

# CONNECTING EPIC GROOV VIEW TO CODESYS USING OPC-UA

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DE

## General

This document is a step by step to configure the EPIC Controller's groovView to communicate to the Epic Controller's CodeSys using OPC-UA. All the software and hardware is included within Epic, nothing else is required.

## What You Need

This procedure assumes you already have a CodeSys program and a groovView application started.

## Outline

### CodeSys

- Add Symbol Configuration to the CodeSys Device Tree

- Build the CodeSys project

- Select the Tags to Expose to OPC

- Download and run the CodeSys project

### groovView

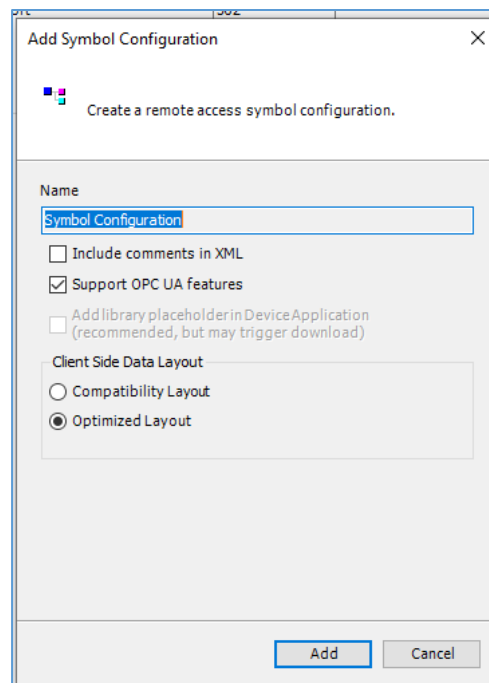
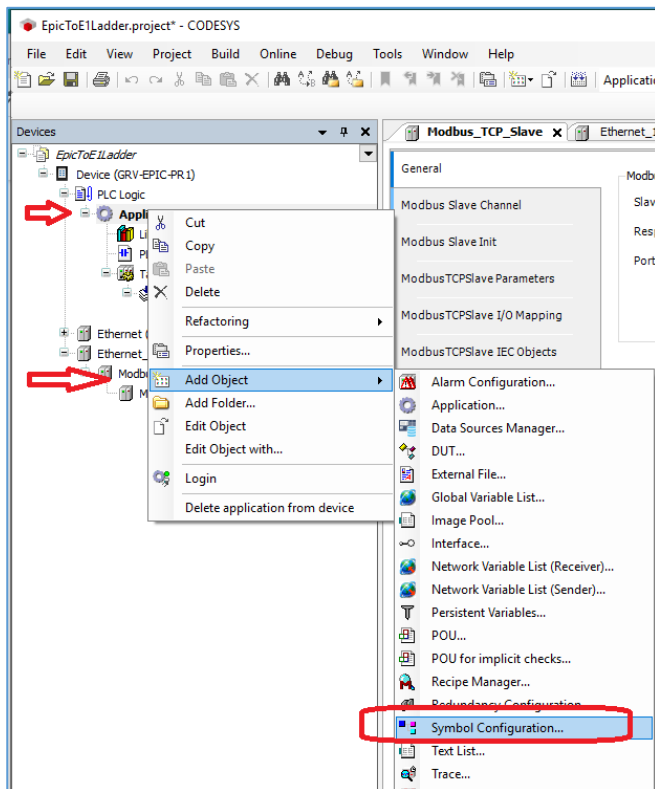
- Add the OPC-UA Device

- Browse the OPC-UA Tags

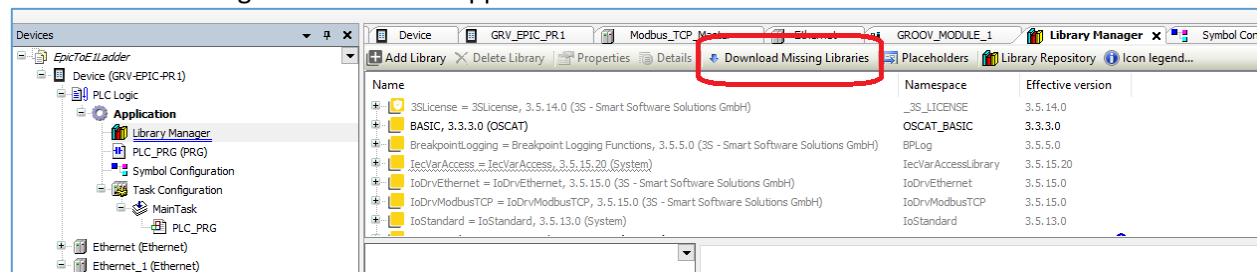
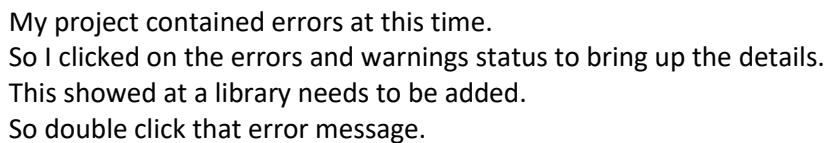
## CODESYS

### Add the Symbol Configuration to the Device Tree

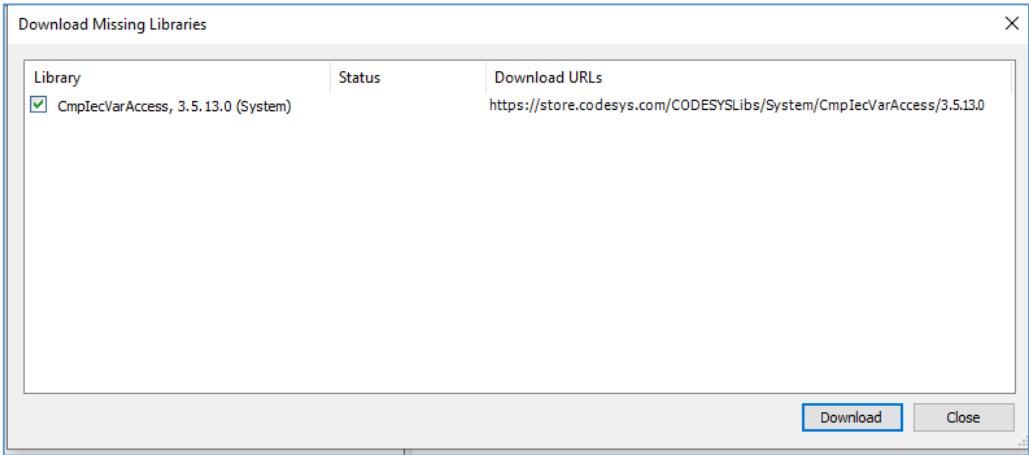
Click-right on the Application, select Add Object, then click on Symbol Configuration. The Add Symbol Configuration will pop up. Click Add.



The Symbol Configuration now appears in the Device Tree. Click the Build button.



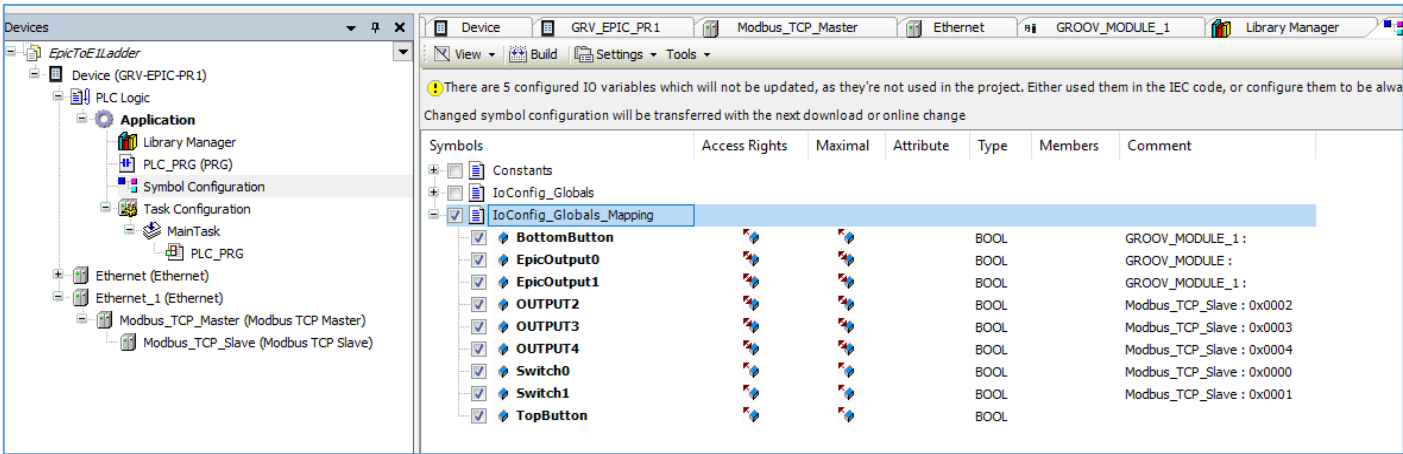
Click the Download button on the Download Missing Libraries screen, and the download should proceed. This should clear up the errors in the project.



Next do a project Build.

Select the Tags to Expose to OPC

Select the Symbol Configuration from the Device Tree (or that tab might already be open in the main working area). Now you can drill down to select the tags you want to expose to the OPC-UA Server.



Download and run the CodeSys project

Build, Save, Login, and Run the project. The OPC-UA Server should now be running and able to be connected to it from groovView.

## GROOV VIEW

Open up your groovView project into the Build Mode.

### Add the OPC-UA Device

Select *Configure Devices and Tags* and then select *Add New Device*.  
Select the *OPC-UA Server*.

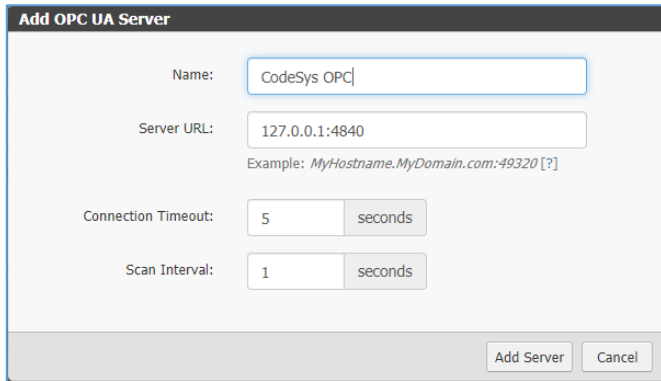
Configure the OPC-UA Server .

The name is arbitrary.

The Server URL is 127.0.0.1:4840

127.0.0.1 is because the CodeSys OPC-UA server is running on the Epic itself and 4840 is the port.

Click Add Server to complete the configuration.



The screenshot shows a dialog box titled "Add OPC UA Server". It contains the following fields and controls:

- Name:** A text input field containing "CodeSys OPC".
- Server URL:** A text input field containing "127.0.0.1:4840". Below it is an example: "Example: MyHostname.MyDomain.com:49320 [?]"
- Connection Timeout:** A numeric input field with "5" and a dropdown menu set to "seconds".
- Scan Interval:** A numeric input field with "1" and a dropdown menu set to "seconds".
- Buttons:** "Add Server" and "Cancel" buttons at the bottom right.

### Browse the OPC-UA Tags

The CodeSys OPC device should show up in the tag browser. The shot below shows where the tags are located.  
At this point you can use these tags in your groovView project.

