Simplify Deployment of IoT-based Field Area Networks

As the Internet of Things (IoT) leads to networking previously unconnected devices, organizations are seeing large gains in operating efficiency and capturing new business opportunities. At the same time, they are experiencing increased network complexity.

Utilities, for example, face a massive increase in smart meters as well as distribution sensors and controllers on their networks. Other industries — transportation, oil and gas, and municipalities — are also experiencing the growth of things at the edge of their networks. They need to connect and manage them, and gain insight with analytics.

This is where the Cisco Industrial Operations Kit comes in. It is an all-in-a-box solution for managing your field area networks (FANs), and is part of the Cisco® IoT System, a comprehensive set of products and technologies for creating IoT solutions from cloud to fog.

The Cisco Industrial Operations Kit not only works to simplify your network, it also virtualizes network services on a single Cisco Unified Computing System™ (Cisco UCS®) server. That means you can deploy a multiservice FAN solution quickly, within a matter of days instead of weeks or months. As your infrastructure adapts to the millions of new devices and things in IoT, it also becomes equipped to handle the connection of people, processes and data that are part of the Internet of Everything (IoE).

Create Your Efficient, Secure Industrial Architecture

The Industrial Operations Kit provides a bundle of virtualized services that are deployed on one Cisco UCS server. The solution extends the capabilities of the IoT Field Network Director and enhances features for industrial networks. You can deploy FANs quickly and make critical infrastructure updates more easily.

Benefits

- Reduce Cisco Field Area Network setup time to days with virtualized deployment.
- Reduce upfront costs and overall TOC with the consolidation of physical servers and elimination of manual setup.
- Enjoy fast, simple, agile deployments using virtualized components and pretested orchestration scripts.
- Gain new levels of manageability and control with a single portal that manages all virtualized components on a single server.
Cisco Industrial Operations Kit:

- Provides everything required for industrial operations, including solution and network management; security; authentication, authorization, and accounting (AAA); zero-touch deployment; network server; and a self-configuration tool
- Has a single software file containing all the necessary scripts to configure network services
- Virtualizes and consolidates physical servers and routers to eliminate manual setup
- Supports up to 300 routers and 250,000 endpoints, which is well-suited for piloting in medium- to large-scale networks and as a production deployment for smaller operators
- Works in concert with Cisco Field Area Network and mobility solutions to enable unprecedented levels of simplicity, security, manageability, and control

At-a-Glance

“Simplicity is key. The Industrial Operations Kit allows us to offer a simplified option for our customers who are looking for turnkey, small- to mid-sized smart grid installations. The solution shortens the time to deployment. It also gives customers a way to centrally manage their field area network without compromising security.”

Jeff Carkhuff
Vice President of Global Solutions Marketing for Electricity, Itron

Next Steps

To learn more about how the Cisco Industrial Operations Kit can help grow your business and accelerate IoT deployments, visit www.cisco.com/go/iok.