

SIEMENS

Ingenuity for life

Asset Management for Digital Substations

Substation Device Management keeps your equipment up to date

www.siemens.com/digital-substation/sdm

Importance of Asset Management

Successful asset management keeps the value of every investment as high as possible throughout the asset's entire lifecycle. Asset management is based on data and information that describe the technical and financial condition of equipment and installations.

In the fast-moving energy sector with its increasing number of digital devices, it is becoming more and more important to ensure the transparency of installed assets. Today operators often lag on up to date information of secondary devices in their substation. Understanding exactly what secondary equipment - for example protection devices, controllers, routers, switches and PCs - is installed and analyzing what software and firmware needs to be upgraded is a necessary but complex and labor intensive activity.

Thanks to digital solutions, collecting asset data that previously required considerable effort and cost to collect are easily available today with digitalization.

Benefits

- Fraction of time required for documentation of asset data compared to traditional documentation.
- Enhanced Cyber Security through transparency and recommendation of patches to be installed.
- Flexibility of integration as well 3rd party devices via SNMP, WMI and 61850 Interfaces.
- Easy scalability to cope with more and more digital devices in future.
- Fulfilling regulatory requirements like ISO 27001.



Our solution

Substation Device Management with EnergyIP™ SDM application powered by MindSphere, is providing

- Transparency of your installed base at your finger tip. Automated asset inventory lists and reports with firmware versions, serial numbers, patch versions, production date and many more data of your substation devices like protection devices, controllers, routers, sensors and PCs.
- Comparison of as is values with target values. For instance of patch version, protection settings, etc.
- Addresses your Cyber Security needs by enabling you to set up an efficient Patch Management

With EnergyIP SDM you achieve transparency of secondary products installed with a few mouse clicks.

EnergyIP SDM also facilitates advanced services for operators such as asset management, remote support, and security patch management using automated information obtained from the Siemens CERT SVM database.

State of the art

How it works

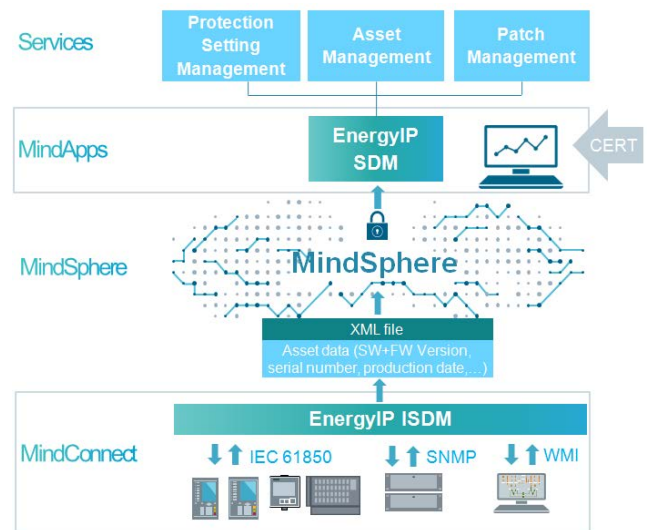
Asset data deriving from substation secondary equipment are collated via standardized protocols IEC 61850, SNMP and WinRM, in the Interface for Substation Device Management - EnergyIP ISDM. Once converted into an XML file, all relevant product data are then uploaded to the centrally managed monitoring and analysis platform EnergyIP SDM, e.g. via a VPN connection. You can use EnergyIP SDM as well without a remote connection into the substation, just by uploading the substation data via a laptop with Internet connection when you perform a maintenance task in the substation anyway.

EnergyIP is a server based platform, which can run in the Siemens private cloud, in your own enterprise private cloud, or on-premise. EnergyIP enables scalable, global IoT connectivity and application development.

EnergyIP SDM displays up-to-date version information about your substation at the click of a button and even reads third-party devices. This ensures optimum transparency of your installed base.

The application supports as well identification of deviations from a target version or value. For instance of patch version, protection settings, etc.

EnergyIP ISDM is a browser-based Java application that may run on any PC in your substation. The application has an intuitive user interface and can be installed with low engineering and commissioning effort. Ideally, the application EnergyIP ISDM is part of every new substation. Even retrofitting an existing substation with the application takes less time, than manually retrieving asset information the traditional way.



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"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)"

"This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)"

"This product includes software developed by Bodo Moeller."