

Unidirectional CloudConnect[®]: A Secure Industrial Cloud Gateway



Risks in IIoT Adoption: Cyber Security & Interoperability

The IIoT promises revolutionary improvements in the efficiencies of industrial operations, manufacturing platforms, transportation systems, utilities and other industrial systems. With already-identified benefits such as predictive maintenance, remote monitoring, big data analytics and security incident management, the IIoT is hard to ignore. However, these benefits require the massive deployment of connected devices that gather and communicate data, thereby increasing cyber security attack surfaces dramatically, opening paths for attackers to enter industrial networks.

The multitude of different protocols and applications used by industrial systems is another important challenge to widespread IIoT adoption. Collecting data from many devices, of various types and from many vendors, and re-coding that data to a unified “cloud-friendly” format, demands innovative technologies and approaches.

Many Sites: One Cloud Interface

Waterfall Security Solutions, the leader in industrial control system security since 2007, now offers Unidirectional CloudConnect, an innovative solution based on Waterfall's patented Unidirectional Security Gateways.

Waterfall's Unidirectional CloudConnect uses unidirectional gateway technology to gather data from industrial sources such as historians, industrial control systems, OPC servers, and industrial devices. It converts that data into unified cloud-friendly formats, such as NoSQL databases and WebSockets, and transmits the unified data securely out of the site and into industrial clouds, including GE Predix and Microsoft Azure. CloudConnect's foundational unidirectional gateway technologies ensure seamless connectivity with both industrial and cloud systems, and eliminate remote network threats that are fundamental to Internet-exposed networks and systems.

Benefits



Reap the benefits of the IIoT without the risks of cyberattacks



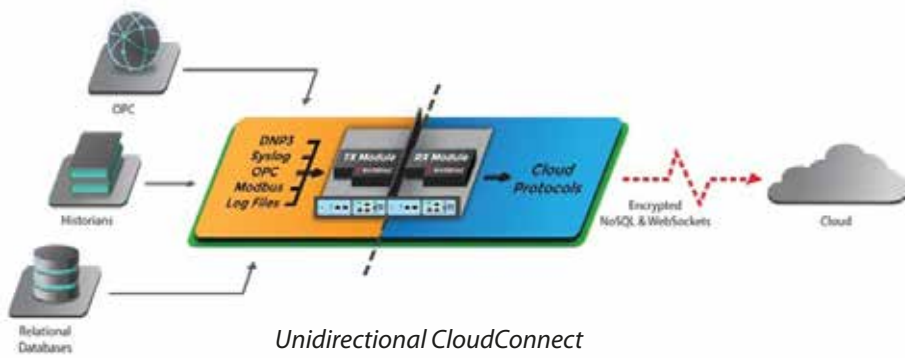
Interoperability between industrial and cloud-based systems



Transform industrial data into GE Predix, Microsoft Azure and other cloud-friendly formats



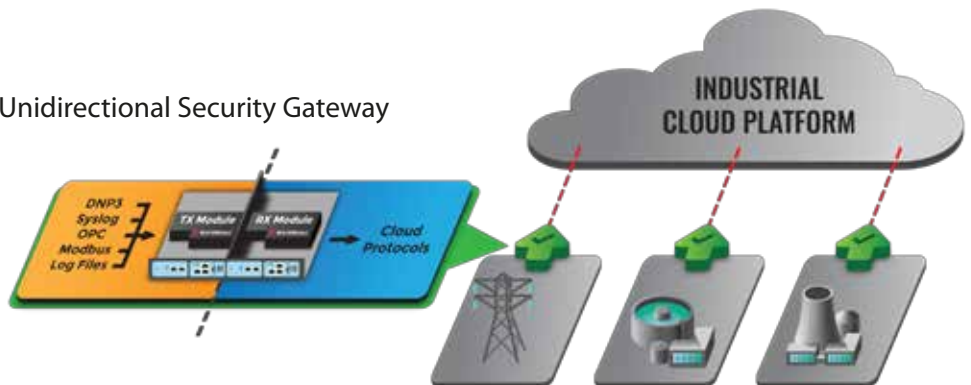
Enable big-data, cross-protocol correlations



The Unidirectional CloudConnect solution utilizes Waterfall’s patented, market-leading, unidirectional security technology that enables safe and reliable IT/OT integration. Providing hardware-enforced protection, the technology allows data to flow out of industrial networks, without any possibility of remote attacks penetrating industrial networks.

Highlighted Features

- Supports a wide variety of industrial systems and protocols
- Supports leading industrial cloud protocols and systems, including GE Predix and Microsoft Azure industrial cloud platforms
- Powerful, configurable translation capabilities
- Standard 1Gbps throughput
- Easy installation and deployment
- Based on Waterfall’s market leading Unidirectional Security Gateway



About Waterfall Security Solutions

Waterfall Security Solutions is the global leader in industrial cybersecurity technology. Waterfall products, based on its innovative unidirectional security gateway technology, represent an evolutionary alternative to firewalls. The company's growing list of customers includes national infrastructures, power plants, nuclear plants, off and on shore oil and gas facilities, refineries, manufacturing plants, utility companies, and many more. Deployed throughout North America, Europe, the Middle East and Asia, Waterfall products support the widest range of leading industrial remote monitoring platforms, applications, databases and protocols in the market.

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