoint 402	100.00
Setpoint 701	100.00

Setpoint List

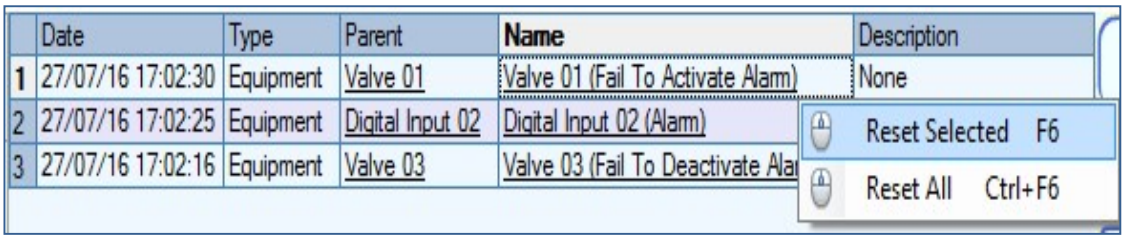
4.8.3 Alarm List

An Alarm List will dsiplay any currently active alarms to which the control is bound.

	Date	Type	Parent	Name	Description
1	27/07/16 17:02:25	Equipment	Digital Input 02	Digital Input 02 (Alarm)	None
2	27/07/16 17:02:16	Equipment	Valve 03	Valve 03 (Fail To Deactivate Alarm)	None

Alarm List

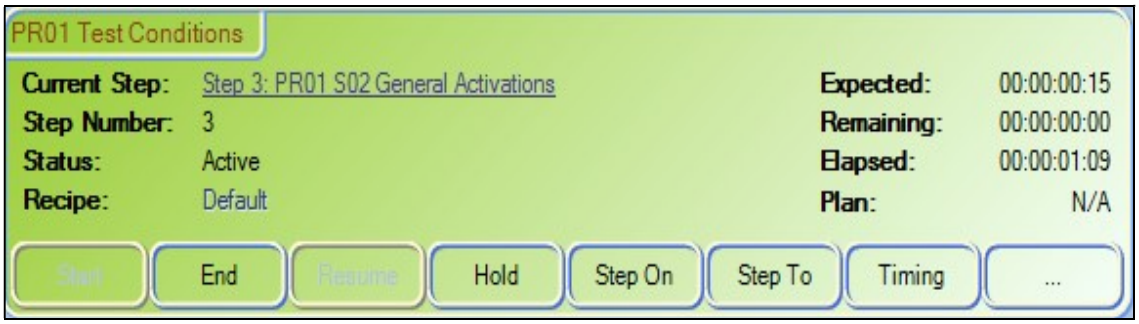
Once a user is logged into the Accord Server service, right clicking on the control will bring up an option to acknowledge and attempt to reset selected alarms or all alarms.



Clicking on an item in the list will bring up the Device Faceplate for the named device.

4.9 Program Control

The Program Control is used to display the status and other information of Programs and the Program Control may be used to send commands to the program in Controller.



Program Control showing Active Program

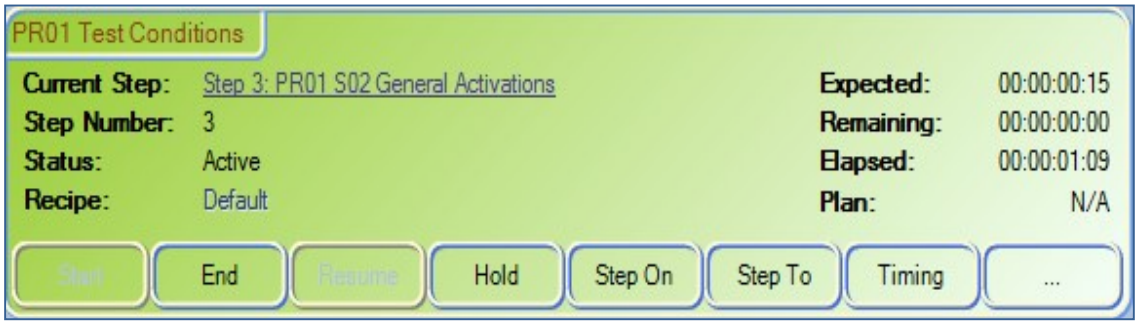
- **Name:** The name of the Program.
- **Current Step:** The name of the step which is currently running. If logged in, a user may click the step name to step to a selected step.
- **Step Number:** The recipe position of the current step.
- **Status:** The status of the Program.
- **Recipe:** The name of the recipe currently running. If logged in, clicking this will allow a user to change the recipe.
- **Expected:** The step time setpoint which has been configured.
- **Remaining:** The duration remaining before the step time setpoint has elapsed.
- **Elapsed:** The amount of time for which the current step has been active.
- **Plan:** The name of the Plan of which the Program is currently a part, if applicable.

Once logged into the Accord Server service, the command buttons may be used to issue commands to the Program.

- **Start:** Start the Program if it is not running.
- **End:** End the Program if it is currently running.
- **Resume:** Resume the Program if it is currently in hold.
- **Hold:** Place the Program into hold if it is currently running.
- **Step On:** End the current step and start the next step in the recipe step order.
- **Step To:** End the current step and step to the selected step.
- **Timing / Time Held:** Toggle whether or not the step time will increment.

4.10 Multi Program Control

The Multi Program Control is used to display a Program Control (see above) from a pre-configured list of Programs.



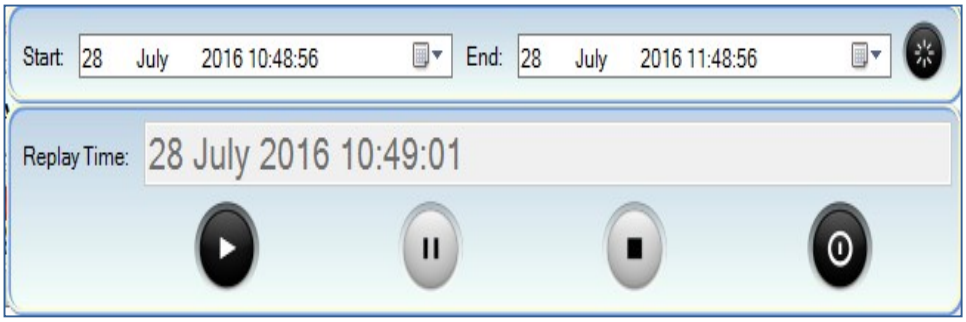
MultiProgram Control

The highest priority Program from the list which is currently active will be displayed. If no Program in the list is currently active then the control will default to the highest priority Program. The User can select to show any bound program by clicking into the Program Name label. A list of bound programs will be shown for the users choice.

4.11 Replay Control

The Replay Control can be used to select a time period and “replay” the states and values of devices displayed on the HMI.

Replay Control – Initial selection



Replay Control – Replay of previous time

4.11.1 Replay Control Buttons

 Start the replay at the selected time, or resume from paused.

 Pause the replay.

 End the current replay and release any currently stored replay data.

 Access Configuration to select Start and End Times

 Closes the configuration window.

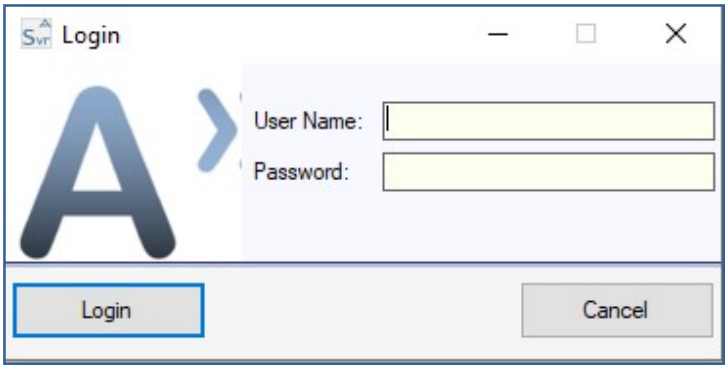
 Load replay data for the selected timespan.

4.12 Security

The Security Control is used to log into the Accord service, enabling Operations for the HMI.

Login Button

Clicking on the "Login" button on the Security Control will bring up the Login window. Entering a user name and associated password in the window and clicking Login will log the user into the system.

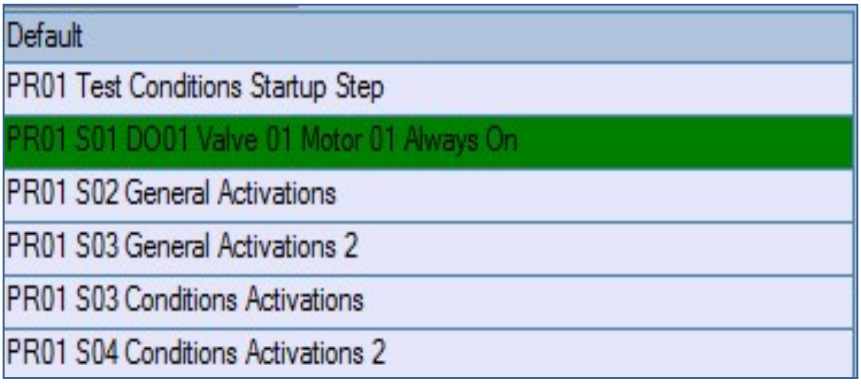


Login Panel

4.13 Step List

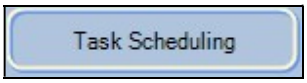
The Step List control is used to show a list of all steps of a selected program, and indicate the current step which is running.

In Runtime, the title bar of the Step List control will show the current recipe. Underneath this will be a list of all of the steps in the program to which the control is bound, with the current step highlighted in green.

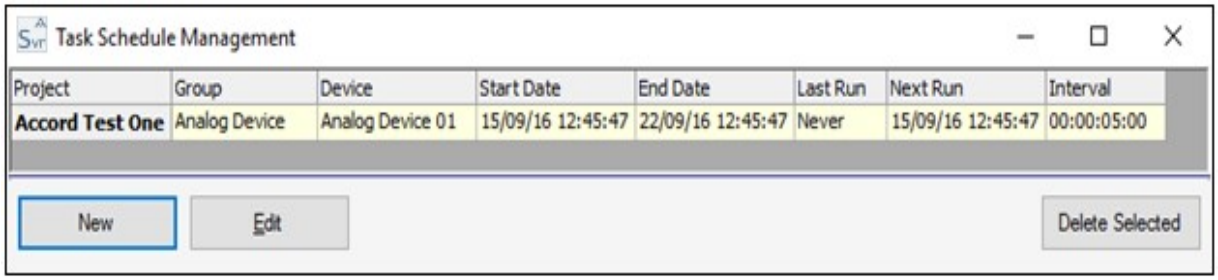


4.14 Task Scheduler

The Task Scheduler Control allows users to manage scheduled OPC writes. A schedule is a user configured event that automatically modifies the specific property of a device at a defined time.

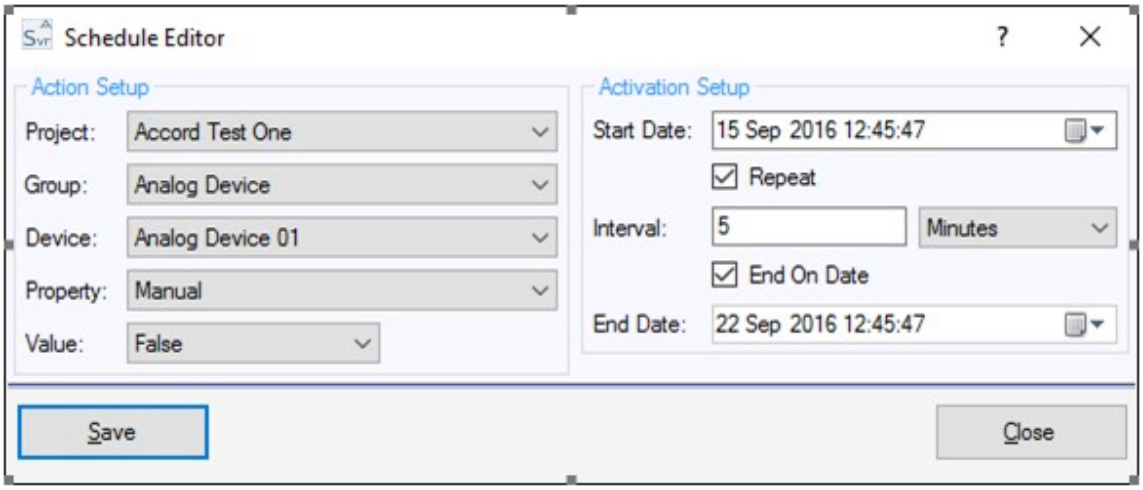


Once clicked, the Task Scheduler Control displays the following information:



Item	Description
Project	The name of the project that contains the device to be modified.
Group	The name of the group for the device to be modified.
Device Name	The name of the device to be modified.
Start	The date when the action will be performed for the first time.
End	The date when the action will no longer be performed.
Last Run	The date when scheduled task last performed the requested action.
Next Run	The date when scheduled task will next perform the requested action.
Interval	The time interval in hours, minutes and seconds in which the action will perform the action next.

- **New:** Create a new Schedule – See below for information regarding the Schedule Editor window.
- **Edit:** Edit the selected Schedule – See below for information regarding the Schedule Editor window.
- **Delete Selected:** Delete the currently selected Schedule.



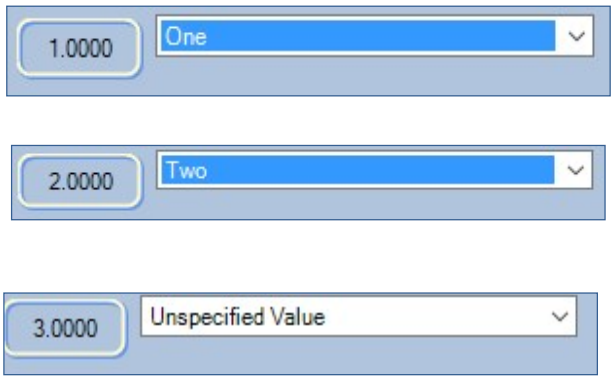
- **To Create / Edit a Schedule**

1. Select the project from the '**Project**' list.
2. Select the group from the '**Group**' list.
3. Select the device from the '**Device**' list.
4. Select the property of the device from the '**Property**' list.
5. If the '**Value**' field takes the form of a list, select the desired value, otherwise type the value for the property.
6. Select the '**Start Date**' by clicking on the calendar button to the right side of the field.
7. If the schedule needs to run more than once tick '**Repeat**', otherwise leave it un-ticked.
   a. Select the time interval by entering a value and selecting a time unit (e.g. – 5 minutes).
   b. If the schedule needs to end on a specific date tick '**End On Date**', otherwise leave it un-ticked.
      i. Select the '**End Date**' by clicking on the calendar button to the right side of the field.
8. Click '**Save**'.

4.15 Text Display

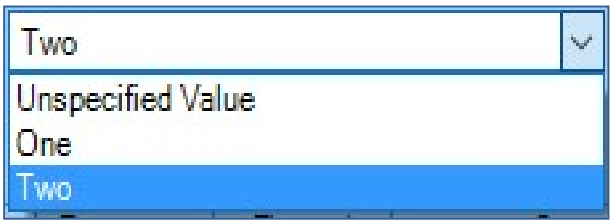
The Text Display control is used to show a pre-set text string instead of a value result from an Accord Server Device, and can be used to set the value by selecting the corresponding string.

As the result value of the device to which the control is bound changes, the text displayed in the control will update to the appropriate string. Should the current value not be configured in the control then “Unspecified Value” will be shown instead.



Text Display Samples

The value of the device may be set by selecting the associated string via the drop-down list.

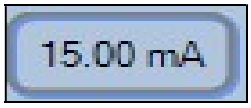


Entry Using Text Display

4.16 Value Control

The Value control is used to display a numerical value result from an Accord Server Device.

During Runtime and once connected to the Accord Server service, the Value Control will show the current value in the desired format with the configured engineering units used, if applicable.



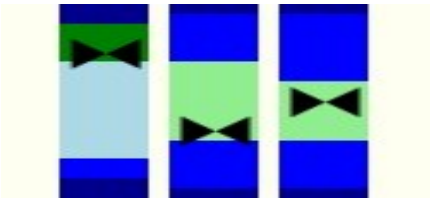
Value Control

Clicking on the Value Control in Runtime will bring up the Device Faceplate associated with the device to which the control is bound.

5 KPI Controls

5.1 Analog Input Monitor

The Analog Input Monitor Control is used to quickly monitor the value(s) of a single or multiple Analog Inputs in relation to their Low Low, Low, High and High High Levels.

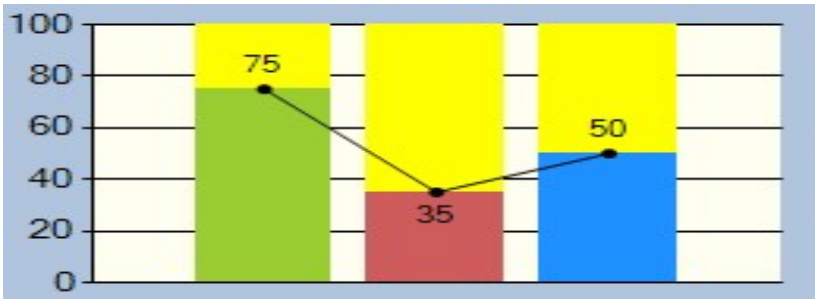


In the above example, the current value of the first monitored Device is above the configured High Level, while the other devices have values between the configured High and Low Levels.

Clicking on a bar will bring up the Faceplate associated with the Device.

5.2 Bar

The Bar Control is used to quickly monitor the value(s) of a single or multiple device properties.

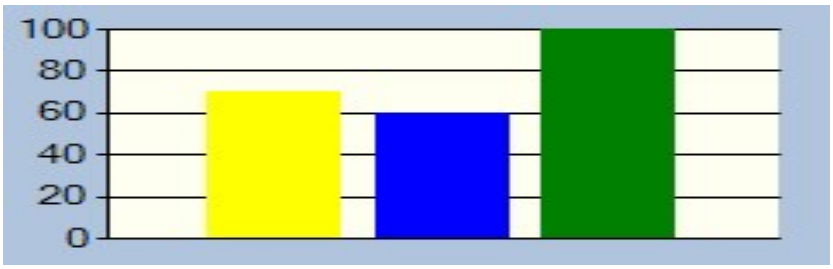


In the above example, the Bar Control is configured with specified limits of 1-100, is showing background gridlines, value labels and with a connecting line between each of the bars.

Clicking on a bar will bring up the Faceplate associated with the Device.

5.3 PID Monitor

The PID Monitor Control is used to quickly monitor the Setpoint, Input and Output values of a single PID Loop.

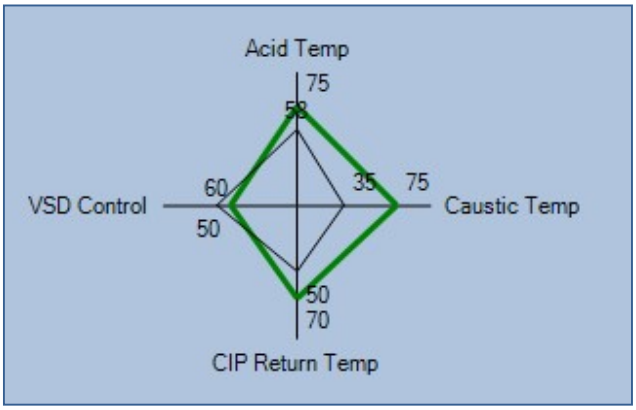


In the above example, the PID Monitor Control is configured with specified limits of 1-100 and is showing background gridlines.

Xx PID Faceplate

5.4 Polar Star

The Polar Star Control is used to quickly monitor the values of multiple Accord Server Devices in relation to selected targets.



Polar Star

In the above example, the Polar Star Control is configured to show Description labels, and labels with both the target and current values.

5.5 Spark Line

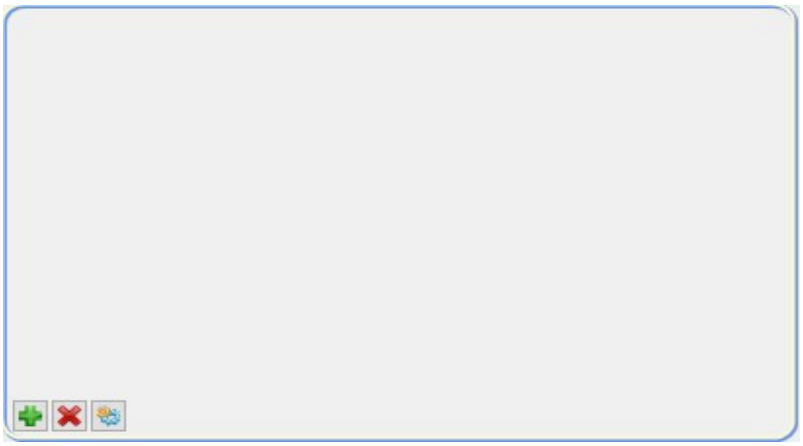
The Spark Line Control can be used to display a minimalistic live trend graph of a value from a single Accord Server Device.

Spark Line Control

5.6 Query

The KPI Control is used to display a number of runtime-configurable values from historical data.

Each Row on the Control is a Query. A Row is added by clicking on the '+' button and removed by selecting the row and clicking on the 'X' button.

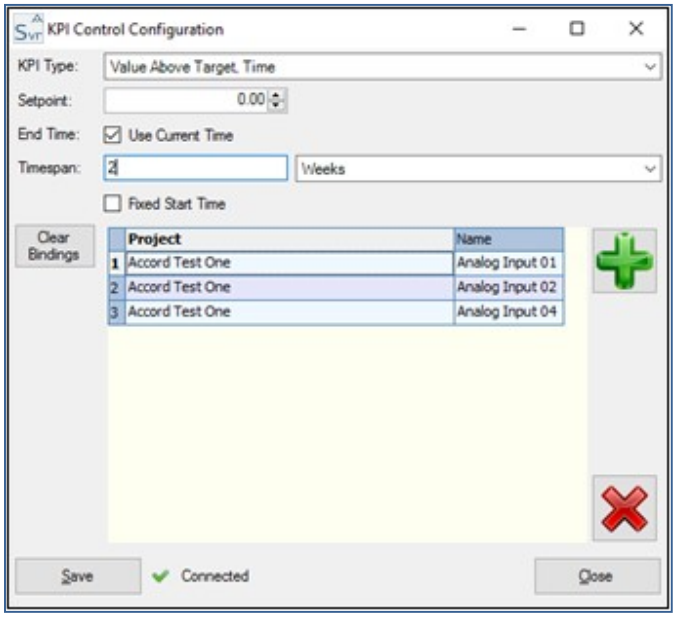


Query Control – Initial Setup

Clicking on the text field at the top right side of the form and then the configure button at the bottom left brings up the configuration panel.

Row Selection for Configuration

The configuration panel allows the query type and objects to be configured.



KPI Query Setup

- **KPI Type:** The operation type used to determine the value displayed on the row:

  - **Program Active / Running / Held / Alarm Time:** The total time for which the selected Program(s) were active / running / held / in alarm during the configured time period.
  - **Program Starts:** The total number of times the selected Program(s) were started during the configured time period.
  - **Digital Input Count:** The total number of times the selected Digital Input(s) were active during the configured time period.
  - **Digital Input Time:** The total time for which the selected Digital Input(s) were active during the configured time period.
  - **Display Value:** Used to display the current value of a single selected Device.
  - **Value Average:** The average (mean) value of the selected Device(s) over the configured time period.
  - **Value Min:** The minimum value of the selected Devices(s) during the configured time period.
  - **Value Max:** The maximum value of the selected Device(s) during the configured time period.

- **Alarm Count:** The total number of times the selected Alarm(s) were in alarm during the configured time period.
- **Alarm Time:** The total time for which the selected Alarm(s) were in alarm during the configured time period.
- **Digital Device Activations:** The total number of times the selected Digital Device(s) were activated during the configured time period.
- **Digital Device Time:** The total time for which the selected Digital Device(s) were activated during the configured time period.
- **Value Above / Below Target, Time:** The total time for which the selected Device(s) value was above / below the configured setpoint.
- **Value Above / Below Target, Count:** The total number of times the selected Device(s) value was above / below the configured setpoint.
- **Analog Input Above / Below LL / L / H / HH, Count:** The total number of times the selected Analog Input(s) value was above / below the LL / L / H / HH level.
- **Analog Input Above / Below LL / L / H / HH, Time:** The total time for which the selected Analog Input(s) value was above / below the LL / L / H / HH level.
- **Setpoint:** The setpoint used for the KPI types which require a configured value.
- **End Time:** The date and time used to configure the time period used for the KPI calculations.
- **Use Current Time:** If this is checked, the end time will update dynamically to the current time when the calculation is run. If left unchecked, a static date and time will need to be selected.
- **Timespan:** The duration of the time period used for the KPI calculations.
- **Fixed Start Time:** If this is checked, a static date and time will need to be selected for the beginning of the time period. If left unchecked, a duration (for example: 2 days) will need to be set.
- **Clear Bindings:** Used to clear the list of devices currently selected for the KPI calculation.

6 Help

6.1 System Information

Clicking the Help menu and select About presents information about Accord and to the operating system.

Module	Version	Description
Accessibility	v4.0.0.0	Accessibility.dll
Accord HMI Design	v1.7.1.0	The design application for HMI
Accord.AdvancedCommunications.Sdk	v3.16.0.0	The Accord advanced communications SDK
Accord.Controls	v3.16.0.0	A series of shared resources for Accord controls
Accord.Dal	v3.18.0.0	The Accord database communications module
Accord.Hmi.Library	v1.7.1.0	A series of shared resources for HMI
Accord.Library	v3.16.0.0	A series of shared routines used by Accord
Accord.Licensing	v3.16.0.0	The Accord Licensing API
Accord.Server.Library	v3.16.0.0	The common library for all Accord Server dependant components
Accord.UX	v3.16.0.0	A library of useful generic user experience related classes
Accord.UX.WinForms	v3.16.0.0	A library of useful user experience related classes
FlexCell	v3.3.2.0	FlexCell Grid Control for .NET 2008
Microsoft.VisualBasic	v10.0.0.0	Microsoft.VisualBasic.dll
Microsoft.VisualStudio.Debugger.Runtime	v11.0.0.0	Microsoft.VisualStudio.Debugger.Runtime.dll
Microsoft.VisualStudio.HostingProcess.Utilities	v11.0.0.0	Microsoft.VisualStudio.HostingProcess.Utilities.dll
Microsoft.VisualStudio.HostingProcess.Utilities.Sync	v11.0.0.0	Microsoft.VisualStudio.HostingProcess.Utilities.Sync.dll
mscorlib	v4.0.0.0	mscorlib.dll

6.2 Connection Issues on Deployed HMIs

It can happen that an HMI works fine during design time and fail to connect when it is deployed. This is usually caused by incorrect service manager configuration. See section 4.2.7 on how to configure the connections properly. Always ensure the service manager has the correct settings for both service IP address and port number. Having a live connection on HMI Design does not guarantee connectivity for Deployed HMIs (Runtime). This is because the connection settings for Design and Runtime are different. Runtime connections are dependent on the Service Manager settings.

6.3 Deploying HMIs with a Redundant Service

Before deploying an HMI intended to take advantage of Accord's Redundancy Service, it is important to remember to configure the Redundancy IP address on the Service Manager. It is not enough to only configure Accord Primary and Partner services. We also need to tell the HMI which IP address is used to look for the Redundant/Partner service. See section 4.2.7. on where to set the Redundant Service IP for deployed HMIs.