

**Proprietary solutions** 

# All-in-one

Building management software for medium-sized and enterprise building automation projects

**NETx Multi Protocol Server** 

#### **Motivation**



## Building automation systems are heterogeneous

Many different technologies are used Each technology has its characteristics and its own way to represent and process control data

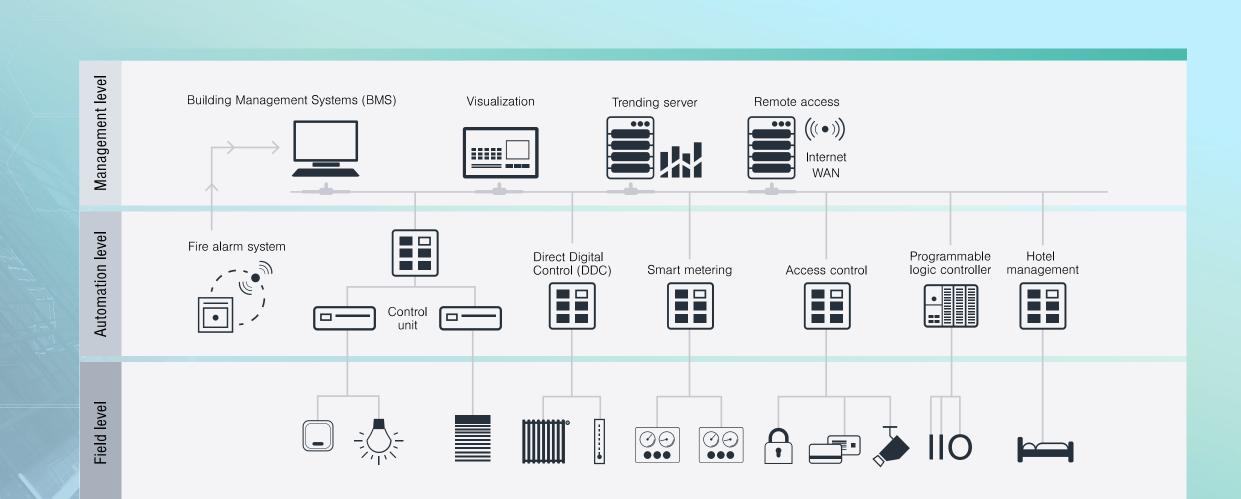






## **Building automation**





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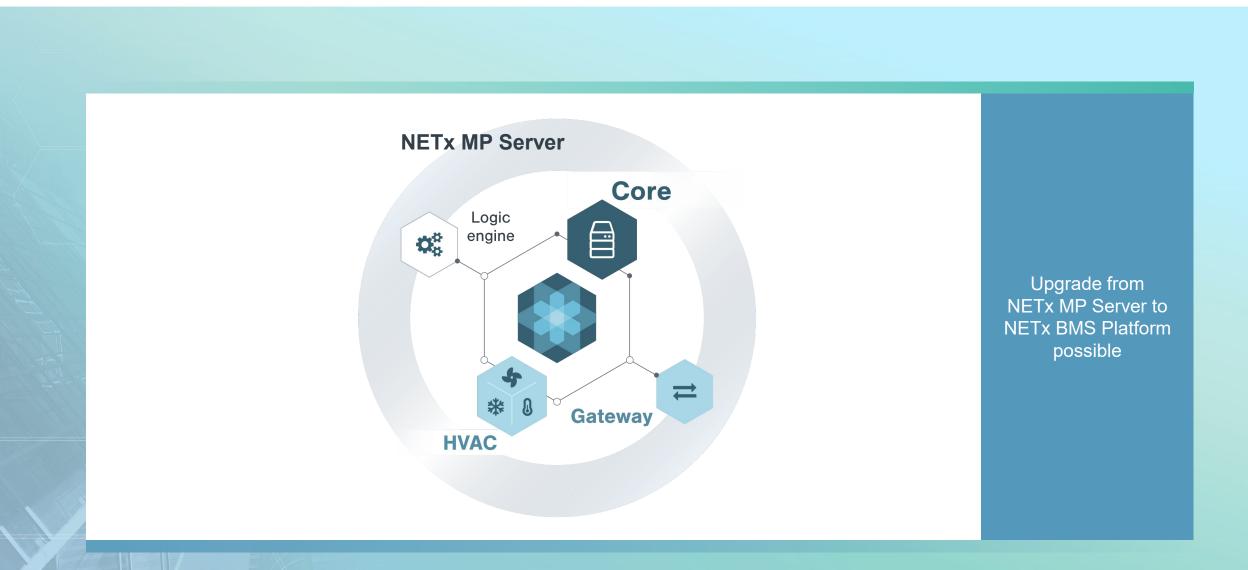
## **Building automation**



**NETX** 

## **NETx Multi Protocol Server**







Product features	NETx BMS Platform	NETx MP Server		NETx BMS Platform	NETx MP Server
Several interfaces to the field level KNX, Modbus, BACnet, SNMP, etc.	~	~	Alarm management definition of alarms, displaying alarm lists	~	×
Several interfaces to the management level OPC, BACnet/IP, oBIX, KNX WS, MQTT, etc.	~	~	Trending historical database	~	×
Multi-protocol gateway connects several interfaces to the field level	~	~	Scheduling time-based events	~	×
Import of the device configuration for KNX ETS projects, BACnet discovery, OPC/BMS explorer	~	~	Reporting create PDF, Excel, reports	~	×
Monitoring field level and management level analysis	~	~	Web-based visualization access with all devices with web browser	~	×
Programming logics LUA Script, graphical programming	~	~	Web-based management Web Manager including user management	~	×
Clustering data exchange between servers	~	~	PC-based visualization access with Windows devices	~	×



Product extensions	NETx BMS Platform	NETx MP Server		NETx BMS Platform	NETx MP Server
LaMPS Lighting and DALI management	~	×	Shutter Control Automatic shading of complex buildings	~	×
Metering Module Monitor, analyze and process data from smart meters	~	×	mySmartSuite Integrated hotel solution for any type of hotel project	~	×
Interfaces to the management level	NETx BMS Platform	NETx MP Server		NETx BMS Platform	NETx MP Server
OPC provides data for other OPC clients	~	~	MQTT provides data via MQTT	~	~
BACnet/IP provides data for BACnet clients	~	~	SQL MariaDB, MS SQL Server for historical data	~	×
oBIX provides data for oBIX clients	~	~	Web Web Manager and Web Visualization	~	×



Interfaces to the field level	NETx BMS Platform	NETx MP Server		NETx BMS Platform	NETx MP Server
KNX Secure KNXnet/IP tunnelling   KNXnet/IP tunnelling/routing	~	~	Hotel management		
BACnet BACnet/IP   other BACnet media (BACnet MS/TP, )	~	~	Fidelio/Opera, Infor, Protel, RMS Cloud, CharPMS Door locking systems: VingCard   Kaba   SALTO		•
Modbus Modbus/TCP   Modbus RTU over IP	~	~	Own interfaces via LUA script, UDP, TCP, RS-232 protocol   via C# .NET API	~	~
SNMP v1, v2, v3	~	~	DALI Digital Addressable Lighting Interface	with hardwa	are gateway
OPC Integration of other OPC servers	~	~	DMX512 stage lighting and effects	with hardwa	are gateway
HTTP and web services Integration of data from HTTP servers & web service gateways	~	~	EnOcean wireless building automation	with hardwa	are gateway
Special interfaces on request	~	~	M-Bus europ. standard for remote reading of smart meters	with hardwa	are gateway



#### Operating system - Windows based operating system required

Windows 10 / Windows 11

Windows Server 2016 / Windows Server 2019 / Windows Server 2022

For maintainable systems we strongly recommend at least Windows 10 or Windows Server 2016 (or higher). Our products basically also run on older Windows versions down to Windows 7 and Windows Server 2008. However, due to limited future support for these operating systems by Microsoft we will not be able to provide full support for our software running on these systems.

#### Hardware

Any device that supports Microsoft Windows can be used	Use of virtualization environments possible
Requirements depend on project size (small embedded device up to server systems)	VMWare, Virtualbox, Hyper-V,

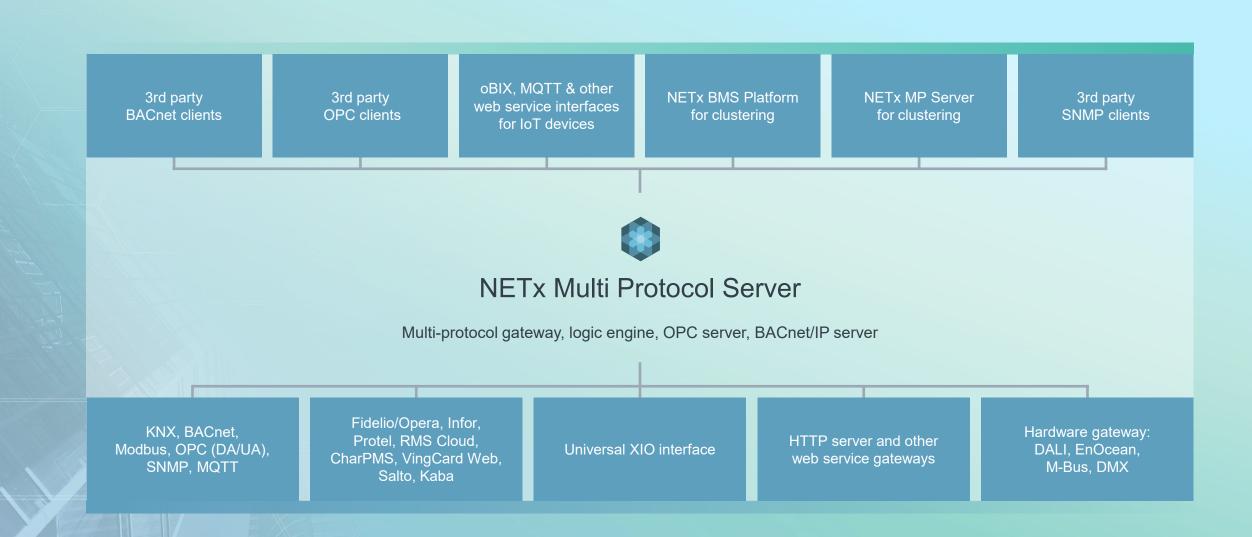
## Licensing



License		
Number of	Optional: additional license fees for special modules and interfaces	
Integrated data points from field BACnet objects, Modbus reg	<ul> <li>Hotel management interfaces Fidelio/Opera or Protel Fix fee + 5 data points for each room</li> <li>Door lock interfaces</li> </ul>	
Licensing process		
Hardlock	<b>VingCard, Salto, Kaba</b> Fix fee + 5 data points for each door lock	
USB Dongle hardware independent	Unlock code dependent on hardware and operating system	and more

## **NETx Multi Protocol Server**





## Interfaces to the field level



Open and standard protocols KNX, BACnet, Modbus, SNMP, OPC (DA/UA), MQTT	Hotel management system Fidelio/Opera, Infor, Protel, RMS Cloud, CharPMS, VingCard Web, Salto, Kaba	Door lock systems VingCard, Kaba, Salto	
HTTP Server and other	Develop your	Customer specific	
Web Service Gateways	own interface	interface on request	

## Interfaces to the management level



	OPC	BACnet
	OPC DA and OPC UA	BACnet/IP server
11-1	MQTT	oBIX and other Web Service interfaces for IoT
	Communication to one or more MQTT brokers	oBIX and KNX Web Services

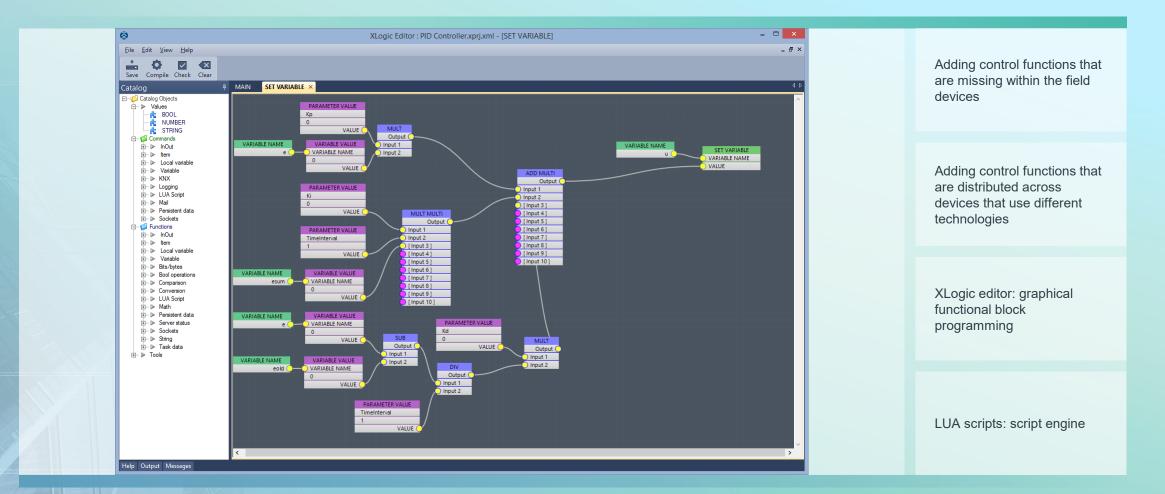
## Integration of 3rd party systems



	gration of	Integration of	Integration of
	C clients	BACnet clients	OPC servers
3rd p	arty clients	3rd party BMS systems from Siemens, Schneider Electric, Honeywell, Sauter	Fire detection systems, elevators, etc. with different proprietary systems

#### Logic engine







## www.netxautomation.com