



zenon 12

HIGHLIGHTS

Accelerate access to life-changing medications

Life sciences and process manufacturing are complex and regulated, involving multiple stages, sterile environments, and expensive automated equipment. Government regulations restrict drug development, manufacture, labelling, and packaging, leading to lengthy approval times and high costs. The FDA approval process for new drugs requires extensive testing. zenon, a comprehensive drug manufacturing automation software solution, simplifies the process by providing streamlined workflows and efficient automation.

Open and modular process automation starts now

Module Type Package (MTP) Standard

The MTP Standard is still in progress – newly released parts will be implemented when available.

What parts are released and supported with zenon v12?

Parts 1 to 5.1 are included in zenon v12 onable insights for optimizing processes and driving business success.

VDI/VDE/NAMUR 2658		SUPPORTED
1. Basic Concept (draft)	↑ v12 ↓	✓ v 1.1
2. HMI – Concept		✓ v 1.0
3. HMI Interfaces		✓ v 1.0
4. Process Control		✓ v 1.0
5. Runtime Concept (draft)		✓ v 0.1
5.1 Runtime Concept – OPC UA (draft)		✓ v 0.1

Figure 1: MTP Standard

What's new in the Module Type Package (MTP) Studio

Compatibility Layer

- ▶ Read MTP files based on current and older versions of the MTP standard VDI/VDE/NAMUR 2658
- ▶ Versions are automatically detected by the MTP Editor.
- ▶ Conversion to newest version can be done automatically or vice versa
- ▶ Improved and extended validation report.

Reporting

- ▶ Generate reports to show batch relevant data.

MTP Gateway

- ▶ Interface for automatic MTP file creation.
- ▶ Get legacy equipment ready for MTP.
- ▶ Service offered by COPA-DATA.

Web Visualization Service (WVS)

- ▶ Support for Equipment model screen
 - Function execution
 - Filter usage
 - Alarm graphics
- ▶ Additional elements and properties, e.g. switch, bargraph, pointer.
- ▶ Single host deployment
 - Flexible parameterization of project access (URLs) and concurrent session limitation.
- ▶ Distributed deployment
 - Flexible network and application (user groups) segmentation.
 - Load balancing and lowest performance impact on process server.



Figure 2: Pharma HMI Demo supporting Web Visualization Service



Smart Objects

Enhanced functionalities and handling of Smart Objects

- ▶ Access protection for Smart Object Templates
 - Protect your tested/validated components against modification.
- ▶ Flexible Logic Project Mapping
 - Flexible allocation of physical and virtual target platforms (61131-3 runtime) to host PLC code.
- ▶ Use of WPF elements in Smart Objects
 - Enhanced graphical and functional possibilities with Smart Objects.
- ▶ Smart Object API
 - Extending the support of automated Smart Object engineering.

Report Engine

Status value evaluation

- e.g. distinct exclusion of invalid values.
- ▶ Coloring
 - e.g. status indication in graphs and tables.

External Information Model for OPC UA

zenon can now use information models (nodeset files) for OPC UA

- ▶ OPC UA Server
 - Support for external information model.
 - Improved data structuring possibilities. Benefit from standards-based information model.
- ▶ OPC UA Driver (Client)
 - Support for importing external information model.
 - Enabling offline tag browsing for OPC UA client implementation.

SAP Interface

- ▶ zenon's SAP interface now uses the SAP Netweaver interface
 - Benefit from compatibility with the latest SAP versions.
 - Exchange production data with the ERP layer to improve your workflows.

Robust and future-proof software technology via Linux: towards platform-agnostic energy automation

The Linux Service Engine's primary focus lies within its exceptional component for data acquisition and data storage, ensuring unparalleled compatibility between Windows and Linux-based components.

zenon drivers for Version 12 include but are not limited to:

- ▶ MODBUS_ENERGY
- ▶ SNMPNG32
- ▶ MBUS32
- ▶ stratonNG
- ▶ SAMPLE32
- ▶ 3S_V3
- ▶ BACnetNG
- ▶ BeckhNG
- ▶ GenericNet
- ▶ LOGIX_ODVA
- ▶ MELSECA (TCP based only)
- ▶ OmronEIP
- ▶ OPCUA32
- ▶ S5TCP32
- ▶ S7TCP32

Process Gateway version 12

Access OPC UA support: variable read/write, secure communication, OPC-UA client authentication using certificates.

