≡HERTZ

RFID Middleware

Powerful RFID middleware for data communication

Management and configuration of all hardware

Connectivity and data exchange through uniform communication

Integration with process control

Integration with monitoring and alerting systems

**Hybrid combination of auto-ID technologies**

RFID · BLE

HERTZ

quickly and flexibly handles all **data communication** between hardware and business applications

powered by ≡AUCXIS

The Aucxis middleware HERTZ functions as a translation layer between hardware and business applications and relieves you of all your worries about communication protocols which are applicable to the data communication.

HERTZ ensures the communication for various devices such as data collectors – among which RFID readers, barcode scanners, cameras and I/O modules – but also printers, signalisation, barriers, etc.
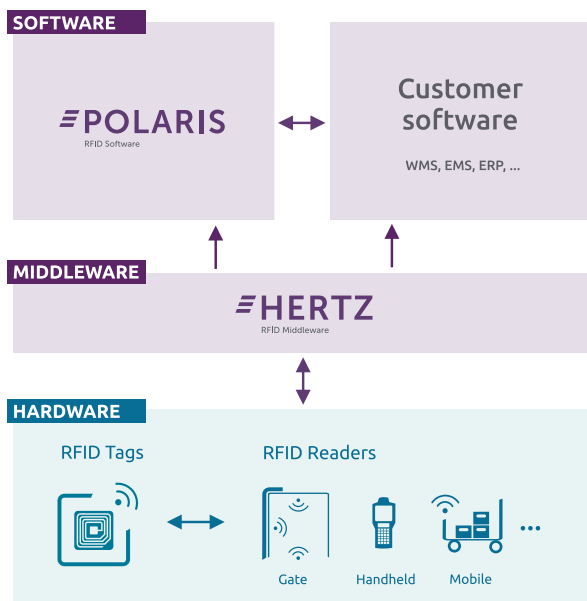
HERTZ enables to **process captured data. The data can be used for the control of internal processes and for big data analysis.** Only the communication with HERTZ needs to be set up. There is no need to be concerned about the various communication protocols with all hardware components in a project.

For interfacing with the customer's software, Aucxis uses, in most cases, standard protocols. We make use of TCP/IP, HTTP/HTTPS, AMQP/MQTT, MODBUS/OPC UA, enabling us to forward different formats (XML, JSON, ...).

Data processsing

HERTZ transforms the data input from the hardware into logical events that your software can easily understand and process. This is done by means of filters (duplicate, best value, pattern recognition, ...), buffering modules to group data (avoids problems in case of connection loss of Wi-Fi, for example) and conversion between data formats. This enables HERTZ, for example, to detect all unique tags in a truck and forward them together with the licence plate or to automatically open a barrier when a specific tag is read.

Structure

HERTZ is based on the Microsoft platform and is composed of a set of modules and configuration files. **Our RFID middleware is flexible, which enables to communicate with new types of hardware which can be easily added.** By adding or linking modules in a different way, logic can be changed quickly and efficiently according to new wishes or additional functionalities.

Specifications

Our middleware HERTZ is a **lightweight service** with the following minimum requirements:
• Windows 10 OS or Windows Server 2016
• 4GB memory (depending on size installation)
• X86 or X64 machine
• Microsoft .NET 6.
Multiple HERTZ services can run on a single device for multiple read points.

External links

HERTZ also provides the **transmission of data to external software packages** (MES, WMS, ERP systems, …). Some examples:

The HERTZ Portal is a web application that provides insight into various aspects of the Aucxis HERTZ Middleware, including active instances, error messages and system configuration.

Dashboard

The portal's dashboard shows an overview of all HERTZ instances within the site, with visual indication of their status.

It also displays recommended actions to prevent or address any issues.

Users can click through directly to the details of specific modules or actions for further analysis and management.
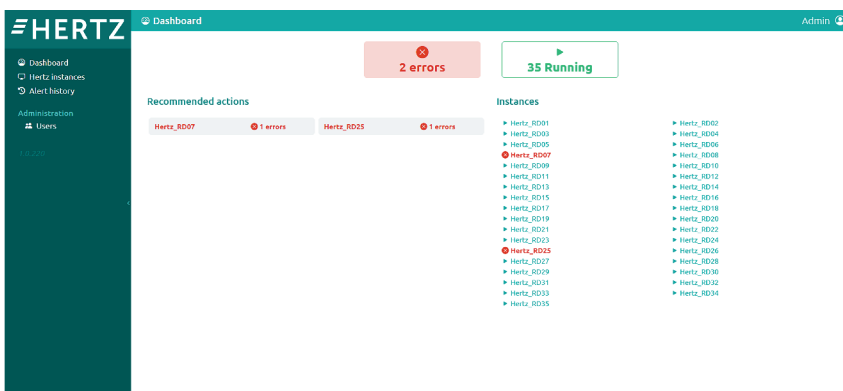
Increased security

A clear history of all notifications is available across all HERTZ instances.

The overview and convenient filtering options make it easy to find important information, resulting in more efficient and proactive alert management.