

Previously, utilities such as nuclear power stations, electricity distribution, water supply, transportation and telecommunications used closed systems for reporting. Today they all depend on open IT systems and often third parties for management, surveillance and control of functions. These functions include collecting, processing and storing log messages, managing devices on IP networks, real-time billing and more.

Challenge

Secure digitalisation of information systems

One major challenge for critical infrastructure businesses is how to enable digitalisation of information systems without introducing risks for cyberattacks. Integrating production environments with IT systems is driven by efficiency goals and lowering costs. However, it leaves facilities more open to risks with integrity and accessability, and even cyberattacks that could have devastating effects. How to protect your facility from these threats, yet remain efficient and continue to guarantee operational uptime?

Solution

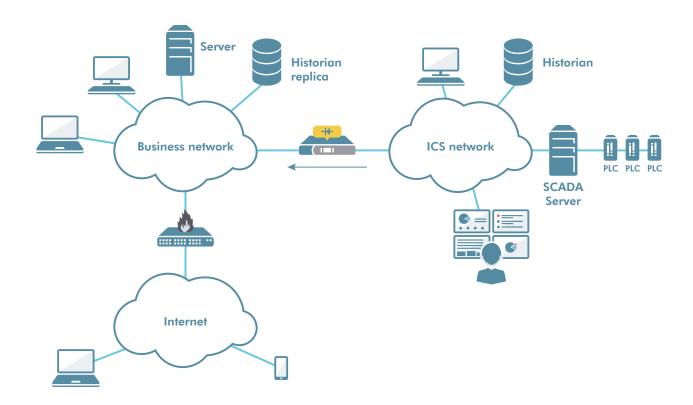
Persistent protection of your production environment with data diodes

Advenica's Data Diodes are the failsafe way to protect your sensitive systems and confidential data. By hardware enforced one way data flow, they allow only designated data to pass in one direction. This security function is persistent over time as no malware, destructive data or a simple administrative mistake can change the information flow during data transfer.

Data diodes are compact appliances, also called 'unidirectional security gateways', which sit between two networks. They guarantee secure, one-way data transfer, safeguarding the integrity of the connected system. The data diode disconnects the critical part of your infrastructure from other networks while maintaining vital information flows.

With data diodes no unauthorised people or processes are able to interfere with your systems. Additionally they offer greater efficiencies over conventional firewalls as data diodes do not require any configuration or software updates for maintaining the one way data flow, minimising the risk of human error.

© Advenica 2024



Advantages

Keep up with standards and regulations

With the growing need for IP-based access and the risk of intrusion or leakage it brings, it is more important than ever to conform to relevant standards. There are several authorities that recommed the use of data diodes to comply to these standards and regulations. With Advenica's Data Diodes you will recieve a solution that brings high security over time, making sure your data and your business processes stay protected.

© Advenica 2024 2



Advenica provides expertise and world-class high assurance cybersecurity solutions for critical data in motion up to Top Secret classification. We enable countries, authorities and companies to raise information security and digitalise responsibly. Founded in 1993, we are EU approved to the highest level of security. Our unique products are designed, developed and manufactured in Sweden.

Read about us at advenica.com

© Copyright 2025 Advenica AB. All rights reserved. Advenica and the Advenica logo are trademarks of Advenica AB. All registered and unregistered trademarks included in this publication are the sole property of their respective owner. Our policy of continuous development may cause the information and specifications contained herein to change without notice. Doc. no.: 18163 v1.1

