

IQUILA IN OIL AND GAS

OUR CHALLENGE

In the oil and gas industry, we encounter escalating issues with connectivity security and an ever-increasing demand for data. Maintaining VPN connections from oil and gas rigs is challenging, even in optimal conditions. We needed a more robust solution capable of operating over satellite connectivity, minimizing latency, and maximizing throughput to meet growing data demands. Additionally, High Availability (HA) was crucial, as downtime can cost our organization millions of dollars in lost productivity every hour.

KEY CHALLENGES

-  Stable connectivity over satellite
-  Robust security
-  High Availability (HA)
-  Cost efficiency

THE SOLUTION

We discovered the iQuila Enterprise solution, which addressed our connectivity challenges effectively. By deploying their High Availability (HA) Enterprise platform across our data centres, we achieved the server-side resilience we required. The multi-threaded VEN protocol operated seamlessly over satellite links, tunnelling through the IPv6 network and delivering IPv4 address blocks to our rigs. The system's Layer 2 functionality and advanced virtual networking simplified deployment within our complex networks, while state-of-the-art encryption ensured the security needed to combat modern threats.

KEY BENEFITS



Stable connectivity over satellite

The multi-threaded protocol was a game changer, providing seamless connectivity over satellite. The AI within the protocol managed the connections, delivering consistent connectivity with low latency and high throughput, meeting our data requirements.



Robust security

iQuila offers a range of security features, and we selected the Quantum encryption option, providing 4096-bit encryption. This ensured comprehensive protection, right to the network edge, safeguarding our data at all times.



High Availability (HA)

iQuila Enterprise's High Availability (HA) feature allowed us to distribute the solution across three data centres, ensuring instant failover in case of any issues. Deploying multiple bridge devices on the rigs enabled endpoint failover, so if hardware failure occurred on a rig, connectivity would switch to a different bridge instantly, maintaining continuous data flow and operational efficiency.



Cost efficiency:

The iQuila solution provided a cost-effective, high-performance connectivity infrastructure, significantly reducing potential losses from downtime and ensuring our operations run smoothly.

In summary, iQuila Enterprise delivered a robust, secure, and high-availability connectivity solution, addressing the critical challenges faced in the oil and gas industry and ensuring our operations remain efficient and uninterrupted.

