An automated network management system connects individual systems, sensors and devices so that you can easily monitor and control your sites and access your weather observation data from anywhere. Using a solution with advanced diagnostics and data analytics services together with remote monitoring gives you easy access to your field devices to efficiently identify and solve problems quickly ensuring continuous high-quality data and lower lifetime costs.

Benefits of an Automated Network Management System

- Central Monitoring 24/7 from Anywhere
- Reduce Site Visits via Remote Access and Control
- Continuous Reliable Observations
- Automated Performance Notifications and Reports
- Shorter Site Visits with Correct Staff, Tools and Spares
- Effortless Connectivity and Data Distribution

Having access to all of your weather observation data from all of your sites in one place is the new industry standard. Today, economical and more reliable hardware and communications through secure Internet Protocol networks are enabling a revolution in how agencies and countries manage their individual weather observation sites. Integrating your weather observation systems, stations, devices, and sensors using the communication protocols right for your agency will allow you to monitor and control everything via one centralized office. From implementation to long-term maintenance, a network management solution optimized for your needs increases your data quality, operational efficiency and reduces the lifetime cost of managing and maintaining all your observation sites.
Automated Network Management for Operational Efficiency and Lower Lifetime Costs

Central Monitoring 24/7 from Anywhere
Whether your agency manages a few or a few hundred weather observation sites, the ability to monitor individual site status via secure web technologies and collect data 24/7 from one central network helps you and your team be more efficient no matter whether you are using personal computers, tablets or mobile phones.

Reduce Site Visits via Remote Access and Control
Utilizing the latest user management and information security practices, network management allows your team to remotely monitor and control individual sites to fix the problems faster and optimize your network operation to enhance observation site performance and automation. See a detailed site status from your office to reduce and avoid unnecessary and unplanned site visits.

Continuous Reliable Observations
Ensure reliable observations and high-quality data by actively monitoring the status of your weather observation sites and perform real-time data quality checks. Feel confident that you will get the high-quality observation data you need, which is crucial when your data is used further in decision-making for critical operations and public safety. Redundant hot-standby multi-servers or virtual environments can be used with long-term data archiving capabilities to ensure continuous, uninterrupted operation.

Automated Performance Notifications and Reports
Achieve improved oversight and know the performance of your entire network with timely, accurate, understandable, prioritized, and managed alert and notification information as well as automatic real-time and historical observation, data availability and validity reporting. This gives you powerful tools to optimize your daily operations as well as enhance observation site and network performance.

Shorter Site Visits with Correct Staff, Tools and Spares
Field technicians and maintenance teams can obtain detailed site information: metadata, maintenance and spare-part data, and device status processed by advanced diagnostics and data analytics services in real time. They are better informed and equipped to plan site visits and fix problems in the field requiring less time, expertise, travel, and personnel.

Effortless Connectivity and Data Distribution
Take full advantage of your investment by using open industry-standard interfaces that allow other applications to efficiently use quality controlled observations. Easily share real-time and historical data with anyone in your agency to maximize the value of all of your weather data. When choosing the best solution for your agency you need a flexible and open solution that allows the integration of multiple types of observation sites and different brands of equipment.

- Central monitoring of all observation sites
- Remote diagnostics and updates
- Data quality control and analytics
- Open industry-standard interfaces
- Information security
- Automated alerts and reports

HORIZONTAL INTEGRATION TO LEVERAGE ONE SCALABLE PLATFORM

SEAMLESS VERTICAL INTEGRATION

AUTOMATION

Observations
Reliable high-quality weather observations 24/7.

Monitoring Networks
Comprehensive remote monitoring of weather conditions, products’ condition and operation enabling alerts and notification changes.

Optimizing Network Operations
Combined remote monitoring and control capabilities enabling optimized network operation in order to enhance product performance, operations efficiency, predictive diagnostics, maintenance and repair services.

- Autonomous systems act in coordination with other products and systems. Autonomy can reduce the need for operators and improves safety and facilitates operation in remote locations.
Get the Most Out of Your Investment

Selecting the right tools for your network management is a decision with a long-term impact and investment. The initial investment in weather stations, systems, sensors, and other devices can seem high, but the lifetime cost of managing and maintaining all of these assets can far exceed the initial investment. Therefore, implementing a scalable, flexible management solution with autonomous systems and intelligent field devices of all brands and types which provide interfaces for efficient integration with other products and systems will allow you to optimize your network operations, improve safety and facilitate operation in remote locations.

An off-the-shelf solution with proven performance and functionality significantly reduces the implementation time and total lifetime costs, helping you stretch your budget further. Continuous modernization and efficient upgrades helps you utilize the most advanced technologies available to improve performance now and in the future.

**Cost-Effective, Configurable Off-the-Shelf Platform**
- Fully configurable and scalable web-based platform for your agency’s needs
- Fast deployment and integration of new observation sites
- Usage-based pricing model with low initial investment
- Continuous modernization and efficient upgradeability

**Real-Time Monitoring with Alerts and Remote Diagnostics**
- 24/7 access to all your weather observation data, individual sites and devices
- Reduce and optimize number of site visits, and avoid unnecessary visits, planned or unplanned, with real-time alerts and remote diagnostics
- Quicker reaction to network and sensor failures, and faster problem identification and solution deployment for improved network uptime and data availability
- Understand precisely real-time weather conditions throughout your country or region affecting your operations and observation site performance

**High Data Security, Availability and Validity**
- Data quality control and data analytics maintain the high quality of observation data
- High availability multi-server or virtual environments supported with open industry-standard data export interfaces
- Advanced data security and user management capabilities to avoid network vulnerability, helping to mitigate the risks of intrusion and cyber threats

**Platform to Monitor Different Observation Networks**
- Achieve seamless integration of weather observation systems, networks and sensors using Vaisala’s years of know-how and experience
- Integrate weather observation networks with different brands of equipment

_Vaisala Observation Network Manager enables remote monitoring and control of your weather observation networks on one central, secure and automated platform._

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