

EcoStruxure Control Expert - Asset Link V2.2 Release Notes

Table of Contents

1.	EcoStruxure Control Expert – Asset Link.....	2
2.	What’s New in EcoStruxure Control Expert – Asset Link 2.2	2
3.	System Requirements	2
4.	Installation	3
4.1.	Security.....	4
5.	Software Licensing.....	5
5.1.	Demonstration / Trial Licensing.....	5
5.2.	Licensing Asset Link for the First Time	5
6.	Migration.....	5
7.	Recommendations and Known Issues.....	7

1. EcoStruxure Control Expert – Asset Link

Ecostruxure Control Expert – Asset Link is an AVEVA System Platform template which removes duplicate engineering by reading the configuration of a Modicon PAC Controller and generating/updating a matching set of objects within AVEVA System Platform. Asset Link can update information based on the available DFBs or DDTs within the controllers, the variable addresses, comments or initial values.

Ecostruxure Control Expert – Asset Link v2.1 was released in Mar 2021. This new release is version 2.2, which has new features added. Asset Link is a template, so the V2.2 provides a new version of the template for use within AVEVA System Platform.

This version contains RTU Support and enhanced logging mechanism in asset link template.

2. What's New in EcoStruxure Control Expert – Asset Link 2.2

RTU support

- Allows the user to configure SCADAPack with dynamic DNP3
With respective control variable file and RTU file from Remote Connect.
- Once configured, clicking on Browse Control Project will identify the assets with matching variables.

Enhanced display of log details

- This release brings improvised display of log information with additional capabilities to refer which attributes are updated in system platform during generation.

3. System Requirements

Minimum Hardware Requirements

- CPU: 6-core processor. For example, Intel Xeon E5-1650 v2 3.5 GHz.
- RAM: 16 GB minimum; 24 GB recommended
- Hard drive: 80GB of free space minimum

Software Requirements

Compatible with either of the following operating systems:

- Windows® 10 64-bit
- Windows 16 64-bit
- AVEVA System Platform 2014R2 SP1 (or)
- AVEVA System Platform 2017 Update 3 (or)
- System Platform 2020
- .Net Framework 4.7.2

Ecostruxure Control Expert – Asset Link v2.2 was validated as a template for

- AVEVA System Platform 2014R2 SP1
- AVEVA System Platform 2017 Update 3
- AVEVA System Platform 2020

Ecostruxure Control Expert – Asset Link v2.2 was tested with controller configuration produced by

- Unity Pro v13
- Ecostruxure Control Expert v14.1 onwards
- SoMachine v4.3
- Telemetry Server Communication Drivers 2020 (Build 82.7416) Release

- Remote Connect Version: R2.5.1/3.8.1.1036
- EcoStruxure Process Expert for AVEVA System Platform 2020 R2
- Microsoft Office Excel (Required to support SCADAPack)

4. Installation

The EcoStruxure Control Expert - *AssetLink User Guide* is available before installation as a separate download from Schneider Electric Exchange.

Before uninstalling earlier version, it is recommended to take backup of user created files at the same location. Example, user defined patterns in the same location can be taken backup.

Uninstall earlier versions of Asset Link before installing Ecostruxure Control Expert - Asset Link 2.0 or 2,0,1 or 2,0,2.

If earlier version of Asset Link is 2.1, user can upgrade installing 2.2. No need to uninstall version Asset Link 2.1.

AssetLink Installation creates a set of folders within the ProgramData directory. These folders contain the content required to import the AssetLink template and trial its operation.

- Asset Link Template and Pattern Schema – Asset Link Template for Import

Control Expert Samples

- General Purpose Library (GPL) Patterns – Sample of GPL Patterns
- Demo Patterns – Sample of 2 Patterns to evaluate Asset Link
- Export – File

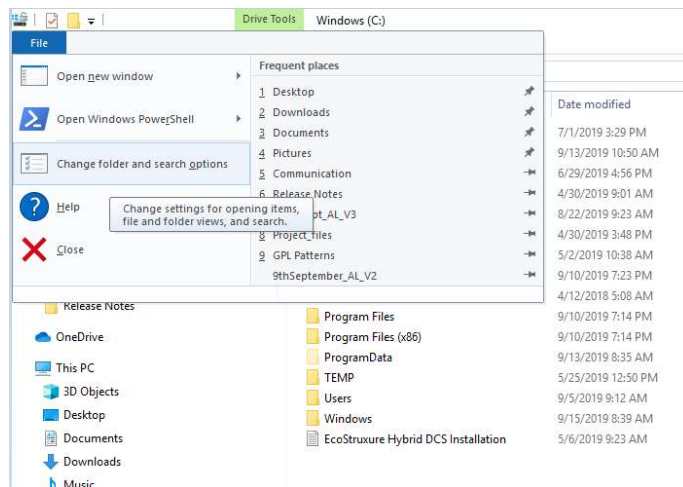
Machine Expert Samples

- Machine Expert Templates
- Machine Expert Patterns
- Machine Expert Variable Files

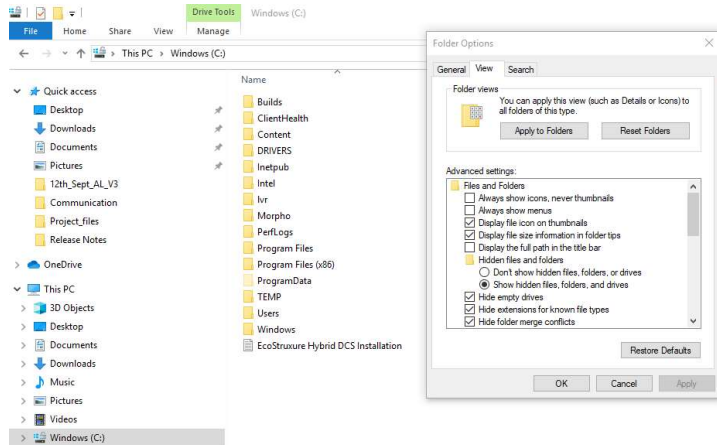
SCADAPack Samples

- SCADAPack Templates
- SCADAPack Patterns
- SCADAPack Variable Files

The ProgramData folder could be hidden. It can be made visible using the procedure below. From windows explorer for C drive, click on Change folders and search options as shown below.



From Folder Options->View, select “Show hidden files, folder and drives” as shown below to make Program Data folder visible.



To import the AssetLink template into the AVEVA System Platform galaxy.

- Import \$EsxCEAssetLink.aaPKG
- Create a derived template of AssetLink for each controller.

To import the Demo template into the AVEVA System Platform galaxy.

Step	Action
1	Open Demo Templates and Patterns folder from the installed location of the AssetLink.
2	Create new Galaxy .
3	Import Galaxy Styles .
4	Import Script Function Libraries .
5	Import demo templates (\$aPSxAnalogInput.aaPKG, \$aPSxMotor.aaPKG).
6	Import AssetLink template from the installed location.
7	Configure Demo Patterns in the pattern's path and then Browse Control Project in the Generation tab.

To import all templates of GPL for WSP into the AVEVA System Platform galaxy.

Open “GPL WSP Templates” folder from the installed location of the AssetLink.

To import RTU supported demo template into the AVEVA System Platform galaxy, Open “SCADAPack Template” folder and import the aaPKG.

The GPL templates delivered are compatible with AVEVA System Platform 2017 Update 2. This library does not support Intouch OMI. This version of GPL library supports OPC DA communication protocol (OPC UA protocol is not supported).

4.1. Security

Reference	Description
User account used for the installation	User must have administrator rights on the computer to install and launch AssetLink. This is to avoid the request to provide the rights

	each time the software is launched. Please check the Windows User Account Control settings and configure them appropriately.
--	--

5. Software Licensing

5.1. Demonstration / Trial Licensing

Unlicensed Asset Link instances allows all functionality during trial period of 30days and display a licensing warning message on the screen. To access full functionality after trial license expired, the user must acquire a license.

5.2. Licensing Asset Link for the First Time

AssetLink installation automatically installs Schneider Electric License Manager version 2.5 and Schneider Electric Floating License Manager version 2.5.2.0

License for AssetLink needs to be bought from Schneider Electric Exchange. On receiving the email with Activation ID, activate the license in Schneider Electric Floating License Manager loaded version 2.5.2.0

Installed release	Asset Link
Licenses required	V2.0.0

6. Migration

Upgrade to AssetLink 2.2	AssetLink 1.0.0/ 1.0.1 user	AssetLink 1.0.2 SP2 user (Imported \$EsxCeAssetLink without deleting existing 1.0.1 template)	AssetLink 1.0.2 SP2 user (Imported \$EsxCeAsset-Link after deleting existing 1.0.1 template)	AssetLink 1.0.2 SP2 user (Imported \$EsxCeAsset-Link without deleting existing 1.0.2 SP2 template)	AssetLink 2.0.0/ 2.0.1/ 2.0.2 user	AssetLink 2.1 user
Installation Procedure	User has to uninstall AssetLink 1.0.0/ 1.0.1 and install AssetLink 2.2.	User has to uninstall AssetLink 1.0.2 SP2 and install AssetLink 2.2.	User has to uninstall AssetLink 1.0.2 SP2 and install AssetLink 2.2.	User has to uninstall AssetLink 1.0.2 SP2 and install AssetLink 2.2.	User has to uninstall AssetLink 2.0.0/ 2.0.1/ 2.0.2 and install AssetLink 2.2.	User has to install AssetLink 2.2 for upgrading.
Using AssetLink Template	Re-create AssetLink object in ArchestrA IDE. Delete existing AssetLink 1.0.0/ 1.0.1 template and Import AssetLink 2.2 template - \$EsxCeAsset-Link.aapkg.	Re-create AssetLink object in ArchestrA IDE. Delete existing AssetLink 1.0.1 template and Import AssetLink 2.2 template - \$EsxCeAsset-Link.aapkg.	Import AssetLink 2.2 template - \$EsxCeAsset-Link.aapkg.	Import AssetLink 2.2 template - \$EsxCeAsset-Link.aapkg. (above existing 1.0.2 SP2 template)	Import AssetLink 2.2 template - \$EsxCeAsset-Link.aapkg. (Above the existing 2.0.0/ 2.0.1/ 2.0.2 template)	Import AssetLink 2.2 template - \$EsxCeAsset-Link.aapkg. (Above the existing 2.0.0/ 2.0.1/ 2.0.2/ 2.1.0 template)
Impact	Since previous version of AssetLink template is deleted, user has to re-enter settings of AssetLink. No impact in already generated ASP AppObjects.	Since previous version of AssetLink template is deleted, user has to re-enter settings of AssetLink. No impact in already generated ASP AppObjects.	Since it is new import of AssetLink, there is no impact. No impact in already generated ASP AppObjects.	Since it is import on previous version of AssetLink, there is no impact. No impact in already generated ASP AppObjects.	Since it is import on previous version of AssetLink, there is no impact. No impact in already generated ASP AppObjects.	Since it is import on previous version of AssetLink, there is no impact. No impact in already generated ASP AppObjects.

Recommended to upgrade all the generated objects from previous versions of Asset Link to avail the rename capability for areas in Plant Model.

The WSP App Objects generated in previous of Asset Link, will show with “No Action” for assets, which can be generated for one time to update the existing WSP App Objects.

7. Recommendations and Known Issues

Installer Related

- Cancel button is disabled while Uninstallation process is triggered from setup.exe. But if user goes to Control Panel and clicks on uninstall then Cancel button is enabled (as we don't have control here). It's not recommended for user to press cancel while uninstalling. Rollback of uninstalled files will not happen, then user needs to reinstall software
- While Installing, A Random message appears during the installation of floating license manager. Its false message. Please press **No** here and continue. Installation of Floating License Manager will happen successfully.



Controller Export File Security

- Asset Link does not check for data integrity of exported files. It is the user's responsibility to ensure these files are securely transferred.

Plant Model Export File Security

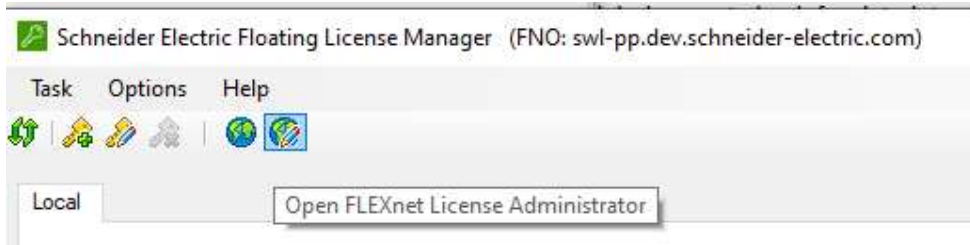
- Asset Link does not check for data integrity of exported files. It is the user's responsibility to ensure these files are securely transferred.

If Archestra Galaxy Fails to Connect

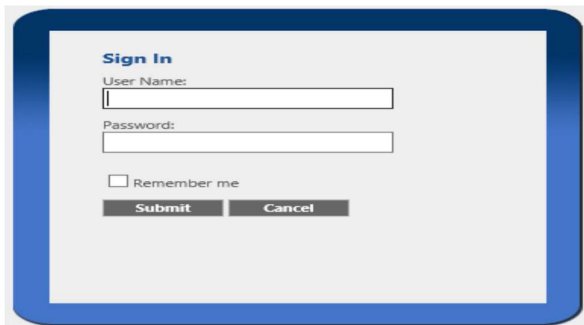
- If Asset Link Setup is installed and immediately after it is found that System Platform IDE (Archestra) is not connecting to newly created galaxy then we must check logfile (aalogViewer) to see actual reason of Archestra failure.
- If Asset Link fails to connect to galaxy, check if GR node and Asset Link in two different machines. If so, we are yet to support this architecture. We recommend using both GR node and Asset Link in the same machine.
- If Log File indicates Port conflict, then user need to change Schneider Electric Floating License Manager currently utilized port

How To Change Floating License Manager Port

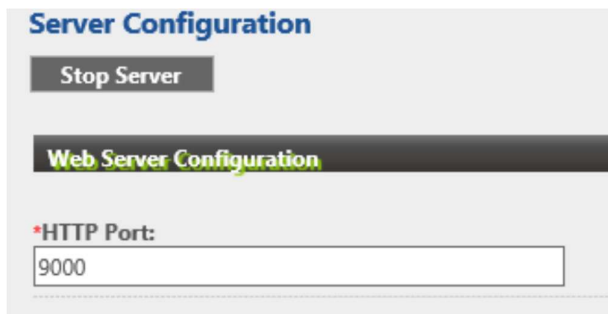
- Open Schneider Electric Floating License Manager
- Open FLEXnet License administrator web page as indicated below



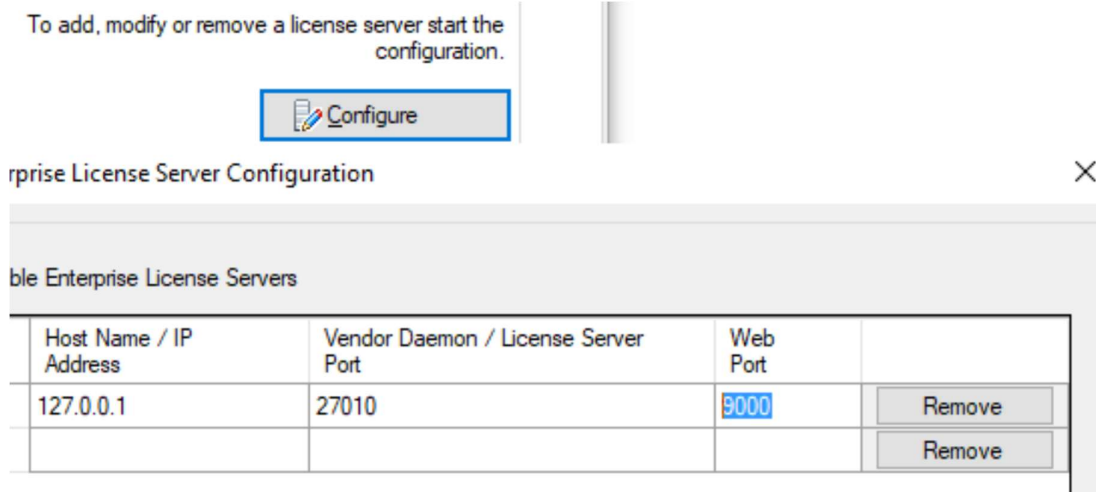
- Once FLEXnet License administrator web page opens, Click on Administration Page
- Enter Username as [MachineName] \ [SystemLogin_User_Name] i.e. "PC1\Ravi" and Password as [System_Login_Password]



- After Login, select "Server Configuration" from left hand tabs where you can set any available port to HTTP Port text box.



- Next, User needs to change port configuration as well in Schneider Electric License Manager, so open Schneider Electric License Manager → Select Floating option → Click Configure Button
→ Set Same Web Port number as set in server configuration



Asset Link Operations

1. At times, observed that downgrade from Asset Link 2.2 to Asset Link 2.1, does not open Asset Link 2.1 template in Archestra IDE.
2. If the objects selected for update / recreate are checked out, in such case, generate process will mark the Action status as "Updated" / Created" however no changes were successful as the objects were checked out. Users' need to perform Browse control project and generate post check in of the objects.
3. Stop Generation

Issue	Issue Description	Recommendation	Workaround
Stop generation while we generate "Re-Create" assets	During stop generation of assets which are marked for action "Re-Create", delete will happen for the asset and create will be stopped.	Recommended is to not stop the generation process while we have assets to "Re-Create".	If this problem occurs, user can perform "Browse Control Project" and get the object for "Create" action.

4. In Asset Link Pattern Editor, if user has deleted any include rule then it will be softly deleted in view but include rule file will still exists in file folder.
5. While we apply filter in generation table, the auto select of area to assets is not supported. Then, user has to explicitly select the respective area. Otherwise, the asset will move to default area or unassigned area. Clear filters in generation table to have the auto select of asset to area working fine.
6. It is suggested to have one system in EPE is equivalent to one galaxy in System Platform. If user has multiple systems from EPE into one galaxy, the same object in two different systems will lead to detect for an update. To differentiate the object, we can use optional prefix while generation those objects.
7. At times, observed that there is no assigned instances coming EPE for the folder, the area is getting created during generation or objects.

8. Since OPC DA is not case sensitive during communication and OPC UA, UA Embedded is case sensitive, we need to ensure the control logic comes from Control Expert is well managed with naming conventions.

9. Plant Model

Issue	Issue Description	Workaround	Recommendation
Plant Hierarchy Notification with "To be resolved"	While we rename area which had conflicts in previous generation of objects in System Platform and were resolved, the notification show to resolve again in next cycle.	If it occurs, user must resolve and generate again to remove conflict and update notification. This operation will not modify the plant hierarchy or any content of the object.	
Combination of location change and rename of area.	If we rename area in EPE and change the area location in EPE. The area is detected to rename in Asset Link. Whereas, the location does not change.	In next cycle of browse control project, detects for update of location. User must generate the area again to get the actual location in system platform.	User is recommended to perform location change and rename as two separate operations.
Combination of Rename and Recreate actions in one cycle.	If we rename area in EPE and in Asset Link, modify the type of area. The area is detected to create a new one in System Platform instead of renaming and recreate with new type.	If it occurs, select the area which will create in system platform and the old area name in system platform can be deleted by user.	User is recommended to perform recreate and rename as two separate operations.
Combination of Rename and conflict actions in one cycle.	If we rename system in EPE and same as galaxy name in ASP, then to be resolved is identified again in multiple cycles.	If it occurs, rename system in EPE which is not conflict ASP galaxy name.	While we rename system in EPE, user to ensure, it does not conflict with ASP galaxy name.
Template names must be same between EPE and ASP to have the plant hierarchy working well	If we have an asset with template name different between EPE and ASP, the proposed hierarchy identification will not be same as EPE location. For example, EPE has Motor1 (asset name) and \$Motor (asset type) ASP supposed to have template name as "\$aMotor". The template name "Motor" in EPE must be same as "Motor" in ASP with suffix "\$a"	Rename the ASP template name, to match with EPE template name to achieve the exact plant hierarchy in ASP.	While we build the templates in ASP, to provide the naming convention same as what is given in EPE with suffix as "\$a". EPE = "\$Motor" and ASP = "\$aMotor"
Plant Model changes will be detected only in forced browse	As incremental browse will detect only control logic changes, the plant model changes will be detected via Forced Browse enabled.		
Modifying proposed name in resolve dialog	In resolve dialog, there is a possibility to provide both Object ID and Proposed Name as same, which is yet to be validated in Asset Link.	If it occurs, user to ensure provide unique name in resolve dialog.	To continue with proposed name from Asset Link, which will be unique.

10. If a part of the plant hierarchy from EPE exist already in System Platform, the same area name will be used to add the assets respectively. For example, System1.Area1.Area2 is generated already and other hierarchy is added for browse control project and generate, which has Area1 exist at the different hierarchy level. In this case, Asset Link will detect and generate on the existing Area1. It is not for the conflict.

11. UI validations for Pattern Editor editable areas are yet to be handled. User has to ensure the expected values in pattern is provided properly. While we add a new rule with action and the respective values for system platform attributes has to be filled accordingly.
12. UDA not found occurs if we recreate an object which is already deployed. User has to undeploy the object and execute the recreate of assets.
13. UI Validations for SCADAPack configurable parameters : Telemetry Server Name, Outstation Full Name and Hierarchy Name is handled partial. If user enter invalid characters will lead to erase of previous good value in the UI display. So, user need to ensure right characters are entered in editable parameters. User can get the previous generated values of hierarchy information by performing browse control project.
14. At times, observed recreated assets are shown in deployment view. Whereas, not in model view. If we restart all Archestra Services and re-open Archestra IDE shows the asset respectively in model view.