PI Server 2014

Unleash Your Infrastructure

Presented by **Stephen Kwan, OSIsoft Product Manager**

Agenda

1. PI Server Basics:
   - What is an infrastructure?
   - What is the PI Server's role?
   - What is included with the PI Server?
2. Tags vs. Assets
   - Value from both approaches
   - High value features driven by assets
   - Future investment is in assets
3. Asset-Based Analytics
   - What is new in PI Server 2014?
   - The value of PI Server 2014 and our Asset-Based Analytics capabilities
   - What do I do next?

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1.

PI Server Basics

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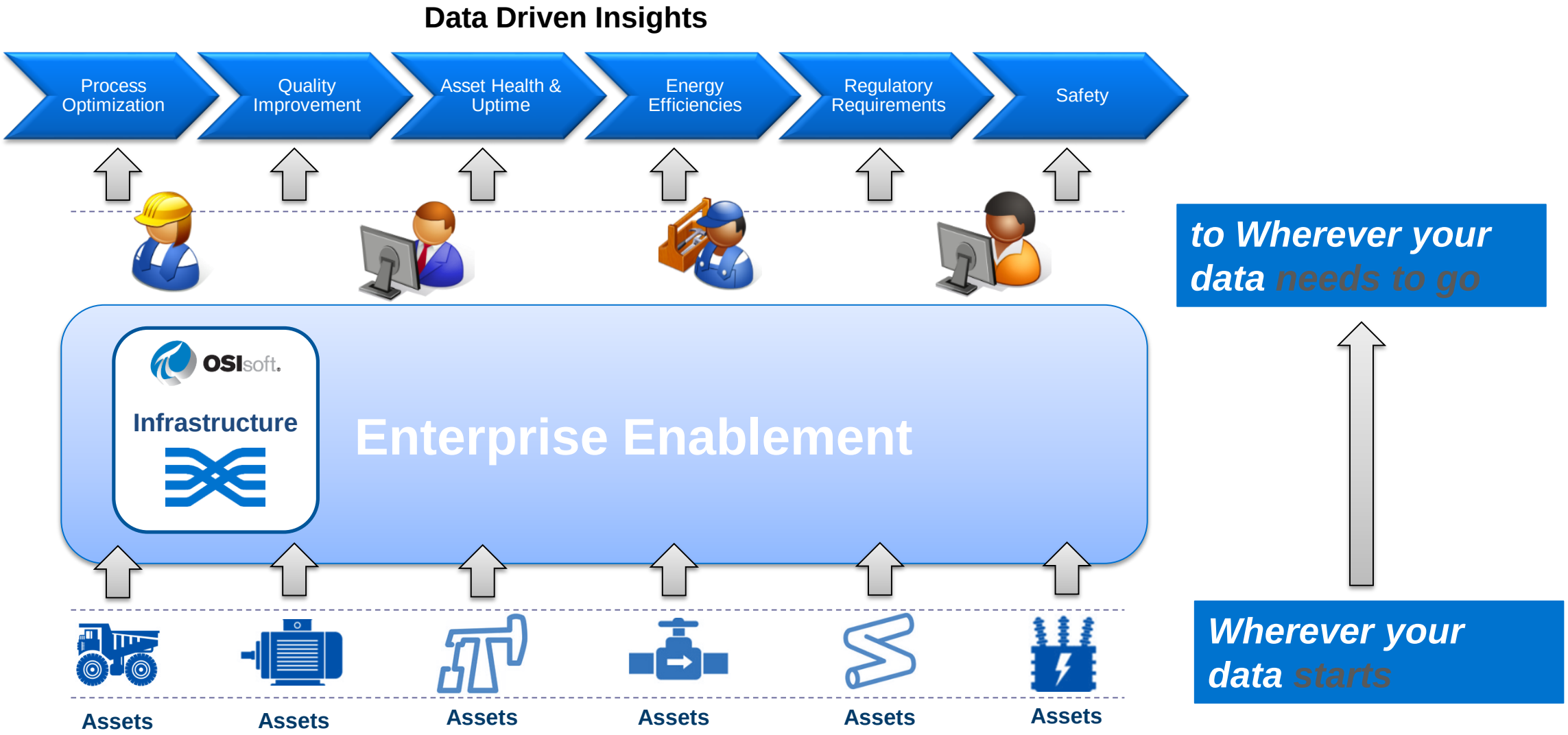
An Enterprise Infrastructure



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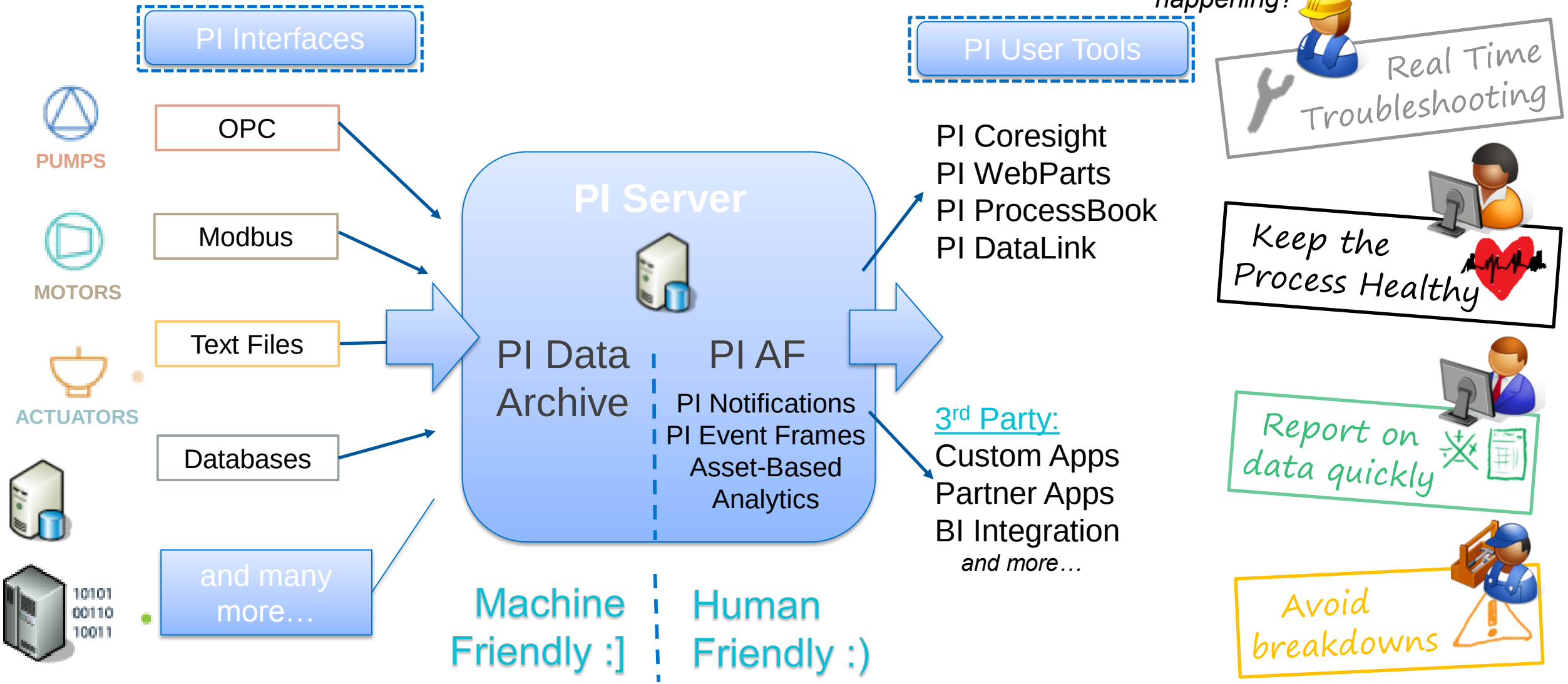
What is part of our Infrastructure…



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The PI System is in many industries

Power & Utilities

OSIsoft is ranked **1st** in the power industry

Oil & Gas

100% of the global Top 10 producers

Chemicals & Petrochemicals

40 of top 50 Chemical Companies

Materials, Mines, Metals & Metallurgy

Installed in the world's **largest** mining companies

Pharmaceuticals, Food & Life Sciences

9 of the Top 10 pharmaceuticals

Pulp & Paper

400 sites from worldwide leaders

Critical Facilities, Data Centers & IT

Innovative uses to monitor complex IT environments

Developing Markets

Health care, Machine to Machine, Automotive, Semi Conductors

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What's included in PI Server 2014

- **Time Series Data Storage**
  - PI Data Archive
- **Contextual, Organize and Find**
  - PI Asset Framework (PI AF)

- **Mark Important Events**
  - PI Event Frames
- **Notify Based on Conditions**
  - PI Notifications

- **Analytics and Event Generation**
  - Asset-Based Analytics
  - PI ACE (Advanced Computing Engine)
  - PI Performance Equations
  - PI Totalizers

- **System Management**
  - PI System Management Tool
  - PI Interfaces for System Management

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2.

Tags vs. Assets

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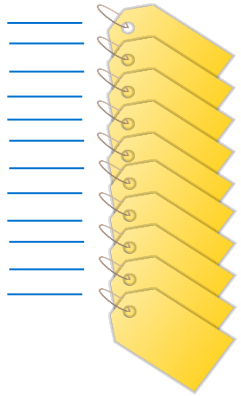
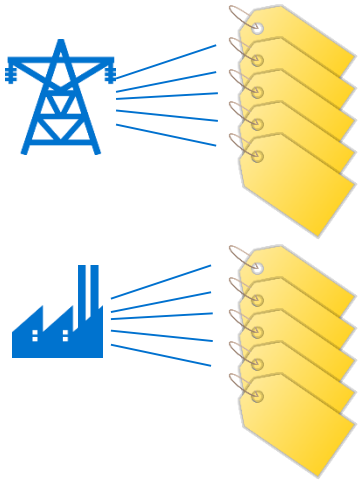
Both approaches add value

Tag Centric



- Named by **Control System point names**
- Traditional method of data collection
- Leverage historical knowledge built around tags
- Simple deployment



Asset Centric

- Named by **Asset & Property**
- Organize your assets hierarchically, categorically, or by a particular grouping
- Standardize and build templates to help create a uniform way to compare assets
- Helps scale your system

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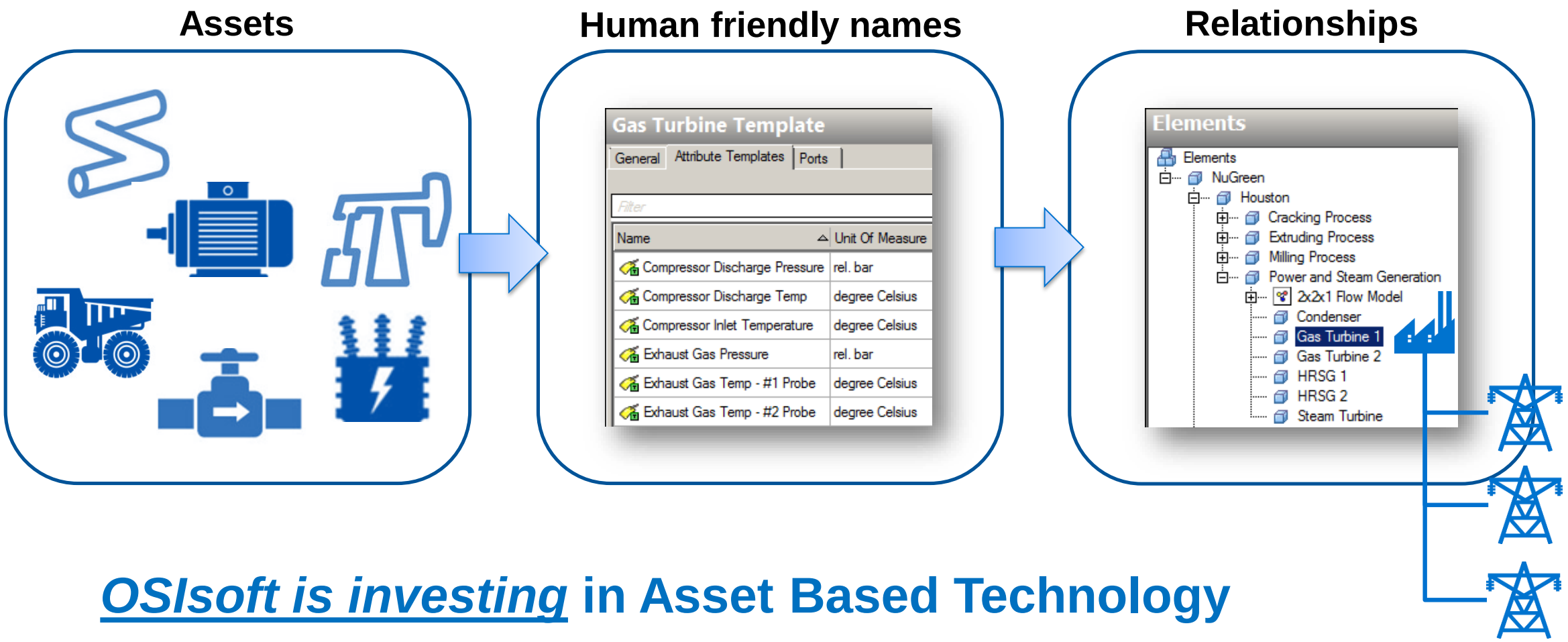
An asset-based approach has many benefits



OSIsoft is investing **in Asset Based Technology**

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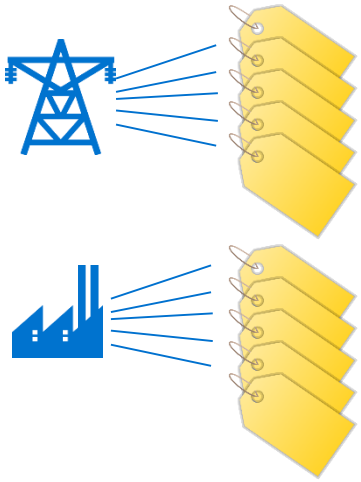
Many high value PI Server 2014 features rely on assets

Tag Centric

- Classic Historian
- Supports over 400+ Interfaces

Asset Centric



- Classic Historian
- Supports over 400+ Interfaces
- PI Asset Framework
- PI Event Frames
- PI Notifications
- Asset-Based Analytics

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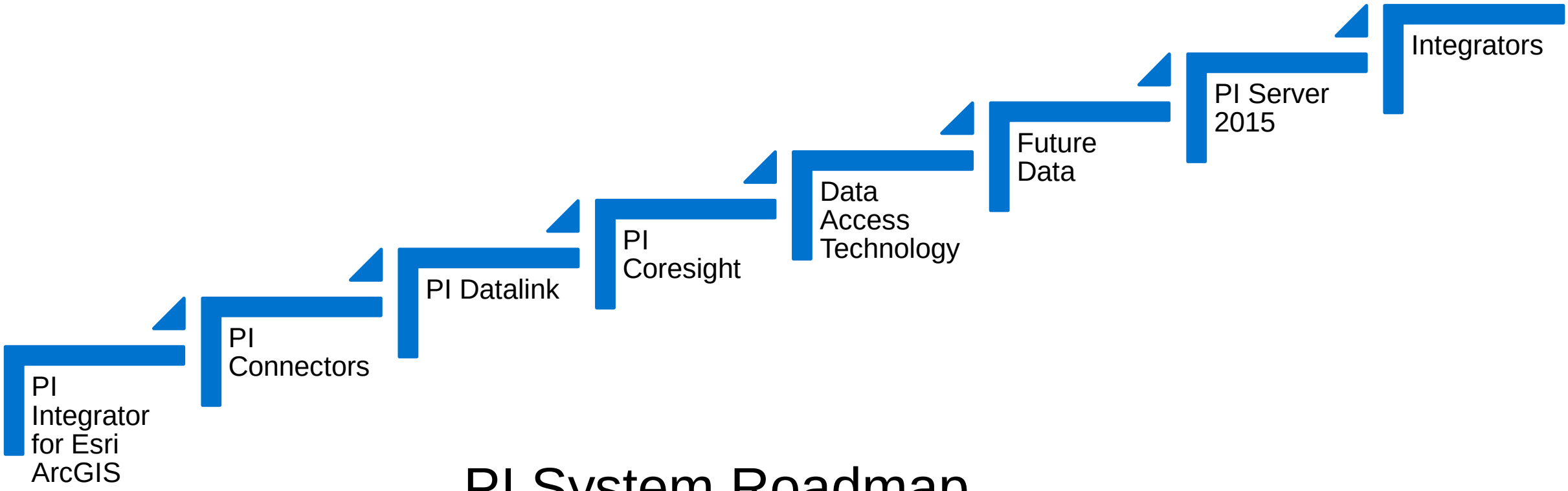
Future OSIsoft technologies are based on assets



PI System Roadmap

https://techsupport.osisoft.com/Products/Product-Roadmap

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3.

New in PI Server 2014

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Asset-Based Analytics

- Easy – empower users to build their own calculations
- Standardize and Reuse
  - Clarity and correctness
- KPIs and Rollups
- Automatic Event marking
- And of course, *Performance and Scalability*

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Performance

- Use Bulk RPCs
- Make One Call instead of Spinning Like a Top

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Performance – Bulk Calls

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Pipe & Cache

- **Pipe Already Holds Interesting Data**
- **Cache Retains Data Client-Side**

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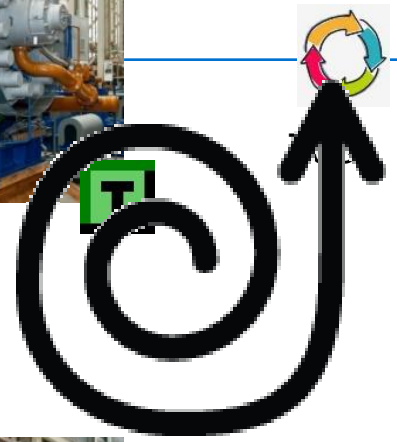
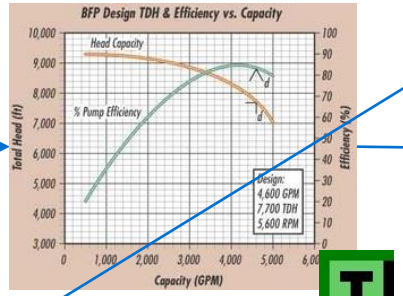
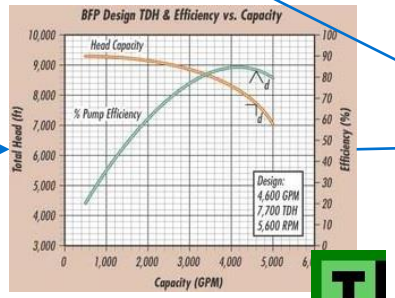
Usage Scenarios



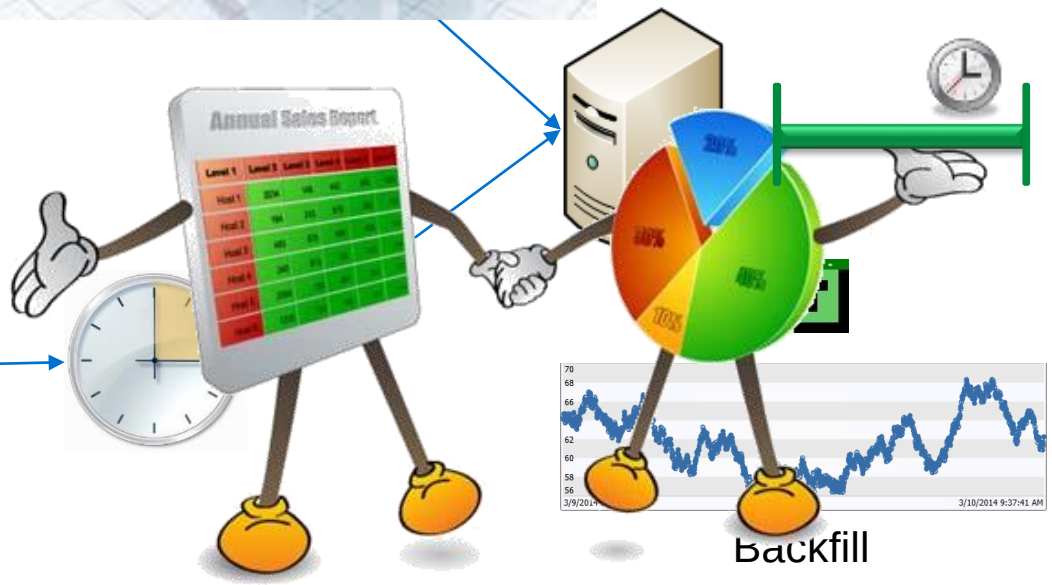


Calculations

Test



Calculations



Backfill

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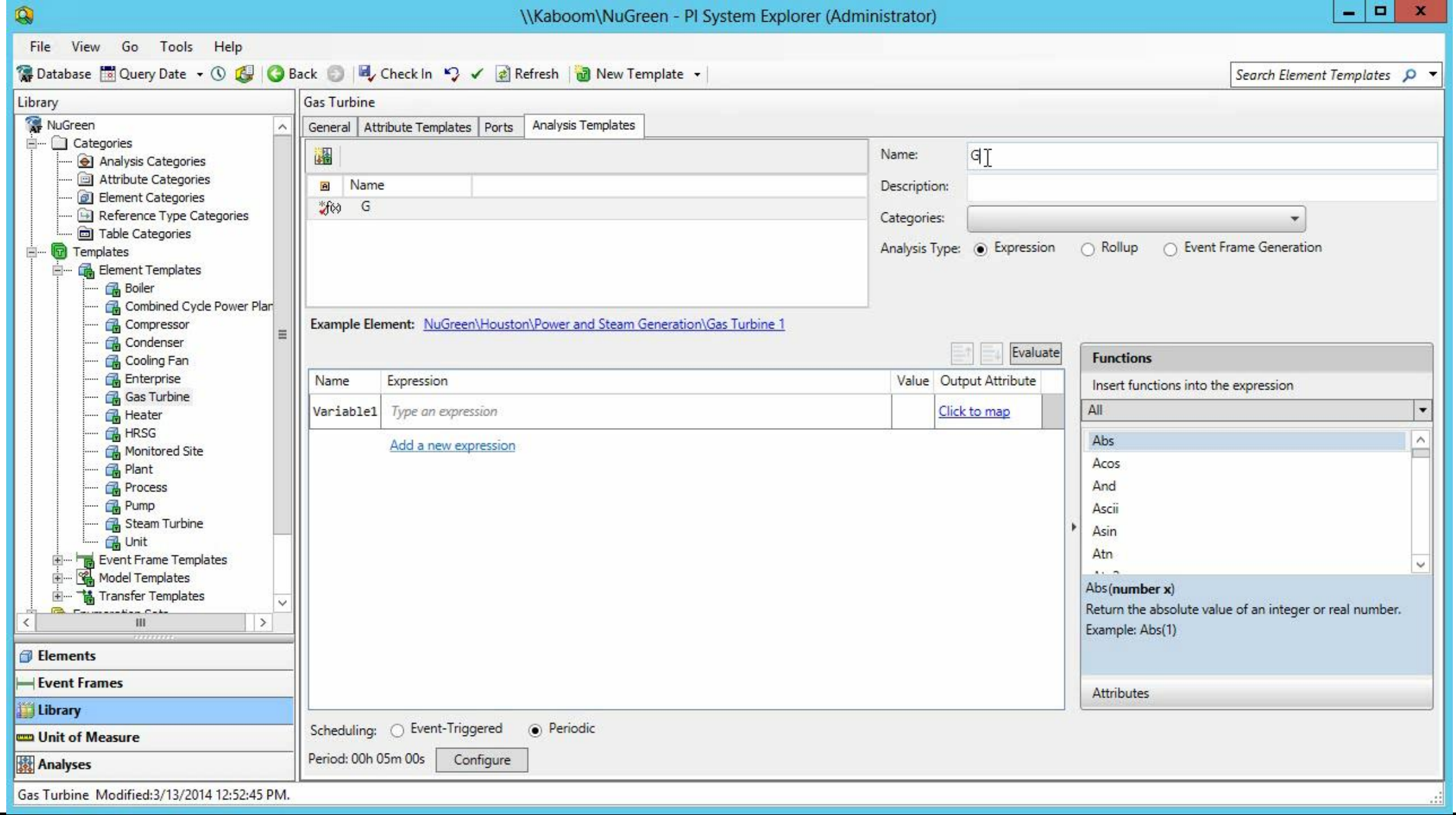

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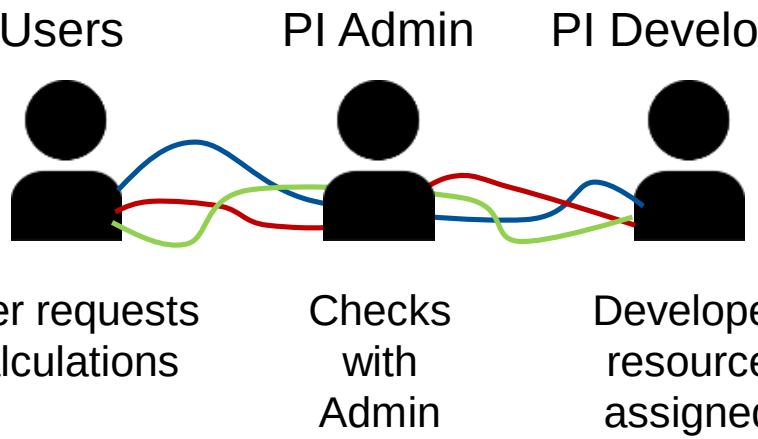
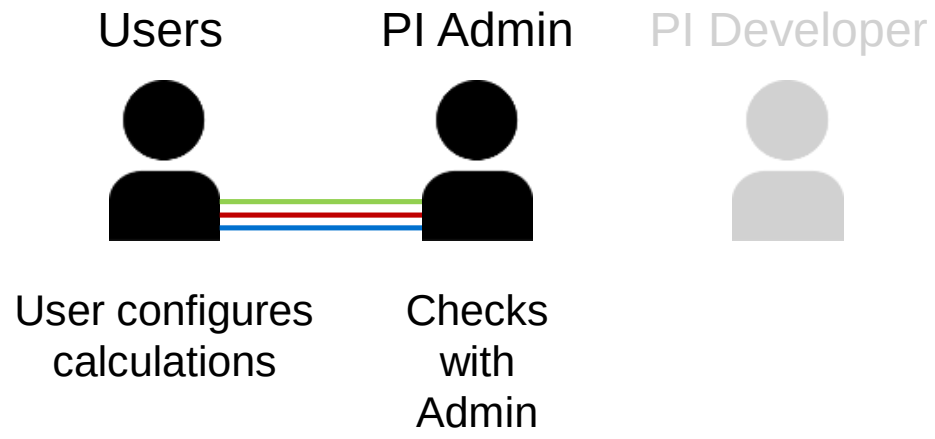
Asset-Based Analytics: Self-Service Analytics

Before



- Slows down time to value
- Numerous interactions, creates complexities

After



- Configure, test and validate – immediate feedback
- Build new assets – templates ensure same calculations in all instances

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Asset-Based Analytics Timeline

- 300+ beta users

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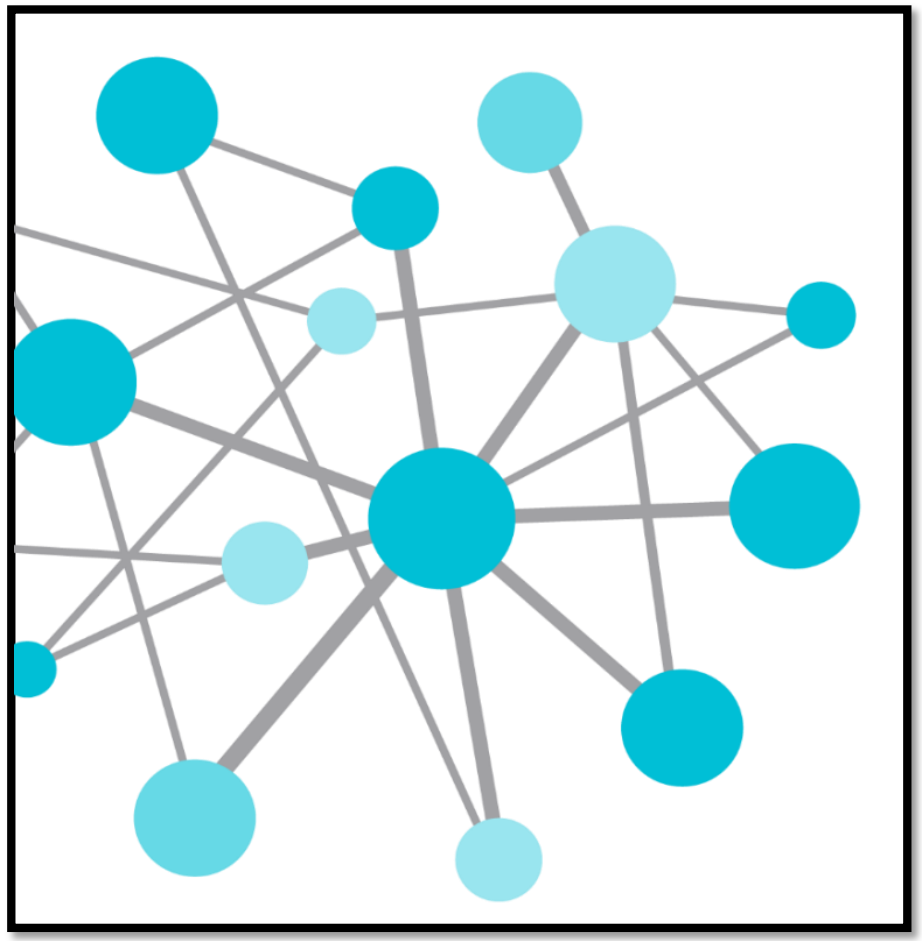
PI Server 2014: How to get it



New Customer?

- ⇨ Talk to you Account Manager
- ⇨ Download and Install

Existing Customer?

- ⇨ Easy Upgrade with current SRP

OSIsoft Learning

- ⇨ OSIsoft Learning Web site
- ⇨ http://learning.osisoft.com

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Thank you

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