Manage your energy networks efficiently with reduced complexity

Nokia Siemens Networks

Energy networks evolve and grow over time. They are added to and redesigned, sometimes over decades. They are comprised of multiple technologies from various vendors.

All this adds up to complexity and inflexibility, making it more and more difficult to change and add new elements. What's needed is a common end-to-end management system supporting operations processes that is easily adaptable.

A solution based on Open EMS Suite from Nokia Siemens Networks allows energy network operators to significantly increase efficiency, by harmonizing processes, minimizing manual tasks and increasing the visibility of their networks performance in real-time. Open EMS Suite's in-built operations and maintenance applications and its developer tools make it easy to create different kinds of management solutions, customized applications and integrations. Overall this means reduced OPEX with rapid time to market or rollout.

What Open EMS Suite means for operators

- A common management system for different technologies and different vendors means greater efficiencies
- Low cost-of-ownership and fast-time-to-market by decoupling integrations from the applications
- In-built scalability and high availability
- Reduced risk in technology choices with open, mainstream IT technologies

Case study
Wind farm network performance and fault management

ServusNet, Open EMS Suite and wind farms

Wind farm operators typically have equipment from multiple turbine vendors each with their own local SCADA-based management systems. Once a wind farm build-out has been completed, an operator's focus turns to maximizing revenue by ensuring maximum network availability with optimized OPEX.

Operators may have multiple wind farms, perhaps distributed across many countries with each farm comprising perhaps hundreds of turbines. As energy markets evolve, these renewable energy operators face increased competition for contracts to supply national or regional grids. As part of their SLAs they must guarantee supply and price to which penalties will apply if not met. This is where ServusNet's offering brings dividends in planning and optimizing delivery.

"Open EMS Suite from Nokia Siemens Networks provided a perfect match for the issues we faced. It had all the functionality we needed – for our application framework – straight out of the box, giving our solution a rapid time to market" says Des Farren, CEO of ServusNet. "In fact, using a very small development team, we had the first system on test with a customer just two months from starting the project. We had been looking around for something that would adapt readily from telco to wind technology, Nokia Siemens Networks provided this robust, reliable and scalable solution that has the headroom for growth we need."

Open EMS Suite – designed to be changed

Open EMS Suite is a state-of-the-art software platform for utility and telecommunications network management. It is well suited for the management of multi-vendor and multi-technology scenarios.

Open EMS Suite provides common, task-oriented interfaces. Because integrations are decoupled from the applications, management system adaptations to changes in the network – like topology changes, software upgrades, device type changes etc. – are rapid and pain free. And Open EMS Suite can scale from just a single server to large cluster configurations managing very large networks.

Benefits for solution providers

- Lowered systems integration costs through decoupled integrations
- Faster time-to-market using efficient application developer tools
- In-built scalability and high availability
- Reduced risk in technology choices and competence availability with open, mainstream IT technologies

Open EMS Suite technical specification

Fault management
A complete fault management application and a server-side fault management engine for event collection, filtering and correlation.

Performance management
An out-of-the-box performance management application that can be adapted to manage any performance data coming from the managed equipment. It includes performance data extraction, loading and reporting.

Managed object framework
Providing metadata driven topology services, the basis of Open EMS Suite's ability to easily adapt to various networks.

In-built interfaces
Interfaces for integrating with southbound and northbound systems; SNMP, XML, ASCII, OSS/J, O&M Agent.

Developer tools
Tools for customizing and enhancing Open EMS Suite to seamlessly interoperate with Open EMS Suite applications like fault management and performance management. Tools that expand the applications' capabilities and help create adaptations for applications and mediations.

Graphical user interface framework
A tool for developing web and rich Java management applications.

Technical requirements
IT middleware – Linux, Oracle, WebSphere, J2EE
Hardware – X86, AMD, 1.6 GHz, 2GB RAM, 40GB Hard Disk, DVD/CD, Ethernet.

Read more:
www.nokiasiemensnetworks.com/ossmiddleware

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