



# Cisco DNA for Manufacturing

## Introducing an entirely new era of networking. The Network. Intuitive.

Nearly 4 out of 5 manufacturers expect moderate to major effects from digital disruption and nearly 4 out of 10 incumbents might be bumped from their market position in the next five years. Fueled by mobility, IoT and cloud technologies this relentless pressure on manufacturers is driving them to find new ways to innovate and new ways to squeeze more productivity from production facilities. They do all of this while reducing cost and improving quality. In the past, operations could do what they wanted on the factory floor because IT's realm of responsibility lay in the carpeted space only. This has changed and cooperation between IT and operations is now critical to ensure new digital models can be implemented successfully and data easily shared.

Cisco® Digital Network Architecture (DNA) for manufacturing revolutionizes how manufacturers design, build and manage enterprise and production facilities. It means faster deployment and simpler, centralized management of your network, getting multiple locations up and running in days rather than months. It also offers actionable networkwide insights for smarter operations on the production line. With Cisco DNA for manufacturing solutions, manufacturers can deliver key digital capabilities with a digital-ready foundation – securely, simply and intelligently.

## Benefits

- **Faster innovation with actionable insights:** Industrial IoT requires massive plant floor data movement. Liberation, management and orchestration of that data at the network edge are becoming increasingly important.
- **Lower complexity and costs with network automation:** Automate plant floor network deployment and expand your factory network quickly and reduce day-to-day operational and management costs with automation, centralized management and assurance.
- **Reduce risks with built-in security everywhere:** Secure manufacturing data and other intellectual property with continuous, faster threat detection and protection, with security embedded networkwide.

### With Cisco DNA, manufacturers can:

- Converge siloed networks on the plant floor
- Get new business insights from plant floor data to make informed decisions
- Minimize security vulnerability from opening up access to plant floor data
- Minimize network administration: easily manage and expand plant floor networks
- Deploy new and replacement network hardware with consistent policies

### IT leaders in manufacturing organizations will be able to:

- Protect against security breaches while maintaining production integrity
- Understand and support multiple network protocols on the factory floor and drive standardization
- Provide easy access to and utilize business intelligence and analytics for management
- Design and implement scalable systems, services, processes and analytics with integrated enterprise applications

## Transform manufacturing with Cisco DNA solutions

### **Faster, global collaborative product development and maintenance:**

Enable improved collaboration among distributed R&D and maintenance teams with DNA center and APIC-EM (EasyQoS) for automation; IWAN app for intelligent path control; and Cisco Firepower®, Stealthwatch® and ISE for security and integrity of data and access.

**Industrial monitoring:** Enable secure visibility, measurement and policy management on the shop floor network and in the enterprise with Industrial Network Director and Enterprise NFV for application hosting to roll out virtual network services in minutes. Stealthwatch and Network Data Platform (NDP) provide network visibility and lowers average repair time and APIC-EM APIs and CMX APIs for third-party application and data integration collect enterprise network failure information and ensures uptime.

**Converged plant network:** Enable a common industrial network infrastructure on the plant floor that supports validated data collection across

variable protocols, improved troubleshooting and communications and enhanced security for the plant and community. With CMX for analytics to capture location data to track assets and personnel, Flexible Radio Assignment on Aironet® wireless access points for better productivity and operations and ISE and Cisco IOS® Software zone-based firewall for security.

**Connected products:** Enable products to securely send information to enterprise users with DNA Center and APIC-EM (ESA app) for automation and flexibility in provisioning devices and DNA Center and APIC-EM (Plug and Play) for zero-touch deployment and simplified management.

**Pervasive manufacturing security:** Secure manufacturing data and intellectual property while enabling secure remote access for visibility and limited control of floor assets with Stealthwatch, ISE and zone-based firewalls.

## Learn more

Visit us at [Cisco DNA for Manufacturing](#).