



Protecting an offshore installation

Petrorio secures oil platform with Fox DataDiode

Like many other organizations, the Brazilian oil and gas company Petrorio has had its share of cyberattacks on its network. Therefore, security is high on the agenda. “Health, safety and security do not only apply to all our physical activities, but also to the digital ones,” says Glaucio Breder Soares, member of the maintenance team of the Polvo oil platform.



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Petrório's Polvo field is located about 100 km out of the coast of Rio de Janeiro. It was the first production asset on which Petrório began exploration activities. In 2016, the company invested over 11 million dollars to increase the oil extraction from this field by using new, advanced technologies. That investment made it possible to extend the life cycle of this field and increase production.

Transfer data via USB

In order to get data from the drilling platform to the Petrório office, the company used USB sticks to collect control data from the stand-alone system on the platform. Keeping the platform fully segregated from all networks was safe and secure, but also meant data at the head office was not always up to date. "Therefore, we started looking for a solution that would enable us to get an online connection without putting the platform at risk," said Soares, who first evaluated around fifteen possible solutions, including firewalls and data diodes. Firewalls were quickly ruled out as they can be identified in the network and manipulated. A data diode has no IP address nor MAC address and therefore cannot be identified and tampered with. It creates a true one directional network, so malware has no chance of entering the control network on the platform. Only traffic from the platform to the head office is possible.

Fox DataDiode shortlist

Soares made a shortlist of four data diode providers, which were evaluated thoroughly. Ultimately, he selected the Fox DataDiode for a number of reasons. "First of all, this solution offered the reliability and state-of-the-art technology we required. Furthermore, it proved to be the best cost-effectiveness of all the solutions we evaluated. Additionally, Fox-IT turned out to be a well-organized vendor, and they communicated excellently with us during the project."

After installing the Fox DataDiode with the help of a Fox-IT expert, Petrório was able to get all the data from the platform to the analysts at headquarters without delay. "The platform is connected but also ensured that a cyberattack is impossible. That was our main goal.



Polvo oil platform

We cannot have any downtime on the platform, as this is extremely costly. We practically abolished the use of USB sticks and are also looking for other parts in the company where we may deploy a data diode. This will further enhance security at our company."

More information on the Fox DataDiode for your oil and gas organization? Get in touch with us via datadiode@fox-it.com.



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fox-it.com

Fox-IT B.V.

Olof Palmestraat 6, Delft
P.O. Box 638, 2600 AP Delft
The Netherlands

T +31 (0)15 284 7999
F +31 (0)15 284 7990
fox@fox-it.com

Fox-IT is part of NCC Group.