



## OSIsoft Product Roadmap 2010

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OSIsoft, LLC

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Empowering Business in Real Time.

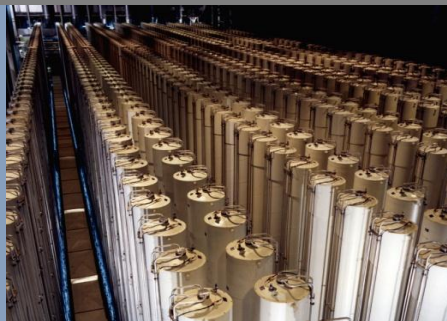
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## What did OSIsoft accomplish in 2009 to help you?



### Security

Critical Facilities  
are Safe



### Asset Centric PI

Define Once  
Use Over and  
Over



### Localization

Use Worldwide



### Scaling, 64 bit

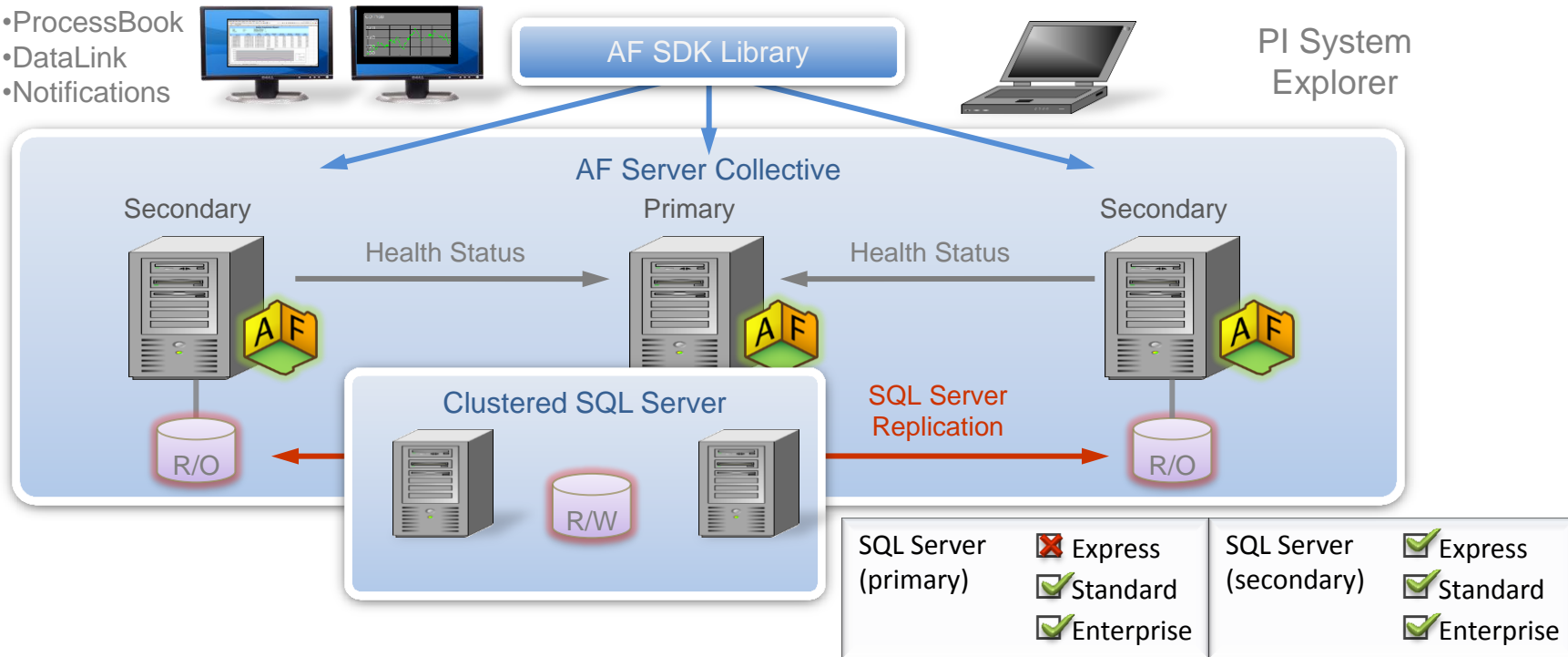
Use PI for more  
data

- PI AF 2.x uses Windows Security since the first release
- The PI Server 3.4.380 can leverage Windows authentication mechanism
- PI Notifications leverages PI AF and PI Server Security

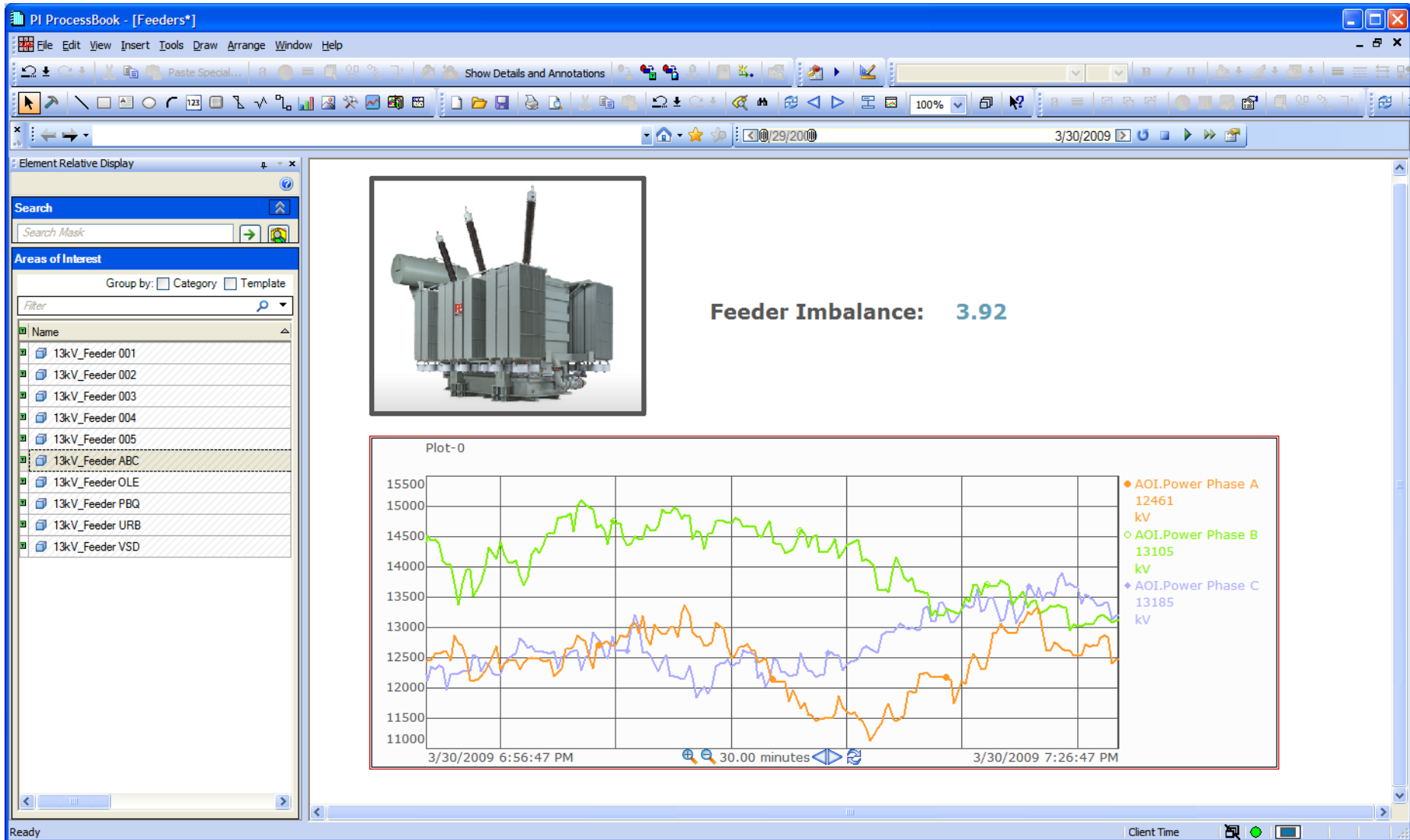


AF-based PI Clients

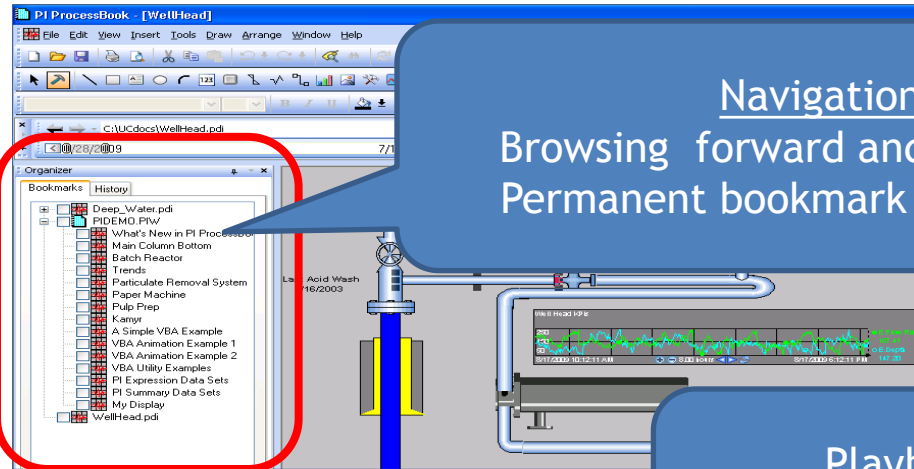
- WebParts
- ProcessBook
- DataLink
- Notifications



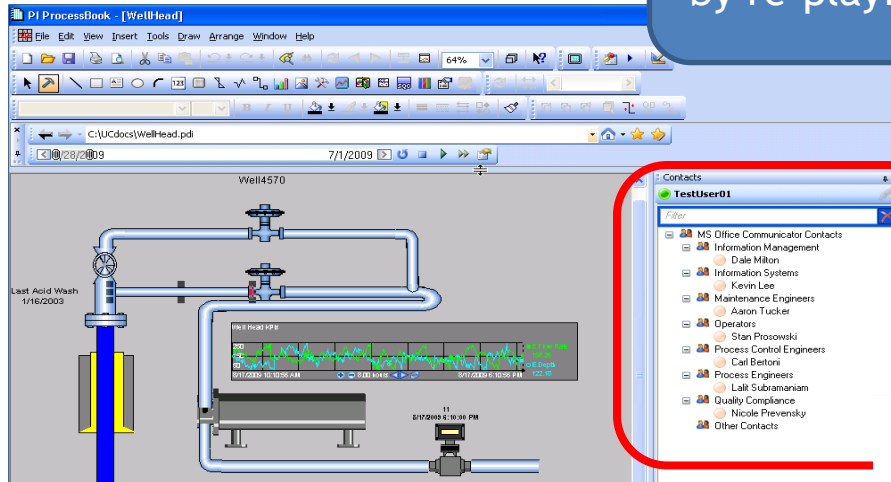
# PI ProcessBook 3.2: Element Relative Displays



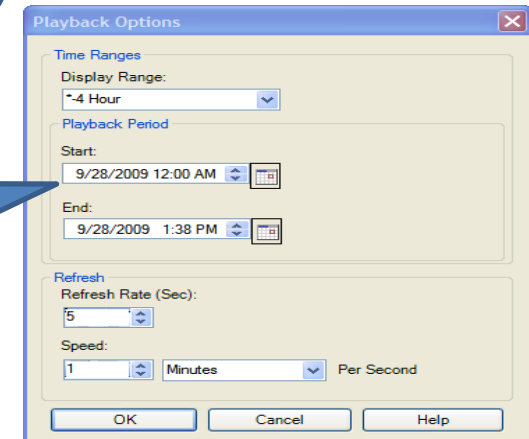
# PI ProcessBook 3.2: Productivity Enhancements



Navigation  
Browsing forward and backwards  
Permanent bookmark of favorites



Playback  
Troubleshoot problems  
by re-playing a display



Communicator  
IM, Email Contacts  
Easily send a PB  
screenshot





**Configure AF Tree View -- Webpage Dialog**

Server: DFP12010RC

Database: Trans DistribuCo

- Trans DistribuCo
  - TransDistribuCo
    - Distribution
      - Assets
        - Eastern District
          - Bighorn Basin
            - Batteries
            - Capacitor
            - Circuit Breaker
            - Load Tap Changer
            - Transformer
              - TR0842
                - TR2003
                  - Bushing Degradation
                  - DGA Alert
                  - Differential Oil Temperature
                  - Elevated Oil Temperature
                  - Low Nitrogen Pressure
                  - LTC2003
                - TR3045
                - TR5620
                - TR9124
              - Gypsy Junction
              - Victory Valley
              - Wolverine
            - Northern District
            - Southern District
            - Western District

Root Node: \\DFP12010RC\Trans DistribuCo\TransDistribuCo

Default Selected Node: \\DFP12010RC\Trans DistribuCo\TransDistribuCo

OK Cancel

**Station Detail - Windows Internet Explorer**

http://transdistco/SitePages/Station%20Detail.aspx

Station Detail

Site Actions Browse Page Paul Kaiser

TransDistribuCo 2010 Portal Station Detail

Welcome to the TransDistribuCo portal!

Home Stations Station Detail Transformer Detail Search this site...

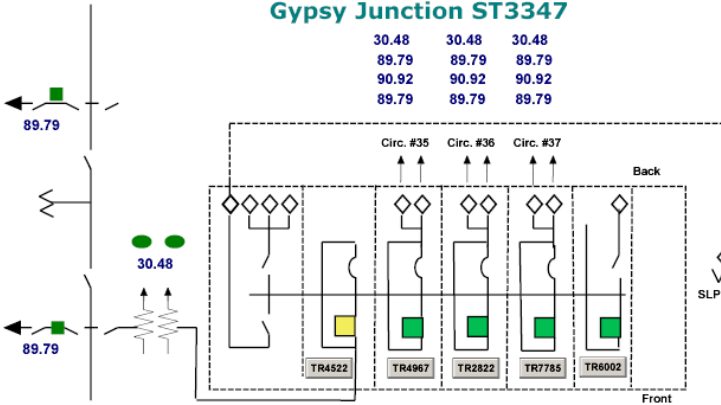
**Stations**

- Eastern District
  - Bighorn Basin
  - Gypsy Junction**
  - Victory Valley
  - Wolverine

**Station Overview**

**Gypsy Junction ST3347**

|       |       |       |
|-------|-------|-------|
| 30.48 | 30.48 | 30.48 |
| 89.79 | 89.79 | 89.79 |
| 90.92 | 90.92 | 90.92 |
| 89.79 | 89.79 | 89.79 |



**Workorders**

| Date                  | Equipment ID | Order Number | Task                 | Task Type              | Assigned To   |
|-----------------------|--------------|--------------|----------------------|------------------------|---------------|
| 2/2/2010 12:00:00 AM  | TR4522       | 2002-1234    | DGA OIL SAMPLE       | Other Maintenance      | Wiggum, Ralph |
| 7/3/2010 12:00:00 AM  | TR4522       | 2002-1234    | N2 SYSTEM REPAIR     | Other Maintenance      | Wiggum, Ralph |
| 4/13/2010 12:00:00 AM | TR4522       | 2002-3957    | N2 SYSTEM REPAIR     | Corrective Maintenance | Wiggum, Ralph |
| 9/5/2010 12:00:00 AM  | TR4522       | 2003-1034    | TCG TEST - MAIN TANK | New Installation       | Krupp, Benny  |
| 7/7/2010 12:00:00 AM  | TR4522       | 2003-1034    | DGA OIL SAMPLE       | Other Maintenance      | Wiggum, Ralph |

Showing 1 to 5 of 13

Done Local intranet | Protected Mode: Off 100%

- **OSIsoft commitment:**
  - 440 interfaces
  - 20 developers in 6 locations
  - Over 150 person years of development
  - 78 Interface releases during the past year
- **PI3 380 Security for ICU and APS**
- **Support for Vista, 2008 Server, 2008 R2 Server, and Windows 7**
- **New Interfaces** (Modus, ABB 800xA Batch, Wonderware InBatch, Honeywell TotalPlant Batch, GE iBatch, Siemens Spectrum Power TG)
- **AMI Head-End Systems** (Trilliant UnitySuite, Silver Spring Networks UtilityIQ, Grid Net PolicyNet, Elster EnergyAxis)
- **Other Interface Development** (ESC StackVision, BACnet, ACS Prism on Linux, REpower OPC DA, UFL)

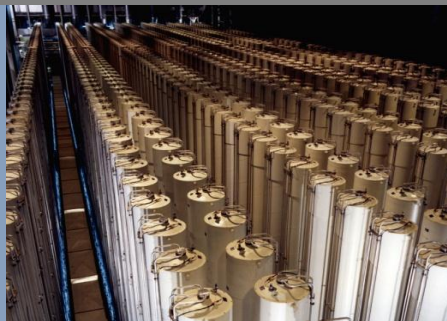


## What did OSIsoft accomplish in 2009 to help you?



### Security

- ✓ PI 380
- ✓ Deployment



### Asset Centric PI

- ✓ PI ProcessBook
- ✓ PI WebParts
- ✓ PI Notifications
- ✓ PI AF HA



### Localization

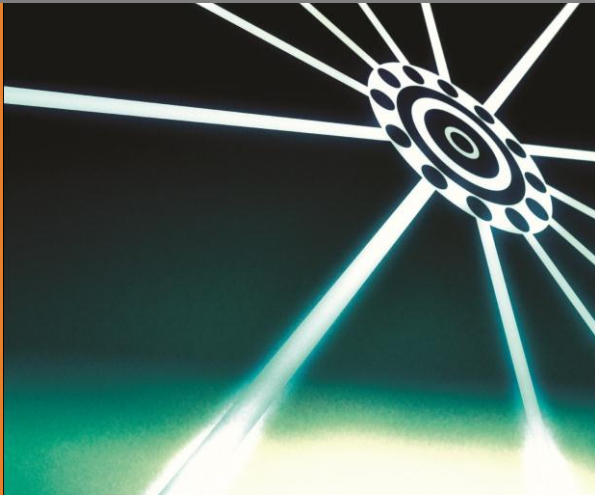
- ✓ 8 languages
- ✓ 5 products
- ✓ 3 planned



### Scaling, 64-bit

- ✓ Servers
- ✓ Data Access
- ✓ Web Access

## What are the benefits of PI System 2010?



### Simple

Easy to get started,  
system grows with you



### Relevant

Delivers the most  
important data to right  
people



### Collaborative

Everyone has access to  
the data, easy to share

# What's New in PI System 2010



## PI Clients

- PI WebParts 2010
- PI DataLink 2010
- PI for Office 2010

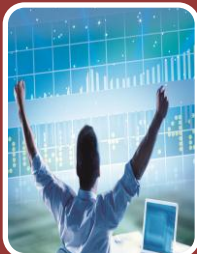
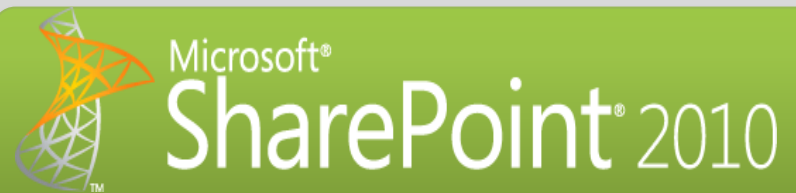
## Business User Experience



## PI Data Access

- PI OLEDB Enterprise 2010
- PI Web Services 2010
- PI JDBC 2010

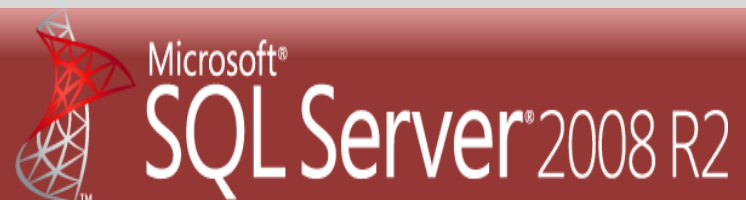
## Business Collaboration Platform

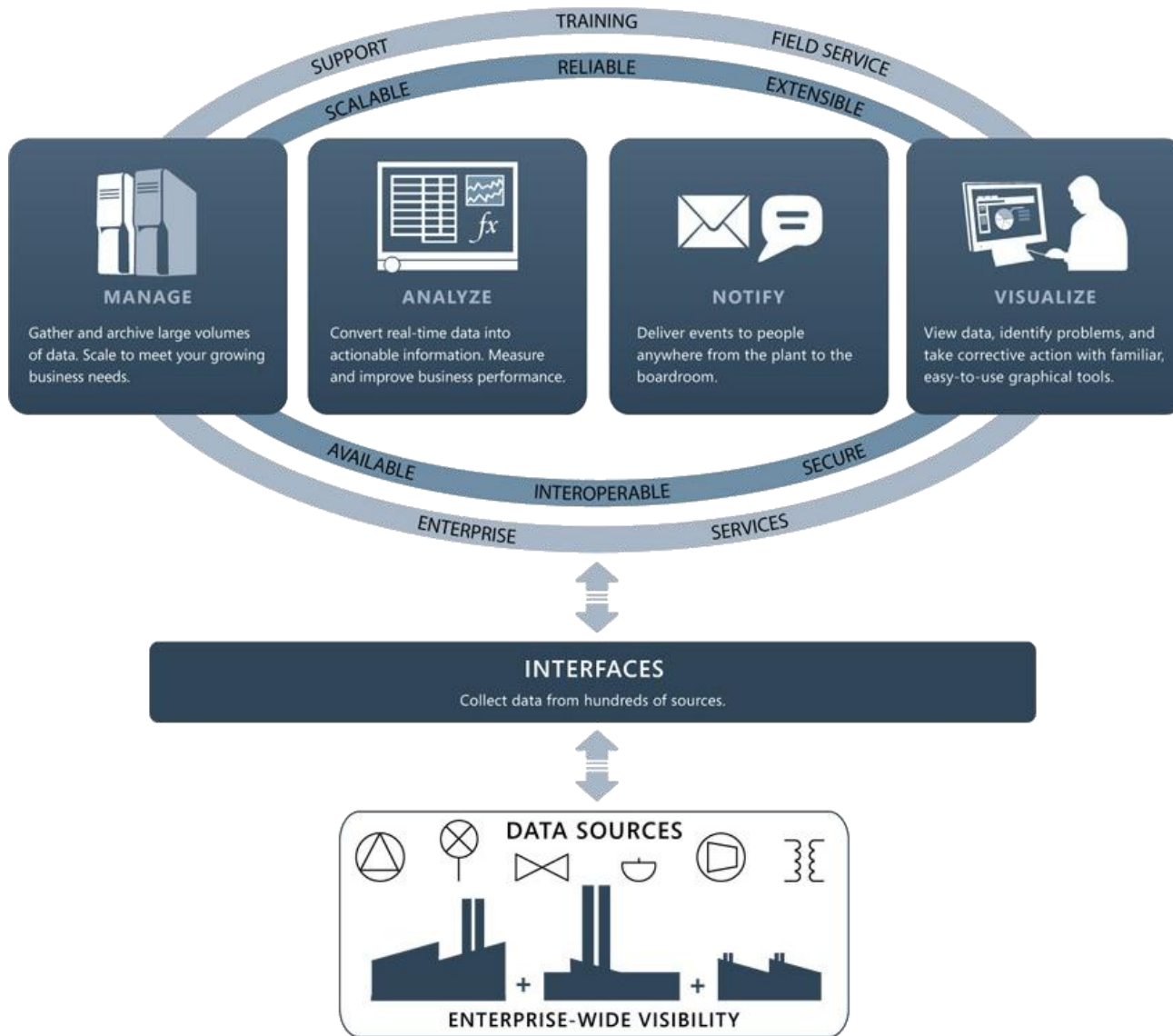


## PI Server

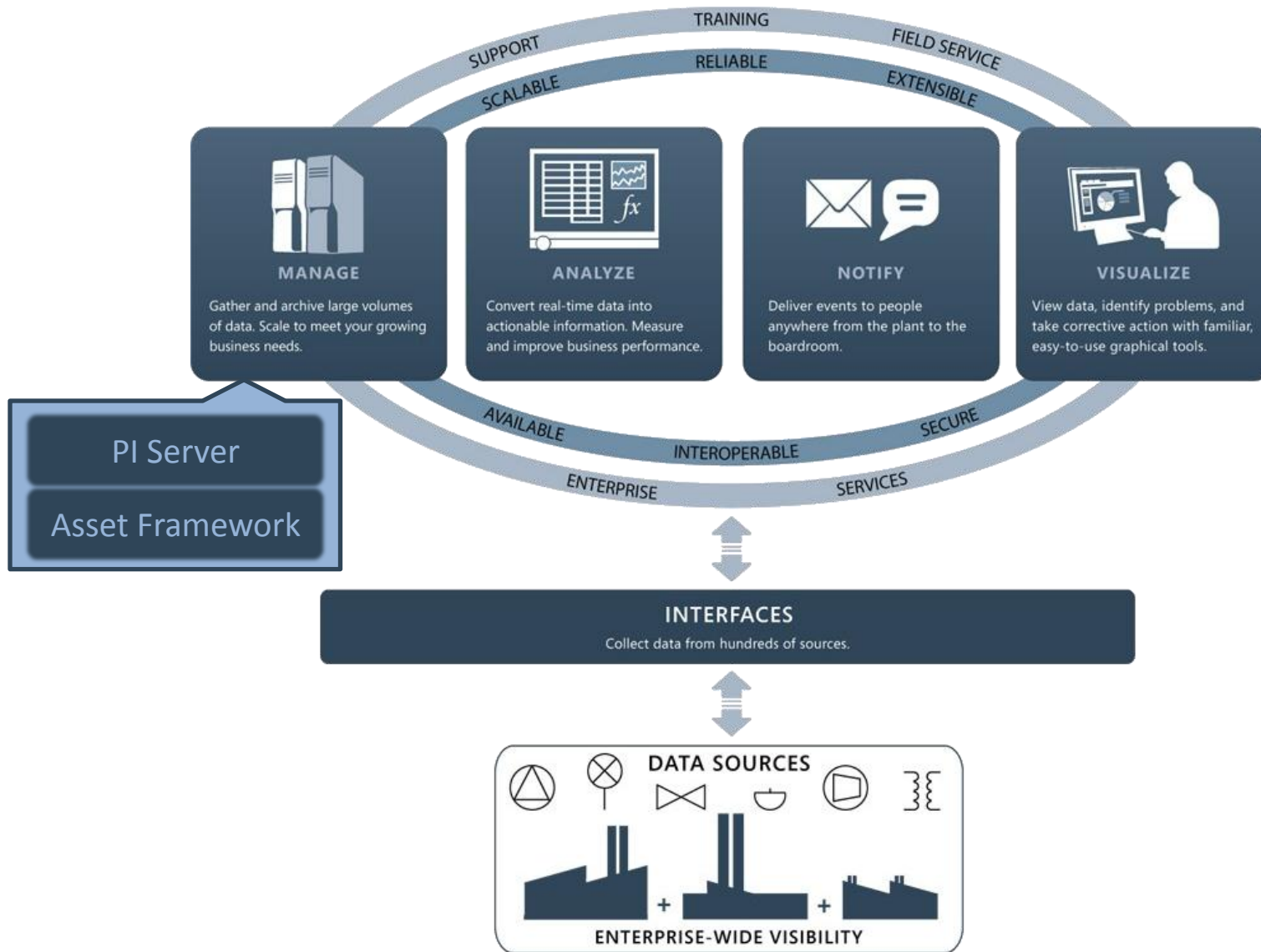
- PI Server 2010
- Assets and Tags
- PI Analytics for StreamInsight

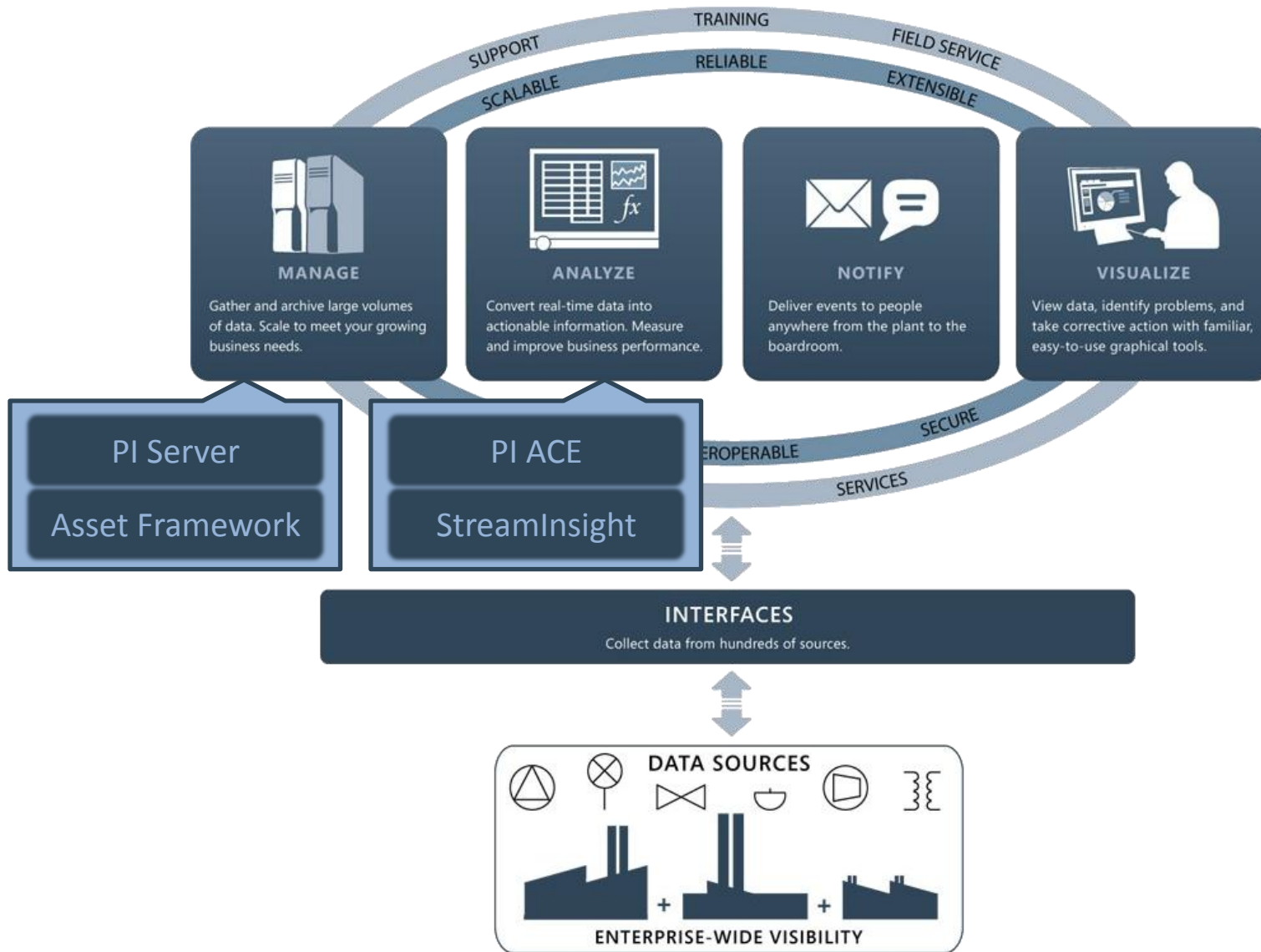
## Data Infrastructure and BI Platform



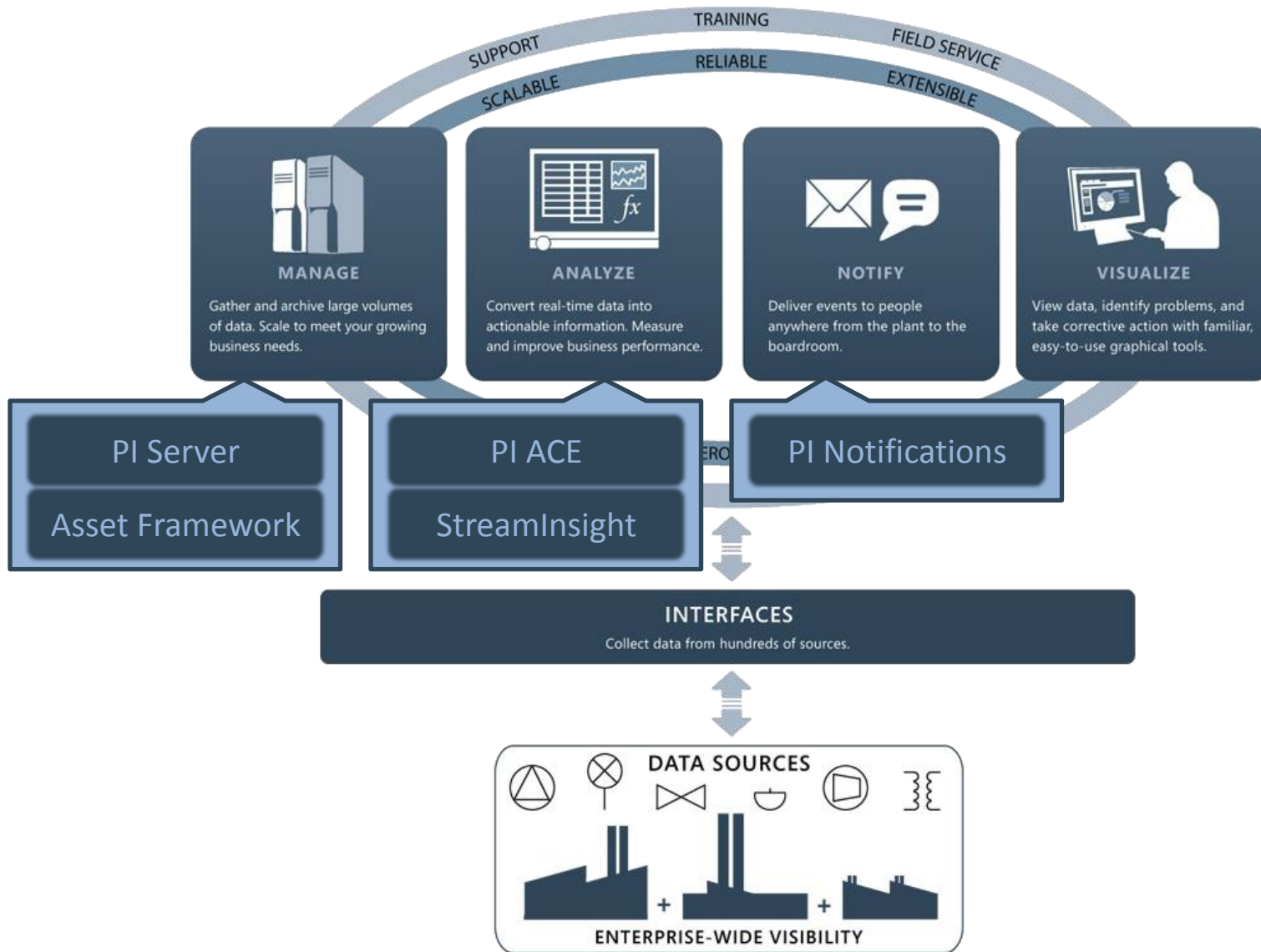


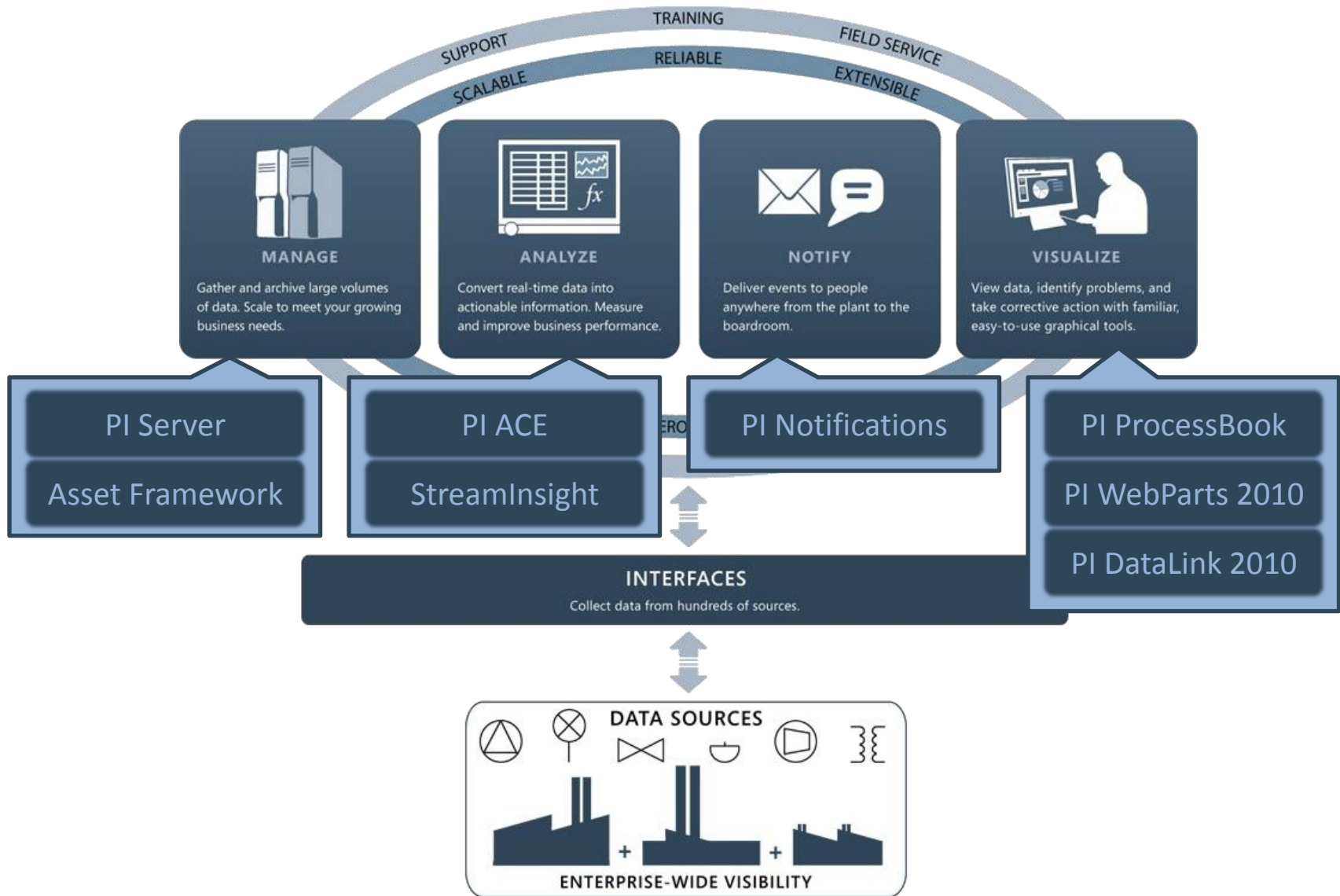


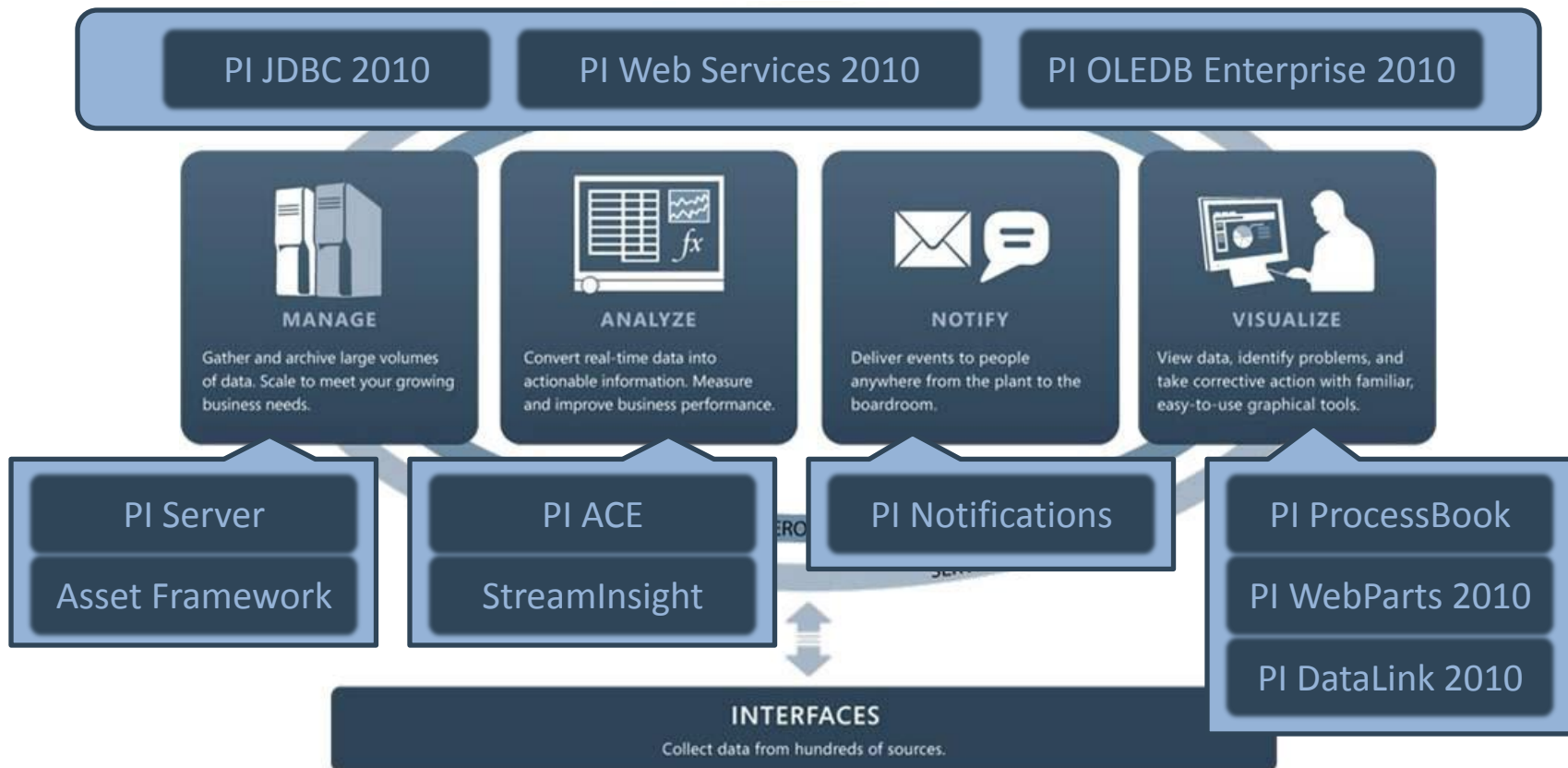


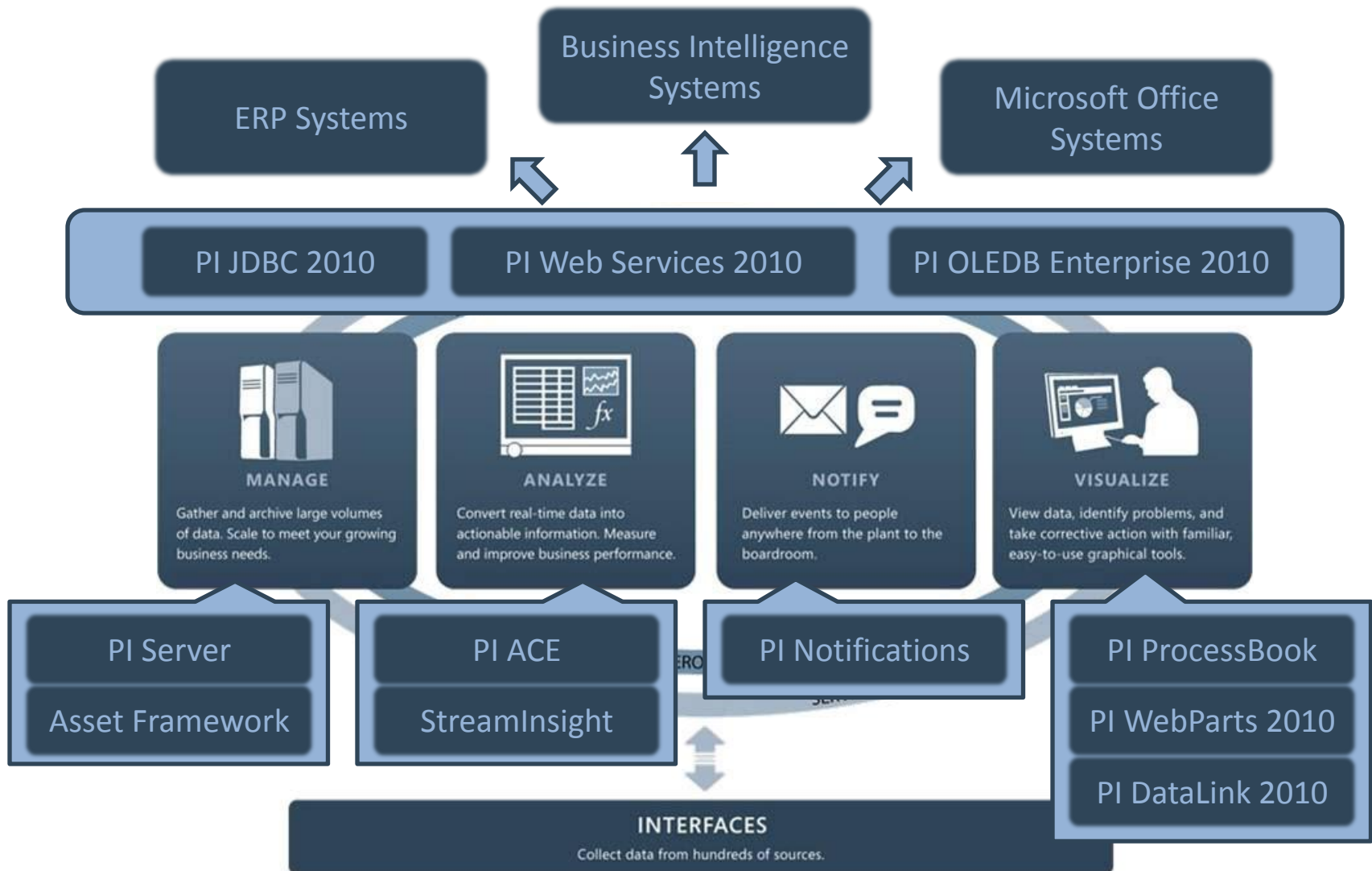


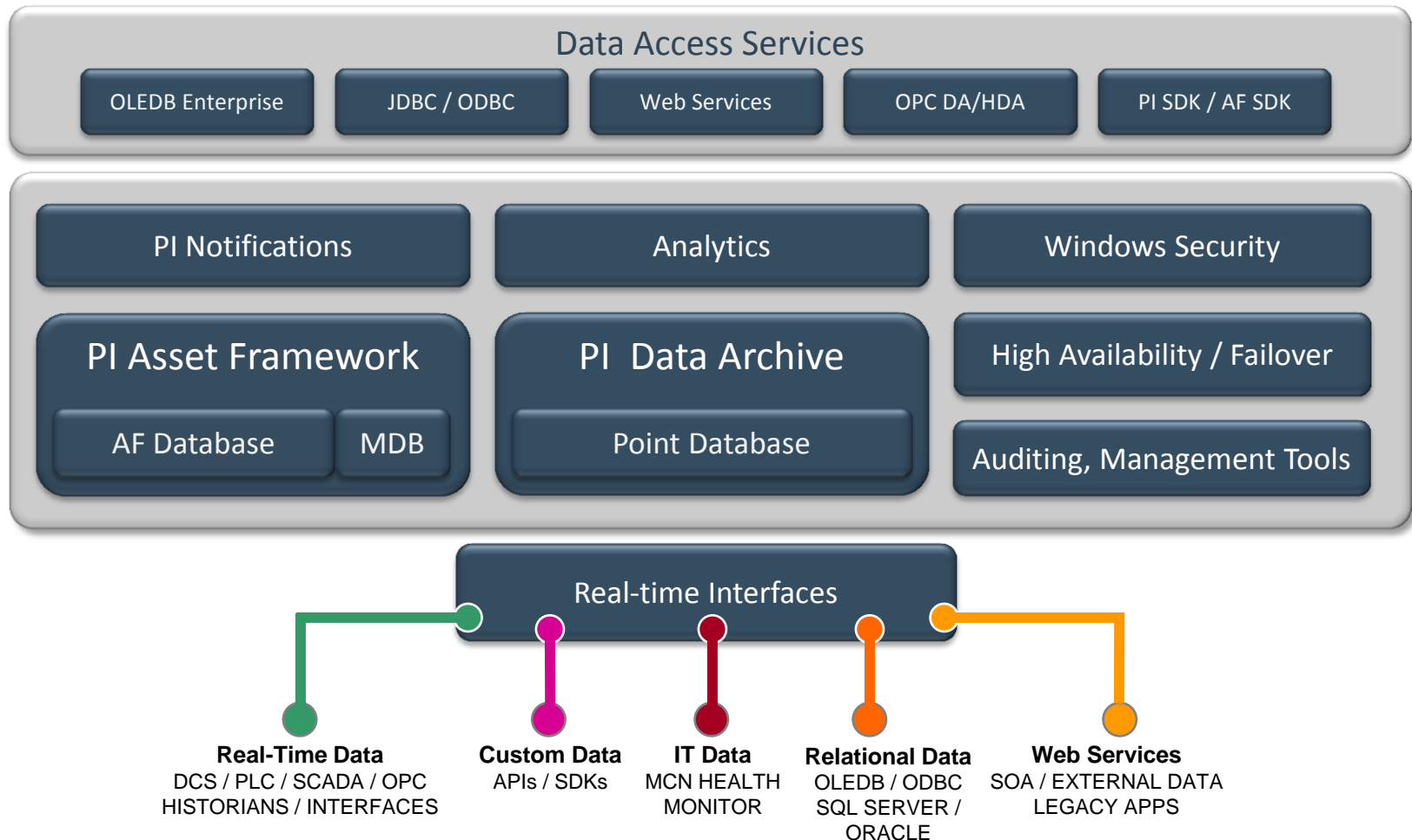












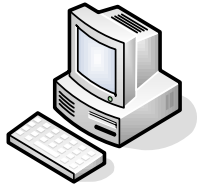
# Migrating Module DB to Asset Framework (AF)



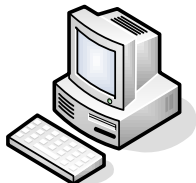
## MDB based Applications



PI DataLink



IT Monitor

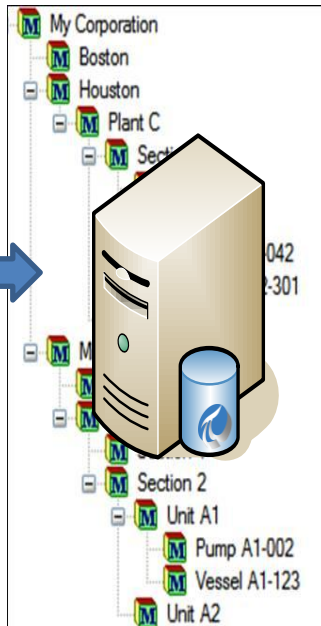


BatchView

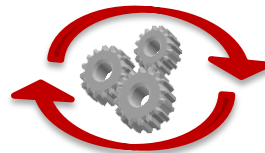


PI ACE

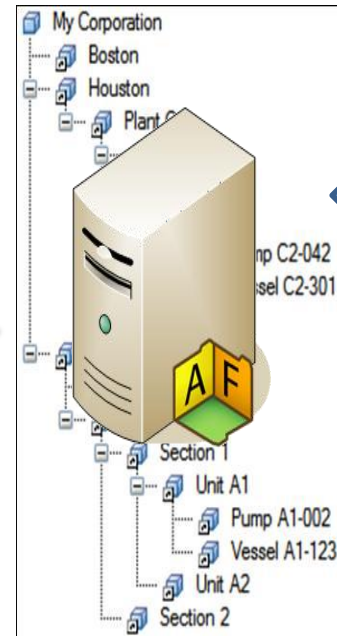
## Module Database



## PI Asset Link Subsystem



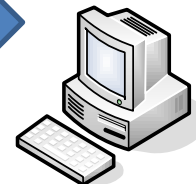
## AF Element Database



## AF based Applications



PI WebParts



PI ProcessBook



Custom via Data Access



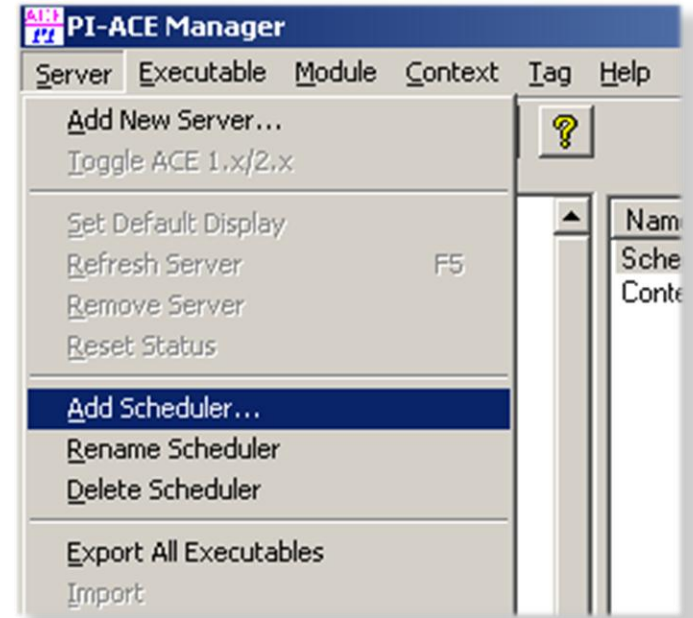
- Upcoming PI AF features in PI AF 2010 R2:  
AF Builder 1.0 - Excel Add-In for Configuration
- Upcoming PI AF features in PI AF 2011
  - Event Frames
  - Configured Analytics
  - PE functions as a Data Reference

- Scalability/Manageability/Performance
  - PI Server
  - PI Notifications
  - PI AF
- User Experience
  - PI System Search
- Analytics
  - PI ACE Performance
  - AF Analytics
  - Edge Processing

- PI Server point database
  - Faster point creation and editing
  - Faster startup time
  - Even larger point counts
- PI Update Manager
  - More connections
  - More sign-ups
  - Faster sign-ups
- AF 2.2
  - Faster insert speed
  - Ability to traverse huge hierarchies

- Native support for 64-bit Windows \*
- Upgrade to .NET code base
- Support for Visual Studio 2010
- Startup optimization \*
- Cache enhancements \*
- PI ACE Schedulers on multiple machines against a single PI Server

\* *Performance enhancement*



- Data-by-Exception
- Non-timeseries data
- PI System Search
- Bring PI AF forward
  - Full Manipulations on PI AF
    - Create
    - Read
    - Update
    - Delete

## Data Buffering

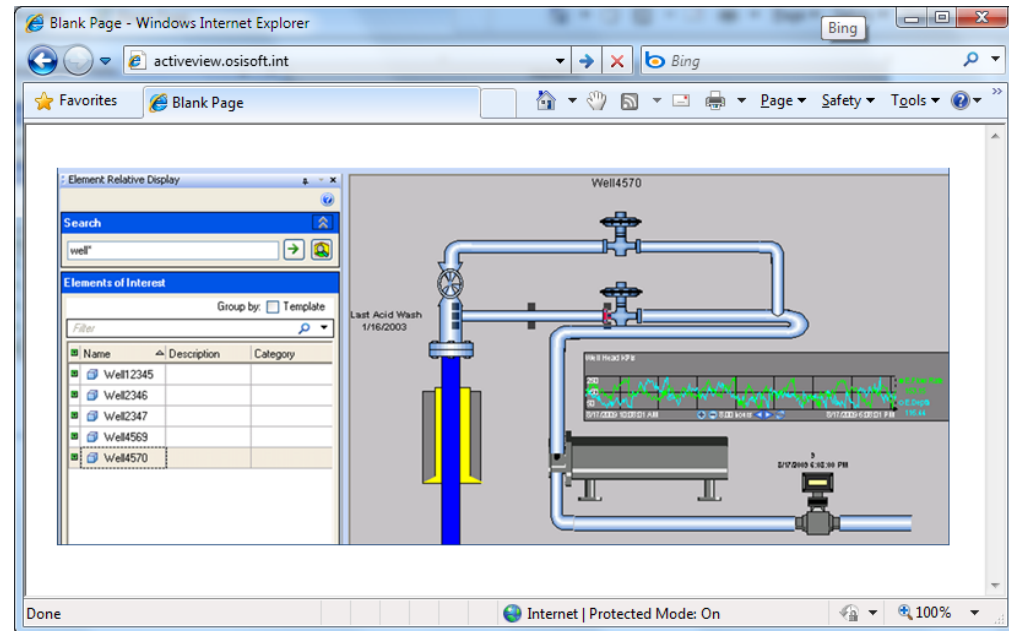
- Important Use Cases
  - Custom Interfaces
  - Applications that write data to PI System
  - SQL Applications, writing data to PI OLEDB
- Support for HA
  - Buffering in case of disconnection
  - “Fanning” to a Collective



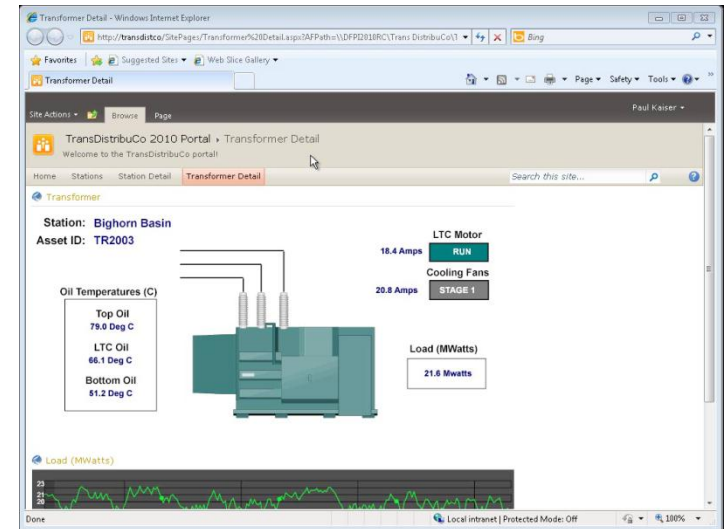
- Asset view of data
- PI System Search
- Better analysis via PowerPivot and BI tools
- Report building
- Publishing for others using Excel Services



- PI System search
- Docking Windows in ActiveView
- Time Management
- Multi-Language improvements
- Performance



- Improved access to asset data
- PI System Search
- Deployment architecture
  - Performance, Scale, Manageability
- Improve User Interaction





# Thank you

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