

KNX

**BACnet** 

MQTT

Modbus

Helvar

OPC (DA/UA)

Fidelio/Opera | Protel | Infor RMS Cloud | CharPMS VingCard Web | Kaba | Salto **SNMP** 

DALI EnOcean M-Bus DMX

Proprietary solutions

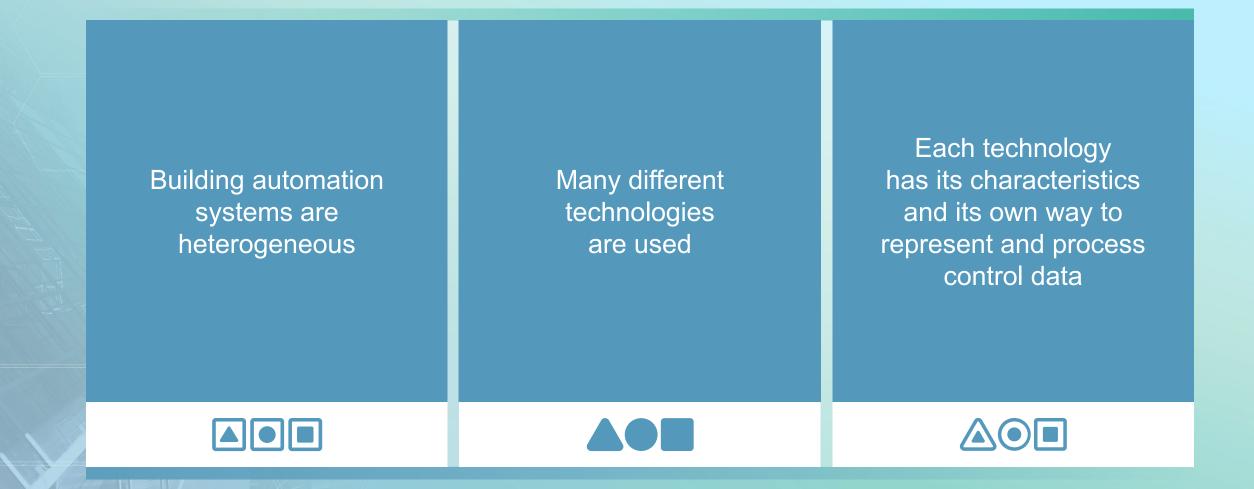
# All-in-one

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

**NETx Multi Protocol Server** 

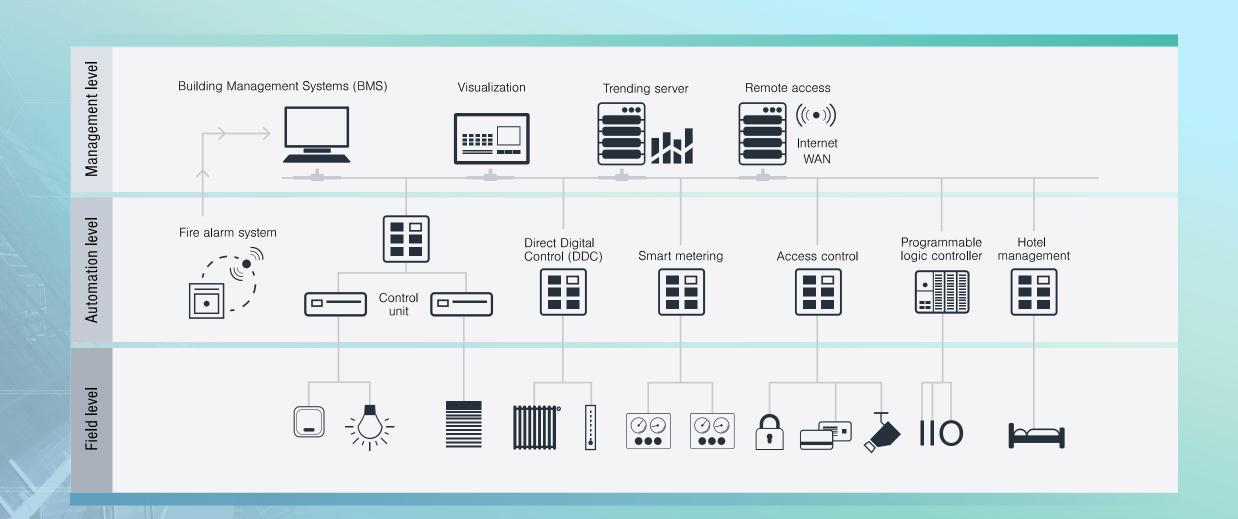
## **Motivation**





## **Building automation**





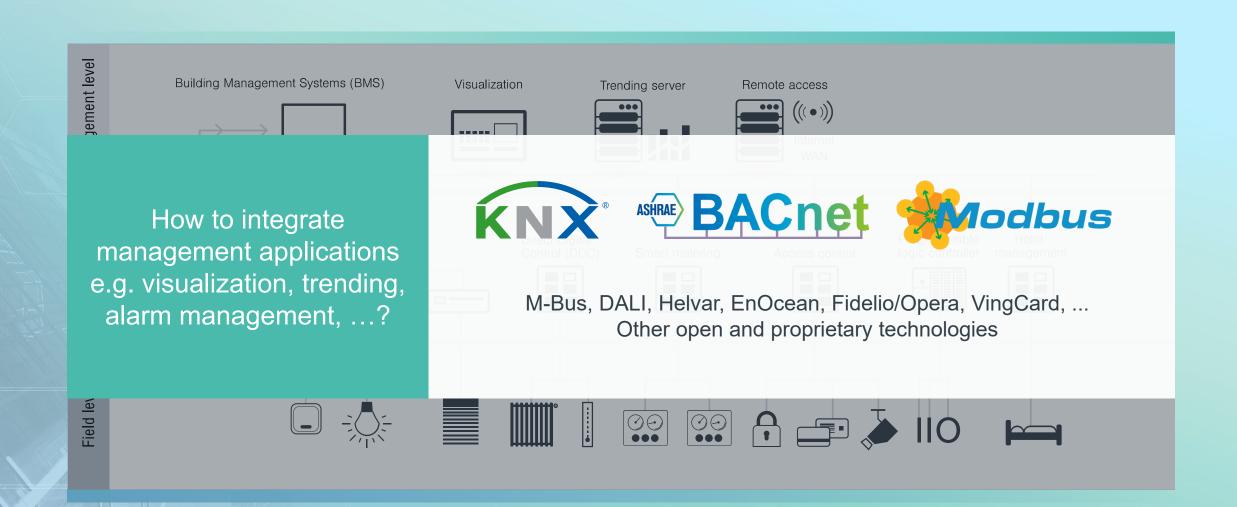
# **Building automation**





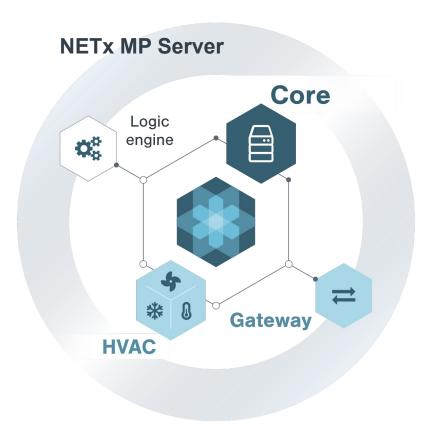
# **Building automation**





## **NETx Multi Protocol Server**





Upgrade from NETx MP Server to NETx BMS Platform possible

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

## **NETx BMS Platform < > NETx MP Server**



Product extensions	NETx BMS Platform	NETx MP Server		NETx BMS Platform	NETx MP Server
LaMPS Lighting and DALI management	<b>~</b>	×	Shutter Control Automatic shading of complex buildings	<b>~</b>	×
Metering Module  Monitor, analyze and process data from smart meters	<b>~</b>	×	mySmartSuite Integrated hotel solution for any type of hotel project	<b>~</b>	×

Interfaces to the management level	NETx BMS Platform	NETx MP Server		NETx BMS Platform	NETx MP Server
OPC provides data for other OPC clients	<b>~</b>	<b>~</b>	MQTT provides data via MQTT	<b>~</b>	<b>~</b>
BACnet/IP provides data for BACnet clients	<b>~</b>	<b>~</b>	SQL MariaDB, MS SQL Server for historical data	<b>~</b>	×
oBIX provides data for oBIX clients	<b>~</b>	<b>~</b>	Web Web Manager and Web Visualization	<b>~</b>	×

# **NETx BMS Platform < > NETx MP Server**



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

## **Operating system & hardware**



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 data points

Integrated data points from field level like KNX group addresses, BACnet objects, Modbus registers, SNMP data points, ...

## Licensing process

#### Hardlock

USB Dongle hardware independent

#### Softlock

Unlock code dependent on hardware and operating system

Optional: additional license fees for special modules and interfaces

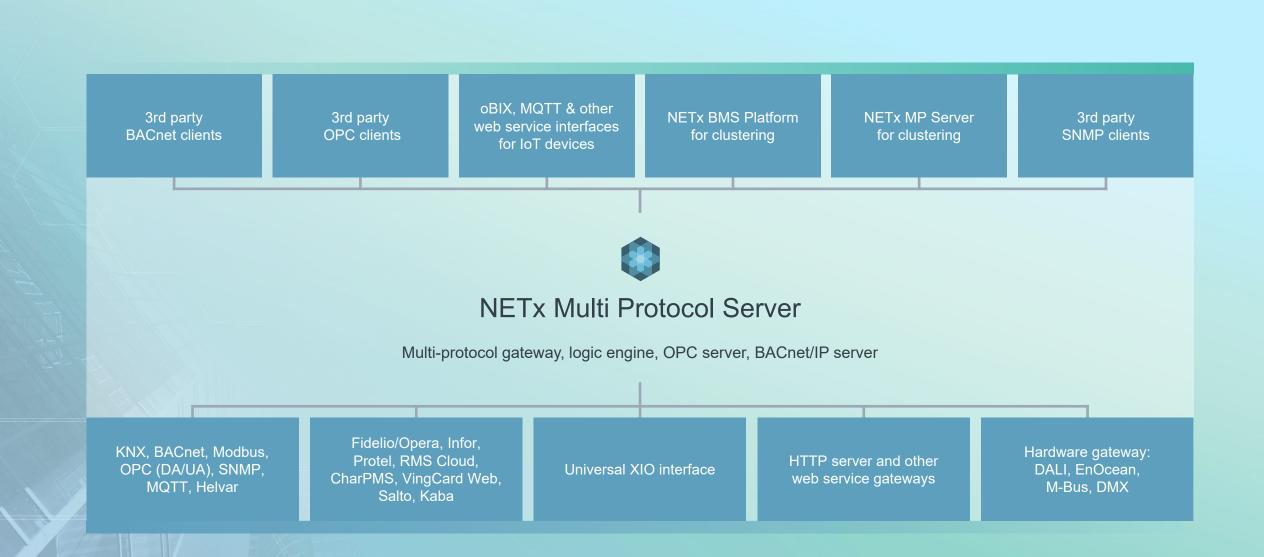
 Hotel management interfaces Fidelio/Opera or Protel

Fix fee + 5 data points for each room

- Door lock interfaces
   VingCard, Salto, Kaba
   Fix fee + 5 data points for each door lock
- and more

#### **NETx Multi Protocol Server**





### Interfaces to the field level



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

# Interfaces to the management level



OPC	BACnet
OPC DA and OPC UA	BACnet/IP server
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**



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

## Logic engine



