

OSIsoft Data Integrators Connect Operational and Business Intelligence

An OSIsoft Solution

Challenge

Because PI System data does not behave like data from digital assets, significant human capital is spent on manipulating data so that it works with standard BI tools. People spend more time creating reports than analyzing data to generate insight and actionable information.

Solution

The PI Integrator for Business Analytics prepares time series data to work with many business analytics tools. Deploying the integrator replaces the need for manual data entry and conversion each time reports are needed.

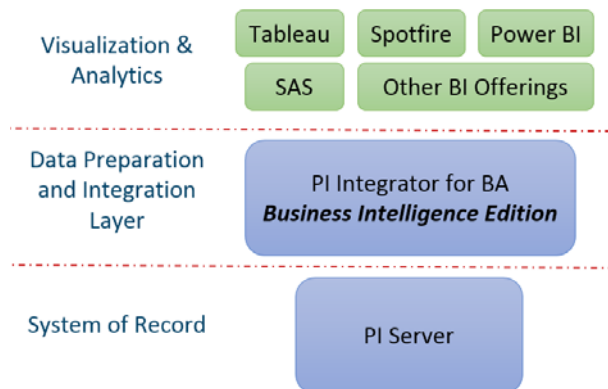
Benefit

The Integrator eliminates the need for custom coding, SQL queries and manual data entry and extends the value of PI System data by making it work with business tools already in place.

Business Challenges

Today's technology marketplace offers the unprecedented capability to capture large volumes of industrial, sensor-based data. The challenge is to transform raw data into actionable information that benefits both operational and business stakeholders. Without tools that convert sensor-based data to work with business analytics tools, generating insight and even executing everyday tasks are requiring more and more human capital. Areas where integrating operational data with business systems can generate value include:

- Comparing performance across large asset portfolios or fleets
- Establishing correlations between asset or system performance and operational parameters such as vendor, shifts and environmental factors
- Generating consistent, timely and accurate reports for compliance, process or strategic business purposes.



Business Impacts

Deploying the PI System Integrator for Business Analytics creates a robust, reliable way for plant, asset and process managers to extend the value of their PI System data. Now they can:

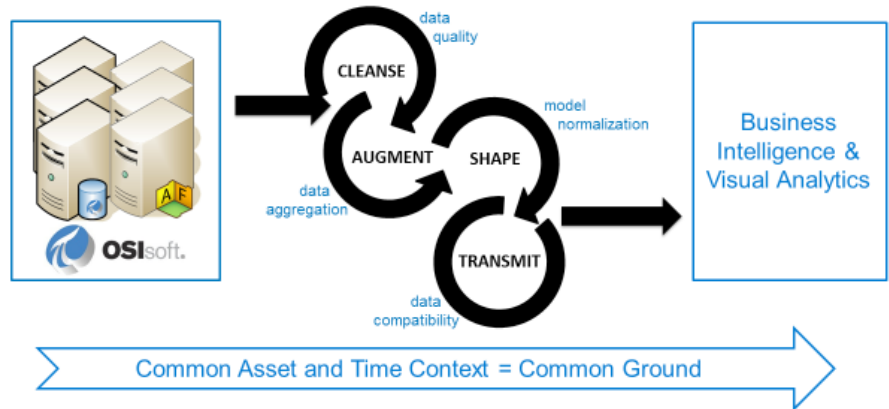
- Reduce opportunity costs by generating production reports that are closer to real-time
- Shorten time to insight and reduce cost of reporting by creating automated, reusable analysis models
- Reduce costs by eliminating system complexity and leveraging existing skill sets by connecting PI System data to business analytics tools that are already in place

Solution Approach

For over 30 years, the PI System has captured, integrated and stored time-series data for asset health, quality and process efficiency. The PI System stores source data in its original fidelity, ensuring that the data accurately represent the physical behavior of assets and processes. Because it reflects the physical behavior of assets and processes, high fidelity time-series data has natural gaps, spikes or uneven spacing, creating significant challenges when integrating with BI tools for larger scale analytics and automated reporting. The

PI Integrator for Business Analytics (BI edition) extracts PI System data from the Data Archive and cleanses it to create a purpose-built view that is ready for consumption by many BI tools. Alternative approaches directly query production archives repetitively, lowering the performance of the BI tool and potentially creating performance issues in the production system. The PI Integrator for BA eliminates the complexity of queries needed to turn the raw data into analysis-ready data, optimizing people and production systems.

PI Integrator for Business Analytics



Features and Benefits of the PI Integrator for BA - BI Edition

Feature	Benefits
Intuitive User Interface	Allows anybody familiar with the PI System to quickly and easily publish analysis-ready data to business analytics tools.
Compatible with multiple BI tools	Quickly modify or refine existing views to ask new questions, create new insights, basis of continuous improvement. The PI System integrator is compatible with multiple BI tools. No need to endure disruptive rip and replace.
Drag and drop data	No custom coding, SQL queries create an easy way to browse and search PI System data for analytics

Summary

PI Integrators reduce the complexity of analyzing real-world industrial data so people can focus on creating strategic information that aligns with enterprise business KPIs. By removing the burden of converting time-series data to work with standard business analytics tools, the PI Integrator for BA empowers OT to deliver trusted data sets to the rest of the organization, including compliance managers, plant managers, shift manager, maintenance or asset manager. The seamless, out-of-the-box connection from PI System data to BI tools already in use reduces costs and removes complexity of manual, labor-intensive methods.

About OSIssoft

OSIssoft, a global leader in operational intelligence, delivers the PI System to capture and store real-time, sensor-based data. With over 17,000 installations worldwide, our customer base encompasses Fortune 100 and 500 in power generation, renewables, oil and gas, utilities, metals and mining, biosciences and other industries. OSIssoft is privately held and remains faithful to its original mission – to create software that connects people, operations and data.