

Roadmap: Coming to a PI System Near You

Presented by **Yves Gauthier** and **Hans-Otto Weinhold**

Themes

1. Asset-based PI System
2. Event Frames
3. Future Data
4. Mobility/Visualization
5. Downstream Systems
6. Cloud Services

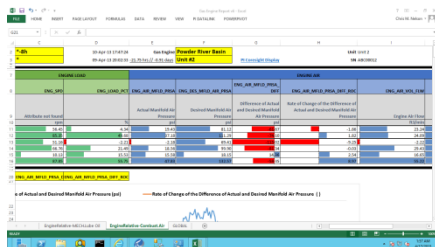
Theme 1: Asset-based PI System

An easier way to manage a PI System

2013

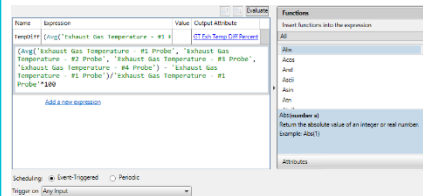


PI Coresight 2013

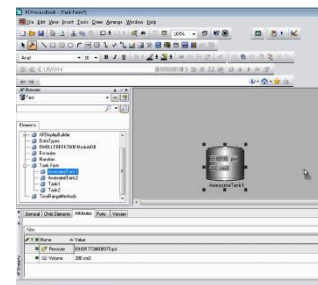


PI DataLink 2013

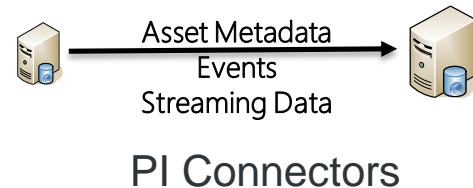
2014

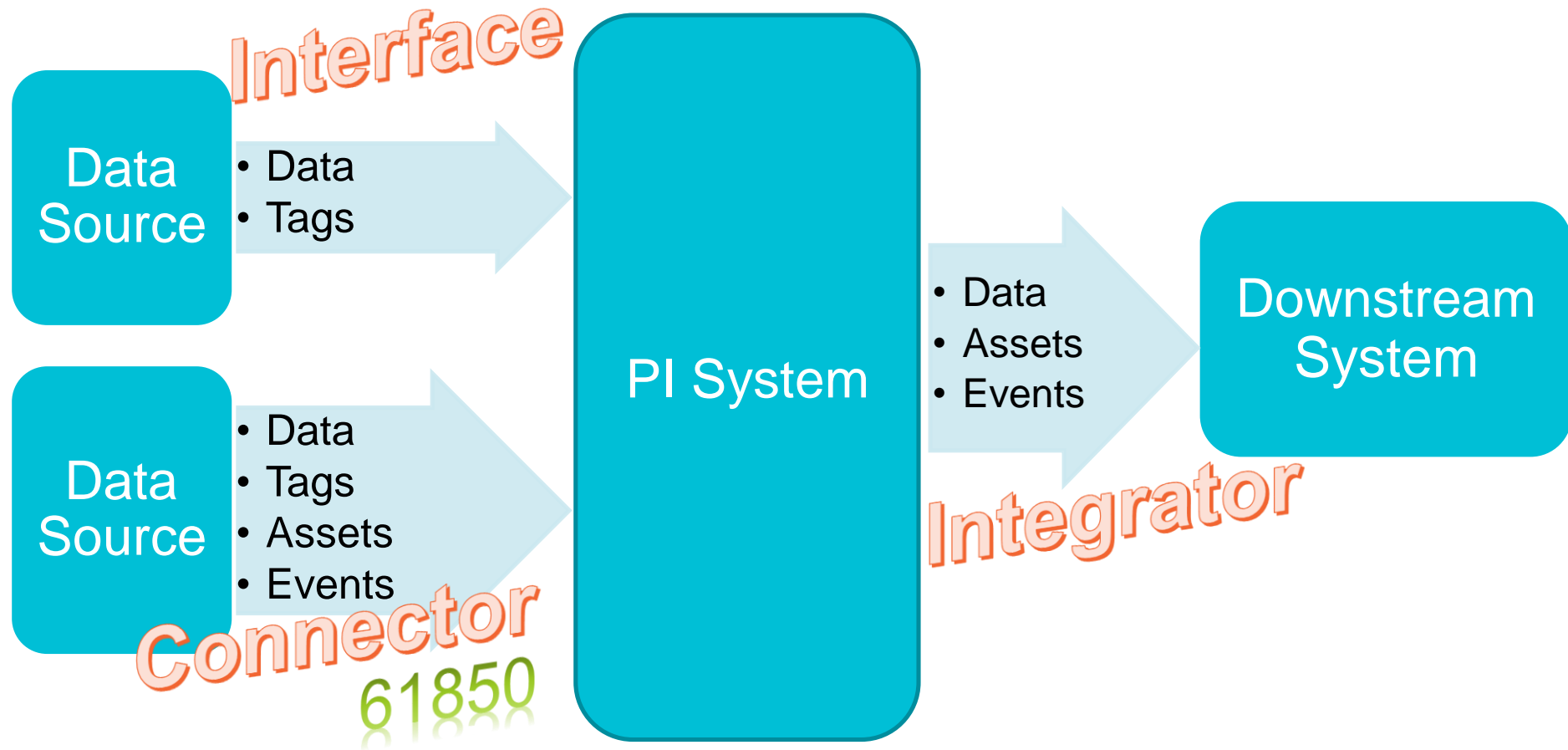


PI Server 2014
(Analytics)



PI ProcessBook 2014
AF Display Builder





The screenshot shows a web browser window with the address bar displaying `http://localhost:5460/` and the page title `CygNet Administration`. The main heading is **CygNet Connector Administration Site**. On the left is a sidebar menu with the following items: Overview, Data Source List, Server List, and Diagnostics. The **Overview** section is active and contains the following content:

- Overview**
- CygNet connector details**
Version 1.0.0.10
- Status of the connector**
Connector running as OSI\bandersen
✔ Connector is running - [Stop connector](#)
- Data sources for the CygNet connector**
✔ CygNet Data Source
[Add or modify data sources](#)
- Servers configured to receive data from the connector**
✔ PI Data server : IntOne
✔ PI Asset server : IntOne
[Add or modify servers](#)

An orange arrow points from the **Data Source List** menu item to the [Add or modify data sources](#) link.

OSIsoft.

← → http://localhost:5460/DataSourceL CygNet Administration

CygNet Connector Administration Site

CygNet Data Source Configuration

Data source description (optional)

A Test CygNet System

CygNetSite

OSILARGE

CVSScanRate

1

VHSScanRate

15

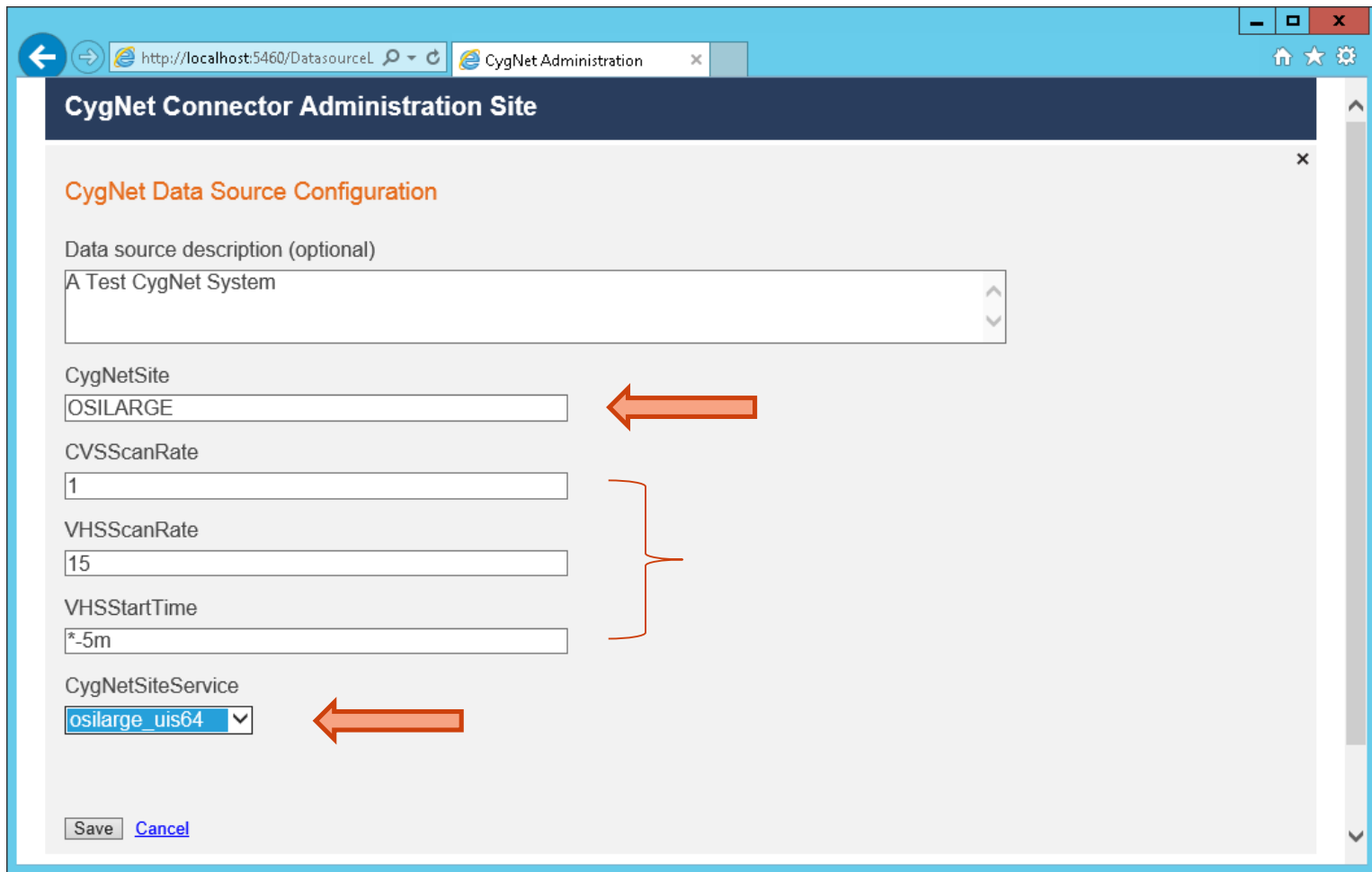
VHSStartTime

*-5m

CygNetSiteService

osilarge_uis64

Save Cancel



CygNet Explorer - Domain [5410]OSILARGE.FAC

File View Help

Filtered Services-Type-Status

Domain [5410]

- OSILARGE
 - Facility Service
 - Point Service
 - UIS 64-bit
 - VHS 64-bit

Contents of: Domain [5410]

Facility Identifier

OSILARGE_HSS

OSI_BATTERY_1

OSI_BATTERY_2

OSI_COMMDEV_1

OSI_COMMDEV_2

OSI_DDSFAC_1

OSI_DDSFAC_2

OSI_DMD_1

OSI_DMD_2

Elements

Connectors

CygNet Connector

OSILARGE.UIS64::OSI_BATTERY_1

OSI_BATTERY_1_BATE

OSI_BATTERY_1_CP1P

OSI_BATTERY_1_CP1PSH

OSI_BATTERY_1_FR1FALM

OSI_BATTERY_1_LTOIL1

OSI_BATTERY_1_PP1F

OSI_BATTERY_1_PP1V

OSI_BATTERY_1_SYDEVADDR

OSILARGE.UIS64::OSI_BATTERY_2

OSILARGE.UIS64::OSI_COMMDEV_1

OSILARGE.UIS64::OSI_COMMDEV_2

OSILARGE.UIS64::OSI_DDSFAC_1

OSILARGE.UIS64::OSI_DDSFAC_2

OSILARGE.UIS64::OSI_DMD_1

OSILARGE.UIS64::OSI_DMD_2

OSILARGE.UIS64::OSI_DRIVE_1

OSILARGE.UIS64::OSI_DRIVE_2

OSILARGE.UIS64::OSI_POC_1

OSILARGE.UIS64::OSI_POC_2

OSILARGE.UIS64::OSI_SWD_1

OSILARGE.UIS64::OSI_SWD_2

OSILARGE.UIS64::OSI_WELL_1

OSILARGE.UIS64::OSI_WELL_2

General Child Elements Attributes Ports Version

Filter

Name	Value
tagfull	
taglong	
twopntscale	Y
uniformdatacode	BATE
uniformdatacode_desc	
Unreliable	N
userflag1	N
userflag2	N
userflag3	N
userflag4	N
userflag5	N
userflag6	N
userflag7	N
userflag8	N
Value	65

Programmatic Access for Asset-based PI

- PI ODBC
- PI Web API including OData
- Programmable Analytics

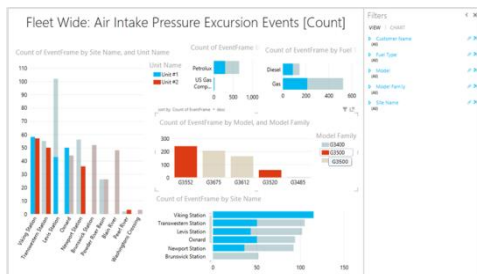
Theme 2: Event Frames

Capability of the PI System to record and analyze important process or business events

Industry	Event Frames	Value
T & D	Startups & Shutdowns	Respond to MW dispatch requests
T & D	Equipment failures	Increase grid reliability
T & D	Day and peak hours analysis	Understand if a situation is critical
Oil & Gas	Pump vibrations, downtime, ramp ups	Safety, optimization, asset reliability
Oil & Gas	Truck offloads into facility storage	Inventory Tracking
Metals & Mining	Rolls of Aluminum	Quality, roll comparisons
Chemicals	Batches, processing steps	Equipment effectiveness
Life Sciences	Batches, unit procedures, phases	Product quality, regulatory

Event Frames

2013



OLEDB Enterprise 2012

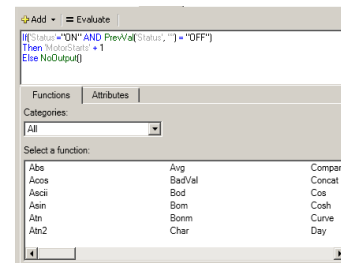
- PI Web Services
- BES/MES Interfaces
- EF Generator

Coresight 2013

2014



PI DataLink 2014



Analytics in PI Server 2014



Batch to Event Frame Migration in PI Server 2014 R2

PI DataLink

- PI DataLink 2014 released in April
 - Event Frames functions
 - New AF template filter function
 - Tag search enhancements
- PI DataLink Server 2014
 - Developed in parallel with PI DataLink 2014
 - Release in June

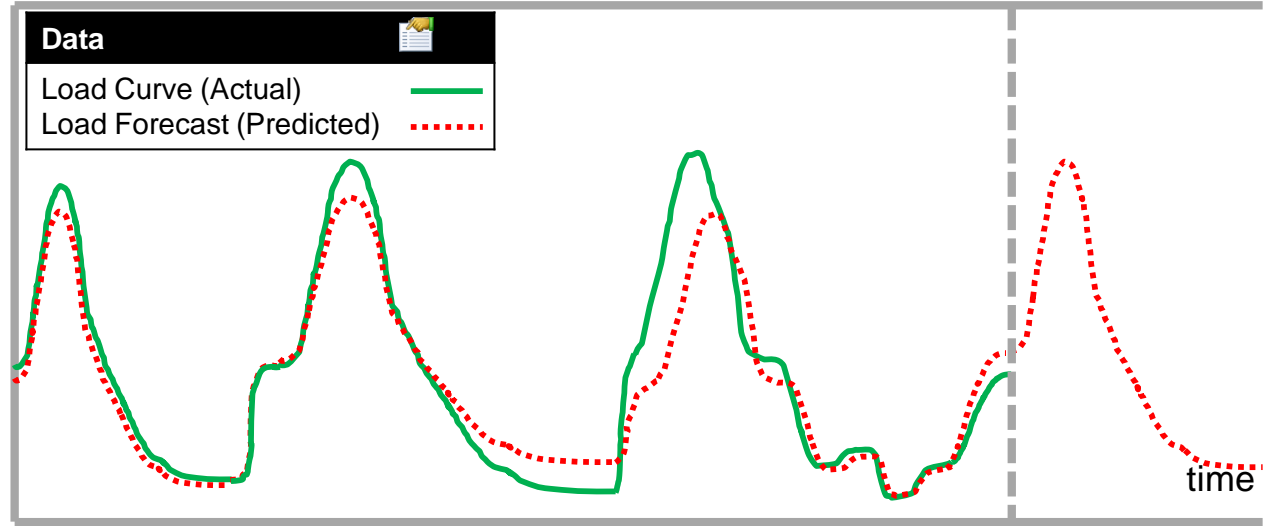
Coming Soon for Event Frames

- PI DataLink Server 2014
- Overlay trend in PI Coresight
- RtReports
- PI Notifications

Themes

1. Asset-based PI System
2. Event Frames
- 3. Future Data**
4. Mobility/Visualization
5. Downstream Systems
6. Cloud Services

Theme 3: Future Data



- PI Server 2014 Release 2
- Visualization enhancements

Theme 4: Mobility/Visualization

- Web-based technologies
- Multiple devices for each user
- Notify you of exceptions instead of relying on monitoring

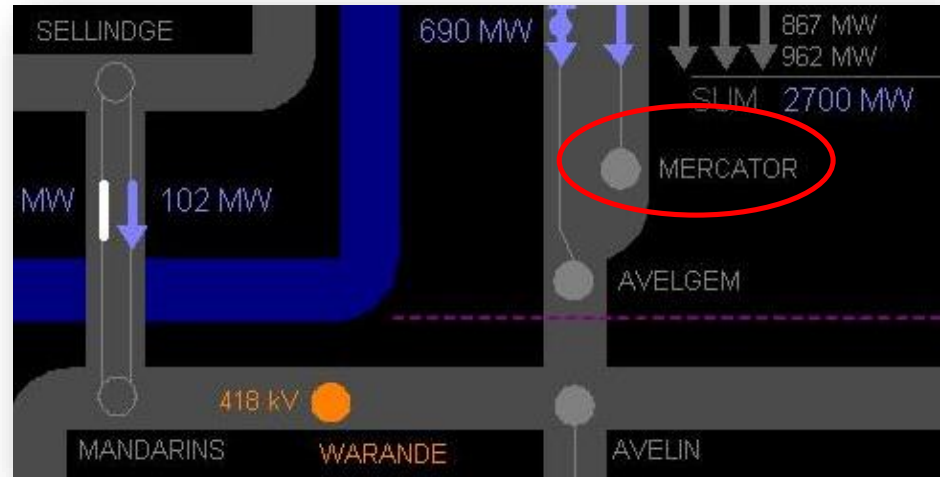
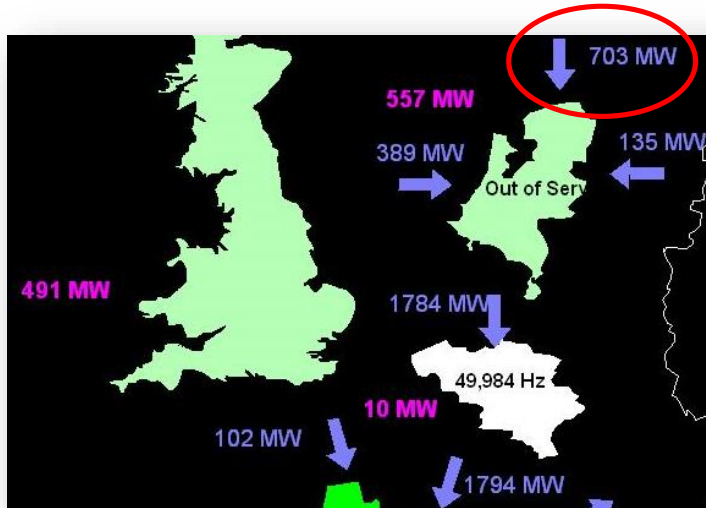
PI Coresight 2014

- Fast and easy access to PI System data
- PI ProcessBook display viewing in any browser
- New mobile web site designed for small screens and accessible on any device



PI ProcessBook 2014

- Link Asset Framework assets to images



Images are a courtesy of Coreso

Upcoming Visualization Releases

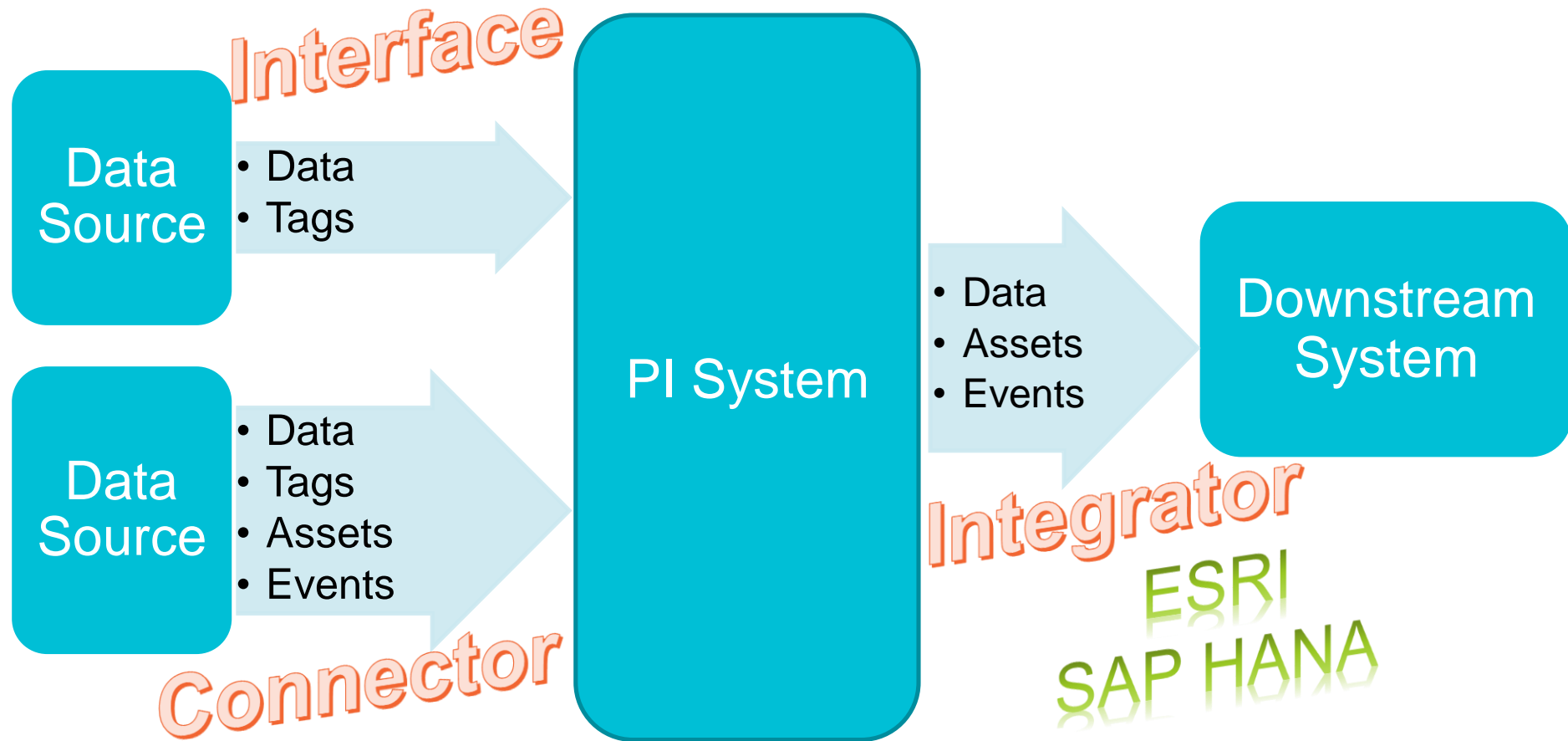
- PI Coresight 2014
- PI Manual Logger 2014
- PI ProcessBook 2014
- PI WebParts 2013 - *released*

Research around visualization

- Apps for Office web add-in
- Modern User Experience Project
- Finish moving from Microsoft Silverlight to HTML5 in PI Coresight

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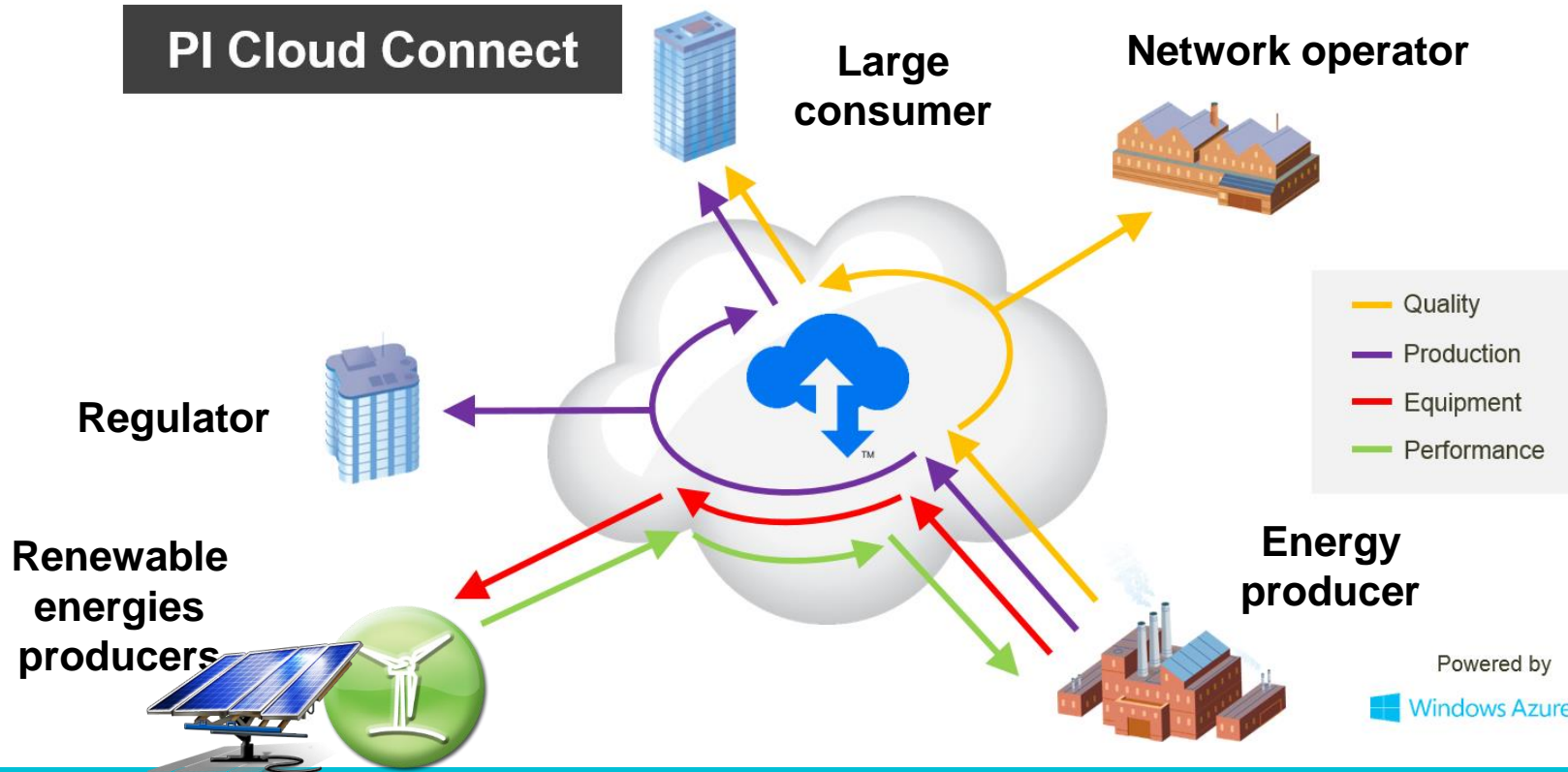


Downstream Systems

- PI Integrator for Esri ArcGIS
 - Technology Preview now
 - Release July 2014
- PI Integrator for SAP Hana in development

Theme 6: Cloud Services

PI Cloud Connect

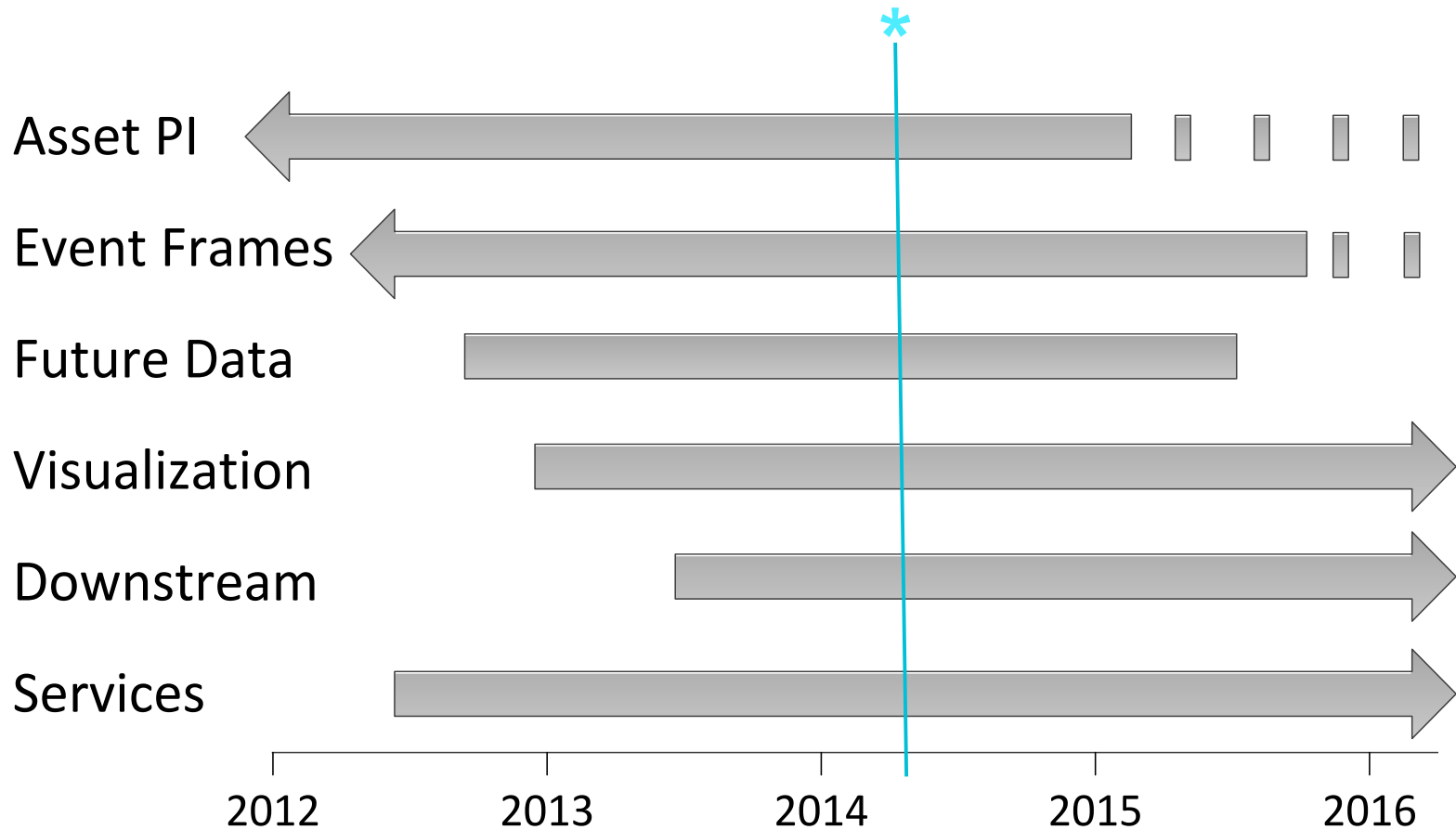


Powered by



Cloud Services growing month by month

- PI Cloud Integrator for Esri ArcGIS
- PI Cloud Access



Conclusions

- Use PI Asset Framework in new (and old) projects
- PI Event Frames provides a new way to analyze data.
- PI ProcessBook displays go mobile with PI Coresight 2014
- PI Cloud Connect makes it easy and secure to share real-time data with business partners

Yves Gauthier

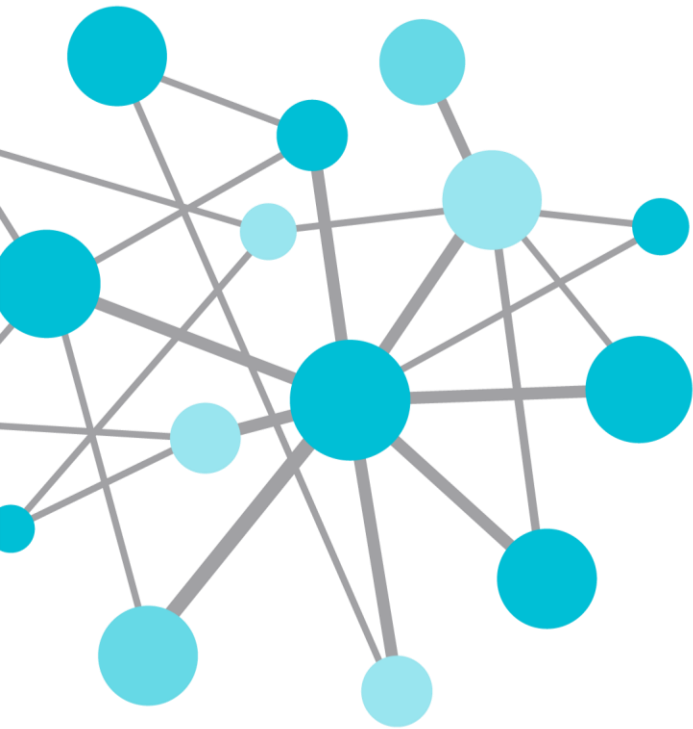
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THANK
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