

Deploy APERIO DataWise™ to monitor and improve the health of your OSIsoft PI data

Companies use PI data to monitor their assets, perform analytics, make visual inspections, prove regulatory compliance, conduct predictive modeling, improve emissions and energy usage, and/or conduct batch and continuous reporting. APERIO DataWise for PI™ can monitor, measure, and improve the data integrity of your PI systems' historical and live data streams. Through machine learning, APERIO can automatically detect and notify you of issues. Are you looking for:

- ✓ **Better, more centralized visibility**, with continuous validation, to assess the reliability & accuracy of PI data?
- ✓ **Automatic DQI alerts** through integrated PI Notifications when data integrity is poor?
- ✓ **Higher productivity** through easy installation, value pricing, and streamlined processes and workflows?
- ✓ **Happy and enabled PI users** and no more unnecessary off-work outages?
- ✓ **Greater value** derived from models, analytics, and AI that are built using this verified data?



Source and impact of most PI data problems

As someone responsible for the proper operation of PI servers, you know that poor data integrity must be continuously addressed. Your challenges may include:

- **Missing data.** Missing data samples from sample rate changes or a constant signal for an abnormal duration, relative to the history.
- **Stale or dead tags.** Stale or dead tags can be “retired” or misconfigured tags. Identifying retired tags frees up tag counts and/or reminds you to update the tag descriptors so users know they are retired. Because misconfigured tags can go unnoticed amongst the thousands of tags, it’s better to identify these at the source rather than when critical data is needed.
- **Bad data.** A form of missing data, abnormal bad status concentrations will cause failure in reports, performance equations, models, and any other application of the data. Causes are often systemic and easy to fix when identified automatically and timely.
- **Connection dropped/data buffering.** While interface buffering provides reliable data collection, users don’t have access to the data. Post-incident forensics can be confusing because the data *is* there. With periods of buffering identified, PI admins will know when and how often it occurs. This info can be used to address and eliminate underlying issues.
- **Data out of range.** Values outside the typical range relative to history.

Measure and improve the data integrity of your PI interfaces

At APERIO, we define Data Integrity as:

$$\text{Data Integrity} = \text{Data Quality} + \text{Data Security} + \text{Data Intelligence} + \text{Data Value}$$

APERIO DataWise will assess the quality of PI data and keep it secure, setting you up for data-driven decision-making and advanced model use. APERIO measures data quality via its Data Quality Index. DQI guarantees data accuracy, consistency, completeness, validity, integrity, and timeliness. Identifying data quality issues in PI interfaces allows system administrators to:



- ✓ Know the status of your PI data quality in real time
- ✓ Quickly identify and address interface problems
- ✓ Easily track and report data integrity and watch it improve over time
- ✓ Automatically alert with recommended actions; can integrate with PI Notifications for seamless visualization

...as a standalone APERIO portal or within the OSIsoft PI dashboard.

Quickly and easily deploy APERIO DataWise™

APERIO DataWise for PI, a SaaS-based deployment, is easy to install. The Data Quality engines train and become operational quickly, with initial results seen in a few hours. Once the historical data is certified, you then have complete visibility into your PI System's data quality with automated, continuous monitoring of real-time data streams.



Learn more about APERIO DataWise for PI at aperio-datawise-for-pi/.

APERIO is the leader in industrial data integrity solutions. We help customers drive profitability and sustainability goals while mitigating risk in their industrial operations. Powered by AI machine learning, APERIO automatically validates operational data at scale to improve data accuracy, security, and value, allowing for better, smarter business decisions based on real-time, trusted, superior data.

APERIO
Superior Data