

INTERNATIONAL ENERGY SERVICES PROVIDER USES 128 TECHNOLOGY TO POWER ITS DIGITAL OILFIELD NETWORKS

A global oil and gas services provider turned to 128 Technology to improve the performance, reliability and economics of its energy exploration and production data networks. The 128T Session Smart Networking solution eliminates the overhead of conventional routing solutions, providing efficient, secure and resilient network connectivity to remote oilfield and gas well sites, even over lower-quality satellite and 4G LTE connections.

The Challenge: Ensure Secure, Reliable And Efficient Connectivity Over Low-Grade WAN Links

A multibillion dollar energy services company is rolling out data analytics solutions and AI-driven automation to improve the performance and safety of its oilfield and gas well operations. By analyzing and intelligently acting upon remote sensor and measurement data, the services provider can help its customers improve production rates, avoid hazards and downtime, and reduce operations expenses. But oilfield assets are often deployed in out-of-the-way locations like remote rural areas, offshore platforms, and desert and polar regions that are accessible only via low-capacity, high-latency network services like satellite links or cellular data connections.

Conventional wide-area networking solutions, designed to support traditional enterprise applications and services, aren't well suited for capacity-constrained networks. They use high-overhead VPN tunneling protocols like IPsec that squander precious bandwidth and impair application performance. Worse still, they place all traffic into a single tunnel, treating all application data the same regardless of its characteristics or service level requirements.

To make the most of its IoT and AI/ML investments the energy services company needed to find a way to transport a wide variety of business-critical application data over suboptimal WAN connections—securely, reliably and cost-effectively.

The Solution: 128 Technology Ensures High Security, Reliability And Service Quality For Digital Oilfield Apps, With Unmatched Economics

After an extensive evaluation and pilot program, the company selected 128 Technology as the foundation for its next-generation digital

“128 Technology lets us boost our networking capacity up to 900%. The solution gives us the bandwidth we need to remotely monitor and control our assets, which helps us dramatically improve oilfield operations.”

Manager of Field Operations

Challenge

Provide secure, efficient and reliable connectivity to secluded oilfield and gas well assets

Solution

128T Session Smart Networking improves utilization, performance and resiliency of suboptimal VSAT links and spotty 4G connections

Results

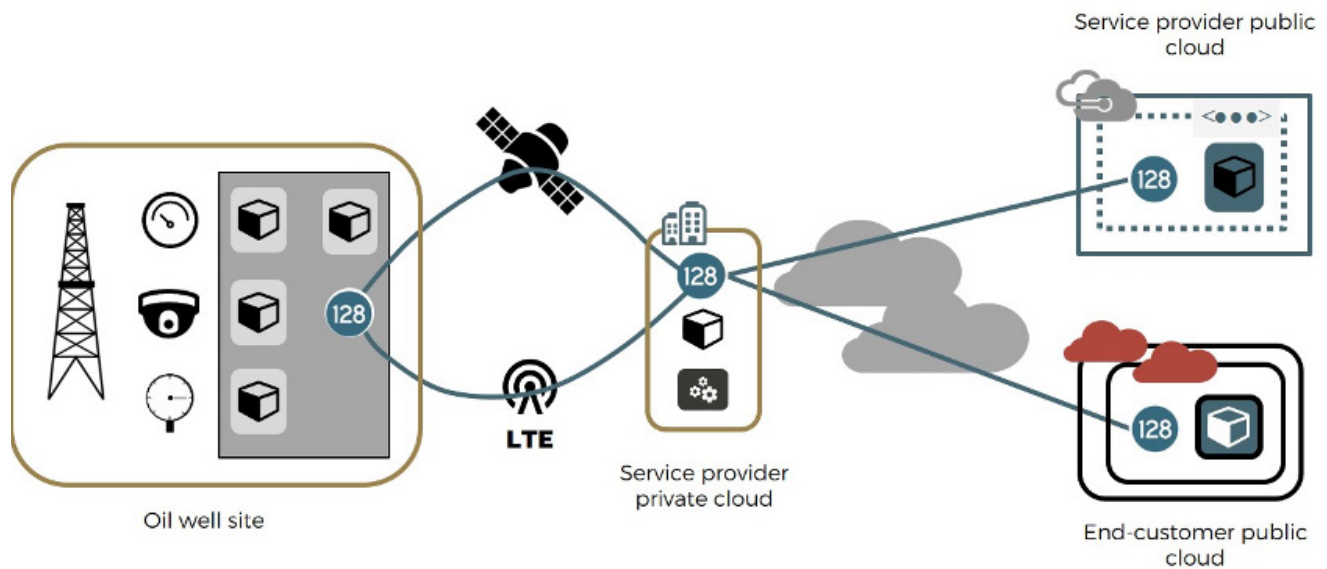
- Next-generation digital oilfield networks provide fast, predictable connectivity for business-critical and safety-critical applications
- 1.5x to 10x increase in WAN capacity
- Up to 2x improvement in TCP transmission rates
- Seamless link failover for continuous connectivity

oilfield networks. The 128T Session Smart Networking solution is a state-of-the-art software-based networking solution that eliminates the inherent inefficiencies and cost constraints of traditional wide-area networking products and legacy SD-WAN solutions. The solution converges a variety of advanced networking and security capabilities onto a single virtual network function (VNF) that runs on inexpensive commercial off-the-shelf servers for ultimate flexibility and economics.

Ideal for bandwidth-limited digital oilfield networks, the 128 Technology solution uses innovative Secure Vector Routing to protect data privacy without the overhead of traditional encryption protocols. Extensive packet shaping and prioritization capabilities, and multi-path session redundancy features ensure fast performance for delay-sensitive traffic like real-time oilfield control data—even over lossy or latency-prone connections. Seamless, multi-path session migration functionality ensures continuous availability for mission-critical and safety-critical applications in the event of link failures or network outages. And zero-touch provisioning and single-pane-of-glass, centralized management dramatically simplify solution deployment, administration and maintenance at unstaffed remote sites.

The Result: 128 Technology Lays The Ground For Digital Transformation

128T Session Smart Networking improves the utilization, performance and resiliency of suboptimal satellite links and spotty 4G connections. The solution increases available WAN capacity by up to 900% and increases TCP transmission rates by up to 100%, paving the way for a new wave of digital oilfield applications that automate operations, reduce costs and improve safety.



128
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ABOUT 128 TECHNOLOGY

At 128 Technology we help our customers radically reinvent their digital futures based on a new model for virtual networking called Session Smart™. Session-smart networking enables enterprise customers and service providers to create a service-centric fabric that's more simple, agile, and secure, delivering better performance at a lower cost. Whether your enterprise is moving your business to the cloud, modernizing the WAN edge, seeking more reliable unified communications or pursuing an industrial internet of things (IIoT) initiative, session smart networking re-aligns networks with digital transformation initiatives.