



Military Training Camp

Developing a system to monitor weather conditions across a large military training camp in order to assess its impact on systems, tactics and operations.

The Challenge

Located in a vast semiarid region, the military training camp is intended for the practice of combat procedures within the framework of specific climatic peculiarities, such as a dusty atmosphere, strong winds and extreme temperatures. Weather data is part of the intelligence information required by commanders to optimally plan and conduct combat operations.

The challenge was to develop a system for monitoring weather conditions at 3 spots of the camp, located far apart from each other and from the headquarters.

The Solution

The camp was fitted with 3 high performance weather stations, each of which measures wind, temperature, humidity, rain and atmospheric pressure, plus all derived variables. All 3 stations feature an uninterruptible power supply system that ensures the availability of data in the event of a power outage.

The weather data is monitored in real time from the headquarters using a Weathercloud meteOS server. The built-in interface displays all the data on a summary page for a quick and easy visualization.



Weathercloud meteOS is a rack-mounted server providing real-time weather monitoring and data storage.

Overview

Weathercloud meteOS is an extremely robust Linux-based server that efficiently combines sensor data retrieval with accurate real-time weather monitoring and SQL data storage.

The server can be fitted with unlimited sensors of any type, and is fully customizable to suit even the most demanding requirements.



Built-in Features

- Fully customizable and expandable system.
- Wide range of compatible sensors and protocols.
- Clean and stylish browser-based user interface.
- Responsive design for easy mobile monitoring.
- Automatic data transfer to FTP server and email.
- Quick data export to most spreadsheet formats.
- Low noise and power consumption.

Optional Features

- Configurable warnings and alarms.
- Open database for remote data extraction.
- METAR, SPECI and SYNOP ready.
- RAID-ready for local backups and data protection.
- Cloud service for remote data backups.
- Local touch screen and rack keyboard.
- Dual power supply for critical applications.