

OSIsoft’s Business Analytics Integrator Joins Operational and Business Systems of Record

An OSIsoft Solution

Challenge

Because PI System data does not behave like data from digital assets, significant human capital is required to produce curated, analysis-ready data.

Solution

The PI Integrator for Business Analytics (Data Warehouse Edition) prepares and exports time series data to work with existing corporate reporting standards such as financial, customer supply chain, costs, etc.

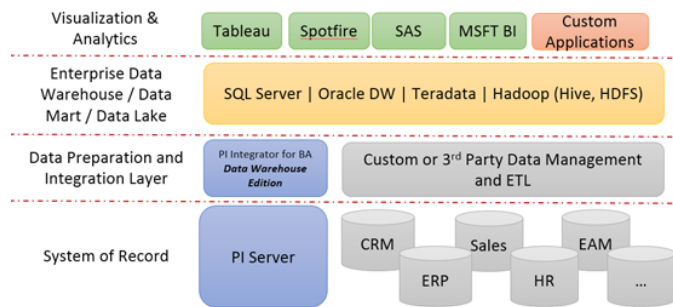
Benefit

By harmonizing sensor-based data with other authoritative data types. The PI Integrator eliminates the need for custom integration, SQL queries and manual data entry. Connecting systems of record with the integrator extends the value of PI System data by making the data 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; however, sensor-based data is only one of the many data sets enterprises capture and store. More and more, harmonizing disparate systems of records is becoming critical to generating integrated enterprise intelligence. Without tools that prepare operational data to work with data stored in data warehouses, enterprises spend significant human capital programming or manually manipulating data. Areas where integrating operational data with business systems can generate value include:

- Creating an integrated enterprise analytics platform to establish business performance baselines
- Integrating and accessing information to accurately predict how decisions in production environments affect business performance
- Using operational parameters to optimize asset lifecycles and associated capital expenditure planning.



Business Impacts

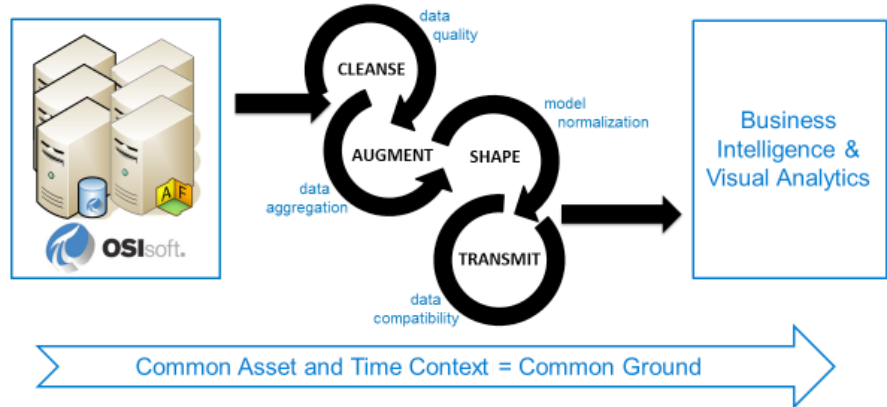
Deploying the PI System Integrator for Business Analytics creates a robust, reliable way for plant, asset and process managers to extend the value of their PI System data. Now they can:

- Integrate PI System and business data without impacting production or manufacturing systems
- 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 data warehouse platforms that are already in place

Solution Approach

For over 30 years, the PI System has captured, integrated and stored time series data. The PI System stores source data in its original fidelity, ensuring that the data accurately represent the physical behavior of assets and processes. Time series data has natural gaps, spikes or uneven spacing, creating significant challenges when integrating with table-based storage tools like data warehouses. The PI Integrator for Business Analytics (Data Warehouse edition) extracts PI System data from the Data Archive, cleanses it and securely delivers it into an enterprise data warehouse platform. Time series data can then be exported at scale into native tables and joined with other authoritative data sets such as financials, customer records, supply chain, etc. Alternative approaches require finding individuals or assembling teams experienced in both operational and IT programming environments to manage integration and data governance. The PI Integrator for BA also maintains context needed to generate enterprise intelligence and reduces cost and complexity by leveraging warehouse platforms already in place.

PI Integrator for Business Analytics



Features and Benefits of the PI Integrator for BA - Data Warehouse Edition

Feature	Benefits
Intuitive User Interface	Allows anybody not familiar with the PI System to quickly and easily publish analysis-ready data to business analytics tools without custom coding.
Compatible with multiple BI tools	Quickly modify or refine existing views to calculate enterprise KPIs, link opex costs to production. Reduce complexity and eliminate disruptive rip and replace by leveraging existing tools.
Drag and drop data	Automated data preparation means reducing the need for custom coding, SQL queries and creates an easy way to browse and search PI System data for analytics or reporting.

Summary

PI Integrators for Business Analytics reduce the complexity of harmonizing real-world industrial data with business data so people can focus on creating integrated, enterprise intelligence. By removing the burden of converting time series data to work with data warehouses, the PI Integrator empowers IT to leverage operational data sets for business analysis and corporate reporting. The PI Integrator provides seamless, out-of-the-box connection from the PI System to data warehouses reduces costs of labor-intensive data conversion, removes data silos and leverages investments in people and tools that are already in place.

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.