

# MYNXG Access

Cloud-based user management providing access to sites, data, processes, and things. It includes ISA/IEC 62443-compliant security process management based on digital workflows for highly flexible processes.

MYNXG Access is the basis of the MYNXG industrial Operational Technology (OT) system and contains a cloud-based software as a service solution. A complete people management, based on a sophisticated Global Master Data (GMD) structure is the system's core, combined with MYNXG Smart Mobile Application Real Time (SMART) and the access infrastructure which is controlled by CTIA cyber secure cellular LTE / 5G Edge gateways. Transparent OSDP based interfaces allow installations of RFID NFC readers and wireless doorknobs.

## Access Technology

To provide users access, the MYNXG SMART application running on smartphones or tablets is used per default. Alternatively, ATEX capable phones and or MIFARE cards can be utilized.

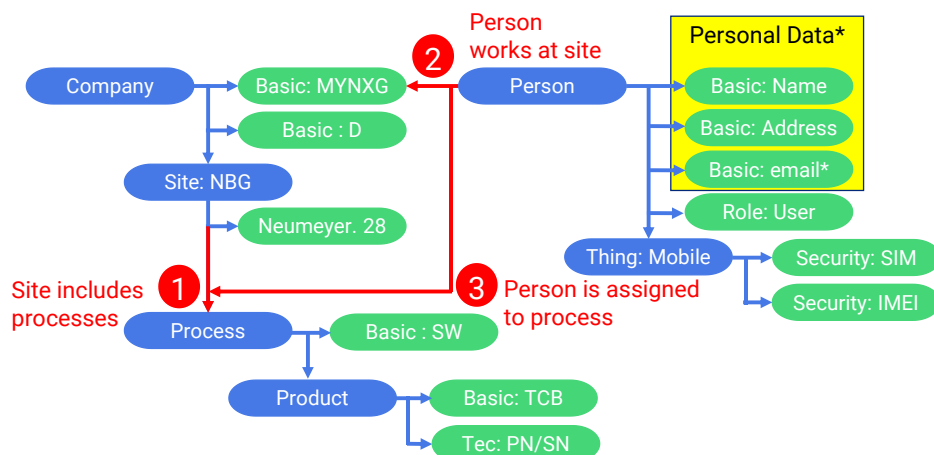
The people management is based on the Global Master Data (GMD). With bare minimum personal data, we create a General Data Protection Regulation (GDPR) compliant structure that allows the user right management across sites for employees and visitors.

The system provides safety and security functions including time-, emergency-, alarm- and Covid 19 management. capabilities.

## Customer Benefits

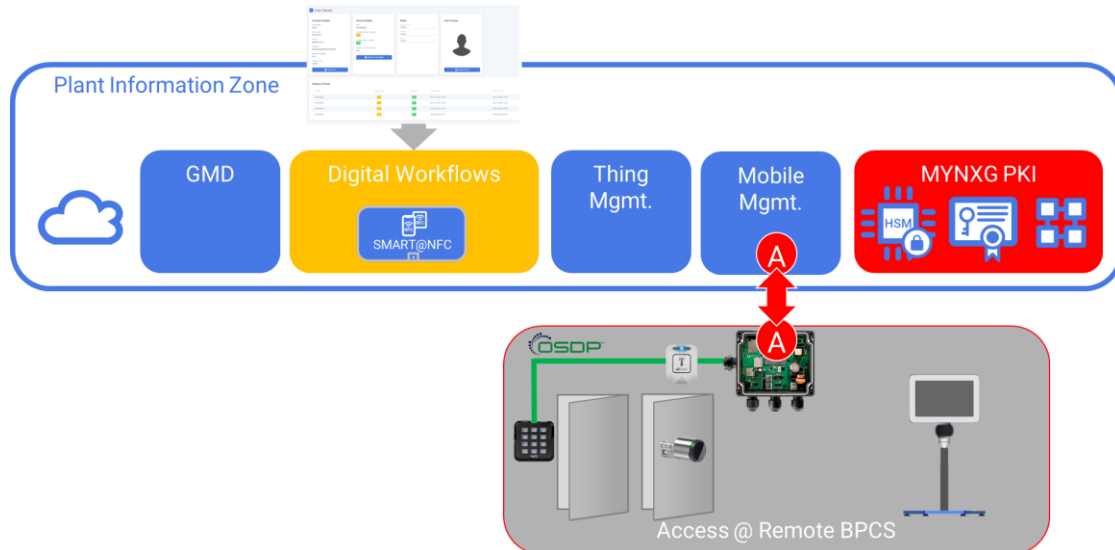
- ISA/IEC 62443 and GDPR compliant cloud-based technology.
- People management for employees and visitors based on Global Master Data (GMD).
- Easy to install readers and gateways which requires zero IT skills at site.
- Integrated Electronic Mobility Management (EMM) that works with any Android™ 8 or later smartphone/ tablet.

## Access GMD Person



## Cloud-based Access Technology

MYNXG Access is controlled by the MYNXG cloud. The MYNXG cloud and the Access System at Site (remote BPCS) are connected via LTE/5G technology. MYNXG Edge ECO gateways control and manage the Access readers and doorknobs at site. The MYNXG SMART application on the smartphone communicates via the RFID NFC interfaces with the doorknobs and readers.



## Installation Simplicity

- LTE / 5G gateway and wireless doorknobs make the MYNXG Access system easy to install.

## Cloud-based Access Technology

**Edge ECO Gateway** controls readers, doorknobs as well as kiosks and links the system securely via LTE / 5G with the MYNXG cloud. The gateways are CTIA cybersecurity level 3 certified.

**OSDP Bus**, via an OSDP protocol the gateways control the readers and the airlink interface for doorknobs. The communication between SMART and the reader is utilizing RFID NFC protocols.

**Doorknobs** are intelligent keyless locks and allow the installation at doors without any cabling or extensive modification of the door. The doorknobs are wirelessly linked via Airlink Devices with the Edge ECO gateway.

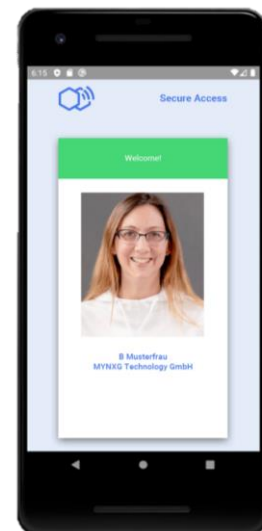
**Access Readers** are linked via OSDP RS485 interfaces with the Edge ECO. Readers are available with and without keypads. Doors require an electrical lock controlled by the gateway.

**Kiosks** are providing self-service capabilities for visitors at receptions. Kiosks are linked via integrated Edge ECO gateway with the MYNXG cloud. MYNXG provides customization packages to automate reception services like site maps and safety videos.

**SMART**, every time, SMART is presented at the NFC reader MYNXG validates the SMART Integrity. MYNXG compares the actual signature of SMART and documents this check with a MYNXG blockchain transaction. After successful checks, access is granted.

**MIFARE cards** are the alternative for users without smartphone.

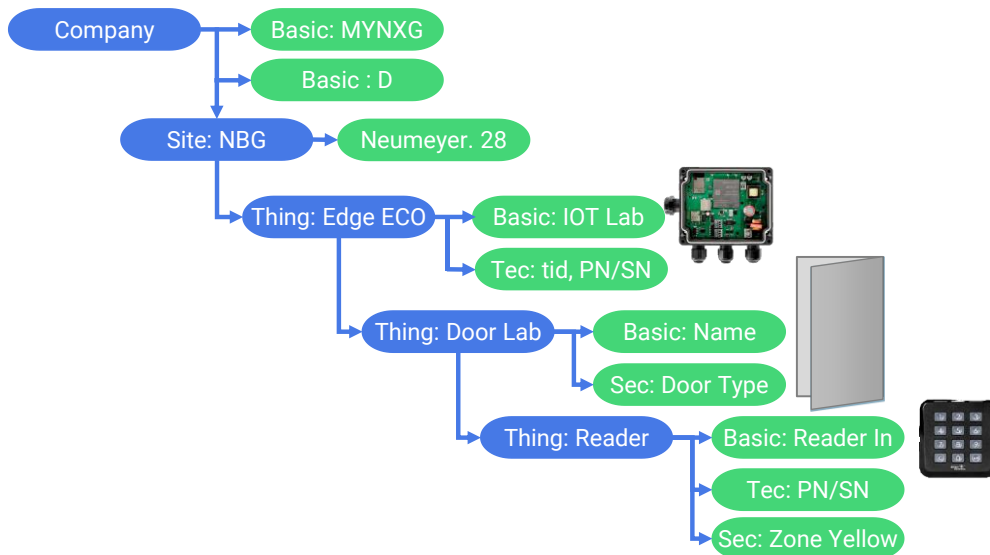
## MYNXG SMART



- ISA/IEC 62443 compliant application technology.
- Works with any Android™ 8 or later smartphone / tablet

## GMD Access System Devices

MYNXG uses its GMD structure to create the logical link between physical implementations at site and the operations. The example below shows a door controlled with a keyboard reader. The door provides access to a "Yellow" security area with limited access to the "IOT Lab" area inside the MYNXG site located at the Neumeyer-street 28.



### Benefits GMD Data

- Enables the creation of user specific safety and security zones

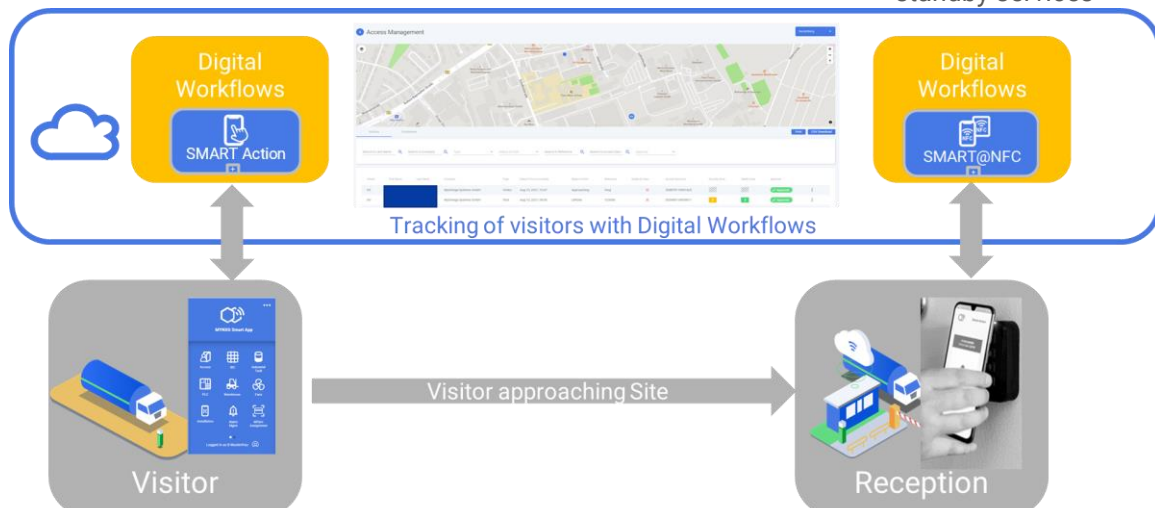
## Advanced Access Functions

By combining SMART, GMD data structures and MYNXG readers, doorknobs, and kiosks, it is possible to create new functions and services, like optimized receptions:

- Visitors register the visit remotely at SMART
- Tracking of visitors that are approaching the site
- Planning of deliveries and external services
- Optimized reception and capacity management

### Solution Features

- Utilize the capabilities of today's smartphones for your access management via SMART
- Enable remote access to your sites, data and processes and reduce standby services



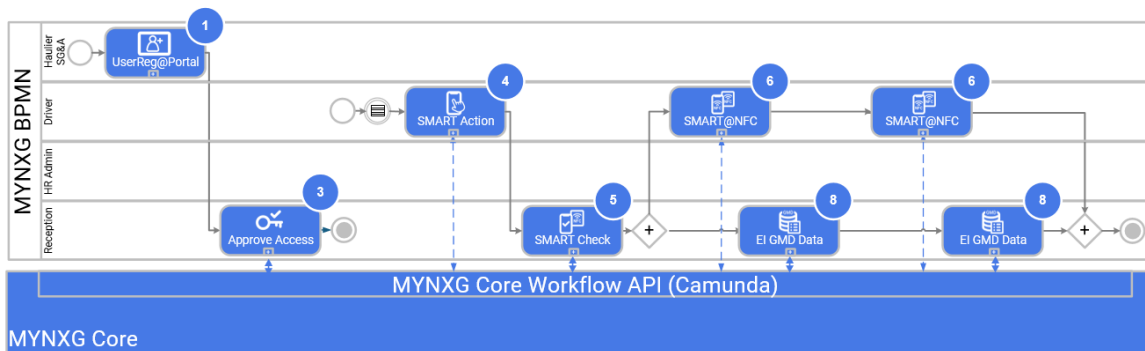


## Digital Workflows for Access

Digital workflows are the technology to digitalize and automate processes with human interaction. In case multiple processes with deviations shall be executed by user groups, digital workflows are the right technology choice. To support the design of digital workflows, MYNXG provides Method Building Blocks (MBB) that interacts with the MYNXG-IoT devices, -SMART and -Core (Cloud).

One example of a MBB is the SMART @ NFC. In case SMART is presented to the reader, the entire integrity checks, the validation of the access rights, the blockchain transactions, the opening of doors, and the updates of the GMD data are executed by the MBB.

MYNXG library of MBB tools provide support for all access standard process elements including user registration, approvals, SMART action and SMART check as well as the defined updates of electronic inventories.



### Key benefits

- Create user / role specific digital workflow to manage policies
- Low coding efforts for the design of access processes
- Highly efficient digital visitor and supplier management
- Create highly efficient time reporting and activity KPIs

## Functions

### Access Automation



- Easy & secure authentication and authorization
- Creation of individual GMD Person data sets
- Creation of GMD Access Systems to define sites
- Setting of access right according to GMD profiles
- Access to buildings via RFID NFC readers
- Access to data and information
- Access to processes, safety, and security checks
- Access to things, machines, equipment

### Registration @ Portal



- Administration can create users
- MYNXG User roles for Administration, Developers,
- User and Viewer are supported,
- User rights are assigned via the GMD Person, including assignment to single user /user groups, enabling policy mgmt. across sites.

### Security Features

#### Applied Methods

- MYNXG signing and whitelisting of Software
- MYNXG Blockchain transactions
- Generation of user credentials
- Android™ class KeyStore
- Android™ SafetyNet Attestation



## Registration @ Kiosk



- Visitors can register themselves at the kiosk
- Safety and security trainings are provided
- After approval the person that registered can get access rights via SMART or MIFARE cards.

## Remote Registration @ SMART



- By invitation of the Asset Owner /Site Mgmt. the SMART application is provided for installation
- SMART users can interact remotely and securely with the devices and processes at site.
- SMART visitors can register remotely, reception and visitors can save time and cost.

## Electronic Inventory Employees /Visitors



- Electronic Inventories provide real time status
- Visitors and employees present at site are visible
- Emergency lists can be generated including presence inside safety and security relevant zones

## Time Management



- Active presence at and offsite sites are registered
- Time reporting per employee
- Key performance indicators for processes.

## Covid 19 List



- Covid 19, the 21-day covid history list
- Questionnaire for Covid 19 relevant symptoms

## Security /Safety Zoning



- GMD Access System Devices defines zones
- Safety (ATEX) and security are categorized into red, yellow, green zones
- Only person with access rights can enter the zones

## Geo Fencing



- SMART-based geo-fencing includes the tracking of persons at sites and approaching sites
- Exit from site automatically stops the tracking
- In addition, Bluetooth beacon can be used to define areas /zones which require specific rights /devices

## MYNXG Product Installation



- All MYNXG products contain QR Codes,
- Scan the QR Code and receive installation guides
- Installation of access products include doorknobs

## Security Functions

- Security check at every start of SMART
- Signing of every SMART software download
- Individual key/credential pairs per SMART
- Validation of SMART Integrity at MYNXG Access readers
- Blockchain transaction to document integrity checks
- Blockchain transactions on behalf of SMART for approvals/transactions
- Safety zone support for hazardous areas



iSafe 530 ATEX®  
smartphone



## Product Information

**MYNXG SMART** requires a MYNXG user account, which is automatically installed at any Android™ Smartphone by enabling SMART is complementing the MYNXG Automation solutions and is distributed by OT asset owner invitation

- SMART is provided at zero cost for MYNXG User “Viewer”
- SMART may cause blockchain transaction fees.
- SMART can be configured per user / per solution

### MYNXG compliant MIFARE DESFire cards and fobs

MYNXG provides MIFARE® cards or fobs that are compliant with the MYNXG Access System, for users without MYNXG SMART capable smartphones or one-time / infrequent visitors.

### MYNXG Edge FCR Eco Access Cabinet

- Edge FCO ECO, CTIA IoT Cybersecurity Level 3 compliant
- ISA/IEC 62443 3-3 compliant Smallest Possible Cell (SPC)
- Cabinet contains all required electronics to create access systems and to connect readers and control locks, as well as the interfaces to connect ALS 20 Airlinks.

**MYNXG compliant Deister products**, supporting Goods Receipt, Warehouse Storage, Commissioning, Goods

- PRX 6 RFID NFC Reader
- KPX 6 RFID NFC Reader
- ALS 20 Airlink
- DLN 1 Wireless Knob

### MYNXG Kiosk Products

The MYNXG Access Kiosk enables the digital self-service registration for visitors instead of paper-based processes. The data is managed with the MYNXG user management. Edge FCR Eco Access Kiosk comes as standing, desk, or wall-mounted version.

### MYNXG compliant Bluetooth beacons

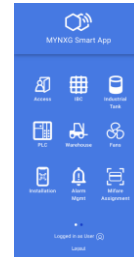
- BT beacons to define additional safety /security zones

## About MYNXG

MYNXG is a secure industrial IoT architecture to protect assets, infrastructure, and their data to the highest cybersecurity standards. MYNXG is the technology of choice to securely connect operational devices in highly regulated industries and the people interacting with them. The platform supports all industrial interfaces at the device level, provides cloud platform APIs and provides Digital Workflow support for BPMN 2.0.

The MYNXG platform sets the de-facto security standard for operational technology and is fully ISA/IEC 62443 certified.

## Access Products



MYNXG Headquarters  
*High Tech Center  
Neumeyerstraße 28 -34  
90411 Nuremberg  
Germany*

For more information call  
**+49 911 990 876 00**  
or visit us @  
[www.mynxg.com](http://www.mynxg.com)

**Smart. Realtime. Secure.**