



## INTEGRATION OF 2N® ACCESS COMMANDER WITH 3<sup>RD</sup> PARTY SYSTEMS

Office buildings as well as residential apartments currently tend to being equipped with systems for protection and monitoring of people, assets and the property itself. The aim is to seamlessly integrate these multi-layered security systems into a single, centrally operated, monitored and maintained system – **Integrated Security System**.



Video Surveillance



Access Control System



Fire Detection  
&  
Alarm System



Intrusion Alarm



### Access Control System

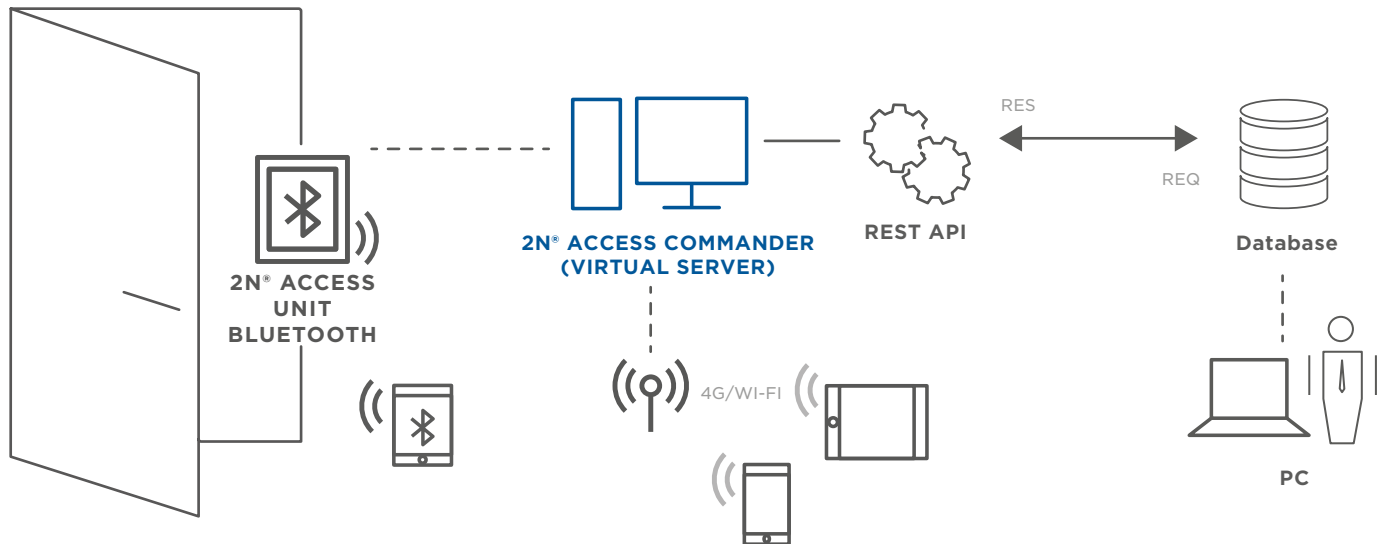
2N® Access Commander, a modern SW with a simple and intuitive user interface is a nerve center of the 2N IP Access Control system. It is used mainly for managing access to the building, but also for monitoring of the status of Intercoms and access units in real time.

The 2N IP Access Control system integrates easily into third-party systems using the REST API web interface. LDAP protocol helps with synchronization with an external Active Directory and for special or proprietary systems a data exchange in form of the CSV file is an option.

## REST API OF THE 2N® ACCESS COMMANDER

The REST API, an interface supported by 2N® Access Commander, is the most convenient, complex and practical interface to be used for the integration with third-party systems.

Due to its elaborate description, the API is ready for the Developers. The Application interface is designed to control and set all important features and parameters of the 2N IP Access Control system. Standard HTTP commands GET, PUT, POST and LIST are used for communication with a server.



### TYPICAL USAGE:

The API could be used for an integration of 2N® Access Commander with 3rd party Reservation or Booking system.

Users with their credentials, Security zones, and Access rules are created and stored in the Reservation system, which has an appropriate User interface for the clients or operators/clerks. Reservation system then sends necessary data over the API to the 2N® Access Commander which, by its nature, assures the distribution and provisioning of the data across the relevant HW units – IP Intercoms and Access units.

In the opposite direction, 2N® Access Commander as an Access Control system can provide information like Access Logs – card tapping time, name of the user, identification of the used reader, etc.

### EXAMPLE OF REAL PROJECT:

The REST API was used for the integration of 2N® Access Commander with the PowerKey® system of Advent spol. s r.o.

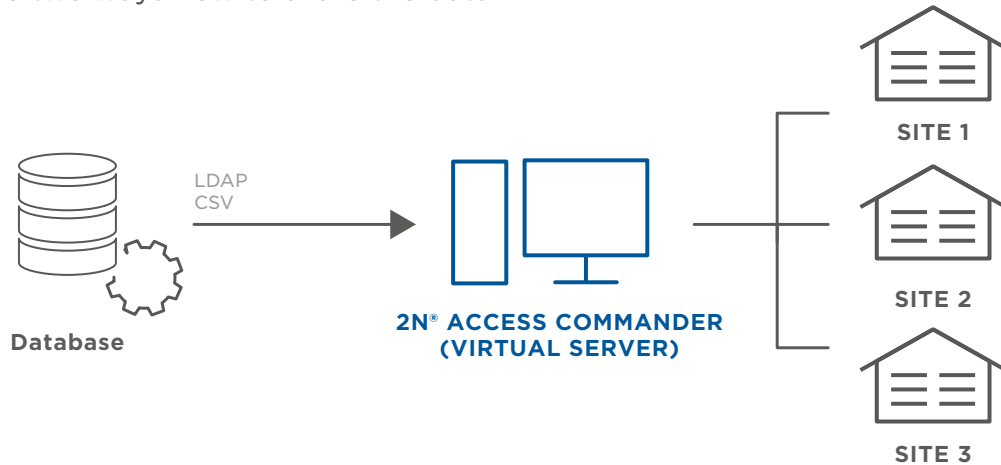
PowerKey® is an application designed to manage identification systems and, above all, to process acquired data. It is not tied to one particular device, but thanks to its versatile interface, it can work with many technical resources.

In this project, PowerKey® software is used for an advanced Time&Attendance as well as for Access Control while 2N® Access Commander effectively manages the exchange of the data between the PowerKey® system and 2N devices.

## SYNCHRONIZATION WITH EXTERNAL DATABASE USING LDAP AND CSV

Every company is interested in minimizing the number of databases into which new information needs to be written manually and is looking for a solution how to do it automatically and share it across the company's departments.

2N® Access Commander holds a database of Users and their Credentials, Security Zones and Access devices. These are further used to form access rules within the Access Control system. Below, there are two ways how to share the data.



### LDAP-BASED DATA SYNCHRONIZATION WITH MS ACTIVE DIRECTORY

Lightweight Directory Access Protocol (LDAP) is available in 2N® Access Commander which enables a smooth and fast integration with an external Active Directory services.

The common and broadly used directory service is MS Active Directory. The main purpose is to authenticate and authorize users and computers in the local network. Also, it can provide data through LDAP protocol to other company's systems like Intrusion detection system or Access Control. The synchronization of the data can run at the scheduled time or upon the Click on the button the synchronization can start immediately.

### CSV FILE-BASED DATA SYNCHRONISATION

CSV is a text file that uses a comma to separate values. In many cases, database programs store data in a proprietary format, which is hardly employed by other applications. However, such database program can most likely be exported into CSV file allowing thus sharing the data.

This format can be used also for data synchronization with 2N® Access Commander.

#### EXAMPLE OF REAL PROJECT:

The CSV file-based data synchronization is used for an integration of 2N® Access Commander with 'Property and Residents' database of Richdale Apartments, a leader in property management and development in the USA, which offers luxury apartments and short-term corporate housing.

2N IP Intercoms, installed at the main entrance to Richdale's gated communities and residential buildings, are used for video door communication between tenants and their visitors.

The database of tenants is centrally managed and kept up to date by Richdale's property managers. Updated database is automatically exported in form of CSV file and sent to 2N® Access Commander which manages the correct provisioning of the users in 2N IP intercoms.

# ACCESS CONTROL INTEGRATED WITH VIDEO SURVEILLANCE

An important part of the Integrated Security System is Video surveillance system or CCTV. Typical CCTV consists of two parts – the surveillance cameras and video management software (VMS) to and collect video streams, record them and control the devices.

## Combining video with access control offers several advantages:

- Better decision making from operators based on visual verification of incomers
- More efficient work processes due to integrated interface
- Video information linked to each entry/exit allows straightforward post-incident investigations

## EXAMPLE OF INTEGRATION:

2N® Access Commander can be for this purpose integrated with the leading IP VMS Milestone XProtect® - a powerful and easy to use SW with a wide array of features for basic to advanced surveillance needs.

XProtect® Access, an add-on product to Milestone's XProtect® VMS, enables to integrate 2N Access Control with XProtect® VMS making use of its REST API.



FOR MORE INFORMATION ABOUT POSSIBLE SCENARIOS AND PRODUCT SPECIFICATION  
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