

# User Guide

Document: Accord Plan V1.16 User Guide

## Accord >>

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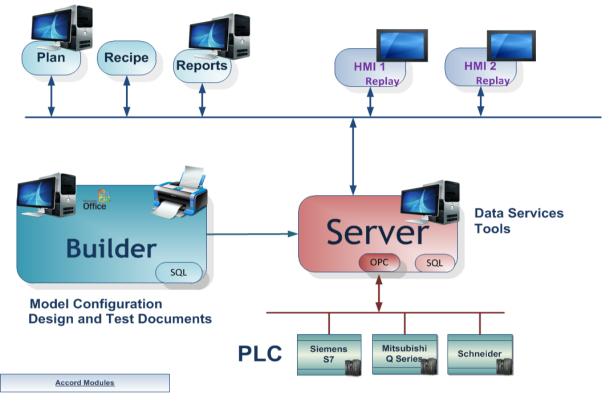
## 1 Introduction

Accord Plan allows for the configuration of a sequence of Programs with selectable Recipes. Each Sequence can contain different programs and recipes. The Plan Sequence may be saved as a Template or may be run as a single Plan. Each Plan sequence may be started within



another Plan sequence, allowing users to build simple plans, and combine them to perform more complex tasks.

Each Sequence may be attached to a configured Report, and this will automatically generate a Plan Report when the sequence finishes.



Accord Platform Modules

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

### 2 Installation

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

Plan is installed from Accord Setup Installer.



Accord Setup is started and Plan and any other required modules are selected. Server should be installed, either on this or a networked PC, to provide Database management.

🖟 Accord - InstallShield Wizard		×
Customer Information	<b>\\</b>	
Please enter your information.		ccord >>
<u>U</u> ser Name:		_
Engineer		
Organization:		_
Logicon		
InstallShield		
	< Back	Next > Cancel

Accord Setup.exe

1. Entry of User Name and Organisation

👷 Accord	- InstallShield Wizard			×
Destinat Click Net	ion Folder xt to install to this folder, or clic	k Change to insta	ll to a different fode	rd >>
	Install Accord to: C:\Program Files\Accord 4\			Change
InstallShield -		< Back	Next >	Cancel

2. Installation Folder selection



🖟 Accord - Inst	allShield Wizard X
Setup Type Choose the se	etup type that best suits your needs.
Please select	a setup type.
Full Insta	Ilation
1 B	Full installation with selectable features. Recommended for Server Installation.
O HMI Runt	time Client
<b>B</b>	Installs HMI Runtime Client only. Recommended for HMI installation.
InstallShield	
	< <u>B</u> ack <u>N</u> ext > Cancel

#### 3. Installation selection

🖟 Accord - InstallShield Wizard X	🖟 Accord - InstallShield Wizard 🛛 🗙
Custom Setup Select the program features you want installed.	Custom Setup Select the program features you want installed.
Click on an icon in the list below to change how a feature is installed.	Click on an icon in the list below to change how a feature is installed.
Install to: C:\Program Files\Accord 4\ Change	Install to: Change
InstallShield	InstallShield

4. Selection of Plan and any other required modules. The installation is to a ProgramFiles folder but may be changed. Server must be installed on this PC or on a networked PC.



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

Record - InstallShield Wizard ×
Ready to Install the Program The wizard is ready to begin installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
Current Settings:
Setup Type:
Full Installation
Destination Folder:
C:\Program Files\Accord 4\
User Information:
Name: User
Company:
InstallShield
< <u>B</u> ack <u>Install</u> Cancel

5. Installation is completed on pressing Install.

#### 2.1 Initial connection to Accord Server.

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

**Note:** Licencing is not required for Accord Plan. Other licences may be required for additional Accord software installations. Please refer to the Accord Server User Guide for more information.

1. Start Accord Plan. Check for the "**Connected**" to Service status at the bottom left of the Screen.

## Accord >>

Pa Accord Plan				- 0	×
				>> Accord >>	
Plan Management	History				
Plan Controls			Library		
P. Next Scheduled	Run Active	e-Plans			
Connected				User: Eng	ineer1:

Accord Plan Connection Status area

2. If "**Disconnected**" or not connected to required IP, then perform Search by clicking on the Connection Status (highlighted above).

This will cause following popup to appear with Green Refresh button.



P. Configuration	?	×
Primary Redundant Options		
Service Port: 8000 - Streaming Port: 8001 -		
Services:		
10.0.0.123		
Save	Close	9

Accord Service Selection window

Click on the Green Refresh button at the bottom right side of the form, to begin search for Accord Server by IP address.

Pun Configurati	on				?	×
Primary Redun	dant Options					
Service Port:	8000 🖨	Streaming Port:	8001	-		
Services:						
Save					Clo	se

#### Accord Service searching

This will find the available Accord Servers, with appropriate IP addresses.



Point Configuration	? ×	
Primary Redundant Options		
Service Port: 8000 Streaming	Port: 8001 ≑	
Services:		]
10.0.0.111		
10.0.0.131		
10.0.0.123		
10.0.0.123		
	•	
Save	Close	
Save	Close	

Accord Service Selection window

Select required Server.

If this does not return an appropriate IP, then:

- Check that Accord Server is running.
- Check that Accord Server PC is connected if it is another PC.

**Note:** By default Accord server uses Service Port 8000 and Streaming Port 8001. This should never be changed.

3. After connection Log-In by clicking on the "**User**" at the bottom right of the Screen. Ensure that the User is already listed as a User in Server settings Security section.

Pix Accord Plan					_		$\times$
				>	Accord	•>>	
Plan Management	History						
Plan Controls			Lib	rary			
P. Next Scheduled	Run Active	(B)-Plans					
Connected					User	: Engi	neer1

User Login



### **3** Plan configuration

Accord Plan provides the ability to set up sequences of Programs to be run automatically, with selected Recipes for options, step options and setpoints.

Plans can be configured in two different modes: basic and advanced. Plan mode can be configured when editing or adding a Plan.

Plan in Basic Mode:

- Plan steps executed in sequence, based on Plan Row Configuration, when a selected condition is met, the plan the steps into the next row.
- Plan cannot start another Plan.

Plan in Advanced Mode:

- Uses "Step To" Configurations. Plan can be setup to step to a definable Plan step. A list of "Step To" can be configured per plan row. Each step to can be configure with a destination and a condition to be met. Once the condition is met, the Plan steps to relative step to destination. This can be accessed through the "Trigger".
- Plan can start another Plan. This is to allow users to create and test reusable small plans. Once tested, these Plans can then be combined to complete a more complex function. There is a limitation of 3 levels of nesting within a Plan.

An example of this level limitation is below. There is a "General Plan" with tasks within, which again, contains tasks within. These tasks are Plans. When "General Plan" is started, it can start all of these Plans nested within. Accord Plan with not allow for the selection on another Plan within "General Plan Task 1 Function X".

- General Plan
  - o General Plan Task 1
    - General Plan Task 1 Function 1
    - General Plan Task 1 Function 2
  - General Plan Task 2
  - o General Plan Task 3



#### 3.1 Starting Plan

#### 3.1.1 Plan Manager

When starting Accord Plan, the initial screen is presented.

Please ensure:

- 1. Service is Connected in Bottom left of panel.
- 2. Login is completed by clicking on the User section.

Accord Plan					— 🗆
					>>Accord >>
Plan Management	History				
lan Controls				Library	
Plan Next Sc Test Plan 1 N/A	heduled Run Activ	e	⊕- <mark>Plans</mark>		
nected					User: Engine

#### **Initial Screen**

On initial launch of Accord Plan, the Plan Manager screen will be presented. The Plan Manager screen is broken into two sections.

One the right, Plans can be created and configured. Once the Plan is built, it can then be dragged to the left, which enables Plan Controls.

- 1. Plan Controls
  - a. Lefthand side of Plan Manager.
  - b. Clicking on a Plan allows for Plan Controls. These controls include actions such as; Start, Stop and Resume of the selected Plan. A Plan can be started by selecting the Plan and pressing the start button above the Plan Controls. A Plan can also be started by doubling clicking a Plan and selecting start.



- c. Plan status is shown in the "Active" column. If a Plan is running, active will be displayed as "Yes".
- d. Double clicking a Plan will display a Plan details popup. This popup includes:
  - i. Plan History
  - ii. Full Plan Controls.
  - iii. Plan Status details.
- 2. Library
  - a. Righthand side of Plan Manager.
  - b. Right Clicking allows for addition of a new plan or for the import of an existing Plan.
  - c. Create new plans, modify, and delete existing one's when required.

#### 3.1.2 Creating a Plan

Right Click on the '**Plans**' drop-down tree on the right plane and select "Add a New Plan" from the drop-down menu.

P.M Accord Plan				—		×
				>> Accor	'd <b>&gt;&gt;</b>	
Plan Management	History					
Plan Controls			Library			
Plan Next So Test Plan 1 N/A	cheduled Run Active No	B-PAdd a new Plan Import Plan				
Connected				Us	er: Eng	ineer1

Add New Plan

Plan Configuration Form is presented.



#### 3.2 Plan Configuration

The Plan configuration is presented as Rows and Columns, where each Row is a separate action to be carried out by Plan Manager and the columns provide configuration of the action.

Pri Plan Configuration				_	
Plan Name:	Next Run:	10 Oct 2023 10:58:06	Repeat:	Minutes	$\sim$
Row Title Item Project Name	Name Property Valu	e Recipe Enable Next Row E	nabler Project Enabler	Description Disable Controls	
					-
					÷
					<b>*</b>
Advanced Mode:	Generate Report:	No Entries Found			[Browse]
Save Save A	s				Close

New Plan Start Screen

*Plan Name:* This name will appear in Plan Manager as the Plan name once the Plan is Saved and Closed.

*Next Run:* Used to run a Plan at a predefined time. To enable, select the check box and input the required Plan start time.

**Repeat:** If a Plan is setup to run at a predefined time, the Plan can be setup to run on a schedule. If the Plan is Inactive after running, the Plan will begin again automatically once the Plan has been Inactive for the duration of the Repeat time. This will loop until disabled in the Plan. This can be setup by selecting the repeat check box and input the desired repeat time. The units of time also need to be defined.



**Up Arrow:** Move the current selected row up one row of the Plan.



Down Arrow: Move the currently selected row down one row of the Plan.



Add Row: Add an additional blank row to the Plan.





Delete Row: Removes the selected row from the Plan.



Edit Row: Opens a popup to edit the selected row of the plan.



**Export:** Export the Plan to a definable destination folder on the PC.

Advanced: Select to toggle between Plan advanced mode and basic mode.

**Generate Report:** If selected, on Plan completion a Report can be automatically generated for the opened Plan. A destination folder must be selected.

Save: Saves and closes the opened Plan.

**Save As:** Option available while saving an existing Plan. When selected, an additional Plan name is requested. Then entered and confirmed, the Plan will be saved under the new name as a copy.

**Close:** Close the opened Plan Configuration.



#### 3.3 Plan Row Configuration

#### 3.3.1 General Configuration

To Configure a Plan, follow the initial steps.

- 1. Enter a name for the Plan.
- 2. Provide a next run time and date. (If required)
- 3. Provide a repeat interval number and time span. (If required)
- 4. Select the associated Plan Report and a location for storing Plan Reports. (If required)
- 5. Select Advanced Mode if intended to start other Plan from current plan, or if the required step order is not sequential.

#### 3.3.2 Row Details

Click Add Row button to add a new row and configure the Plan step, Plan Row Details screen is presented. This Popups is broken down into 3 sections.

Continue to add rows until the Plan can perform the required sequence of tasks. Row creation is described in points 1-8 below.

**Action:** Add Plan row name. This name will appear in the Plan and Plan manager once saved. Item is used to select the type of action this Plan row should perform.

Controls can be disabled for the Programs currently controlled by the Plan. If "Disable Controls" is selected, Program controls are disabled on the HMI.

Target: Select which object to apply the Action on.

**Enabler:** Available in Basic Mode only. When the enabler condition is met, the Plan will stepon to the next row. When in Advanced mode, this section will not appear.

- 1. Enter Plan Step Title into to the designated location.
- 2. Select required type from the "Item" dropdown menu. Selection here will change both the target and enabler options.



The following item types are selectable:

Program -	Selection of a Program in the Project
Wait -	Pause for a period of Seconds.
Setpoint -	Selection of a Program Setpoint for changing.
Digital Device -	Selection of a Digital Device for Manual Activation
Analog Device -	Selection of an Analog Device for Manual Value
Decision -	Selection of a decision for state change
PID Loop -	Selection of PID Loop for Manual Operation
HMI Prompt -	Generate popup window for operator input.

Sr Plan Row Detail	s —		×
Title:	Start Pre-Rinse Program		
Item:	Program		~
Disable Controls:	Program		
Target	Step To		
Project Name:	Wait Setpoint		
Name:	Digital Device		
	Analog Device		
Property:	Decision		
Recipe:	PID Loop		
	HMI Prompt		
Value:	Start		~
Enabler			
Enable Next Row:	Program Finished		~
Project Name:	LP CMO CIP		~
Enabler:	0 Safety		~
Description:	Start Program		
Save		Clos	se

#### New Plan Item Selection

Configure the "Target" item, using the dropdown menus.

3. Select Project name from the dropdown. This will filter target items, only showing items for the selected Project.



Proi	ject Name:	Name	of the	Accord	Model	the	target	item	is in
110	cee manne.	Nume	or the	Accord	wouci	unc	unger	item	13 111.

Svn Plan Row Detai	ls —		×
Title:	Start Pre-Rinse Program		
ltem:	Program		~
Disable Controls:	$\square$		
Target			
Project Name:	LP CMO CIP		~
Name:	0 Safety		~
Property:	0 Safety		
Property.	Final Rinse		
Recipe:	Pre-Rinse		
Value:	Recirculation Wash		
value.	zz CCheck Items		
Enabler			
Enable Next Row:	Program Finished		$\sim$
Project Name:	LP CMO CIP		~
Enabler:	0 Safety		~
Description:	Start Program		
Save		Close	в

New Plan Project Name Selection

4. Select the device to target with this Plan row.

**Name:** This dropdown is populated based on Item selection. This can include a list of Programs, Steps, Setpoints, Digital Devices, Analog Device, Decisions or PID Loops.

5. Select Property from the dropdown list. See the table below for available Items, Properties, and associated Values.

**Property:** This field requires population for Analog Devices, Digital Devices, and PID Loops. Property allows selection of writing a device to manual mode or writing and activation value to the device.

Item:	Property:	Values:
Program	Command	Start, End, Hold, Restart, Step On, Step
		Change,
		Disable Step On, Enable Step On,
Wait		
Setpoint	Setpoint	Desired Value for Setpoint
Digital Device	Manual Mode	True or False
	Manual Command	

The following Properties and Values are selectable:



Analog Device	Manual Mode	True or False
	Manual Value	Desired Manual Value for Device
Decision	Result	True or False
PID Loop	Manual Mode	True or False
	Manual Value	Desired Manual Value for Loop

6. Select Value from the dropdown list. See the table above for available Items, Properties, and associated Values.

**Value:** This field requires population for Programs, Setpoints, Digital Devices, Analog Devices, Decisions, and PID Loops. This is the value to write to the device.

7. If the Plan row is required to start a program, select the required Recipe. This Recipe will be loaded to the PLC prior to the start of the program.

**Recipe:** This list is based off the Accord Recipe system. Any recipes created for the selected program will be displayed here. If no recipe is required, this field can be left as "Default".

8. Fill in the required Enable Next Row and Enabler Value columns. These will ensure that the next action on the next row in the Plan can be carried out.

Enable Next Row: Selection of the type of item to enable the next row within the Plan.

Project Name: Selection of which project the "Enabler Value" required is in.

**Enabler Values:** Filtered by the "Enable Next Row", this is a list of all selectable items from the Model. If delay is selected, add the required delay period into the "Enabler Value", the delay period is in seconds. Delay is a period in which the Plan program will pause, prior to commencing the action of the next row.

Enable Next Row:	Enabler Values:	Explanation					
		Next Row is enabled when:					
Program Finished	Program Name	Selected Program is completed or ended					
Program in Step	Program@Step	Selected Program is active in the					
		selected Step					
No Delay		Immediately					
Delay	Delay Value (Integer)	After the Delay value of Seconds					
Decision True	Decision Name	Selected Decision is True					
Condition True	Condition Name	Selected Condition is True					
Decision False	Decision Name	Selected Decision is False					
Condition False	Condition Name	Selected Condition is False					

## Accord >>

Sa Plan Row Detail	s -	-		×
Title:	Start Pre-Rinse Program			
Item:	Program			~
Disable Controls:				
Target				
Project Name:	LP CMO CIP			~
Name:	Pre-Rinse			~
Property:	Command			~
Recipe:	Default			~
Value:	Start			~
Enabler				
Enable Next Row:	Program In Step			~
Project Name:	LP CMO CIP			~
Enabler:	Pre-Rinse @ Pre-Rinse - Startup Step			~
Description:				
Save			Close	

#### **Configured Row**

Once complete, check if all Plan Row settings are filled correctly and press the Save button.

The saved Step is now displayed in the Plan Configuration form. Continue adding steps until the Plan is completed as required. This consists of repeating steps 1-8 above.

Ри	Plan Co	figuration											_		×
Plan	Name:	CMO CIP PI	an	Next	Run:	11	Oct 20	23 17:00:(	• 00	Repeat: 🗹	1		Days		~
	Title	Item	Project			Property	Value			t F Enabler Pro		Description		s	$\wedge$
1	Start P	e-Rin Progr	am LP CMC	) CIP	Pre-Rinse	Command	Start	Default	Program In	S LP CMO CI	Pre-Rinse @	I	True	_ 4	
														C	₽
														C	
		Advanced M	ode:	Gen	erate Repor	t: 🗌 No	Entries	Found	$\sim$						Browse]
	Save		Save As											Clos	e

Plan Row Configuration



#### 3.4 HMI Prompt Configuration

It is possible to make an HMI prompt appear as part of a Plan. This prompt is selectable as part of a row Item. When selected a "Configure Prompt" button will appear. If selected the below popup will appear and the HMI Prompt can be configured.

When this row is active within a Plan, a popup window will appear. "Confirm" must be pressed here to step the plan onto the next row.

Pun Plan Configuratio	n	_		×
Title:	Initail Reading			
Message:	Please enter the RFID Number and Operator Name before starting this Plan			
Show HMI Popup:	LP CMO HMI V RFID - TK2	201		$\sim$
Is Signature Required:				
Item 1:	Text V RFID			
Item 2:				
Item 3:	Text V Operator			
Item 4:				
Background Color:				
Foreground Color:				
Save			CI	ose

#### **Configure Prompt**

To configure the prompt:

- 1. Enter the title for the generated Prompt window. This will appear on the top of the prompt.
- 2. Enter the message to be displayed in the generated Prompt window.
- 3. If an additional window is required, it must first be configured in HMI Design.
  - a. The HMI containing the Popup Window must be configured and deployed.
  - b. Please refer to the User Guide for HMI Design for deploying an HMI to HMI Server.
  - c. Select the target HMI project from the first drop down list and the required HMI popup from the second drop down list.
- 4. If a signature is required for this HMI prompt, tick the check box in the "Is Signature Required" section.



- 5. Multiple items may be configured for each HMI Prompt. For each required item the following configuration is required:
  - a. Tick the check box.
  - b. Select the item type.
  - c. Enter the text to be displayed in the prompt window.

#### 3.5 Plan Advanced Mode

Advanced mode allows for two core functions:

- 1. Multiple enablers with destination steps available.
- 2. The ability to start a Plan inside a Plan.

Note: It is possible to revert back to the normal mode if there are no Plans started within the Plan. If changing between modes, triggers are not carried over. If triggers are built in normal mode and you enter advanced mode they will need to be built again. Once these triggers are configured, they are stored and toggling between the two modes will not delete them.

To configure steps in advanced mode, please follow points 1-5 below.

1. Enable Advanced Mode in Plan Configuration Form by ticking checkbox.

Put P	lan Config	uration												×
Plan 1	Name: CM	O CIP Plan	Next R	un:	11 0	ct 2023	17:00:00		Rep	eat: 🗹 🛛		Days		~
Row	Title	Item	Project Name	Name	Property	Value	Recipe	Enabler	(	Description	Disable Controls			$\mathbf{A}$
1	Start Pre-R		LP CMO CIP	Pre-Rinse	Command	Start	Default	<u>Trigger</u>			True		4	
2	Prompt Cor	f HMI Prompt	LP CMO CIP					Trigger			False			•
														-
													C	╞
													•	≍
													1	
	Adva	anced Mode:	Genera	te Report:	No E	intries Fo	ound	~						Browse]
	Save	Save	e As										Clos	e

#### Select Advanced Mode

2. Add an additional row or edit an existing row.



Configure the Plan Action and Target as per a normal Plan.

An additional "Item" is now selectable. This is "Start Plan". The required Plan to start must then be selected.

Note: In Advanced Mode there is less details which must be configured. The Enabler setup has been removed from this popup. Advanced Mode can have a multiple Enabler Types and Enabler Values and they are configured separately.

Sv Plan Row Details			Х
Title:	Set Setpoint A Value to 55		
ltem:	Setpoint		~
Target			
Project Name:	LP CMO CIP		~
Name:	Setpoint A		$\sim$
Property:	Setpoint		$\sim$
Value:	55		
Description:			
Save		Close	

Plan Row Configuration in Advanced Mode



3. Save the Plan Row Configuration.

Configure the Plan Enablers.

These can be access in Plan Configuration by clicking "Trigger" in the "Enabler" column for the desired row.

	Name: CMO	CIP Plan	Next R	un: 🗹	11 Oct 202	23 17:00	:00 🔲	<ul> <li>Repeat:</li> </ul>	☑ 1		Days	
low	Title	Item	Project Name	Name	Property	Value	Recipe	Enabler	Description	Disable Controls		
	Start Pre-Rir	Program	LP CMO CIP	Pre-Rinse	Command	Start	Default	<u>Trigger</u>		True		- 47
		HMI Prompt						Trigger		False		
	Set Setpoint	Setpoint	LP CMO CIP	Setpoint A	Setpoint	55		Trigger		False		
												$\checkmark$
												÷

Access Row Step to Configuration Form



4. Once presented with the "Step On Configuration" popup, press the plus to add an additional row.

PLA Plan - CMO CIP Plan - Ste	o On Configuration				- 🗆 ×
Step Name: Set Setpoint A Valu	ie to 55				
Row Enabler Project	Enabler Type	Enabler	Step To	Duration	جائے
					×
Save					Close

Row Step to Configuration Form

5. Within the new row, populate each column as per a normal Plan.

**Step To:** Multiple stepons are possible, with multiple destinations. Within the "Step To" column, add the destination step. The Plan will step here once the enabler has been achieved. **If no "Step To" destination is selected and the enabler is TRUE, this will END the Plan.** 

**Duration:** If "Delay" is selected for the enabler type, the duration is input here. This duration is in seconds.

Below are screenshots of an example enabler being created.



Selecting the Model for the required enabler.

Pun P	lan - CMO CIP Plan - Step On Co	nfiguration			_		×
Step I	Name: Set Setpoint A Value to 55						
	Enabler Project	Enabler Type	Enabler	Step To	Duration		<u> </u>
1	LP CMO CIP						
		1					
							<b>~~</b>
	Save					C	llose

Select Enabler Project Name

Selecting the enabler type.

Pun P	lan - CMO CIP Plan - Step On Co	nfiguration			_		×
Step	Name: Set Setpoint A Value to 55						
Row	Enabler Project	Enabler Type	Enabler	Step To	Duration		
1	LP CMO CIP	~					<b>ب</b>
		Program Finished Program In Step No Delay Decision True Condition True Plan Completed Decision False Condition False					
	Save					C	llose

## Select Enabler Type



## Selecting the enabler condition.

Рыя Р	lan - CMO CIP Plan - Step On Co	nfiguration			_	- 🗆	×
Step I	Name: Set Setpoint A Value to 55						
Row	Enabler Project	Enabler Type	Enabler	Step To	Duration		
1	LP CMO CIP	Decision False	~				
			Decision A Decision C Decision C Decision D				
	Save					(	Close

#### Select Enabler Name

Selecting the step require once the enabler condition is achieved.

Pun P	'lan - CMO CIP Plan - Step On Co	nfiguration			-	- 🗆	×
Step	Name: Set Setpoint A Value to 55						
Row	Enabler Project	Enabler Type	Enabler	Step To	Duration		
1	LP CMO CIP	Decision False	Decision C	~			
				Start Pre-Rinse Program Prompt Configuration			
							*
	Save					(	Close

#### Select Step to Value



Plan step enabler trigger in advanced mode with two completed enablers.

Step To Configuration below shows the rows, with Delay and No Delay Enabler Type configurations.

Enabler Project	Enabler Type	Enabler	Step To	Duration	
LP CMO CIP	No Delay		Prompt Configuration		C
LP CMO CIP	Delay		Prompt Configuration	5	

#### Step To Configuration with Delay and No Delay

6. Once Enablers for the row have been configured as desired, pressing the save button will exit the popup and return back to the Plan Configuration.



#### 3.6 Save the Plan

Once the Plan is configured, click Save or Save As to store plan. If this is a new Plan, the Plan will then appear on the righthand side of the Plan Manager in the Library.

Pun Pl	an Configur	ation									_		×
Plan N	lame: CMO	CIP Plan	Next R	un: 🗹	13 Oct 202	23 17:00	:00 🔲	Repeat:	☑ 1		Days		~
Row	Title	Item	Project Name	Name	Property	Value	Recipe	Enabler	Description	Disable Controls			$\wedge$
	Start Pre-Rir	Program	LP CMO CIP	Pre-Rinse	Command	Start	Default	Trigger		True			
	Prompt Conf	-						<u>Trigger</u>		False			
3	Set Setpoint	Setpoint	LP CMO CIP	Setpoint A	Setpoint	55		<u>Trigger</u>		False			
												Ľ	$\checkmark$
												(	╬
													*
												1	
	Advan	ced Mode:	Genera	te Report:	No Entries	Found		$\sim$					[Browse]
Save	(New Version	n) Save	As									Clo	se

Plan Configuration to be Saved.



#### 3.7 Export Plan

To export a Plan:

1. In Plan Manager right click on the required Plan within the Library, from the drop-down menu select and click Edit Plan.

Accord Plan					- □ ×
Plan Management H	istory				WAccord W
Plan Test Decision Condition False Test Plan 1	Next Scheduled Run N/A N/A	Active No No		Plans     CMO CIP     Set Decis     Set Decis     Start a pla     Test Deci     Test Plan     Copy Plan	
			>		

Edit Plan

2. Click the Export Plan button in Plan Configuration.

Pir Pi	lan Configu	ation											×
Plan N	lame: CMO	CIP Plan	Next R	un: 🗹	13 Oct 20	23 17:00	:00 🔲	<ul> <li>Repeat:</li> </ul>	☑ 1		Days		~
Row	Title	Item	Project Name	Name	Property	Value	Recipe	Enabler	Description	Disable Controls			
1	Start Pre-Rir	Program	LP CMO CIP	Pre-Rinse	Command	Start	Default	Trigger		True			4
	Prompt Conf	HMI Prompt	LP CMO CIP					Trigger		False			
3	Set Setpoint	Setpoint	LP CMO CIP	Setpoint A	Setpoint	55		Trigger		False			
													• • ×
													~ [
	Advan	ced Mode:	🗹 Genera	te Report: 🗌	No Entries	Found		~					Browse
Save	(New Version	n) Save	As									C	lose

Export Plan



3. Define the Plan destination and save. Plan is exported into .acp file and stored into user selected location.



### 4 Plan Manager Screens

#### 4.1 Summary

This screen shows all controllable and created Plans.

When a Plan is saved, it is displayed on the right. When a Plan is dragged from the right to the left, it can be started manually.

Additional screens are available from the Plan Manager, this section will describe these popups and their functionality.

Accord Plan Plan Management lan Controls Plan	History			→ Accord »
lan Controls Plan	History			>> Accord >>
lan Controls Plan	History			
Plan				
			Library	
est Decision Condition   est Plan 1	Next Scheduled F False N/A N/A	Run Active No No	Plans     CMO CIP Plan     Set Decisions     start a plan from the plan     Test Decision Condition False     Test Plan 1	
			>	

Saved Plans



#### 4.2 Functionality

At the left of each Plan title within the library, there is a plus control which when clicked on allows to see all the steps of that Plan. These Plan step names are populated by giving each Plan row a name within the editor. These names can be used to breakdown the actions performed within a Plan.

If a Plan is in advanced mode with a nested Plan, the nested Plan will appear here. It is then possible to open the nested Plan and view its steps.

Plan Management Hi	story			>> Accord >>
an Controls			Library	
'lan est Decision Condition False est Plan 1	Next Scheduled Run N/A N/A	Active No No	CMO CIP Plan CMO CIP Plan Configuration Set Setpoint A Value to 55 Set Decisions Start a plan from the plan Test Decision Condition False Test Plan 1	

**Plan Steps** 



Right click on the title of the Plan. Drop-down menu displayed with available choices of:

- Edit Plan: Menu selection opens Plan Configuration Form where new Rows can be added, or old ones reconfigured for the selected Plan.
- **Delete Plan**: Menu selection used to remove Plan.
- **Copy plan:** Menu selection enables user to create a copy of the Plan under the new Plan Title.
- **Plan Details**: Menu selection opens Form which displays all the steps of the Plan. This is especially useful when Plan has a lot of Rows configured and contains multiple Plans within.

Pa Accord Plan							×
Plan Management	History				>> Accor	•d <b>&gt;&gt;</b>	
Plan Controls Plan Test Decision Condition Fa Test Plan 1	Next Schedule	ed Run Active No No	>	► Plans CMO CIP Start P Promp Set Se Set Decisions Set Decision Condition False Test Plan 1			
Connected					Us	er: Eng	ineer1:

Plan Drop-Down Menu



Plan details gives a full breakdown of all steps within a Plan. This breakdown also includes all nested Plans and their steps.

If an advanced Plan, triggers can also be accessed here.

		IP Plan - Step									
.ow	Title	Item	Name	Property	Value	Recipe	Enabler	Description	Disable Controls		
	Start Pre-Rin	Program	Pre-Rinse	Command	1	Default	<u>Trigger</u>		True		
	Prompt Config	HMI Prompt					<u>Trigger</u>		False		
	Set Setpoint	Setpoint	Setpoint A	Setpoint	55		<u>Trigger</u>		False		

#### Plan Details

If required, Plan Details can be exported, using the export button at the bottom left corner. This will export to a word document.

CMO CIP Plan Plan Configuration:								13 Oct 2023 义	
Step	Step Type	Project Name	Item Name	Item Property	Item Value	Recipe Name	Enabler Type	Enabler Value	Disable Controls
1	Program	LP CMO CIP	Pre-Rinse	Command	1	Default	Program In Step	Pre-Rinse @ Pre-Rinse - Startup Step	True
2	HMI Prompt	LP CMO CIP					Prompt Confirmation		False
3	Setpoint	LP CMO CIP	Setpoint A	Setpoint	55		Program Finished	0 Safety	False

**Exported Plan Details** 



#### **5.3 Plan Controls**

To enable manual operation of a Plan, left click and hold the Plan within the library. Drag the Plan into the Plan Controls on the left. Once achieved, the Plan name, its next scheduled run and its active status will appear on the left. This is shown in the image below.

Scheduled Plans that are not dragged to the left are still started. Scheduled Plans can be dragged to the left to view and control.

Pa Accord Plan				- 0	×
Plan Management	History				
Plan Controls Plan Test Decision Condit	Next Scheduled Run tion False N/A	Active No	Library Plans CMO CIP Plan Set Decisions Set Jack Information False Test Plan 1		
Connected				User: Eng	incer1:

#### Plan Selected for Operating

Additional Plan information from Plan controls can be reached by double clicking the Plan name on the left. This is shown below.

Test Decision Co	ndition False - Deployed Plan Details	×
Plan Details:		Plan Control:
Plan Name: Active Row: Programs Status:	Test Decision Condition False N/A Inactive	003
Plan Status:	Inactive	History
<ol> <li>Set Setpoint A i</li> <li>Set Setpoint B i</li> <li>set setpoint C t</li> <li>Prompt Finished</li> </ol>	io 22 o 102	

#### Plan Runtime Form



On the right side of the form Plan details are displayed:

- Plan Name: Name given to the Plan.
- Active Row: If the Plan is active, this displays the number of the current active Plan row.
- **Program Status:** Shows a combined current status of Model programs which are currently controlled by the Plan. This includes; Active, Inactive, Hold, Alarm
- Plan Status: Active, Inactive, Paused or Error.
- List all steps within the Plan, and all steps nested within the Plan.

It is possible to control a Plan from this popup. This is done using the three buttons on the right.

- **Start/Hold Plan:** If the Plan is inactive, it may be started here. If the plan is Active it may be paused here. This will also give the option to pause all programs while pausing the Plan.
- **Stop Plan:** If a Plan is active, this will stop the Plan. This will also give the option to stop all programs that the Plan is currently running.
- **Step through**: To move to the next Plan Row.
- **History button:** Opens form with the completed Plans history. This shows historical Plan run details.

Image below shows Plan at the first Row.

Test Decision Condition False - Deployed Plan Details	×
Plan Details:	Plan Control:
Plan Name: Test Decision Condition False	
Active Row: 1	
Programs Status: Inactive	
Plan Status: Active	History
1       Set Setpoint A to 55         2       Set Setpoint B to 22         3       set setpoint C to 102         4       Prompt Finished Plan	

#### Active Plan Row

Blue colour highlights active Row of the Plan. Plan status has changed from inactive to active.



#### 5.4 Plan History

Once a Plan has finished, its details are stored within History. When pressed, the below screen appears.

📑 Pla	n - Test Decision Condition F	alse - History Detai	ls		_		×
From:	☐ 16 Oct 2023 09:49:38 ∨	To: 16 Oct	2023 09:49:38 🗸	Select Plan		$\sim$	ø
Plan Id	Plan Name	Start	End				
15	Test Decision Condition False	13/10/23 11:32:52	13/10/23 11:34:00				
16	Test Decision Condition False	13/10/23 11:34:44	13/10/23 11:35:04				
17	Test Decision Condition False	16/10/23 09:39:04	16/10/23 09:45:13				
18	Test Decision Condition False	16/10/23 09:45:29	16/10/23 09:46:38				
De	etails					Close	

#### **Plan History**

Plan history table shows all finished executions of the selected plan. Plan Name together with Plan start and Plan end time is displayed.

Search configuration is available.

- Start time can be set by ticking "From" checkbox and selecting desired time.
- End time can be set by ticking "**To**" checkbox and selecting desired time.

• Other plans can be viewed if Selected Plan name is changed in the drop-down selection.

🖳 Pla	n - Test Decision Condition F	alse - History Detai	ils		_		×
From:	☐ 16 Oct 2023 09:49:38 ∨	To: 🗌 16 Oct	2023 09:49:38 🗸	Select Plan		~	P
Plan Id	Plan Name	Start	End		CMO CIP Plan Set Decisions		
15	Test Decision Condition False	13/10/23 11:32:52	13/10/23 11:34:00		start a plan from the plan		
16	Test Decision Condition False	13/10/23 11:34:44	13/10/23 11:35:04		Test Decision Condition	False	
17	Test Decision Condition False	16/10/23 09:39:04	16/10/23 09:45:13		All		
18	Test Decision Condition False	16/10/23 09:45:29	16/10/23 09:46:38				-
De	etails					Clo	ose

#### Select Available Plans

All the plan names are displayed in the drop-down list. Select desired Plan and click search icon just to the right of drop-down list. If All is selected instead of particular Plan name all available histories will be loaded.

## Accord >>

🛃 Plar	n - Test Decision Condition F	alse - History Detai	ils		-	_		×
From:	☐ 16 Oct 2023 10:02:04 ∨	To: 🗌 16 Oct	2023 10:02:04 🗸	Select Plan	All		~	P
Plan Id	Plan Name	Start	End					
1	Test Plan 1	02/10/23 09:51:47	02/10/23 09:52:12					
2	Test Plan 1	02/10/23 09:52:39	02/10/23 09:54:57					
3	Test Plan 1	02/10/23 09:58:53	02/10/23 10:00:16					
4	Test Plan 1	02/10/23 10:00:21	02/10/23 10:02:20					
5	Test Plan 1	02/10/23 10:02:47	02/10/23 10:08:37					
6	Test Plan 1	02/10/23 12:47:36	02/10/23 12:49:30					
7	Test Plan 1	02/10/23 12:50:34	02/10/23 12:52:13					
8	Test Plan 1	02/10/23 13:00:21	02/10/23 13:01:59					
9	Test Plan 1	02/10/23 14:07:41	02/10/23 14:09:24					
10	Test Plan 1	02/10/23 14:10:15	02/10/23 14:10:25					
11	Test Plan 1	02/10/23 14:13:45	02/10/23 14:15:49					
12	Test Plan 1	02/10/23 14:21:32	02/10/23 14:25:42					
13	Test Plan 1	02/10/23 14:31:53	02/10/23 14:34:17					
14	Test Plan 1	02/10/23 14:34:35	02/10/23 14:34:43					
15	Test Decision Condition False	13/10/23 11:32:52	13/10/23 11:34:00					
16	Test Decision Condition False	13/10/23 11:34:44	13/10/23 11:35:04					
17	Test Decision Condition False	16/10/23 09:39:04	16/10/23 09:45:13					
18	Test Decision Condition False	16/10/23 09:45:29	16/10/23 09:46:38					
De	tails						Close	

## All Plans History

Image above shows the histories of all completed Plans in displayed in the table.