

## Features

**Organization:** PI AF elements and attributes can be organized hierarchically, categorically or as connectivity models to simplify navigation, speed up browsing and searches for relevant information.

**Standardization:** PI AF uses templates to enforce your structure and standards for organizing your data. Templates also allow extensions, giving you the flexibility to define subtle differences between similar assets. Using templates simplifies management of changes over time, as any changes made to templates immediately propagate to all individual instances.

**Unit of Measure (UOM):** A rich set of user extendable unit of measure (UOM) classes and conversion factors come standard with PI AF allowing automatic conversion of attribute UOM within the same class.

**Versioning:** PI AF captures the evolution of your assets and structures over time so your data is always presented in the correct context.

**Versatile Data Sourcing:** PI AF is data agnostic and it connects, through customizable data references, to multiple data sources including non-PI System sources.

**Configuration:** In PI AF, calculations and rules are configured instead of programmed, which makes them more accessible to users.

**Scalable:** Depending on your application, PI AF can support millions of assets and event frames, each having many attributes.

**Flexible and Robust:** PI AF supports multiple deployment configurations including a high availability configuration to provide a robust platform for your important data.

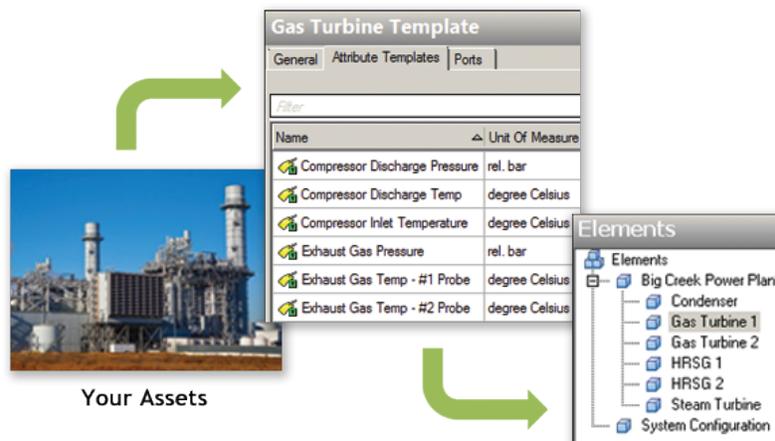
## Business Challenge

Companies today struggle with the growing information appetite of their users. Organizations have an abundance of data from a variety of sources spanning their enterprise. Oftentimes this data is inconsistent and may have varying definitions and names—adding considerable complexity to even simple analyses. To create consumable information and fully realize the potential of this valuable data, companies must find a way to abstract the data so that it is available to users in a consistent, meaningful and intuitive manner, thus making it easier for users to quickly find the information they need and leverage it to make critical decisions.

## PI Asset Framework Overview

Business constantly changes and evolves. To remain current and valuable to users, your presentation of information must also evolve. Included with the PI Server™, PI Asset Framework™ (PI AF) lets you define a consistent representation of your assets and provide a structure for your information. PI AF allows you to identify the components or elements that make up a process, specify relationships between these objects and organize them in whichever way that makes the most sense to your business. Once an element is defined, you can then associate data as properties of your assets. These may be static data, time-series data from PI Server(s), or information from other data sources such as relational databases. You can also apply calculations or rules to the asset properties and determine how results should be displayed.

PI AF supports a wide range of data types and objects including PI Event Frames™. With PI Event Frames, you can search and analyze your data in terms of meaningful events that have start and end times and other attributes. You define the events and their properties to track the events important to your business. PI Event Frames is flexible enough to model any event you have, such as downtimes, startups, batches, grades, environmental events and more. Furthermore, individual assets in PI AF can be organized and regrouped allowing multiple presentations of data. Since PI AF data is always in context and easy to find, you spend more time using the information and less time hunting for it.



*Easily build a PI AF structure that accurately reflects your assets using templates then organize and connect your asset attributes to your data sources.*

## Technical Components

**PI AF Server:** The PI AF Server consists of an application service and a SQL database. PI AF supports Microsoft® SQL 2005 or higher including Express, Standard, Enterprise, Business Intelligence and Data Center editions. PI AF also supports SQL mirroring and clustering configurations.

**PI System Explorer™:** PI System Explorer is an included tool that allows you to create, configure and manage your PI AF asset structures and processes. In addition, you can use PI System Explorer to run analyses or work with PI AF objects including PI Event Frames.

**PI AF Builder™:** This Microsoft Excel® based tool allows you to configure PI AF objects such as elements, attributes and event frames in bulk using the familiar Excel user interface.

## PI AF Software Development Kit

**(PI AF SDK™):** Developers can use the PI AF SDK, available through OSIsoft vCampus, to tailor PI AF for their organization's exact needs. This SDK allows you to directly access all PI AF objects and PI Server data. The PI AF SDK and OSIsoft vCampus provide comprehensive reference materials to lead developers through the programming experience.

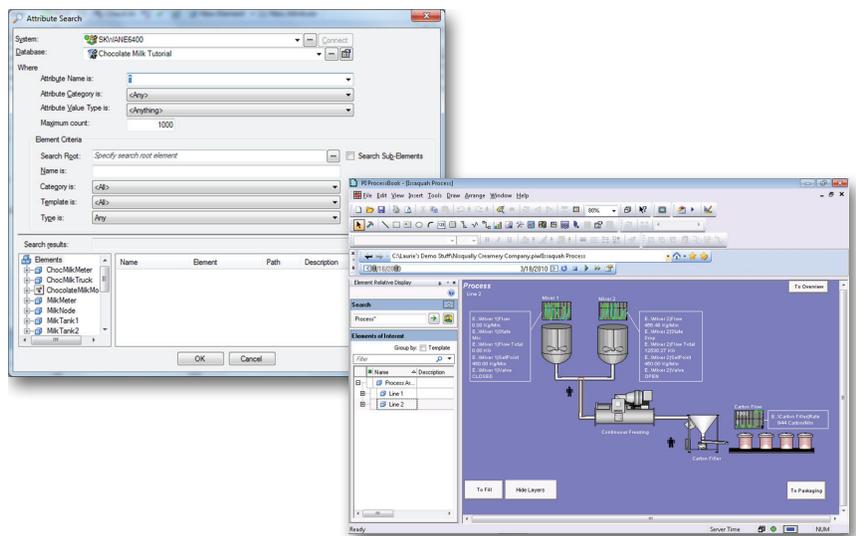
## Benefits

**Enhance data comprehension** by assigning context to data. Asset centric views presented through PI AF combined with event contexts from PI Event Frames make data more meaningful and relevant to information workers.

**Improve data management** by using a common, easy-to-navigate, infrastructure for accessing data, naming assets and defining processes that apply across your entire operation – be it a single plant or a multi-site enterprise.

**Implement standards** across the enterprise by using templates to define models, assets, events, processes, calculations and more.

**Fully leverage your information** through the PI System™ visualization tools which integrate with PI AF. With PI AF success is shared as the same displays can be used across your organization to compare all similar assets without needing to recreate the display for each new asset. This integration also makes it easy for your users to view related information and gain further insight into existing assets, processes and more.



*PI AF allows users to quickly and efficiently navigate to or search for the information they need while exposing this rich context to PI System client tools, enabling faster utilization and better comprehension of the data.*

## About OSIsoft, LLC

OSIsoft (www.osisoft.com) delivers the PI System, the industry standard in enterprise infrastructure, for management of real-time data and events. With installations in 110 countries spanning the globe, the PI System is used in manufacturing, energy, utilities, life sciences, data centers, facilities and the process industries. This global installed base relies upon the PI System to safeguard data and deliver enterprise-wide visibility into operational, manufacturing and business data. The PI System enables users to manage assets, mitigate risks, comply with regulations, improve processes, drive innovation, make business decisions in real-time and to identify competitive business and market opportunities. Founded in 1980, OSIsoft is headquartered in San Leandro, California, with operations worldwide and is privately held.

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