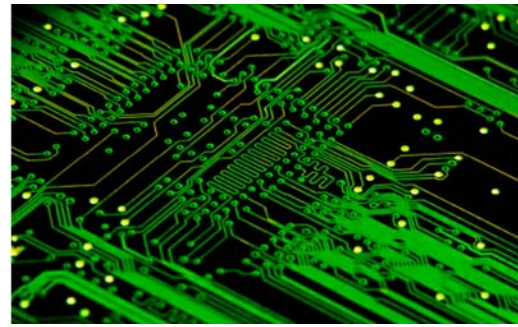


Application Brief: Electronics Manufacturer



The Challenge

Mike Hake likes to say that he's "an electrician first and a programmer second." Hake is Senior Facilities Technician at an electronics manufacturer in Bohemia, New York. The company designs and manufactures motion control and other products for applications in aerospace, defense, and industrial automation.

An electrician by training, Hake learned to program automation controllers when the company bought Opto 22's SNAP PAC System to monitor and control the compressors, vacuum pumps, lighting, and other equipment at its manufacturing facility.

Hake also learned to use PAC Display HMI (human-machine interface) software to build operator interfaces for the automated systems. The operator interfaces he built worked well on a Windows PC.

A few years passed and, as Hake saw smartphones multiply and his spare time diminish, he realized how valuable they'd be for remote monitoring and control. Smartphone support became a priority. Hake thought about using remote desktop software to access his HMI, but using a PC on a smartphone's small display was awkward at best. He searched for something simpler and better.

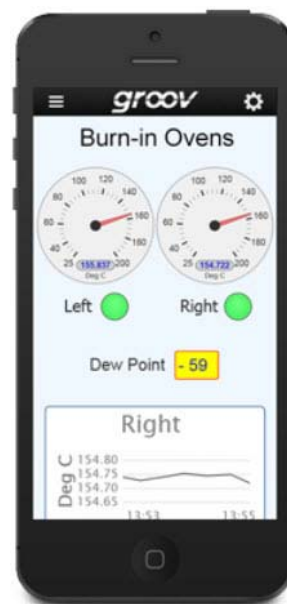
The Solution

Hake found his smartphone solution when he read about *groov* on Opto 22's OptoForums online community, learning that operator interfaces built in *groov* run in a modern web browser on almost any smartphone. Hake bought a *groov* Box hardware appliance and easily got it up and running, an experience he describes as "very plug and play."

He then built operator interfaces in *groov* and created user and group accounts, assigning access permissions and operator rights to employees based on job, department, and other criteria.

The existing Windows PC-based operator interfaces remain online. Explains Hake: "*groov* augments those HMIs; it doesn't replace them." He says that *groov* makes essential information and important controls immediately available, while the HMIs provide detailed information that's valuable for analysis and diagnostics. With his *groov* interface open on his smartphone, Hake can remotely monitor and control facility compressors, lighting, air conditioning units, pumps, and ovens. He can also see the facility's power consumption data from three Opto 22 OptoEMU Sensor energy monitoring units. Hake particularly appreciates being able to monitor and, if necessary, override an automated schedule for lighting and some equipment.

Another bonus is the speed of the *groov* interface. Because *groov* retrieves only new or changed information, the response is immediate, even over a slow mobile connection when he's away from the plant. "I can't believe how fast data updates."



A simple interface, shown here on a smartphone, provides equipment status.

About Opto 22

Opto 22 develops and manufactures hardware and software for applications involving industrial automation and control, energy management, remote monitoring, and data acquisition. Designed and made in the U.S.A., Opto 22 products have an established reputation worldwide for ease of use, innovation, quality, and reliability. Opto 22 products, which use standard, commercially available networking and computer technologies, are used by automation end-users, OEMs, and information technology and operations personnel in over 10,000 installations worldwide. 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.