VEKTRA

Maximum Reliability of Vektra® Installations

telegrafia®

www.telegrafia.eu

Vektra® Installation Possibilities

From the simplest to the most sophisticated

It is vital for any mass warning system in an emergency that it is **fully reliable and functional**, both from the hardware and software points of view. Therefore, **Vektra®** is utilised in five installations, which differ in their failure safety provisions.

Basic Software Installation

A solution suitable for a basic level of availability

Advantages

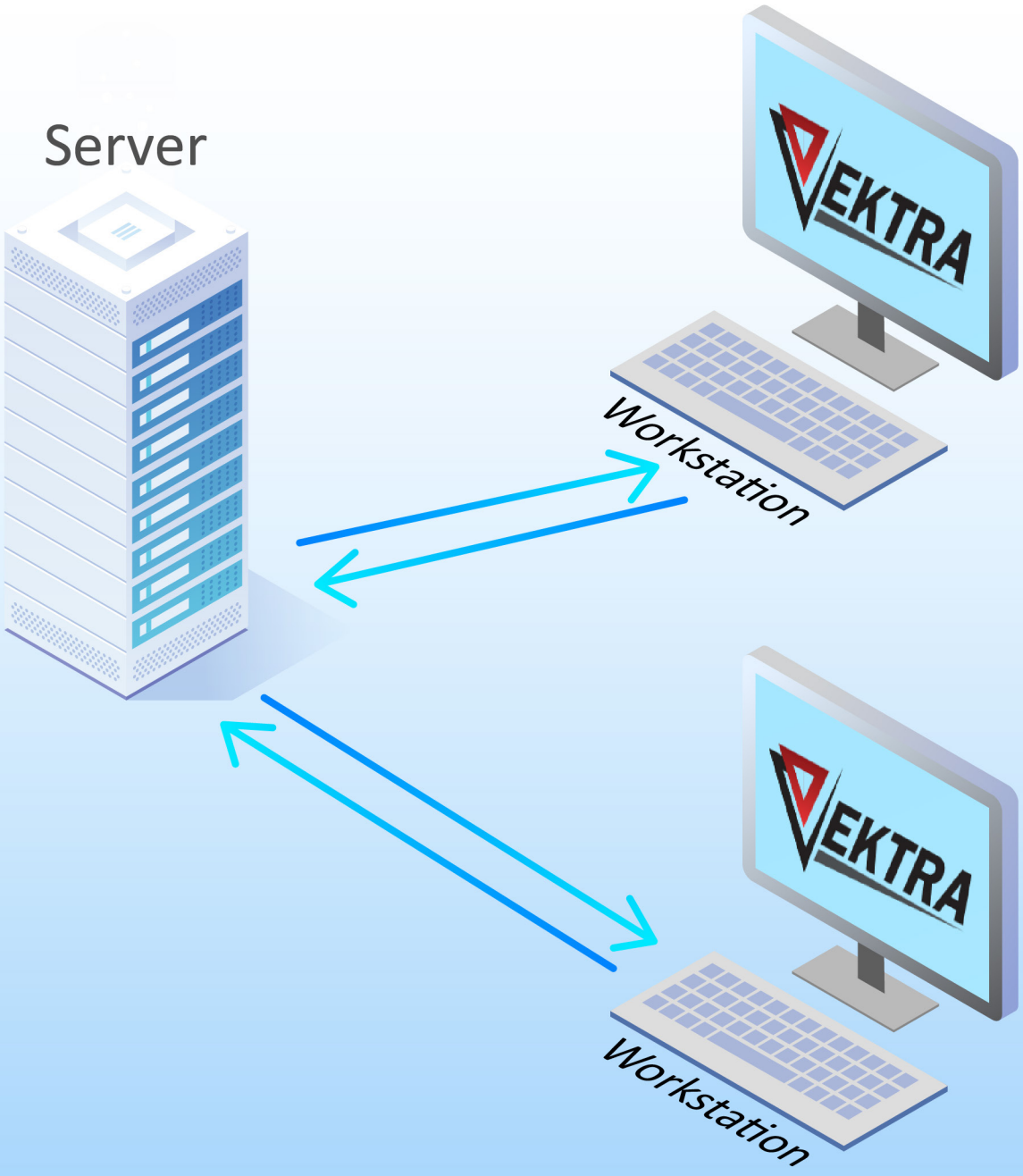
- Effortless installation and configuration methods
- Simple system administration and operation due to a single computer use

Disadvantages

- A whole system failure in case of a failure of any of computer hardware components

Two Workstations Connected to a Server

System control from two independent workstations with no need for synchronisation



Advantages

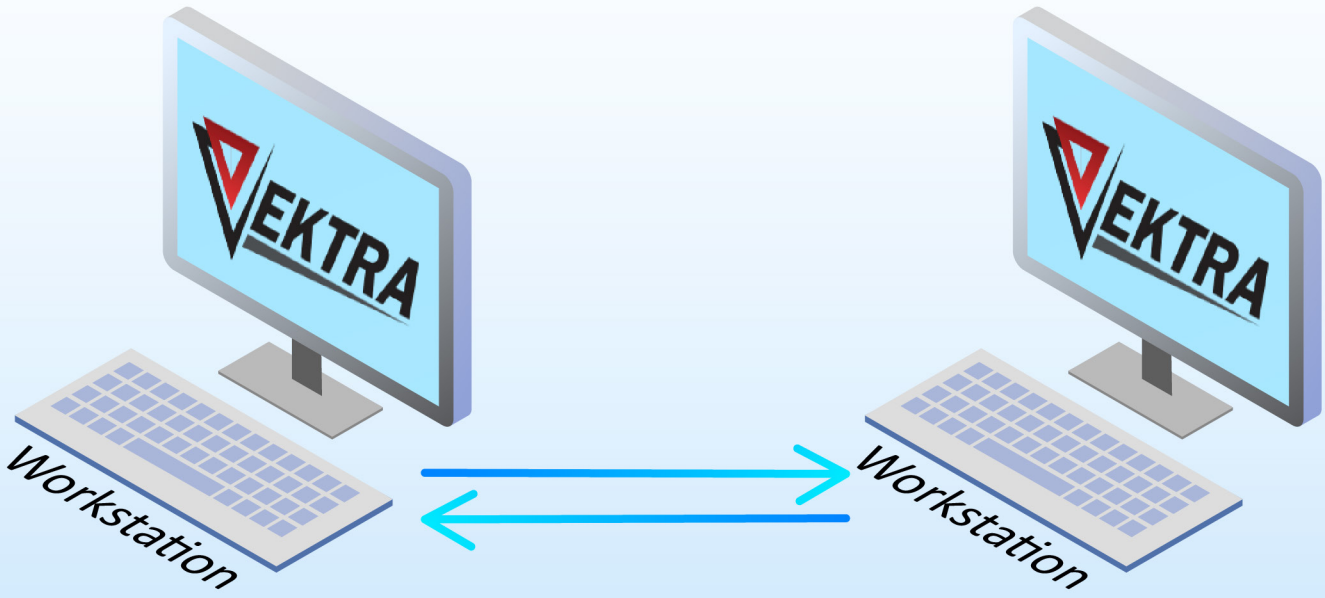
- Preservation of the full functionality of one workstation in case of another station's failure
- Selective locations for workstations in a different room or building section

Disadvantages

- A whole system failure and data loss in case of a failure of the computer server

Coordinated Workstations

A solution with an automated switch in case of a failure of one workstation



Advantages

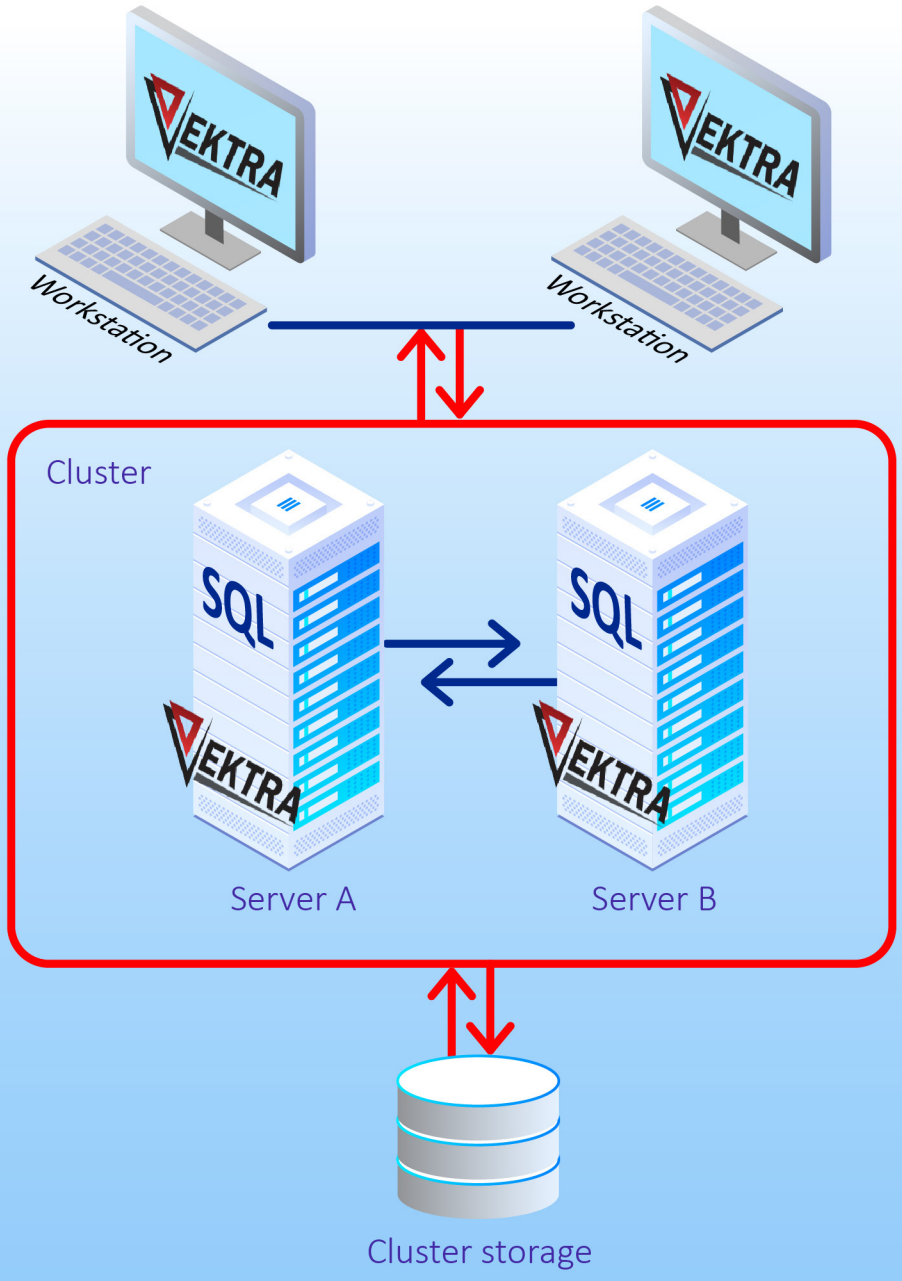
- Mutual coordination between workstations
- Preservation of the full functionality of one workstation in case of another station's failure

Disadvantages

- Inability to simultaneously perform operations on both workstations

Fail-Safe Solution (Failover Cluster)

The most robust and secure solution with a high level of availability



Advantages

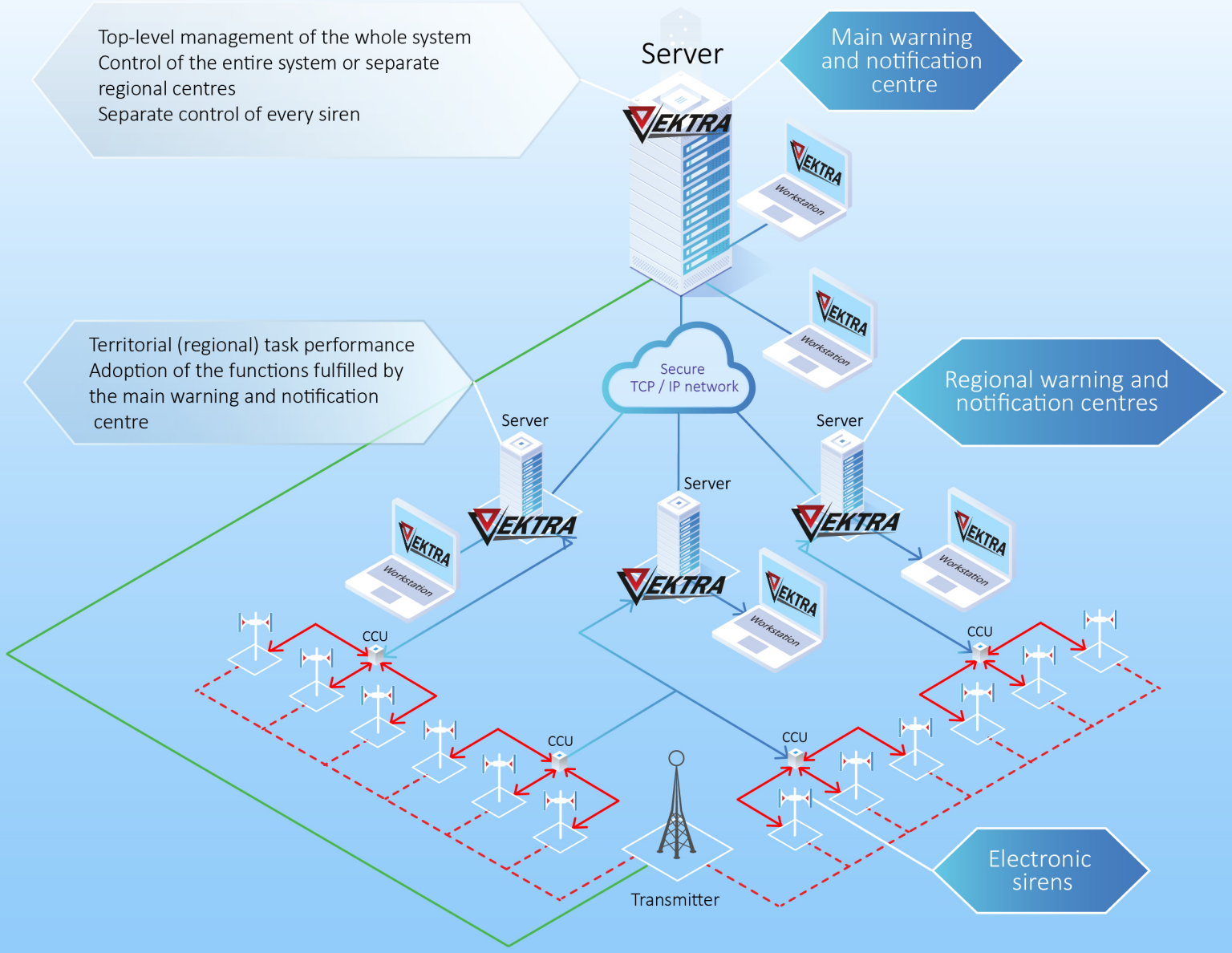
- Multiple resilience to hardware (including network infrastructure), OS and software failures
- Minimum two-fold redundancy
- Automatic transfer of all services to the next node available
- Automatic load redistribution across the individual nodes
- Automatic data synchronisation
- Multiple data redundancy
- Cooperation with the storage system
- Parallel data access
- Maintenance without shutting down a running solution
- Prophylaxis during a solution in running

Disadvantages

- More demanding initial installation and configuration
- The higher complexity of the solution
- Higher investment costs

Example of a multi-level and hierarchical system equipped with Vektra® applications

With any major mass warning, notification, and monitoring system, it is necessary to create an **efficient, multi-level and hierarchical structure with a smart and robust control** to ensure its functionality even during undesired system breakdowns.



Benefits of a multi-level and hierarchically structured system

- **Independent system control** from several warning centres and its adaptation to suit the hierarchical or typological structure of an organisation
- **Maximum readiness for action and operability of the system** even in case of a failure of any centre within the hierarchical system structure or breakdown of communication interfaces
- **Effective crisis management** thanks to the immediate flow of information about the situation from any Vektra® workstation
- **Independent installation of all Vektra® applications** for each hierarchical level and thus different operator availabilities and possibilities
- **Elaborate access system**, where all functions and powers of the warning and notification centre are determined according to the access routes a registered operator, regardless of which centre they logged into the system
- **Well-proven reliability** by many practical Vektra® application installations worldwide