Industry Profile
Oil and gas processors are experiencing continuous growth in their business operations, driving rapid deployment of secure, cost-effective enhancements to infrastructure and technology.

Challenges
- Update technology to meet customer demands
- Manage facility downtime to adhere to customer service level agreements (SLAs)
- Satisfy the reporting requirements of government gas emission standards

Panduit Solution Offered
Integrated Network Zone System

Benefits
- Ability to upgrade the network within one week of delivery
- Achieve increased network reliability with pre-tested dual fiber uplink

Industry Best Practice: Oil and Gas Processing
Integrated Network Zone System Reduces Deployment Time and Improves Reliability

Challenges
To accommodate the demands of managing increased productivity, energy infrastructure providers need to reliably deploy networks across their treatment/processing facilities. Overloaded networks can experience operational issues with out-of-date technology, therefore companies are deciding to upgrade to a system that offers consistency, reliability and adherence to the latest industry network standards. An upgraded network system is critical to a company’s overall business operations to alleviate loss in profitability, meet customer agreements, and to maintain compliance with industry regulations.

To maintain competitive advantages in the energy market, managing planned downtime is imperative. Therefore, speed of deployment is a key aspect for business operations to seamlessly continue with minimal downtime.

Lead time to deployment of an additional network is critical to achieve completion during a planned facility shutdown; therefore it requires a reduction in the risk of deployment delay.

Customer obligations must be met within the promised time frames and shutdowns to perform repairs or upgrades are carefully planned and monitored to help avoid potential reliability issues and extensive operating costs.

Critical data collection and reports regarding gas emissions to comply with government and local jurisdiction are also deployment time factors that companies need to address.

Solution
A standard build approach to network deployment could increase implementation delays, as well as affect network reliability. As a result, Panduit recommends the implementation of an Integrated Network Zone System.
Industry Best Practice: Oil and Gas Processing

**Solution (continued)**

The system enables rapid deployment due to its integration with an Allen-Bradley® Stratix Industrial Ethernet Switch, meeting businesses’ requirements of securing a standardized solution that enables scalability on a global basis for greater agility and faster time to production. The Allen-Bradley® Stratix switch offers management and diagnostics from within IT, controls environments and optimizes network traffic.

The Integrated Network Zone System is pre-engineered, thermally validated, IP66 and NEMA 4 rated, and pre-tested with structured cabling and Rockwell Automation active equipment, providing optimized building-block architectures for a company’s network. This system supports the demands of real-time control and data collection and helps ensure the industrial networks and control systems operate at a sufficient performance margin within the specified environmental conditions. The pre-tested and pre-engineered quality of the solution gives companies’ deployment and operations confidence through the minimized effort and complication usually associated with deploying a network in segments.

![Diagram of integrated network zone system]

**Benefits**

The Integrated Network Zone System allows companies to upgrade the networks within their treatment/processing facilities with minimal downtime to ensure customer SLAs are maintained. The design of the system, as well as its built-in integration allow all phases of the implementation project to run smoothly, improving reliability and safety while reducing deployment and operating costs.

Customers that implement the Panduit Integrated Network Zone System experience:

**Speed of Deployment** – Reduces implementation time and costs by removing complexity and delivering a validated solution optimized for partner technology applications

- Can deploy an up-to-date network within one week
- Provides a single part number when ordering a full solution for zone architecture deployment in an industrial environment

**Mitigated Risk of Downtime**

- Increases reliability with pre-tested dual fiber uplink and mitigated risk of the delayed plant uptime after scheduled downtime
- Provides expansion of switch and ports as the network grows to make this a future proof enclosure
- Delivers active equipment within an optimized physical layer to provide a consistently high network performance

**Safety**

- Protects from shock hazards and allows clean segmentation between the upper level plant network and the machine level network to help maintain network SLAs

Learn More Now

Find videos, configuration drawings and more at: www.panduit.com/integratedzone