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Opto 22 announces relationship with Dell to develop and deploy Internet of Things (IoT) applications

Automation manufacturer Opto 22 and Dell join forces to bridge the gap between existing industrial assets and infrastructure, and the digital world of mobile, cloud, and information technology.

Temecula, CA - November 29, 2016 – Industrial automation manufacturer and Internet of Things (IoT) application toolset provider Opto 22 announces that it has joined the Dell IoT Solutions Partner Program. This relationship provides a product and solution ecosystem for connecting real-world signals and industrial "things" to the digital world of information technology, mobile, and cloud computing.

A technology revolution is gaining momentum, and this surge of innovation is connecting sensors, devices, and equipment to a network that can transmit and receive data for tracking, analysis, and action. With the estimated number of connected things reaching over 25 billion by 2020 and rapid innovations in collected data analysis, this isn't just about new technology—it's an entirely different way of doing business.

Advancing IoT solutions together

Dell's IoT Partner Program brings together innovative technology and services companies to help customers be at the forefront of this change. Dell IoT partners are qualified to integrate industrial IoT hardware such as edge gateways and embedded PCs into full IoT solutions, but many also work with other Dell and Dell EMC technologies such as server, storage, and networking hardware, and software tools for security, manageability, data integration, and analytics.

The addition of Opto 22 to the Dell IoT Solution Partner Program creates a powerful toolset for IoT application developers. This combination brings together an industrially ruggedized hardware

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platform, data visualization for mobile and web clients, robust industrial automation protocol support including Modbus/TCP and OPC UA, and advanced data flow processing with software development environments like Node-RED. Combining these capabilities with the ability to connect multiple data sources including devices, databases, and third-party APIs (application program interfaces), Opto 22 and Dell deliver a single, cohesive, cost-effective, and powerful solution for nearly any IoT or edge computing application.

"Dell believes curated partnerships are critical in building the bridge between the exciting industry potential of IoT and profitable market reality," said Jason Shepherd, director, IoT Strategy and Partnerships, Dell. "We are excited about our relationship with Opto 22, the industrial and process controls expertise they'll bring to our customers, and look forward to our continued collaboration."

Going the Last Mile

Connecting existing industrial assets to IT systems requires translating the electrical signals (voltage and current) in the physical world to the bits and bytes of the digital world. Opto 22, respected worldwide for its 42-year history of product quality and innovation, manufactures the I/O and controllers that translate signals on that "last mile" of the data route.

Designed on open standards and built for harsh industrial environments, Opto 22's SNAP PAC System integrates hardware and software for the industrial Internet of Things, industrial control, remote monitoring, and data acquisition applications. Designed to simplify the typically complex process of understanding, selecting, buying, and applying an automation system, the SNAP PAC System consists of these integrated components:

- **SNAP I/O™**—analog, digital, and serial I/O modules for wiring directly to field devices, machines, and sensors. Wide variety of signal types; 1 to 32 I/O points per module; most I/O modules are guaranteed for life.
- **SNAP PAC brains**—intelligent I/O processors for distributed control on Ethernet and serial networks
- **SNAP PAC controllers**—standalone or rack-mounted industrial controllers with networking options and a RESTful API, or a software-based controller
- PAC Project™ Software Suite—easy-to-use flowchart-based control programming, HMI (human-machine interface) development and runtime, plus optional OPC server, database connectivity software, and software-based controller for PC-based control

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• **groov**—an easy-to-use tool for building and using custom mobile operator interfaces and system dashboards to monitor and control systems and equipment from any web-enabled device

More about groov

groov offers a zero-programming, web-based way to present key data and controls to the people and software that need them. Whether it's technicians in the field troubleshooting pumps and pipelines, line operators monitoring factory processes, managers checking production and KPI data, or company databases requiring data from physical equipment, groov provides what's needed, securely and efficiently.

Using *groov*, you build your custom operator interface with drag-drop-tag simplicity. *groov* connects multiple data sources including devices, databases, and third-party APIs (application program interfaces), and supports Modbus/TCP and OPC UA automation protocols. Your custom interface can be securely viewed on any web-enabled device regardless of manufacturer or size, from smartphones and tablets to computers and high-definition TVs.

groov can augment existing human-machine interfaces (HMIs) and Supervisory Control and Data Acquisition (SCADA) systems by making important information available to authorized users at any time and in any location. Users can also receive event-based email messages, for example when a connected machine or system needs attention.

In addition to Modbus/TCP networking, *groov* supports OPC Unified Architecture (OPC UA) to communicate with a variety of machines and systems on the plant floor, including PLCs, DCSs, PACs, databases, and OPC-DA servers. *groov* also communicates directly with Opto 22 SNAP PAC System controllers.

groov Free Trial Version and Online Demo

A fully functional version of *groov* Server for Windows is available to download and try so you can see your own system's data on a smartphone, tablet, or other mobile device. The *groov* Free Trial operates for two hours without a license and can be restarted as needed. You can also see *groov* in action immediately and try it yourself with a live online demo available at groov.com/see-groovnow.

Dell Edge Gateway 5000 Series

groov Server for Windows is qualified on the Dell Edge Gateway 5100 Model, purpose built for the IoT to provide fast, responsive data solutions in extreme conditions. The Gateway 5100's fanless, solid-state design is also optimized for wall and DIN-rail mounting, and the extended environmental specifications are designed to withstand temperatures up to 70 °C and down to 30 °C.

With its gateways, Dell brings IT security to operations using encrypted data from endpoints, and privacy and data security best practices to the cloud and datacenter. The Edge Gateway provides built-in security features at the hardware level to help protect the network edge and sensors from intrusions, along with secure boot and BIOS-level control. By normalizing and cleansing data streams from sensors, gateways keep data movement and network costs down while performing local analytics and real-time actions even when larger network connections are lost.

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The use of the word "partner" or "partnership" does not imply a legal partnership relationship between Dell EMC and any other organization.

About Opto 22

Opto 22 designs and manufactures industrial control products and Internet of Things platforms that bridge the gap between information technology (IT) and operations technology (OT). Based on a core design philosophy of leveraging open, standards-based technology, Opto 22 products are deployed worldwide in industrial automation, process control, building automation, industrial refrigeration, remote monitoring, and data acquisition applications. Designed and manufactured in the U.S.A., Opto 22 products have a worldwide reputation for ease-of-use, innovation, quality, and reliability. For over 40 years OEMs, machine builders, automation end-users, and information technology and operations personnel have and continue to trust Opto 22 to deliver high-quality products with superior reliability. The company was founded in 1974 and is privately held in Temecula, California, U.S.A. Opto 22 products are available through a global network of distributors and system integrators. For more information, contact Opto 22 headquarters at +1-951-695-3000 or visit www.opto22.com. Follow us on Twitter, Facebook, LinkedIn, YouTube.

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