



OSIsoft Product Roadmap 2010

John Daniels
Customer Support Engineer
OSIsoft, LLC

- The Year in Review 2009
- PI System 2010
- Roadmap for Infrastructure
- Roadmap for Clients

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



- True Single Sign-On (SSO)
- Easier to Manage
 - User Accounts in Windows/AD Only
 - Leverage AD Tools and Security Policies
- Upgrade Experience
 - Backward Compatibility
 - Simply Requires PI SDK 1.3.6
- More Secure
 - SSPI*-based Kerberos or NTLM**
 - Server-Side Authentication Control
- More Flexible
 - Unlimited Access Control Lists (ACLs)

* Security Support Provider Interface
** NT LAN Manager



AF-based PI Clients

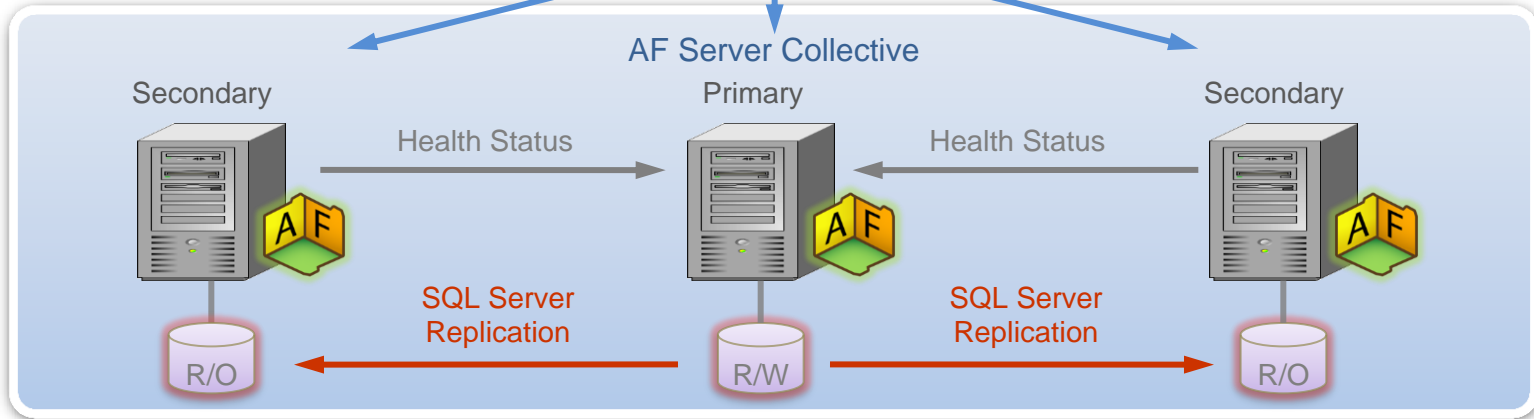
- WebParts
- ProcessBook
- DataLink
- Notifications



AF SDK Library



PI System Explorer



SQL Server (primary)	<input checked="" type="checkbox"/> Express <input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Enterprise	SQL Server (secondary)	<input checked="" type="checkbox"/> Express <input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Enterprise
----------------------	---	------------------------	---

PI Notifications: The Power of Templates...



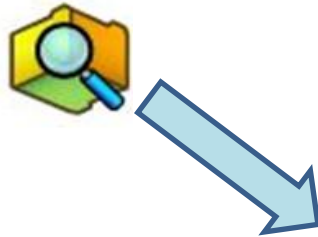
Define information once

- Fewer errors
- Automatically in sync
- Maintenance can scale

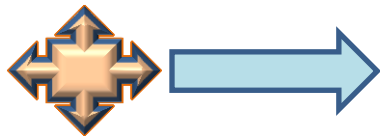
Override where necessary

- Change time rule
- Define specific content
- Add/modify subscribers

Configured from
AF Elements



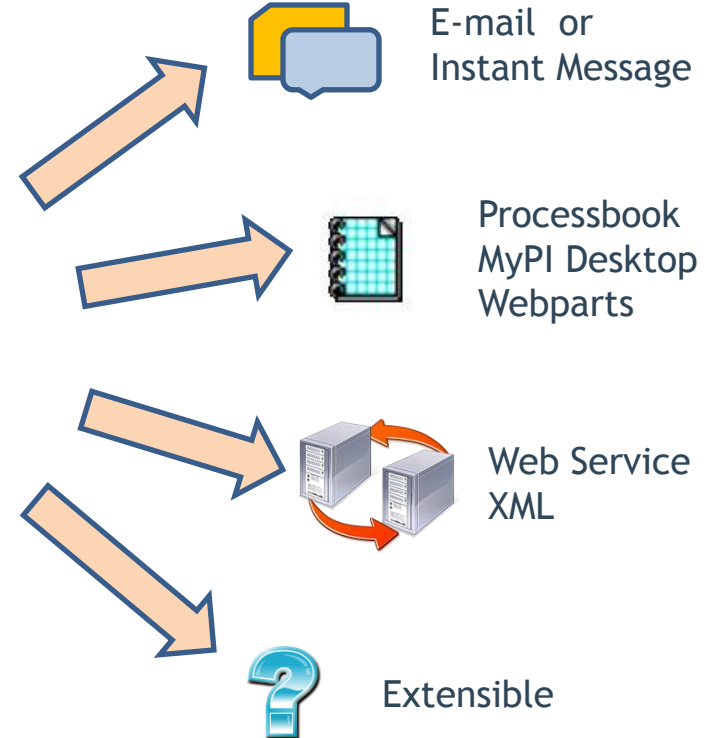
Filtered with
sophisticated
rules

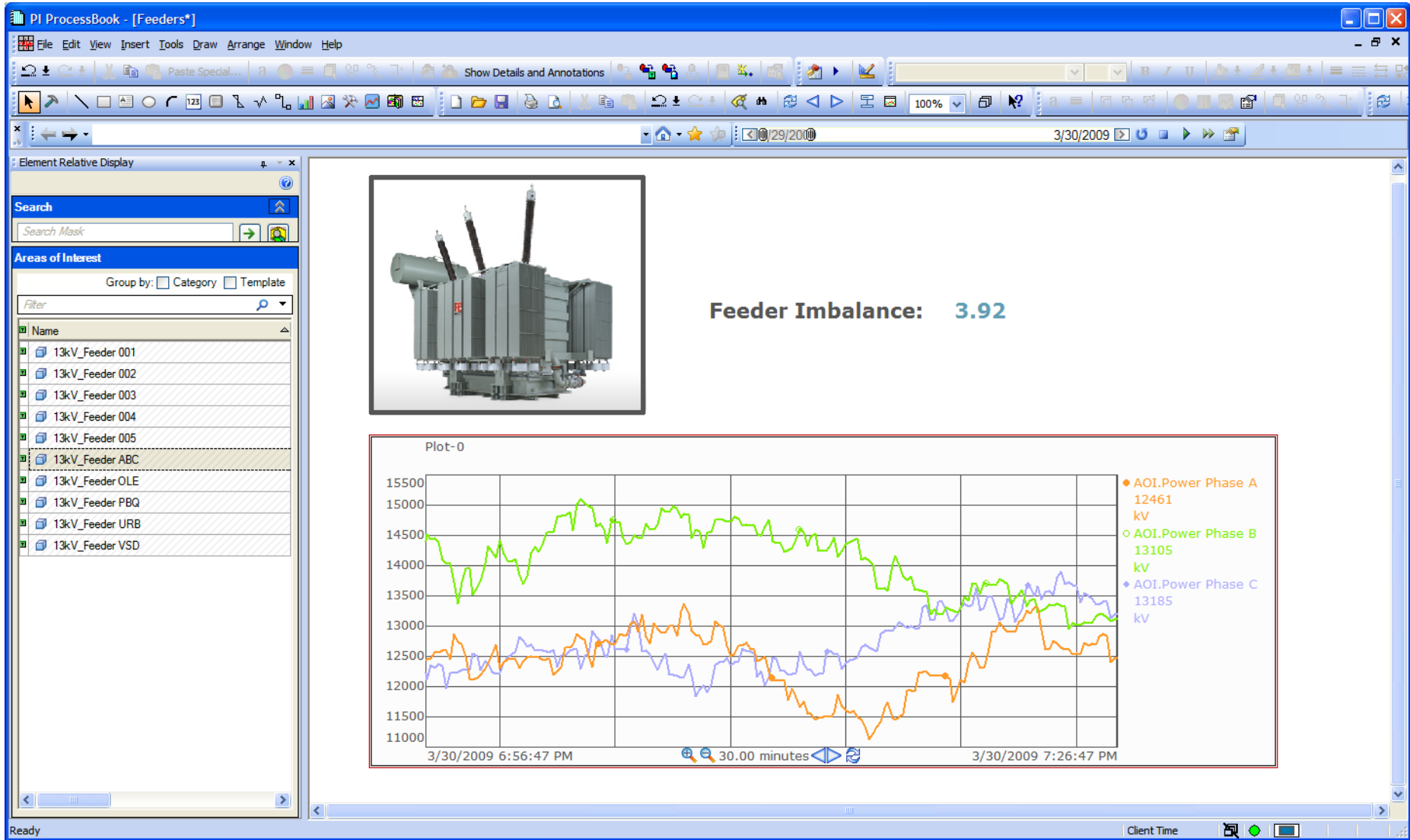


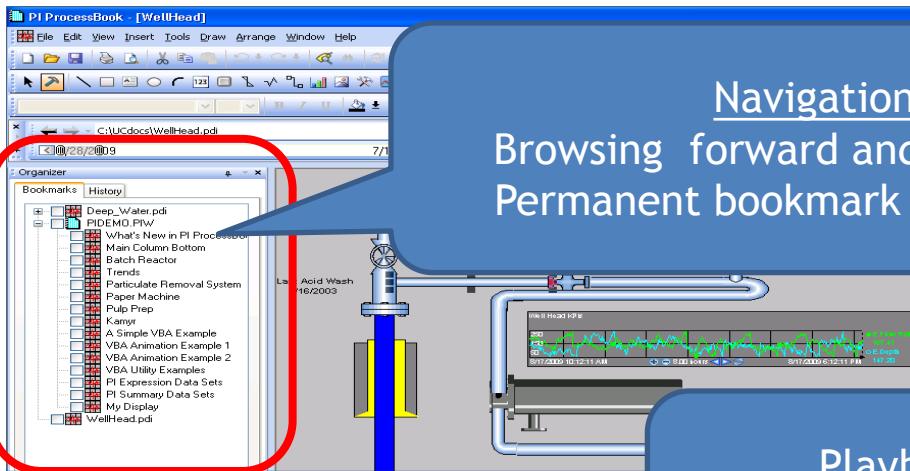
Active Directory



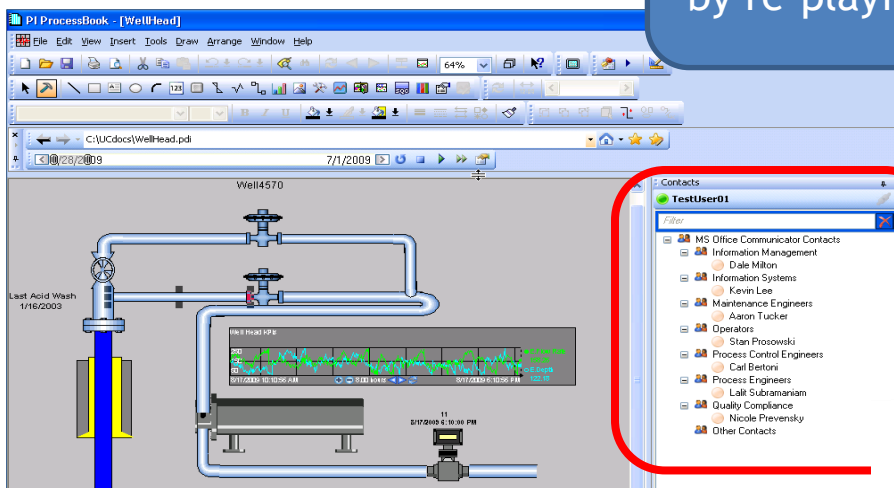
Trigger



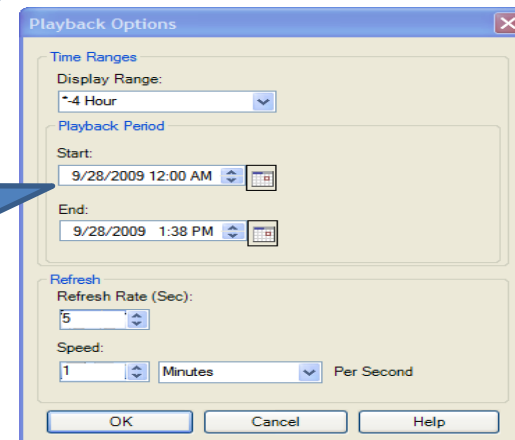




Navigation
Browsing forward and backwards
Permanent bookmark of favorites



Playback
Troubleshoot problems
by re-playing a display



Communicator
IM, Email Contacts
Easily send a PB
screenshot



Configure AF Tree View -- Webpage Dialog

Server: DFPI2010RC

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: \\DFPI2010RC\Trans DistribuCo\TransDistribuCo

Default Selected Node: \\DFPI2010RC\Trans DistribuCo\TransDistribuCo

OK Cancel

Station Detail - Windows Internet Explorer

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

Station Detail

TransDistribuCo 2010 Portal > Station Detail

Welcome to the TransDistribuCo portal!

Home Stations **Station Detail** Transformer Detail

Search this site...

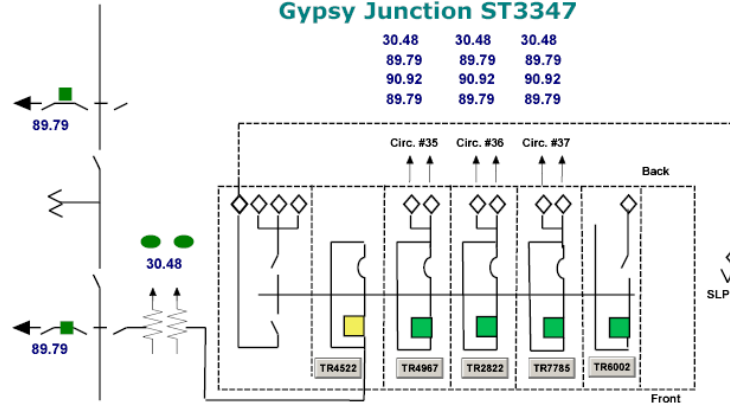
Stations Overview

Eastern District

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

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

- Available now
 - PI ProcessBook
 - PI ActiveView
 - PI WebParts
 - PI SDK
- In development
 - PI DataLink
- In plan
 - PI System Explorer
 - PI Notifications
 - PI Manual Logger

- French
- German
- Russian
- Spanish
- Korean
- Japanese
- Brazilian Portuguese
- Simplified Chinese

hallo *bonjour*
¡Hola **привет**
안녕하세요
こんにちは
你好 Olá
saluton

Making PI System work well on a large scale

- Performance, scalability and throughput for the PI AF and PI Notifications
- New PI SMT 3 plug-ins to manage the PI Server 3.4.380 security model
- 64 bit support for scale and performance



- Servers:
 - PI Server 3.4.380
 - PI AF 2.1
 - PI Notifications tested as a 32bits running on 64bit
 - PI Utilities Gateway
- Clients
 - PI WebParts 3.0
 - PI DataLink for Excel Services 4.1
- Data Access
 - PI SDK
 - PI OLEDB
 - PI OLEDB Enterprise
 - PI Web Services



Why 64-bit Support?



- Most server hardware today is 64 bits
- Microsoft aggressively moving to 64 bits
 - Windows 2008 R2, SharePoint 2010 are 64 bit only
- Allows full utilization of hardware and cache
- Mostly relevant to OSIsoft servers and customer applications
 - Programmatic interfaces are used by servers



- **OSIsoft commitment:**
 - 450+ 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)

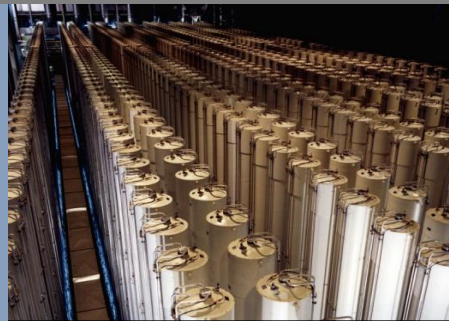
- Servers
 - PI Server 3.4.380
 - PI SMT 3.3.1.3
 - AF 2.1
 - PI Notifications 1.1
 - PI Notifications OCS Delivery Channel
 - MCN Health Monitor 1.3.5.2
- Data Access
 - PI SDK - 64-bit 1.3.8.385
 - PI JDBC 1.0.0
 - PI Data Services 3.0.0
 - PI System OLEDB 1.0.0.11
- Clients
 - PI ProcessBook 3.2.0
 - PI Active View 3.2.0
 - PI Web Parts 3.0.0
 - PI DataLink 4.0.3
 - DataLink for Excel Services 4.0.3
 - DataLink for Excel Services 4.1.1.0
 - RtReports 3.3.0.0
 - PI Manual Logger 2.3.0.160
- Additionally
 - 31 Minor Releases
 - 7 Language Packs

What did OSIsoft accomplish in 2009 to help you?



Security

- ✓ PI 380
- ✓ Deployment



Asset Centric PI

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



Localization

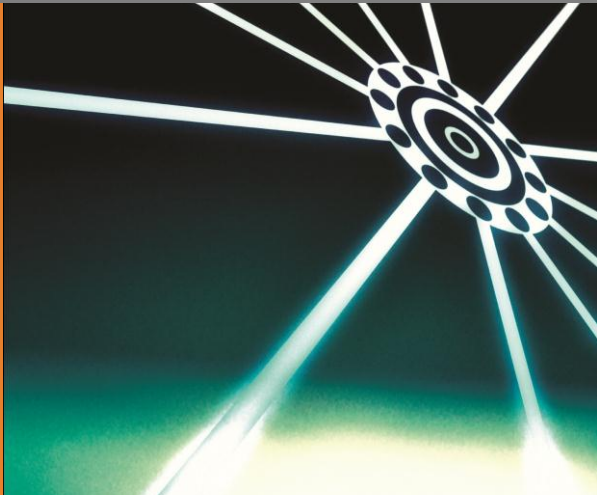
- ✓ 8 languages
- ✓ 5 products
- ✓ 3 planned



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



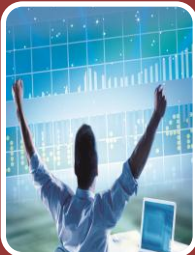
PI Clients

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



PI Data Access

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



PI Server

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

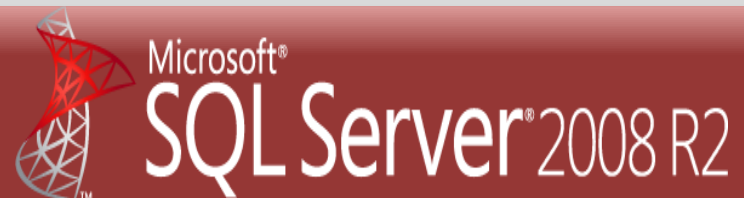
Business User Experience

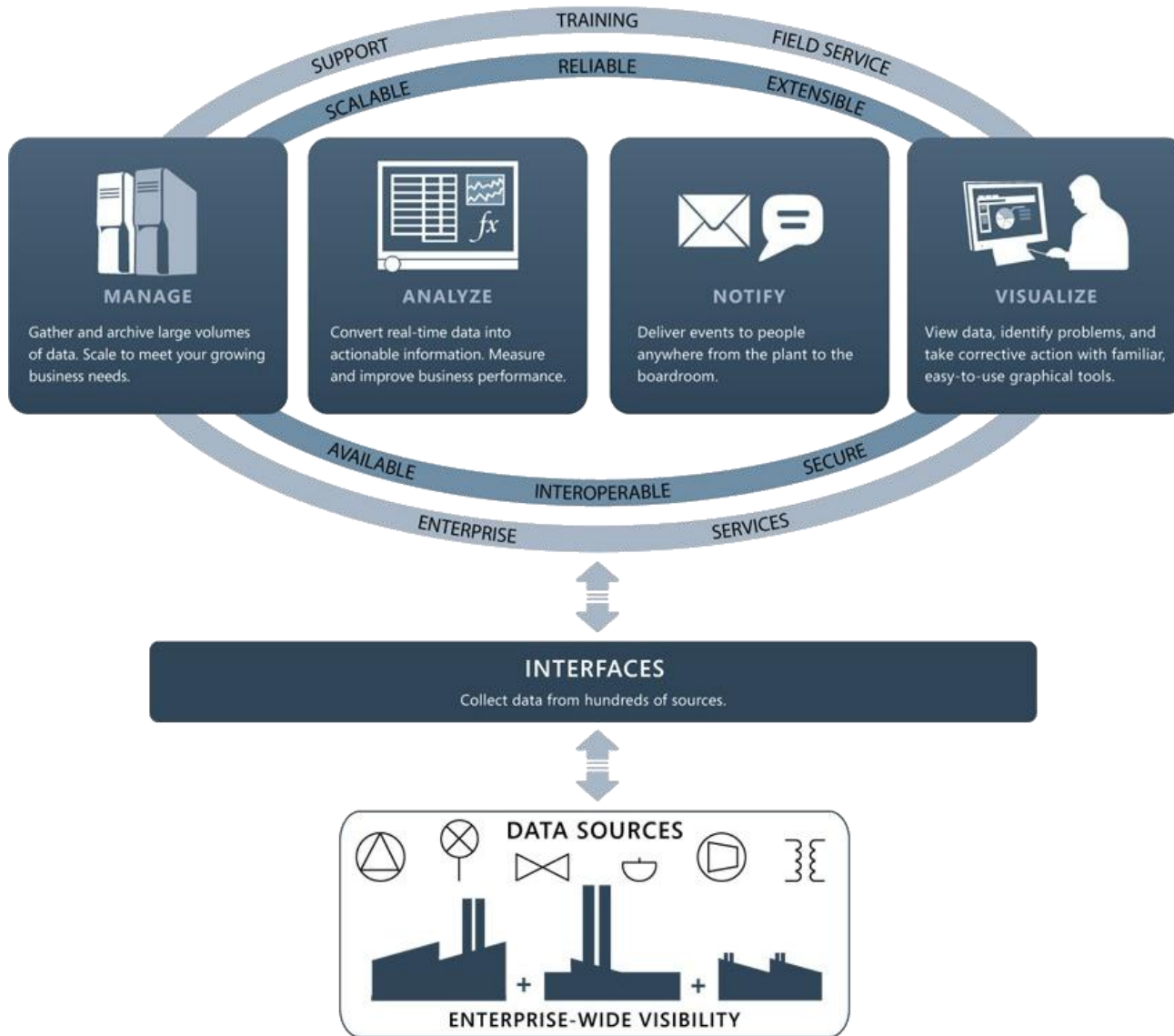


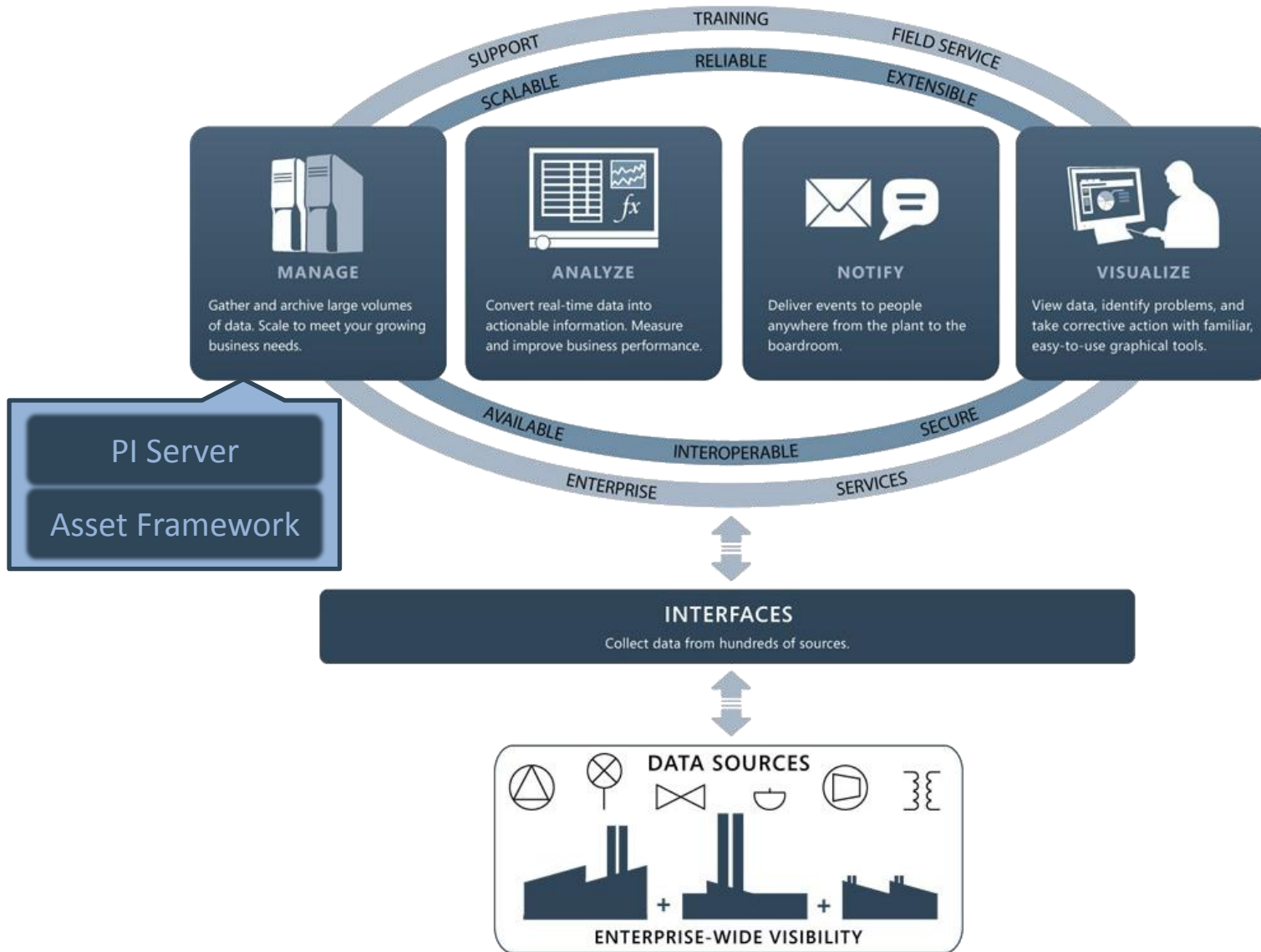
Business Collaboration Platform

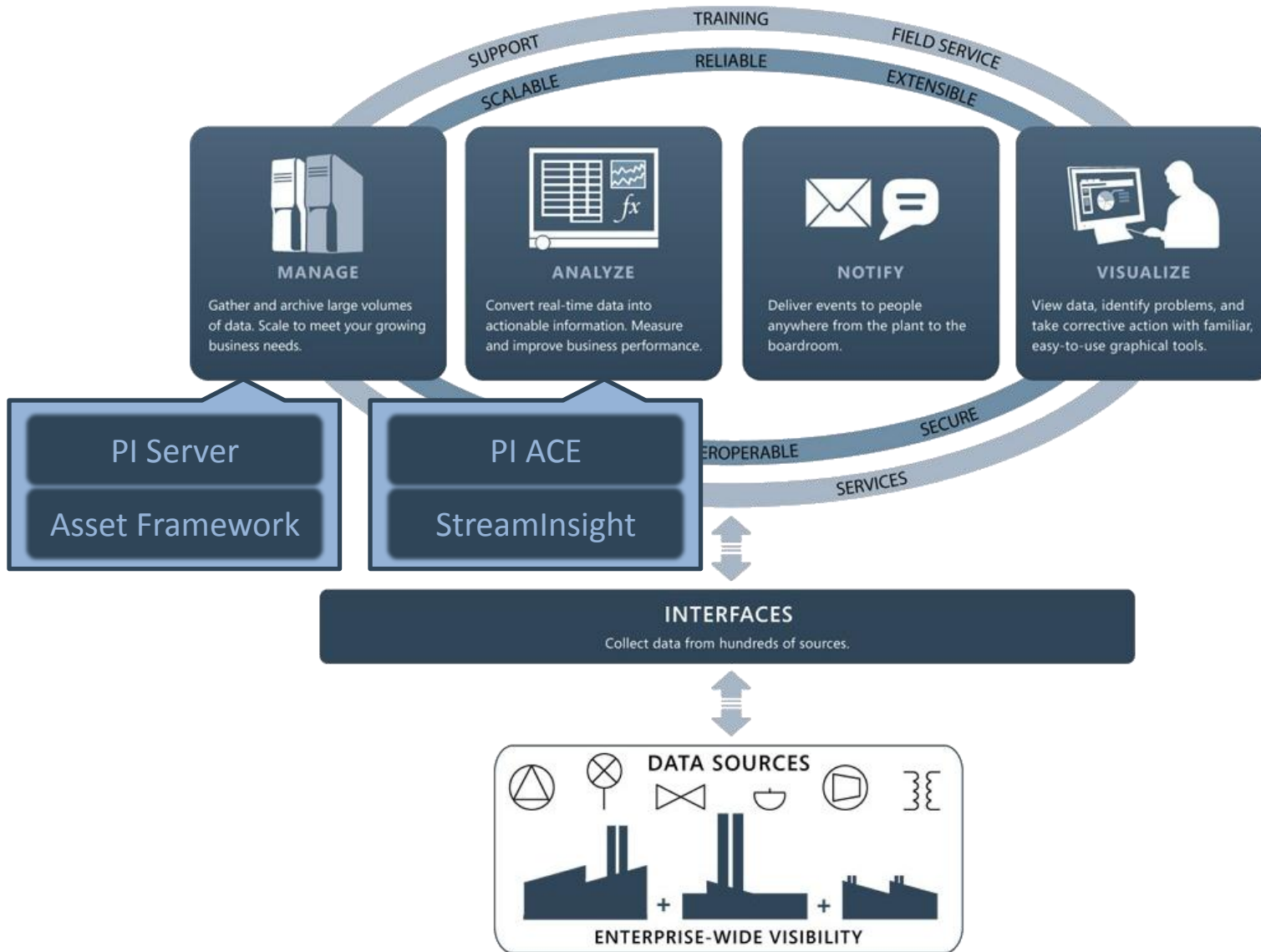


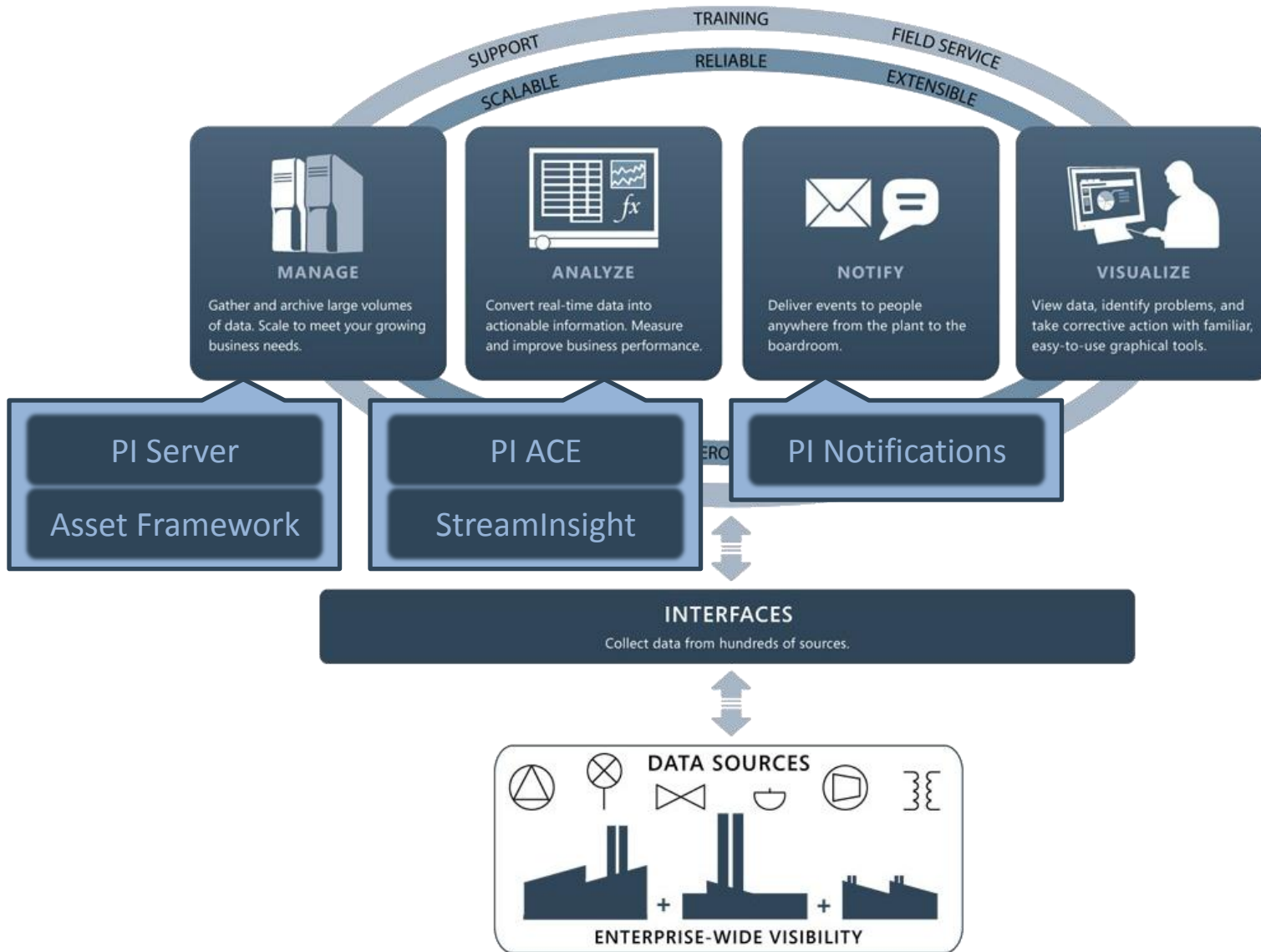
Data Infrastructure and BI Platform

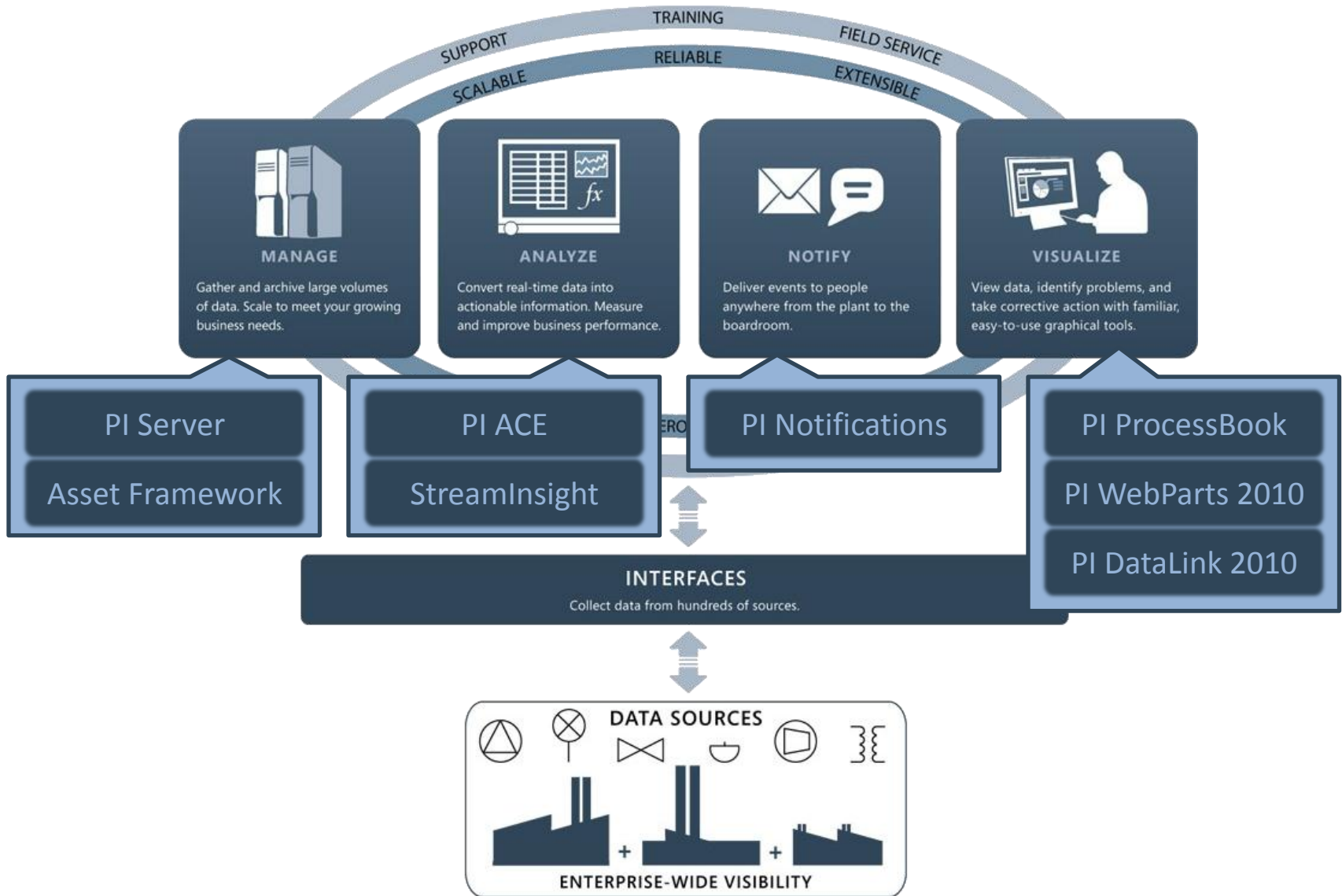


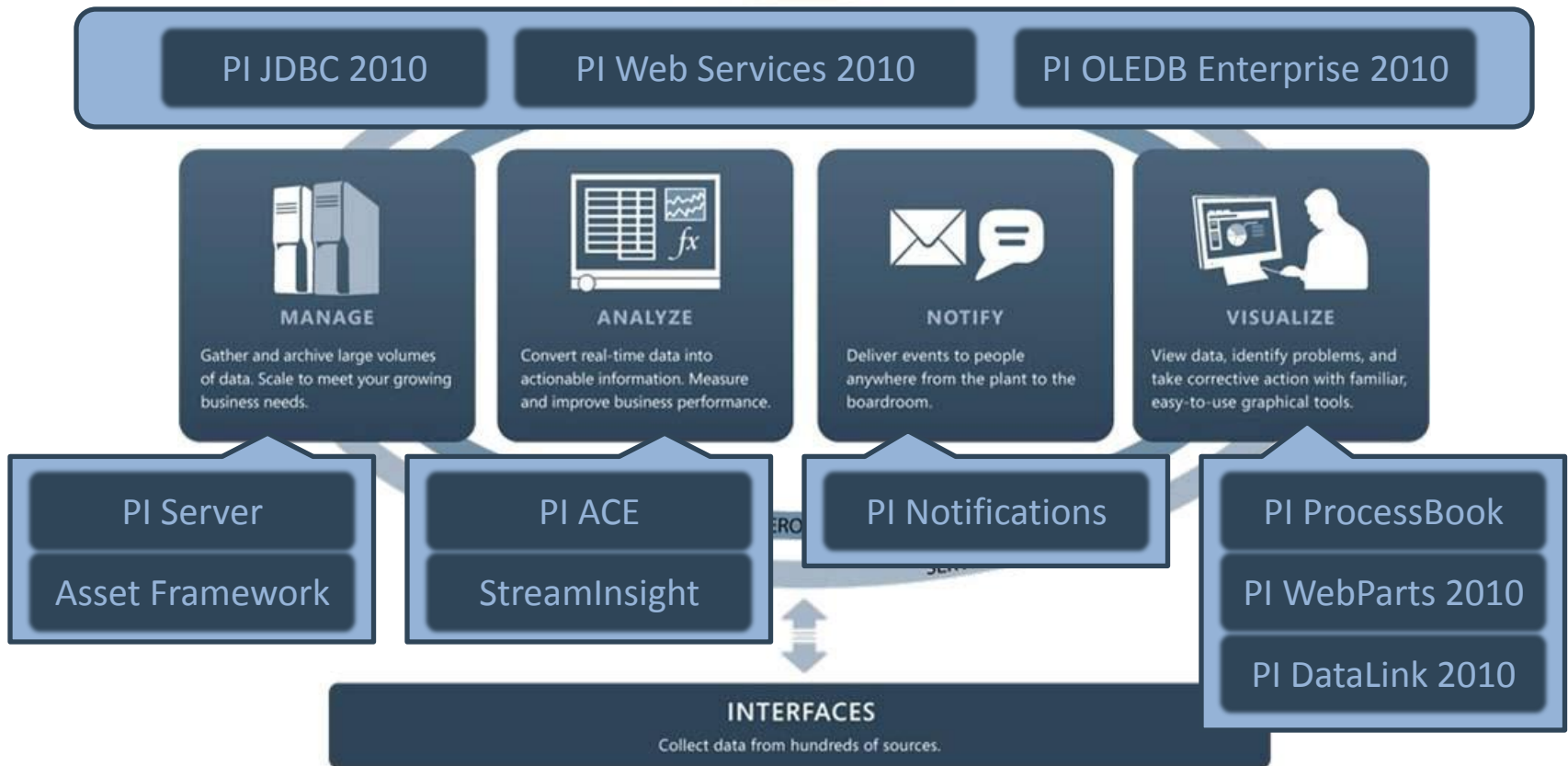


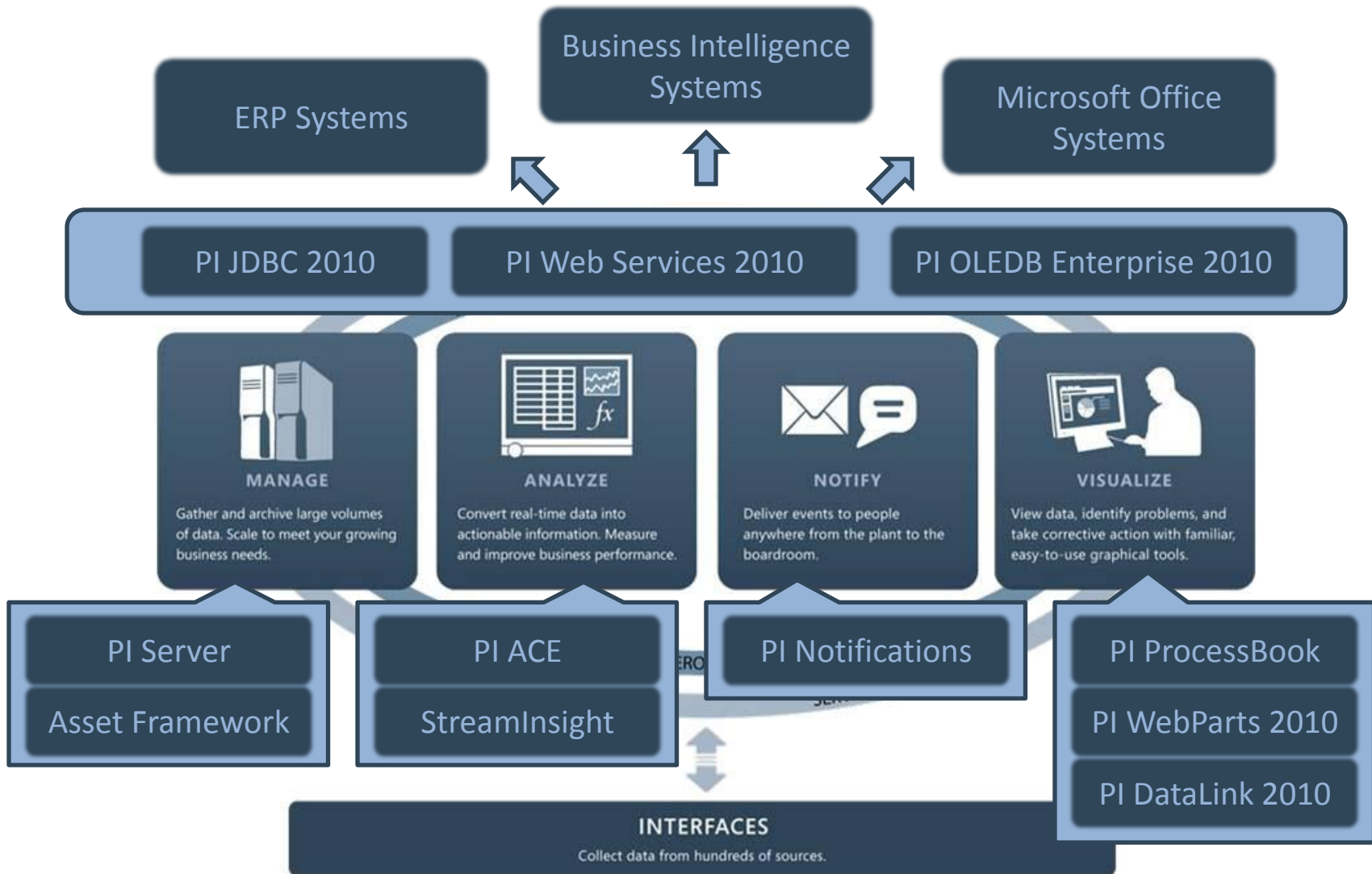


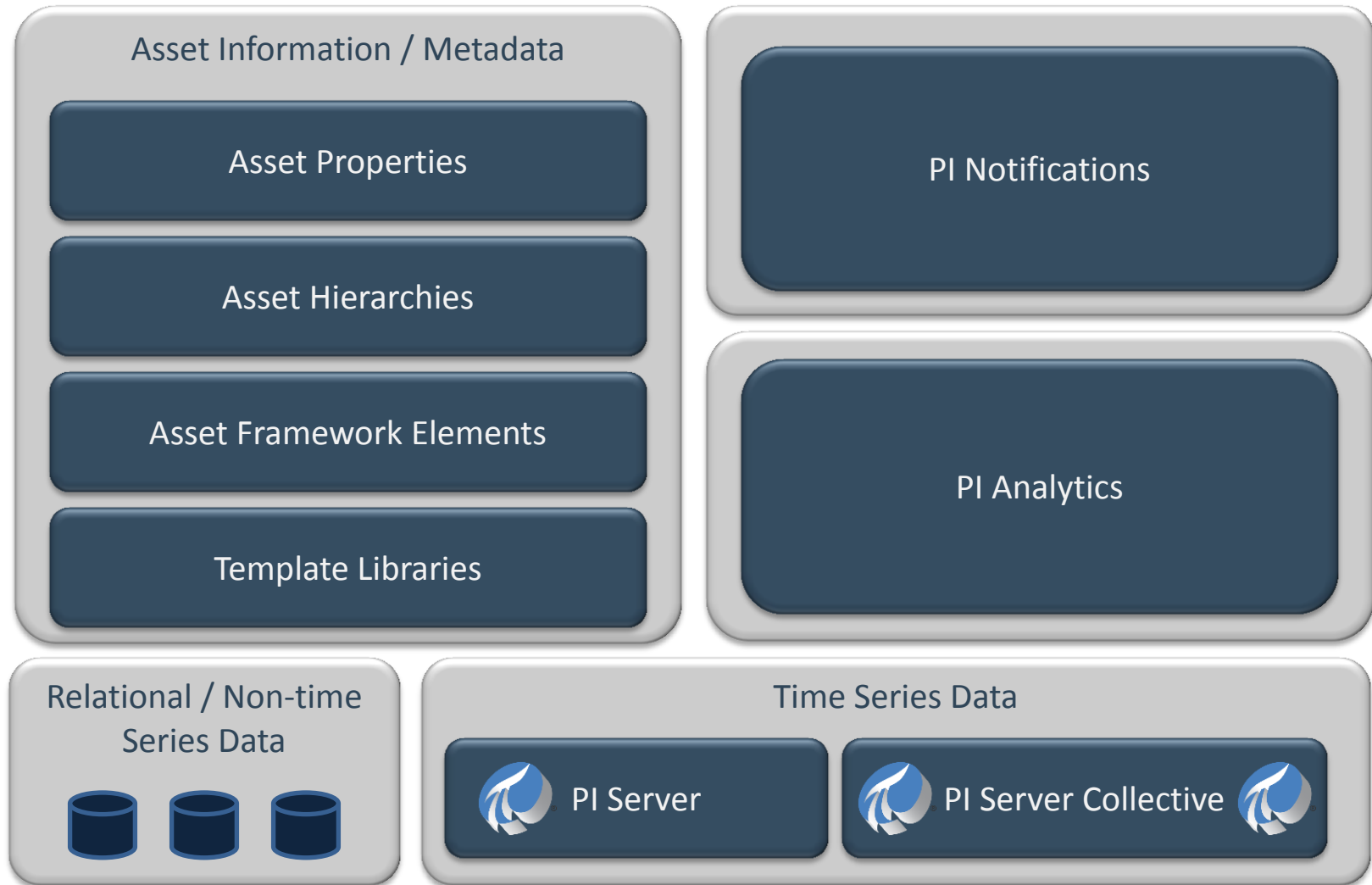












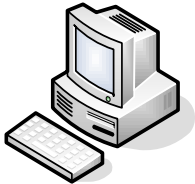
Migrating Module DB to Asset Framework (AF)



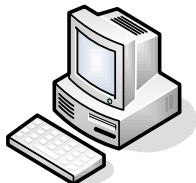
MDB based Applications



PI DataLink



IT Monitor

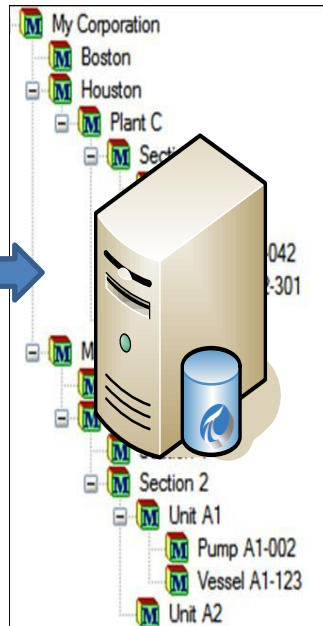


BatchView



PI ACE

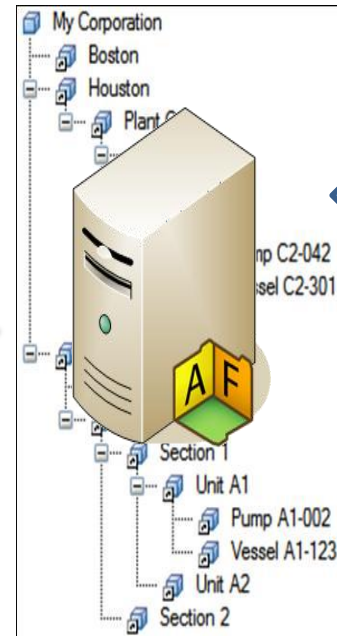
Module Database



PI Asset Link Subsystem



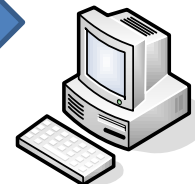
AF Element Database



AF based Applications



PI WebParts



PI ProcessBook



Custom via Data Access

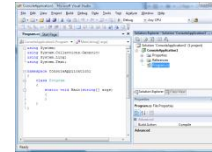
Analytics need to be calculated in real time

	Database Applications	Event-driven Applications
Methodology	Request - Response	Event - Notification
Query Paradigm	Ad-hoc queries or requests	Continuous standing queries
Latency	Seconds, hours, days	Milliseconds or less
Data Rate	Hundreds of events/sec	Tens of thousands of events/sec or more
Query Semantics	Declarative relational analytics	Declarative relational and temporal analytics

PI System and StreamInsight Platform



StreamInsight Application Development

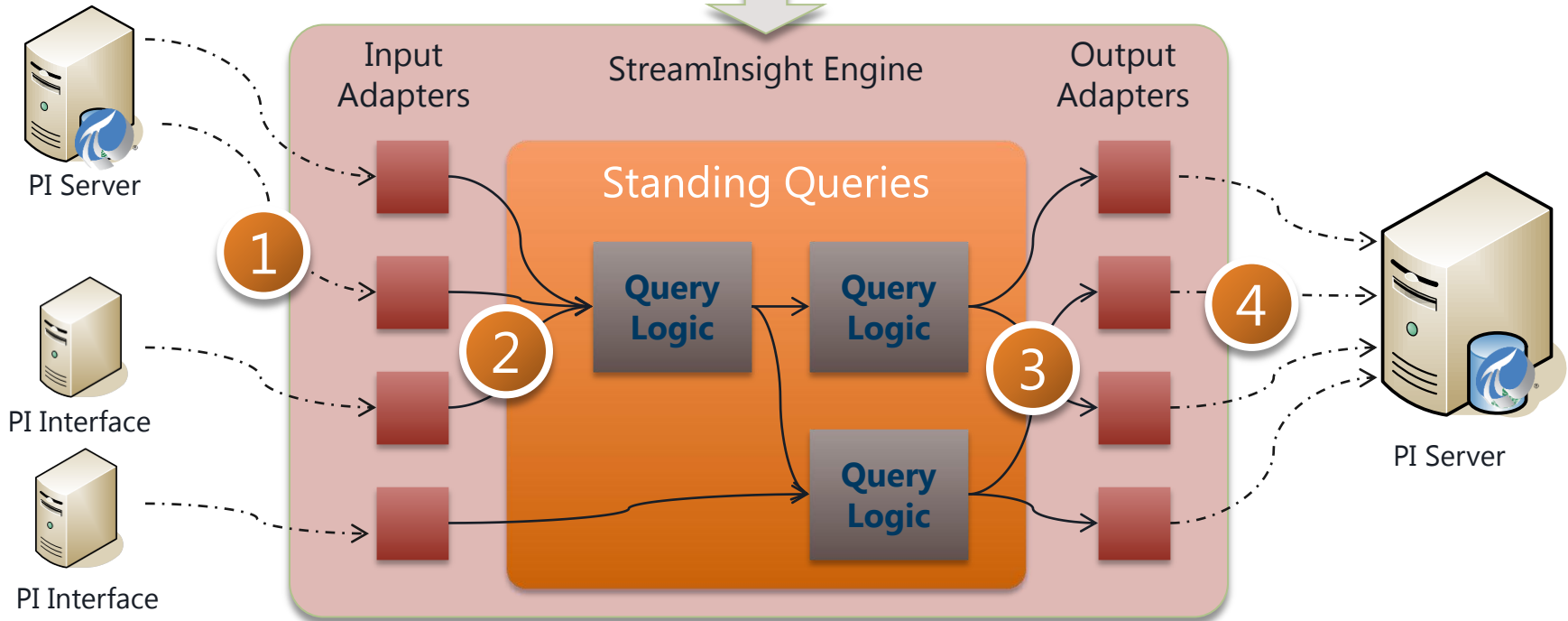


.NET
C#
LINQ

StreamInsight Application at Runtime

Event sources

Event targets



- **Process** large volumes of events across multiple data streams in less than a second (memory resident)
- **Manage** your business through historical data mining and continuous insights
- **Support** many events types with rich query semantics
- **Reduce** development cost by utilizing existing skill sets and investments in Microsoft development platform
- **Flexible** deployment options

PI Data Access: The 2010 Wave



Data Access Services

JDBC 2010

PI Web Services 2010

PI OLEDB Enterprise 2010

OPC DA/HDA Server 2010

OSIsoft SDK's

Asset Information / Metadata

PI Asset Framework

Event Data

Analytics / Notifications

Relational / Non-time Series Data



Time Series Data

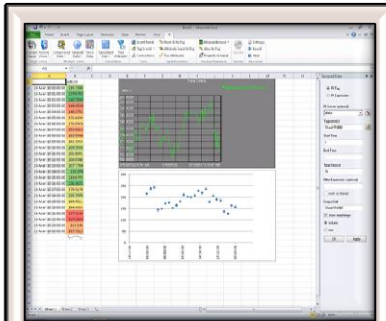


PI Server

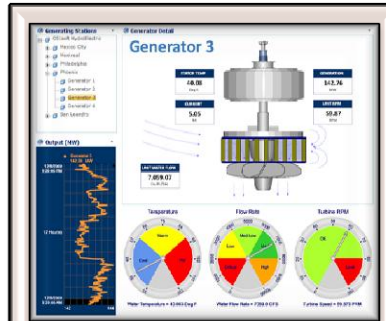


PI Server Collective

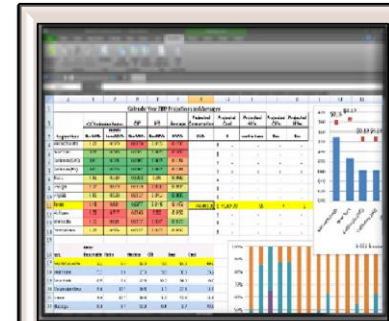




PI DataLink for Excel
2010



PI WebParts for
SharePoint 2010



PI DataLink
Server 2010

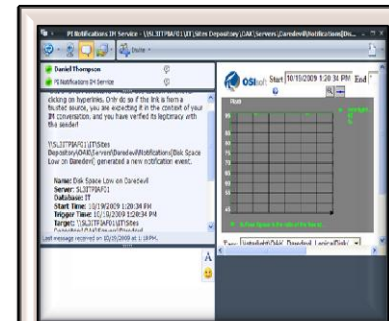


PI and PowerPivot
for 2010

PI OLEDB
Enterprise 2010

PI Web Services
2010

PI Data Access
Technologies



PI System Access
License

Improved Formatting and charts

Easier Navigation with Slicers

Bull's Eye Stores
Sales By Department for May 2007
(sales in millions)

	Current	1 Year History		
		Trend	High	Low
All Departments	\$ 159.6		\$ 159.6	\$ 130.5
Women's Apparel	\$ 32.6	↑	\$ 32.6	\$ 30.2
Patio & Garden	\$ 16.2	↑	\$ 16.9	\$ 15.1
Toys	\$ 15.7	↑	\$ 15.7	\$ 13.5
Electronics	\$ 14.9	↓	\$ 18.3	\$ 14.9
Baby Apparel	\$ 14.2	↑	\$ 14.8	\$ 7.5
Men's Apparel	\$ 13.5	→	\$ 13.2	\$ 12.8
Kid's Apparel	\$ 12.6	→	\$ 12.9	\$ 11.9
Furniture	\$ 11.4	→	\$ 14.5	\$ 8.7
Bed & Bath	\$ 11.1	↑	\$ 11.1	\$ 9.3
Kitchen	\$ 9.9	↑	\$ 10.1	\$ 2.3
Home	\$ 7.5	→	\$ 9.1	\$ 4.5

Comparison Chart: Profit (m)

Department	Profit (m)
Women's Apparel	~\$12.5
Patio & Garden	~\$16.5
Electronics	~\$15.0

Pivot Table: Sum of Tickets Sold and Sum of NoOfPurchases

Row Labels	Sum of TicketsSold	Sum of NoOfPurchases
Action/Adventure	33.33%	20.63%
Comedy	33.67%	31.38%
Drama	11.61%	11.22%
Horror	4.67%	8.23%
Other	3.59%	7.01%
Sci-Fi/Fantasy	3.05%	6.96%
Thriller	7.11%	12.87%
Grand Total	100.00%	100.00%

Bar Chart: Sum of Tickets Sold and Sum of NoOfPurchases by Genre

Genre	Sum of Tickets Sold	Sum of NoOfPurchases
Action/Adventure	~33.33%	~20.63%
Comedy	~33.67%	~31.38%
Drama	~11.61%	~11.22%
Horror	~4.67%	~8.23%
Other	~3.59%	~7.01%
Sci-Fi/Fantasy	~3.05%	~6.96%
Thriller	~7.11%	~12.87%

Microsoft® Excel 2010

PI DataLink 2010



Fuel Gas Report and Analysis - Microsoft Excel

Fuel Gas Report and Analysis.xlsx - Windows Internet Explorer

Reports ▶ PowerPivot Cubes ▶ Fuel Gas Report and An: Matt Ziegler

	A	B	C	D	E	F	G
1							
2							
3							
4	Timestamp						
5	26-Apr-10 17:07:27						
6	26-Apr-10 17:02:27						
7	26-Apr-10 16:57:27						
8	26-Apr-10 16:52:27						
9	26-Apr-10 16:47:27						
10	26-Apr-10 16:42:27						
11	26-Apr-10 16:37:27						
12	26-Apr-10 16:32:27						
13	26-Apr-10 16:27:27						
14	26-Apr-10 16:22:27						
		Tucson		Houston			
4	Timestamp	B309_FG903	B555_FG120	B210_FG005	B235_FG293		
5	26-Apr-10 17:07:27	67.69919586	92.93471527	61.57380295	84.13001251		
6	26-Apr-10 17:02:27	69.40677643	91.1309433	64.05405426	83.35953522		
7	26-Apr-10 16:57:27	68.48088074	91.31063843	67.99434662	84.85340881		
8	26-Apr-10 16:52:27	67.59732819	90.02399445	62.44659805	83.		
9	26-Apr-10 16:47:27	64.29003143	92.38550568	63.10819244	87.1		
10	26-Apr-10 16:42:27	63.14068222	88.09690094	61.33683395	86.4		
11	26-Apr-10 16:37:27	67.10540009	84.7400589	66.60814667	83.7		
12	26-Apr-10 16:32:27	67.34307098	89.38541412	65.41352081	88.87563324		
13	26-Apr-10 16:27:27	65.02715302	92.40144348	65.09230804	90.44684601		
14	26-Apr-10 16:22:27	68.05756378	92.36569214	59.8769455	92.34683228		

Microsoft® Excel 2010

SparkLines DimDate RawTagData Pivot Table

Local intranet | Protected Mode: Off 160%

Milling Process - Windows Internet Explorer

http://dfpiweb2010/NuGreen/Engineering/Process%20Pages/Milling%20Process.aspx

Milling Process

Site Actions | Browse | Page | Laurie Dieffenbach

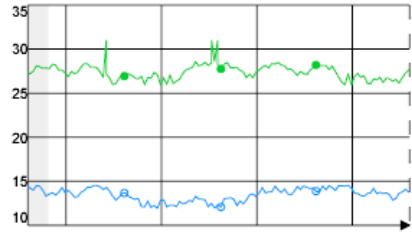
Engineering > Milling Process

NuGreen | Operations | Manufacturing | Engineering | Reports | Marketing | Sales | Accounting | Search this site...

Milling Assets

- Milling Process
 - Equipment
 - B-737
 - B-914
 - F-200
 - F-770
 - H-148
 - H-393
 - H-395**
 - K-384
 - P-009
 - P-509

PI Trend



Equipment Documents

Type	Name
	Equipment Benchmarking Report
	Fuel Gas Ratio
	Fuel Gas Utilization Report

+ Add document

Production Schedule

Milling Production Schedule

	Production			Inventories			Today's Performance		
	Rate (Tons/Hr)	Target (Tons/Hr)	Capacity (Tons/Hr)	Raw Material Available Tons	Product Available Days	Sales (Tons/Day)	Product Available Tons	Product Available Days	Energy 2%
Houston	32.9	35.0	50	30,128	35.9	1,200	10,638	8.9	86206%

Microsoft® SharePoint® 2010

Done | Trusted sites | Protected Mode: Off | 100%

Microsoft®
Excel.2010

Empowering The End User

- Enable users to perform self-service analysis and intuitively build their own BI solutions
- Allow users to interactively explore and perform calculations on large data sets
- Integrate data from multiple sources
- Minimize dependence on IT support



PI System and Microsoft PowerPivot



The screenshot displays the Microsoft Excel 2010 interface with the PowerPivot and PivotChart Tools tabs active. The PivotTable Field List on the right shows the following fields:

- Σ Equipment
 - _Count Equipment
- Σ EquipmentPower
 - _Count EquipmentPower
 - Sum of ElectricRate
 - Sum of EnergyCost
 - Sum of Power
 - Sum of PowerCost
- Σ Time_Date
 - _Count Time_Date
- Σ Time_Hour

The PivotCharts show the following data:

Energy Cost by Shift

Plant	Shift 1	Shift 2	Shift 3
Houston	~40000	~50000	~60000
Little Rock	~25000	~35000	~45000
Tucson	~15000	~25000	~35000
Wichita	~30000	~40000	~50000

Energy Cost by Process

Plant	Cooling Fan	Pump
Houston	~100000	~150000
Little Rock	~75000	~100000
Tucson	~50000	~75000
Wichita	~75000	~100000



PI Notifications



The screenshot displays a notification window from Office Communications Server 2007 R2. The notification details are as follows:

- Name:** Fuel gas utilization: Milling Process
- Server:** DFPI2010RC
- Database:** NuGreen
- Start Time:** 4/16/2010 11:24:10 AM
- Trigger Time:** 4/16/2010 11:24:10 AM
- Target:** \\DFPI2010RC\NuGreen\NuGreen\Tucson\Milling
- Value:** High
- Priority:** Normal

Link: [Milling Process, Fuel Gas Trend](#)
[Tucson - Process Overview](#)

Actions: [Acknowledge](#)
[Acknowledge with Comment](#)

Last message received on 4/16/2010 at 11:24 AM.

The 'Ad hoc Trend' window shows a line graph of fuel gas flow over time. The y-axis ranges from 26 to 31. A horizontal cyan line is drawn at approximately 30. The green data line fluctuates around 27-28 until 11:24 AM, where it spikes sharply to over 31, crossing the upper limit. The x-axis shows a 60-minute interval from 10:25:48 AM to 11:25:48 AM on 4/16/2010.



Simple

- ➔ Simple naming and versioning
- ➔ Single PI System package
- ➔ Aligned release schedule

Relevant

- ➔ Organize PI System data around assets
- ➔ Migration of existing asset definitions
- ➔ Integration of PI with business systems
- ➔ New ways to analyze data

Collaborative

- ➔ Use the tools you already know
- ➔ Business Intelligence for the masses
- ➔ Easily share insights with others

- 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 concurrent users
 - More sign-ups
 - Faster sign-ups
- AF 2.2
 - Faster insert speed
 - Ability to traverse huge hierarchies

AF Builder for Excel allows creation or modification of:

- Elements
- Templates
- Categories
- Enumeration Sets
- Notifications
- Analyses
- Event Frames

AF Builder for Excel



	B	C	D	E	F	G	H
1	assetnum	description	manufacturer	serialnum	failurecode	changedate	changeby
2	11200	HVAC System- 50 Ton Cool Cap/ 450000 Btu Heat Cap	TRN	3481-52		2/7/2005 10:09	WILSON
3	11210	Circulation Fan- Centrifugal/ 20/000 CFM	TRN	3749-9		2/7/2005 10:11	WILSON
4	11211	Motor Starter- Size 2/440v/3ph/60cy	WES	S2DNGB		2/7/2005 10:11	WILSON
5	11220	Electrical Control Panel- HVAC System	WES	24096-2		12/7/1999 21:17	MAXIMO
6	11230	Emergency Generator	WES	32331-4		2/7/2005 10:14	WILSON
7	11240	Circulation Fan- Centrifugal/ 20/000 CFM	TRN	3749-9		2/4/2005 16:38	WILSON
8	11250	Circulation Fan- Centrifugal/ 20/000 CFM	TRN	3749-9	BLDGS	2/7/2005 10:14	WILSON
9	11300	Reciprocating Compressor- Air Cooled/100 CFM	IR	43960		2/7/2005 10:15	WILSON
10	11340	Motor Starter- Size 4/NEMA 12/440v/3ph/60hz	WES	23-4630		2/7/2005 10:15	WILSON
11	11400	Boiler- 50,000 Lb/Hr/ Gas Fired/ Water Tube	BWC	66392	BOILERS	2/7/2005 10:16	WILSON
12	11430	Centrifugal Pump 100GPM/60FT HD	IR	377-9A	PUMPS	2/9/2005 8:01	WILSON
13	11450	Centrifugal Pump 100GPM/60FTHD	IR	377-9B	PUMPS	2/9/2005 8:24	WILSON
14	11460	Burner, Gas Fired- For Boiler	BWC	373-RH	BURNERS	12/7/1999 21:27	MAXIMO
15	11470	Centrifugal Pump 100 GPM, 60 FT-HD	IR	377-9C	PUMPS	2/11/2008 12:31	MAXADMIN
16	11480	Centrifugal Pump 100 GPM, 60 FT-HD	IR	377-9D	PUMPS	3/30/1999 22:16	MAXIMO

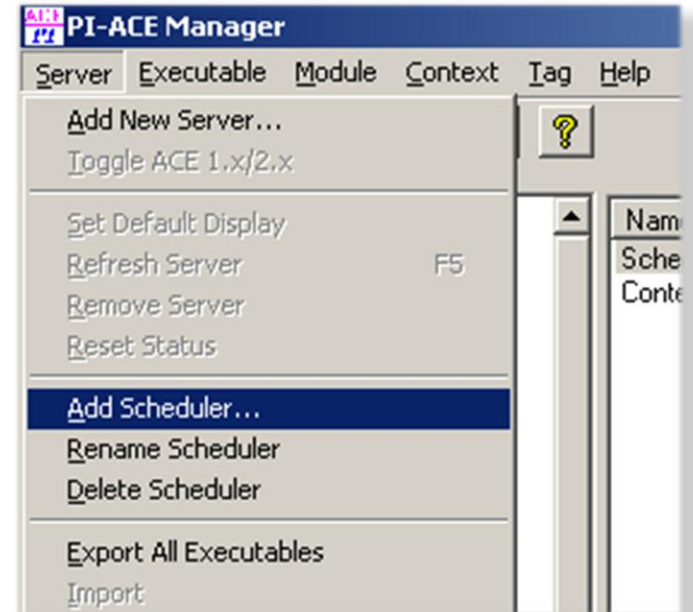
		Programming	Configuration
Tag Context	PI Tags	PI SDK (Custom applications), PI ACE	PI PE, PI Totalizers, PI Alarms, PI RT SQC
Asset Context	PI MDB	PI SDK (Custom applications), PI ACE	None
	PI AF	<ul style="list-style-type: none"> • AF Data References • AF Analysis Rules • AF SDK (Custom applications) 	<ul style="list-style-type: none"> • AF Analytics • AF Formula (PE syntax) • New Analysis Rules • Scheduling (Clock & Event) • Export results to PI tags

Focus for 2010

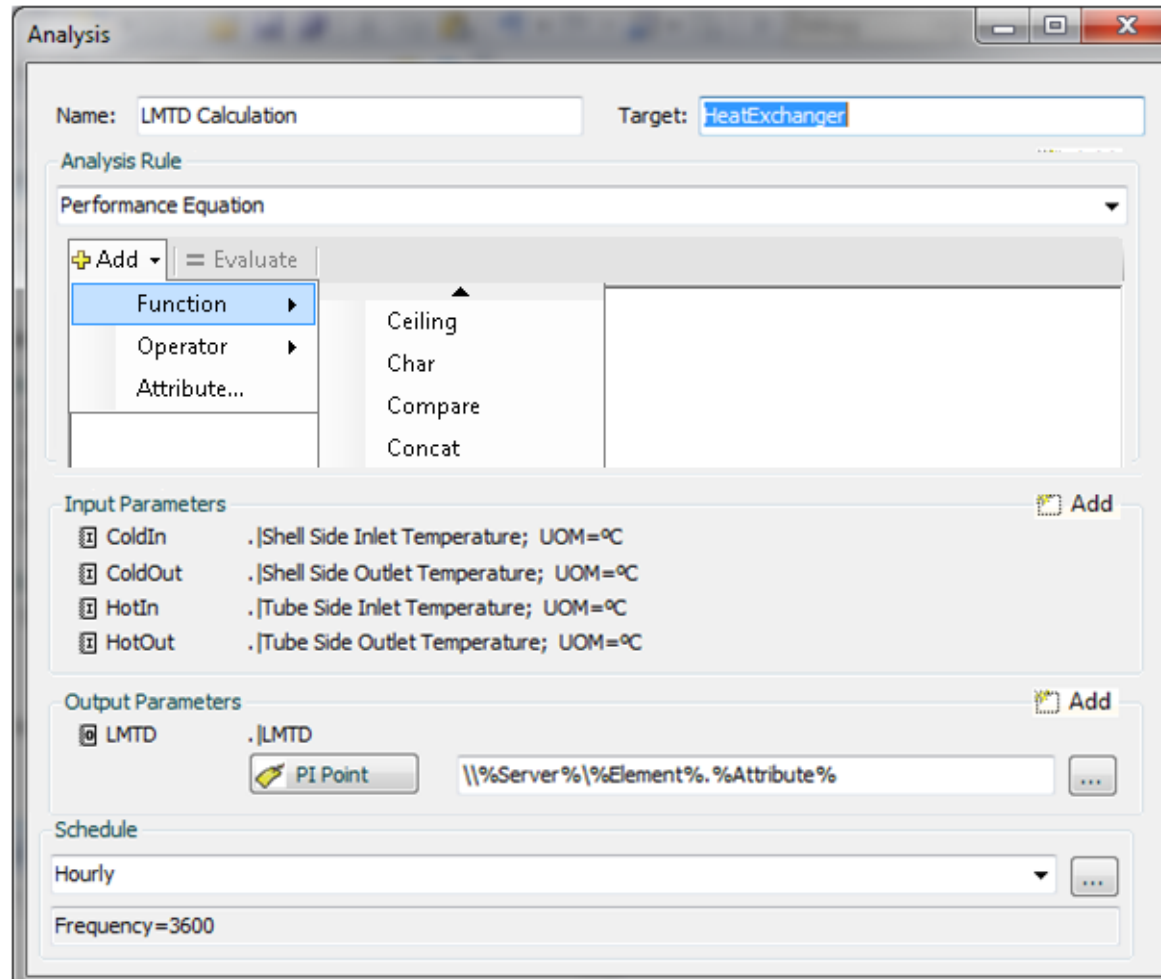
- PI ACE
- AF Analytics
- Edge Processing

- 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*



- Leverage AF Elements and AF Element Templates
- GUI configuration experience
- Outputs written back to PI System
- Same PE Library as in PI Notifications
- No change to existing AF Data References



Analysis

Name: LMTD Calculation Target: HeatExchanger

Analysis Rule

Performance Equation

+ Add = Evaluate

- Function
- Operator
- Attribute...
- Ceiling
- Char
- Compare
- Concat

Input Parameters Add

- ColdIn .|Shell Side Inlet Temperature; UOM=°C
- ColdOut .|Shell Side Outlet Temperature; UOM=°C
- HotIn .|Tube Side Inlet Temperature; UOM=°C
- HotOut .|Tube Side Outlet Temperature; UOM=°C

Output Parameters Add

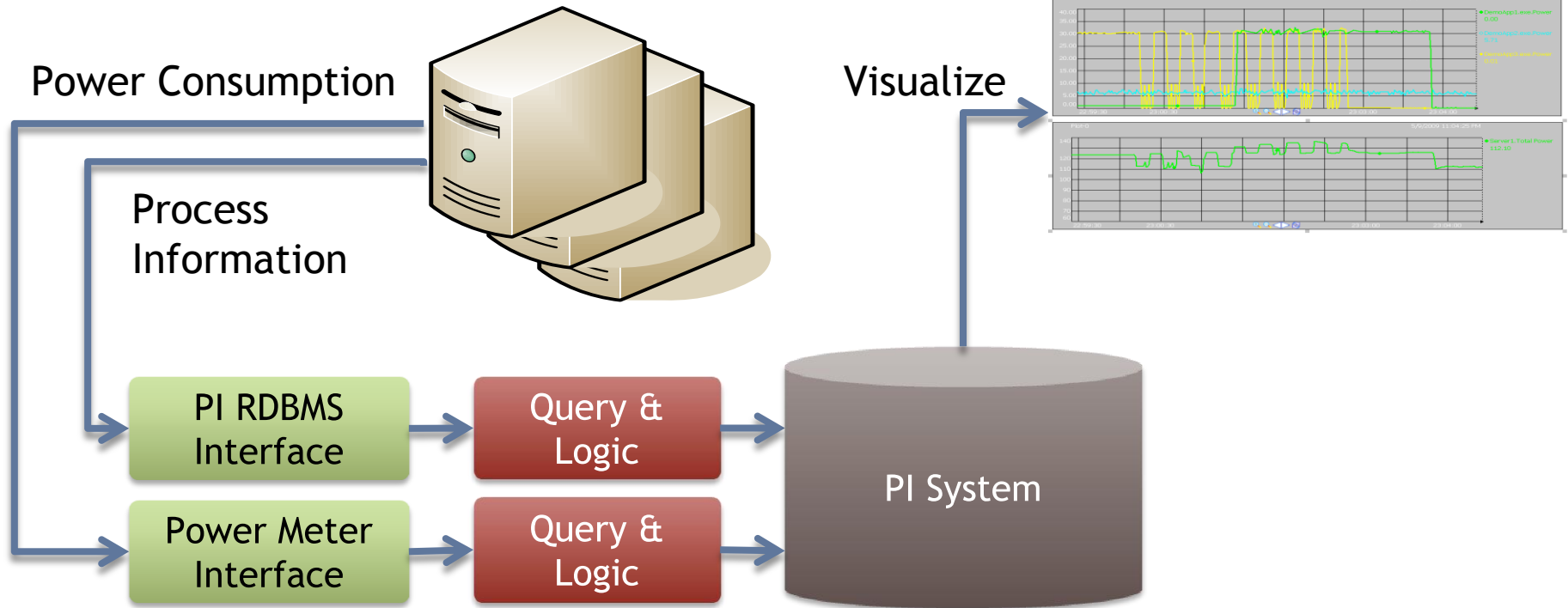
- LMTD .|LMTD

PI Point \\%Server%\%Element%. %Attribute%

Schedule

Hourly

Frequency=3600



- Event Frames Database & SDK available
 - CTP (Community Technology Preview)
- Significant partner and customer interest
- Partners now developing
 - Downtime tracking
 - OEE (overall equipment effectiveness)



OSIsoft.

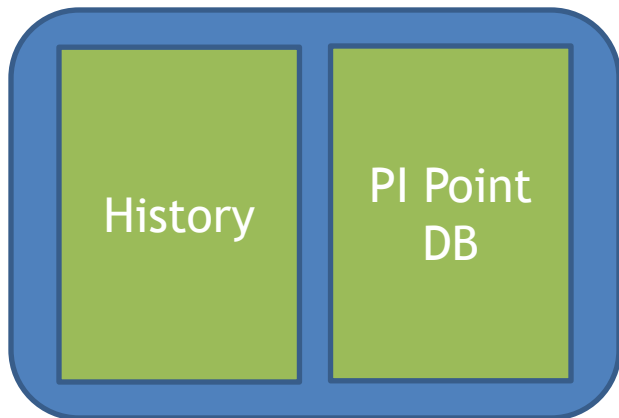
VIRTUAL CAMPUS

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

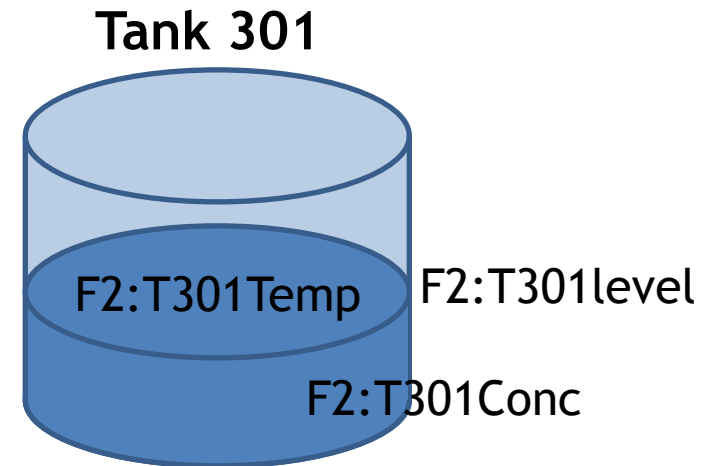
Data Buffering

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

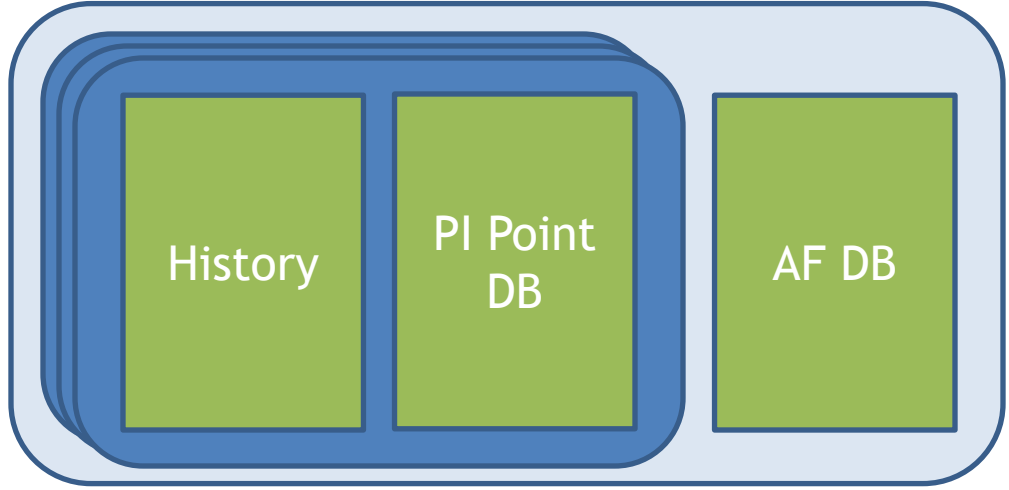
Search by Point Attributes



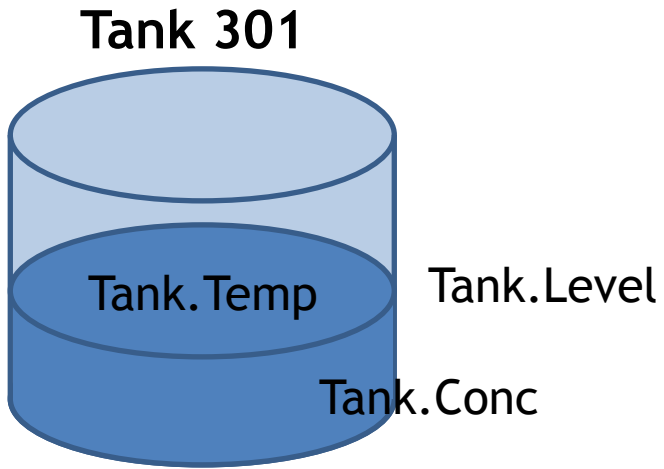
Search by attribute mask, value



Elements and Attributes



Search by mask, type, value





Simple

Easy to get started, system grows with you



Relevant

Deliver the most important data to right people



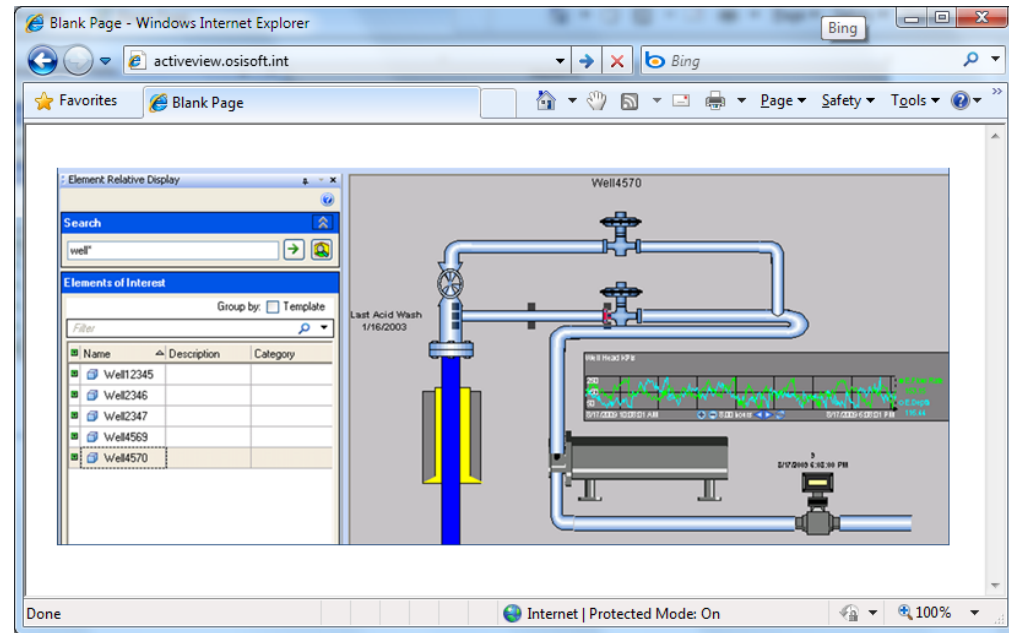
Collaborative

Everyone has access to the data, easy to share

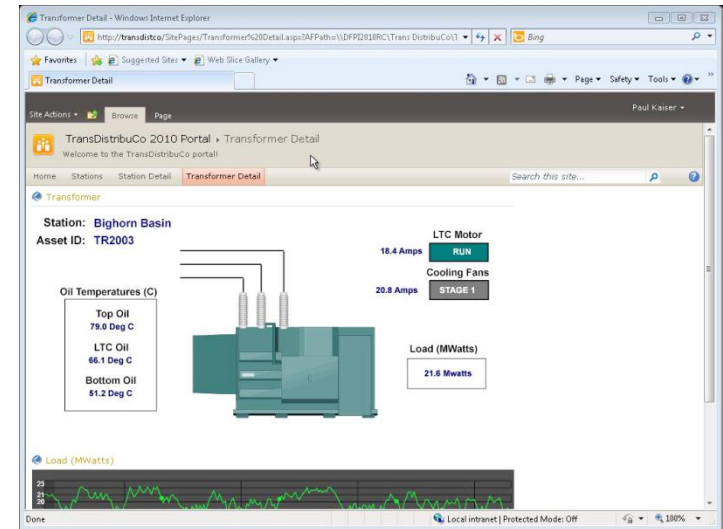
- Asset view of data
- PI System Search
- Better analysis via PowerPivot and BI tools
- Report building
- Publishing for others using Excel Services



- 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
- Social SharePoint System





Thank you

© Copyright 2010 OSIsoft, LLC.

777 Davis St., San Leandro, CA 94577