



Intended Audience:

Anyone currently involved in use of PERA including:

- 1. Diagrams (XML)
- 2. Process to MES data flows (B2MML)
- 3. Product information (XLS)
- 4. Textual Documents (DOCX and PDF)

Context and Objectives of this Learning Map

Because PERA’s emphasis is on “People” (along with Facilities and Systems), several documents are particularly important in PERA, including Learning Maps, Organization Charts, Swimlane Diagrams, and Workflows. To facilitate automation and ultimately the use of AI agents, we have chosen to implement these as “Intelligent” XML Diagrams.

Additional MLMs are shown on Learning Map LM-006 that include more detailed help in preparing specific GraphML diagrams.

In the past, MySQL and other databases were used for PERA Learning Maps and Product hierarchies. However, “flat” XML documents prove to be a better alternative because this information can be utilized more easily by AI applications. For example, new XML information on the PERA website is loaded into the PERA Chatbot daily.

The first PERA User Guides (release planned for January 2026) will be for process industries, we therefore propose to use ISA 95 B2MML, and other XML standards such as BPMN and dataflow diagrams to model data flows between plant Automation and Control Systems (ACS) and the Manufacturing Execution Systems MES/MOM of the enterprise. MLM-022-F and MLM-022-G explain use of these standards within PERA.

