

WATERFALL FOR ICCP

SECURE ICCP SERVER REPLICATION

Operators of electric generation, transmission, distribution and power grid control centers all rely on continuous communications with partner utilities and central authorities to balance generating and transmission capacities against load. The Inter Control-Center Communications Protocol (ICCP) is frequently used for such coordination. Partner utilities may be large or small, and may be more or less thoroughly secured against cyber attacks. It is vital to the reliable operation of electric utilities that utilities' control systems are protected from attacks originating in partner utilities across ICCP communications channels.

Waterfall for ICCP unidirectionally replicates ICCP servers to external networks in real-time. Partner utilities and central authorities can poll the ICCP replicas normally, as if they were still communicating with the original ICCP server. Unidirectional replication means that no online attacks, no matter how sophisticated, can penetrate back into a protected control system or SCADA network from ICCP partner utilities.

BENEFITS OF USING WATERFALL FOR ICCP



Securely and unidirectionally replicates ICCP servers



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



Eliminates all remote attacks and malware propagation from external networks



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



Fully transparent to ICCP applications



Power



Pipelines



Rail



Water



Facilities

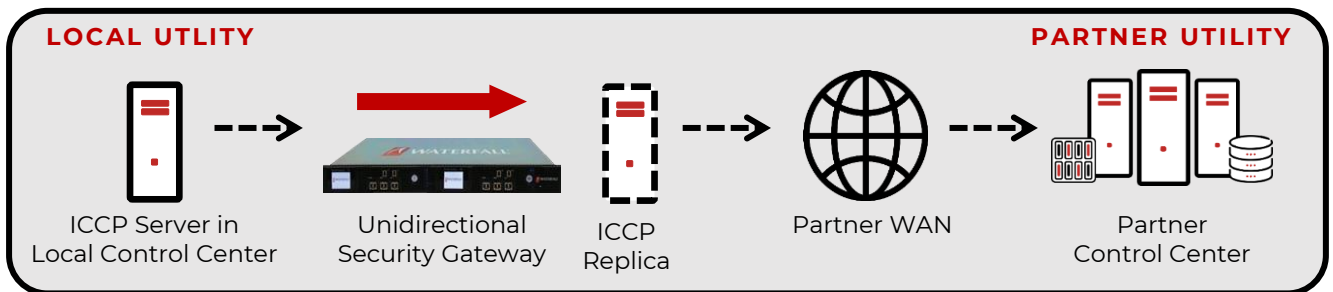


Manufacturing

WATERFALL SOLUTION FOR ICCP

Waterfall for ICCP connector polls protected ICCP servers, regularly creating a snapshot of all configured ICCP registers and values. That snapshot is transmitted unidirectionally to an external network, such as a wide-area network (WAN) connecting an electric utility to other utilities or to a central authority. On the external network, Waterfall for ICCP is a standard ICCP server. External partner ICCP servers can poll the Waterfall ICCP replica and receive the same answers to their polls as the live ICCP server would have provided.

Waterfall for ICCP supports high availability, management automation, central monitoring and diagnostics, and many other features essential to reliability-critical deployments. Waterfall for ICCP also supports the auto-discovery of ICCP register definitions, automatically propagating register additions, deletions and attribute changes to Waterfall's ICCP replicas. With Waterfall for ICCP deployed, electric utilities can be confident that no compromise of a partner utility or the ICCP WAN can propagate back into the protected control system network.



FULLY- FEATURED & ROBUST SUPPORT:

- » Faithful, real-time replication of ICCP servers
- » Automatic discovery of new ICCP tags and propagation of those tags to ICCP replicas
- » Supports an unlimited number of ICCP tags
- » Tested and supported with a wide variety of ICCP versions and vendors
- » 1-10 Gbps standard throughput & High-availability options

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ABOUT WATERFALL

Waterfall Security Solutions' unbreachable OT cybersecurity 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, 8,223,205, 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 to change 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