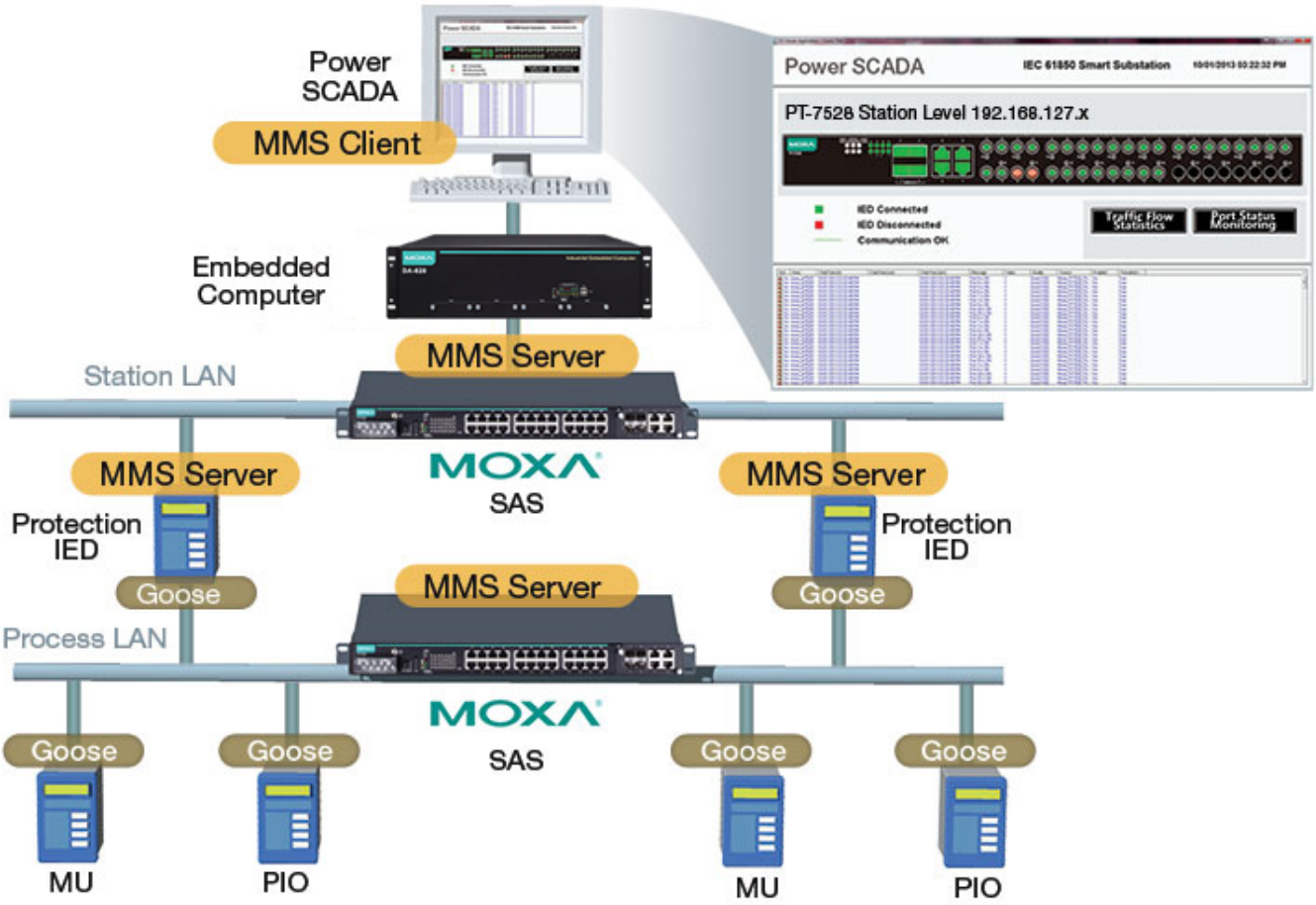
# IEC 61850 New Substation Manageability

## Moxa?s PowerTrans PT-7528 substation Ethernet switches come with fully integrated MMS support.




***IEC 61850 New Substation Manageability***

**IEC 61850-90-4 Data Modeling: Integrated Network Monitoring Solutions for Power Substation SCADA**

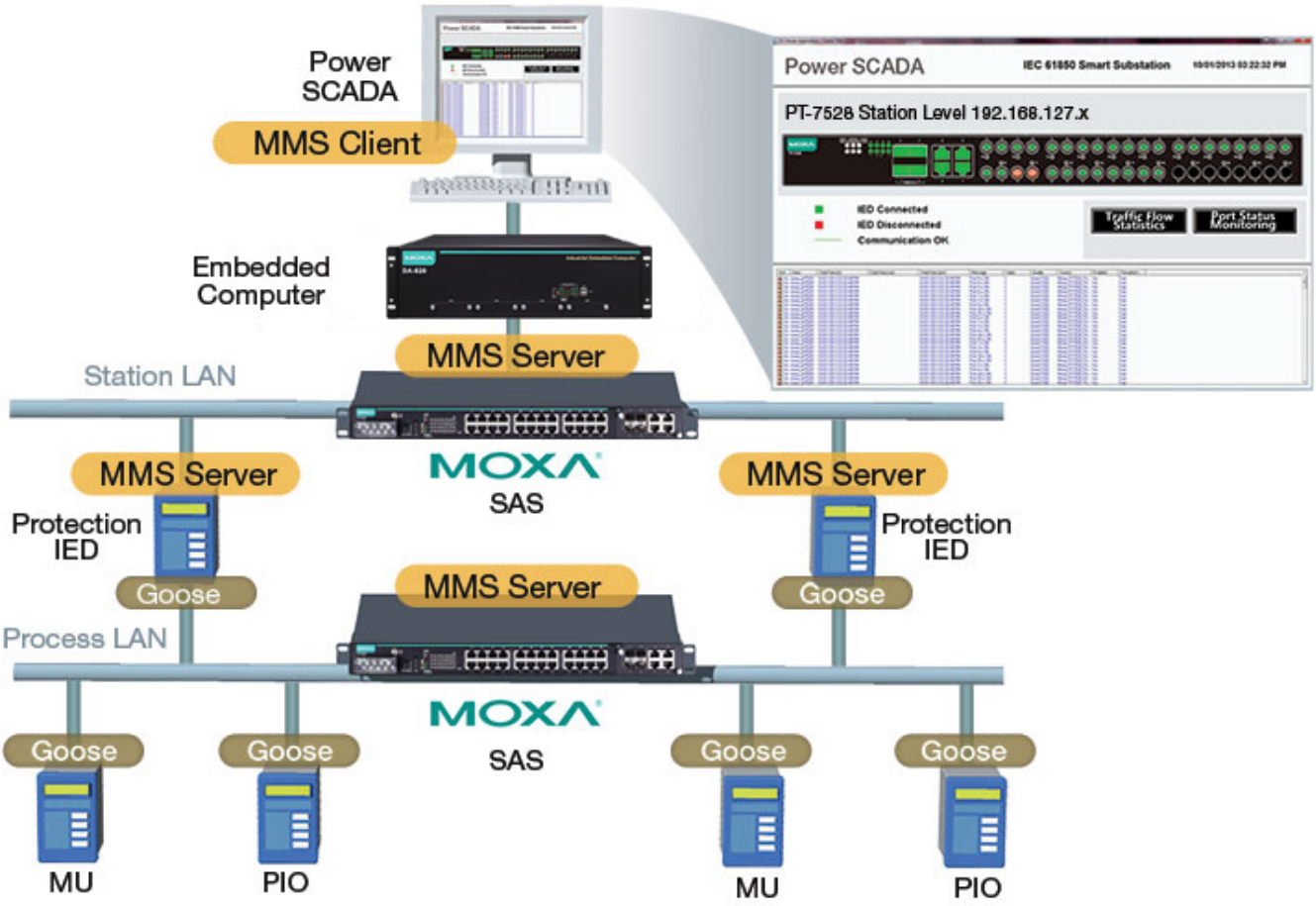
Moxa?s PowerTrans PT-7528 substation Ethernet switches come with fully integrated MMS support. PT-7528 IEC 61850-90-4 switches give substation engineers the option of bringing their IT devices into the same SCADA overview as the IEDs, or any other IEC 61850 device that uses MMS as its device-to-device

messaging model.

With MMS-capable IT hardware, substation SIs and automation engineers will be able to render a full accounting of the entire network of automation devices right alongside process layer information, all under a single SCADA view. Because substation systems will no longer need to resort to installing and configuring separate NMS software for IT devices, substation operators will achieve the combined benefits of more thorough automation integration, improved management efficiency, and savings on deployment costs.

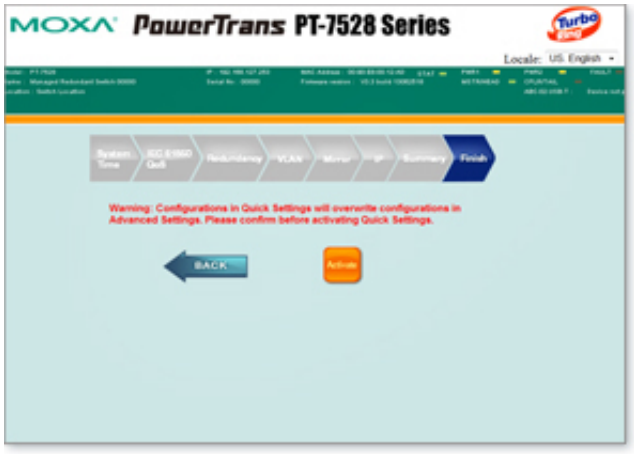
Integrating IT devices via MMS makes substation networks more controllable, more flexible, and more responsive. Administrators may now use MMS to:

- Monitor and control IEDs, switches, embedded computers, device servers, and process data from a single power SCADA interface
- Eliminate redundant SNMP systems for IT hardware while decreasing network congestion
- Configure devices for event triggers, polling reports, or both
- Precisely locate devices relative to other devices within the network hierarchy in a single software view
- Directly configure and control IT hardware from the SCADA
- Batch configuration by CID (Configured IED Description) files

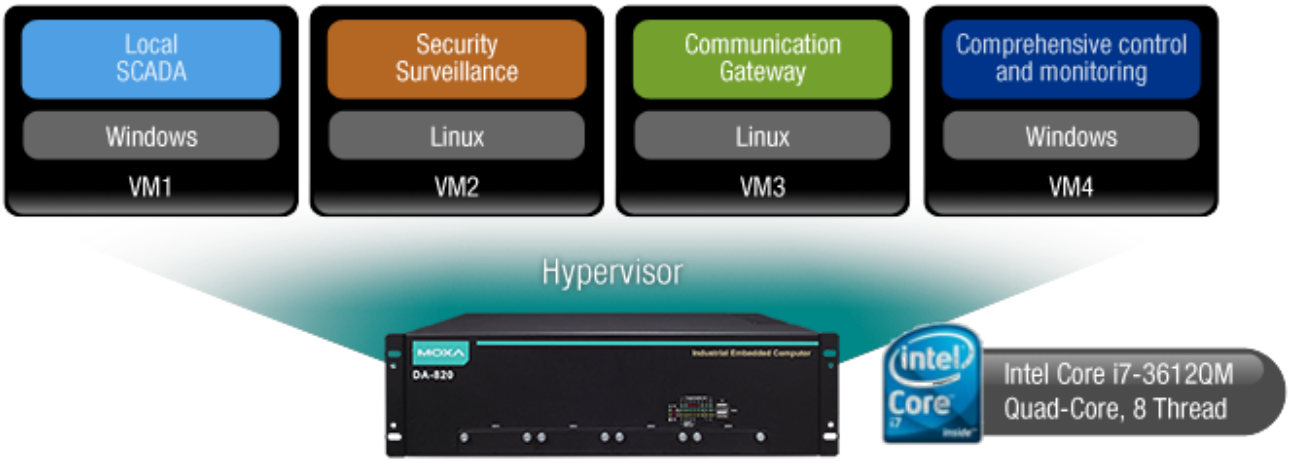



**Substation Configuration Wizard**

Because substations are such a specialized environment, IT setups will only require a few key features. Thus, simplifying and streamlining the configuration process makes a lot of sense: by reducing the configuration interface to only the relevant network features, setup and maintenance becomes much more efficient. Using Moxa?s browser-based configuration wizard, effectively deploying one of our network devices can take as little as 7 steps.



## Comprehensive Control and Monitoring SCADA Virtualization

### A Virtual Application Platform that Can Play Multiple Roles

The multi-function, high performance DA-820 computers are suitable for multi-function tasks. In substations, this means handling remote control and monitoring, front-end communication, backend hosting, tele-control, and video surveillance. In order to confirm its ability to support multiple tasks at the same time, the DA-820 was successfully tested with VMware ESXi. Simply install VMware on the high performance and full-function DA-820 computer to support and switch between different operating systems for different applications.