

Emergency Lighting



Logica Visual OPC Server

INSTRUCTION

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Version: V2.7.1



English



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Information of the instruction

Important instructions for the installation of the OPC server

Important instructions

According to EN 50110-1:2004-11 any work on the installation has to be executed by qualified electricians only.

Other activities described in this instruction have to be executed only by persons who:

- have been instructed by qualified persons
- have fully understood their tasks and the functions of the installation
- are under observation and being checked regularly by qualified persons

Please observe the local rules and regulations.

Symbol explanation

The following symbols must be observed.



Attention:

Indicates hazards that may be the cause for damage to human, plant or environment as well as very important instructions.



Note:

Provides information and advice for navigating within the described plant, components or functions.



SLEB LOGICA

Entries with this hint are only related to SLEB software for central and group battery systems as well as for mains replacement systems.



AUTO LOGICA

Entries with this hint are only related to ALOG software for central and group battery systems as well as for mains replacement systems.

Manufacturer, further documents

Manufacturer:

Beghelli PRÄZISA GmbH

Internet: www.beghelli.de
E-mail: kontakt@beghelli.de

Further documents:

Catalogues

Low Power Supply Systems NGB, Central Battery Systems NZB,
Mains Replacement Systems NEA, Single Battery Systems NEB

The catalogue contents are also available over the internet – www.beghelli.de.

CD-ROM

Catalogue CD

Type codes

German:

NGB	Not licht Gruppen Batterie Versorgungs gerät
NZB	Not licht Zentral Batterie Versorgungs gerät
NEA	Netz Ersatz Anlage
NEB	Not licht Einzel Batterie Versorgungs gerät

English:

GBS	Group Battery System resp.	LPS-System	Low Power Supply System
CBS	Central Battery System resp.	CPS-System	Central Power Supply System
MRS	Mains Replacement System		
SBS	Single Battery System resp.	SPS-System	Single Power Supply System

Designation:	Station type:	Mains monitoring:	Mains supply:	Battery supply:	Mains output voltage:	Battery output voltage:
NZB	main station	3~	400 V AC 50/60 Hz 3~	216 V DC	230 V AC 50/60 Hz 1~	216 V DC
NZB	sub station	1~	230 V AC 50/60 Hz 1~	216 V DC from main station	230 V AC 50/60 Hz 1~	216 V DC
NZB	sub station	3~	400 V AC 50/60 Hz 3~	216 V DC from main station	230 V AC 50/60 Hz 1~	216 V DC
NGB	main station	3~	230 V AC 50/60 Hz 1~	24 V DC	230 V AC 50/60 Hz 1~	230 V DC
NEA	main station	3~	400 V AC 50/60 Hz 3~	no	230 V AC 50/60 Hz 1~	230 V AC 50/60 Hz 1~



Attention:

The specified mains and battery output voltages are only valid if output circuit cards of the types AK 1/2/4x12/32 EÜ/SÜ are used.

The specified mains and battery output voltages are only valid if the operating mode "9=CCSD" in menu item 4-3 "Line Operating Modes" is not used.

Mains output voltage:

- > The mains output voltage designates the voltage with which the output circuits of an emergency light station can be operated if no supply failure is present.
- > The mains output voltage designates the voltage with which the output circuits of an emergency light station are operated if a partial supply failure is present.

Battery output voltage:

- > The battery output voltage designates the voltage with which the output circuits of an emergency light station are operated if a general supply failure is present.
- > The battery output voltage designates the voltage with which the output circuits of an emergency light station are operated if a function test, a battery test, an insulation test or a read-in is executed.

Preface

This instruction describes the installation, configuration and the functional scope of the OPC server for the software Logica Visual. Furthermore device functions and device parameters are documented. The information provided conforms to the functional scope of the version of the OPC server mentioned in this instruction. Additional information can be requested from the above mentioned address.

The technical content of this instruction is correct at time of print.
Subject to change without prior notification.

This version of the OPC server supports no linking regarding the single battery systems in Logica Visual. Respective NEB device functions and device parameters are not documented.

Scope of delivery

The OPC-Server for Logica Visual is delivered together with the software Logica Visual on a data medium of the type CD-ROM.

OPC server for Logica Visual:

Article number: SWB16312
Software: Logica Visual
OPC server for Logica Visual
Data medium type: CD-ROM
Data medium quantity: 1 piece

Hard and software requirements

Hardware:

Computer base: IBM compatible PC
Recommended processor type: at least Intel Pentium 4 / 2 GHZ (or equivalent)
Memory: at least 512 MB RAM
Free hard disk memory: at least 3 GB

Software:

Operating systems: Microsoft Windows XP (32 Bit / 64 Bit)
Microsoft Windows VISTA (32 Bit / 64 Bit)
Microsoft Windows 7 (32 Bit / 64 Bit)
Microsoft Windows Server 2008 (32 Bit / 64 Bit)

User software: Logica Visual as of Version V2.10.3
Microsoft .NET as of Version V4.0

Installation and configuration of the OPC server – general notes

Term definition – OLE:

OLE **Object Linking and Embedding**

OLE ("Object Linking and Embedding") is an object system and protocol developed by Microsoft which enables a cooperative work of different software applications, as long as all software applications are OLE capable.

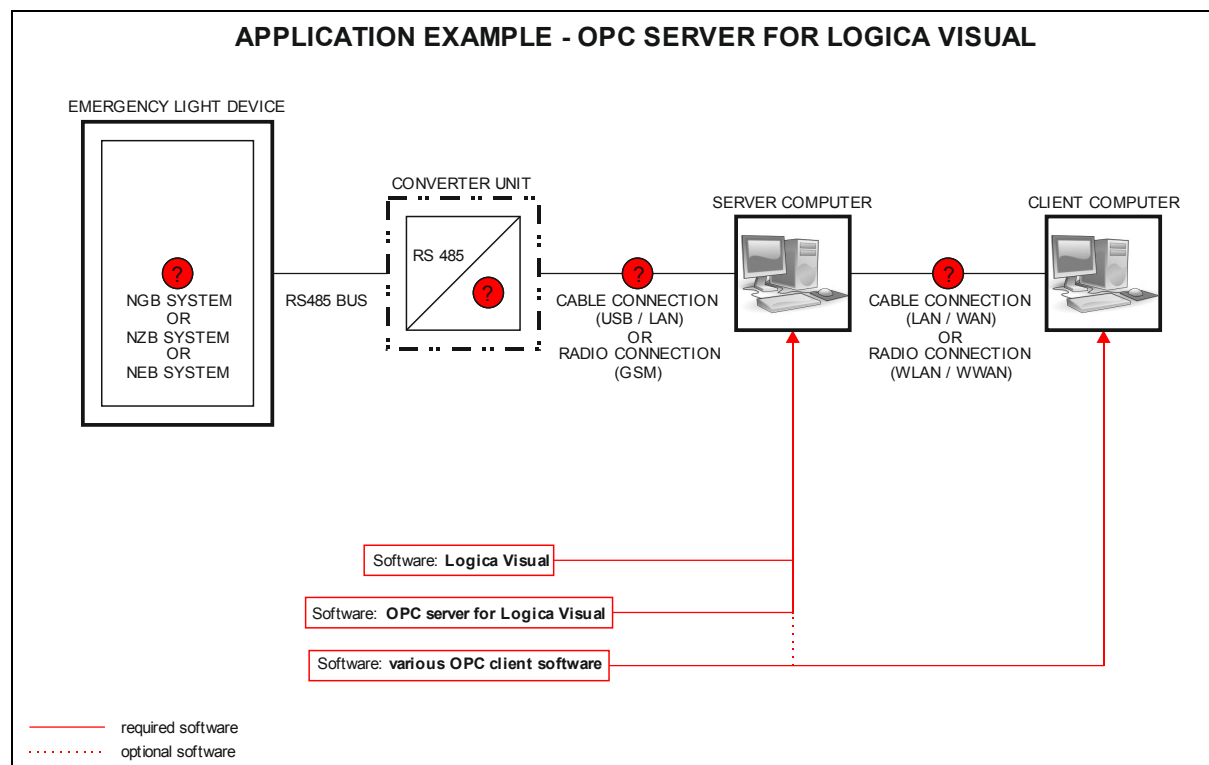
Term definition – OPC:

OPC **OLE for Process Control**

OPC ("OLE for Process Control") is the designation for an open software interface, which is developed especially for the data exchange between software applications of different manufacturers. It is based on the object system and protocol OLE from Microsoft. With the standardised data exchange an OPC server offers also a base for connecting software applications with hardware of many application areas where a process control is used.

General explanations – OPC server for Logica Visual:

The OPC server for Logica Visual from Beghelli PRÄZISA enables an easy and comfortable access to the database file of Logica Visual and with this to a multitude of equipment of the application area of emergency lighting. With the easy configuration of the OPC server the integration of the chosen emergency lighting installations in the building management system is accelerated. The specification "OPC Data Access" (for transmission of real-time values) used at this version of the OPC server has the state 3.0.



Installation step 1 – installation

To begin the installation of the OPC server one of the two installation files must be executed.

- > The installation files of the OPC server have the file names "setup.exe" and "LvOpcServerInstaller.msi".
- > The executable program file of the OPC server has the file name "LVOpServer.exe" after the installation.



Note:

At the installation of the OPC server no entry is made in the start menu of Microsoft Windows (all versions).

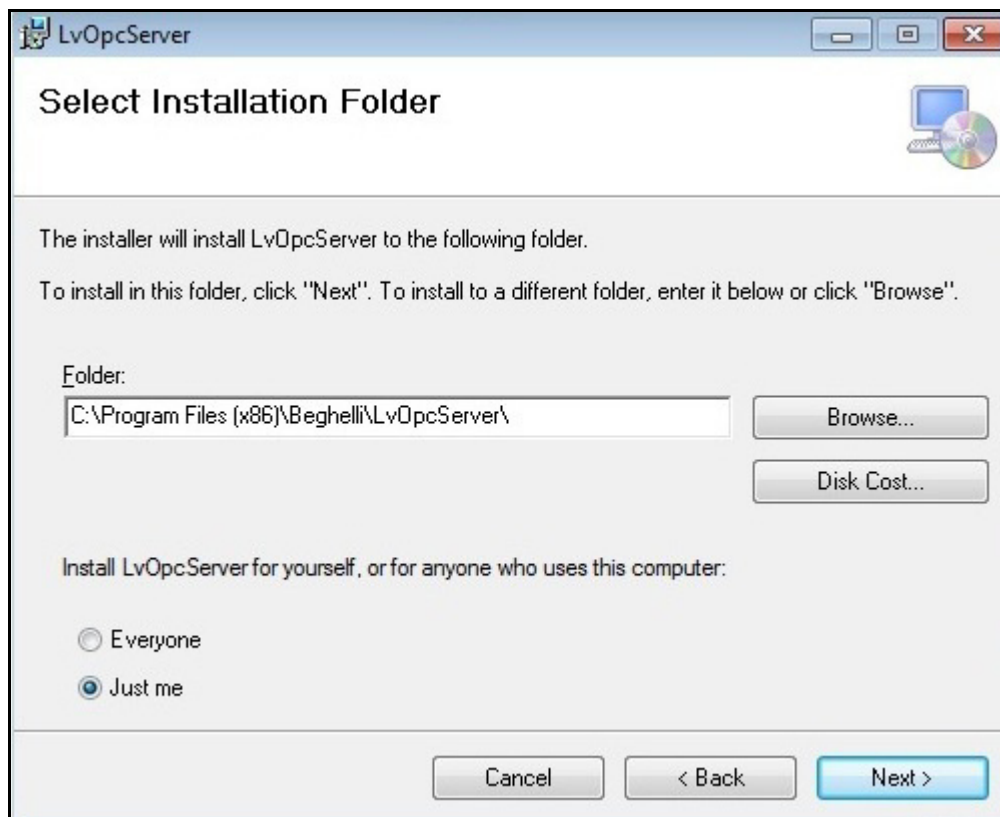
Step – beginning of installation with notes:



"Cancel": Cancel installation.

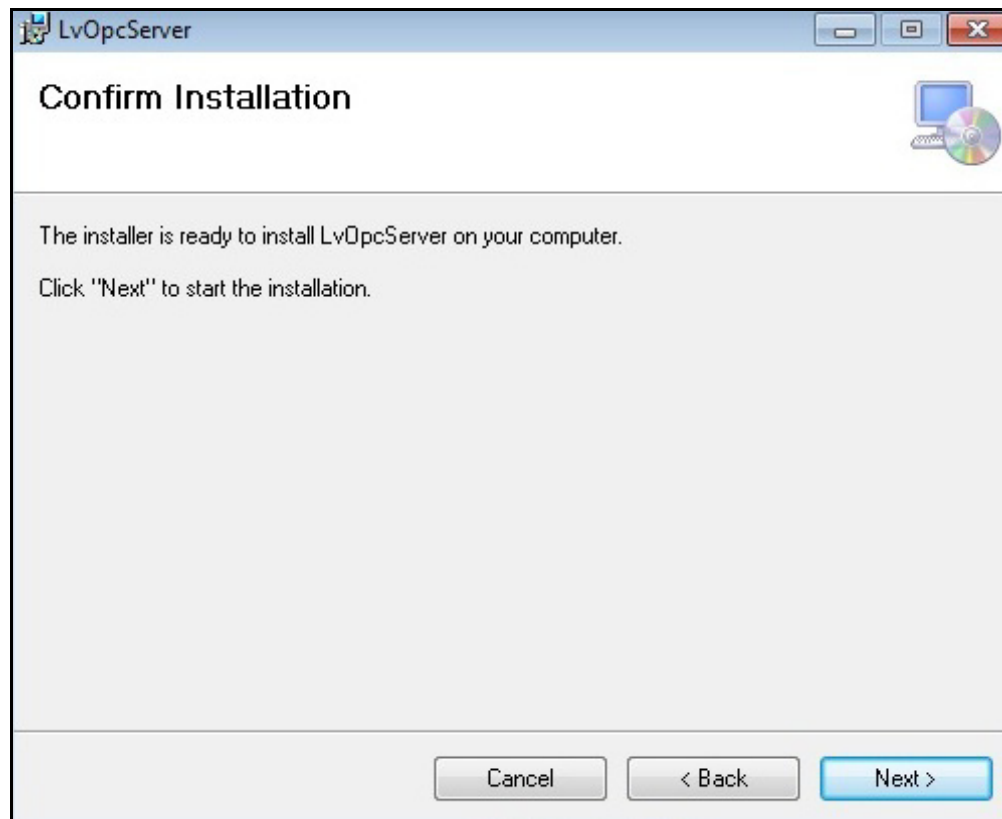
"Next >": Continue installation with next step.

Step – select installation parameters:



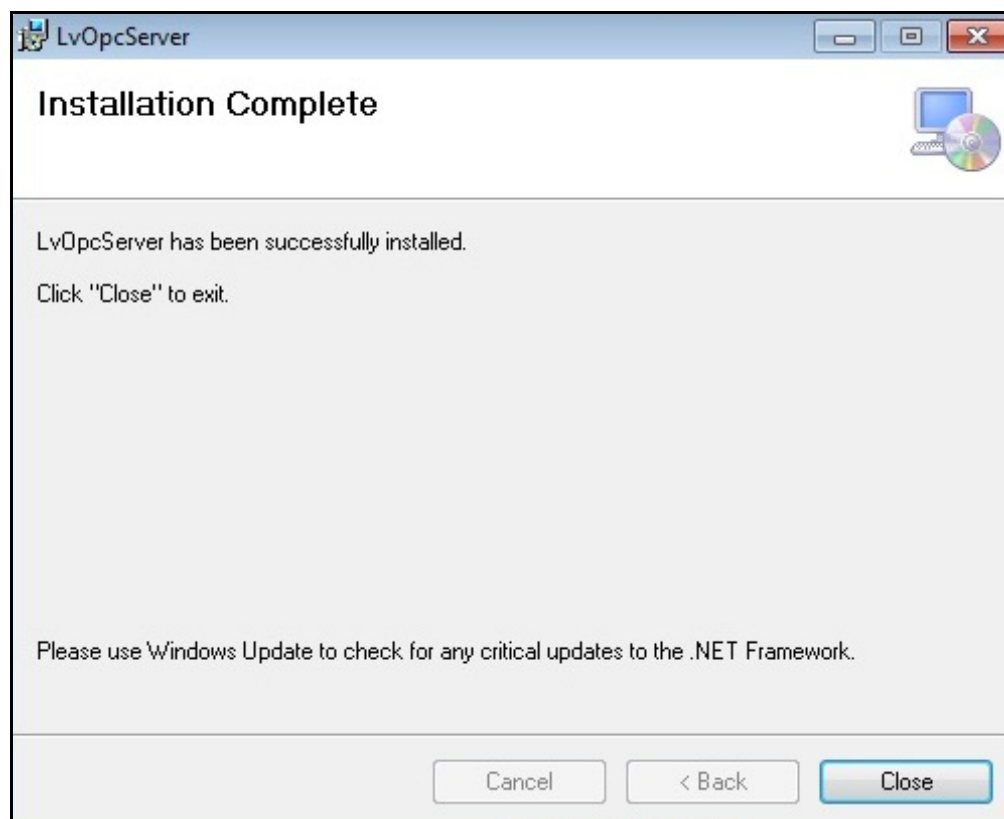
- "Browse": Select installation directory.
- "Disk Cost": Show available and required memory space for installation.
- "Everyone": Do installation of the software for all users of this computer.
- "Just me": Do installation of the software only for current user of this computer.
- "Cancel": Cancel installation.
- "< Back": Continue installation with previous step.
- "Next >": Continue installation with next step.

Step – confirm installation:



"Cancel": Cancel installation.
"< Back": Continue installation with previous step.
"Next >": Continue installation with next step.

Step – Message of completed installation:



"Close": Finish installation.



Attention:

To ensure a failure free function of the OPC server attention must be paid that the software platform Microsoft .NET from Microsoft is continuously updated with the newest updates.

Installation step 2 – update

Partial update by file "LVOpServer.exe":

When the program file "LVOpServer.exe" is provided by Beghelli PRÄZISA for the update of the OPC server the present program file in the selected installation directory must be overwritten with the updated program file.



Attention: Both the software Logica Visual as well as the OPC server must be closed at this installation step.

Full update by file "setup.exe" or "LvOpServerInstaller.msi":

When the installation file "setup.exe" or "LvOpServerInstaller.msi" is provided by Beghelli PRÄZISA for the update of the OPC server the present installation of the OPC server must be uninstalled by the used operating system. Thereupon a new installation of the OPC server can follow according to installation step 1.

Installation step 3 – generation of the configuration and demo licence file

For the later configuration of the OPC server it is necessary to generate a configuration file. For the later obtaining of the full licence of the OPC server it is necessary to generate a demo licence file. This happens for both files at the first execution of the OPC server automatically in the selected installation directory.

- > The configuration file has the file name "Config.ini".
- > The demo licence file has the file name "License.demo.dat".

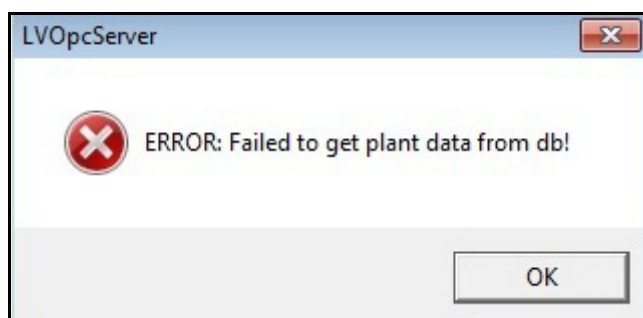
First execution of the OPC server:

At the first execution of the OPC server there is standardly no entry of a full licence recognised. Therefore the following message appears that the OPC server will be operated in demo mode.



Note:

Also at any further execution of the OPC server where no entry is recognised a demo licence file will be generated provided that those is not present yet.



Depending on the previous use of Logica Visual it can be at the first execution of the OPC server that no sufficient entries are recognised regarding the database file of Logica Visual to execute the OPC server further on. In this case the failure message appears that the OPC server could retrieve no installation data from the database file.



Note:

The OPC server will automatically close itself when no installation data could be retrieved from the database file of Logica Visual.

Installation step 4 – configuration over the configuration file

The configuration of the OPC server is done over entries in the configuration file. The file is located in the selected installation directory of the OPC server. TXT editor programs like Microsoft Editor or Microsoft WordPad can be used for editing.

> The configuration file has the file name "Config.ini".

Standard content of the configuration file:

```
[SOURCE]
PlantName=OPC Plant
DbPath=C:\Beghelli\LogicaVisual
DbFileName=DatiImpianti.mdb
[OPTIONS]
OpcMinUpdateRateSec=60
ReadDBRateSec=60
Minimized=no
StationCommErrMinutes=120
[LOG]
EnableLogFile=yes
EnableDebug=no
MaxBackupLog=7
```

"PlantName":

The name of the installation made in Logica Visual which should be linked with the OPC server is entered here. When this entry is left blank the OPC server links itself autonomously with the name of the installation which is found at first in the database file of Logica Visual.

"DbPath":

The installation directory of Logica Visual is entered here.

"DbFileName":

The file name of the database file of Logica Visual is entered here. The database file is located in the selected installation directory of Logica Visual.

> The database file has the file name "DatiImpianti.mdb".

"OpcMinUpdateRateSec":

The update interval for the communication exchange between the OPC client and the OPC server is entered here.

Input format: SECONDS



Attention:

The OPC server accepts a minimal value of 60 seconds for the update interval.

"ReadDBRateSec":

The update interval for the read and write access of the OPC server on the database file of Logica Visual is entered here.

Input format: SECONDS

"Minimized":

Here it is determined whether the OPC server should be minimised or maximised after an execution under Windows operating systems.

Input format: YES / NO

"YES": OPC server will be minimised after an execution

"NO": OPC server will be maximised after an execution

"StationCommErrMinutes":

The maximum update interval regarding the next status update by the command "update status" in Logica Visual is entered here. When this maximum update interval is exceeded the OPC item "error" indicates an update failure in correspondence with the equipment add-on "MainStation" resp. "MainStation>SubStation".

> The OPC item "lv_last_read" indicates the date and the time of the last status update in Logica Visual in correspondence with the equipment add-on "MainStation" resp. "MainStation>SubStation".

Input format: MINUTES



Attention:

The OPC server accepts a minimal value of 1 minute for the update interval.

"EnableLogFile":

The automatic generation of the protocol files of the OPC server is determined here.

Input format: YES / NO

"YES": automatic generation of the protocol files enabled

"NO": automatic generation of the protocol files not enabled



Note:

The protocol files will be automatically generated in the selected installation directory of the OPC server in the folder "SUB".

"EnableDebug":

Here it is determined whether the OPC server should be operated in the debug mode at an execution. An operation in the debug mode has the generation of more detailed protocol files as a consequence.

Input format: YES / NO

"YES": debug mode is activated

"NO": debug mode is deactivated

"MaxBackupLog":

The maximum number of the automatically generated protocol files of the OPC server is entered here.

Input format: NUMBER

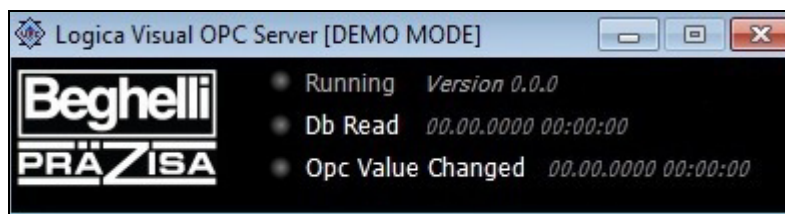
Installation step 5 – obtaining and setup of the full licence

Demo mode of the OPC server:

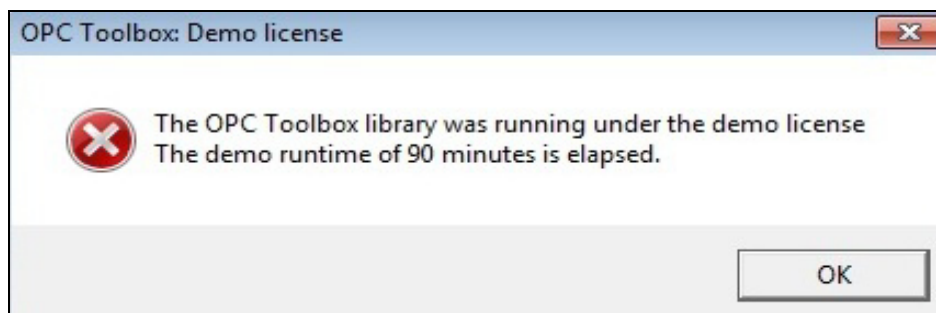
The following message appears after the execution of the OPC server when no entry of a full licence was recognised or when the entry of the full licence is not valid.



The program surface of the OPC server indicates the running demo mode by the addition "[DEMO MODE]".



The demo mode of the OPC server allows its use in the full scope of function but only for a runtime of 90 minutes. The following message appears after expiration of this time.



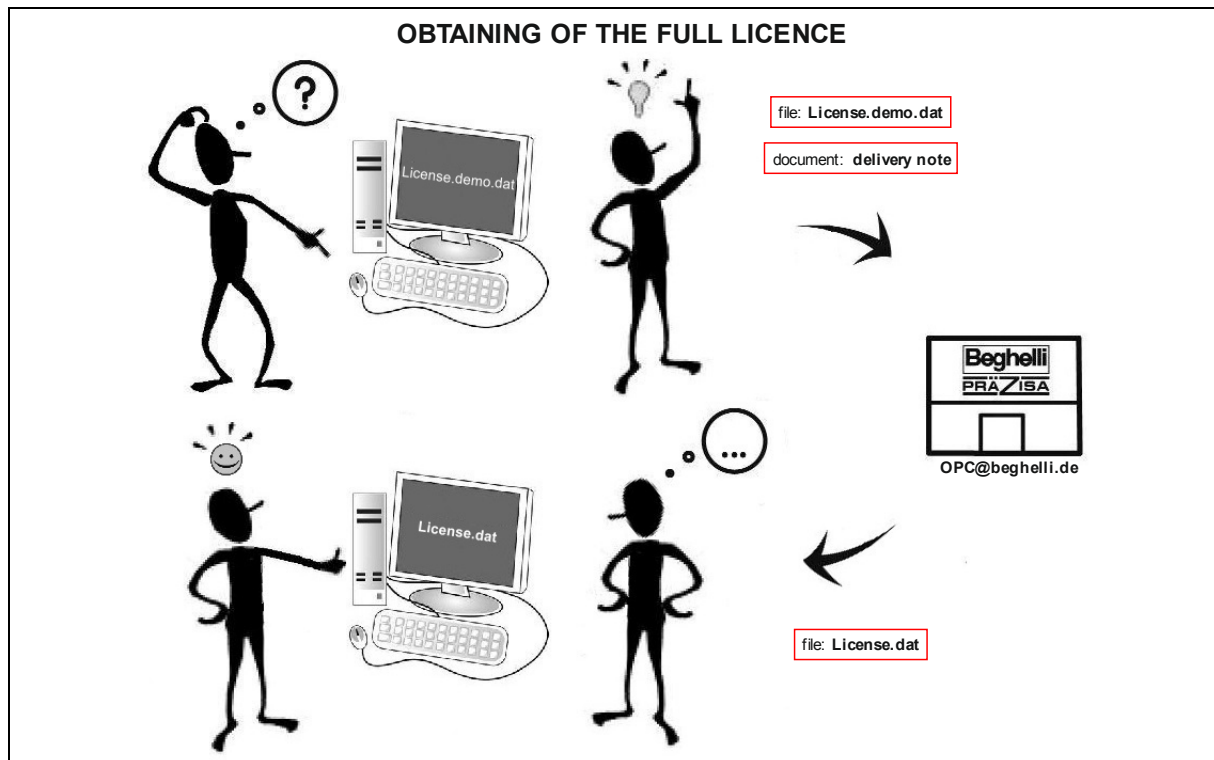
Attention:

The OPC server is deactivating its operating functions autonomously after a runtime of 90 minutes. A new runtime for 90 minutes with full scope of function can only be realized by ending and new execution of the OPC server.

Obtaining of the full licence:

For the use of the OPC server in its full scope of function it is necessary to obtain a full licence. The previously generated demo licence file is required for this. The full licence is handed over through a full licence file.

- > The demo licence file has the file name "License.demo.dat".
- > The full licence file has the file name "License.dat".



The full licence can be requested by the sending of the demo licence file "License.demo.dat" together with a copy of the respective delivery note regarding the obtained OPC server to the e-mail address "OPC@beghelli.de". After a check of the request by Beghelli PRÄZISA the sending of the full licence through the full licence file "License.dat" is done per e-mail to the address of the requestor at authorisation.

Setup of the full licence:

At first the full licence file "License.dat" must be stored in the selected installation directory of the OPC server. After that a registration of the full licence file must be done within the operating system. This is done by the execution of the program file of the OPC server with an additional command line parameter.

- > The executable program file of the OPC server has the file name "LVOpServer.exe" after the installation.
- > The command line parameter for the registration of the full licence file reads "/regserver".
- > The full command for the registration of the full licence file reads "LVOpServer.exe /regserver".



Attention: The full licence file "License.dat" must not be renamed.

Depending on the used operating system the registration of the full licence file can be done with different methods. The command line, the command line interpreter, a file link or a batch file are here on offer under Windows operating systems.



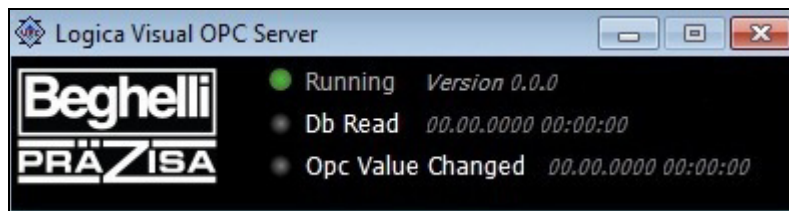
Note: Depending on the chosen method declarations to the save location of the program file of the OPC server can be necessary in addition for the execution of the command for the registration of the full licence file. To ensure a successful registration all commands should be generally executed with full administrator rights if possible.

A deregistration of the full licence file can also be done on demand within the operating system. This is also done by the execution of the program file of the OPC server with an additional command line parameter.

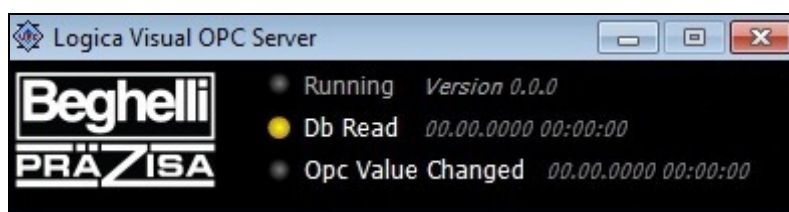
- > The command line parameter for the deregistration of the full licence file reads "/unregserver".
- > The full command for the deregistration of the full licence file reads "LVOpServer.exe /unregserver".

Use of the OPC server – general notes

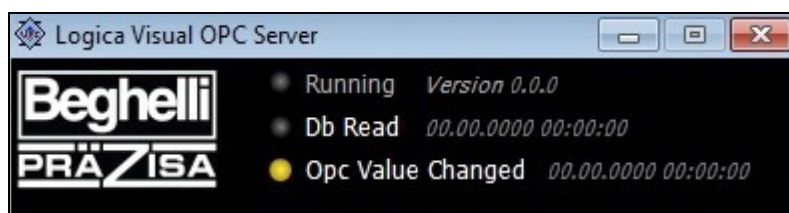
Program surface of the OPC server:



"Running": Green flashing signal – The OPC server is in operation. Beside this status indication the declaration of the currently used version of the OPC server is located.



"Db Read": Yellow flashing signal – The OPC server executes a read access resp. write access on the database file of Logica Visual. Beside this status indication the timely declaration of this procedure is located.



"OPC Value Changed": Green flashing signal – The OPC server has recognised a changed value opposite to the last read access resp. write access within the database file of Logica Visual. Only relevant values are monitored by the OPC server for this. Beside this status indication the timely declaration of this procedure is located.

General explanations – OPC item:

An OPC item is an object which represents a connection to a process variable. A process variable is an element of the address space of the OPC server, for example the output circuit card of a central battery system. An OPC item is identified by its item ID. The item ID is a determined designation by Beghelli PRÄZISA which is unique within the address space of the OPC server. The attributes quality, time stamp and value are associated with every OPC item. The quality of an OPC item indicates whether the value of the respective process variable was determined safe. The time stamp indicates when the value of the respective process variable was determined. Depending on given properties various data can be transmitted unidirectional or bidirectional by an OPC item.

OPC items of the OPC server:

The OPC server for Logica Visual provides OPC items which are each marked by a unique item ID. An OPC item can be linked with one or more equipment (hardware). Depending on the linked equipment (hardware) the OPC item can vary regarding its properties and meanings.



Attention:

To ensure the continuously monitoring of an installation it is necessary that Logica Visual is executed and that a hard and software connection to the respective installation is existing. Furthermore an automatic status update must be activated in Logica Visual. This automatic status update triggers the same procedures like the execution of the command "update status". Only in this way the database file of Logica Visual is continuously updated and a correct processing can be done by the OPC server.



Attention:

In the event of changes of any kind regarding the equipment (hardware and software) on an installation it is important to read in these changes in Logica Visual. In Logica Visual this is realized at first by the execution of the command "update configuration" followed by the execution of the command "update status". Certain changes on equipment (hardware and software) require in addition the ending and new execution of the OPC server. When done changes are not read in over the described kind no correct processing of the database file of Logica Visual can be done by the OPC server.



Note:

To perform tests on demand with the OPC-Server for Logica Visual e. g. the user software OPC Toolbox Demo Client from Softing Industrial Automation can be used. This is a demo client for OPC servers.

OPC items for group battery systems and central battery systems (NGB/NZB)

Links to equipment:

The OPC items which are available for the group battery systems and central battery systems are using additional designations (equipment add-on) for the unique item ID depending on present equipment (hardware) to make the respective link reasonable. Explanations of the possible links are found in the following.

LINKS OF OPC ITEMS TO EQUIPMENT FOR GROUP BATTERY SYSTEMS AND CENTRAL BATTERY SYSTEMS	
Equipment add-on for item ID:	Description of equipment:
"MainStation"	"main station"
"MainStation>SubStation"	"main station>sub station"
"MainStation>AK"	"main station>output circuit card"
"MainStation>SubStation>AK"	"main station>sub station>output circuit card"
"MainStation>AK>Line"	"main station>output circuit card>output circuit"
"MainStation>SubStation>AK>Line"	"main station>sub station>output circuit card>output circuit"
"MainStation>AK>Line>LM"	"main station>output circuit card>output circuit>lamp module"
"MainStation>SubStation>AK>Line>LM"	"main station>sub station>output circuit card>output circuit>lamp module"
"MainStation>Inputs"	"main station>LSSA switch input"
"MainStation>SubStation>Inputs"	"main station>sub station>LSSA switch input"

The equipment add-ons are including address numbers as further information, which accord with the respective addressing within the installation.

Application example: Complete item ID with equipment add-ons of OPC item "num", linked with the equipment main station 1, LSSA switch input 8:

"MainStation[1].Inputs[8].num".

Application example: Complete item ID with equipment add-ons of OPC item "num", linked with the equipment main station 1, sub station 2, LSSA switch input 8:

"MainStation[1].SubStation[2].Inputs[8].num".

Application example: Complete item ID with equipment add-ons of OPC item "description", linked with the equipment main station 1, output circuit card 3, output circuit 4, lamp module 5:

"MainStation[1].AK[3].Line[4].LM[5].description".

Application example: Complete item ID with equipment add-ons of OPC item "description", linked with the equipment main station 1, sub station 1, output circuit card 3, output circuit 4, lamp module 5:

"MainStation[1].SubStation[1].AK[3].Line[4].LM[5].description".

OPC item "next_fz_test"

Item ID "next_fz_test" with equipment add-on:
"MainStation"

Item ID: "next_fz_test"
Equipment add-on: "MainStation"
Equipment: "main station"
Access type: read / write
Data type: BSTR
Value format: day.month.year hour:minute:second
Value range: 01.01.0000 – 31.12.9999 00:00:00 – 23:59:59
Update: with command "update status" in Logica Visual

Description: Date and time of the next automatic function test over the respective main station.

OPC item "next_aut_test"

Item ID "next_aut_test" with equipment add-on:
"MainStation"

Item ID: "next_aut_test"
Equipment add-on: "MainStation"
Equipment: "main station"
Access type: read / write
Data type: BSTR
Value format: day.month.year hour:minute:second
Value range: 01.01.0000 – 31.12.9999 00:00:00 – 23:59:59
Update: with command "update status" in Logica Visual

Description: Date and time of the next automatic battery test over the respective main station.

OPC item "fz_test_period"

Item ID "fz_test_period" with equipment add-on:
"MainStation"

Item ID: "fz_test_period"
Equipment add-on: "MainStation"
Equipment: "main station"
Access type: read / write
Data type: I2
Value format: day
Value range: 001 – 999
Update: with command "update status" in Logica Visual

Description: Period of the next automatic function test over the respective main station.

OPC item "aut_test_period"

Item ID "aut_test_period" with equipment add-on:
"MainStation"

Item ID: "aut_test_period"
Equipment add-on: "MainStation"
Equipment: "main station"
Access type: read / write
Data type: I2
Value format: day
Value range: 001 – 999
Update: with command "update status" in Logica Visual

Description: Period of the next automatic battery test over the respective main station.

OPC item "cmd_test_now"

Item ID "cmd_test_now" with equipment add-on:
"MainStation"

Item ID: "cmd_test_now"
Equipment add-on: "MainStation"
Equipment: "main station"
Access type: read / write
Data type: UI1
Value format: binary number
Value range: 0 – 1
Value definition: 0 – at write access:
start function test
1 – at write access:
start function test
0 – at read access:
command to start for function test received resp. no written command for start of function test
1 – at read access:
command to start for function test not received resp. written command for start of function test
Update: no command necessary in Logica Visual

Description: Binary number for command to start of a manual function test over the respective main station.
The value "1" is set again automatically to the value "0" after receiving of the command.

OPC item "last_test"

Item ID "last_test" with equipment add-on:
"MainStation"

Item ID: "last_test"
Equipment add-on: "MainStation"
Equipment: "main station"
Access type: read
Data type: BSTR
Value format: day.month.year hour:minute:second
Value range: 01.01.0000 – 31.12.9999 00:00:00 – 23:59:59
Update: with command "update status" in Logica Visual

Description: Date and time of the last test report of the respective main station in Logica Visual. The test protocol is related both to a function test as well as to a battery test.

OPC item "lv_last_read"

Item ID "lv_last_read" with equipment add-on:
"MainStation"
"MainStation>SubStation"

Item ID: "lv_last_read"
Equipment add-on: "MainStation"
Equipment: "MainStation>SubStation"
Equipment: "main station"
Equipment: "main station>sub station"
Access type: read
Data type: BSTR
Value format: day.month.year hour:minute:second
Value range: 01.01.0000 – 31.12.9999 00:00:00 – 23:59:59
Update: with command "update status" in Logica Visual

Description: Date and time of the last status update of the respective main station or sub station by the command "update status" in Logica Visual.

OPC item "cmd_set_cbs"

Item ID "cmd_set_cbs" with equipment add-on:

"MainStation"

"MainStation>SubStation"

Item ID:	"cmd_set_cbs"
Equipment add-on:	"MainStation"
	"MainStation>SubStation"
Equipment:	"main station"
	"main station>sub station"
Access type:	read / write
Data type:	UI1
Value format:	binary number
Value range:	0 – 1
Value definition:	0 – at write access: deactivate permanent setting
	1 – at write access: activate permanent setting
	0 – at read access: command for deactivation of the permanent setting received resp. permanent setting deactivated
	1 – at read access: command for activation of the permanent setting received resp. permanent setting activated
Update:	no command necessary in Logica Visual
Description:	Binary number for command for activation and deactivation of the general permanent setting of the respective main station or sub station.

OPC item "description"

Item ID "description" with equipment add-on:

"MainStation"

"MainStation>SubStation"

Item ID: "description"
Equipment add-on: "MainStation"
Equipment: "MainStation>SubStation"
Equipment: "main station"
Equipment: "main station>sub station"
Access type: read
Data type: BSTR
Value format: sign
Update: no command necessary in Logica Visual

Description: Designation of the respective main station or sub station in Logica Visual. The designation can be determined user-defined and contain sign data.

Item ID "description" with equipment add-on:

"MainStation>AK>Line"

"MainStation>SubStation>AK>Line"

Item ID: "description"
Equipment add-on: "MainStation>AK>Line"
Equipment: "MainStation>SubStation>AK>Line"
Equipment: "main station>output circuit card>output circuit"
Equipment: "main station>sub station>output circuit card>output circuit"
Access type: read
Data type: BSTR
Value format: sign
Update: no command necessary in Logica Visual

Description: Designation of the respective output circuit in Logica Visual. The designation can be determined user-defined and contain sign data.

Item ID "description" with equipment add-on:

"MainStation>AK>Line>LM"

"MainStation>SubStation>AK>Line>LM"

Item ID: "description"
Equipment add-on: "MainStation>AK>Line>LM"
Equipment: "MainStation>SubStation>AK>Line>LM"
Equipment: "main station>output circuit card>output circuit>lamp module"
Equipment: "main station>sub station>output circuit card>output circuit>lamp module"
Access type: read
Data type: BSTR
Value format: sign
Update: no command necessary in Logica Visual

Description: Designation of the respective lamp module in Logica Visual. The designation can be determined user-defined and contain sign data.

Item ID "description" with equipment add-on:

"MainStation>Inputs"

"MainStation>SubStation>Inputs"

Item ID: "description"
Equipment add-on: "MainStation>Inputs"
Equipment: "MainStation>SubStation>Inputs"
Equipment: "main station>LSSA switch input"
Equipment: "main station>sub station>LSSA switch input"
Access type: read
Data type: BSTR
Value format: sign
Update: no command necessary in Logica Visual

Description: Designation of the respective LSSA switch input in Logica Visual. The designation can be determined user-defined and contain sign data.

OPC item "type"

Item ID "type" with equipment add-on:

"MainStation>Inputs"

"MainStation>SubStation>Inputs"

Item ID: "type"
Equipment add-on: "MainStation>Inputs"
"MainStation>SubStation>Inputs"
Equipment: "main station>LSSA switch input"
"main station>sub station>LSSA switch input"
Access type: read
Data type: UI1
Value format: decimal number
Value range: 1 – 5
Value definition: 1: light switch setting query
2: sub distribution mains monitoring
3: stairway light switch query
4: switch query for selective standby reset
5: negative light switch setting query
Update: with command "update configuration" in Logica Visual
Description: Allocation number for the configured function of the respective LSSA switch input of a LSSA or TSZ module as well as of the respective LSSA-K switch input of a compact NGB system. The allocation number is not related to LSSA switch inputs of lamp modules.

Item ID "type" with equipment add-on:

"MainStation>AK>Line"

"MainStation>SubStation>AK>Line"

Item ID: "type"
Equipment add-on: "MainStation>AK>Line"
"MainStation>SubStation>AK>Line"
Equipment: "main station>output circuit card>output circuit"
"main station>sub station>output circuit card>output circuit"
Access type: read
Data type: UI1
Value format: decimal number
Value range: 138 – 141
Value definition: 138: single monitoring output circuit EÜ
139: circuit monitoring output circuit SÜ
140: circuit monitoring output circuit SÜ-HL
141: circuit monitoring output circuit SÜ-AC
Update: with command "update configuration" in Logica Visual
Description: Allocation number for the type of the respective output circuit.

Item-ID "type" with equipment add-on:

"MainStation>AK>Line>LM"

"MainStation>SubStation>AK>Line>LM"

Item ID: "type"
Equipment add-on: "MainStation>AK>Line>LM"
"MainStation>SubStation>AK>Line>LM"
Equipment: "main station>output circuit card>output circuit>lamp module"
"main station>sub station>output circuit card>output circuit>lamp module"
Access type: read
Data type: UI1
Value format: decimal number
Value range: 1 – 3
Value definition: 1: lamp module KCE
2: lamp module MEB
3: lamp module SLEB or ALOG
Update: with command "update configuration" in Logica Visual
Description: Allocation number for the type of the respective lamp module.

OPC item "num"

Item ID "num" with equipment add-on:

"MainStation>Inputs"

"MainStation>SubStation>Inputs"

Item ID: "num"
Equipment add-on: "MainStation>Inputs"
"MainStation>SubStation>Inputs"
Equipment: "main station>LSSA switch input"
"main station>sub station>LSSA switch input"
Access type: read
Data type: UI1
Value format: decimal number
Value range: 1 – 64
Update: with command "update configuration" in Logica Visual

Description: Logical input to the configured function of the respective LSSA switch input of a LSSA or TSZ module as well as of the respective LSSA-K switch input of a compact NGB system. The logical input is not related to LSSA switch inputs of lamp modules. The logical input can be determined user-defined.

OPC item "hex_address"

Item ID "hex_address" with equipment add-on:

"MainStation>AK>Line>LM"

"MainStation>SubStation>AK>Line>LM"

Item ID: "hex_address"
Equipment add-on: "MainStation>AK>Line>LM"
"MainStation>SubStation>AK>Line>LM"
Equipment: "main station>output circuit card>output circuit>lamp module"
"main station>sub station>output circuit card>output circuit>lamp module"
Access type: read
Data type: BSTR
Value format: hexadecimal number
Update: Step 1: with command "update configuration" in Logica Visual
Step 2: with command "update status" in Logica Visual
Step 3: by ending and new execution of the OPC server



Description: Hexadecimal number for addressing of the respective ALOG lamp module.

OPC item "function"

Item ID "function" with equipment add-on:

"MainStation>AK>Line"

"MainStation>SubStation>AK>Line"

Item ID:	"function"
Equipment add-on:	"MainStation>AK>Line"
	"MainStation>SubStation>AK>Line"
Equipment:	"main station>output circuit card>output circuit"
	"main station>sub station>output circuit card>output circuit"
Access type:	read
Data type:	BSTR
Value format:	1. decimal number 2. decimal number 3. decimal number 4. decimal number
Value range:	0 – 9 0 – 64 0 – 99 0 – 0
Value definition:	<p>1. decimal number:</p> <p>0: operating mode not configured</p> <p>1: permanent setting</p> <p>2: permanent setting time-controlled</p> <p>3: permanent setting switchable</p> <p>4: standby</p> <p>5: standby switchable to permanent setting</p> <p>6: standby with own mains emergency switch-over</p> <p>7: stairway switching time-controlled</p> <p>8: optional, designated for function extensions</p> <p>9: permanent setting with forced DC in emergency operation</p> <p>2. decimal number:</p> <p>if 1. decimal number has the value 2 then:</p> <p>week time program (1 – 2) of operating mode "permanent setting time-controlled"</p> <p>if 1. decimal number has the value 3 or 5 then:</p> <p>logical input (0 – 64) of function "light switch setting query"</p> <p>if 1. decimal number has the value 6 or 9 then:</p> <p>logical input (0 – 64) of function "sub distribution mains monitoring"</p> <p>if 1. decimal number has the value 7 then:</p> <p>logical input (1 – 64) of function "stairway light switch query"</p> <p>if 1. decimal number has the value 0, 1, 4 or 8 then:</p> <p>no configuration (0)</p> <p>3. decimal number:</p> <p>if 1. decimal number has the value 3 then:</p> <p>logical input (0 – 64) of function "sub distribution mains monitoring"</p> <p>if 1. decimal number has the value 6 then:</p> <p>logical input (1 – 64) of function "switch query for selective standby reset"</p> <p>if 1. decimal number has the value 7 then:</p> <p>power-on duration (0 – 99 minutes) of function "stairway light switch query"</p> <p>if 1. decimal number has the value 0, 1, 2, 4, 5, 8 or 9 then:</p> <p>no configuration (0)</p> <p>4. decimal number:</p> <p>if 1. decimal number has the value 0, 1, 2, 3, 4, 5, 6, 7, 8 or 9 then:</p> <p>no configuration (0)</p>
Update:	with command "update configuration" in Logica Visual
Description:	<p>1. decimal number:</p> <p>Allocation number for line operating mode of the respective output circuit.</p> <p>2. decimal number:</p> <p>Allocated week time program regarding the operating mode "permanent setting time-controlled" of the respective output circuit if 1. decimal number has the value 2. Allocated logical input regarding the function "light switch setting query" of the respective output circuit if 1. decimal number has the value 3 or 5. Allocated logical input regarding the function "sub distribution mains monitoring" of the respective output circuit if 1. decimal number has the value 6 or 9. Allocated logical input regarding the function "stairway light switch query" of the respective output circuit if 1. decimal number has the value 7. No configuration if 1. decimal number has the value 0, 1, 4 or 8.</p>

3. decimal number:

Allocated logical input regarding the function "sub distribution mains monitoring" of the respective output circuit if 1. decimal number has the value 3. Allocated logical input regarding the function "switch query for selective standby reset" of the respective output circuit if 1. decimal number has the value 6. Configured power-on duration in minutes regarding the function "stairway light switch query" of the respective output circuit if 1. decimal number has the value 7. No configuration if 1. decimal number has the value 0, 1, 2, 4, 5, 8 or 9.

4. decimal number:

No configuration if 1. decimal number has the value 0, 1, 2, 3, 4, 5, 6, 7, 8 or 9.

Item ID "function" with equipment add-on:

"MainStation>AK>Line>LM"

"MainStation>SubStation>AK>Line>LM"

Item ID:	"function"
Equipment add-on:	"MainStation>AK>Line>LM"
	"MainStation>SubStation>AK>Line>LM"
Equipment:	"main station>output circuit card>output circuit>lamp module"
	"main station>sub station>output circuit card>output circuit>lamp module"
Access type:	read
Data type:	BSTR
Value format:	1. decimal number 2. decimal number 3. decimal number 4. decimal number
Value range:	1 – 8 0 – 64 0 – 99 0 – 64
Value definition:	1. decimal number: 1: permanent setting 2: permanent setting time-controlled 3: permanent setting switchable 4: standby 5: standby switchable to permanent setting 6: standby with own mains emergency switch-over 7: stairway switching time-controlled 8: permanent setting switchable with own mains emergency switch-over 2. decimal number: if 1. decimal number has the value 2 then: week time program (1 – 2) of operating mode "permanent setting time-controlled" if 1. decimal number has the value 3, 5 or 8 then: logical input (0 – 64) of function "light switch setting query" if 1. decimal number has the value 6 then: logical input (0 – 64) of function "sub distribution mains monitoring" if 1. decimal number has the value 7 then: logical input (1 – 64) of function "stairway light switch query" if 1. decimal number has the value 1 or 4 then: no configuration (0) 3. decimal number: if 1. decimal number has the value 3 or 8 then: logical input (0 – 64) of function "sub distribution mains monitoring" if 1. decimal number has the value 6 then: logical input (1 – 64) of function "switch query for selective standby reset" if 1. decimal number has the value 7 then: power-on duration (0 – 99 minutes) of function "stairway light switch query" if 1. decimal number has the value 1, 2, 4 or 5 then: no configuration (0) 4. decimal number: if 1. decimal number has the value 8 then: logical input (1 – 64) of function "switch query for selective standby reset" if 1. decimal number has the value 1, 2, 3, 4, 5, 6 or 7 then: no configuration (0)
Update:	with command "update configuration" in Logica Visual
Description:	1. decimal number: Allocation number for LA-operating mode of the respective lamp module. 2. decimal number: Allocated week time program regarding the operating mode "permanent setting time-controlled" of the respective lamp module if 1. decimal number has the value 2. Allocated logical input regarding the function "light switch setting query" of the respective lamp module if 1. decimal number has the value 3, 5 or 8. Allocated logical input regarding the function "sub distribution mains monitoring" of the respective lamp module if 1. decimal number has the value 6. Allocated logical input regarding the function "stairway light switch query" of the respective lamp module if 1. decimal number has the value 7. No configuration if 1. decimal number has the value 1 or 4.

3. decimal number:

Allocated logical input regarding the function "sub distribution mains monitoring" of the respective lamp module if 1. decimal number has the value 3 or 8. Allocated logical input regarding the function "switch query for selective standby reset" of the respective lamp module if 1. decimal number has the value 6. Configured power-on duration in minutes regarding the function "stairway light switch query" of the respective lamp module if 1. decimal number has the value 7. No configuration if 1. decimal number has the value 1, 2, 4 or 5.

4. decimal number:

Allocated logical input regarding the function "switch query for selective standby reset" of the respective lamp module if 1. decimal number has the value 8. No configuration if 1. decimal number has the value 1, 2, 3, 4, 5, 6 or 7.

OPC item "error"

Item ID "error" with equipment add-on:

"MainStation"

"MainStation>SubStation"

Item ID:	"error"
Equipment add-on:	"MainStation"
	"MainStation>SubStation"
Equipment:	"main station"
	"main station>sub station"
Access type:	read
Data type:	UI1
Value format:	decimal number
Value range:	0 – 1
Value definition:	0: update failure not present 1: update failure present
Update:	no command necessary in Logica Visual
Description:	Allocation number regarding an update failure between Logica Visual and the respective main station or sub station. When the maximum update interval is exceeded which is determined within the configuration file "Config.ini" an update failure is present.

Item ID "error" with equipment add-on:

"MainStation>AK"

"MainStation>SubStation>AK"

Item ID:	"error"
Equipment add-on:	"MainStation>AK"
	"MainStation>SubStation>AK"
Equipment:	"main station>output circuit card"
	"main station>sub station>output circuit card"
Access type:	read
Data type:	UI1
Value format:	decimal number
Value range:	0 – 1
Value definition:	0: general failure not present 1: general failure present
Update:	with command "update status" in Logica Visual
Description:	Allocation number regarding a general failure on the respective output circuit card.

Item ID "error" with equipment add-on:

"MainStation>AK>Line"

"MainStation>SubStation>AK>Line"

Item ID:	"error"
Equipment add-on:	"MainStation>AK>Line"
	"MainStation>SubStation>AK>Line"
Equipment:	"main station>output circuit card>output circuit"
	"main station>sub station>output circuit card>output circuit"
Access type:	read
Data type:	UI1
Value format:	decimal number
Value range:	0 – 5
Value definition:	0: failure not present 1: failure of output circuit card 2: failure of lamp module 3: failure of fuse of output circuit 4: failure by overload of output circuit 5: failure at insulation of output circuit
Update:	with command "update status" in Logica Visual
Description:	Allocation number regarding diverse failures on the respective output circuit.

Item ID "error" with equipment add-on:

"MainStation>AK>Line>LM"

"MainStation>SubStation>AK>Line>LM"

Item ID: "error"
Equipment add-on: "MainStation>AK>Line>LM"
Equipment: "MainStation>SubStation>AK>Line>LM"
Equipment: "main station>output circuit card>output circuit>lamp module"
Equipment: "main station>sub station>output circuit card>output circuit>lamp module"
Access type: read
Data type: UI1
Value format: decimal number
Value range: 0 – 2
Value definition: 0: failure not present
1: illuminant failure resp. equipment failure present
2: bus failure between output circuit and lamp module present
Update: with command "update status" in Logica Visual
Description: Allocation number regarding diverse failures on the respective lamp module. At simultaneous occurrence of several conditions the single values of the conditions are not added to a total value and outputted in the allocation number. The condition of the bus failure between output circuit and lamp module has priority against the condition of the illuminant failure resp. equipment failure at an output in the allocation number.

OPC item "voltage"

Item ID "voltage" with equipment add-on:

"MainStation"

Item ID: "voltage"
Equipment add-on: "MainStation"
Equipment: "main station"
Access type: read
Data type: R8
Value format: decimal number
Value range: 0 – 999,9
Update: with command "update status" in Logica Visual
Description: Voltage regarding the battery supply on the respective main station. The voltage of the battery supply is only measured on the respective main station.

OPC item "current"

Item ID "current" with equipment add-on:

"MainStation"

Item ID: "current"
Equipment add-on: "MainStation"
Equipment: "main station"
Access type: read
Data type: R8
Value format: decimal number
Value range: 0 – 999,9
Update: with command "update status" in Logica Visual
Description: Charge current resp. discharge current regarding the battery supply on the respective main station. The charge current resp. discharge current of the battery supply is only measured on the respective main station.

OPC item "flag1"

Item ID "flag1" with equipment add-on:

"MainStation"

"MainStation>SubStation"

Item ID:	"flag1"
Equipment add-on:	"MainStation"
	"MainStation>SubStation"
Equipment:	"main station"
	"main station>sub station"
Access type:	read
Data type:	UI1
Value format:	decimal number
Value range:	0 – 10
Value definition:	0: battery operation off
	1: battery operation on – general power failure (mains failure) on the emergency light station
	2: battery operation on – emergency overrun time
	3: battery operation on – function test
	4: battery operation on – battery test with 67 % of nominal operation duration
	5: battery operation on – battery test with 100 % of nominal operation duration
	10: battery operation on – insulation test
Update:	with command "update status" in Logica Visual
Description:	Allocation number for switching state and reason of the battery operation on the respective main station or sub station.

OPC item "flag2"

Item ID "flag2" with equipment add-on:

"MainStation"

"MainStation>SubStation"

Item ID:	"flag2"
Equipment add-on:	"MainStation"
	"MainStation>SubStation"
Equipment:	"main station"
	"main station>sub station"
Access type:	read
Data type:	UI1
Value format:	decimal number
Value range:	0 – 4
Value definition:	0: battery operation off
	1: battery operation on – general power failure (mains failure) on the emergency light station
	2: battery operation on – by manual command initiation
	3: battery operation on – by function test, battery test or insulation test
	4: battery operation on – by bus signal
Update:	with command "update status" in Logica Visual
Description:	Allocation number for switching state and command initiation of the battery operation on the respective main station or sub station.

OPC item "flag3"

Item ID "flag3" with equipment add-on:

"MainStation"

"MainStation>SubStation"

Item ID: "flag3"
Equipment add-on: "MainStation"
Equipment: "MainStation>SubStation"
Equipment: "main station"
Equipment: "main station>sub station"
Access type: read
Data type: UI1
Value format: decimal number
Value range: 0 – 255
Value definition:
0: failure not present
1: battery mode and emergency mode not possible
2: failure at last function test, battery test or at deep discharge simulation
4: failure on output circuit or lamp module
8: installation blocked
16: failure by deep discharge
32: failure on battery symmetry on main station
64: charge circuit failure on main station
128: general power failure (mains failure) on the emergency light station or sub distribution

Update: with command "update status" in Logica Visual

Description: Allocation number regarding diverse failures and switching state of the operational condition on the respective main station or sub station. At simultaneous occurrence of several conditions the single values of the conditions are added to a total value and outputted in the allocation number.

OPC item "flag4"

Item ID "flag4" with equipment add-on:

"MainStation"

"MainStation>SubStation"

Item ID: "flag4"
Equipment add-on: "MainStation"
Equipment: "MainStation>SubStation"
Equipment: "main station"
Equipment: "main station>sub station"
Access type: read
Data type: UI1
Value format: decimal number
Value range: 0 – 255
Value definition:
0: power failure not present
1: optional, designated for function extensions
2: optional, designated for function extensions
4: optional, designated for function extensions
8: optional, designated for function extensions
16: sub distribution power failure present –
critical circuit / sub distribution mains monitoring by LSSA function
32: general power failure present on the emergency light station –
phase 3
64: general power failure present on the emergency light station –
phase 2
128: general power failure present on the emergency light station –
phase 1

Update: with command "update status" in Logica Visual

Description: Allocation number regarding diverse power failures on the respective main station or sub station. At simultaneous occurrence of several conditions the single values of the conditions are added to a total value and outputted in the allocation number.

OPC item "flag5"

Item ID "flag5" with equipment add-on:

"MainStation"

"MainStation>SubStation"

Item ID:	"flag5"
Equipment add-on:	"MainStation"
	"MainStation>SubStation"
Equipment:	"main station"
	"main station>sub station"
Access type:	read
Data type:	UI1
Value format:	decimal number
Value range:	0 – 255
Value definition:	0: charge circuit failure not present 1: charge circuit failure present on the emergency light station – charger 8 2: charge circuit failure present on the emergency light station – charger 7 4: charge circuit failure present on the emergency light station – charger 6 8: charge circuit failure present on the emergency light station – charger 5 16: charge circuit failure present on the emergency light station – charger 4 32: charge circuit failure present on the emergency light station – charger 3 64: charge circuit failure present on the emergency light station – charger 2 128: charge circuit failure present on the emergency light station – charger 1
Update:	with command "update status" in Logica Visual
Description:	Allocation number regarding diverse charge circuit failures on the respective main station or sub station. A charge circuit failure of the battery supply is only measured on the respective main station. Therefore no output of a charge circuit failure appears regarding a sub station. At simultaneous occurrence of several conditions the single values of the conditions are added to a total value and outputted in the allocation number.

OPC item "flag6"

Item ID "flag6" with equipment add-on:

"MainStation"

"MainStation>SubStation"

Item ID:	"flag6"
Equipment add-on:	"MainStation"
	"MainStation>SubStation"
Equipment:	"main station"
	"main station>sub station"
Access type:	read
Data type:	UI1
Value format:	decimal number
Value range:	0 – 255
Value definition:	<p>0: failure not present</p> <p>1: optional, designated for function extensions</p> <p>2: optional, designated for function extensions</p> <p>4: optional, designated for function extensions</p> <p>8: optional, designated for function extensions</p> <p>16: insulation failure present on the emergency light station – insulation failure between the minus pole of the battery supply and another potential</p> <p>32: insulation failure present on the emergency light station – insulation failure between the plus pole of the battery supply and another potential</p> <p>64: battery circuit failure present on the emergency light station – battery 2</p> <p>128: battery circuit failure present on the emergency light station – battery 1</p>
Update:	with command "update status" in Logica Visual
Description:	Allocation number regarding diverse failures on the respective main station or sub station. At simultaneous occurrence of several conditions the single values of the conditions are added to a total value and outputted in the allocation number.

OPC item "flag7"

Item ID "flag7" with equipment add-on:

"MainStation"

"MainStation>SubStation"

Item ID:	"flag7"
Equipment add-on:	"MainStation"
	"MainStation>SubStation"
Equipment:	"main station"
	"main station>sub station"
Access type:	read
Data type:	UI1
Value format:	decimal number
Value range:	0 – 255
Value definition:	0: failure not present 1: optional, designated for function extensions 2: optional, designated for function extensions 4: optional, designated for function extensions 8: optional, designated for function extensions 16: optional, designated for function extensions 32: optional, designated for function extensions 64: protocol memory failure present on the emergency light station – no more free protocol memory 128: blower failure present on the emergency light station – designated as function extension
Update:	with command "update status" in Logica Visual
Description:	Allocation number regarding diverse failures on the respective main station or sub station. At simultaneous occurrence of several conditions the single values of the conditions are added to a total value and outputted in the allocation number.

NOTES:

[illegible]

[illegible]



Beghelli PRÄZISA GmbH
Lanterstraße 34
D-46539 Dinslaken
Fon +49 (0)2064 9701 - 0
Fax +49 (0)2064 9701 - 99
info@beghelli.de
www.beghelli.de