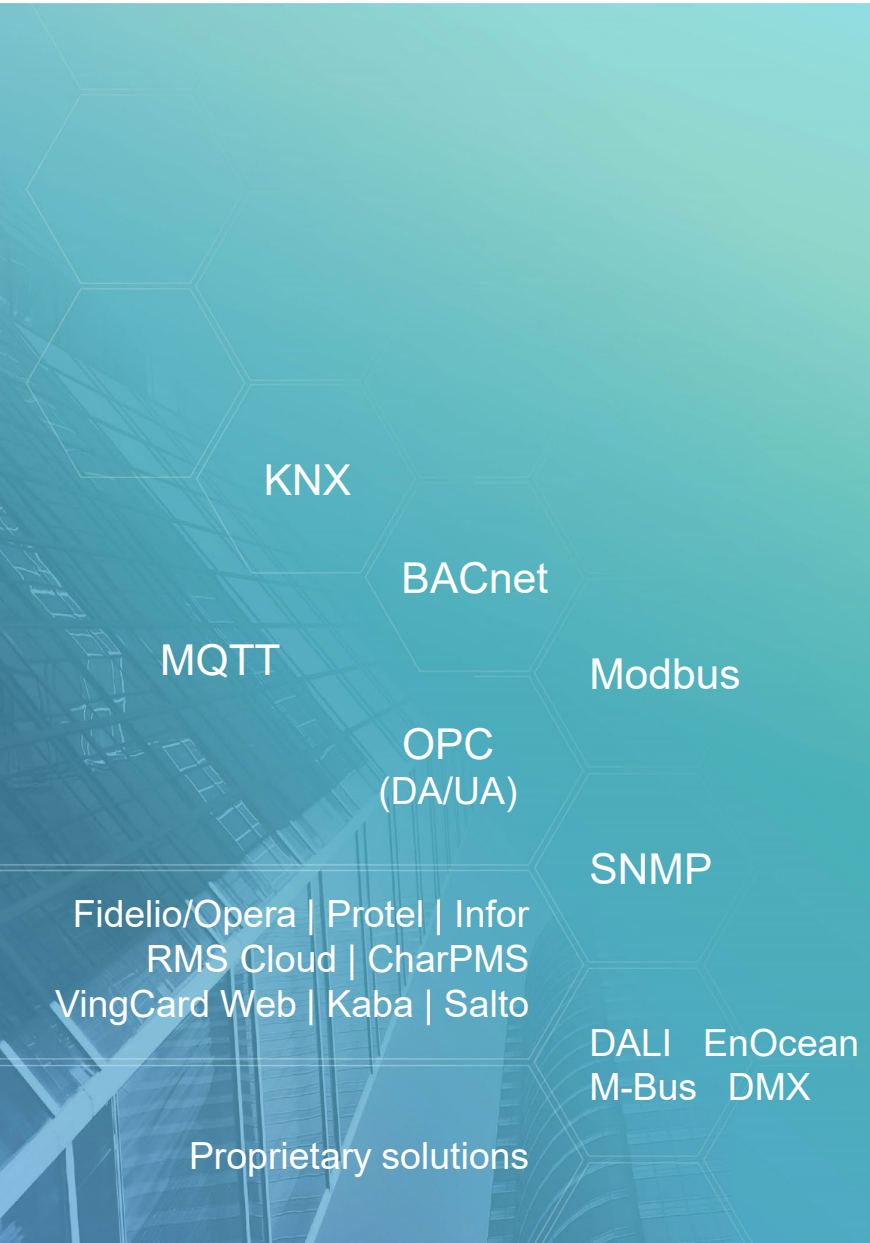
NETx AUTOMATION



All-in-one

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

NETx Multi Protocol Server

Motivation

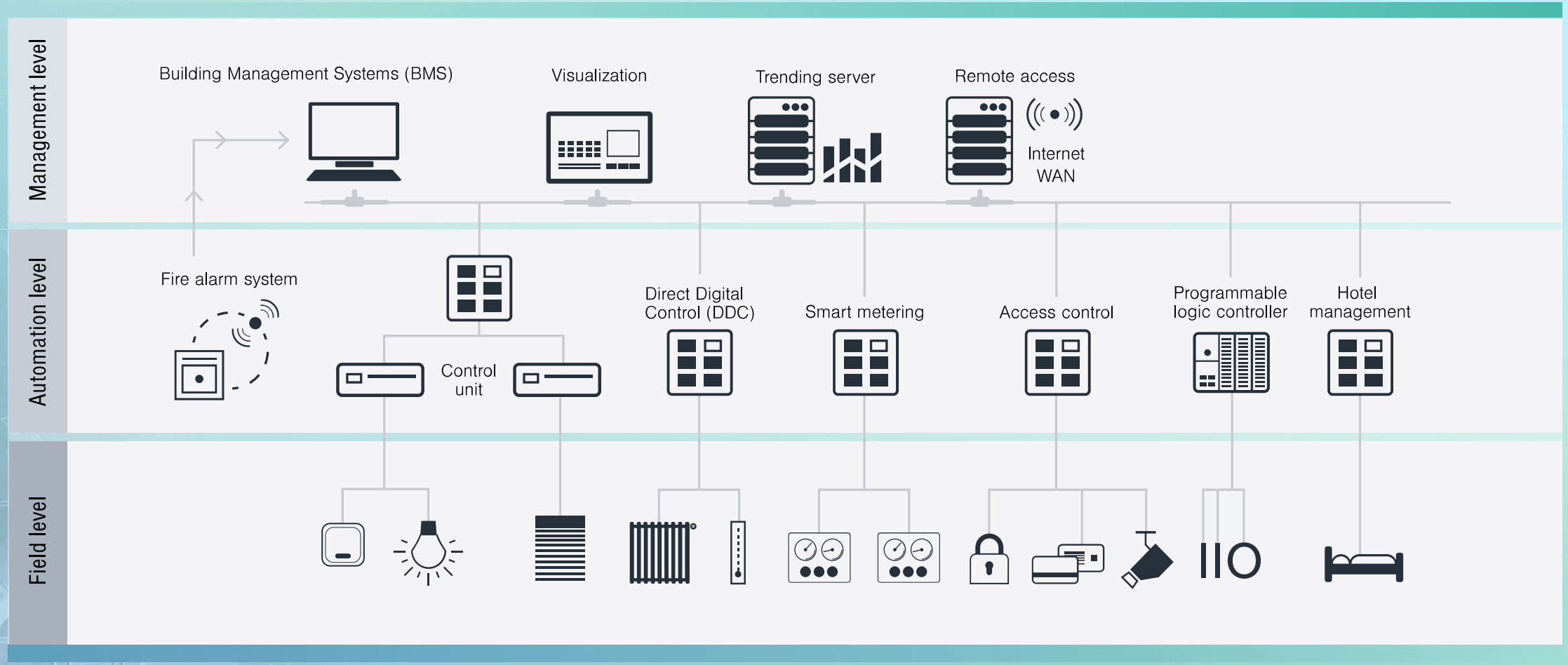
NETx AUTOMATION

Building automation systems are heterogeneous

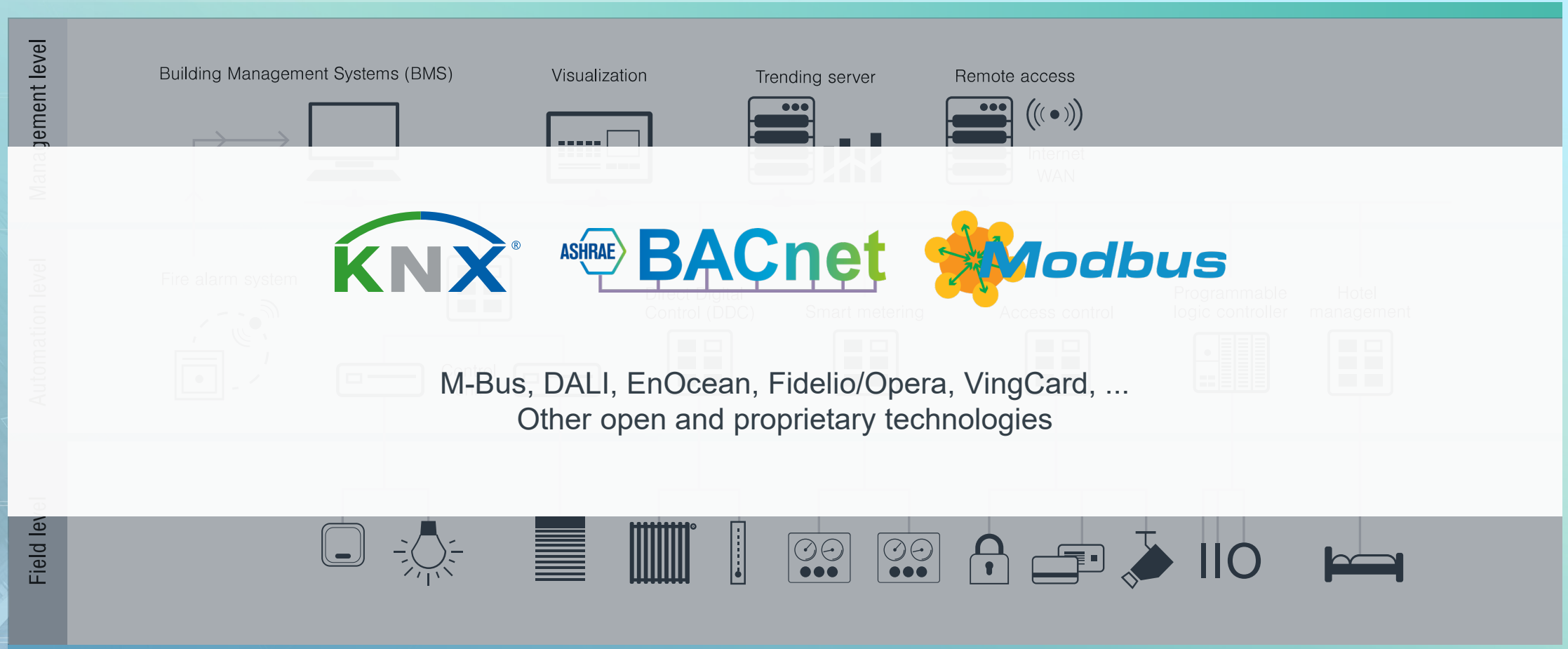
Many different technologies are used

Each technology has its characteristics and its own way to represent and process control data

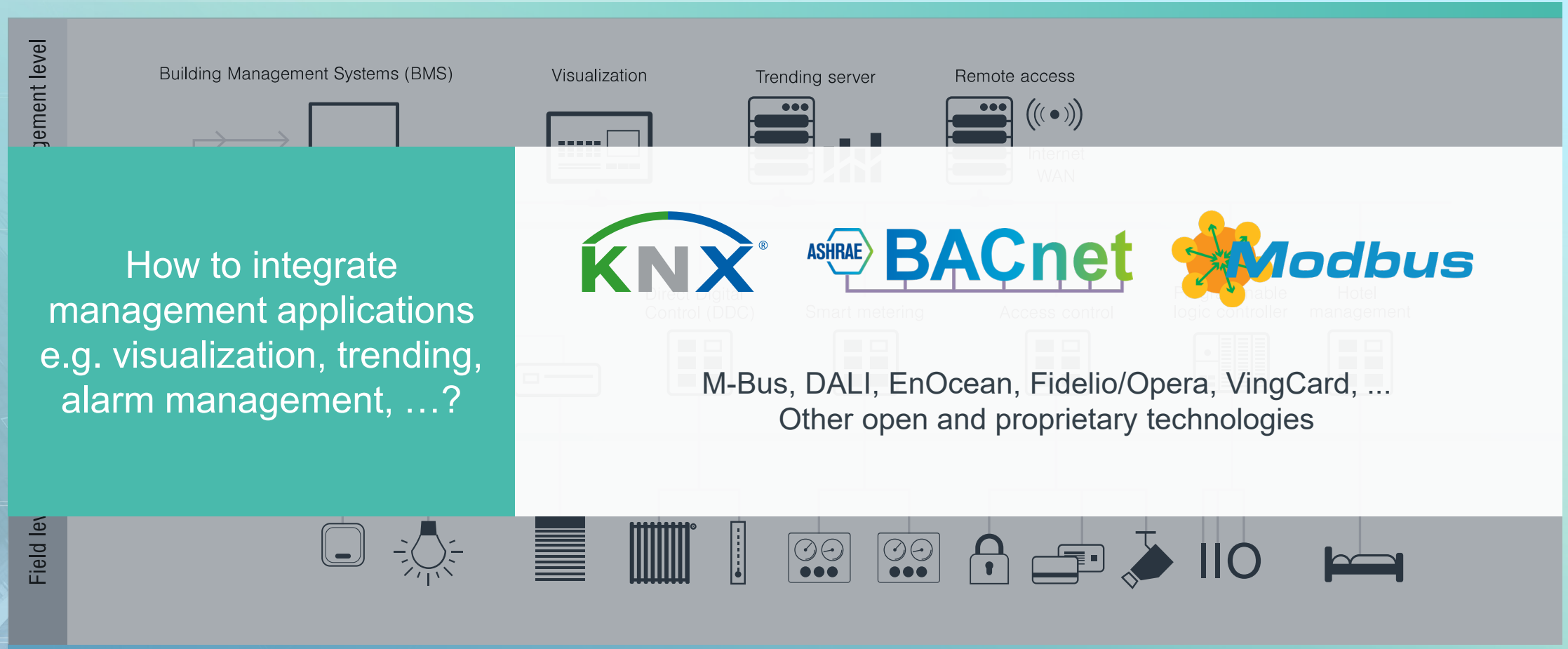
Building automation



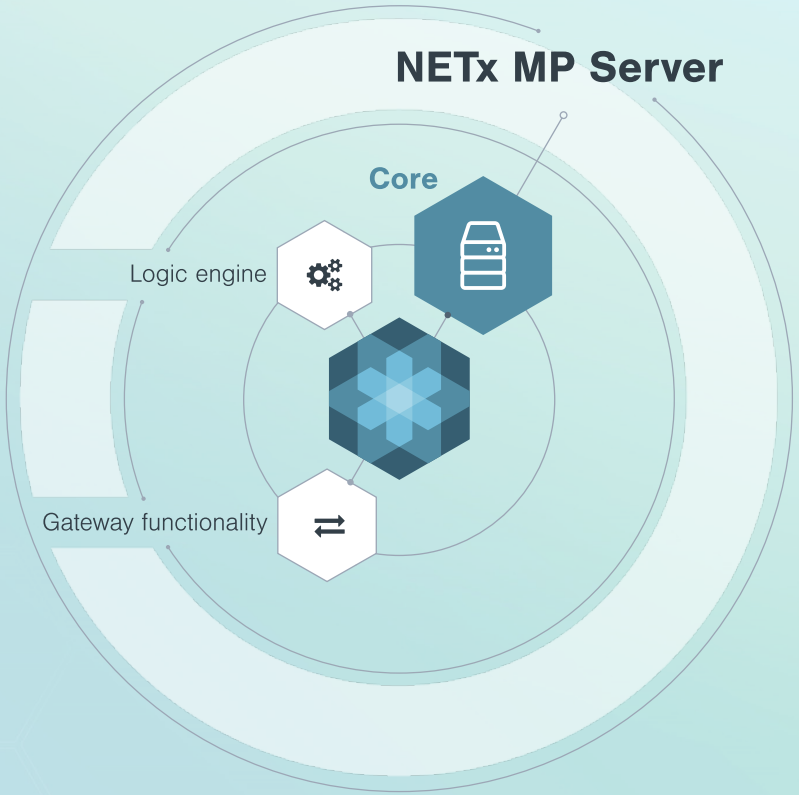
Building automation



Building automation



NETx Multi Protocol Server



Successor product of

NETx KNX OPC Server 3.5

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.	✓	✓	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	✓	✗

NETx BMS Platform < > NETx MP Server

Product extensions	NETx BMS Platform	NETx MP Server
LaMPS lighting and DALI management	✓	✗
Metering Monitor, analyze and process data from smart meters	✓	✗

	NETx BMS Platform	NETx MP Server
Shutter Control automatic shading of complex buildings	✓	✗
mySmartSuite Integrated Hotel solution for any type of hotel project	✓	✗

Interfaces to the management level	NETx BMS Platform	NETx MP Server
OPC provides data for other OPC clients	✓	✓
BACnet/IP provides data for BACnet clients	✓	✓
oBIX provides data for oBIX clients	✓	✓

	NETx BMS Platform	NETx MP Server
MQTT provides data via MQTT	✓	✓
SQL MariaDB, MS SQL Server for historical data	✓	✗
Web Web Manager and Web Visualization	✓	✗

NETx BMS Platform < > NETx MP Server

Interfaces to the field level	NETx BMS Platform	NETx MP Server
KNX Secure KNXnet/IP tunnelling | KNXnet/IP tunnelling/routing	✓	✓
BACnet BACnet/IP | other BACnet media (BACnet MS/TP,…)	✓	✓
Modbus Modbus/TCP | Modbus RTU over IP	✓	✓
SNMP v1, v2, v3	✓	✓
OPC Integration of other OPC servers	✓	✓
HTTP and web services Integration of data from HTTP servers & web service gateways	✓	✓
Special interfaces on request	✓	✓

	NETx BMS Platform	NETx MP Server
DALI Digital Addressable Lighting Interface	with hardware gateway	
DMX512 stage lighting and effects	with hardware gateway	
EnOcean wireless building automation	with hardware gateway	
M-Bus europ. standard for remote reading of smart meters	with hardware gateway	
Hotel management Fidelio/Opera | Protel | Infor | RMS Cloud | CharPMS Door locking systems: VingCard | Kaba | SALTO	✓	✓
Own interfaces via LUA script, UDP, TCP, RS-232 protocol | via C# .NET API	✓	✓

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), except NETx KNX OPC Server 3.5.
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, ...

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**

Licensing process

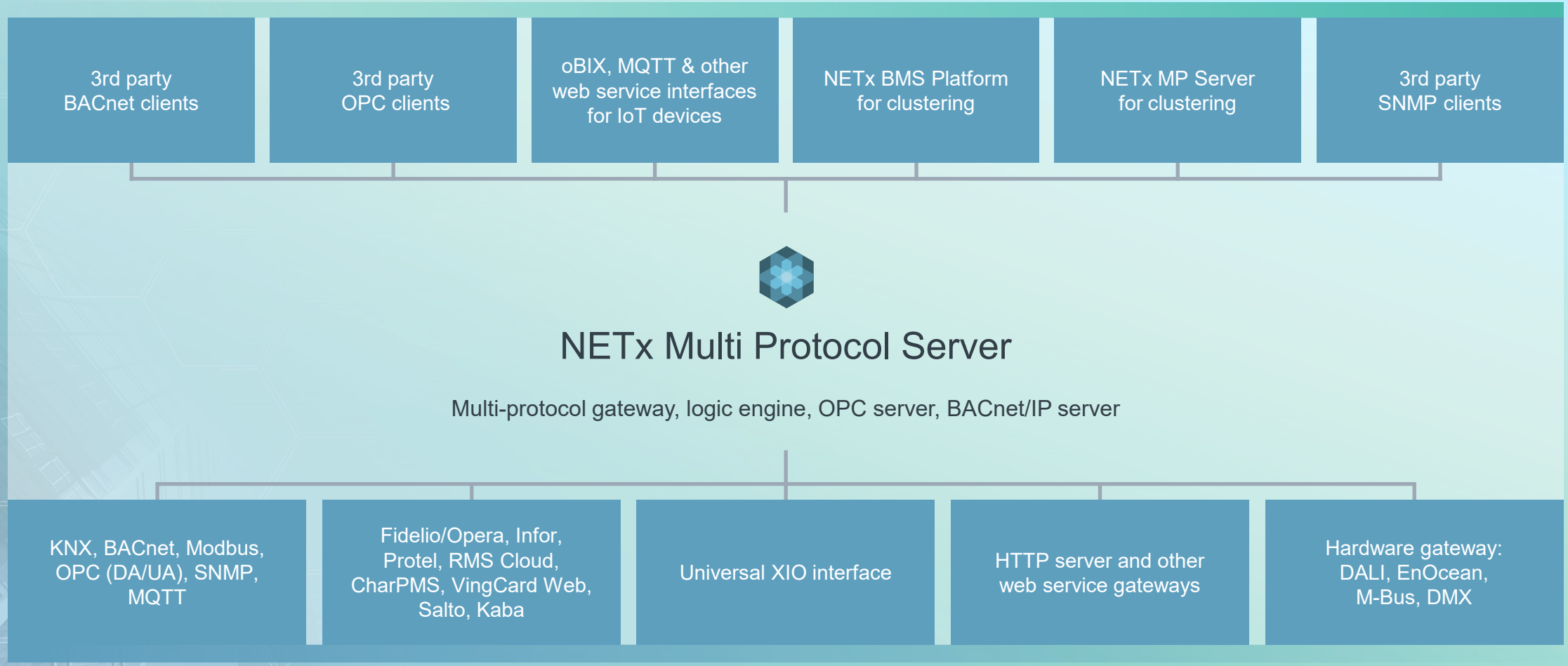
Hardlock

USB Dongle
hardware independent

Softlock

Unlock code
dependent on hardware
and operating system

NETx Multi Protocol Server



Interfaces to the field level

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

Interfaces to the management level

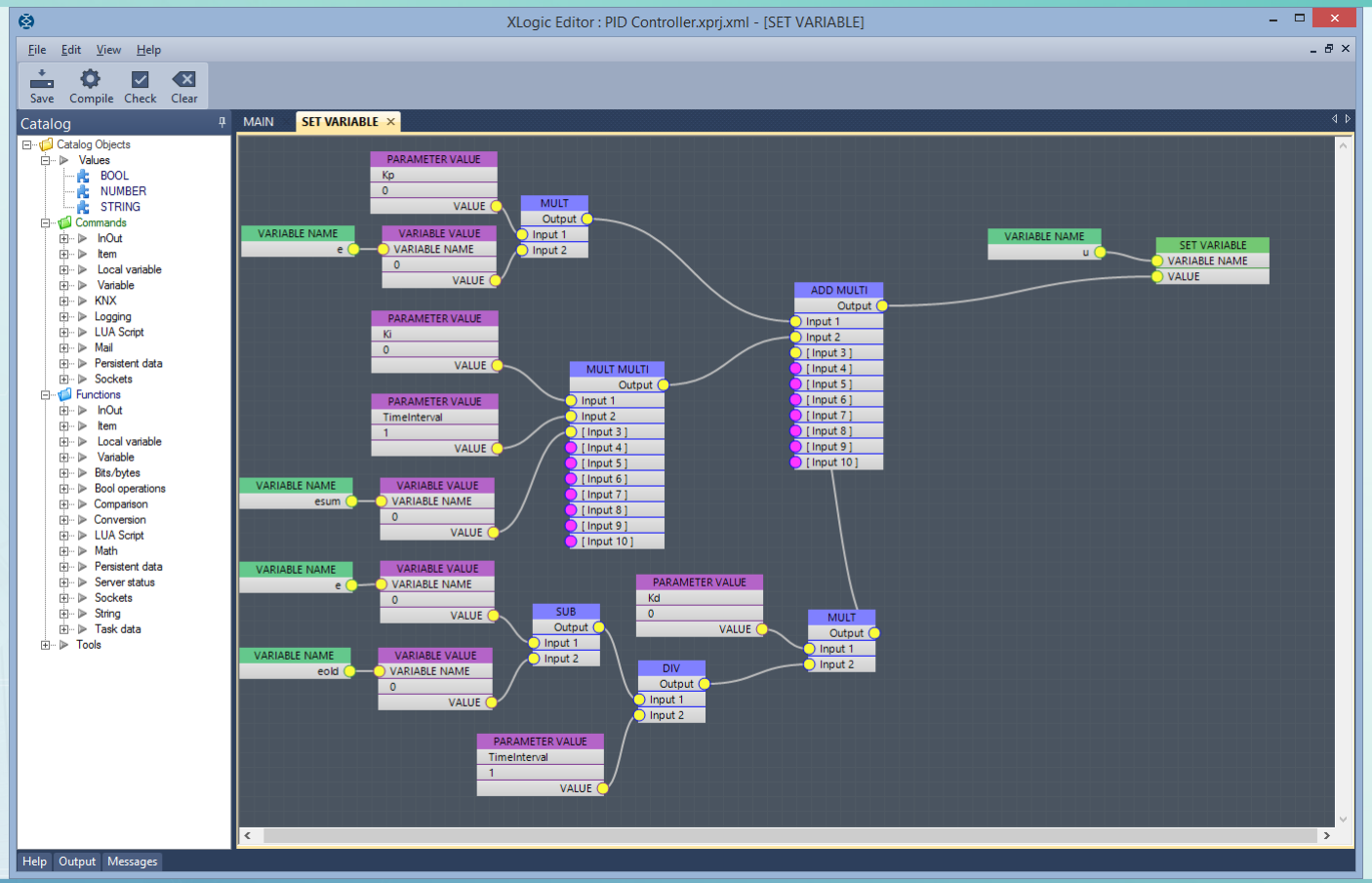
NETx AUTOMATION

OPC	**BACnet**
OPC DA 2.0 and OPC UA	BACnet/IP server
MQTT	**oBIX and other Web Service interfaces for IoT**
Communication to one or more MQTT brokers	oBIX 1.1 and KNX Web Services

Integration of 3rd party systems

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

Logic engine



Adding control functions that are missing within the field devices

Adding control functions that are distributed across devices that use different technologies

XLogic editor: graphical functional block programming

LUA scripts: script engine

NETx AUTOMATION

www.netxautomation.com