![COPADATA - do it your way]

zenon Handbook

Release notes 7.10

v.7.10

COPA·DATA
do it your way

Contents

1. Welcome to COPA-DATA help

GENERAL HELP

If you cannot find any information you require in this help chapter or can think of anything that you would like added, please send an email to documentation@copadata.com (mailto:documentation@copadata.com).

PROJECT SUPPORT

You can receive support for any real project you may have from our Support Team, who you can contact via email at support@copadata.com (mailto:support@copadata.com).

LICENSES AND MODULES

If you find that you need other modules or licenses, our staff will be happy to help you. Email sales@copadata.com (mailto:sales@copadata.com).

2. Revision text 7.10

This revision text includes the most important changes to the 7.10 SPO version
from March 2013 compared to the previous version 7.0 SP0.
 This list should most importantly give a quick overview of the new functional possibilities offered in the current version. More detailed information about the mentioned functions can be found in the documentation shipped with the product.

At the end of this document, you will find a list with all limitations of this version that were known at the moment of the release.

3. General

3.1 Supported operating system

Operating system	Required service pack	
	editor	Runtime
▸ Windows Embedded Standard 7 (if all necessary operating system components exist). Note: zenon Editor not available.	Cannot run	SP 0
▸ Windows Vista (Business, Enterprise and Ultimate version, x86 and x64 versions).	SP 2	SP 2
▸ Windows 7 (Professional, Enterprise and Ultimate version, x86 and x64 versions).	SP 1	SP 0
▸ Windows 8 (Standard, Professional, Enterprise version, x86 and x64 versions)	SP 0	SP 0
▸ Windows Embedded 8 Standard	Cannot run	SP 0
▸ Windows Server 2008 (All editions with the exception of Core)	SP 2	SP 2

		SP 1	SP 0
▸ Windows Server 2008 R2 (All editions with the exception of Core)		SP 1	SP 0
▸ Windows Server 2012 (All editions with the exception of Core)		SP 0	SP 0

Hints:

▸ All operating systems are supported in the multi-lingual version.

▸ Windows 8 RT is not supported for reasons relating to the system.

▸ Itanium processors are not supported for any operating system.

SUPPORTED WINDOWS CE-OPERATING SYSTEMS:

▸ Windows CE 5.0

▸ Windows CE 6.0

OVERVIEW

	Windows Embedded Standard 7/8	Windows Vista/Windows 7/Windows 8/ Server 2008 (R2)	Windows CE
editor		X	
Runtime	X	X	
Runtime for Windows CE			X
Web Server	X	X	X
Web Client	X	X	

3.2   Support for Windows XP

With zenon 7.10 the Windows XP and Windows XP Embedded operating systems are no longer supported.

3.3   Installation

MSDE INCOMPATIBILITY

zenon from Version 7.10 cannot be installed on systems on which the `Microsoft SQL Server Data Engine (MSDE)` is already installed. This affects systems on which zenon 6.20 or an earlier version has been installed most of all. You must first uninstall the MSDE database service.

SERVICES IN 64 BIT OPERATING SYSTEMS

If after installing 7.10 an older zenon version is installed the old setup will re-register the services to the 32 Bit variants. This may cause problems in the 64 bit version of zenon. For this reason, after installing the older zenon version the services have to be registered again to 64 Bit. This can easily be done with a batch file which is contained on the installation DVD in this folder.
`\Additional_Software\Register Admin Service and Log Service x64`

3.4   Conversion to Windows SQL-Server 2012 SP1

The SQL Server is switched to 2012 SP0 Express Edition version with zenon 7.10 SP0. The new SQL Server is automatically installed by the setup. Because each SQL server has its own file storage, projects from older versions cannot be opened directly in zenon 7.10. Projects that should be edited in zenon 7.10 must first be edited in the version in which they were saved. The project backup can then be read back in zenon 7.10 and it is automatically converted in the process. It is not possible to read it back into older zenon versions.

3.5   64-bit version

zenon is now available for Editor and Runtime as a 32-bit and 64-bit version. A 32-bit and a 64-bit zenon Editor and a 32-bit and a 64-bit zenon Runtime are installed on 64-bit operating systems. The file names of the executable files are identical for 32-bit and 64-bit.

On 64-bit systems, all services present in 64-bit are registered and used in the 64-bit version. Editor and Runtime can be started alternately. Projects can be executed in both Editors and in both Runtimes.

Components such as, for example, zenon Logic Runtime, zenon Logic Workbench, drivers, Process Gateway and other tools are always only used in the 32-bit version.

ADVANTAGES

The 64-bit version allows virtually unlimited memory access. It is therefore relevant to the use of larger projects, but also on computers that can be started at the same time (multi-project administration). Mixed operation of the 32-bit and 64-bit variants is possible in both the editor area and in Runtime. This way a server can be a 32-bit Runtime and a client can be a 64-bit Runtime.

LIMITATIONS

- ► The fundamental restriction, that only 64-bit DLLs can be uploaded in 64-bit processes, also have certain restrictions in the use of zenon. This mostly affects external components which are uploaded in the Editor or Runtime. Directly affected are DLLs, which can be loaded via VBA/VSTA code and ActiveX controls. These DLLs must be available as 64-bit version for use in the 64-bit Editor or Runtime. ActiveX controls supplied by COPA-DATA are available in 32-bit and 64-bit versions.

- ► No zenon 5.50 projects can be converted with the 64-bit editor. These must be converted beforehand with the 32-bit Editor.

- ► The Access database is no longer supported in the RGM. In order to be able to use MS Access data from previous versions under 64-bit, the project must first be converted in the 32-bit Editor. The property RGM data storage is no longer available from version 7.10. For details see Convert Recipegroup Manager database

- ► VBA was switched to VBA 7.1 version. Therefore VBA is also available in zenon 64-bit. If, in the VBA code, Windows API or other imported DLL functions are accessed, these calls must be adapted to 64-bit. In general, the following applies: A VBA file created with a 32-bit version must, before being used in a 64--bit version, be adapted.

- ► 64-bit VBA does not support any 32-bit ActiveX controls. This means that VBA wizards in 64-bit zenon do not work. zenon must be run in 32-bit mode to run VBA wizards.

- ► zenon Logic is not available as a 64-bit version.

- ► The web client is only available as a 32-bit version.

▸ Message Control: The following must be noted in order to send emails with Microsoft Outlook: The 32-bit version of zenon requires the 32-bit version of MS Outlook. The 64-bit version of zenon requires the 64-bit version of MS Outlook. Mixed use is not possible.

▸ 32-bit VBA on a 64-bit computer: If 32-bit Runtime is used on a 64-bit computer, the first VBA macro in the VBA macro list is not executed. This is a Microsoft limitation that cannot be rectified at the moment. Workaround: A dummy macro must be present as the first macro in the macro list. All other macros are then executed with no problems.

ADAPTING VBA TO 64-BIT SYSTEMS

When using the 64-bit version of zenon, VBA 7.1 also runs in 64-bit mode. In order to differentiate between 32-bit and 64-bit versions, some `Keywords`, `Defines` and `Declarations` have been introduced in VBA. Code created in the 32-bit version must generally be adapted before it is used in 64-bit versions.

CHANGES

Each existing API Declaration must be adapted before it can be used in 64-bit mode. For example, the API-Function "`FindWindow`", which finds a window by means of its class name and window name, is defined in a 32-bit VBA project as follows:

```
Private DeclareFunction FindWindow Lib "USER32" Alias "FindWindowA"
(ByVal lpClassName As String, ByVal lpWindowName As String) As Long
```

The 64-bit version of this `Declaration` must look as follows:

```
Private Declare PtrSafe Function FindWindow Lib "USER32" Alias "FindWindowA" (ByVal
lpClassName As String, ByVal lpWindowName As String) As LongPtr
```

Note: The 64-bit `Declaration` also works in the 32-bit version of VBA 7.1.

MICROSOFT COMMON CONTROLS

Because Microsoft does not offer a 64-bit version of the `Microsoft Common Controls`, objects from this package cannot be used in 64-bit mode. This package contains the `CommonDialog-Controls` that are often used for `File-Open` and `Color-Picking Dialoge`.

NEW CONSTANTS

Microsoft has introduced two new Conditional Compilation Constants:

▶ `VBA7`: Can be used to stipulate whether the project runs under VBA7 or an older version. This constant is useful for backwards compatibility and prevents different classes having to be created for version 7 and version prior to version 7.

▶ `Win64`: Allows the separation of 32-bit and 64-bit versions of VBA and can be used to ensure that code is only executed if VBA runs in the correct mode.

Example: `VBA7 Constant`

```
#If VBA7 Then
'Use VBA7 functionality
#Else
'Stick to old VBA solution
#End If
```

3.6   Editor compatibility with versions 6.20 SP4, 6.21 SP0, 6.21 SP1, 6.22 SP0, 6.22 SP1, 6.50 SP0 and 6.51 SP0, 7.0 and 7.10

The Editor of version 7.10 can also create Runtime files for the versions 6.20 SP4, 6.21 SP0, 6.21 SP1, 6.22 SP0, 6.22 SP1,6.50 SP0 and 6.51 SP0, 7.0 and 7.10. This makes it possible to operate different Runtime systems from one development environment. Functions not supported in older versions will not be available there. When creating projects for older versions, please make sure that you do not use any functions that are not supported by older versions.

With this new functionality, the user can choose whether he wants to update only his development environment to the newest version, or also his Runtime systems.

3.7   Runtime compatibility with versions 6.20 SP4, 6.21 SP0, 6.21 SP1, 6.22 SP0, 6.22 SP1, 6.50 SP0 and 6.51 SP0, 7.0 and 7.10

Runtime compatibility with versions 6.20 SP4, 6.21 SP0, 6.21 SP1, 6.22 SP0, 6.22 SP1, 6.50 SP0 and 6.51 SP0, 7.0 and 7.10

In the Runtime 7.10 SP0, it is possible to start projects from versions 6.20 SP4, 6.21 SP0, 6.21 SP1, 6.22 SP0, 6.22 SP1, 6.50 SP0, 6.51 SP0, 7.0 and 7.10 without converting them first. Mixed operation is also possible. This means you can load projects from versions 6.20 SP4, 6.21, 6.22 and 6.50, 6.51, 7.0 and 7.10 simultaneously in multi-project administration. This also works in network operation. For example, you can start projects from different versions with a WEB Client.

Exception: Runtime files for the Batch Control module up to version 7.10 are not backwards compatible. For details, see the Batch Control (on page 17) chapter.

3.8 Converting projects

Before you convert a project, please read back all Runtime changeable files (User Administration, Standard Recipes, Recipegroup Manager, Scheduler/PFS and Message Control) into the Editor. This ensures a complete data conversion and makes sure that none of the changes made in the Runtime are lost. After converting to the new version, create all Runtime files once including RT changeable data.

Note: You can find important information for the conversion of certain versions in the zenon help in the Project conversion manual.

CONVERTING MULTI-USER PROJECTS

Multi-user projects can only be converted if no elements are checked out. This means that all people configuring projects have to `accept` their changes first.

If this is not possible for some reason, you have to create a project backup of the project on the project database server and then immediately restore it. This resets all the `Under construction` information. Attention: All changes in the local project versions are lost!

The conversion can only be done on the PC, on which the central project database resides. If there is no Editor on the PC (standalone database server – no longer supported), you must install the Editor first. Only after that can the conversion be done on this PC.

CONVERSION OF PROJECTS 6.20 AND EARLIER

zenon projects in version 6.20 or older can no longer be directly read back in zenon 7.10 or higher.

Background: Versions that are based on the MSDE (SQL Server 2000) are not compatible with the SQL Server 2012 used in zenon.

Solution: First convert in zenon 7.0 and then in 7.10 or higher.

3.9   Documentation in PDF format and update of online help

The `Documentation Download Tool` program installs the current help in PDF format and updates the online help.

You can find the tool in the start folder under COPA-DATA -> Documentation 7.10 -> Documentation Download Tool.

3.10   Critical points that were known at the time of approval

It is possible that these issues been partly rectified or completely rectified over the course of time.

32-BIT VBA ON A 64-BIT COMPUTER:

If 32-bit Runtime is used on a 64-bit computer, the first VBA macro in the VBA macro list is not executed. This is a Microsoft limitation that cannot be rectified at the moment. Workaround: A dummy macro must be present as the first macro in the macro list. All other macros are then executed with no problems.

VBA IN THE WEB CLIENT IN INTERNET EXPLORER 10

VBA does not work with Internet Explorer 10.
In order to use VBA in the web client, select an earlier version of Internet Explorer or a different browser such as Firefox, Google Chrome or Safari.

4.   General improvements

4.1   Toolbars

The toolbar of the macro list was revised and some functions have been added.

4.2 WPF

The WPF element `CircularGauge` was expanded from 3 to 6 display areas. Backward compatibility is not guaranteed here.

Note: Per project only one group file for a WPF element can be used in the Editor as well as the Runtime. If two versions of a group file are available in a project, then the first loaded file is used. A user enquiry is made as to which version should be used. No further actions are needed for the maintenance of the versions used up until now. If a newer version is chosen, all corresponding CDWPF files in all symbols and images in all projects that are loaded in the Editor or in Runtime must be adapted.

4.3 Usability

In the course of the optimization of user guidance and operation of the user interface, the screen filters and their time filters and the operation of these has been completely revised and standardized.

4.4 User administration - blocking of modules in the Editor

In zenon, each user can be assigned function authorizations for Runtime and/or the Editor. These relate to functions in Runtime and the configuration of modules in the Editor. If a user does not have a function authorization, then

▶ In Runtime: the corresponding functions cannot be executed

▶ in the Editor: Tool bars and context menus of the corresponding module are grayed out

4.5 Multi-Touch

Multi-Touch was enhanced for Windows 8 gestures.

If Windows 8 gestures are activated, many images and screen element Multi-Touch gestures are available for operation.

Gestures can only be interpreted using VSTA. They are not available with VBA due to the system.

4.6   Operation lock

In projects without a network, an operating block can be set by means of a binary variable. The Operation lock property was implemented for this. Free operating authorizations can be implemented by means of this function.

4.7   Project Translation Interface

The `Project Translation Interface` program offers support for translating COPA-DATA language tables.

The `Project Translation Interface` is an external tool and is started from the Windows start menu in the COPA-DATA node.

5. Modules

5.1   Alarm areas

A variable can now be assigned to several alarm areas.

5.2   ALC

The module Automatic Line Coloring was supplemented with impedance-based fault locating and load distribution calculation. This also recognizes curves and their parameters. The model is not used internally in zenon, but makes properties and methods for external evaluation available.

`Measured value of the current apparent power (load distribution calculation) in [kVA]` parameter implemented for the 'Drain' topological element.

5.3   Equipment modeling - import and export via API

Import and export of an equipment model is possible via VBA/VSTA.

5.4 Historian

When loading archive data from the readback folder, the archive data from the Runtime path and from all subfolders of the readback folder is also read.

5.5 Batch Control

The module batch control enables the batch production with creation and administration of recipes in the Runtime.

The module was enhanced with:

▶ operations

▶ screen for operations and lists in the master recipe and control recipe

▶ The possibility to exit from phases

▶ datasets for the creation of reports via the Report Viewer

▶ detection of communication faults

▶ Secure writing of command parameters

▶ Amended process for phases

▶ Display of parameters in parameter lists

▶ Touch operation for control recipes

▶ Cyclical data storage and restarting in the event of an error

▶ Functions to create control recipes and run recipe commands (automation functions)

▶ Connection to external order administration

▶ Added filter possibilities and improvements in usability

NOTE FOR CHANGE FROM 7.00 TO 7.10 OR HIGHER

Before converting a project to a new zenon version all recipes must be completed. Once the restart has taken place running recipes are not used further. The restart only functions within the same zenon version.

EFFECTS OUTSIDE BATCH CONTROL

When using different versions for Editor and Runtime, problems can occur if the Batch Control module is licensed but Batch Control is not used.

Background: Some files are compiled in Runtime as soon as the module is licensed. A batch project that was compiled with 7.0 cannot be executed in 7.10.

Solutions:

▶ Compile the project with an Editor of version 7.10 or higher.

▶ Use a Runtime of version 7.0.

▶ Use a license that does not include the Batch Control module.

5.6 CEL

OPERATE HEADER IN THE RUNTIME

Header can be operated in Runtime. With this an individual adjustment of the display in the Runtime is possible:

▶ Move columns

▶ Change size

▶ Changing sorting.

SORTING

In the case of sorting according to time stamp, entries with the same time stamp are also sorted according to the time of creation.

5.7 ETM

With the new option `Only Delta Data` only the archive is reloaded in the diagram when actualized, by having changed data. The archive data can also be sorted according to the time stamp.

The performance of the option `lengthen curve` was changed: The curve is only lengthened up to the current time and not until the boarder of the plot anymore.

With the automatic scaling option, the scaling of the axis for the configured curve is automatically determined when configuring the Y-axis parameter. The `min`/`max` values of the area to be displayed are used as axis limits.

5.8 PFS

PFS time model groups are available for VBA.

5.9 Report Viewer

The Report Viewer was further enhanced with:

- ▶ Further datasets for RGM and batch
- ▶ module-specific filter
- ▶ export as PDF
- ▶ Print option
- ▶ various time domains

DATASETS IN GENERAL

- ▶ The datasets for AM, CEL, ARCHIVE and ONLINE were supplemented with the **RESOURCESLABEL** entry.
- ▶ The maximum number of lines can be configured in the datasets for AML and CEL.
- ▶ The maximum number of lines and the type of compression can be configured in the dataset for ARCHIVES.

DATASETS FOR BATCH CONTROL:

Now several datasets are available for Batch Control:

- ▶ Master recipe

- ▶ Control recipe

- ▶ Recipe screens

- ▶ Matrix as structure

- ▶ PFC structure

- ▶ Phases

- ▶ Parameters

- ▶ Transitions

- ▶ Unit allocations

- ▶ Operation instance

The configuration takes place through switching to a screen of the `Report Viewer` type.

DATASETS FOR RGM

Now the Report Viewer can also display recipe data and values from the Recipegroup Manager. The configuration takes place through switching to a screen of the `Report Viewer` type.

EXPORT AS PDF

With the Report Viewer areas can now also be created or saved in PDF format or directly generated on a printer. In addition to the screen-type-specific function it is also possible to use the new zenon standard function.

MODULE-SPECIFIC FILTER

With the Report Viewer it is now also possible to filter in Batch Control recipes via the module specific filter.

TIME DOMAINS

The Report Viewer can use several time domains from version 7.10 and up. For upwards compatibility the first two configured time filters on the list are used.

5.10 RGM: MS Access database is no longer supported

From version 7.10 the MS Access database is no longer supported in the Recipegroup Manager. When opening an existing project the filing is automatically converted to `Binary data`.

As the 64-bit version of zenon does not support the MS Access database the conversion firstly needs to be processed with the 32-bit version.

5.11 Variables

The Symbolic address property is available for some drivers,m such as Logix_ODVA and IEC61850.

6. Programming interface

DIRECT DRAW

All classes, methods and events that are used for direct drawing in zenon screens using the zenon API (VBA/VSTA) were removed for performance reasons. This concerns:

▶ `Draw` class

▶ `DrawAPI` method

▶ `Draw` event

64-BIT

If you use the 64-bit version of zenon, this has effects on the use of VBA. You can read about this in the 64-bit version (on page 9) chapter.

EQUIPMENT MODEL

Import and export of an equipment model is possible via VBA/VSTA.

XML IMPORT - DIALOG

For an XML import via the zenon API, the dialog that is used to confirm overwriting is now suppressed for all import processes.

6.1   VBA

The `VBA` node has been renamed to `Macro list`.

TOOLBAR

The toolbar of the `macro list` has been revised and some functions have been added.

WEB CLIENT IN INTERNET EXPLORER 10

VBA does not work with Internet Explorer 10.
In order to use VBA in the web client, select an earlier version of Internet Explorer or a different browser such as Firefox, Google Chrome or Safari.

7. Wizards

As part of the switch to 64-bit, the VBA workspace and the wizard have also been revised.

THE FOLLOWING WIZARDS ARE SUPPLIED IN THE VBA WORKSPACE:

> 💡 **Info**
>
> *As a result of limitations from Microsoft (Microsoft common controls are no longer*
> *supported with 64-bit) some wizards can now only be executed in the 32-bit zenon Editor.*
> *You can find details on this from the following:*

- ▶ Variable Import Wizard (zenon 32-bit and 64-bit)

- ▶ Documentation Wizard (zenon 32-bit only)

- ▶ Factory Link Wizard (zenon 32-bit only)

- ▶ XML Import Wizard (zenon 32-bit only)

- ▶ PdiAG Import Wizard (zenon 32-bit only)

- ▶ Symbol Wizard (zenon 32-bit only)

WIZARDS CONVERTED FROM VBA TO VSTA IN THE VSTA WORKSPACE (C#) THE FOLLOWING ARE SUPPLIED:

- ▶ Language Change Wizard (VBA) -> Language Table Wizard (VSTA) new

- ▶ Language Translation Wizard (VSTA) new

- ▶ System Text Wizard (VBA) -> System Text Wizard (VSTA) new

THE FOLLOWING WIZARDS WERE TAKEN FROM THE WORKSPACE, BUT CAN BE REQUESTED FROM COPA-DATA SUPPORT@COPADATA.COM:

- ▶ Demo Wizard

- ▶ VBA Update Wizard

- ▶ World View Wizard

7.1   Analyzer Export Wizard

The Analyzer Export Wizard was adapted to the metadata structure of the zenon Analyzer 2.0. The operation was optimized and supported for archive and project implementation.

7.2   Language Translation Wizard

Wizard for the import or export of zenon project data for Project Translation Interface.

Note: The Project Translation Interface is a new tool for easier translation of configurations in zenon.

7.3 Language Table Wizard

The Language Table Wizard was converted from VBA to VSTA and revised. This Wizard replaces the old Language Change Wizard (VBA).

The wizard searches through the active project for translatable text or key words (text marked with '@') and writes these to the selected language table of the project or also optionally in the global project. At least one table (`ZENONSTR.TXT`) must be selected for import so that it can be used as a zenon reference text.

7.4 System Text Wizard

The System Text Wizard was converted from VBA to VSTA and revised.

Linked projects can also be edited from zenon v7.10. Some options for settings were created in order to improve usability.

The System Text Wizard allows the import of system text into the language table. System texts are Runtime texts that are used in zenon dialogs and menus and cannot be changed by the user. In order to be able to make these texts, which are predetermined by zenon, compatible with language switching, these texts must first be imported into the language table with this wizard. The number of the key words and texts imported can be limited in the settings.

8. Process Gateway

8.1 Everywhere Server

The Everywhere server is for communication from smartphone apps to zenon Runtime. It is part of the Process Gateway.

8.2 IEC 60870-6 TASE.2 ICCP

Process Gateway implements both an ICCP server and a client

9. Drivers

NOTE ON ADDITIONAL SOFTWARE FOR DRIVER

Some drivers need additional software, for example software from manufacturers of control units. Some of these software packages have been programmed for Windows XP and do not support later versions.

zenon 7.10 SP0 no longer supports Windows XP and cannot be installed with this operation system.

If you need additional third-party software in order to use a driver:

- ▶ Try to see if the additional software will run on Windows 7 or higher.

- ▶ Inform the manufacturer about the lack of support and request an update

COPA-DATA tests all drivers it is provided with.
Attention: The compatibility of software from third-party providers with operating systems is not tested by COPA-DATA.

9.1 Step 7 import for TIA portal

The Step 7 import has been revised and adapted to the new project structure implemented by Siemens (version 11).

9.2 3S_Arti_NG - Codesys supports Big Endian

The Codesys driver now supports Big Endian devices. To do this, the `Motorola byte folder` option was added to the driver configuration. This must be activated for communication with a Motorola CPU.

9.3   BACnetNG

LIMIT FOR INCOMING QUERIES

The limit for incoming queries has been amended:

- ▶ The default value for setting `Max. concurrent requests` was increased to `50`.

- ▶ In the configuration, the set value is checked for adherence to the limits of `1 - 256`.

COV SUBSCRIPTION

COV subscription was amended:

COV additional overlapping [ms]	Additional parameter to determine when the renewed subscription is sent. Prevents, with a delayed BACnet reaction, the loss of sent values through a timeout. Default: 0 Formula: `(APDU_timeout*(APDU_retries+1))-COV_additional_overlapping`
Character encoding	Used character set: ▶ ANSI X3.4 ▶ ISO 10646 (UCS-4) ▶ ISO 10646 (UCS-2) ▶ ISO 8859-1

IMPORT

For the zenon variable that is created for `PRESENT-VALUE`, the following are set if present:

- ▶ `Min/Max value` property

- ▶ Decimal points according to the properties `min-/max-pres-value` and `resolution` of the BACnet object

9.4 BiffiDCM32: UDB ports can be configured

The UDB ports can now be configured in the BiffiDCM32 driver.

9.5 BurPVI supports RDA

The BurPVI driver supports RDA.

9.6 DNP3_NG

ADAPTATION TO LEVEL 1 OF THE SPECIFICATION

The DNP3_NG driver supplements the DNP332 driver. It fulfills level 1 of the DNP3 specification and now supports authentication according to version 2, dual end points and redundant addressing. Variables outside of the event classes are possible, the event polling cycle is individually adjustable per class and the polling can also be triggered independent of an interval. The drivers can also release reports from the control system which have not been requested and limit their capabilities to level 1. Variables can be imported online from the control system or via an XML file.

COMMAND PROCESSING CUSTOMIZED AS STANDARD

If `direct Operate` is set for a variable command mode, then only direct writing of the value is possible. The mode `automatic SBO` is however performed for writing a Select from the stack with immediate `Operate`, and the status of the variables includes a `CoT_actterm` at the end. The functionality only applies for binary and numeric outputs. A binary output from the `BIT` type can also be used for the writing of `Close` and `Trip` by setting `QoC` to `2`.

9.7 EibV2_32

The falcon Runtime and the ETS files need not be ordered via an own CD anymore. You can now find it on the zenon DVD in the folder: `...\Additional_Software\EIB – Falcon Runtime`.

9.8 IEC61850 can read large object modules via small PDUs

GETNAMELIST ON DO OPTION IN THE DRIVER CONFIGURATION

The diver - IEC61850 client - can, if the `GetNameList on DO` option is enabled, read the `Objekt Model` of the IEC61850 server by requesting data objects (DO) for each `Logical Node` available in the server per `Functional Constraint` (FC) defined in the IEC61850 standard. Therefore `Objekt Models` can then be read when some `Logical Nodes` are larger than the PDU size supported by the server.

9.9 IEC870-103: New object types

The IEC60870-103 driver

- ▶ now includes new driver object types:
  - Generic Data
  - Generic Data Trigger

- ▶ Supports broadcast address in the time synchronization commands

9.10 IEC62056 uses C mode

The driver IEC62056 now uses C mode instead of A mode for communication. All data points can be addressed in the counter, not only those from table 1. The variable name can now be adjusted via a driver specific property. If this is empty, the variable name is used. The time stamp can also be rounded up or down to the value of a start or end of an adjustable interval. The time can be set via RD command to C003.

9.11 Kuka32

The new Kuka32 driver has been implemented. Direct connection to the Kuka Cross3KRC robot control.

9.12   Mitsubishi FX supports the MC protocol

The Mitsubishi FX driver now supports the MC protocol.

9.13   Modbus Energy

COSTRONIC DFB

The driver now supports COSTRONIC DFB.

OFFSET 1

The `Offset 1` option can be configured for the driver. The driver subtracts `1` when the variable addresses (coils, register) are sent and adds `1` when they are received.

9.14   Omron Fins with new object type

The driver now has EM `Area` as a new object type.

9.15   S7SPONT supports the allocation computer to data block

The S7SPONT driver now supports the allocation of computers to data block numbers.

9.16   STERIFLOW

Drivers for MPI-communication with STERIFLOW devices were implemented.

9.17   Metrawatt

The new Metrawarr driver allows serial communication according to the ECS protocol with the energy sum counter stations `GOSSEN METRAWATT U160x.`

10. Important information

10.1 Integration of VBA wizards and VSTA wizards

All VBA wizards are saved in the file "zenWorkspace.vba" by the zenon Editor. All VSTA wizards are saved in workspace AddIn.

When performing a new installation, these files will only be copied to your computer if they do not already exist in the installation folder. Existing VBA/VSTA files are not overwritten, because all your changes would be deleted in this case. If you want to use our new wizards or modified ones, you can import them manually via the menu "`File – Update Wizards`" in the Editor. At this you can decide yourself which wizards you want to overwrite.

10.2 Overwriting Runtime files

When creating Runtime files in the Editor it can happen, that files changed in online operation are overwritten. This occurs with the following modules:

- ▶ Recipegroup Manager
- ▶ Production & Facility Scheduler or Scheduler
- ▶ User administration
- ▶ Standard recipes

In order to guarantee that data created in runtime (recipes, schedules etc.) is not lost when creating Runtime files, there is a new tab in the dialog for project configuration: "`RT changeable data`". For the modules mentioned above you can define here whether the concerned files should be overwritten when Runtime files are created. If the checkboxes are not active, the files are overwritten!

This behavior is also true for the Remote Transport, when the Runtime files are to be transferred to another computer. So these checkboxes also apply here. If you want to transport all files to the remote system, deactivate all checkboxes. Otherwise the corresponding data will not be transported.

When creating Runtime files and when using Remote Transport, a message appears in the output window indicating that the concerned files were not overwritten.

The standard setting is: Runtime Files are not overwritten!

10.3 Converting existing data

If a project is started in Runtime version 7.x for the first time, the Runtime files of the concerned modules are converted. This guarantees that data changed in online operation is not lost. To do this, please read about conversion of projects (on page 13) in the General (on page 7) chapter.

Attention: All files have to be created in the Editor for the new version; otherwise the project cannot be started!

10.4 zenon Logic Intellisense is slow

For large programs the Intellisense function of the zenon Logic Workbench can cause the project to open very slowly. In this case you should deactivate the Intellisense function in the straton Workbench.

10.5 Process Desk – killing tasks

The Process Desk of zenon now allows you to kill tasks that got stuck.

Attention: Some drivers need a certain follow-up time, because they write a process image on closing. Premature closing can result in data loss! Use this option only in case of emergency, when you are really sure, that the task will not close on its own.

10.6 Page preview and printing in the Report Generator

In order to use the page preview and the printing of the Report Generator, a printer must be configured.

10.7 Saving reports of the Report Generator in the Runtime

Please be aware that on saving reports in the Runtime, all functions are replaced by the current contents of the cells (numbers). The functions in these reports (`.xrs` files) are no longer available. Additionally, these reports can no longer be edited in the Editor. So please use the MDI function "`Save`

`as`" so that the original reports from the Editor are not overwritten. Moreover, we recommend to define the original reports as `read-only`.

10.8   Reload of projects with Simulator driver variables

Simulator driver variables, not projected as HD variables, are reset to the value `0` with the function "`Reload`". Only HD simulator driver variables keep their value after reloading.

10.9   Complex vector graphics

Please note when configuring process screens. When using many and/or complex vector graphics, loading screens in the Runtime can take a long time.

10.10   zenon in the Startup folder with dongle licensing

If zenon is started from the Startup folder, it may happen that it starts before the Wibu Key or Codemeter driver. Consequently, no dongle will be found and zenon will start in demo mode.

You can change this behavior by configuring a delayed start of the Runtime. For this, you need to make the following entry in the `zenon6.ini` file:

`[DEFAULT]`

`STARTDELAY=[delay of the Runtime start in ms]`

10.11   Wibu Key error message „WK1128"

If you get the error message `WK1128` when starting the Editor or Runtime, an obsolete version of Wibu Key is being run. Install the current version of the Wibu Key software from the installation DVD.

10.12   Network access - Firewalls

Different components of zenon try to access the network and can cause an alarm by firewalls or personal firewalls. If you want to use the network or the Remote Transport, you have to unlock the according TCP/IP ports.

The following zenon components result in network access:

▶   Administration service (zenAdminSrv.exe)

▶   Editor (zenone32.exe)

▶   Database server (zendbsrv.exe)

▶   Diagnosis Server (zenLogSrv.exe)

▶   OPC Server (zenOPCsrv.exe)

▶   Process Gateway (zenProcGateway.exe)

▶   Remote Desktop (zenVncSrv.exe and zenVncCli.exe)

▶   Network server (zennetsrv.exe)

▶   Transport service (zensyssrv.exe)

▶   Drivers with TCP/IP connections

▶   Web Server (zenWEBsrv.exe)

▶   zenon Logic Workbench

▶   zenon Logic Runtime

10.13   ActiveX Controls

If special ActiveX controls are developed, the following has to be considered:

If the DISPATCH – which is passed in the `zenonInit` event of zenon – is saved in the ActiveX control, an `AddRef` has to be carried out because this DISPATCH is only valid within the `zenonInit` event. If "`AddRef`" is not called, a crash of the entire Runtime will be the result. Additionally, a release has to be performed in the "`zenonExit`" event.

10.14   MS-ActiveX element DBGrid32.ocx does not work

There a several problems known in context with the use of Microsoft ActiveX element `DBGrid32.ocx` in the Runtime. Therefore please use other ActiveX elements such as `MSDATGRD.ocx`.

10.15   Erroneous line display if extended graphics mode deactivated

In the extended graphics mode, dashed lines with a line width >1 can be drawn. If you deactivate the extended graphics mode and zoom onto the line, the line will be displayed as solid.

10.16   The database server service must be entered correctly in the Startup Tool

Beside the versions you can also change the data base server with the Startup Tool. If you use this function, please note:

Between version 6.21 SP0 and 6.22 SP0 the SQL Service was entered incorrectly in the zendb.ini by the setup. This was no problem because the zenDBSrv did not consider the value. As of 6.22 SP1 this is the case again.
If you read the values using functionRead from zenDB.ini, the values are stored wrongly in the Startup Tool. You must check existing entries and change them if necessary.

10.17   String arrays with straton32 driver

Several string arrays with the same sice can be read out correctly with the `straton32` driver only as of version 6.22 SP1 and zenon Logic Workbench SR7-3. If projects of older versions are converted, the string length must be changed for every string array in order for the communication to work.

10.18   Transport service Autostart

The transport service (zensyssrv.exe) is normally started automatically by the operating system when a user logs in. If the transport service is not started, the computer cannot be reached via the Remote Transport.
At a new installation it is restarted after the computer has rebooted.

If you accidentally delete the entry for the automatic start from the registry, you can restore it with the help of command `Register` in the Startup Tool. At this the transport service is also automatically restarted.