Generate business-driving insights faster with secure, reliable IT/OT integration

The Dell Edge Gateway 5000 Series for IoT connects legacy and modern equipment to the cloud

Achieve a faster return on your Internet of Things (IoT) investment, more cost-effectively and securely with the purpose-built Dell Edge Gateway 5000 Series for IoT.

As more data continues to pour in from ever-multiplying sensors and devices, many companies are struggling with sluggish networks or smart systems as they attempt to send every bit of data to the cloud or data center for analysis. These difficulties are exacerbated by legacy equipment (with varying protocols) that doesn't share information, as well as the risks of cyberattack and data loss. Network latency is also a challenge, especially for situations requiring real-time response.

The solution lies in bridging the gap between information technology (IT) and operations technology (OT) with optimized gateways — devices at the edge of the network that aggregate, help qualify and relay data. But current gateways are expensive or undependable and only increase in cost over time, due to proprietary lock-ins, management issues and security vulnerabilities.

It was these customer challenges that led Dell to leverage its tier-one, end-to-end IoT expertise to develop the flexible, affordable and network-friendly Dell Edge Gateway 5000 Series for IoT. In addition to unprecedented security features, the Dell solution is customizable

and interoperable, so you have the freedom to architect an IoT ecosystem that meets your specific industry needs — and maximizes the value of the equipment you already have. Plus, as always, you can count on Dell support. We offer an end-to-end solution, including deployment services, basic hardware support or Dell ProSupport all throughout the product lifecycle.

Building a smarter industrial-grade IoT

Purpose-built for the building and industrial automation verticals, the Dell Edge Gateway 5000 Series for IoT can be mounted on a wall or DIN rail at the edge of the network enabling you to collect, secure, analyze and act on data from multiple disparate devices and sensors — even those in extreme environments. Powered by an Intel® Atom® processor, the Dell Edge Gateway 5000 Series has the capacity to perform analytics locally, close to the devices and sensors generating data, sending only meaningful data to the cloud or data center or to a master gateway — instead of gorging on bandwidth and wasting money transmitting every unprocessed data set. With expanded I/O (input/output) and support for diverse communication protocols through certified independent software vendor (ISV) middleware, the Dell Edge Gateway 5000 Series can help you connect, extract and analyze data from both your legacy and modern systems.

Realize the benefits of IoT now

Dell's pragmatic approach cuts through the hype to make IoT real today.

1) Start with what you have, the devices and data already in play, to leverage current investment.

2) Architect for analytics, which will drive business action.

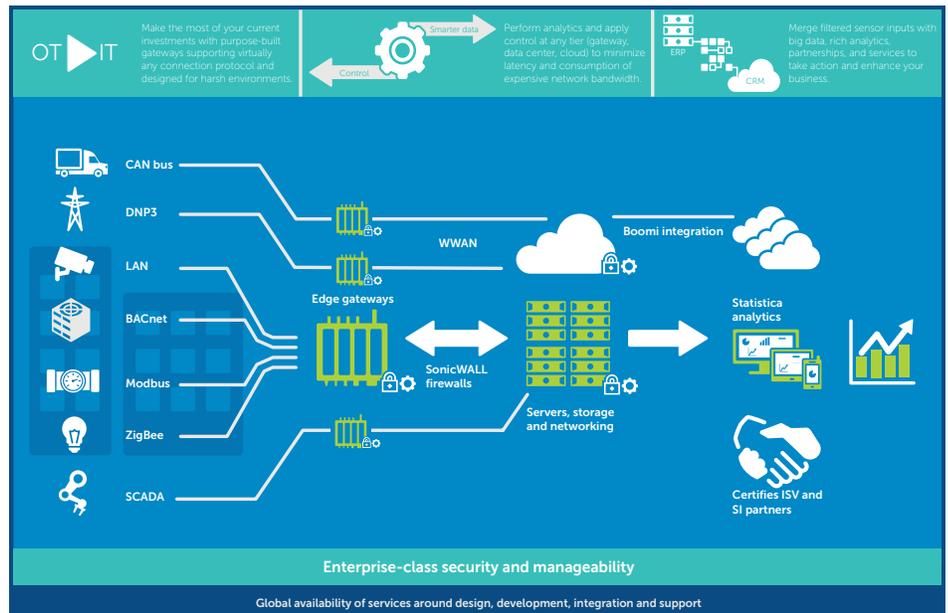3) Put security first, securing data from device to gateway to data center to cloud.

Dell Edge Gateway 5000 Series for IoT Solutions

Form factor	Fanless design. Optimized for wall and DIN rail mounting. Designed for industrial conditions, including 24x7 duty cycles and long life.
I/O	Dual independent gigabit Ethernet: 2 x RJ-45 | USB: 2 x USB2, 1 x USB3 Serial interfaces: 1 x RS-232, 2 x RS-485. | 1 x RS-422/485 Optional CANbus card* 802.11n + WiFi Bluetooth low energy; WWAN (3G or LTE) Optional wireless mesh modules: IEEE 802.15.4 Zigbee/6LoWPAN combo module*, Z-Wave module*
Environmentals	Operating temperature: 0°C to 50°C for the commercial model 5500; expanded temperature range for the industrial model 5700;* relative humidity 5% to 95% non-condensing
Optional accessories	Expansion power module* I/O-expansion module* IP65-rated rugged enclosure*

*Available March 2016

Architecting flexible networks and smart systems

One-size-fits-all architectures don't work for IoT solutions. Dell IoT gateways give developers, partners, system integrators and customers the power to securely connect any endpoint to the network and architect for analytics throughout their IoT ecosystem. Analytics can be performed at the network edge, in the data center or in the cloud. Plus, by incorporating additional big data sources such as customer relationship management (CRM), enterprise resource planning (ERP) and social media, your IoT system can provide even richer insights, predictive modeling and benchmarking. We're here to help you create the smart system that's best for your use industry and associated use cases.

OT ▶ IT — Make the most of your current investments with purpose-built gateways supporting virtually any connection protocol and designed for harsh environments.

Smarter data / Control — Perform analytics and apply control at any tier (gateway, data center, cloud) to minimize latency and consumption of expensive network bandwidth.

ERP / CRM — Merge filtered sensor inputs with big data, rich analytics, partnerships, and services to take action and enhance your business.

CAN bus, DNP3, LAN, BACnet, Modbus, ZigBee, SCADA

Edge gateways, WWAN, SonicWALL firewalls, Servers, storage and networking, Boomi integration, Statistica analytics, Certifies ISV and SI partners

Enterprise-class security and manageability

Global availability of services around design, development, integration and support

Dell's end-to-end offerings

Endpoints	Infrastructure	Data management and integration	Advanced analytics and business intelligence
Acquire, aggregate and analyze data	Put the right data in the right place at the right time	Improve data platform performance	Turn data into insights for better, faster decisions
Edge gateways and tablets	Storage, servers and networking	Boomi	Statistica, Toad Business Intelligence Suite

Security: data privacy, security and governance (SonicWALL, Credant and Identity Access Manager)
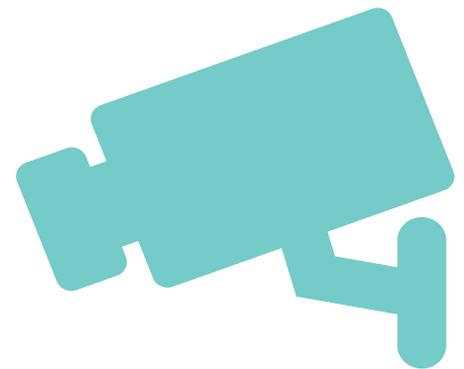
Building your end-to-end IoT solution

With our broad IoT portfolio, we can enable the end-to-end solutions you need from the edge gateway to the data center. Dell can help with expertise in manageability, security, data integration, analytics and services, as well as our cloud, servers, storage, networking and mobility solutions for IoT.

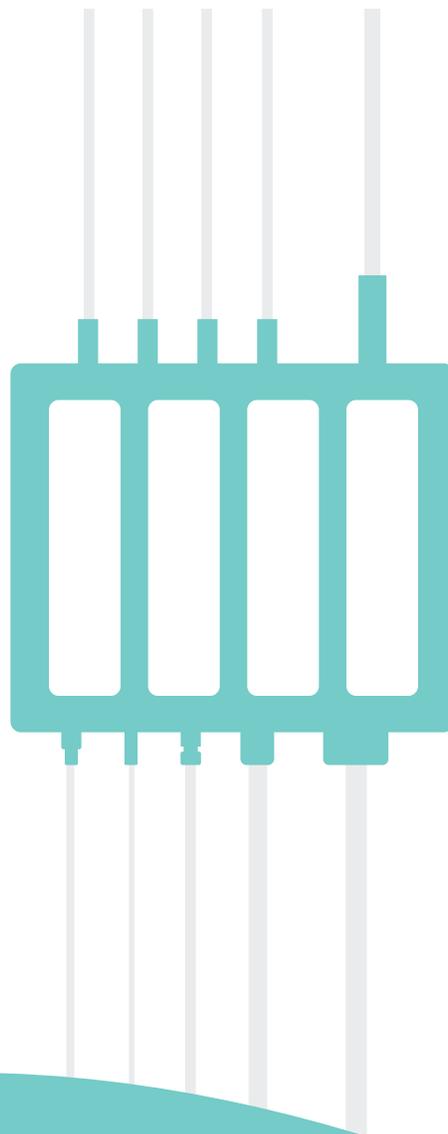## Protecting your network with Dell

Dell can help you build a tighter IoT ecosystem that protects your data from security threats. Our solutions provide you with the features you need to remotely manage your edge network, deploy security updates, encrypt data and secure mobile access. The Dell Edge Gateway 5000 Series utilizes proven IT security tools to address common IoT security concerns, including a Trusted Platform Module (TPM) chip for hardware root of trust, Secure Boot and BIOS-level lockdown of unused I/O ports. The rugged enclosure option also offers alerts for all types of chassis intrusion.

Flexible choices for manageability and data integration

Dell gateways are designed to meet the diverse needs of IT and OT by offering choice in operating systems and manageability tools. WindRiver is supported by Helix Device Cloud, and Ubuntu and Windows 10 IoT customers can choose Dell CCM or a third-party on-site console, backed by the DCCS for both Linux and Windows. With the right physical I/O and middleware from our certified ISVs, the gateway can normalize both legacy protocols such as BACnet® and CANbus and modern wireless mesh networks like ZigBee® into IT standards.

Dell Services expertise for IoT

Dell also offers specific services for IoT, including consultation, configuration and app development. Work with Dell experts who can provide detailed strategic assessments of IoT transformation roadmaps and IoT fitness audits. Leverage Dell's industry leadership in platforms, software, hardware frameworks, solutions and methods for multiple verticals.

End-to-end hardware support for your IoT solution

With the Dell Edge Gateway 5000 Series for IoT, you get an end-to-end service solution, including Dell Deployment Services, Dell basic hardware support or Dell ProSupport, providing hardware support throughout the product lifecycle. The Dell services solution for the Dell Edge Gateway 5000 Series for IoT helps streamline deployment and support so you can focus on innovation.

Start small. Build fast. Connect what matters.

Find out how the Dell Edge Gateway 5000 series for IoT can help you acclerate your IoT return on investment.

Visit **Dell.com/IoTgateway** today.

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