PI System Connections
Gathering and Unifying Data
Data from countless systems, sensors, and devices is needed throughout organizations to feed analytics, provide insights into operations, and empower data driven decision making. But with each system having its own storage protocols, naming conventions, and connectivity standards; collecting, combining, and delivering data where and when it’s need is a challenge. The PI System Connections unlock your data by automatically collecting it from your various sources and seamlessly delivering it to the users and systems who need it.

**PI SYSTEM CONNECTIONS: COLLECT, INTEGRATE, & SHARE**

**Collecting Information**

**PI Interfaces** and **PI Connectors** collect data from systems and sensors throughout your enterprise and deliver that data to the PI Server™. Fluent in the unique nuances, protocols, and language of each data source, PI Interfaces and PI Connectors streamline data collection and eliminate information silos throughout your organization.

PI Interfaces are the original data collection tool for the PI System™. In continual development for over 30 years, today hundreds of PI Interfaces are available. PI Interfaces support everything from decades old devices to the newest systems/sensors and work on a variety of operating systems so your data – no matter how old or new the data source is – is accessible. As the original connectors for the PI System, PI Interfaces have a tag centric approach to data collection. With PI Interfaces, users individually configure, on a tag by tag basis, what data they want to collect and how often to collect it for each data source.

PI Connectors are the next generation of PI System data collectors. Designed to help customers fully leverage the asset centric capabilities of the PI System, PI Connectors include automation features to simplify and speed up configuration so data collection, installation, and ramp up are faster and easier. PI Connectors even auto create both PI Tags and Asset Framework elements for your data. With PI Connectors, information is easier to gather and your enterprise-wide data models are always up to date and working to improve data accessibility and understanding for your users.

Both PI Interfaces and PI Connectors make data easy to collect and universally accessible to your users through the PI Server. The PI Interfaces and PI Connectors seamlessly deliver data at the speed of the data source so information is preserved at its original fidelity. PI Interfaces and PI Connectors also transform data into a cohesive model so information is easy to combine and compare (regardless of where it came from).
Integrating Business Systems

PI Integrators take your PI Server data and deliver it in a consumable format that third party systems such as Esri® ArcGIS®, Business Intelligence tools, SAP HANA®, and HADOOP® can use. With PI Integrators you can integrate your high-fidelity operations data with transactional/business data to gain a more complete view of operations through diverse analyses, for example in geospatial maps and for big data analysis. PI Integrators not only deliver data to these tools, they create a bridge between the systems that handles the behinds the scenes data management to deliver high performance, accurate, information while ensuring efficient integration.

Extending Your Data

PI Developer Technologies gives you a library of tools for building custom applications that leverage your PI Server data.

With the PI Developer Technologies you can:

- deliver data to proprietary systems.
- perform custom analyses and transformations on your data.
- build specialized applications to visualize PI Server data.
- and more.

PI Developer Technologies supports a variety standards including OLEDB, ODBC, JDBC, and Web Services which in turn are supported by a variety of programming languages. This gives you robust flexibility in both the standards and tools you use for your development projects. With PI Developer Technologies, all of your PI Server data can be seamlessly leveraged by your custom applications. To further assist your development efforts, OSIsoft offers the PI Developers Club (part of the PI Square community https://pisquare.osisoft.com) where you can collaborate with OSIsoft experts and other developers. The PI Square community also includes learning and technical support resources just in case you need a little extra help with a project.

Sharing Data

Individuals and companies outside of your organization, from suppliers to business partners to customers, regularly need data from your operations. PI Cloud Connect provides a simple, secure, and reliable cloud based solution for sending select data from your PI Server across corporate boundaries to another company's PI Server. With a simple, secure, way to share data with any company or customer who needs it, your data can be used to:

- improve customer relations.
- optimize part delivery.
- improve cross-company collaboration.
- leverage manufacturer insights to improve asset health.
Data driven organizations need data everywhere to better understand operations, investigate issues, identify areas for improvement, ensure compliance with regulations, minimize costs, achieve corporate initiatives, and more. The PI System Connections unlock the full potential of your data by gathering it from whatever source system creates it (regardless of the age, speed, protocols, or location of that asset) and delivering it to the PI Server where it’s quickly and intuitively available to all your users.

The PI System Connections delivers your PI System data to custom applications, third party systems, and business partners, improving information sharing both inside and outside your organization. With the freedom to easily and securely deliver information whenever and wherever it’s needed, users can leverage your PI System data to facilitate data driven decisions and achieve new levels of operational insight and intelligence.

To learn more about the PI System Connections and how the PI System from OSIsoft can solve your enterprise data, please visit www.osisoft.com.