

Checklist for AutomationML Exchange

Basic Rules

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Check your parts data in Parts management

(Some more details: **TechTip: PLC data exchange** – 6. Preparation of parts data)

1. Each part has to have a unique **PLC type designation**.
2. For each CPU and each head station (first PLC card connected to the bus), the **PLC station type** has to be filled.
*For most vendors, you can use the vendor name. For Siemens devices, there are fixed values, as you can see in "**TechTip: Overview of the PLC properties** – Settings at PLC cards".*
3. For CPU devices please set the **CPU** checkbox in the properties tab.
4. For devices, having bus connection points, please set the **Bus coupler / head station** checkbox.
5. Check the function templates:
 - Every PLC device has a function definition "PLC box".
 - Every connection point has a function template.
 - For I/O connections, the channel designation is filled with numeric values.
 - A bus connection is always the whole plug, not the single pins. Please make sure that:
 - a) The **Plug designation** is filled.
 - b) The **Bus system** is filled.
 - c) The **Connection point designation** is empty.
 - d) The **Connection point description** is empty.

Check your macros listed in the parts

In principle, macros are not necessary, but it's recommended to use them. Please see the details in "**TechTip: PLC data exchange** – 7. Recommendation EPLAN macros".

Note:

Check that the functions in the macros are matching the function templates in the parts data.

Check the structure of your PLC configuration project

All devices to be exported to AutomationML have to be structured by:

1. A **Configuration project** → This is the root element.
2. A **Station ID** → This is a grouping element.
3. A **Rack ID** → If a PLC device can be the root for other devices, this field has to be filled.
A rack gets a **Rack ID**.
CPU and bus coupler get a **Rack ID** if they aren't placed on a rack.
PLC devices which will hold other devices get a **Rack ID**.
4. The **PLC card is placed on rack ID**...
5. ...and **Position (slot / module)** fields are used to define a relationship (structure) with the racks.

Check Message management

In most cases you can use the "PLC data exchange (Mitsubishi)", "PLC data exchange (Siemens)" or another new scheme based on one of these.

In this way you can improve the quality of your project.