

digitexCZK/IP® server software

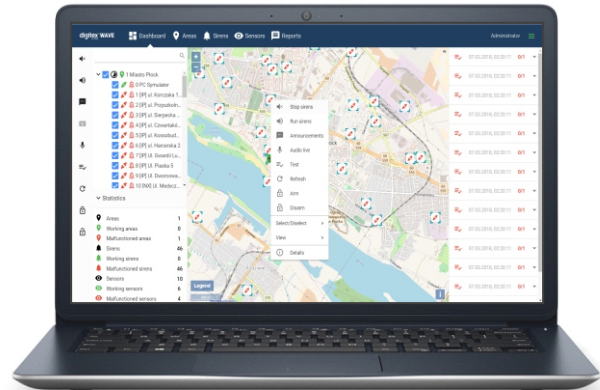
digitexCZK/IP® SERVER SOFTWARE

Depends on requirements there is possibility to use this software on:

- Windows systems
- Linux systems

GENERAL FEATURES

- Client-server architecture
- Up to 1024 clients
- Authorization of users using active directory (option)
- Support of interfaces to external (e.g. sensors) and superior systems (e.g. other IT systems)
- Public warning system operation management
- Database, audio, services
- Maps service offline or online
- Mail or SMS (optional) staff notification about events in the system



ADVANTAGES AND FUNCTIONS

DATA SERVER

digitexCZK/IP® SERVER is a software that stores data of all devices working in the digitexCZK/IP® system. Collects data from all alarm points, i.e. DSE electronic sirens, RPD radio access points, DCA-4000 control panels and physico-chemical sensors working in the system. In addition it stores users data enabling them to access system simultaneously and managing all executive devices (digitexCZK/IP® WAVE dispatcher) from anywhere in the world.

SERVICE SERVER

digitexCZK/IP® SERVER supervises the operation of the entire system, supports commands performed by the dispatcher and allows user to quickly change the configuration and adapt the functionality to current needs.

AUDIO SERVER

digitexCZK/IP® SERVER allows for quick and reliable management of audio files library (alarms and messages) in all or in individual sirens and in sirens assigned to sectors or designated groups. It also allows for opening audio channel to announce live voice message using a microphone.

DATA TRANSMISSION

digitexCZK/IP® system can transfer data using both analogue and digital radio transmission, like TDMA (Motorola MotoTrbo) and FDMA (Kenwood NXDN), as well as IP computer networks (LAN, WAN) using VPN. The use of IP transmission gives unlimited possibilities for expansion, additional functionalities, faster transmission and ease of implementation wherever a traditional VHF/UHF radio network cannot be built.

DATA PROTECTION

digitexCZK/IP® SERVER ensures data security. All data collected in the system is protected against unauthorized access with encryption level similar to SSL used e.g. in banking systems.

COOPERATION WITH EXTERNAL SYSTEMS

digitexCZK/IP® SERVER allows for integration with new or existing external systems by creating additional API (custom interface).

WORK SCHEDULE

digitexCZK/IP® SERVER enables programming of automatic work schedule, i.e. execution of cyclic commands in the system, like self-testing of alarm points (sirens and alarm center, RPD radio access points, physical and chemical sensors) and playing "occasional" alarms and chimes at fixed times during the day.



PERMANENT WORK

digitexCZK/IP® SERVER software works 24/7. The software enables automatic restart in case of failure detection e.g. loss of internet connection. In addition you can create a backup control unit with your own radio that ensures operation in the event of sabotage or system failure.

TECHNICAL SUPPORT

In order to ensure the highest quality of services any diagnostics and configuration changes throughout the entire system are carried out remotely and are carried out by experienced technical support staff guaranteeing immediate response to any failure.

TECHNICAL REQUIREMENTS FOR digitexCZK/IP® SERVER SOFTWARE PC WORKSTATION

- Intel i3 series processor
- 8GB RAM
- 50GB HDD free space
- Ethernet
- MS Windows 7/10 / MS Windows Server 2012 R2

DESCRIPTION OF digitexCZK/IP® SERVER SOFTWARE

InsSs - Service server

Main system application. It is implemented in the form of a system service operating under the control of the MS Windows system. Starts automatically after system startup.

Functionality:

- distribution of current information from sirens to the dispatcher,
- detection of events in the system and generation of alarms,
- support for audio streams,
- service of user requests - supervision over the execution of orders,
- diagnostics and monitoring of communication with sirens and sensors (optional),
- communication with the radio access point (RPD) and the DCA-4000 control panel,
- multi-channel communication support (IP, radio) in communication with devices.

InsDs - Data server

Database system application. It is implemented in the form of a system service operating under the control of the MS Windows system. Starts automatically after system startup.

Functionality:

- authorization of users logging in to the system
- storing configuration data of installed devices in the system,
- archiving of measurement data from sirens and sensors
- collecting statistical data, statuses, event alarms,
- saving data in the SQLite database,

The database is stored in two independent files:

- file with system configuration
- file with data registered during system operation

InsApm - Access Point Manager

System executive application. It is implemented in the form of a system service operating under the control of the MS Windows system. Starts automatically after system startup.

Functionality:

- support for external devices (e.g. radios),
- communication with sirens, meteo sensors (optional)

InsPostman (optional) - Mail client

Send e-mails to appropriate configured users about system events – triggering sirens, failures etc.

MapServer - Map Server Offline

The software is running on the basis of the virtual Docker environment (<https://www.docker.com/>). This solution was used due to the ability to run the application on almost any windows or Linux server. MapServer uses the TileServer_GL software (link: <http://tileserver.readthedocs.io/en/latest/index.html>) and vector maps downloaded from OpenMapTiles.com

