Are you a process engineer who would like to use data from operations, industrial equipment, PLC error logs, and work order information to predict equipment failure in real time? Or, are you a security analyst who would like to improve your organization’s SCADA security posture through comprehensive visibility across IT applications and infrastructure, HMI, asset information, process control settings and PLCs?

Integrating the OSIsoft PI System and Splunk allows you to converge Operational and Technology data, while continuing to leverage best-of-breed data collection, visualization, and infrastructure for OT and IT. A joint OSIsoft and Splunk solution enables you to combine, correlate, and monitor data in your OT and IT systems to create a single pane of glass—driving faster troubleshooting and better decision making. You will be able to apply advanced analytics and machine learning across IT and OT data leading to gains in operational efficiency, sustainability, quality, safety and cybersecurity.

**Actionable insights across OT and IT**

**Correlate PI System data with new data sources**

Find relationships between seemingly unrelated events in data from multiple sources, whether IT data from your technology infrastructure in Splunk, OT data from your industrial operations in the PI System, or business data in Hadoop or relational databases. For example, you could track asset performance in your PI System and correlate it with IT application data to understand how it impacted financial performance over a duration of time. Then you can automate the results of correlations to generate alerts, schedule reports, or support key performance indicators for the business. Splunk software enables easy and fast event correlations using time and geographic location, transactions, sub-searches, field lookups and joins.

**Enhance existing or solve new analytics use cases**

Use built-in Splunk analytics or your own custom machine learning models to discover and tackle impactful issues or opportunities in your company — from avoiding disruptive downtime to optimizing business results. Easily build and operationalize custom models using the guided experience of the Splunk Machine Learning Toolkit. Integrating PI System data with existing Splunk applications and use cases improves security and network operations visibility into the OT environment.

**Reduce Complexity of OT and IT data integration**

Get access to your OT data in Splunk by installing and configuring a new app for Splunk, the Optimate Integrator for PI System to Splunk. Eliminate the need for complex integrations or manual ad-hoc workarounds to integrate your OT and IT data. With this set up, you can continue to fully leverage your current and future investments in the PI System without needing to move your OT and IT data out of their native environments.

**How Optimate Integrator for PI System to Splunk works**

The Optimate Integrator for PI System to Splunk makes the multitude of PI System data streams available in Splunk by sending a read-only query to PI using the Splunk Search Processing Language (SPL™). Results are returned as events, which can be further analyzed, correlated with other data sources and enriched in the Splunk platform.

You can use the integration to make PI data accessible to Splunk software and users. This includes unified queries and dashboards across unstructured or structured data in Splunk, the PI System, Hadoop, and RDBMS, providing a single-pane-of-glass view into IT and OT data.
Deployment options

You can access your PI System data in Splunk no matter where the instances are deployed, whether on-premises or in the cloud. The diagram above outlines reference architectures for the following situations:

1. OSIsoft PI System and Splunk Enterprise instances are both deployed on-premises
2. OSIsoft PI System and Splunk Enterprise instances are both deployed in a public and private cloud
3. OSIsoft PI System instances are on-premises and forwarding data to an OSIsoft PI System instance in the cloud, which is accessed by a Splunk Enterprise instance.

About Splunk


About Optimate

Optimate is a leading provider of products, professional services and solutions specialising in process automation and operational intelligence to optimise production performance. Optimate has extensive expertise spanning Integrated Operations Systems, Process Automation, OSIsoft PI System & Data Integration and OPC & Communications with intimate knowledge of analytics, systems integration, historians, supervisory control, networks and automation control systems.

About OSIsoft

OSIsoft is a proven leader in enabling operational intelligence. OSIsoft is dedicated to helping people transform operational data into rich, real-time insights to make critical business decisions. Worldwide, the PI System™, handles over 1.5 billion sensor streams. The PI System™ delivers a single, enterprise-wide data infrastructure that integrates, contextualizes and visualizes complex information in real time. Visit us today at http://www.osisoft.com/.

Ready to break down Operational and Information Technology silos? Visit Splunkbase to learn more about the Optimate Integrator for PI System to Splunk. Download Splunk for free or explore the online sandbox. Whether cloud, on-premises or for large or small teams, Splunk has a deployment model that will fit your needs.