

The OSIsoft Marketplace

Your next transformation, one click away.

The image displays two screenshots from the OSIsoft Marketplace. The left screenshot shows the 'Welcome to OSIsoft Marketplace' page with a sidebar for navigation and a grid of solution cards. The right screenshot shows the 'Process Plugins Suite of Performance and CBM Apps' page, featuring an introduction, business impact, and a preview of the dashboard.

Welcome to OSIsoft Marketplace
Discover partner solutions to help accelerate your digital transformation.

Process Plugins Suite of Performance and CBM Apps
Process Innovations Inc.
LEARN MORE REQUEST A DEMO

Introduction
Process Plugins is a simple App Platform (on premise or cloud) built on the OSIsoft PI System infrastructure which allows customers to achieve operational excellence through asset based prediction and optimization. Web browser-based dashboard, analytics and alerts enable quick identification of problems and rapid path to resolution. Achieve Operational Excellence by decreasing maintenance/energy costs, while increasing availability and safety. Simple – Easy Web browser-based applications enable users to quickly identify problems so you can take action now. Smart – asset optimization using advanced condition based monitoring algorithms leveraging a comprehensive view of plant data. How does it work? One-stop shopping web browser-based App Platform leverages seamless integration of asset data from OSIsoft PI System for prediction and analytics. Process Plugins provides asset based reliability, safety and energy solutions with at-a-glance visibility across a plant or enterprise to allow customers to quickly drill down to root cause and take action on problems before they become serious. The Dashboard App easily interfaces to modern OSIsoft PI Systems using PI Asset Framework (AF). Once deployed, the AF templates are used to create instantly launched dashboards.

Business Impact
With reduced staffing and an aging workforce it is important to have modern easy to use tools that capture the knowledge of the workforce in a known platform that is familiar to the workforce. With the Process Plugins Apps contained completely within the OSIsoft foundation there is a minimal learning curve to understanding the condition and performance of your assets. In combination with our ERP and Work management connectors that work with the PI Notifications this allows the asset to issue their own work orders when they need help. Process Plugins increase the value of your OSIsoft software investment with actionable information configured for easy visualization and use by the workforce. Performance optimization and condition knowledge converts into savings for your operation.

<https://partners.osisoft.com/solutions/solution/163/process-plugins-suite-of-performance-and-cbm-apps>



Leveraging the OSIsoft Infrastructure for End to End Asset Management

Presented by **Joe Devine**
Ken Potter



Agenda

- Process Innovations and Process Plugins Overview
- Understand business drivers for using OSIsoft technology
- General overview of an End to End Solution
- Demo
- Questions



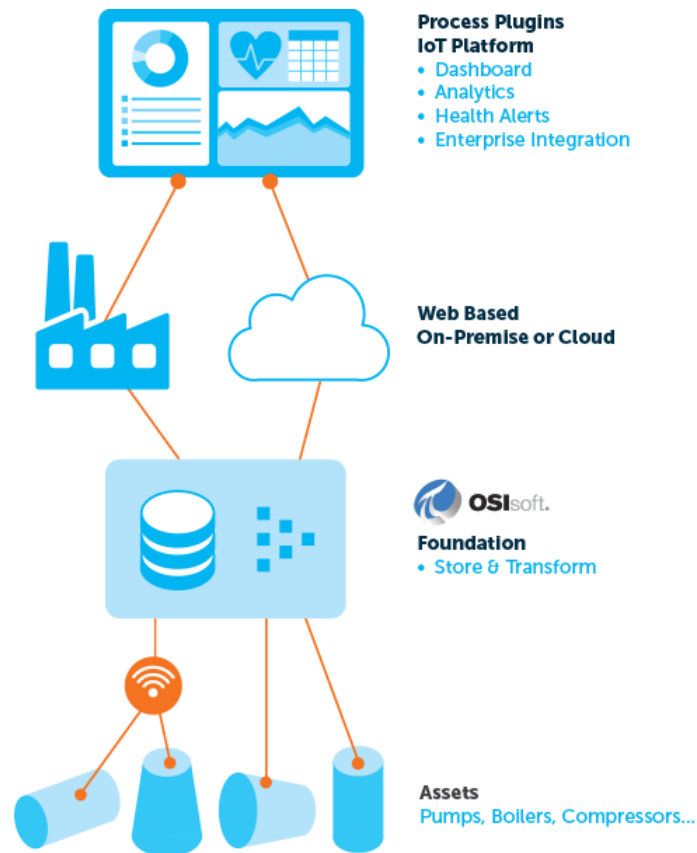
Process Innovations and Process Plugins

- OSIsoft Partner for more than 14 years
- Incorporated to provide services and products based on the OSIsoft infrastructure software
- Process Plugins has over 50 preconfigured asset solutions beyond the combined cycle plant in our demo.



Process Plugins Overview

Asset performance and
Condition Monitoring for
More than 50 asset types
All in AF



Leveraging the pervasive OSIsoft foundation, Process Plugins provides easy analytics and enterprise integration.

Business Drivers

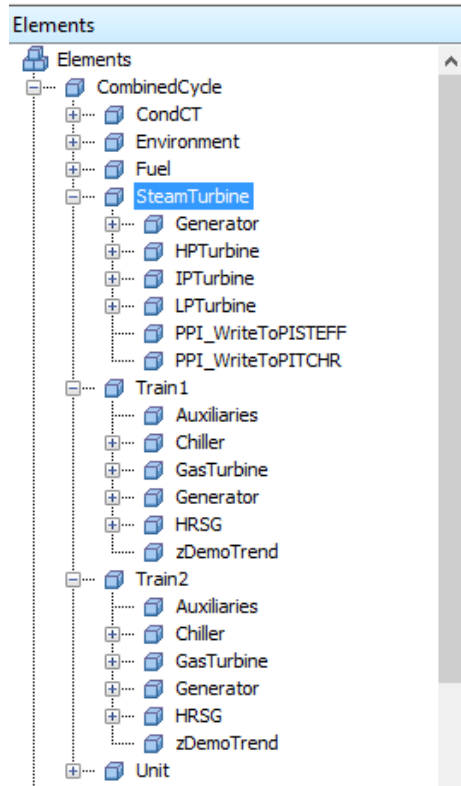
- OSIsoft infrastructure software already in place at most customer sites.
- Cloud options for those sites without onsite systems leveraging Connected Services
- Minimize custom work and programming by taking advantage of the infrastructure
 - Asset Framework (AF)
 - Data Archive
 - Asset Analytics
 - PI Visualization
 - Notifications



Task List

- Build the monitoring and overall condition calculations in the Asset Framework to take advantage of that underlying technology.
- Build visualization in tools that users are already familiar with so no need to learn a new set of tools. PI ProcessBook®, PI Coresight™, PI DataLink®
- Make sure the monitoring and calculations contains enough hooks and triggers to allow the asset to notify employees of possible problems. The asset needs to tell you when there is a need for attention.
- Build Notifications from the hooks and triggers for notification via email as a minimum.
- For true automation for tasks add a connector to the Maintenance Management system (CMMS) so the asset can issue work orders for itself.
- Once you have the connector to the CMMS then you can setup run timers for condition based maintenance along with those that are triggered by the asset for urgent work.

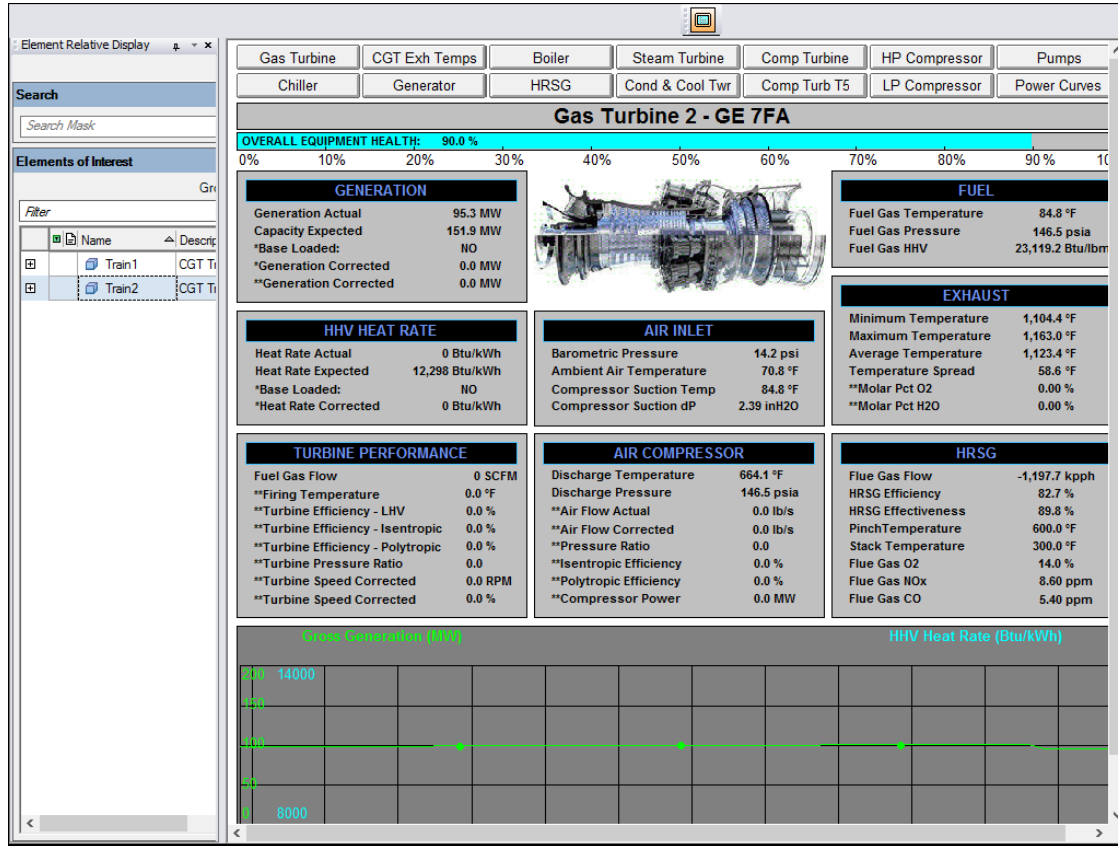
Asset Framework Monitoring



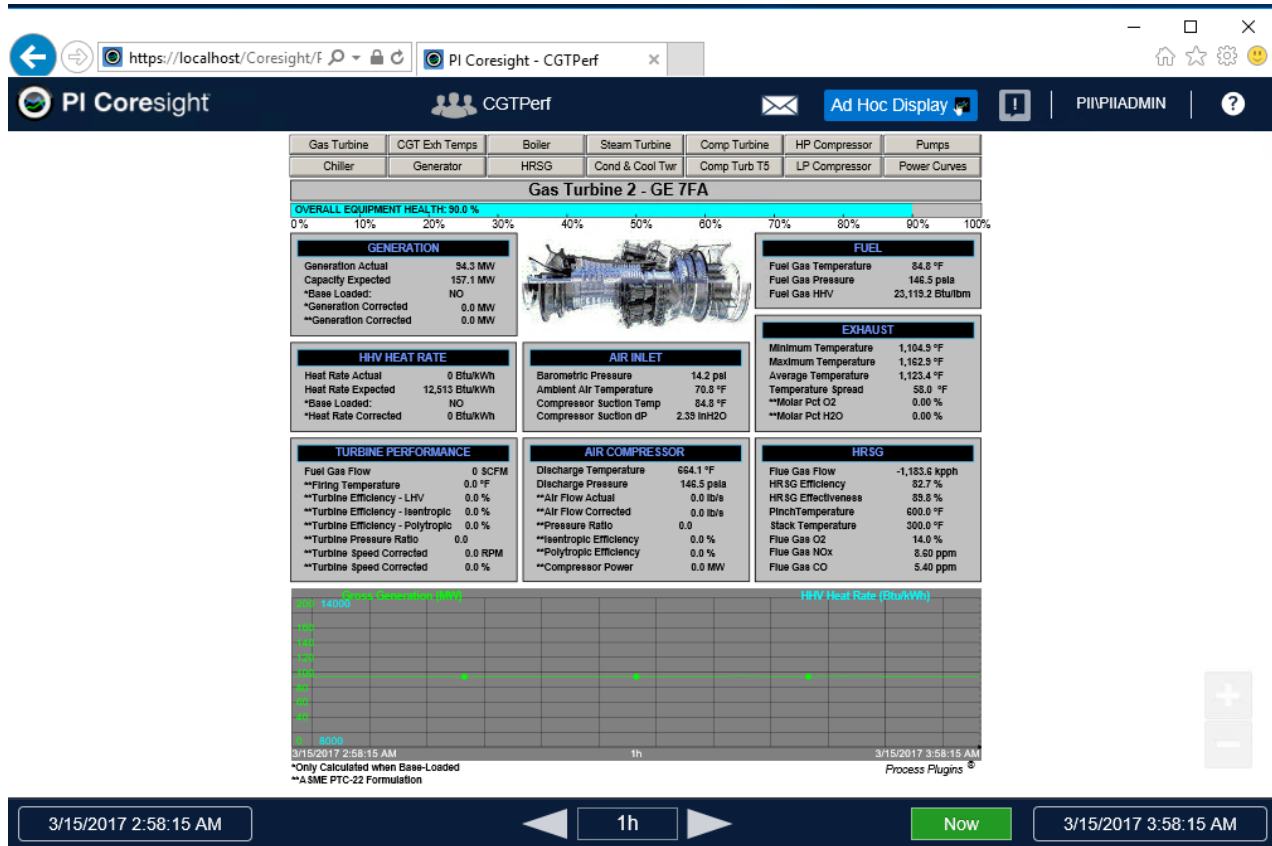
The screenshot shows the 'Formula Configuration: (EfficiencyOverall)' dialog box. It has two main sections: 'Parameters' and 'Equations'. The 'Parameters' section lists the following variables: A=.\HPTurbine\Performance\Efficiency, B=.\HPTurbine\Performance\Power, C=.\IPTurbine\Performance\Efficiency, D=.\IPTurbine\Performance\Power, E=.\LPTurbine\Performance\Efficiency, and F=.\LPTurbine\Performance\Power. The 'Equations' section contains the formula:
$$\text{if } (B+D+F) \text{ then } ((A*B+C*D+E*F)/(B+D+F)) \text{ else } 0$$
. Below the equations, there is a checkbox for 'Default Values Allowed'. The 'Result' section shows 'UOM:' set to '%', and fields for 'Minimum:' and 'Maximum:'. There is also a 'Stepped' checkbox. At the bottom, there is an 'Evaluate' button and a text input field. The 'OK' and 'Cancel' buttons are at the bottom right.

Apply calculations in AF formula whenever Possible to eliminate “Black Box”

OSIsoft Visualization



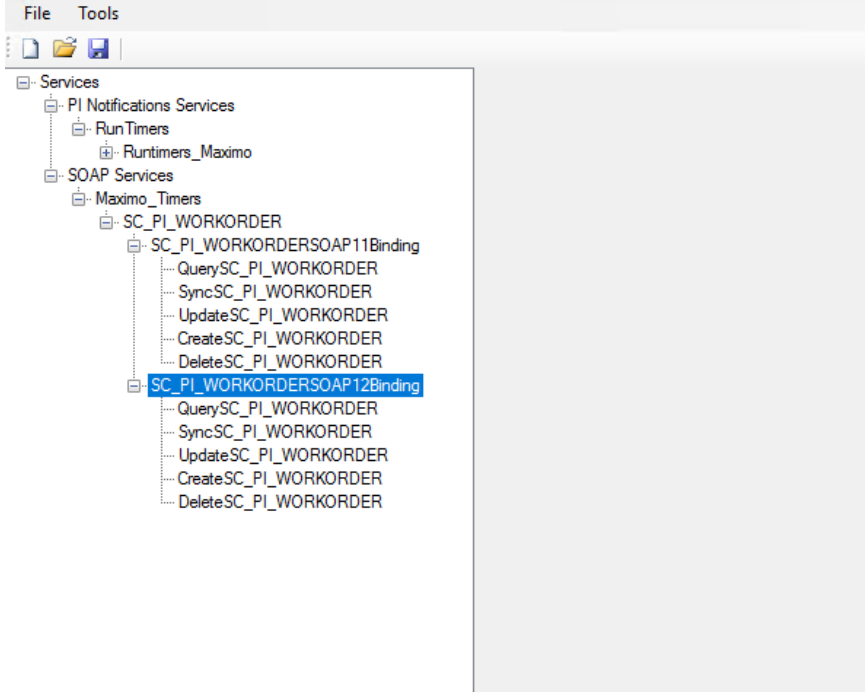
OSIsoft Visualization



Create Connector for CMMS

ppi_demo - Remote Desktop Connection

Notifications Connector Config Util



Import the primary CMMS
Web Service WSDL for Example
Maximo

Generate a new Web Service for Notifications

ppi_demo - Remote Desktop Connection

\\PPI-DEMO\PPI_Demo - PI System Explorer (Administrator)

File View Go Tools Help

Database Query Date Back Check In Refresh

Contacts

New Search contacts

- Contacts
- Escalation Teams
- Groups
- Delivery Endpoints
 - RunTimers
- PIIADMIN

RunTimers

Name: RunTimers

Description: Run Timers to Maximo

Contact Options

Retry interval: 0 Seconds

Maximum Retries: 0

Delivery channel: Webservice

Web Service Configuration

Web Service Address: http://localhost:9090/Runtimers_Maximo

Web Service: Runtimers_Maximo

Web Method: UpdateSC_PI_WORKORDER

Get Web Services

Parameter	Value	Value T...
creationDateTime		System...
creationDateTimeSpecified		System...
baseLanguage		System...

Create a new
Delivery End Point
For Notifications

Demo Combined Cycle Power Plant



For more solutions and Apps visit <https://www.ProcessPlugins.com>



PRODUCT APPS

ASSET CLASS

- All (16)
- Boiler (7)
- Boiler/Air Heater (2)
- Chiller (1)
- Coal Plant (5)
- Coking (1)
- Combined Cycle ALL (12)
- Combined Cycle Detailed Model (1)
- Combined Cycle Detailed Model 2 (1)
- Compressor (3)
- Fuel Gas (1)
- Gas Midstream (1)
- Gas Turbine (8)
- Generator (3)
- Heater (1)
- HRSG (1)
- Maintenance Management (3)
- Power Generation (8)
- Pulp Line (1)
- Pump (3)

Sort All

Asset

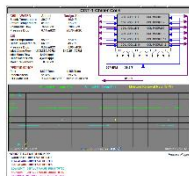


Search

Search

Reset

59 Apps Available



Process Plugins Chiller Performance Monitor & Advisor

Asset Class: Chiller

Industry: All

Chiller Performance Monitor & Advisor.



Process Plugins Fuel Gas Orifice Metering Flowrate

Asset Class: Fuel Gas

Industry: Combined Cycle Plant

Fuel Gas Orifice Metering Flowrate.

Questions

Please wait for the **microphone** before asking your questions



State your **name & company**

Please remember to...

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for this session

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감사합니다

谢谢

Danke

Merci

Gracias

Thank You

ありがとう

Спасибо

Obrigado

