Siemens Wind Power, Power Service Generation Division

Siemens Wind Power adds scalability and flexibility to its business with NetIQ® IT Operations Management tools.

Overview
Siemens Wind Power is a leading supplier of reliable, environmentally friendly and cost efficient renewable energy solutions. Driving down the cost of wind power is its key target in striving to make renewable energy fully competitive with conventional energy sources.

Challenge
With renewable energy an ever growing presence in the world, Siemens Wind Power is experiencing unprecedented growth. Its customers are mainly large global energy companies and installations can be many hundreds of wind turbines. Worldwide, close to 10,000 wind turbines, involving many management elements, called end-points, are currently monitored and managed by a team headed up by Palle Gregersen, Team Leader of the Application Diagnostic Team. He explains: “Our division provides warranty and service contracts. The number of wind turbines we support has nearly doubled in the last two and a half years and we are on course to bring at least another 1,000 wind turbines on line within the next six months. The internal monitoring solution we had in place for our end-points required a lot of manual input which meant we couldn’t easily scale up in line with business requirements. System management was a challenge and the overall performance was often slow. The solution also didn’t give us the enterprise and automation options we really needed in a business of our scale.”

Finally, if a communication line to one of the wind farms was down the data would be lost with the previous system. This is particularly troublesome since some of the wind turbines are off-shore and not easily accessible.

Solution
Gregersen’s market research revealed NetIQ as a potential partner and he decided on a proof-of-concept which included two other competing monitoring solutions. The chosen solution needed to provide the scalability required, easy management and the ability to adapt to quite specific hardware and components monitoring demands. The NetIQ solution stood out in terms of functionality and when NetIQ suggested a flexible licensing structure per turbine, rather than per end-point which suited Siemens Wind Power, the decision was made.

“The flexible pricing model offered by NetIQ means we can proactively forecast and help our customers with their growth plans. We have full visibility at all times providing a more comprehensive service to our customers. The high level of automation has enabled us to build a monitoring infrastructure ready for any business demands coming our way.”

PALLE GREGERSEN
Team Leader Application Diagnostic Team
Siemens Wind Power

Customer Success Story
AppManager
Aegis
NetIQ Operations Center

At a Glance

Industry
Manufacturing

Location
Denmark

Challenge
A wind turbine converts wind energy into electrical power. Arrays of large turbines, known as wind farms, are becoming an increasingly important source of renewable energy and are used by many countries as part of a strategy to reduce their reliance on fossil fuels. The huge growth in wind turbine deployments requires Siemens Wind Power to deploy a more scalable monitoring solution with a transparent licensing model.

Solution
Managing the entire infrastructure, consisting of 100,000 end-points, with NetIQ Operations Management solutions.

Results
+ Drastically increased scalability
+ Many man hours saved in deployment and master data synchronisation
+ Improved customer service
+ Flexible licensing model
“The increased automation means we save many man hours in deployment and synchronisation of master data.”

PALLE GREGERSEN
Team Leader Application Diagnostic Team
Siemens Wind Power

The complete infrastructure, including network devices, communication lines, site routers and Uninterruptable Power Supplies (UPS) is covered. This is a combination of Windows and non-Windows end-points. Siemens Wind Power estimates that over 100,000 end-points will be fully covered by the NetIQ Operations Management solution.

Working closely with Professional Services and local implementation partner Bost Consulting, AppManager®, Aegis® and NetIQ Operations Center were implemented. AppManager is an IT operations management tool providing the smart monitoring the Siemens Wind Power team required. It alerts the team to maintenance and support tasks and highlights any issues in the wind turbine operation. Aegis manages automation between all Siemens’ systems, including asset databases. Operations Center integrates multiple data sources into information providing the team with a holistic view, and enables events captured in AppManager to be transferred to the Siemens ticketing system for further processing.

Results

Gregeresen on the benefits of the new solution: “The increased automation means we save many man hours in deployment and synchronisation of master data. Every week we find things we are now able to do; equipment which we can now monitor and interfaces to special databases which are now managed. Professional Services went the extra mile for us in developing some custom code, which allows us to monitor a specific Siemens box, present in each turbine.

With so many of our turbines off-shore we have to automate as much as the monitoring as we possibly can. This remote management capability allows us to be proactive, saving time and money as our engineers don’t need to visit the sites as often as before, sometimes complicated by adverse weather conditions.

Today, if a communication line is down, not only are we alerted straight away, so downtime is kept to an absolute minimum, but the data will be stored and can be accessed as soon as the line is restored. This is key in keeping an audit trail of the wind turbine’s operation.”

Gregersen concludes: “The flexible pricing model offered by NetIQ means we can proactively forecast and help our customers with their growth plans. The internal monitoring gives our service teams the site system analysis to provide a more comprehensive service to our customers. The high level of automation has enabled us to build a monitoring infrastructure ready for any business demands coming our way.”