Cyberium

One-Way Hardware Enforced PI-to-PI Replication for Critical Infrastructures

Unbreakable Security
Zero Latency
Data & Metadata Sync
Maximum Uptime

Cyberium **OWA-MICA** (**O**ne-**W**ay **A**ppliance – **M**ulti-**I**nstance **C**ontinuous **A**vailability) is a hardware-enforced, one-way PI replication solution purpose-built for critical infrastructure.

The solution replicates PI data from multiple industrial sites into a consolidated IT environment **through a hardware-enforced one-way Data Diode (OWA)**.

Data flows securely from distributed OT PI collectives to centralized IT infrastructure, including main PI Data Lake and regional PI Secondary servers, enabling enterprise-wide analytics without compromising OT security.

OWA-MICA

In partnership with:

AVEVA Partner Ecosystem | Independent Software Vendor | CERTIFIED

TAG SYNC CAPACITIES

Max tags sync/sec

10k | 50k | 250k

and higher upon request

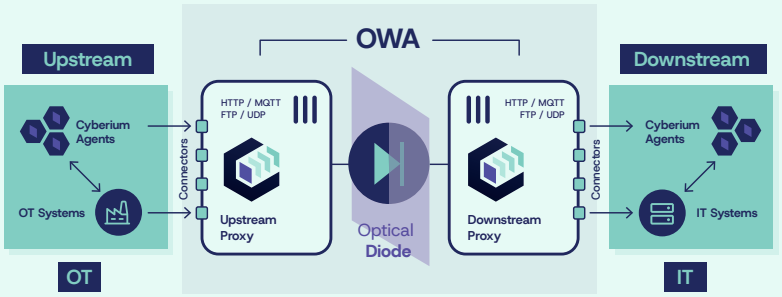
- Sync both Data and Metadata
- Conflict detection (multi-instance setup)
- User-friendly GUI for configuration and conflict resolution

HOW DOES IT WORK?

OWA / MICA AGENT combined architecture:

Cyberium MICA Agent is entirely compatible with OWA Appliances, a top-tier performance Unidirectional Network Segmentation Hardware _ See Cyberium OWA Datasheets for more details

MICA can be deployed either on its own machine (both in OT and IT-side) or as a Virtual Machine on each OWA Proxy Server.



SPECS & REQUIREMENTS

PI REQUIREMENTS

Part Number	SWAG_MICA_[10|50|250]K
Version	1.8
Latest released	2024-02-15
Framework	PI AF Client 2017 or later
Framework Version	2.9.2.8185
License type	Per seat and per tag
PI Server versions	PI Server 2012 or greater

PI SUPPORTED OPTIONS

32-bit/64-bit Support	64-Bit
Support PI Collective	Yes
Failover	Yes
Support Fan-Out	Yes
Max tags	1+ Million
Max tag values per second	300,000

Automatically Creates PI Points	Yes
Automatically Deletes PI Points	Yes
Automatically Incorporates Attribute Changes	Yes
Automatically Incorporates Digital Sets Changes	Yes
Support PI Primary Server failures	Yes
Disconnected Startup	Yes
Exception Reporting	Yes
Health Tag Support	Yes
History Recovery	Yes
Real-time performance monitoring	Yes
Source of Timestamps	Yes
Sub-second Timestamps	Yes
Sub-second Scan Digital Sets	Yes
Supports Questionable Bit	Yes
Supports Multi-Character Point Source	Yes

HIGH AVAILABILITY ARCHITECTURE

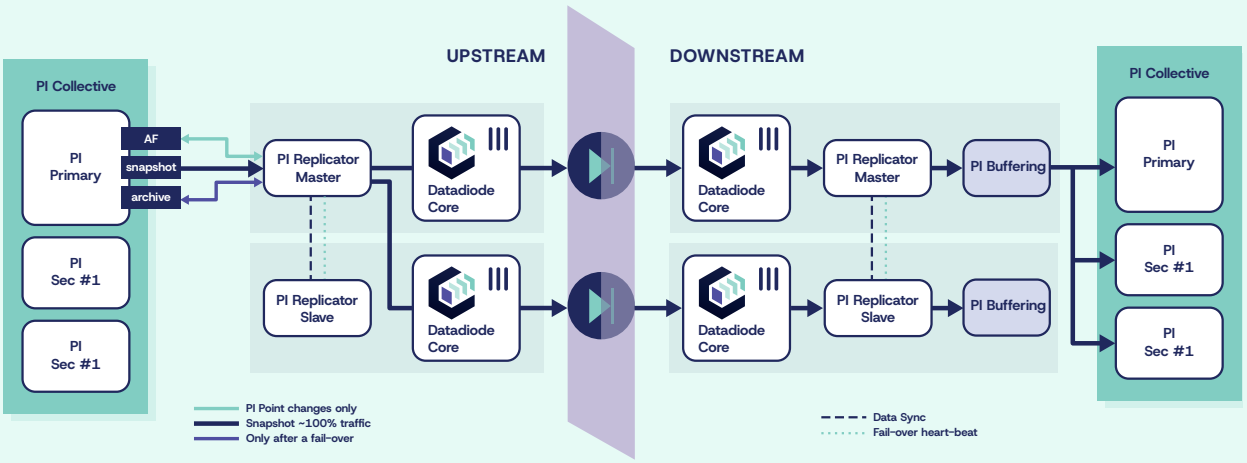
Automatic High Availability (HA) – no human action

Heartbeat monitoring and health checks

Data synchronization between redundant nodes

Zero data loss during single failure events

Resistant to all single points of failure (SPOFs)



Cyberium

We secure the critical
— connecting what should stay isolated

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