

Building Space

Newron

Efficient building management

Always the best solution

Building Space

Everything from the one source. And one head. Because today efficient buildings are intelligently networked. The suitable solutions for this can be found by architects, planners and operators under Building Space Solutions at ABB. This includes innovative technology, products and services for implementing future projects more conveniently and safely.

Modern buildings are today more than merely the expression of future-oriented architecture. Integral systems must do justice to the increasing demands for energy efficiency, comfort, safety and profitable operation. For this, real estate needs intelligence in the form of well-designed technology. It is used to integrate information of the entire building automation and to control heating and cooling systems, ventilation and air conditioning systems, lighting, sun-shading systems, as well as fire protection and safety systems. Depending on the type of its use, a building presents special challenges to everyone concerned. That is why Busch-Jaeger, as subsidiary of the expert global brand ABB, now offers an integral solution – Building Space. Under this umbrella all available expert

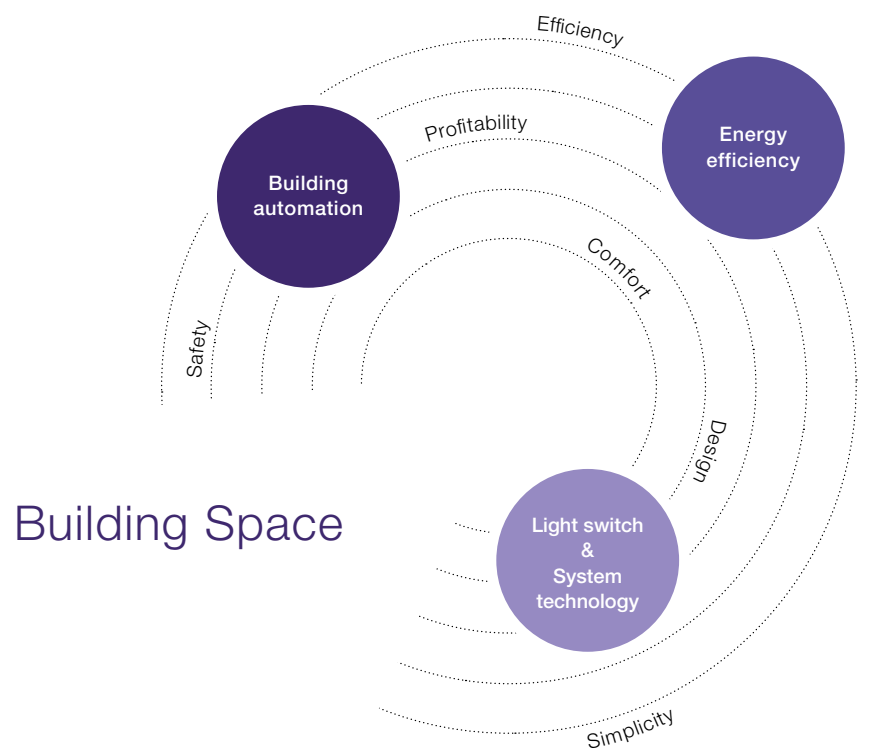
know-how of building automation as well as the electrical and building systems technology sectors is merged as solution for buildings of the future. This portfolio of products and services is unique. With this growing power of expertise, efficient buildings can be made a reality, safely and reliably – from functional buildings up to exclusive luxury hotels. And that on an international level. With Building Space, design, comfort, efficiency, profitability, simplicity and safety are considered in their context. This is how impressive solutions with the greatest possible freedom for design and implementation are created. Because Building Space solutions adapt themselves precisely to the respective object and its use. Even later modifications and extensions are possible at any time. When the building is

to be used later for a different purpose, for example. And here the Newron system guarantees an assured future and efficient operation. Its openness and flexibility make it ideally suited as central and scalable building management system for buildings of every type and size.



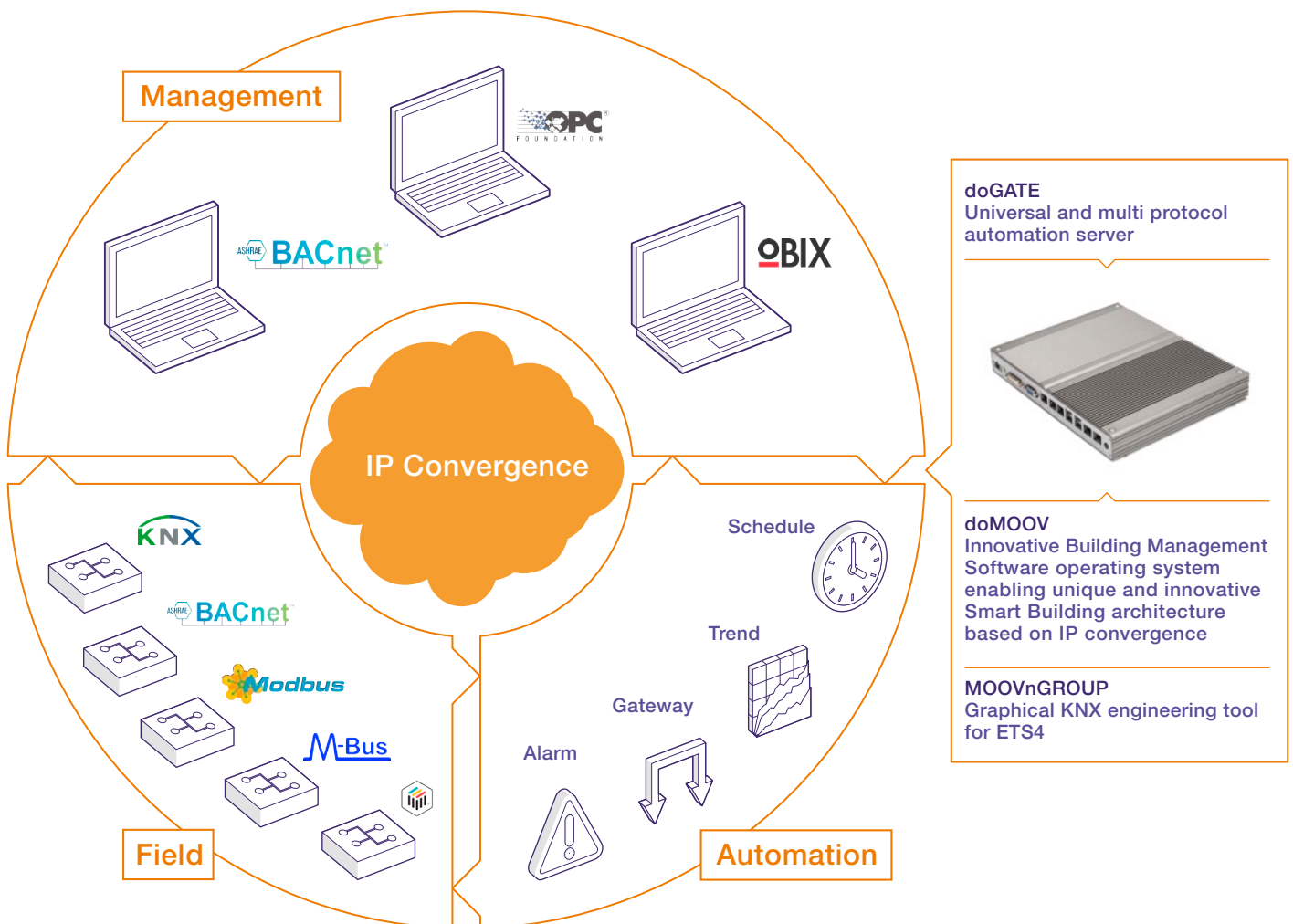
Tel Aviv Museum of Art, Herta & Paul Amir Building

Building Space – everything for the building of the future. The quality of modern architecture is influenced by many parameters. With Building Space, design, comfort, efficiency, profitability, simplicity and safety are considered in their context. This results in all-round sophisticated solutions.



Total networking With Newron

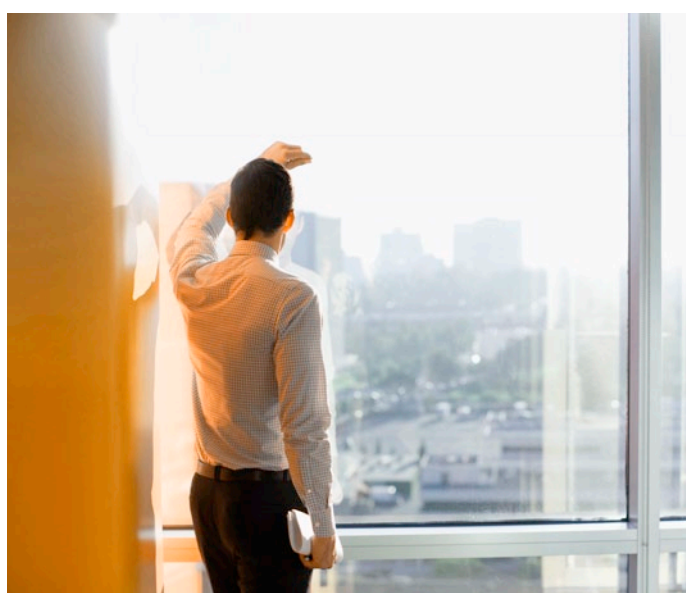
System integrators can now work even more efficiently. Because with the innovative Newron solutions ABB and Busch-Jaeger offer simple and efficient possibilities for intelligent building management.



More possibilities in less time. Newron solutions allow a simple and flexible data exchange to take place between the different levels of a building management system and the most commonly used protocols used in functional buildings. And here the solutions support all open standards such as BACnet, LON, KNX, Modbus, OPC, M-Bus and oBIX. This kind of flexibility allows devices of different manufacturers and different protocol families to be combined in a building in a very simple way. The performance of the system is designed for processing large amounts of data and the efficient integration of numerous data points.

Newron solutions support distributed IT architecture as well as IP convergence. The term convergence in general means the integration of forms of communication based on different technologies into a single network. IP convergence in the context of building management refers to the integration of different bus systems into one IP network. IP convergence offers a number of advantages with regard to expandability, performance, a uniform infrastructure as well as the possibility of joint management. This creates the prerequisites for the integral, service-oriented consideration of information processing.

The outstanding features of Newron solutions are the intuitively operable user interface and the easy-to-understand internal architecture. They are ideally suited for medium to large projects in functional buildings. Newron solutions offer the system integrator the working environment for processing major projects more efficiently and to simultaneously reduce integration time. Newron solutions follow an integrating approach and are therefore the direct interface to all central levels of intelligent building management. They form the bridge between technical system components and management level. Newron in a practical way supplements the numerous innovative KNX solutions for building automation in the existing program and rounds off the portfolio. For planners and system integrators Newron opens new possibilities and a highly attractive field of business – for example, the integration of KNX into the different trades of a building management system.



doGATE

The integral automation solution for intelligent buildings

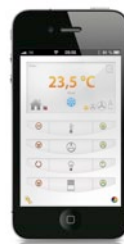
With Newron doGATE ABB and Busch-Jaeger offer the system integrator the possibility of simple integration of different protocols into the building automation system.

Newron doGATE

The system solution for intelligent buildings and all technical applications. The doGATE automation server makes it possible to connect any type of visualization, SCADA systems and offers interfaces to energy management dashboards. Newron doGATE is able to handle almost all standard protocols, making it independent from protocol, manufacturer and trade. doGATE makes available the appropriate physical interfaces and allows the data import from standard databases such as ETS for KNX, LNS for LON, EDE for BACnet, Excel. This suites doGATE solution ideally for renovation, since the available data can be integrated easily and fast.

Newron doMOOV

The innovative building management software for building automation based on open standard protocols. The software includes comprehensive functions for generating alarms, storage of trend data and time-dependent switching. The doGATE automation server includes the doMOOV automation software.



Web-Dashboard

The Web Dashboard is a doGATE-based efficient visualization for the services integrated in the doGATE. The Web Dashboard uses the HTML5 standard and is supported by all commonly used browsers.

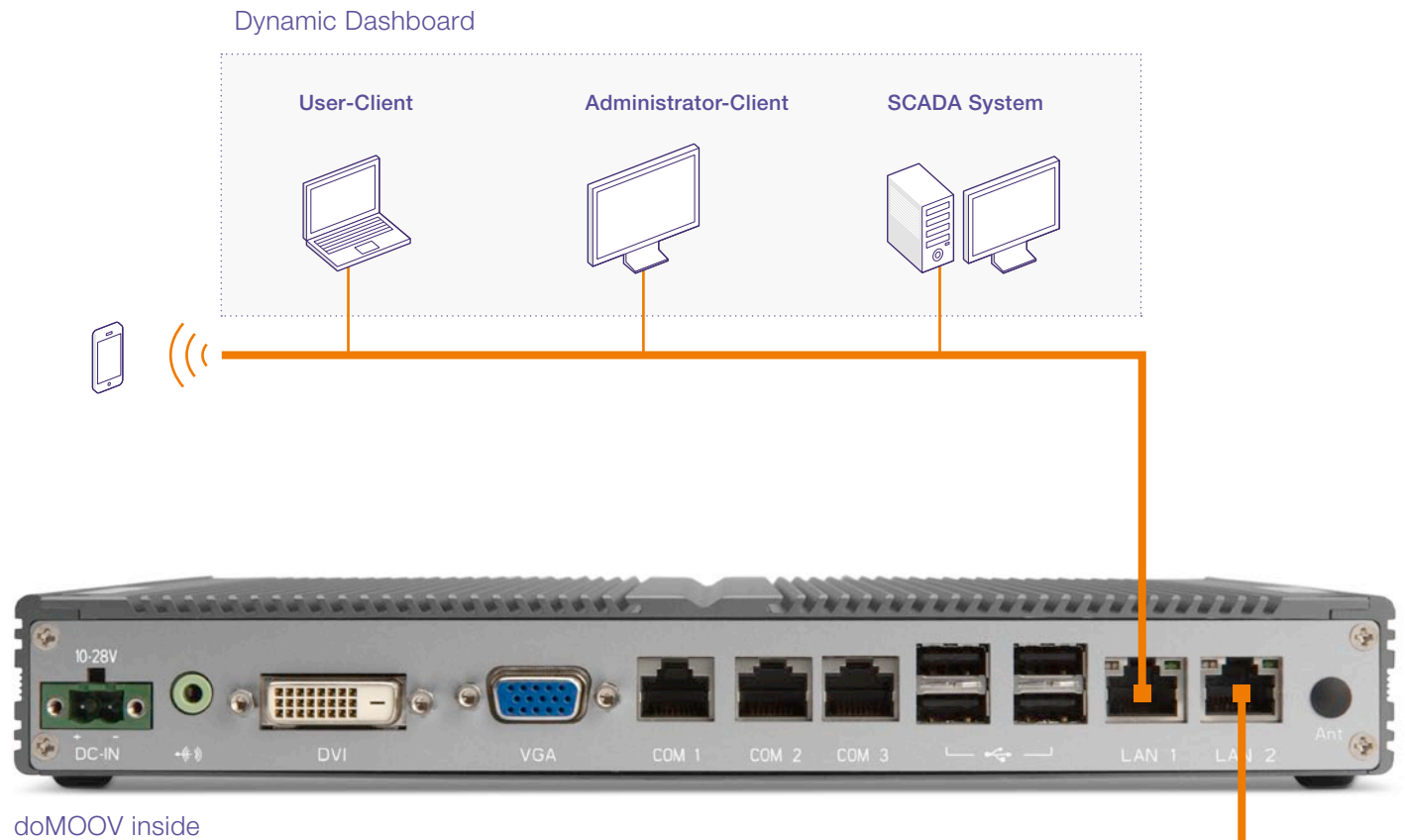
- » Data point management: reading and writing
- » Trend values: display and comparison
- » Alarms: display and management
- » Schedule/calendar: display and management

LIZ

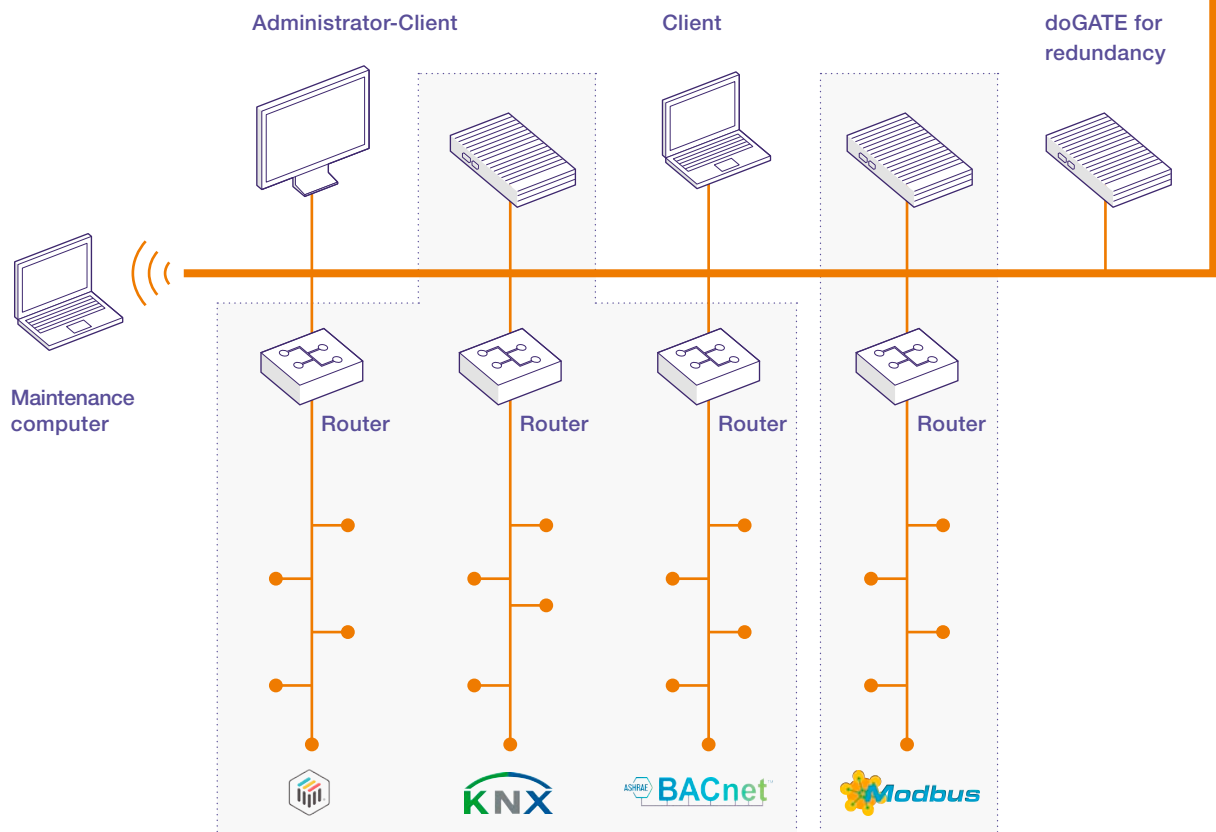
With the LIZ virtual remote control, rooms (zones) can be controlled via smartphone, tablet or PC widget. LIZ allows the user to control the rooms individually. Different rooms are called up with passwords.

- » Multi-room(zone) function
- » For PC, iOS and Android operating system

Building IT Network – TCP/IP



Building Technical Network – TCP/IP



MOOVnGROUP

Entering the market of large commercial buildings

MOOVnGroup is an engineering tool based on ETS4. It allows integrators to implement KNX projects by means of a graphic user interface.



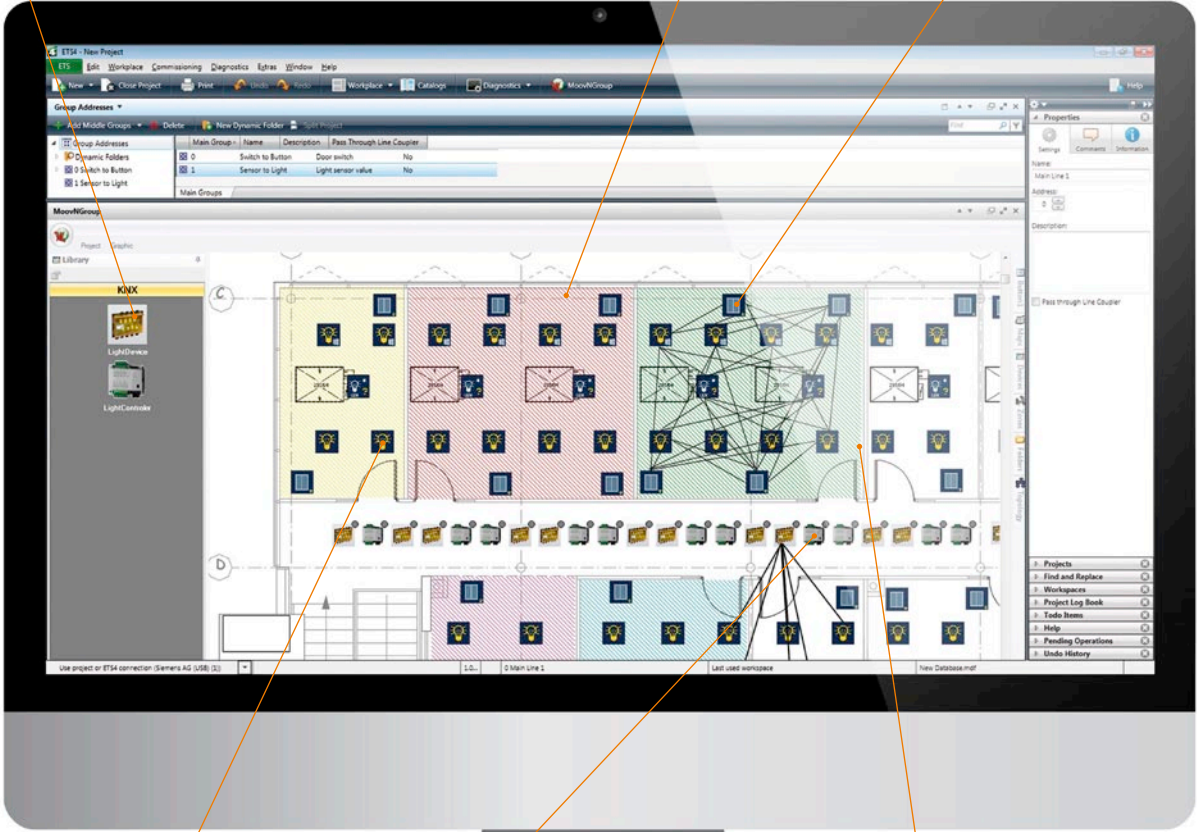
With Newron MOOVnGROUP ABB und Busch-Jaeger are pursuing a new method for commissioning KNX projects. MOOVnGROUP is an engineering tool that was implemented as ETS4 app. It allows integrators to implement projects in a very simple way by means of a graphic user interface. The floor plan of the building or storey acts as a basis for the planning. This floor plan is imported into the MOOVnGROUP project. In the second step the device templates must be created. In this case, all devices contained in the ETS4 device database can be used. The selection is made independent of manufacturer or the use of manufacturer-specific plug-ins. Device templates that have been created once can be collected in a library and reused at any time. The device templates can be dragged via drag-and-drop to the respective position and rooms in which they are required. Once the first room/floor has been

completely set up, additional rooms and entire floors can be added quickly and easily via copy-and-paste. In the next step a zone which contains all devices that are part of a room or zone is defined with a rectangle. The connections between the devices are automatically generated and devices, group addresses and parameters are inserted into the ETS project in the background. MOOVnGROUP is also a valuable aid when the use of the building changes. For example, if two small rooms are turned into a large room, only the zone needs to be redefined via the rectangle. The appropriate group addresses are regenerated automatically in the background. The MOOVnGROUP app is available as download in the KNX online shop.

Graphic device templates

Graphic formation of zones

Collecting the parameters defined in the profiles



Work based on applications

Division of modules into detailed functions

Intelligent algorithm for the automatic creation of group addresses and parameters

Graphic formation of zones

- » Work based on a graphical zone plan of the building
- » Drawing a rectangle (zone) creates group addresses/parameters
- » Flexible concept of zone formation and zone changes
- » Simple change of parameters and groups of parameters

Working with pre-defined templates

- » Use of device and solution templates
- » Enormous saving of time for project planning and parameterization
- » Reuse of once created devices and solutions via library

Automatic generation

- » Group addresses (connection of devices)
- » Data for Web Dashboard
- » Data for virtual remote control (LIZ)
- » BACnet objects for visualization and trend data points

Newron

All the advantages at a glance



doMOOV

doMOOV is a building management software for building automation and makes possible the exchange of data between different protocols. The user-friendly interface and the simple internal structure ensure short programming times and facilitate modification and adaptation.

Software solution

- » Fast to configure
 - » User-friendly HMI (Human Machine Interface)
 - » Supports decentralized IT structure
 - » Multi-protocol gateway – supports the protocols: KNX, LonWorks, BACnet, Modbus, M-bus
 - » Universal SCADA server OPC, BACnet, oBIX
 - » Integrated services: schedule/calendar, trends, alarms
-



doGATE

doGATE is an automation server optimized to doMOOV that is equipped with all necessary physical interfaces, which can also take over backup and remote control functions related to rooms.

Automation-Server

- » Automation server that works functionally stable
 - » Attuned to the requirements of functional buildings and the building management software doMOOV
 - » Makes available all necessary interfaces
 - » Redundancy: can be defined as backup device
 - » Additional functions: virtual remote control and Web Dashboard
-



MOOVnGROUP

MOOVnGROUP is an engineering tool, which as application for the KNX commissioning software ETS4 with a graphic user interface, facilitates the setup and editing of KNX projects. Here for example group addresses are automatically generated.

Graphic engineering tool

- » Graphic engineering tool for the ETS4
 - » Zone concept: simple, fast setup/modification of rooms/connections, as well as modification of parameters
 - » Reduction of complexity due to the automatic generation of group addresses
 - » Working with templates: reuse of created device and zone templates
 - » Automatic generation of data for Web Dashboard, virtual remote control LIZ, BACnet objects for SCADA (visualization) and trend data points
-

Newron

Referenzen & projects

Project Name & Place BPCE - Headquarters - Banque Populaire Caisse d'Épargne - Paris, France (Finished in December 2014)

New or Refurbishment Refurbishment
Surface ~45 000 m²
Integration tools NL220 & NLFacilities
Protocols LonWorks, BACnet/IP (automates), ModBus
Datapoints Quantity 2500 devices (HVAC, Lighting, Blinds), 25 000 Datapoints
SCADA System Desigo Insight over BACnet
Infrastructure & Automation 4 doGates
Products
Site Description Office Building - 8 Stories



Project Name & Place Hôtel Dieu - 5* Hotel - Marseille, France

New or Refurbishment New, only the facade has been conserved
Surface ~23 000 m²
Integration tools ETS
Protocols KNX & BACnet/IP
Datapoints Quantity 2 000 Datapoints
SCADA System Desigo Insight over BACnet
Infrastructure & Automation Products 1 doGate
Site Description New luxurious hotel in Marseille :
 180 rooms + 16 Royal Suites +
 2 Restaurants + 1 Conference Room + 1 Spa



Project Name & Place GDF Suez Tower - Brussels, Belgium

New or Refurbishment New Construction
Surface 75 000 m²
Integration tools NL220 & NLFacilities
Protocols LonWorks
Datapoints Quantity ~10 000 Datapoints
SCADA System WinCC over OPC
Infrastructure & Automation 3 doGate - 800 LIZ
Products
Site Description Office Building, 14 stories, National Headquarters, certified BREEAM and HQE



Project Name & Place Dassault Headquarters - Saint Cloud, France



New or Refurbishment Refurbishment
Surface ~30 000 m²
Integration tools NL220 & NLFacilities
Protocols LonWorks
Datapoints Quantity 20 000 Datapoints
SCADA System PcVue over OPC
Infrastructure & Automation 2 doGate + 1 Redundant
Products
Site Description Office Building - 4 Stories

Project Name & Place NHO - Hôpital d'Orléans - Orléans, France





New or Refurbishment New Construction
Surface 200 000 m² (170 000 m² of buildings + 30 000 m² of underground and silo parkings)
Integration tools NL220
Protocols Lon, ModBus, BACnet
Datapoints Quantity ~ 12 000 Datapoints/ bâtiment = 72 000 Datapoints
SCADA System Wonderware
Infrastructure & Automation 18 doGates
Products
Site Description 6 Buildings of 6 stories each (+Ground floor + Underground) - HQE & QSE


Project Name & Place Hôtel de Région Auvergne - Clermont Ferrand, France



New or Refurbishment New Construction
Surface 16 000m²
Integration tools Moov'n'Group (+ ETS)
Protocols KNX, BACnet & Modbus
Datapoints Quantity 7500 Datapoints
SCADA System PCVue in BACnet
Infrastructure & Automation 3 doGate + 27 IPR/S2.1 ABB KNX Routers
Products
Site Description 1 Building of 5 stories gathering 338 Offices + 25 meeting rooms + 1 amphitheatre

Project Name & Place	Verrazzano - Lyon, France	
New or Refurbishment	Refurbishment	
Surface	14 000 m ²	
Integration tools	NL220 & NLFacilities	
Protocols	Lon, BACnet (soon), OPC(SCADA)	
Datapoints Quantity	1100 LonWorks nodes, around 10 000 Datapoints	
SCADA System	Codra - Panorama E ²	
Infrastructure & Automation	2 doGate	
Products		
Site Description	6 Office Buildings of 3 or 4 stories	

Project Name & Place	ISTP - St Etienne, France	
New or Refurbishment	Refurbishment	
Surface	Around 3000m ²	
Integration tools	NL220, ETS	
Protocols	Lon (AHU), KNX(Room control, heating ceiling) ModBus(metering) BACnet (boilers), OPC (SCADA)	
Datapoints Quantity	2500 Datapoints	
SCADA System	Codra - Panorama E ²	
Infrastructure & Automation	1 doGate	
Products		
Site Description	Prof. Training School on 3 stories	

Project Name & Place	Collège Jean de la Fontaine - Rouane, France	
New or Refurbishment	Refurbishment	
Surface	Around 2000 m ²	
Integration tools	ETS	
Protocols	KNX (Electrical Heating), OPC (SCADA)	
Datapoints Quantity	5000 Datapoints	
SCADA System	Codra - Panorama E ²	
Infrastructure & Automation	1 doGate + 1 Redundant	
Products		
Site Description	Secondary School	

Project Name & Place	LDLC in the past and now SEB	
New or Refurbishment	New Construction	
Surface	9000 m ²	
Integration tools	NL220 & NLFacilities	
Protocols	Lon (Room Control), ModBus, BACnet, OPC (SCADA)	
Datapoints Quantity	5000 Datapoints	
SCADA System	Codra - Panorama E ²	
Infrastructure & Automation	1 doGate	
Products		
Site Description	Office Building on 5 stories	

Project Name & Place **Icade 270 - Aubervilliers, France**



New or Refurbishment Refurbishment
Surface 9500 m²
Integration tools NL220 & NLFacilities
Protocols LonWorks, OPC
Datapoints Quantity 2500*5 = 12500 Datapoints
SCADA System Arc Informatique - PcVue
Infrastructure & Automation 5 doGate + 1 Redundant
Products
Site Description Office Building - 7 Stories - HQE

Project Name & Place **SCOR (rue kleber Paris)**



New or Refurbishment New Construction
Surface 18 800m²
Integration tools NL220, NLFacilities
Protocols Lon, OPC, ModBus
Datapoints Quantity 1000 points en OPC
SCADA System PcVue in OPC
Infrastructure & Automation 1 doGate
Products
Site Description 2 Buildings - 7 Stories each +
3 underground levels

Project Name & Place **URSSAF - Lyon, France**

New or Refurbishment Refurbishment
Surface -
Integration tools Moov'n'Group (+ ETS)
Protocols KNX + BACnet + Modbus
Datapoints Quantity -
SCADA System PCVue in BACnet
Infrastructure & Automation 1 doGate + IPR/S2.1 ABB KNX Routers
Products
Site Description 1 Building of 8 Stories

Contact us

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of the ABB Group

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