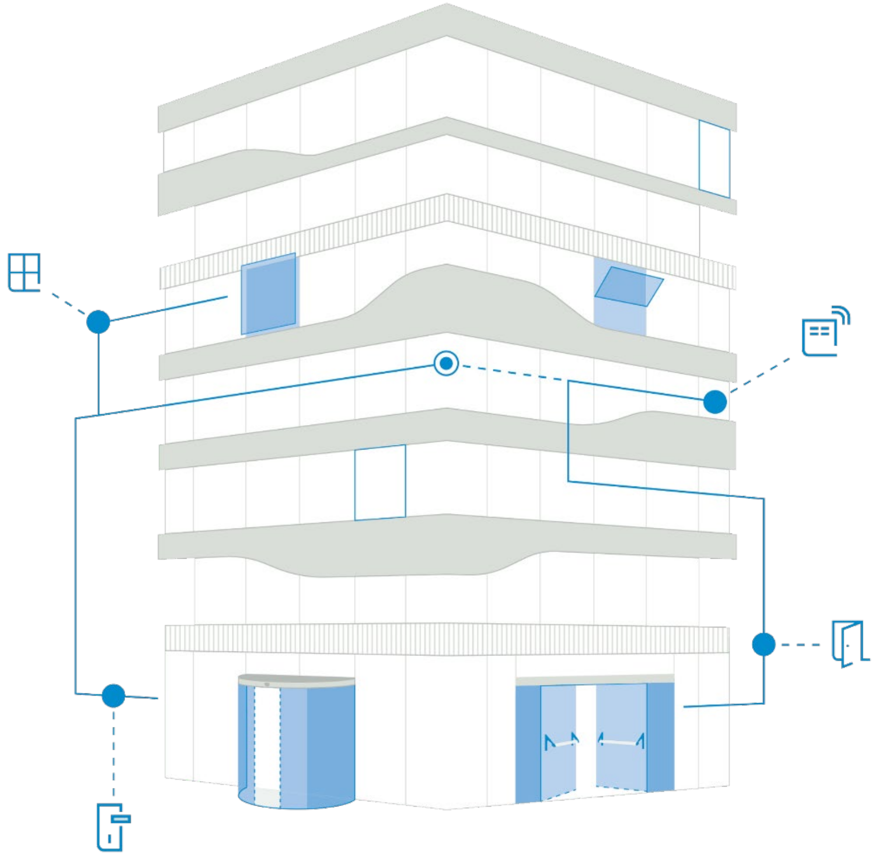

myGEZE Control

EN User manual

Building automation and control system

Overview

- OPC UA
- OPC data sets
- Module types

213697-00 03/2025

Contents

1 Introduction

1.1 Symbols and illustrations

Warning notices

In these instructions, warning notices are used to warn against material damage and injuries.

- Always read and observe these warning notices.
- Observe all the measures that are marked with the warning symbol and signal word.

Warning symbol	Warning	Meaning
	DANGER	Danger to persons. Non-compliance will result in death or serious injuries.
	WARNING	Danger to persons. Non-compliance can result in death or serious injuries.
	CAUTION	Danger to persons. Non-compliance can result in minor injuries.

Further symbols and means of representation

Important information and technical notes are highlighted to explain correct operation.

Symbol	Meaning
	means "important note" Information to prevent property damage, to understand or optimise the operation sequences.
	means "additional information"

1.2 Reference documents

Type	Name	Material no.
User manual	myGEZE Control	207492
User manual	myGEZE Control BACnet definition	207846

1.3 OPC Unified Architecture: OPC UA

OPC UA stands for the industrial communication standard Open Platform Communications Unified Architecture. It can be used to provide data from machines and devices made by different manufacturers in a standardised format.

OPC UA helps to collect device data and make it accessible to other applications, such as building management systems or physical security information management systems.

myGEZE Control is an OPC server that provides data from networked GEZE product systems. A licence option is required in the system to use this function.

The OPC UA standard uses a security concept.

Encrypted communication	Communication between the OPC server and the OPC client is encrypted.
Authentication	Support for client/server certificates to protect the communication connection.
Admission control on the user level	Definition of user-/group-based access rules at the namespace and node level.

1.4 OPC UA tools used

This document uses the tool UaExpert from Unified Automation GmbH (free version available) to display the node sets and address spaces.

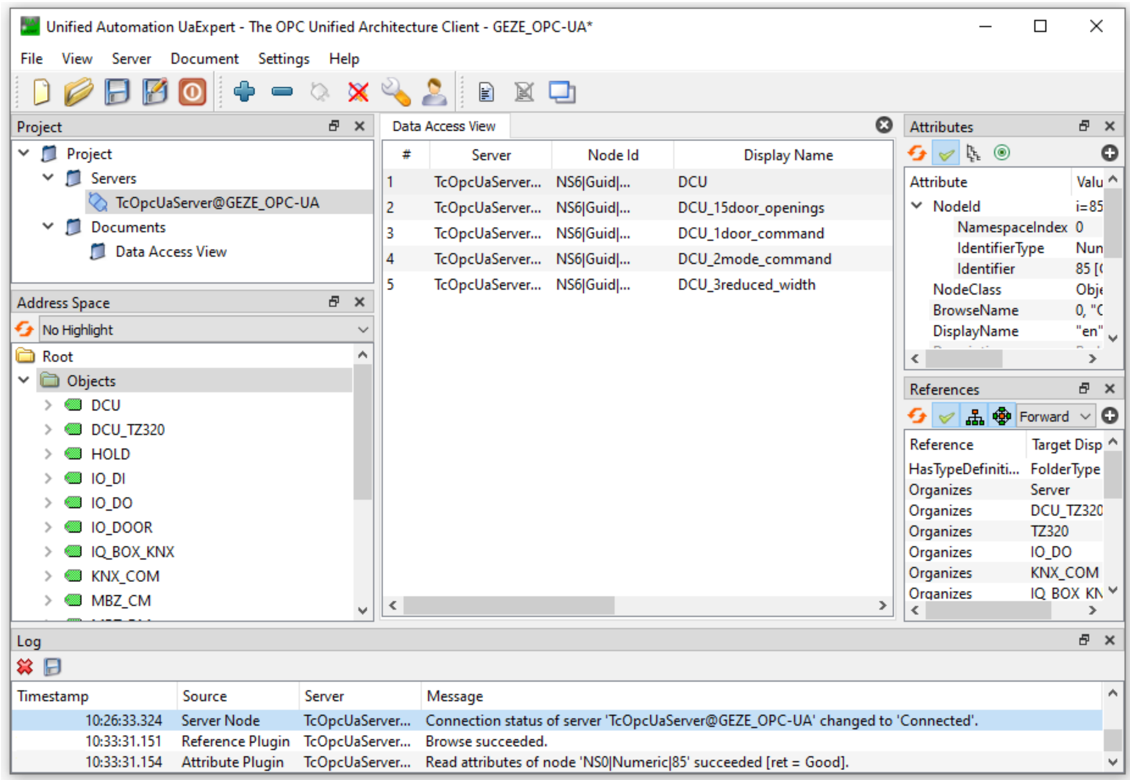

Fig. 1: UA Expert example graphic

1.5 Activated ports

myGEZE Control has a firewall. Only the ports necessary for communication are activated in this firewall. The following TCP ports are available by default for OPC connections:

- TCP 4840, 4841, 4885, 49320, 4897

Additional ports can be activated.

- If a connection between the systems is established by host name and the DNS (Dynamic Name Service) function, it is possible that other ports may be used for this purpose. This causes the firewall to block this connection. GEZE recommends connecting directly to the IP address.

1.6 Configured users

The myGEZE Control OPC UA server is accessed via user accounts. Two users are configured by default for this purpose.

User	Authorisation	Password
GEZE	▶ Access to data from all configured and networked devices	1863
OPC	▶ Access to all configurations of the OPC UA server. ▶ Authorisation to restart the OPC UA server. ▶ Management of certificates, GDS connections. ▶ This user has NO access to configured and networked devices.	2030

GEZE recommends customising these passwords.

1.7 Certificates

To simplify configuration and initial commissioning, the myGEZE Control OPC UA server is set by default to trust every certificate.
Setting: 'TrustAllClientCertificates==True'
This means that an OPC client can use its certificate to connect to the OPC server without further required steps. The certificate files exchanged in this process are not stored in the OPC server.

- To ensure a secure connection between the systems, do not leave the setting as 'TrustAllClientCertificates==True'.

There are various ways of handling customer certificates. In some cases, they can be handled directly via the customer's tool, which the administration provides.
The myGEZE Control OPC UA server offers the option of handling them via OPC. These options can be used to change settings and load certificates into the controller system. It is possible to link to the URL of the customer's GDS pull. This means that certificates managed and provided by GDS are automatically loaded into the controller system.

- These settings can only be changed with the OPC administrative account.
- Incorrect configurations can make it impossible to access the controller. In this case, please contact GEZE Support.

The following section describes the configuration options using the 'UaExpert' tool from Unified Automation GmbH.

2 Configuration with UaExpert

2.1 Connect to the myGEZE OPC UA server

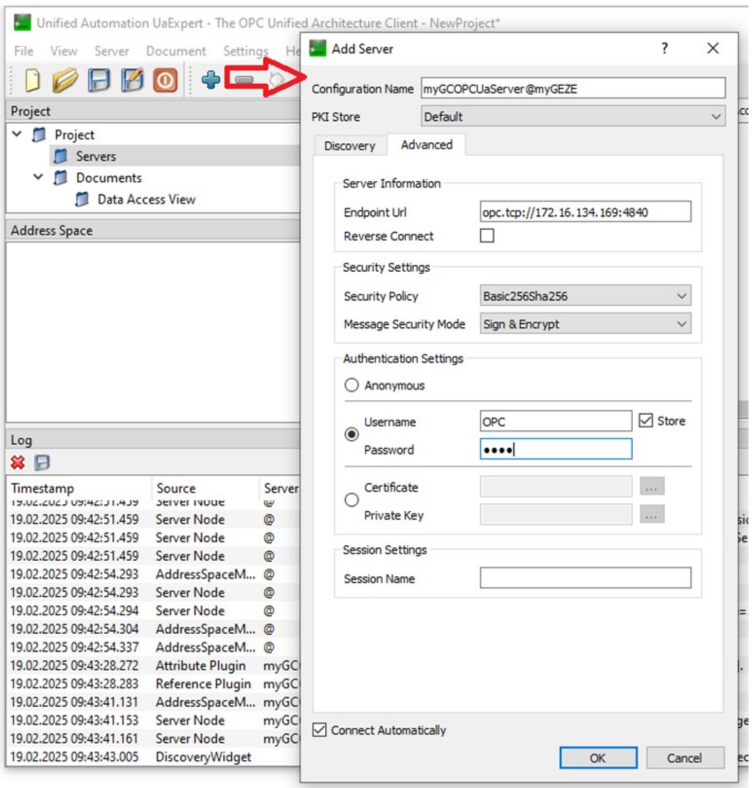

Fig. 2: Establish connection

- Use '+' to add a new connection.
- Configuration name: assign any name
- PKI Store: Default
- Endpoint Url: opc.tcp://IP address:enter port
- Security Policy: Basis256Sha256
- Message Sec. Mode: Sign & Encrypt
- User name: OPC
- Password: Enter password
- Confirm the connection with 'OK'.

If the connection is established successfully, UA Expert will retrieve the data from the OPC UA server.

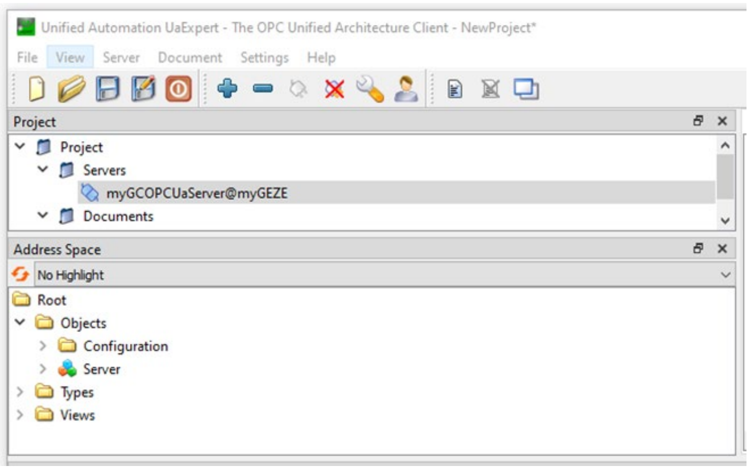

Fig. 3: OPC UA data

The areas for configuration are visible in the project structure according to the user's OPC.

2.2 Entries from GDS server

In the project structure, open the 'Configuration'/'GDSPull' section.

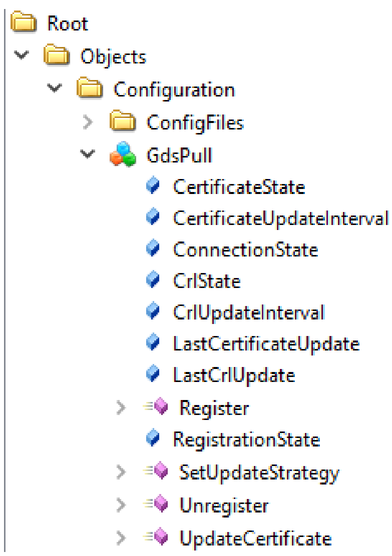

Fig. 4: GdsPull

GDS systems can be registered and deleted, and the update strategy can be defined here.

2.3 Register GDS

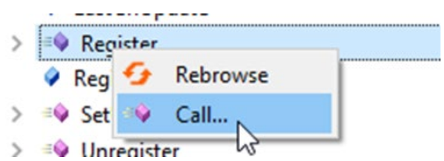

Fig. 5: Call register

Select the "Call" function in the context menu.

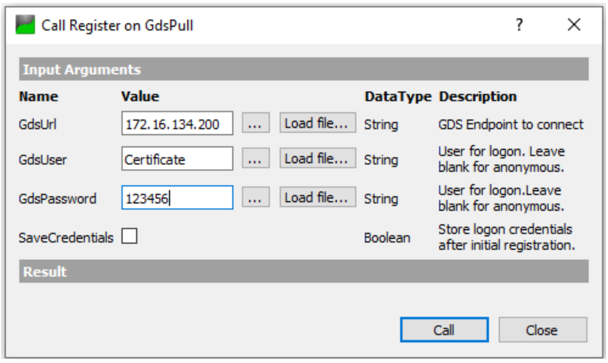

Fig. 6: Call Register on GdsPull

- GdsUrl: Enter IP or URL of the GDS
- GdsUser: Enter user
- GdsPassword: Enter password
- Start the function by selecting Call.
- After the function is executed successfully, a confirmation appears under Result.

2.4 Delete GDS

This function can be used to disconnect a GDS connection.

- Do not perform this function at this point.
- This function is only mentioned here for the sake of providing complete documentation.
- Only use this function if you explicitly want to disconnect the GDS connection and GDS is unable to do so itself.

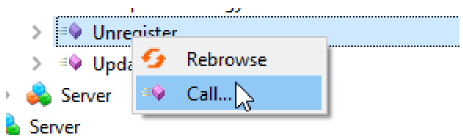

Fig. 7: Call Unregister

Select the "Call" function in the context menu.

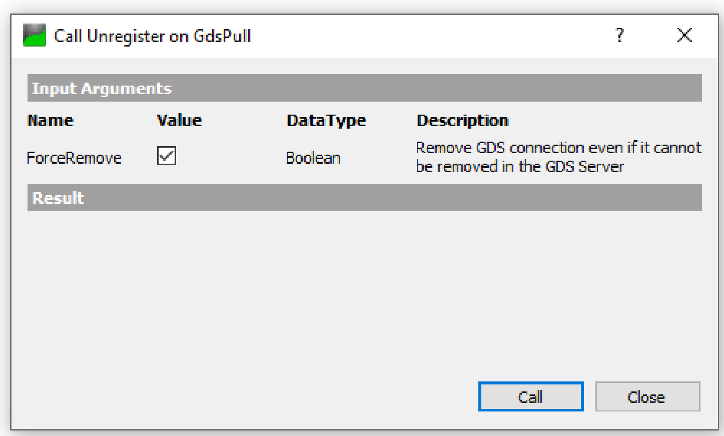

Fig. 8: Call Unregister on GdsPull

- Select Force Remove.
- Start the function by selecting Call.
- After the function is executed successfully, a confirmation appears under Result.

2.5 Set update strategy

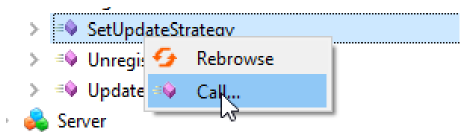

Fig. 9: Call SetUpdateStrategy

Select the "Call" function in the context menu.

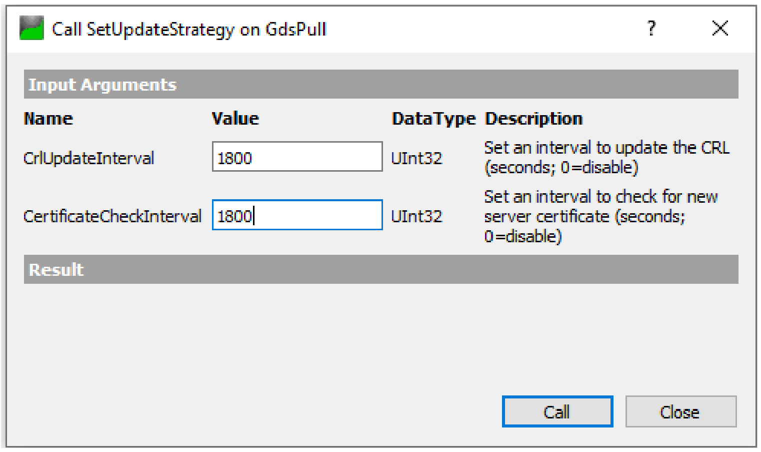

Fig. 10: Call SetUpdateStrategy on GdsPull

- ▶ Enter the intervals for the update and CertCheck.
- ▶ Start the function by selecting Call.
- ▶ After the function is executed successfully, a confirmation appears under Result.

2.6 Complete direct update

Fig. 11: Call update

Select the "Call" function in the context menu.

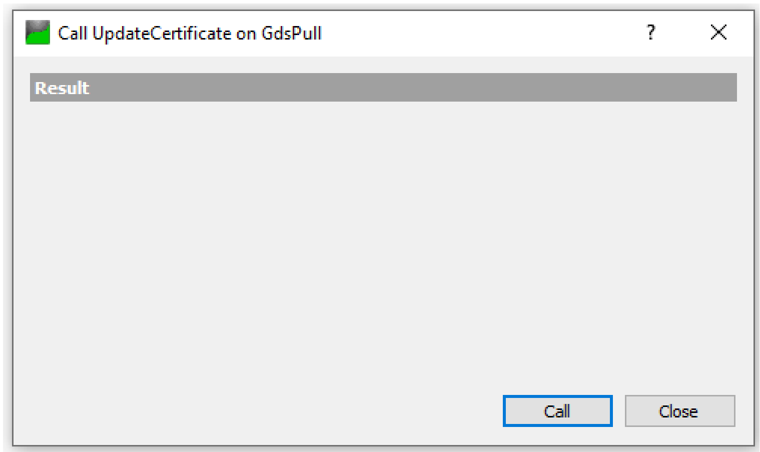

Fig. 12: Call update on GdsPull

- Start the function by selecting Call.
- After the function is executed successfully, a confirmation appears under Result.

- It is essential to execute this function at this point in the configuration of a GDS. Otherwise, OPC UA access to the control may no longer be possible after changing the access to valid certificates (the next step described here). In this case, it will only be possible to restore this access through a GEZE administrator account.

2.7 Edit the TcUaServerConfig.xml file

If the registration on the GDS was successful and the certificate was updated for the first time, the connection to the myGEZE Control OPC UA server can only be switched to certificate-based communication. This setting must be changed in the TcUaServerConfig.xml file.

The following steps explain how to read this file from the controller, edit it and write it back to the controller using UAExpert.

2.7.1 Open file access

In the context menu, call up the following function in the Call context menu in the path Objects/Configuration/ConfigFiles/TcUAServerConfig.xml/Open:

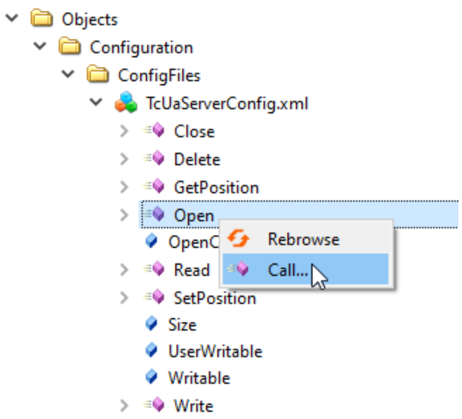

Fig. 13: Open file access

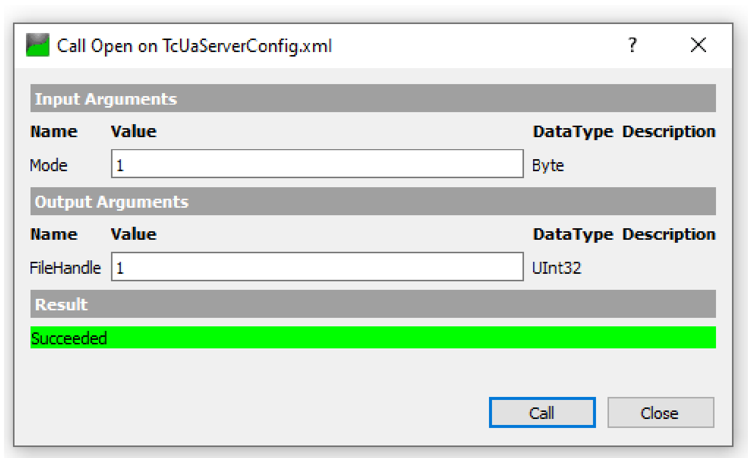

Fig. 14: Call Open

This function is used to open file access to the file.

- Open file access for reading.
- Mode: 1 Read
- Filehandle: Do NOT make any entry!
- Press Call

The program returns a file handle after the function has been executed.
- Remember this file handle for the next steps!

2.7.2 Read file

In the Call context menu of the Objects/Configuration/ConfigFiles/TcUAServerConfig.xml/Read path, call up the following function:

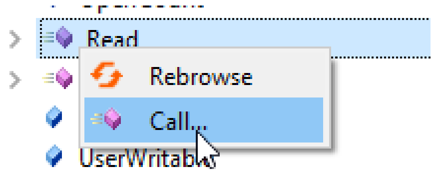

Fig. 15: Open Read

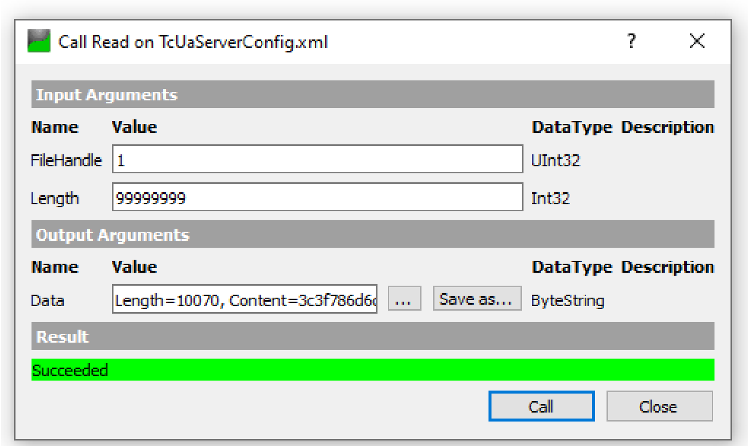

Fig. 16: Call Read

- Filehandle: Enter data from the Open step
- Length: 99999999 (simply so that the entire file is saved and loaded completely)
- Press Call

A display with the length and coded content appears under Result/Data. Click on Save as... and save the file wherever you choose.

2.7.3 Close file

In the Objects/Configuration/ConfigFiles/TcUAServerConfig.xml/Close path, call up the following function in the Call context menu:

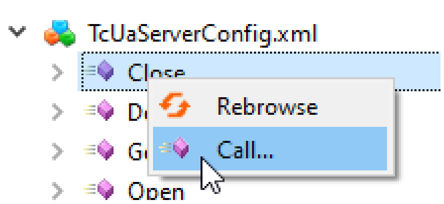

Fig. 17: Open Close

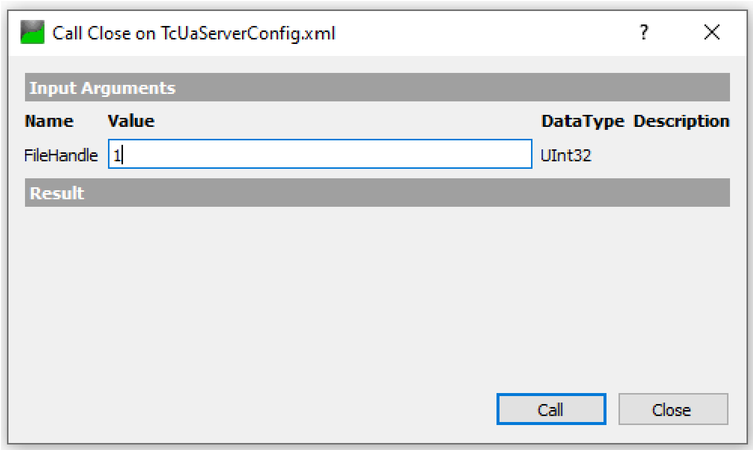

Fig. 18: Call Close

- Filehandle: Enter data from the Open step
- Click on the Call button to close the file again.

Closing the file is extremely important. If the file is not closed as described, it may be destroyed when you write to it later.

2.7.4 Edit file with Editor

Open the file transferred to the computer system for editing with a text editor. To make the file easier to read, we recommend using an editor that can break down the structures of an XML file. Find the following line in the file:

<AutomaticallyTrustAllClientCertificates>false</AutomaticallyTrustAllClientCertificates>

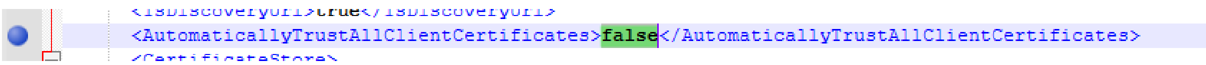

Fig. 19: XML display

This is how the decision is made on how to handle connections.

True.	All certificates are accepted. A client can create a certificate itself and exchange it with the server. The connection is made.
False	Only certificates that have been explicitly created and authorised for this connection will be accepted. For example, those received through a connection to a GDS system.

- Change the parameter to '**False**' if you only want to allow qualified connections.
- Save file

Do not change format and structure when saving.
Loading a faulty file into the controller will cause the myGEZE Control OPC UA server to malfunction!

2.8 Write the edited file back to the controller

2.8.1 Open file access

In the context menu, call up the following function in the Call context menu in the path Objects/Configuration/ConfigFiles/TcUAServerConfig.xml/Open:

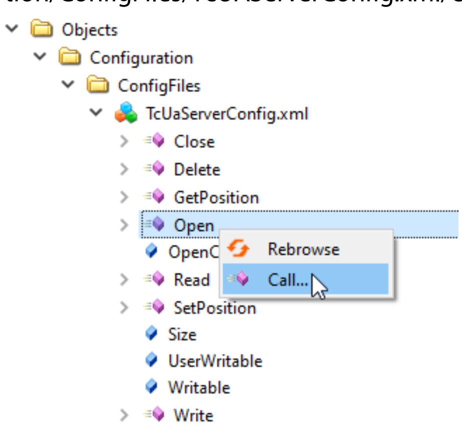

Fig. 20: Open file access

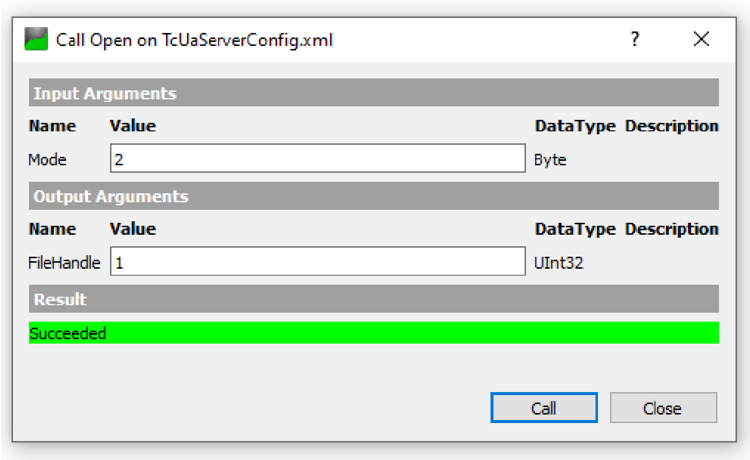

Fig. 21: Call Open

This function is used to open file access to the file.

- Open file access for reading.
- Mode: 2 Read
- Filehandle: Do NOT make any entry!
- Press Call

The program returns a file handle after the function has been executed.
- Remember this file handle for the next steps!

2.8.2 Write file

In the Call context menu, call up the following function in the Objects/Configuration / ConfigFiles/TcUAServerConfig.xml/Write path:

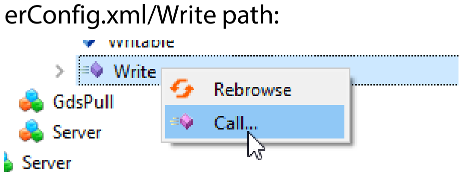

Fig. 22: Open Write

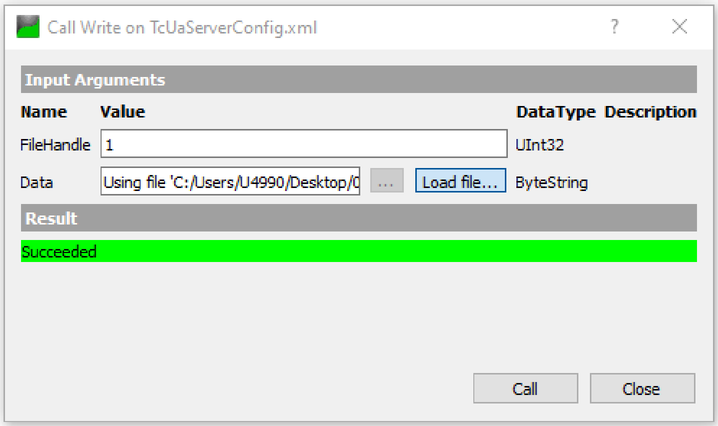

Fig. 23: Call Write

- Filehandle: Enter data from the Open step.
- Data: Select the modified file from the storage path by clicking 'Load file'
- Press Call.

2.8.3 Close file

See chapter 2.7.3 Close file, on page 15.

2.9 Restart the OPC UA Server

To make the changes in the configuration file effective, the OPC UA server must be restarted. The myGEZE Control OPC UA server can be restarted remotely via the user account OPC. This restart does not restart the entire controller system. This does not result in functional outages. In the Objects/Configuration/Server/RestartServer path, call up the following function in the Call context menu:

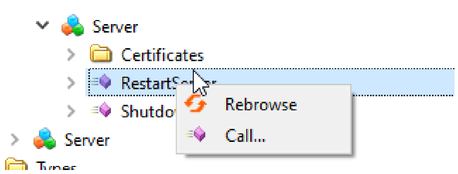

Fig. 24: Open Restart

Restarting the OPC UA server takes about 5 minutes. This depends on the other activities being carried out on the system.

3 Module types

Technical type	**What**	**Max. possible data points**
Server system	The OPC UA Server provides information items about general information; status, current time, namespace	-
TZ320	Emergency exit control, emergency exit system	16
DCU	Automatic drives for swing, sliding and revolving doors	17
DCU + TZ	Combination of automatic drives + emergency exit control	25
DOOR	Manual door systems	10
MBZ	Smoke and heat extraction systems type MBZ300 in different versions	30…y
IQBOX KNX	KNX Windowdrive	11
KNX Common	KNX general data	7
DI/DO	List of product-neutral inputs and outputs	1…z
HOLD	Image of a hold-open system with a combination of input and output signals	5

y = depending on the number of modules installed in the MBZ 300

z = number of inputs and outputs

3.1 Basic design of the object structures

The object structures of the OPC UA data result from the module types. This structure is always the same in the individual module types. The information read by a GEZE device is summarised in an overall structure. The writeable information is provided again separately as individual data.

Example for module type DCU

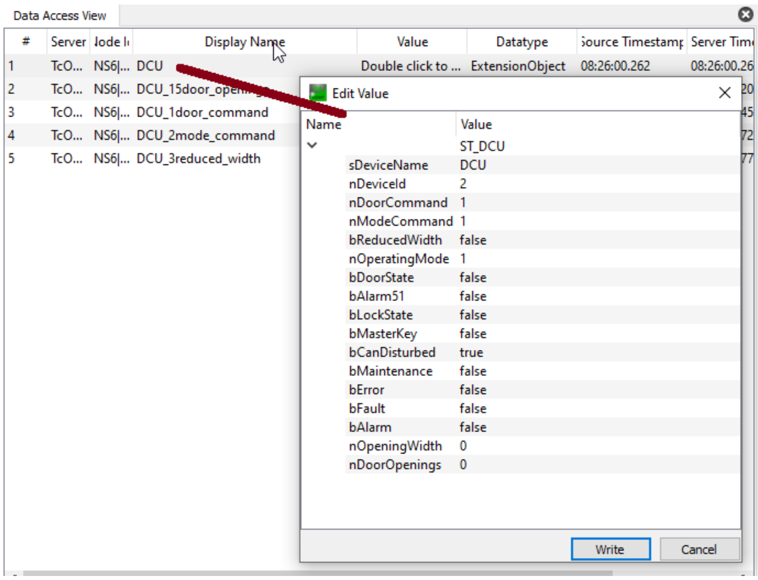

Fig. 25: Node set for reading data points.

Data Access View

#	Server	Node Id	Display Name	Value	Datatype	Source Timestamp
1	TcO...	NS6|...	DCU_15door_openings	0	UInt32	09:36:45.200
2	TcO...	NS6|...	DCU_1door_command	1	UInt32	09:36:46.457
3	TcO...	NS6|...	DCU_2mode_command	1	UInt32	09:36:47.721
4	TcO...	NS6|...	DCU_3reduced_width	0	UInt32	09:36:48.778

Fig. 26: Individual points for write access

The respective data types are placed in front of the item designation (e.g. bDoorState == Boolean) or defined for individual items in the 'Data type' field. The meaning of the individual levels (values) is explained in the respective module type.

The name used for the structure is derived from the configuration in myGEZE Control. The name given there for the GEZE device is used as the structure name (display name).

The system allows the user to enter customer-specific designations at this point, such as plant identification keys (PIK).

Input options

Name of the node set:	40 characters
Description of the individual points:	120 characters

The data is entered in the myGEZE Control Configurator in UTF-8 format.

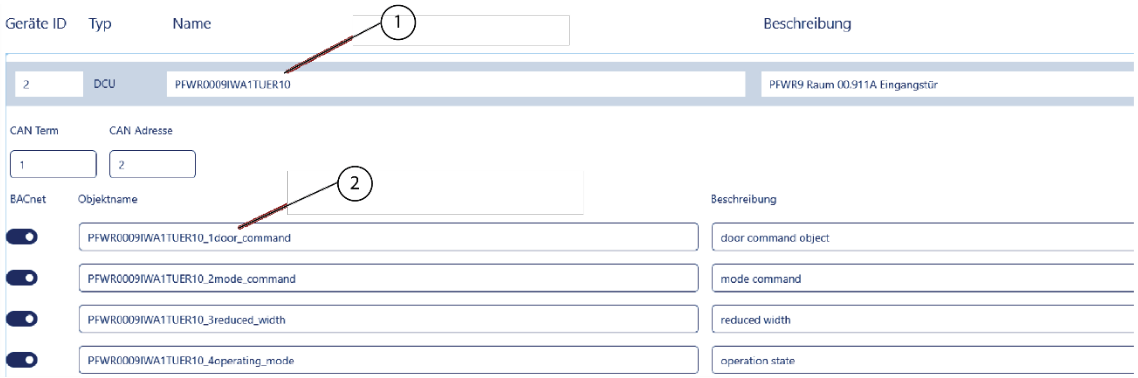

Fig. 27: Entries in the myGEZE Control Configurator

	Designation
1	Node set name
2	Individual data point name

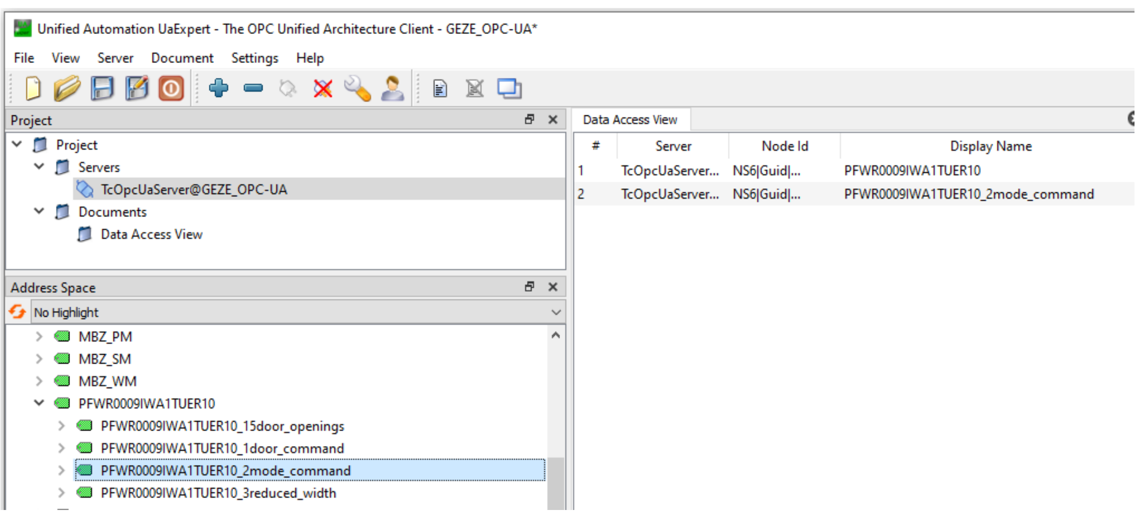

Fig. 28: Visualization of data in UA Expert

3.2 Open count

For each module type in which a product is opened, the openings/cycles are counted. This data information is always identical. It is available in the node set as readable information and can be overridden by OPC via the respective individual point. This is used to adjust the counted cycles, e.g. when replacing hardware.

Switch object DoorOpenings

OPC-Designation	Value range	Command	Explanation
nDoorOpenings	0 … 999,999	Number of door openings	Range: 0... 999999 cycles

4 Overview of module-specific data points

4.1 Server system

The server system offers the option of providing global functions for the entire device. This includes some system-specific objects and structures.

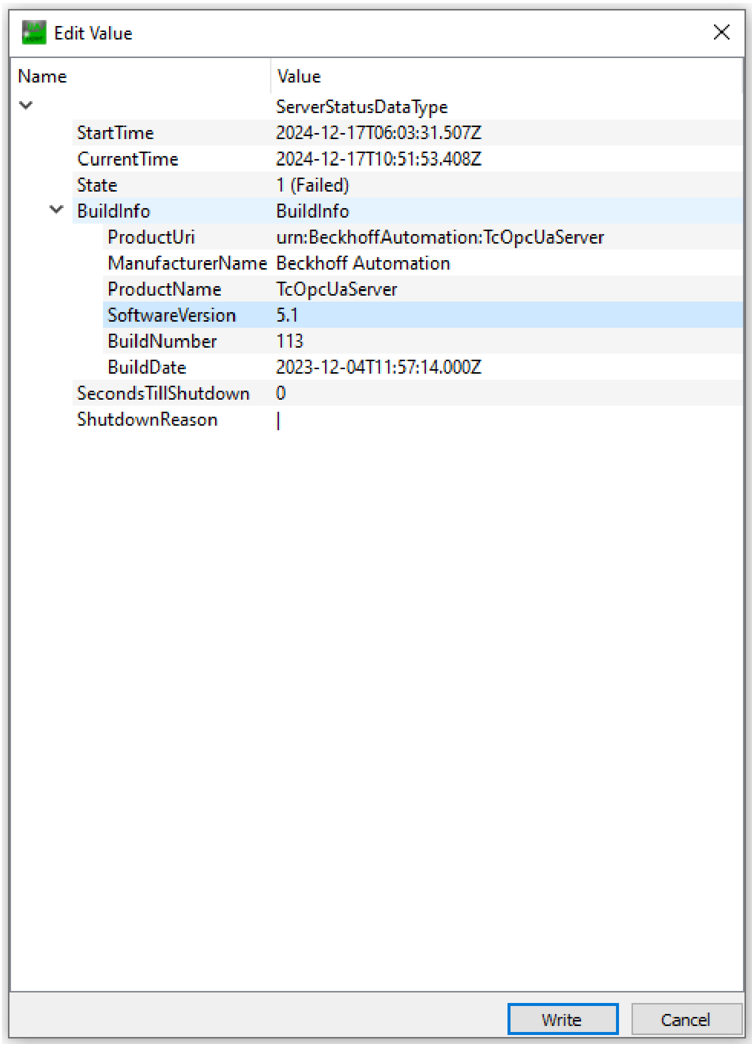

Fig. 29: Server system/status

4.2 TZ320

Possible devices

- Door control units TZ320, TZ321, TZ322
- Locking element (FTV320, MA500, FTÖ)
- Door terminal (T320)

Node set structure

OPC-Designation	Message/data point	Explanation
sDeviceName	Structure name	Name of the node set.
nDeviceId	internal device number	Internal number used for technical addressing.
nCommand	Command	Display of sent commands; see table for commands.
nOperating-Mode	Operating status	Display of operating statuses; see the following table
bDoorState	Door status	Feedback from the contact of the built-in locking element: closed/open
bLockState	Locking status	Bolt feedback from the contact of the built-in locking element: locked, unlocked.
bRelease	Release emergency push button	Activation of the red emergency push button directly on the system.
bEmergen-cyUnlock	Emergency unlocking	Emergency unlocking is unlocking the door via a fire alarm system or smoke and heat extraction system or via the GEZE bus.
bDoorAlarm	Door alarm	The door alarm is triggered if the door is not closed after the end of the pre-alarm time.
bSabotage	Sabotage contact TZ, TT, clamping box	The sabotage alarm is triggered if the housing of a system component is opened.
bCanDis-turbed	CAN bus fault	Disrupted connection to myGEZE Control. Data point triggers if a CAN address is programmed, but there is no bus connection.
bRelayFault	Relay error	Relay error due to short circuit, sticking relay or reversed polarity.
bLockFault	Error on the locking element	Locking element unlocked or not locked after a specified activation.
bCommunica-tionFault	Communication disruption with the door terminal or clamping box	Connection between the door control unit-door terminal-clamping box components is disrupted.
nDoorOpen-ings	Count value number of door openings	Count of the transfer of door status from closed to open.

Operating statuses

The available operating statuses of the system are transmitted collectively as a multi-level data point via the node **nOperatingMode**. The listed operating statuses are represented by the step values.

Step	Operating statuses	Explanation
1	Unlocked	Unlocked by key operated button or remote command.
2	Unlocked timer	Unlocked by timer input signal.
3	Locked	Locked by key operated button or remote command.
4	Locked by burglar alarm system	Locked by input signal from a burglar alarm system.
5	Short-time release	Short-time release by key operated button or remote command. System is unlocked for the set time or until the end of access and then locks again automatically.
6	Service mode active	System is in service mode for configuration.
7	Alarm active	There is at least one alarm in the system; such as a door alarm, sabotage, release
8	Fault	System has a fault; e.g. locking error, defective fuse
9	Active security interlocking door system	Control unit is an active part of an interlocking door system
10	Passive interlocking door system	Control unit is a passive part of an interlocking door system
11	Interlocking door system occupied	Control unit currently bringing persons through an interlocking door system.

Switch object nCommand:

This is used to send commands to the system. OPC UA is activated by specifying the step value.

Step value	Command	Explanation
1	No command	After executing an activation, the data point automatically returns to this value.
2	Unlock	Sustained unlocking of the door control unit.
3	Lock	Sustained locking of the door control unit.
4	Short-time release	One-time short-time release according to the parameters set for hold-open in the door control unit.

Functionality

Activation, for instance on step value 2 for unlocking. The controller executes the command, successful execution is reported via the data point **Operating statuses in the node set**. The switching object goes back to a step value of 1.

4.3 DCU

Possible devices

- DCU1
  - Slimdrive (all)
- DCU2
  - Powerdrive
- DCU6
  - TSA325 NT
  - Revo.PRIME
- DCU8

Node set structure

OPC-Designation	Message/data point	Explanation
sDeviceName	Structure name	Name of the node set.
nDeviceId	internal device number	Internal number used for technical addressing.
nDoorCommand	Door command	Display of sent commands; see table for commands.
nModeCommand	Operating mode command	Display of sent commands; see table for commands.
bReducedWidth	Daylight savings time changeover command	Display of sent commands; see table for commands.
nOperatingMode	Operating status	Display of operating statuses; see operating status table.
bDoorState	Door status	Feedback from the contact of the built-in locking element: closed/open
bLockState	Locking status	Bolt feedback from the contact of the built-in locking element: locked, unlocked
bMasterKey	Mode of operation selection locked	Specification of a mode of operation selection is locked for this drive (only door type EMD).
bCanDisturbed	CAN bus fault	Disrupted connection to myGEZE Control. Data point triggers if a CAN address is programmed, but there is no bus connection.
bMaintenance	Maintenance	Evaluation of the maintenance-related fault codes transmitted by the drive.
bError	System fault	Evaluation of the fault codes transmitted by the drive. Error on the system that does not directly result in an outage: DPS not connected, continuous activation
bFault	Technical fault	Evaluation of the fault codes transmitted by the drive: Technical defects that can result in an outage.
bAlarm	Alarm	Evaluation of the fault codes transmitted by the drive: Direct danger alarms (fire, smoke).
nOpeningWidth	Opening width	Display of the percentage opening widths.
nDoorOpenings	Count value number of door openings	Count of the transfer of door status from closed to open.

Operating statuses

The available system operating statuses are transmitted collectively as a multi-level data point via the node operating status **nOperatingMode**. The listed operating statuses are represented by the step values.

Step value	Operating statuses	Explanation
1	Automatic	Automatic mode: The connected sensors are active and the system opens and closes automatically.
2	Night mode	Night mode: The connected sensors are inactive. The system does not open and close automatically.
3	Exit only	The connected sensors on the inside of the door are active. The connected sensor on the outside of the door is inactive. Automated access is only possible in the direction **Outside**.
4	Hold open	System is continuously open.
5	Timer active	The mode of operation of the system is specified by a timer at one or more input contacts (NA, LS, AU, DO). The input is configured as the timer in this case.
6	Fire alarm active	There is a fire alarm. Reported by a corresponding input. Depending on the setting, the drive and door system are decoupled and the door closed via spring load.
7	DCU not initialised	The control unit of the drive is not configured. A technician is required to configure the system.
8	DCU disrupted	There is a defect or a fault on the control unit of the drive. A technician is required to correct the error.
9	Smoke alarm	There is a smoke alarm, reported by a built-in smoke switch control unit. Depending on the setting, the drive and door system are decoupled and the door closed via spring load.
10	Active security interlocking door system	Control unit is an active part of an interlocking door system
11	Passive interlocking door system	Control unit is a passive part of an interlocking door system
12	Interlocking door system occupied	Control unit currently bringing persons through an interlocking door system.
13	Drive switched out of operation	##

Note

Not all operating statuses are available on every door system. This is dependent on the system hardware design.

ModeCommand switch object

This is used to send commands to the system. OPC UA is activated by specifying the step value.

Step value	Command	Explanation

1	No command	After executing an activation, the data point automatically returns to this value.
2	Night mode	Night mode
3	Exit only	Exit only
4	Automatic	Automatic
3	Hold open	Hold open
4	Switch drive off	The drive is switched off. A door can be manually opened/closed, depending on the system version.

DoorCommand switch object

This can be used to send commands to the system to open it once. OPC UA is activated by specifying the step value.

Step value	Command	Explanation
1	Inactive	After executing an activation, the data point automatically returns to this value.
2	Door opening	Activation of contact type KB (contact authorised).

bReducedWidth switch object

This can be used to send commands to the system to switch to or from daylight savings time.

Step value	Command	Explanation
0	Summer mode	Complete opening width
1	Winter mode	Reduced opening width

4.4 DCU+TZ320

Possible devices

- Slimdrive EMD
- Slimdrive SL
- Powerturn
- TZ320, TZ321, TZ322

Node set structure

OPC-Designation	Message/data point	Explanation
sDeviceName	Structure name	Name of the node set.
nDeviceId	internal device number	Internal number; used for technical addressing.
nDoorCommand	Door command	Display of sent commands.
nModeCommand	Operating mode command	Display of sent commands.
bReducedWidth	Daylight savings time changeover command	Display of sent commands.
nOperatingModeDcu	DCU operating status	Display of operating statuses.
nOperatingModeTz	Operating status TZ320	Display of operating statuses.
bDoorState	Door status	Feedback from the contact of the built-in locking element: closed/open
bLockState	Locking status	Bolt feedback from the contact of the built-in locking element: locked, unlocked
bMasterKeyDcu	Mode of operation selection locked	Specification of a mode of operation selection is locked for this drive (only door type EMD).
bReleaseTz	Activation/emergency stop	Actuation of the red emergency stop push button directly on the system.
bEmergencyUnlockTz	Emergency unlocking	Emergency unlocking is unlocking the door via a fire alarm system or smoke and heat extraction system or via the GEZE bus.
bDoorAlarmTz	Door alarm	The door alarm is triggered if the door is not closed after the pre-alarm time has elapsed.
bSabotageTz	Sabotage contact TZ, TT, clamping box	The sabotage alarm is triggered if the housing of a system component is opened.
bRelayFaultTz	Relay error	Relay error due to short circuit, sticking relay or reversed polarity.
bLockFaultTz	Error on the locking element	Locking element unlocked or not locked after a specified activation.
bCommunicationFaultTz	Communication disruption with the door terminal or clamping box	The connection between the door control unit, door terminal and clamping box components is faulty.
bCanDisturbed	CAN bus fault	Disrupted connection to myGEZE Control. This monitors the DCU and TZ320.

OPC-Designation	Message/data point	Explanation
bMainte-nanceDcu	Maintenance	Evaluation of the maintenance-related fault codes transmit-ted by the drive.
bErrorDcu	System fault	Evaluation of the fault codes transmitted by the drive: Error on the system that does not directly result in an outage: DPS not connected, continuous activation
bFaultDcu	Technical fault	Evaluation of the fault codes transmitted by the drive: Tech-nical defects that can result in an outage.
bAlarmDcu	Alarm	Evaluation of the fault codes transmitted by the drive: Direct danger alarms (fire, smoke).
nOpeningWid th	Opening width	Display of the percentage opening widths.
nDoorOpen-ings	Count value number of door openings	Count of the transfer of door status from closed to open.

Operating statuses

- The explanation of operating statuses is identical to the DCU type. See 4.3 DCU.
- The explanation of operating statuses is identical to the RWS type. See 4.2 TZ320.

Switch objects

- The commands are identical to the DCU type. See 4.3 DCU.

Notifications and alarms are transmitted individually via multiple binary data points (BACnet object type: Bi-nary Value). Each entry in the table corresponds to one data point.

4.5 Door

Node set structure

OPC-Designation	Message/data point	Explanation
sDeviceName	Structure name	Name of the node set.
nDeviceId	internal device number	Internal number used for technical addressing.
nDoorCom-mand	Door command	Display of sent commands.
bDoorState	Door status	Feedback from the contact of the built-in locking element: closed/open
bLockState	Locking status	Bolt feedback from the contact of the built-in locking ele-ment: locked, unlocked
bDoorAlarmTz	Door alarm	The door alarm is triggered if the door is not closed after the end of the pre-alarm time.
nDoorOpen-ings	Count value number of door openings	Count of the transfer of door status from closed to open.
nDuration-ShortTi-meRelease	Short-time release dura-tion	Range: 0…200 sec
nAlarmDelay	Alarm delay	Range: 30…300 sec
nTargetState	Internal status of the output signal	Display of the internal setpoint state of the switching state. Steps correspond to the door command. While the door com-mand returns to the value '1' after execution, this data point remains in the last commanded state.

Command switch object

This can be used to send commands for an opening to the system.

Step value	Command	Explanation
1	No command	After executing an activation, the data point automatically returns to this value.
2	Unlock	Sustained unlocking of the door control unit.
3	Lock	Sustained locking of the door control unit.
4	Short-time release	One-time short-time release according to the parameters set for hold-open in the door control unit.

DurationShortTimeRelease switch object

This can be used to send the time for the opening command KZF to the system.

Value	Command	Explanation
0	Short-time release duration	Range: 20…200 sec

AlarmDelay switch object

This can be used to send the time until the release of an alarm to the system.

Value	Command	Explanation
0	Alarm delay	Range: 30…300 sec

4.6 MBZ

A modular MBZ consists of different internal functional modules. These can be installed multiple times in some cases. To reflect this modular design, the type MBZ is divided into different modules:

MBZ.PM	MBZ300 Power module
MBZ.CM	MBZ300 Control module
MBZ.SM	MBZ300 Control module for other fire sections
MBZ.DM	MBZ300 drive module for connecting drives
MBZ.WM	MBZ300 weather module

4.6.1 MBZ.PM

Node set structure

OPC-Designation	Message/data point	Explanation
sDeviceName	Structure name	Name of the node set.
nDeviceId	internal device number	Internal number used for technical addressing.
bBatteryOperation	Battery operation	Indicates that the system is running on battery power. Supply voltage is not present.
bBattCheck	Battery test	Battery test in progress
bSystemVoltageFault	System voltage fault	Error in the internal system voltage.
bBatteryFault	Battery error	Battery error.

4.6.2 MBZ.CM/SM

Node set structure

OPC-Designation	Message/data point	Explanation
sDeviceName	Structure name	Name of the node set.
nDeviceId	internal device number	Internal number used for technical addressing.
bShevAlarmState	Smoke alarm	Release of a smoke detector connected to the module.
bDetector1	Triggering detector 1	
bDetector2	Triggering detector 2	
bAlarmButtonActive	Triggering alarm button	Release of a SHEV button connected to the module.
bLineFault	Fault detection line	The signalling lines on the module are actively monitored.
bSystemFault	System fault	If a line is interrupted, a notification is output here.
bMessagingRelay	Signalling relay triggered	
bConfigurationFault	Configuration error	A signalling relay can be used to provide an outstanding alarm as a potential-free contact for other systems.
bCanDisturbed	CAN bus fault	Disrupted connection to myGEZE Control. Data point triggers if a CAN address is programmed, but there is no bus connection.

4.6.3 MBZ.DM

Node set structure

OPC-Designation	Message/data point	Explanation
sDeviceName	Structure name	Name of the node set.
nDeviceId	internal device number	Internal number used for technical addressing.
nWindowCommand	Command	Display of sent commands; see table for the command WindowCommand.
nWindowState	Window status	Reports the current status of the window: 1 = stopped 2 = open 3 = closed 4 = closing 5 = alarm
bShevAlarmState	Smoke alarm	Release of a smoke detector connected to the module.
bDriveModuleFault	Drive module fault	The connection to the connected drive is actively monitored.
nWindowOpenings	Number of window openings	If the module detects an interruption, a message is displayed.
bInput1	Configurable input 1	Transfer of data information from free input 1 on the drive module
bInput2	Configurable input 2	Transfer of data information from free input 2 on the drive module

WindowCommand switch object:

Step value	Command	Explanation
1	No command	After executing an activation, the data point automatically returns to this value.
2	Open	Drive moves in the opening direction.
3	Close	Drive moves in the closing direction.
4	Stop	Drive stops

4.6.4 MBZ.WM

Node set structure

OPC-Designation	Message/data point	Explanation
sDeviceName	Structure name	Name of the node set.
nDeviceId	internal device number	Internal number used for technical addressing.
bWind	Wind alarm	The module evaluates the wind sensor connected to the input. If the set limit value is exceeded, a notification is output here.
bRain	Rain alarm	The connected rain sensor detects precipitation.

4.7 IQBOX KNX

Possible devices

- GEZE IQ window drives over IQ Box KNX
  - Slimchain
  - Powerchain
  - F1200+
  - Locking system

Node set structure

OPC-Designation	Message/data point	Explanation
sDeviceName	Structure name	Name of the node set.
nDeviceId	internal device number	Internal number used for technical addressing.
nWindowCom-mandPosition	Target position	Specification for the desired opening of the drive, as a percentage of the max. possible stroke.
bWindowLock1	Block activation	Drive is blocked for activation to command position.
nWindowSpeedNext-Drive	Speed	Specification for the desired speed of the drive, as a percentage of the max. possible speed.
nWindowActualPosi-tion	Current position	Display of the current position of the drive, as a percentage of the max. possible stroke.
bWindowClosed	Closed	Drive reports closed.
bWindowOpen	open	Drive reports open.
bServiceCheckUnit	Drive maintenance	Drive reports maintenance.
bServiceErrorUnit	Drive fault	Drive reports a fault.
bWindowLockAuto	Automatic block	Drive is blocked for automatic functions from KNX; e.g. a KNX group address would write di-rectly to the command

WindowCommandPosition switch object:

Department	Command	Explanation
0...100%	Target position	Specification for the desired opening of the drive, as a percentage of the max. possible stroke.

WindowSpeedNextDrive switch object:

Department	Command	Explanation
0...100%	Speed	Specification for the desired speed of the drive, as a percentage of the max. possible speed.

WindowLock1 and WindowLockAuto switch object:

Step value	Command	Explanation
0	Release	The drive is released.
1	Block	The drive is blocked.

4.8 KNX Common

If the KNX interface of the control unit system and therefore of GEZE IQ window drives is connected to the overall KNX system of the building, then control notifications from the KNX system can be used for the window. These global data points can be integrated into myGEZE Control.

Node set structure

OPC-Designation	Message/data point	Explanation
sDeviceName	Structure name	Name of the node set.
nDeviceId	internal device number	Internal number used for technical addressing.
bAlertSafety	Alarm - Safety	KNX system reports a general data point safety.
nAlertWindSpeed	Alarm value wind speed	KNX transfers the set threshold for triggering a wind alarm.
bAlertWind	Alarm - Wind	KNX reports a wind alarm.
bAlertRain	Alarm - Rain	KNX reports a rain alarm.

4.9 DI/DO

The controller system can connect non-network-compatible devices via digital input and output terminals, and the resulting information is mapped onto data points. The designation/function is determined from the connected device.

Examples

- EC Turn
- TSA 160
- Staircase control panel
- Hold-open systems
- IQ lock
- 24VDC signals (such as a reed contact for the door notification)
- Third-party products from other competitors

Digital input data point

Node set structure

OPC-Designation	Step value	Value	Explanation
sDeviceName	Structure name		Name of the node set.
nDeviceId	internal device number		Internal number used for technical addressing.
bUniversalDi	false/true	Off/On	For instance report of a smoke alarm of hold-open system

Digital output data point

Node set structure

OPC-Designation	Step value	Value	Explanation
sDeviceName	Structure name		Name of the node set.
nDeviceId	Internal device number		Internal number used for technical addressing.
bUniversalDo	false/true	Off/On	For example Activation for the release of a hold-open system.

bUniversalDo switch object:

Step value	Command	Explanation
False	Off	
True.	On	For example Activation for the release of a hold-open system.

4.10 HOLD hold-open system

The controller system can connect non-bus-capable devices via digital input and output terminals. The resulting information for a hold-open system is summarised via the HOLD module type.

HOLD module type is available from template version 2.0.

Node set structure

OPC-Designation	Operating statuses	Explanation
sDeviceName	Structure name	Name of the node set.
nDeviceId	Internal device number	Internal number used for technical addressing.
	Close	A pulse is generated at the digital output, which triggers the door to close. The pulse interrupts the power supply to the built-in hold-open element and the door is closed via the mechanical door closer.
bState	false/true	Door status: closed/open
bAlarm	Alarm	Triggering of the smoke switch control unit Inactive/Alarm

nCommand switch object

Step value	Command	Explanation
1	No command	After executing an activation, the data point automatically returns to this value.
2	Close	A pulse is generated at the digital output, which triggers the door to close. The pulse interrupts the power supply to the built-in hold-open element and the door is closed via the mechanical door closer.

5 Compatible products

To connect to the myGEZE Control system, the product systems must fulfil minimum hardware and firmware requirements. The minimum requirements are listed in the myGEZE Control user manual.

For more information, see chapter 1.2 Reference documents, page 4.

6 List of figures

Germany
GEZE GmbH
Niederlassung Süd-West
Tel. +49 (0) 7152 203 594
E-Mail: leonberg.de@geze.com

GEZE GmbH
Niederlassung Süd-Ost
Tel. +49 (0) 7152 203 6440
E-Mail: muenchen.de@geze.com

GEZE GmbH
Niederlassung Ost
Tel. +49 (0) 7152 203 6840
E-Mail: berlin.de@geze.com

GEZE GmbH
Niederlassung Mitte/Luxemburg
Tel. +49 (0) 7152 203 6888
E-Mail: frankfurt.de@geze.com

GEZE GmbH
Niederlassung West
Tel. +49 (0) 7152 203 6770
E-Mail: duesseldorf.de@geze.com

GEZE GmbH
Niederlassung Nord
Tel. +49 (0) 7152 203 6600
E-Mail: hamburg.de@geze.com

GEZE Service GmbH
Tel. +49 (0) 1802 923392
E-Mail: service-info.de@geze.com

Austria
GEZE Austria
E-Mail: austria.at@geze.com
www.geze.at

Benelux
GEZE Benelux B.V.
E-Mail: benelux.nl@geze.com
www.geze.be
www.geze.nl

Bulgaria
GEZE Bulgaria - Trade
E-Mail: office-bulgaria@geze.com
www.geze.bg

China
GEZE Industries (Tianjin) Co., Ltd.
E-Mail: chinasales@geze.com.cn
www.geze.com.cn

GEZE Industries (Tianjin) Co., Ltd.
Branch Office Shanghai
E-Mail: chinasales@geze.com.cn
www.geze.com.cn

GEZE Industries (Tianjin) Co., Ltd.
Branch Office Guangzhou
E-Mail: chinasales@geze.com.cn
www.geze.com.cn

GEZE Industries (Tianjin) Co., Ltd.
Branch Office Beijing
E-Mail: chinasales@geze.com.cn
www.geze.com.cn

France
GEZE France S.A.R.L.
E-Mail: france.fr@geze.com
www.geze.fr

Hungary
GEZE Hungary Kft.
E-Mail: office-hungary@geze.com
www.geze.hu

Iberia
GEZE Iberia S.R.L.
E-Mail: info.es@geze.com
www.geze.es

India
GEZE India Private Ltd.
E-Mail: office-india@geze.com
www.geze.in

Italy
GEZE Italia S.r.l. Unipersonale
E-Mail: italia.it@geze.com
www.geze.it

GEZE Engineering Roma S.r.l
E-Mail: italia.it@geze.com
www.geze.it

Korea
GEZE Korea Ltd.
E-Mail: info.kr@geze.com
www.geze.com

Poland
GEZE Polska Sp.z o.o.
E-Mail: geze.pl@geze.com
www.geze.pl

Romania
GEZE Romania S.R.L.
E-Mail: office-romania@geze.com
www.geze.ro

Russia
OOO GEZE RUS
E-Mail: office-russia@geze.com
www.geze.ru

Scandinavia – Estonia
GEZE Scandinavia AB eesti filial
E-Mail: estonia@geze.com
www.geze.ee

Scandinavia – Finland
GEZE Scandinavia AB Filial Finland
E-Mail: finland@geze.com
www.geze.fi

Scandinavia – Latvia
GEZE Scandinavia AB Latvijas filiāle
E-Mail: latvia@geze.com
www.geze.lv

Scandinavia – Lithuania
GEZE Scandinavia AB Filial Lietu.
E-Mail: lithuania@geze.com
www.geze.lt

Scandinavia – Sweden
GEZE Scandinavia AB
E-Mail: sverige.se@geze.com
www.geze.se

Scandinavia – Norway
GEZE Scandinavia AB avd. Norge
E-Mail: norge.se@geze.com
www.geze.no

Scandinavia – Denmark
GEZE Danmark
E-Mail: danmark.se@geze.com
www.geze.dk

Singapore
GEZE (Asia Pacific) Pte, Ltd.
E-Mail: gezesea@geze.com.sg
www.geze.com

South Africa
GEZE South Africa (Pty) Ltd.
E-Mail: info@gezesa.co.za
www.geze.co.za

Switzerland
GEZE Schweiz AG
E-Mail: schweiz.ch@geze.com
www.geze.ch

Türkiye
GEZE Kapı ve Pencere Sistemleri
E-Mail: office-turkey@geze.com
www.geze.com

Ukraine
LLC GEZE Ukraine
E-Mail: office-ukraine@geze.com
www.geze.ua

United Arab Emirates/GCC
GEZE Middle East
E-Mail: gezeme@geze.com
www.geze.ae

United Kingdom
GEZE UK Ltd.
E-Mail: info.uk@geze.com
www.geze.com

GEZE GmbH
Reinhold-Vöster-Straße 21–29
71229 Leonberg
Germany

Tel.: 0049 7152 203 0
Fax.: 0049 7152 203 310
www.geze.com