

Fidelix connected building BMS architecture

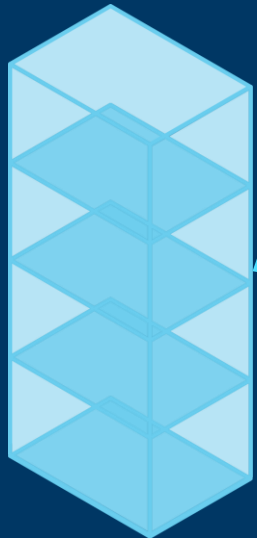
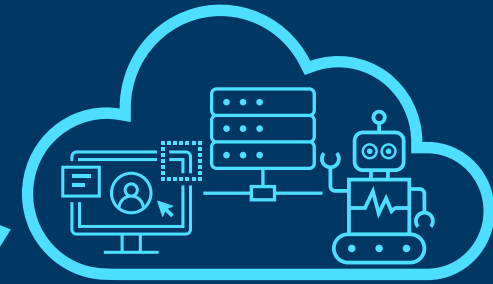
Connecting all
(types of) users



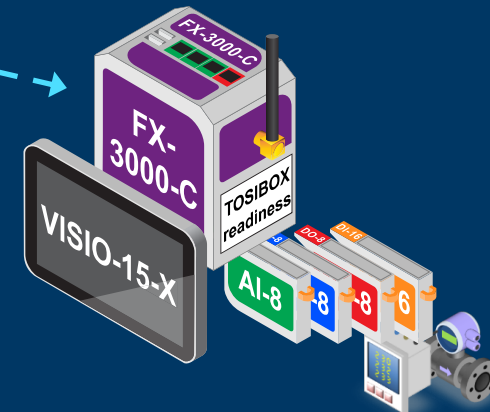
Fidelix
VPN
cloud



Connecting all
(types of) services



Interconnecting all
buildings

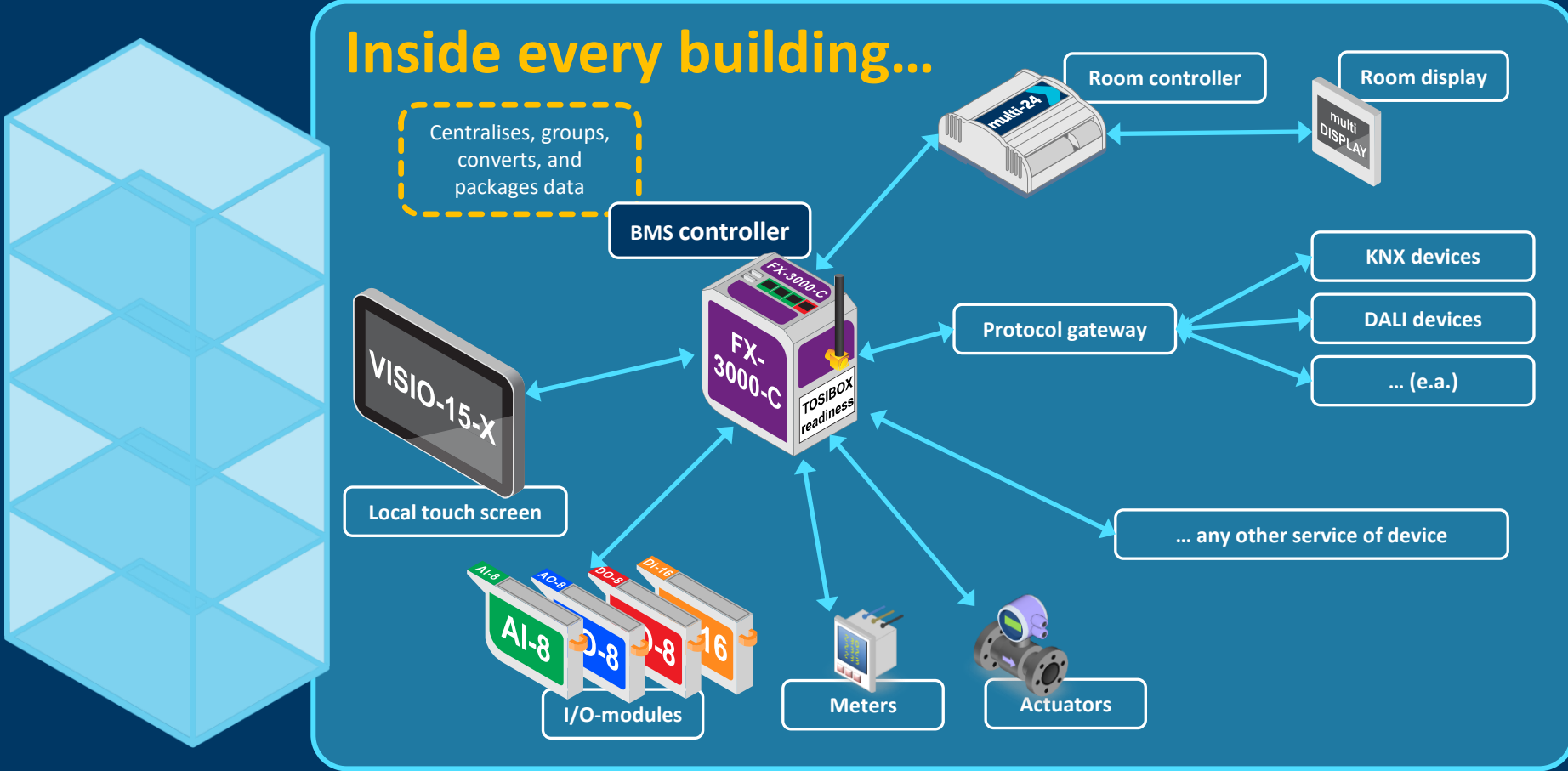


Inside every building...

Fidelix connected building BMS architecture

Inside each building, different controllers can directly manage and control the HVAC systems, measuring, metering, and other systems, or connect, centralise and visualise locally (the same as remotely) all services and systems running in the building.

Using different open protocols natively (Modbus, BACnet, M-Bus), or other proprietary protocols through gateways (KNX, LON, Dali, CAN, ...), any equipment can be connected without the need for any licenses!



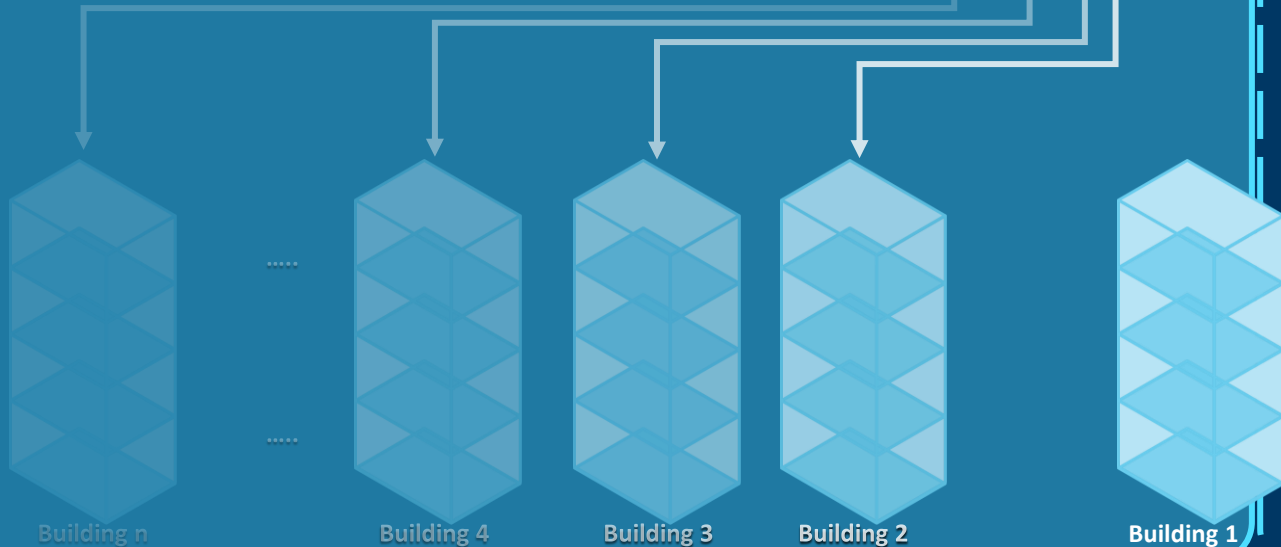
Fidelix VPN cloud

Each building connects through one central FX-controller, using built-in patented Tosibox® VPN software, to the Fidelix Central Lock via an encrypted, private connection

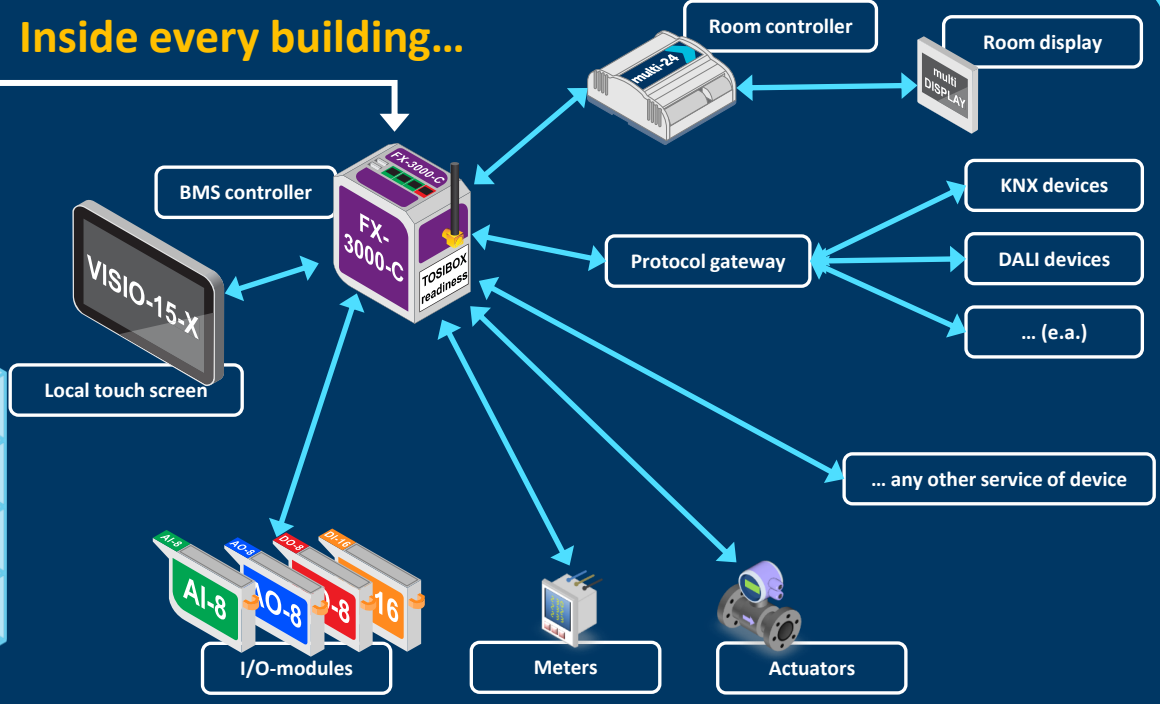


Connections using Tosibox®'s encryption algorithms

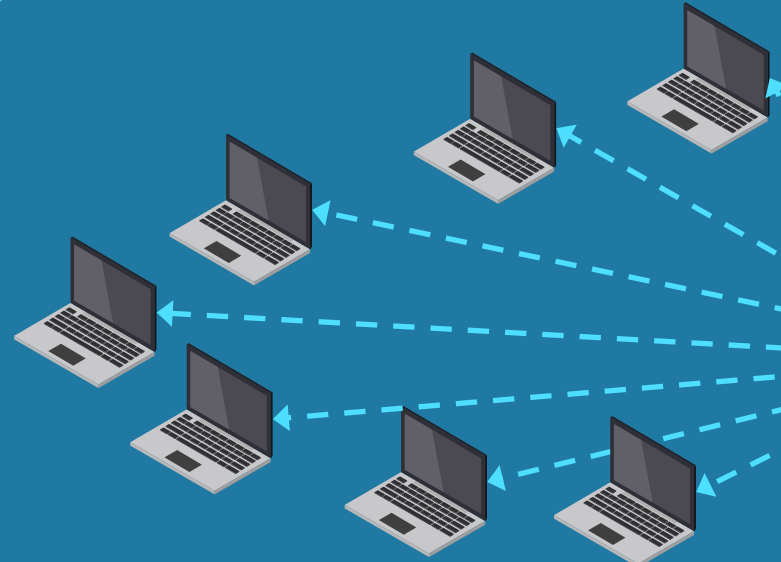
Interconnecting all buildings



Inside every building...



Fidelix VPN cloud



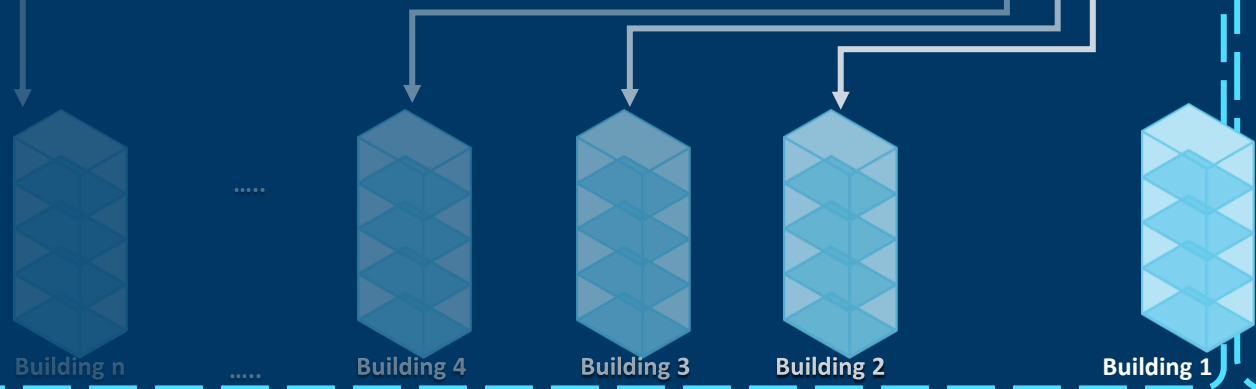
Connecting all (types of) users

Different types of end-users get different log-in credentials with different rights, possibilities, views, actions and reports.

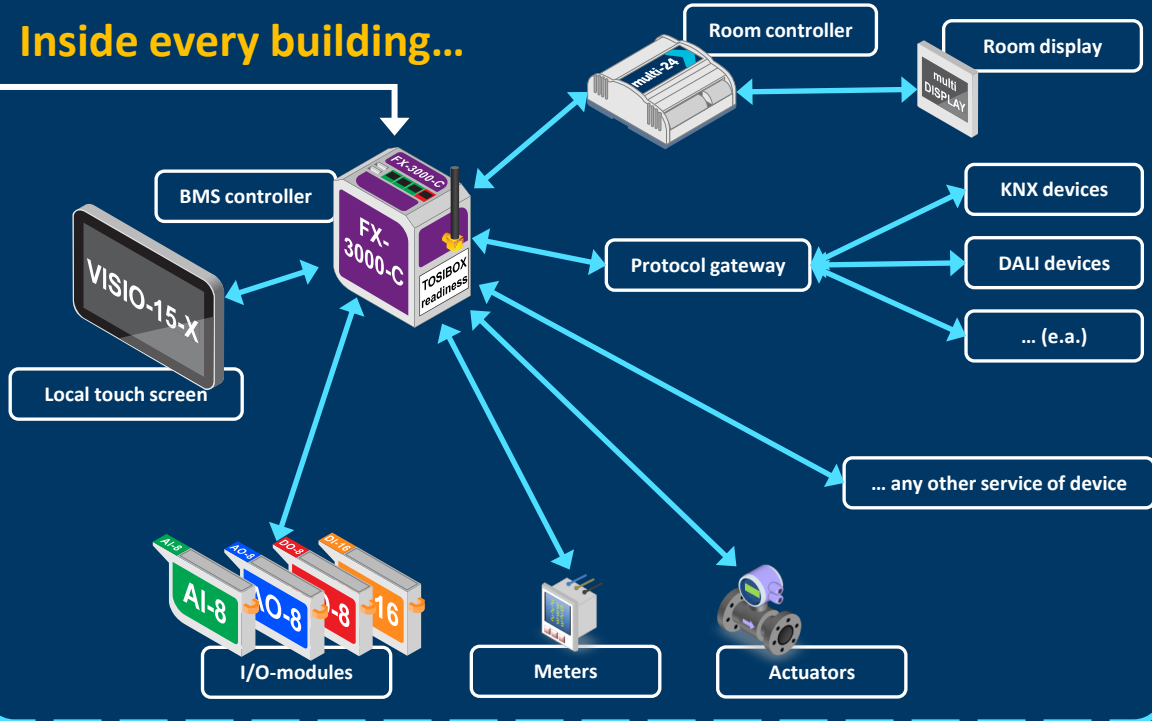
Everybody logs on through the same web portal <https://portal.Fidelix.fi> where they will then see only what is relevant for them:

- maintenance crew sees alarms and HVAC systems
- management sees energy reports
- janitor sees clocks, calendars, alarm reports, setpoints, conversion tables, time schedules, etc.
- ...

Interconnecting all buildings

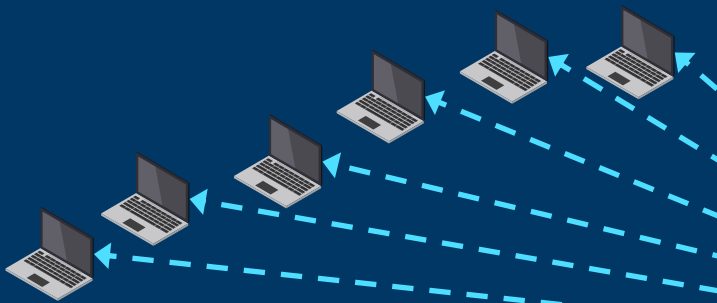


Inside every building...



Fidelix VPN cloud

Connecting all (types of) users

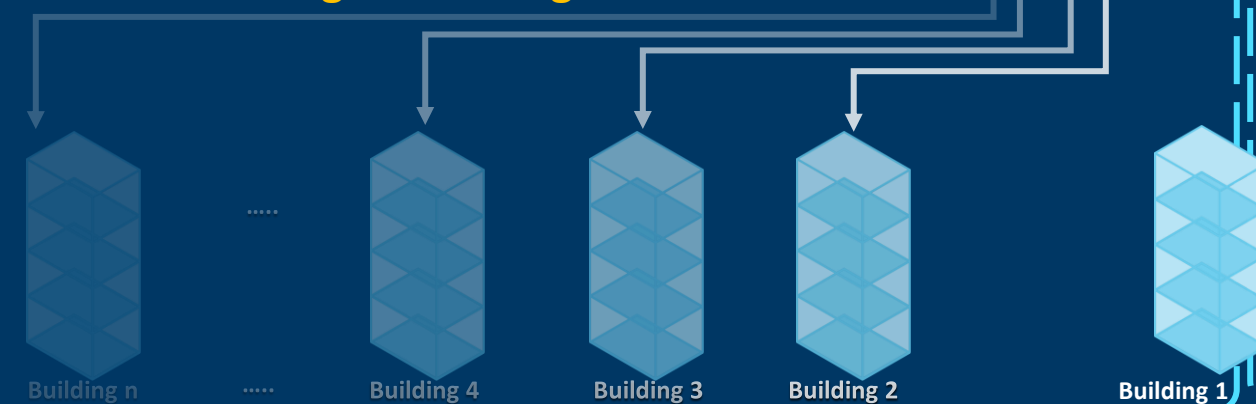


Connecting all (types of) services

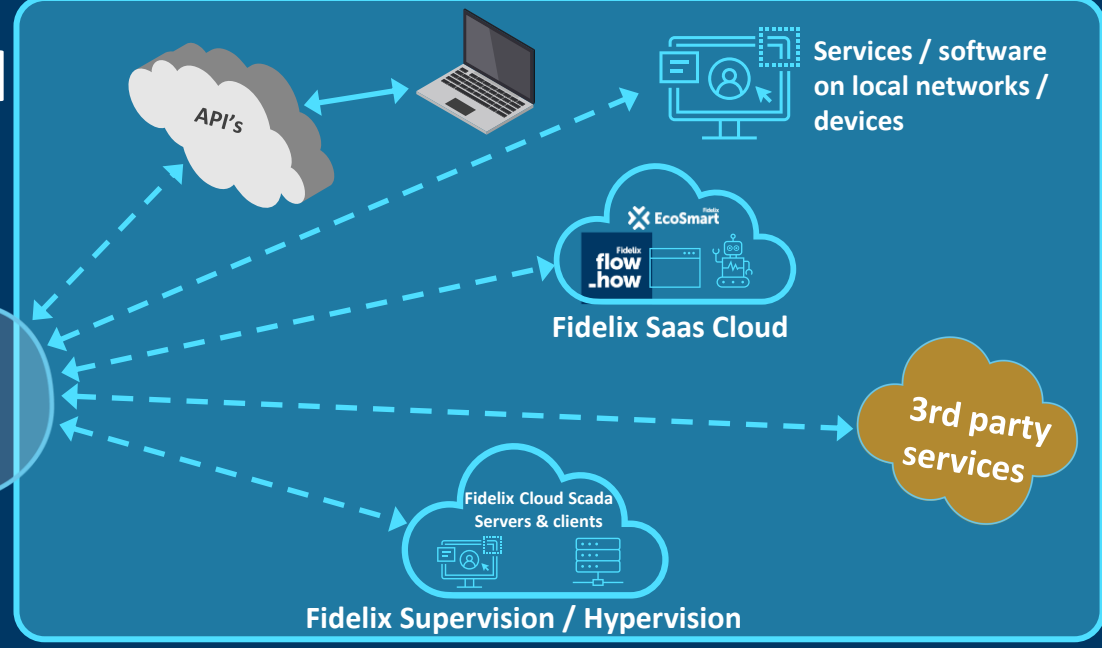
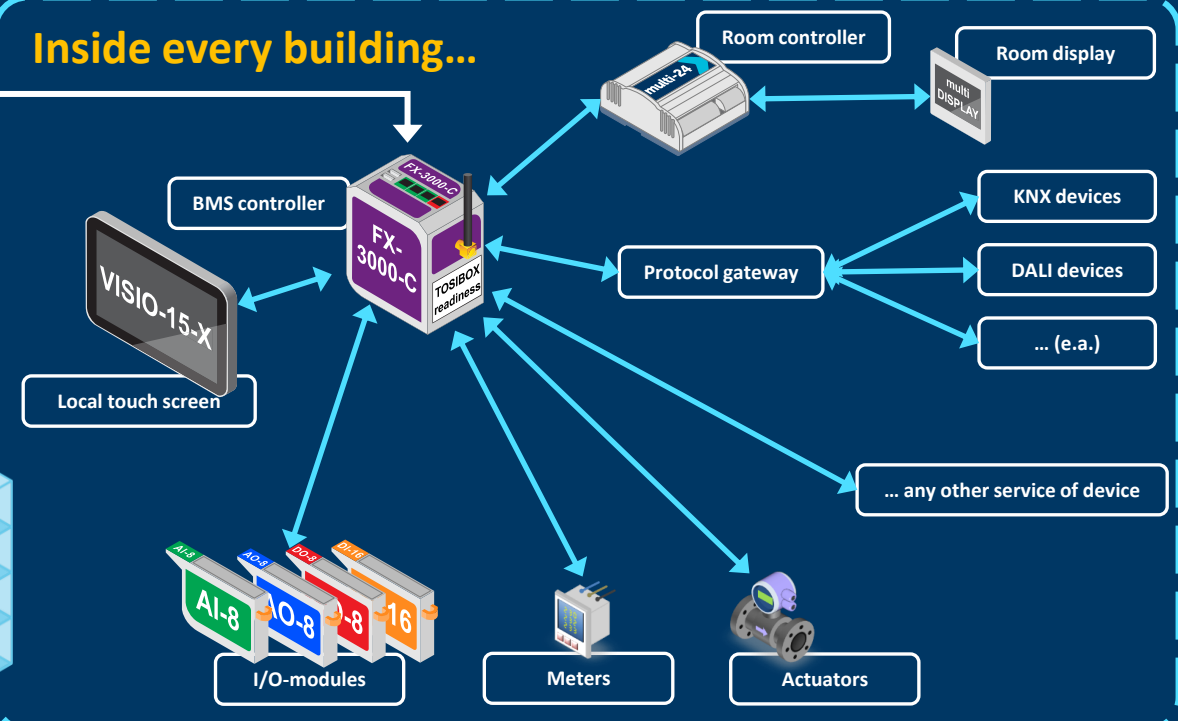
Many types of different services, both from Fidelix and other providers, can be connected through the Fidelix VPN cloud, either hosted on our MS Azure® servers, or through the use of different API's, on other secured platforms.

Fidelix offers not only several types of SCADA software (webVision / FX-SCADA), but also different AI-driven optimisation and follow-up software to optimise algorithms, predict maintenance cycles, and help lowering energy consumption with smart monitoring and deviation detection techniques

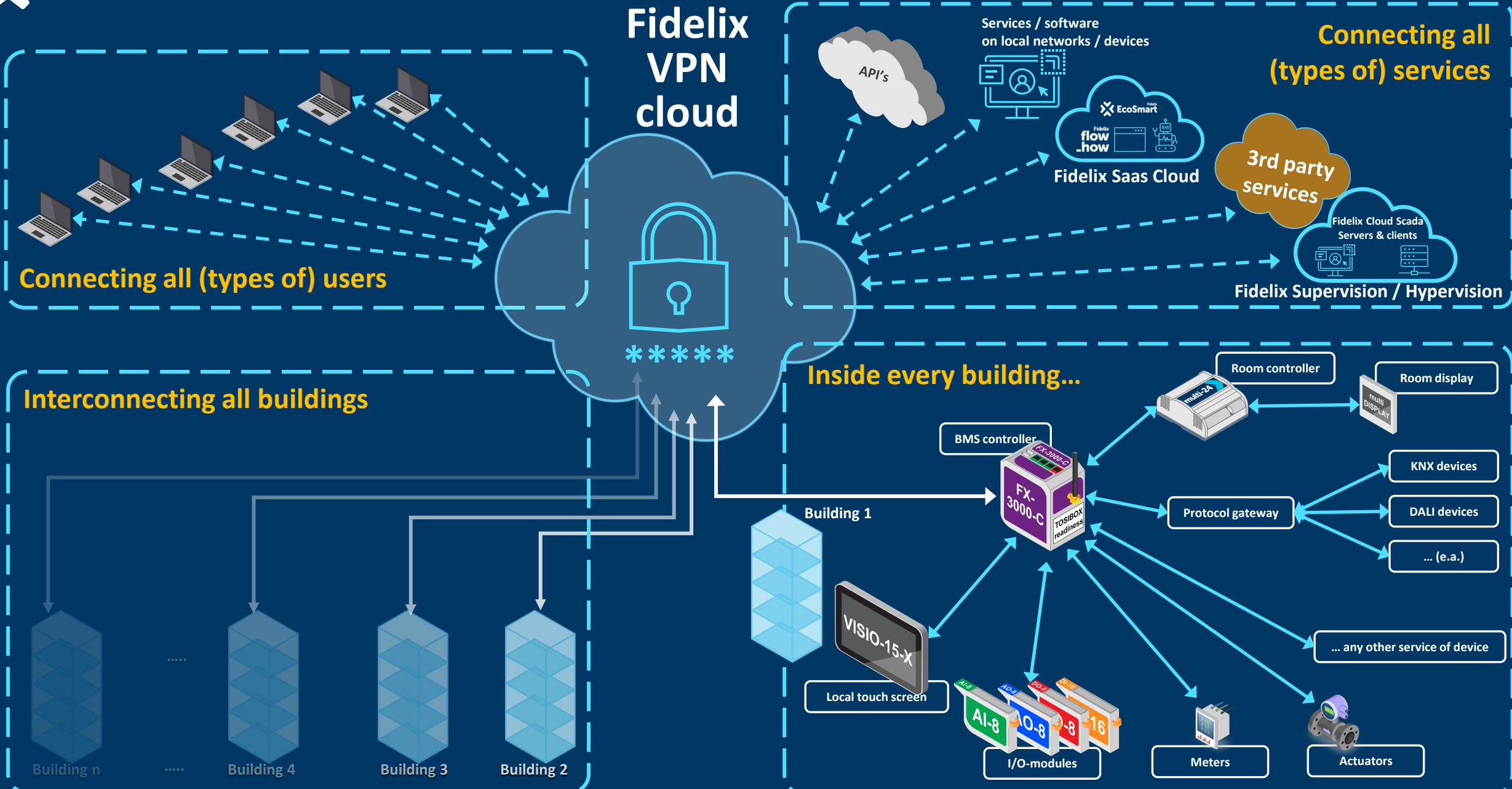
Interconnecting all buildings



Inside every building...



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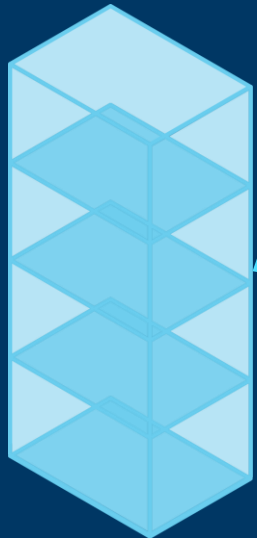
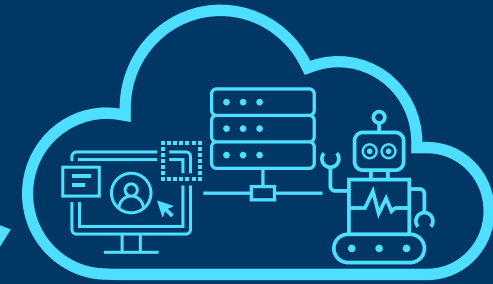
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(types of) users



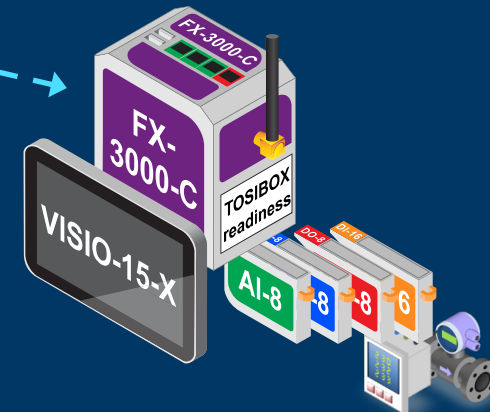
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Inside every building...

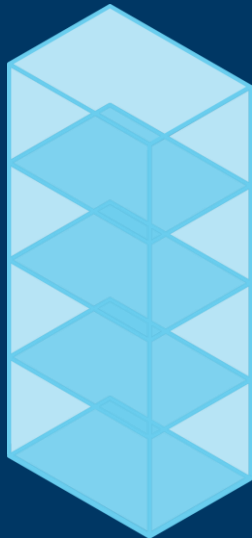
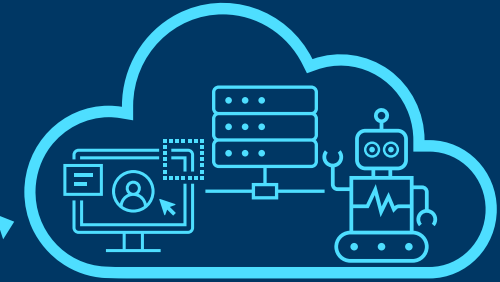
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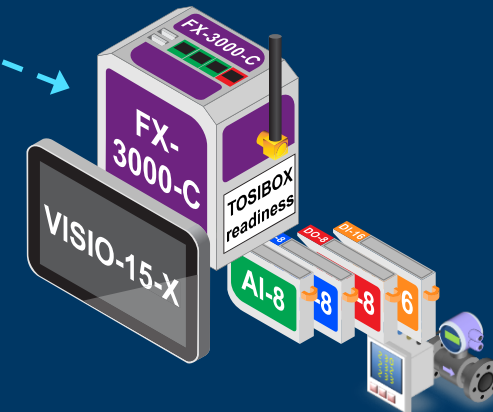
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Fidelix's solutions are unique in the sense that:

- No licences, never !
- Web interface for all levels of users, available on all devices
- Interconnectivity between different types of systems and services

- Each building and system can and will run independently even when using connectivity because of the decentralised logic; each controller runs independently and connects when possible
- Local alarms can be sent individually to local service providers or other stakeholders.
- (SCADA) Server software combines and centralises data, makes energy and consumption reports.

- Endless updating and expanding possibilities (backwards compatible +20 years and counting!)
- Third-party integration possibilities
- API's that can connect to other systems and services

Fidelix is itself a system integrator !

- We have hands-on experience with several local government entities throughout Finland
- We have project implementation experience handling with a mixture of renovations, upgrades, new builds and coupling existing systems into one larger new whole
- ...