

# WATERFALL FOR AVEVA PI

## SECURE MONITORING OF AVEVA PI SYSTEMS FOR ENTERPRISE USE

Since 2009, Waterfall Security has been a trusted partner of AVEVA (formerly OSIsoft), securing the IT/OT connection in PI deployments for many mutual customers worldwide. AVEVA, a world leader in operational intelligence with its flagship PI System, enables businesses to capture and leverage sensor-based data across enterprises for improved efficiency.

Waterfall's solution suite for the AVEVA PI System comprehensively addresses:

- Safe integration of operational technology (OT) and information technology (IT) networks
- Native protocol support and access to AVEVA PI data sets and analytics capabilities
- Safe and seamless connectivity to the AVEVA Data Hub

By deploying Waterfall for AVEVA PI System<sup>®</sup>, businesses eliminate the risk of remote cyberattacks entering their industrial control systems while enabling seamless enterprise and cloud access to critical operational data for improved efficiencies.

# AVEVA

## FEATURES & BENEFITS WATERFALL FOR AVEVA PI



Secure replication for AVEVA PI Data Archive, PI Asset Framework, PI Backfill and PI Data Hub



Elimination of remote-control cyber attacks and online malware propagation



Real-time alarms & diagnostics via Syslog, Windows logs, email, SNMP traps, log files, PI system tags and Waterfall's monitoring console



High-availability options: PI High Availability Collectives, clustered Waterfall gateways and many others



Real-time replication of tags, attributes, events, frames, values & notifications. Optional propagation of tag structure and attribute changes.



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



Native protocol support for all PI data types: numeric, digital, string and timestamps



Optional aggregation of multiple industrial PI Servers into a single enterprise server. Complete or selective server replication.



Power



Pipelines



Rail



Water



Facilities



Manufacturing

## WF FOR AVEVA PI UNIDIRECTIONAL REPLICATION



## WATERFALL'S SOLUTION SUITE FOR THE PI SYSTEM

Waterfall Unidirectional Security Gateways support the replication of both the PI Archive and Asset Framework namespaces. Waterfall for AVEVA PI is a native replication, without need for third-party protocol converters or other components running on PI Servers or other systems. Waterfall for AVEVA PI supports many-to-one architectures, PI Collectives, Backfill, events, tags, tag data and tag attribute replication and synchronization, with multiple options for native High Availability.

### AVEVA PI SYSTEM

Replicates operational PI Systems in industrial networks to enterprise networks, optionally aggregating multiple plants into a single enterprise historian.

Users interact normally and bi-directionally with replica servers, keeping industrial networks safe from remote cyber attacks.

### PI ASSET FRAMEWORK

Replicates PI Asset Framework servers, repositories for asset-centric models, hierarchies, objects, and equipment by using the supported, PI AF API.

The PI AF replicas are automatically synchronized with the original ICS AF servers and provide access to all PI AF data sources. Framework replication of names, contexts; accessible via AF interfaces

### PI BACKFILL

Retransmits AVEVA PI System data to replica servers on the IT network to address data gaps.

The Backfill function identifies existing data so that duplicate data does not appear in replica servers.

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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](http://www.waterfall-security.com)