Engie Solar Becomes More Agile with Cisco IoT Solutions

Engie Solar

Parent company
Engie

Industry
Energy

Headquarters
Paris, France

Company size
150 employees around the world*

No. of solar power plants
104 worldwide*

* May 2018 figures

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Engie Solar: A subsidiary of engie group

Engie group is the French leader in energy, supplying natural gas and electricity to individuals and professionals around the world. For several years, it has invested in renewable energies in order to promote a serene energy transition. Engie focuses in particular on solar energy because it is clean, sustainable, and inexhaustible. That’s why it acquired SolaireDirect in 2015, now known as Engie Solar. Its mission is to develop solar farm projects, while ensuring their implementation, commissioning, management, and maintenance. Founded in 2006, the company has several offices and plants around the world, and generates more than 3GW in 2018 to meet the energy needs of its customers.

Transforming for a better growth

As part of its development, Engie Solar encountered three main issues:

1. Network reliability and data archiving. As an energy supplier, it is committed to recording its activities to its investors and customers.
2. Information systems agility. To make new solar farms installation and configuration easier, the IT team needs visibility, flexibility, and simplicity.
3. Standardization, industrialization, and security. Solar farms equipment must fit the industrial environments to ensure an optimal continuity of service.

Cisco has supported Engie Solar in the digital transformation of its offices and its production sites.

Transform the industrial sites to increase productivity
Engie Solar’s next steps

1. Integration of the new Cisco industrial network architecture in the solar farm renewal, and provisioning to the entire group.

2. Study remote expertise applications for maintenance. Use collaborative tools to solve issues more easily remotely on all Engie Solar sites.

3. Study of predictive maintenance applications, empowering the data through Cisco Kinetic, in order to increase productivity and reduce costs.

The Engie Solar digital transformation is just beginning and will continue over the next years.

Main issues

Standardize industrial IT equipment

Engie Solar needs to comply with industry standards, including ISO standards, to equip its solar farms.

Ruggedize industrial IT hardware to ensure quality of service

In order to provide its customers with a service that is continuous and of quality, the company’s IT equipment must fit into any type of industrial environment.

“Our industrial hardware is installed in critical environments all around the world. It has to resist to dust, sea salt, altitude, high temperatures... Our previous infrastructure was not suitable for these types of conditions..”

said Gaël Sitzia
CIO, Engie Solar

Simplify the installation and the implementation of new solar farms

Engie Solar is currently growing. Twenty solar farms are under construction around the world. The installation of new parks as well as the extension of existing ones must be facilitated. Sometimes, these are operated by other companies.

That is why Engie Solar needs agile and scalable IT systems to make its installation and management easier.

Record the network’s activity logs

As an energy supplier, Engie Solar is committed to recording its activities to its investors and customers. Thus, even when there is an electrical or a network issue in a solar farm, the information must be continuously escalated.

The network must be reliable and the data should be systematically recorded.
Case study
Cisco public

Solutions
Cisco industrial network solutions
Engie Solar has equipped its new solar farms with a Cisco® industrial network architecture, which includes Cisco Industrial Ethernet (IE) 2000 and IE4000 Series Switches, Cisco IR807 and IR809 Industrial Integrated Services Routers and Cisco 3000 Series Industrial Security Appliances (ISA).

These solutions are secure and ruggedized to fit industrial environments, high and low temperatures, dust, vibrations, etc. Equipment is redundant to ensure continuity of service in case of failure.

To avoid passing the costs of this investment to its end customers, Engie Solar conducted a pilot to test and successfully implemented the solutions beforehand.

Cisco Prime network management platform
Engie Solar chose Cisco Prime to manage its network and the events remotely from France.

Notifications are sent via collaborative tools to the appropriate teams in the field in order to solve connectivity issues in real time.

Results
Industrial and secured infrastructure
The implemented infrastructure is reliable: it responds positively in industrial environments, allows continuity of service in case of failure, and is secure.

Engie Solar’s IT and OT teams worked together with Cisco to put it in place. Thanks to the international presence of Cisco and its partners, Engie Solar benefits from global support.

Faster installation
The scalability of Cisco solutions reduced the installation time from 2 - 3 weeks to just 2 days. And the IT cabinet height decreased from 140 cm to 90 cm. It facilitates the equipment’s transportation and installation.

Better IT systems visibility
The industrial infrastructure is managed and monitored using Cisco Prime, a centralized platform hosted in a Engie Solar private cloud.

Feedback from the field
Engie Solar’s IT teams are more responsive to solve connectivity issues on the network. They have more time to work on high-value projects.

“Now, the equipment can be installed in two days, managed in the cloud, and its lifetime has greatly increased.”

Gaël Sitzia
CIO, Engie Solar

More information
Cisco’s IoT solutions: cisco.com/go/IoT  About Engie group : engie.com