Unidirectional Security Gateways



Waterfall replacing firewalls in industrial network environments



HOW DO WATERFALL CONNECTORS WORK

UNIDIRECTIONAL SECURITY GATEWAYS WITH HARDWARE & SOFTWARE

Cyber-attacks on industrial control systems within different vertical industries such as power utilities and other critical infrastructure, smart-buildings, manufacturing, etc. can have serious physical consequences to safety, critical assets and overall business.

THE HARDWARE CONNECTS WHILE THE SOFTWARE PROTECTS

Waterfall Unidirectional Security Gateways enable safe IT/OT integration, secure remote access, and real-time industrial network monitoring.

The solution contains both hardware and software components.

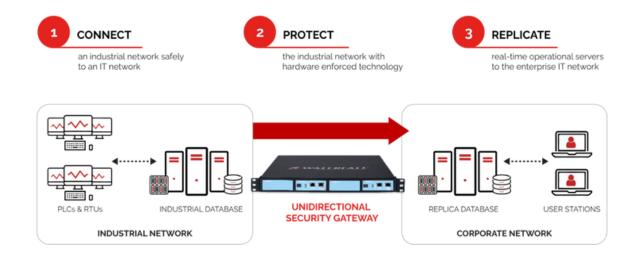
The hardware components include:

- Transmitter:
- Fiber optic cable;
- Receiver (or core data diode technology)

And, the software components include:

• Industrial Application Software Connectors

The software ensures one-way transmission and replication of server information from an OT network to an external network, but prevents the propagation of any virus, DOS attack, human error or any cyber attack back into the protected network.



BENEFITS

PROTECTION

Absolute protection from Remote-control attacks, Denial of service attacks, Sophisticated worms and other malware, Targeted ransomware.

VISIBILITY

Unidirectional
Gateways are Secure,
enable plug-and-play
IT/OT integration, have
seamless Internet
connectivity and
secure remote
support.

COMPLIANCE

Comply with global industrial cyber security standards, dramatically reduce compliance cost and is Common-Criteria EAL4+ certified.

REDUCED COSTS

Provides cyber insurance, operates on reduced costs as compared to competition, and boasts of simplified personnel and vendor training programs.

POPULAR CASE

North American Petrochemical Refinery

demanded to protect critical equipment and on-going productivity of a highly sensitive production environment involving the processing of petrochemicals, while at the same time improve the performance of plant production with real-time, actionable and predictive analytics.

Waterfall's Unidirectional Solution

Secure the production environment perimeter from external threats and provide real-time enterprise visibility – Unidirectional Security Gateways protect all industrial control systems (DCS, individual controllers and logic controllers) with an impassable physical barrier to external network threats, while enabling enterprise access to real-time production data.



Results

- 100% Security the PCN is now physically protected from threats emanating from external, lesstrusted networks.
- 100% Visibility users on the external network now access real-time data from replicated servers for all informational and analytical requirements.
- 100% Compliance meets cyber security standards as well as by global industrial control system cyber security standards and regulations.

