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Title: **Animeo IB+ OPC server**

Type: **User Manual**

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Summary

This document intends to provide the necessary information regarding understanding, use and set up the animeo IB+ OPC Server functionality.

Change log

Rev 1.0 First version – Document created

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1 What is OPC?

OPC is a series of standards specifications. The first standard (originally called simply the OPC Specification and now called the *Data Access Specification*) resulted from the collaboration of a number of leading worldwide automation suppliers working in cooperation with Microsoft. Originally based on Microsoft's OLE COM (component object model) and DCOM (distributed component object model) technologies, the specification defined a standard set of objects, interfaces and methods for use in process control and manufacturing automation applications to facilitate interoperability. The COM/DCOM technologies provided the framework for software products to be developed. There are now hundreds of OPC Data Access servers and clients.

Everyone's favourite analogy for needing the original Data Access Specification is printer drivers in DOS and then in Windows. Under DOS the developer of each application had to also write a printer driver for every printer. So AutoCAD wrote the AutoCAD application and the printer drivers. And WordPerfect wrote the WordPerfect application and the printer drivers. They had to write a separate printer driver for every printer they wanted to support: one for an Epson FX-80 and one for the H-P LaserJet, and on and on. In the industrial automation world, Intellution wrote their Human Machine Interface (HMI) software and a proprietary driver to each industrial device (including every PLC brand). Rockwell wrote their HMI and a proprietary driver to each industrial device (including every PLC brand, not just their own).

Windows solved the printer driver problem by incorporating printer support into the operating system. Now one printer driver served all the applications! And these were printer drivers that the printer manufacturer wrote (not the application developer). Windows provided the infrastructure to allow the industrial device driver's solution as well. Adding the OPC specification to Microsoft's OLE technology in Windows allowed standardization. Now the industrial devices' manufacturers could write the OPC DA Servers and the software (like HMIs) could become OPC Clients.

The resulting selfish benefit to the software suppliers was the ability to reduce their expenditures for connectivity and focus them on the core features of the software. For the users, the benefit was flexibility. They could now choose software suppliers based on features instead of "Do they have the driver to my unique device?" They don't have to create a custom interface that they must bear the full cost of creating and upgrading through operating system or device vendor changes. Users were also assured of better quality connectivity as the OPC DA Specification codified the connection mechanism and compliance testing. OPC interface products are built once and reused many times; hence, they undergo continuous quality control and improvement.

The user's project cycle is shorter using standardized software components. And their cost is lower. These benefits are real and tangible. Because the OPC standards are based in turn upon computer industry standards, technical reliability is assured.

The original specification standardized the acquisition of process data. It was quickly realized that communicating other types of data could benefit from standardization. Standards for Alarms & Events, Historical Data, and Batch data were launched.

The "OPC world" is managed by the OPC Foundation (www.OPCFoundation.org).

2 This is animeo IB+

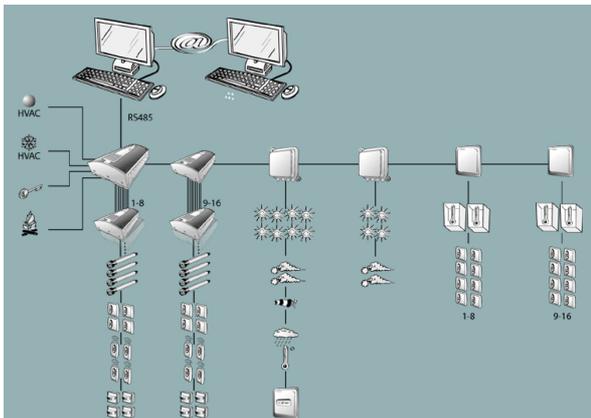
First, for detailed information please study the animeo IB+ owner's manual. See also chapter **Chyba! Nenalezen zdroj odkazů.**

So, animeo IB+ is a control system for any type of solar shading device and various types of windows (for natural ventilation and night cooling features). The function can simply be described as: By analyzing the present weather data e.g. the solar shading devices are ordered to an optimized position.

The building is divided into zones. A zone is typically a specific type of solar shading device in a specific weather direction. One system can manage up to 16 zones and each zone can manage up to 400 motors. Each zone has its own set of adjustable parameters; these are called "Zone functions". There are also a number of functions that valid for all zones; these are called "Building functions". It's also fully possible to locally control any specific motor from a local control point; this is called "Local control".

An animeo IB+ system consists of following devices:

- **Building controller (BuCo)**
The BuCo is the heart of the system. This device analyzes all input and take all decisions. A BuCo can control up to 8 zones. If more zones are required an additional BuCo (BuCo Extension) can be used. This leads to that a system can manage up to 16 zones. The BuCo can also via potential free in- and outputs communicate with other systems in a building, e.g. fire alarm
- **Sensor boxes**
There are two different type of sensor boxes available. One for interior and for exterior sensors. A number of different types of sensors can be connected to each sensor box. Up to two of each can be connected to a system.
- **Motor controllers (MoCo)**
All motors and local control points (e.g. a switch and/or remote) are connected to the MoCo. There are a number of different MoCo's available. Normally due to the motor type to be used (e.g. 230V, 120V, 24V, Encoders etc.).
- **A PC and linked animeo PC software**
The system will work without the PC up and running (except OPC functionalities). The PC is used to make settings, monitor the status and give commands. The PC communicates with the BuCo over RS-485.



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2.1 Priorities

All functions are divided into two different categories, either Security or Non-security. The difference is that the Security functions are impossible to override, even in Manual mode. Non-security functions are only active in Automatic mode. The highest priority has "Major Alarm" and the lowest "Non-critical System Error".

Security functions	
Major Alarm	When active the end products will take the programmed position. Often used to connect the buildings fire alarm system.
PC Building lock 0%	When active the all end product will take it's secure position
PC Zone lock 0%	When active the all end product in a zone will take it's secure position
Key Building lock 0%	When the central lock 0% input on the building controller is active more then 2s all end product will take its secure position.
Key Zone lock 0%	When a group lock 0% input on the internal sensor box is active more then 2s all end product in a zone will take it's secure position
Major Error	When active the all end product will take it's secure position
Wind Speed	When active the all end product in a zone will take it's secure position
Wind Direction	When active the all end product in a zone will take it's secure position
Snow	When active the all end product will take it's secure position
Frost	When active the all end product will take it's secure position
Rain	When active the all end product will take it's secure position
Building Timer	When active the all end product will take it's secure position
Key Building 100%	When the central block input 100% on the building controller is active more then 2s all end product will take its secure position.
Non-Security functions	
PC Zone Command	Active when a manual command is given from the PC
Zone Timer	When active the zone will take programmed position. The position could be intermediate position 1 or 2, 0% or 100%.
Reset Building 0%	When active all zones will take 0% position
Switch Building Command	Active when the central block inputs (0 or 100%) on the building controller is active less then 2s – a manual central command is executed.
Switch Zone Command	Active when the group lock 0% inputs (0 or 100%) on the internal sensor box is active more then 2s – a manual group command is executed.
Solar Heating	When active the zone will act to get heat from the sun. E.g. move sun protection to 0% position.
Solar Heating HVAC	When active the zone will act to get heat from the sun in combination with the HVAC system. E.g. move sun protection to 0% position.
Maintain Heat	When active the zone will act to preserve heat by e.g. move sun protection to 100% position.
Ventilation Cooling HVAC	When active the zone will act for natural ventilation in combination with the HVAC system by e.g. by opening windows
Zone Synergy	When active an internal sun protection zone adopts a locked external sun protection zone function to keep maximum performance of the building.
Sun	When active the zone will take it's programmed position
Non-Critical System Error	When active a minor error has occurred. These errors will not impact the security of the system and will not execute any action. This is just an indication.

2.2 Control mode

Each zone can be in either Manual or Automatic control mode. In Automatic mode all functions are enabled. In Manual mode all Non-security functions are disabled. Security functions are always enabled, independent of Control mode. See also chapter 2.1.

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2.3 Communication within an animeo IB+ System

Within the system all communication is bidirectional except between the BuCo and MoCo, which is Mono directional. It's then important to remember: If the BuCo give a command to a zone to go to a specific position AND if locally e.g. a specific shading device in the zone is controlled to another position, the BuCo will not be aware of this.

This means that ALL information and actions in an animeo system is on Zone level.

Meaning it's not possible to monitor or control a specific motor in a zone from the PC or OPC client.

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3 Animeo IB+ OPC server

3.1 General

The OPC server is a third party component from Software Toolbox Inc. (www.softwaretoolbox.com). Once installed. It is a part of the Somfy animeo IB+ Operating Software. The OPC server is compliancy tested according to the specifications of the OPC foundation (www.opcfoundation.org).

Via the OPC interface it is possible to access status on both zone and building level as well as sending commands for each zone to change operating mode or to control the end products.

It is not possible to alter functional parameters via the OPC interface as these may change the configuration of the system in such a way that equipment, in a worst case, might be damaged.

3.2 Limitations

There are a few limitations to be aware about:

- **Zones**
As already stated in chapter 2.2 that it is only possible to get the position for a zone. Not for a single motor in a zone. It's also only possible to give commands (e.g. up or down) on zone or building level.
- **The PC and the animeo IB+ Operating software**
Both the PC AND the animeo IB+ Operating software / OPC server must be running to access OPC functionality.
- **Size restrictions**
Normally only one system (up to 16 zones) can be controlled per OPC client. Meaning, if more zones are to be used, this second system will require its own PC and animeo IB+ Operating software / OPC server.

3.3 Responsibilities

Somfy is only responsible for configuring and commissioning of the animeo IB+ system and the installation of the OPC server. Somfy does not take responsibility for the OPC server, client integration. This is the job of the integrator/BMS supplier.

3.4 Installation and PC requirements

Simply insert the animeo OPC installation CD-ROM in the PC that already has the animeo IB+ Operating software installed and run the setup Somfy OPCServer Manager file and follow the instructions.

The PC requirements are described in the animeo IB+ owner's manual.

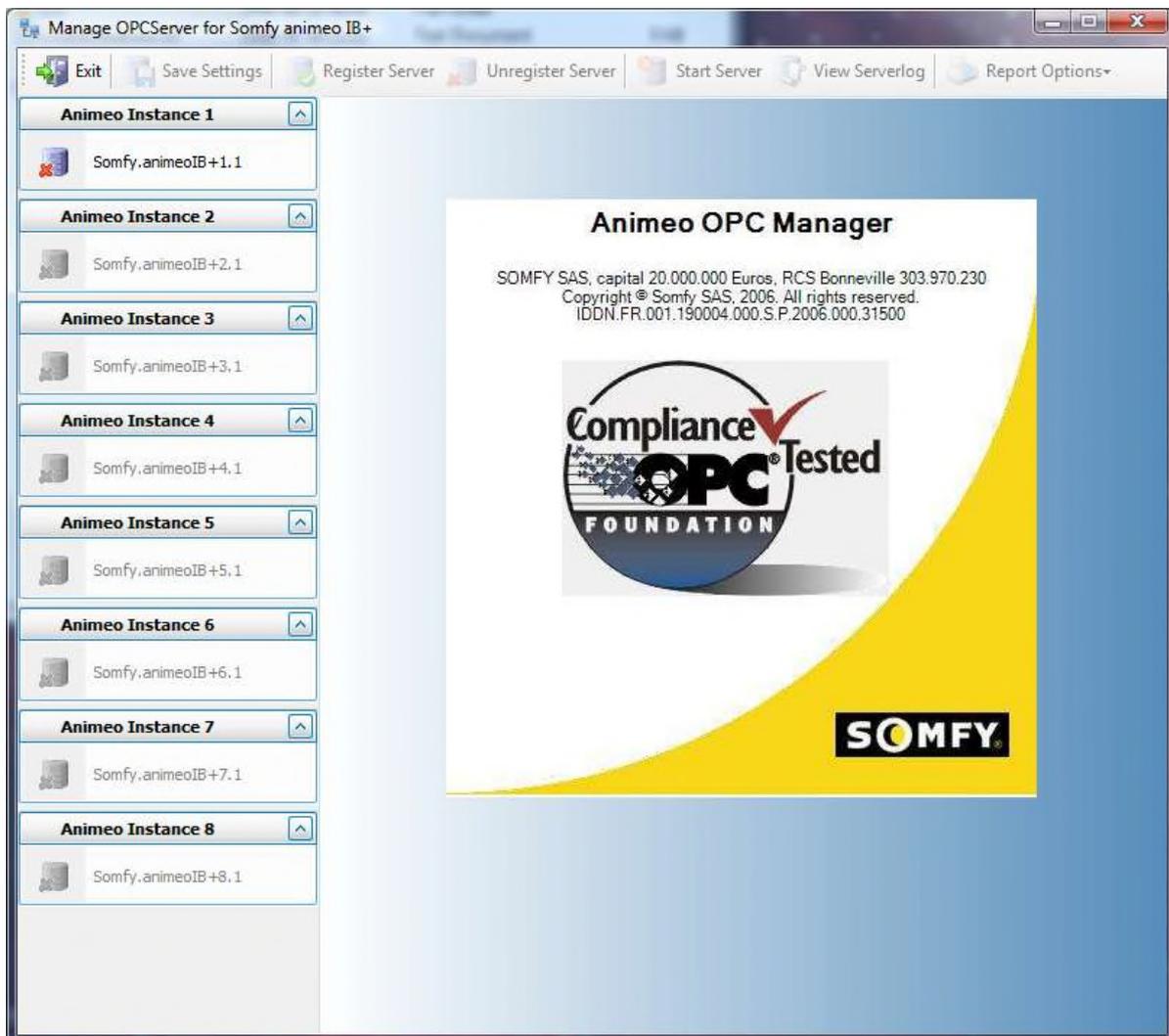
4 OPCServer Manager

The OPCServer Manager is the software used to manage the animeo IB+ OPC connection.

From the manager the user enables (register) or disables (unregister) one or many (max 8) OPC server(s).

4.1 First start

When the application is started the only available options are Exit and open server one.



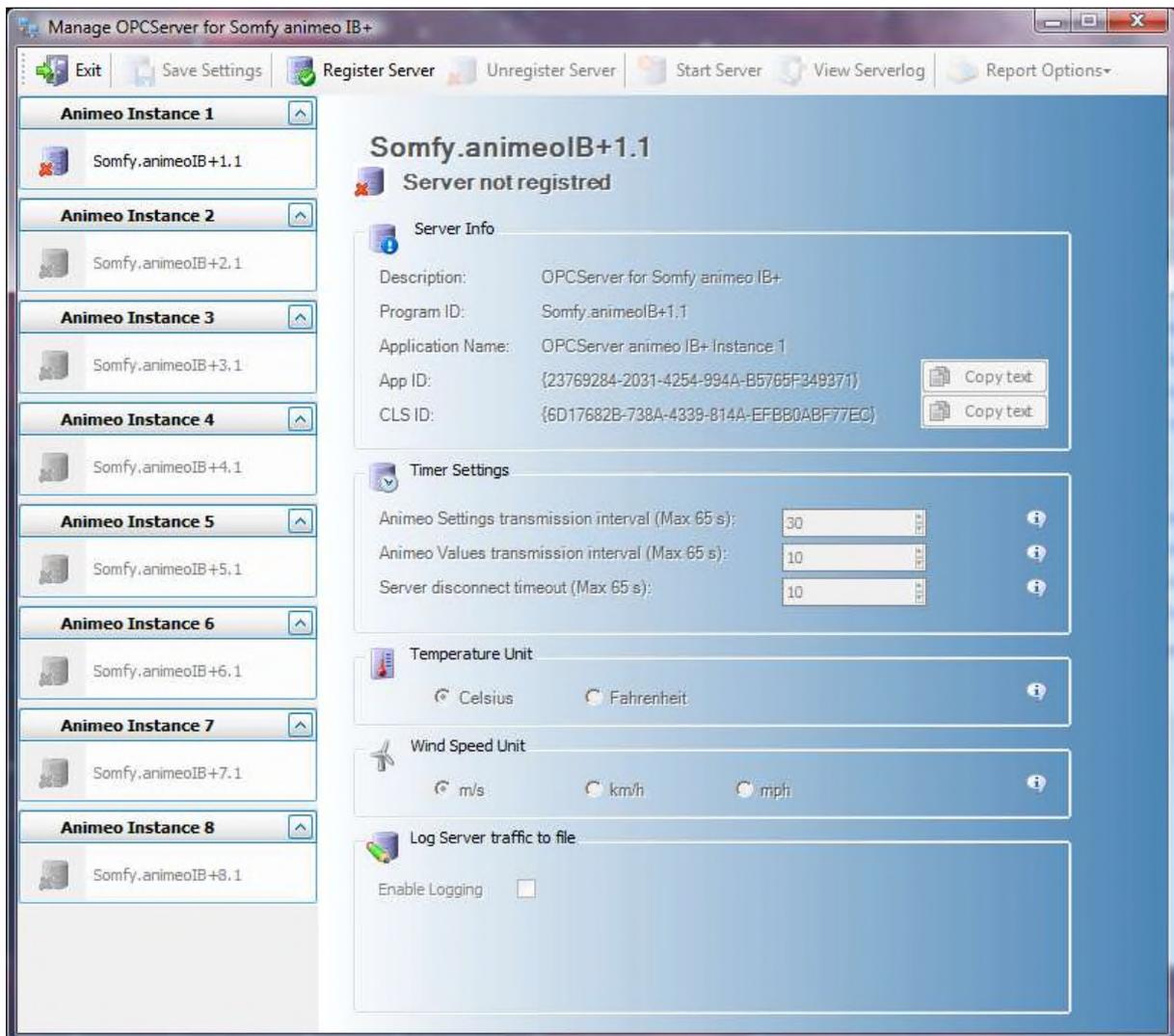
4.1.1 Server Instance

Somfy animeo IB+ Operating Software supports a building with 16 zones; if a building consists of more than 16 zones a second instance of Somfy animeo IB+ Operating Software is started and connected to a different port. The OPC servers are then associated with a specific instance of Somfy animeo IB+ Operating Software. I.e. If an OPC server is enabled, Somfy animeo IB+ Operating Software instance 1 is connected to OPC server instance 1 and so on.

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4.1.2 Register the first server

To register a server and make it available in animeo IB+, press the link under the Animeo instance 1, Somfy.animeoIB+1.1.



Information about the server default settings is shown but all settings are disabled. The server icon has a red cross meaning that it's not yet registered. To register the server press *Register Server* in the toolbar.

The server icon turns green and the settings are enabled. Also, it's now possible to register a new server, Somfy.animeoIB+1.2, in a similar way.

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4.2 Server Settings

When opening a server that is registered, the user can change some of the server's settings.

4.2.1 Server Info

The first "field", Server Info, is always read only.



Description

- The description stored on the OPC Server object.

Program ID

- The version dependent programmatic identifier for the OPCServer object. It must be given a unique Prog ID and CLSID so that OPC clients may connect to your server.

Application Name

- The name to be associated with the AppID.

AppID

- The application identifier for the internal OPCServer object.

CLSID

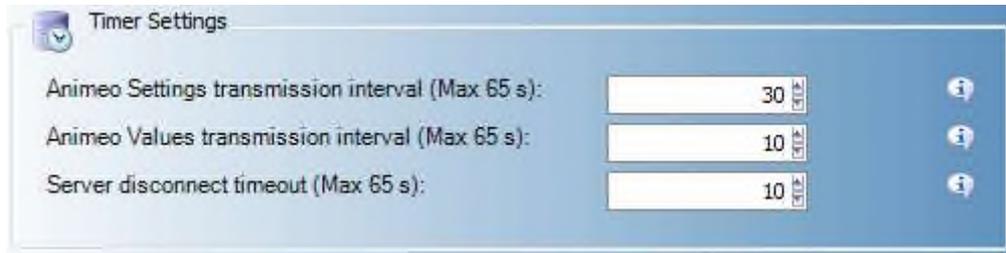
- The class identifier for the internal OPCServer object. Clients may use the CLSID in the process of creating instances of your OPC server.

The buttons *copy text* next to App ID and CLS ID will copy the GUID (identifier) for the App ID and CLS ID.

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4.2.2 Timer Settings

Control different timer settings on the OPC Server.



Animeo Settings transmission interval

- The update rate for the less frequently changed values in animeo, for example used and active functions.

Animeo Values transmission interval

- The update rate for the frequently changed values in animeo like sensor values.

Server Disconnect timeout

- The time for the OPC server to wait before shutting down after the Request Disconnect message is sent to the client. If no clients are connected the OPC Server is closed immediately.

4.2.3 Temperature Unit

Select the desired temperature unit used then the Somfy animeo IB+ Operating Software presents the inside and outside temperature in the OPC Server.



4.2.4 Wind speed Unit

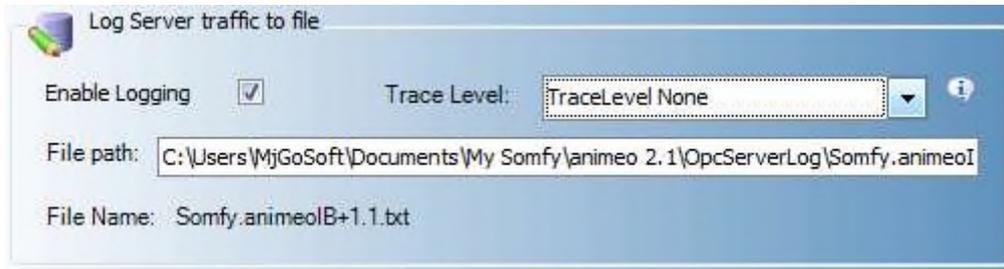
Select the desired wind speed unit used then the Somfy animeo IB+ Operating Software presents the wind speed in the OPC Server.



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4.2.5 Log Server traffic to file

The OPC server is able to create a trace file. Different level of tracing is available.



The trace levels used are:

TraceLevel None

- (Default) No trace messages are stored.

TraceLevel Connect

- Log trace messages associated with client connectivity and server activation.

TraceLevel Group

- Log trace messages associated with creating / deleting / modifying OPC groups.

TraceLevel Item

- Log trace messages associated with item transactions. For example, read, write, and subscription transactions.

TraceLevel All

- Log all message types.

The trace is saved on a log file stored under the existing `..\Documents\My Somfy\animeo 2.1` folder (created when installing animeo) in a folder called `"OpcServerLog"`.

The filename is `servername.txt`, example `"Somfy.animeoIB+1.1.txt"`.

The maximum size, in Megabytes, that the trace log file can grow to is 10 Mb (default). When the file reaches this size, it will start from the beginning of file. Thus, the trace log file is circular.

4.3 Unregister Server

Servers must be unregistered in reverse order to their registration, i.e. Last registered server is the only possible server to unregister.

Unregistering a server removes the connection between the OPC server and Somfy animeo IB+ Operating Software. The OPC Server information is deleted from registry and the server won't be in the list of available OPC servers.

No software will be deleted and the server is easily registered again.

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4.4 Start Server

Pressing start server starts the instance of Somfy animeo IB+ Operating Software associated with the selected OPC Server.

4.5 View Server log

Opens the server log (if it exists).

4.6 Report options

It's possible to get a summary of the OPC server settings, either as a text document saved to file or printed out.

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5 Node specification

This chapter contains the format and values on the different Node Groups in the OPC server. To save space the prefix on a node is omitted, for example the node SENSOR.OUTTEMP.VALUE will be called VALUE in the list below.

To create the node structure in the OPC server, a module shall be added to animeo that generates the structure specified below. This module shall also handle the update of the nodes according to animeo value and settings transmission interval.

5.1 Node structure

- 📁 **SENSOR**
 - 📁 **OUTTEMP**
 - Data
 - 📁 **RAIN**
 - Data
 - 📁 **WINDDIR**
 - Data
 - 📁 **INSIDETEMP_XX** (XX = 01-04)
 - Data
 - 📁 **SUN_XX** (XX = 01-12)
 - Data
 - 📁 **WINDSPEED_XX** (XX = 01-04)
 - Data
- 📁 **SYSTEM**
 - Data
- 📁 **SYSTEM_ERRORS**
 - Data
- 📁 **ANIMEO_ZONES**
 - 📁 **ZONE_XX** (XX = 01-16)
 - Data
 - 📁 **USED_FUNCTIONS**
 - Data
 - 📁 **ACTIVE_FUNCTIONS**
 - Data
- 📁 **COMMANDS**
 - 📁 **ZONE_XX** (XX = 01-16)
 - Data

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5.2 Sensor

Displays current sensor value for all sensors in the system. All Sensors are included in the server but only the used one will have a value. The values are updated according to the settings in "animeo values transmission interval", default is every 10 seconds. All sensors show three "values", Alias, Value and Operational.

Alias

- The name given to the sensor when system was configured.

Value

- The sensor value, can be a Boolean (true/False) or an integer.

Operational

- Tells if a sensor is used and active (Boolean).

5.3 Outside temperature

The system can have one outside temperature sensor. The value is shown in degrees Celsius or Fahrenheit. The OPC server and animeo doesn't need to show the value in the same unit.

Prefix: SENSOR.OUTTEMP

Structure:

- SENSOR
 - OUTTEMP
 - xxx

VALUE	Value x degrees Celsius or Fahrenheit (integer)
ALIAS	Value name (string)
OPERATIONAL	Boolean (True/False)

5.4 Rain

The system can have one rain sensor. Together with the outside temperature sensor the system can indicate snow and frost. The value is a Boolean for precipitation or No precipitation.

Prefix: SENSOR.RAIN

Structure:

- SENSOR
 - RAIN
 - Xxx

VALUE	Boolean (True/False)
ALIAS	Value name (string)
OPERATIONAL	Boolean (True/False)

5.5 Wind Direction

The system can have one wind dir. sensor. The value is shown in degrees from 0 – 359.

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Prefix: SENSOR.WIDDIR

Structure:

- SENSOR
 - WINDDIR
 - xxx

VALUE	Value x degrees (integer)
ALIAS	Value name (string)
OPERATIONAL	Boolean (True/False)

5.6 Inside Temperature

The system can have four inside temperature sensors. The value is shown in degrees Celsius or Fahrenheit. The OPC server and animeo doesn't need to show the value in the same unit.

XX could be "01-04".

Prefix: SENSOR.INSIDETEMP_XX

Structure:

- SENSOR
 - INSIDETEMP_XX
 - xxx

VALUE	Value x degrees Celsius or Fahrenheit (integer)
ALIAS	Value name (string)
OPERATIONAL	Boolean (True/False)

5.7 Sun

The system can have 16 sun sensors. The value is shown in Klux. XX could be "01-16".

Prefix: SENSOR.SUN_XX

Structure:

- SENSOR
 - SUN_XX
 - xxx

VALUE	Value x Klux (integer)
ALIAS	Value name (string)
OPERATIONAL	Boolean (True/False)

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5.8 Wind Speed

The system can have 4 wind speed sensors. The value is shown in m/s, km/h or mph. The OPC server and animeo doesn't need to show the value in the same unit.

XX could be "01-04".

Prefix: SENSOR.WINDSPEED _XX

Structure:

- SENSOR
 - WINDSPEED _XX
 - Xxx

VALUE	Value m/s or km/h or mph (integer)
ALIAS	Value name (string)
OPERATIONAL	Boolean (True/False)

5.9 System

Shows the current status of the server and the connection between animeo and the building controller. It also shows the update rate for sensor values, settings and Server disconnect timeout. Handles temperature and wind speed units used to present temperature and wind speed in the server. Available wind units shall be the same as in animeo (m/s, km/h and mph). Available temperature units shall also be the same as in animeo (Celsius and Fahrenheit). Note that it shall be possible to select different unit in the server and animeo.

Prefix: SYSTEM

Structure:

- SYSTEM
 - Xxx

SERVER_ONLINE	Server online status
SERVER_SENDING_DATA	Server activity status
ANIMEO_ONLINE	Animeo online status
SENSOR_UPDATE_TIME	Sensor update rate
SETTINGS_UPDATE_TIME	Settings update rate
SERVER_SHUTDOWN_DELAY	Server disconnect timeout
UNITS.WIND	Wind unit used by server
UNITS.TEMP	Temp unit used by server

5.10 SYSTEM ERRORS

System Errors shows status of the different errors, True if error otherwise False. The values are updated according to the settings in "animeo values transmission interval", default is every 10 seconds.

Prefix: SYSTEM_ERRORS

Structure:

- SYSTEM_ERRORS
 - Xxx

INSIDENSORBOX_01	Error inside sensor box 01
INSIDENSORBOX_02	Error inside sensor box 02
INSIDETEMP_01	Error inside temp sensor 01
INSIDETEMP_02	Error inside temp sensor 02
INSIDETEMP_03	Error inside temp sensor 03
INSIDETEMP_04	Error inside temp sensor 04
MAJORALARMINPUT	Major alarm
OUTSIDEEXTENSIONSENSORBOX	Error outside extension sensor box
OUTSIDESENSORBOX	Error outside sensor box
OUTSIDETEMPSENSOR	Error Outside temp sensor
SUN_01	Error sun sensor 01
SUN_02	Error sun sensor 02
SUN_03	Error sun sensor 03
SUN_04	Error sun sensor 04
SUN_05	Error sun sensor 05
SUN_06	Error sun sensor 06
SUN_07	Error sun sensor 07
SUN_08	Error sun sensor 08
SUN_09	Error sun sensor 09
SUN_10	Error sun sensor 10
SUN_11	Error sun sensor 11
SUN_12	Error sun sensor 12
WINDDIRSENSOR	Error Wind direction sensor
WINDSENSOR_01	Error Wind sensor 01
WINDSENSOR_02	Error Wind sensor 02
WINDSENSOR_03	Error Wind sensor 03
WINDSENSOR_04	Error Wind sensor 04

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5.11 Zone Info

On first level, the basic info Alias, Angle, Position, End Product, Isauto and Islocked is shown. XX could be "01-16".

Alias

- The name given to the zone then configure the system.

Angle

- Show the current angle if a tilting end product is controlled.

Position

- Show the current position of the end product, 0-100 where 100 is fully down.

End Product

- The type of end product, for example "Venetian Blind"

Isauto

- Automated mode is on.

Islocked

- The zone is locked

Prefix: ANIMEO_ZONES.ZONE_XX

Structure:

- ANIMEO_ZONES
 - ZONE_XX
 - Xxx

ANGLE	Value x degrees (integer +90 to -90)
ALIAS	Value name (string)
POSITION	Value x % down (0-100)
END_PRODUCT	Value name (string)
ISAUTO	Show if automated mode is on Boolean (True/false)
ISLOCKED	Shows if zone is locked Boolean (True/false)

5.12 Used functionality

The values is updated according to the value specified in "animeo Settings transmission interval", default is every 30 seconds.

Prefix: ANIMEO_ZONES.ZONE_XX.USED_FUNCTIONS

Structure:

- ANIMEO_ZONES
 - ZONE_XX
 - USED_FUNCTIONS
 - Xxx

USEPCBUILDINGLOCK	PC Building Lock used
USEBUILDINGTIMER	Building timer used
USEFROST	Frost used
USEKEYBUILDING	
USEKEYBUILDINGLOCK	Key building lock used
USEKEYZONELOCK	Key Zone lock used
USEMAINTAINHEAT	Maintain heat used
USEMAJORALARM	Major Alarm Used
USEMAJORERROR	Major error used
USEPCZONECOMMAND	pc zone command used
USEPCZONELOCK	pc zone lock used
USERAIN	rain function used
USERESTEBUILDING	Reset building used
USESNOW	Snow function used
USESOLARHEATING	Solar heating used
USESOLARHEATINGHVAC	Solar heating HVAC used
USESUN	Sun used
USESWITCHBUILDINGCOMMAND	Switch building command used
USESWITCHZONECOMMAND	Switch Zone Command used
USEVENTILATIONCOOLINGHVAC	Ventilation Cooling HVAC used
USEWINDDIR	Wind direction used
USEWINDSPEED	Wind speed used
USEZONESYNERGY	Zone synergy used
USEZONETIMER	Zone timer used

5.13 Active functionality

The values are updated according to the settings in "animeo values transmission interval", default is every 10 seconds.

Prefix: ANIMEO_ZONES.ZONE_XX.ACTIVE_FUNCTIONS

Structure:

- ANIMEO_ZONES
 - ZONE_XX
 - ACTIVE_FUNCTIONS
 - Xxx

ACTBUILDINGLOCK	Building lock activated
ACTBUILDINGTIMER	building timer activated
ACTFROST	Frost Activated
ACTKEYBUILDING	Key building lock inactivated
ACTKEYBUILDINGLOCK	Key building lock activated
ACTZONELOCK	Zone lock activated
ACTMAINTAINHEAT	Maintain heat activated
ACTMAJORALARM	Major Alarm activated
ACTMAJORERROR	Major error activated
ACTZONECOMAND	Zone Command activated
ACTPCZONECOMMAND	PC Zone Command activated
ACTPCZONELOCK	PC Zone lock activated
ACTRAIN	Rain Activated
ACTRESETBUILDING	Reset Building Activated
ACTSNOW	Snow activated
ACTSOLARHEATING	Solar heating activated
ACTSOLARHEATINGHVAC	Solar heating HVAC activated
ACTSUN	Sun activated
ACTSWITCHBUILDINGCOMMAND	Switch building Command activated
ACTSWITCHZONECOMMAND	Switch zone command activated
ACTVENTILATIONCOOLINGHVAC	Ventilation cooling HVAC activated
ACTWINDDIR	Wind direction activated
ACTWINDSPEED	Wind speed activated
ACTZONESYNERGY	Zone Synergy activated
ACTZONETIMER	Zone timer activated
NOFUNCTIONACTIVE	No Function active
NSFUNCTIONACTIVE	No Security Function
NSPFUNCTIONACTIVE	Non Security Performance Function active
NSSFUNCTIONACTIVE	Sun Function Active
PRFMCOMFORT	Performance mode Comfort
PRFMCOMFORTNOLOCAL	Performance mode No Local Control
PRFMENERGY	Performance mode Energy mode
PRFMPRESENCE	Performance mode Presence detector
PRFMPRESENCENOLOCAL	Performance mode Presence detector no local control
PRFMTIMER	Performance mode Timer
PRFMTIMERNNOLOCAL	Performance mode Timer no Local Control
SFUNCTIONACTIVE	Security Function Active

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5.14 Updatable items

A way for the BMS system to interact with the animeo system, this is the only nodes that are updatable. By sending the value 1 to any node below, the animeo system will perform the required action.

Note: The value on the node isn't updated, but if it receives a request to update the value to 1 it will pass the node request to the animeo system. Any other value but 1 is ignored. The quality of these data is always BAD as it does not reflect the status of the system.

Prefix: COMMANDS.ZONE_XX

Structure:

- COMMANDS
 - ZONE_XX
 - Xxx

AUTO_MODE	Automated mode on (Manual mode off)
MANU_MODE	Manual mode on (Automated mode off)
EXTEND_100	Extend (100% = pos 100)
SECURE_POSITION	Go to secure position (0% pos =0)
STOP_MOVEMENT	Stop movement
GOTO_IP1	Go to IP 1
GOTO_IP2	Go to IP 2
LOCK_ZONE	Lock a Zone
UNLOCK_ZONE	Unlock a Zone

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