

# WATERFALL FOR BACNET/IP

### SECURE ENTERPRISE MONITORING OF BACNET DEVICES

Enterprises frequently need enterprise-wide access to data from devices supporting the BACnet/IP building automation and control (BAC) network protocol. Connecting enterprise networks to BACnet devices through firewalls is high risk, however, as all connections through firewalls introduce attack opportunities. Waterfall for BACnet/IP enables industrial networks to replicate industrial devices to enterprise networks, without risk to the safe and continuous operation of industrial networks.

The Waterfall for BACnet/IP software securely emulates BACnet/IP devices to enterprise networks. Enterprise users and applications can access the replica devices normally and bidirectionally without risk to the building automation network. The Waterfall unidirectional hardware physically prevents any attack or malicious command from reaching through the gateway to protected BACnet/IP devices, enabling businesses to leverage operations data throughout their enterprises without exposing automation networks to cyber risk.

Waterfall for BACnet/IP is simple to install, with user-friendly, web-based configuration and monitoring tools. Comprehensive diagnostics include real-time alarms that alert users of fault conditions via Syslog, Windows logs, email, SNMP traps, log files and Waterfall's monitoring console.

#### BENEFITS OF USING WATERFALL FOR BACNET/IP



Secure, real-time unidirectional replication of BACnet devices to enterprise networks



Simple deployment – the connector runs entirely in the Unidirectional Gateway with a simple web user interface



Facilitates compliance with NERC CIP, NIST 800-82, ANSSI, IEC 62443 and more



Physically not able to transmit any remote attacks or malware propagation from external networks into protected networks



Enterprise users and applications interact normally with accurate, timely replicas of BACnet/IP devices on enterprise networks



Power











Pipelines

Rail

Water

Facilities

Manufacturing



## WATERFALL FOR BACNET/IP



The Waterfall for BACnet/IP connector is part of the Waterfall Unidirectional Security Gateway family of products. The connector polls controllers and devices on industrial networks in real time, sends that data through the Unidirectional Gateway hardware, and replicates the BACnet/IP devices to enterprise users and applications, such as enterprise historians.

Replica BACnet/IP devices are maintained as a faithful, real-time emulations of the original devices on the building automation network. Enterprise users and applications work with the replicas as if they were the original, industrial devices. Unidirectional replication improves not only security, but performance as well. Users can poll the replicas without fear of slowing down or impairing the operation of critical systems on the industrial control network. BACnet/IP replication provides enterprise-wide access to automation data without the need to provide access to automation devices and networks. The gateway hardware is not physically able to transmit cyber attacks from the enterprise network into the building automation network, preventing the propagation of online attacks, malware and/or human errors.

FULLY-<br/>FEATURED<br/>BARDBUST<br/>SUPPORT:> Real-time replication of BACnet/IP devices> Fully compliant with the official BACnet/IP standard> Supports any number of BACnet/IP devices> Scales to very large BACnet/IP deployments> 1-10 Gbps throughput standard

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#### ABOUT WATERFALL

Waterfall Security Solutions' unbreachable OT obersecurity technologies keep the world running. For more than 15 years, the most important industries and infrastructure have trusted Waterfall to guarantee safe, secure, and reliable operations. The company's growing list of global customers includes national infrastructures, power plants, nuclear generators, onshore and offshore oil and gas facilities, refineries, manufacturing plants, utility companies, and more. Waterfall's patented Unidirectional Gateways and other solutions combine the benefits of impenetrable hardware with unlimited software-based connectivity, enabling 100% safe visibility into industrial operations and automation systems.

Waterfall's products are covered by U.S. Patents 7,649,452, 8,225,205, and by other pending patent applications in the US and other countries. "Waterfall", the Waterfall Logo, "Stronger, than Firewalls", "In Logs We Trust" "Unidirectional CloudConnect", and "CloudConnect, and "One Way to Connect" are trademarks of Waterfall Security Solutions Ltd. All other trademarks mentioned above are the property of their respective owners. Waterfall Security reserves the right ochange the content at any time without notice. Waterfall Security makes no commitment to update content and assumes no responsibility for any mistakes in this document. Copyright © 2023, Waterfall Security Solutions Ltd. All Rights Reserved. www.waterfall security.com