

Update on Development of Key PI Interfaces for Oil & Gas

Presented by **Chris Coen, Product Manager**

Brandon Andersen, Sr. Software Developer

Agenda

- Context
- PI Connector for CygNet
 - Overview
 - Demo
- Wonderware Historian (InSQL)
- WITSML
- Closing Comments



OSIsoft – The Leader In Connecting to your Data Sources

- Strategic differentiator & Competitive Advantage
- We've built over 450 PI Interfaces
- Continuing to maintain those
- Building more to meet your needs
- Strong team and core competency



TOP 50 GLOBAL AUTOMATION VENDORS		2010 Worldwide
	TOTAL (in millions)	88,555.4
1	✓ Siemens	12,896.4
2	✓ ABB Process Automation and ABB Automation Products	10,945.6
3	✓ Emerson Process Management	6,533.3
4	✓ Rockwell Automation	4,424.0
5	✓ Schneider Electric	4,415.0
6	✓ Mitsubishi Electric	3,473.6
7	✓ Danaher Industrial Technologies	3,168.4
8	✓ Yokogawa Electric	2,979.3
9	✓ Honeywell Process Solutions/Sensing & Control	2,775.1
10	✓ GE	2,200.1

Source: www.controlglobal.com



Rockwell
Automation



ODBC



SIEMENS

Honeywell

HTML/XML



Schneider
Electric

SNMP



Distributed
Network
Protocol



GE
Intelligent Platforms



Landis
Gyr+
manage energy better



COOPER Power Systems



werum
SOFTWARE & SYSTEMS



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Things to Do <ul style="list-style-type: none">Generate a License FileOpen a Support CaseDownload SoftwareUpdate My Profile		<ul style="list-style-type: none">Ask the CommunitySearch Knowledge BaseWatch Learning VideosBrowse the Live LibrarySystem Manager Resources	<ul style="list-style-type: none">My DownloadsBrowse All DownloadsMy Download History	<ul style="list-style-type: none">PI System RoadmapPI ServerPI VisualizationPI System AccessSearch for Interfaces

My Support Cases

You currently have no open cases.

- View all my support cases
- Create a new case

Product Alerts

December 10, 2013
[PI Coresight and Microsoft Patch Compatibility](#)

November 14, 2013
[VSS backup of PI Server 2012 fails on Windows Server 2012 R2](#)

September 9, 2013
[PI Interface for Performance Monitor version 2.0.0.73 Ignores the Conversion Tag Attribute](#)

August 13, 2013
[Security Bulletin - Two vulnerabilities in the PI](#)


Product Releases

March 12, 2014
[A new Tech Support Website is coming next week!](#)

March 11, 2014
[PI Interface for SIMCA-online version 3.0.0.104 and PI Interface for SIMCA-online x64 version 3.0.0.105 are released](#)

March 6, 2014
[PI Interface for OPC DA 2.5.1.3 is released](#)

February 13, 2014
[PI Interface for SAFER Real-Time 1.0.2.14 is released](#)



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PI Interfaces Search

Enter a few key words below to find the right PI Interface for your system.

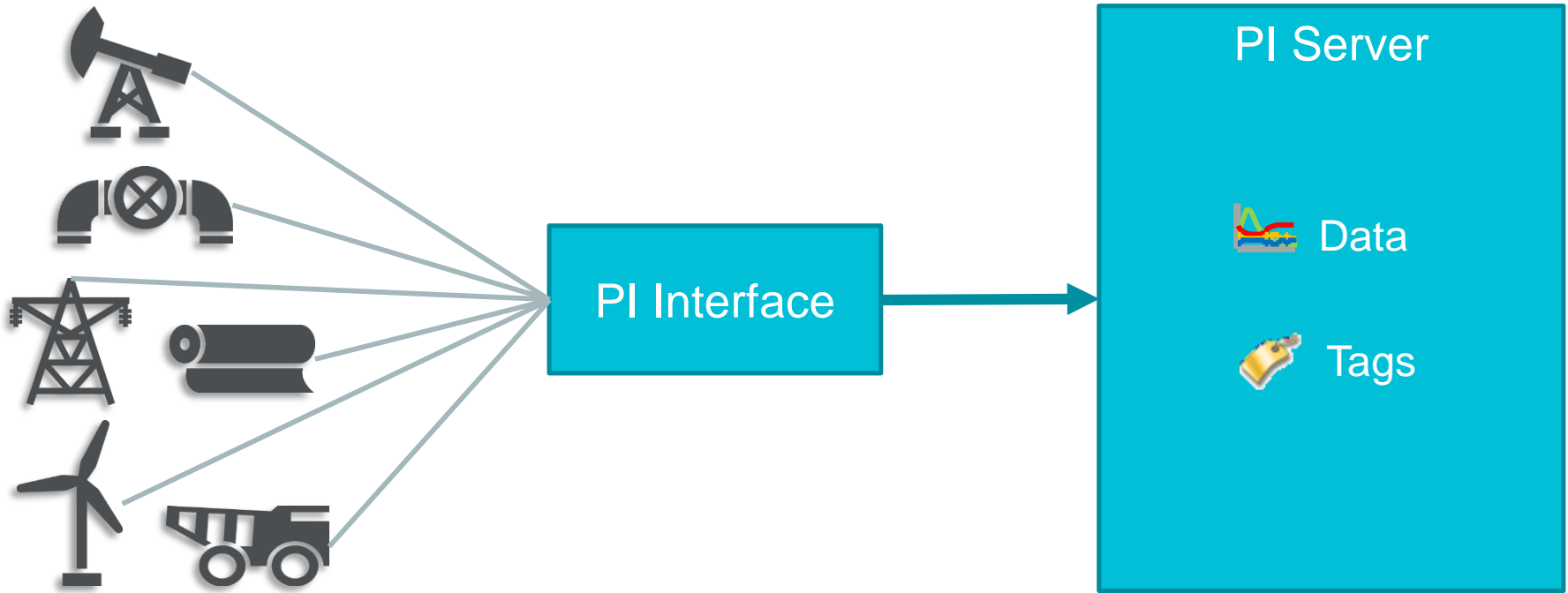
Hint: try the vendor name (for example: "Honeywell").

abb Search

Interface	Platforms	Version	Availability
PI Interface for ABB 800xA Batch PI-IN-ABB-800BAT-NTI	Windows	3.0.13.369	Standard
PI Interface for ABB IMS Advant PI-IN-ABB-ADV-NTI	Windows	5.82.0.58	Standard
PI Interface for ABB IMS Advant PI-IN-ABB-ADV-HPUX	HPUX	N/A	Standard
PI Interface for ABB IMS Advant PDL PI-IN-ABB-PDL-NT	Windows	3.0.3.45	Standard
PI Interface for ABB Procontrol P for PBS Common Procontrol data Server PRIMO-S, abbpbs, POS30 POS 30, PBS30, PBS 30 PI-IN-ABB-PPBS-NTI	Windows	2.25.0.73	Standard

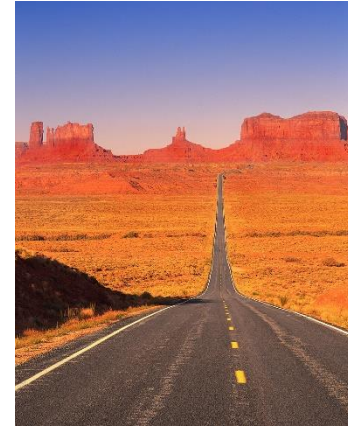
PI Interfaces:

Proven and reliable data collection



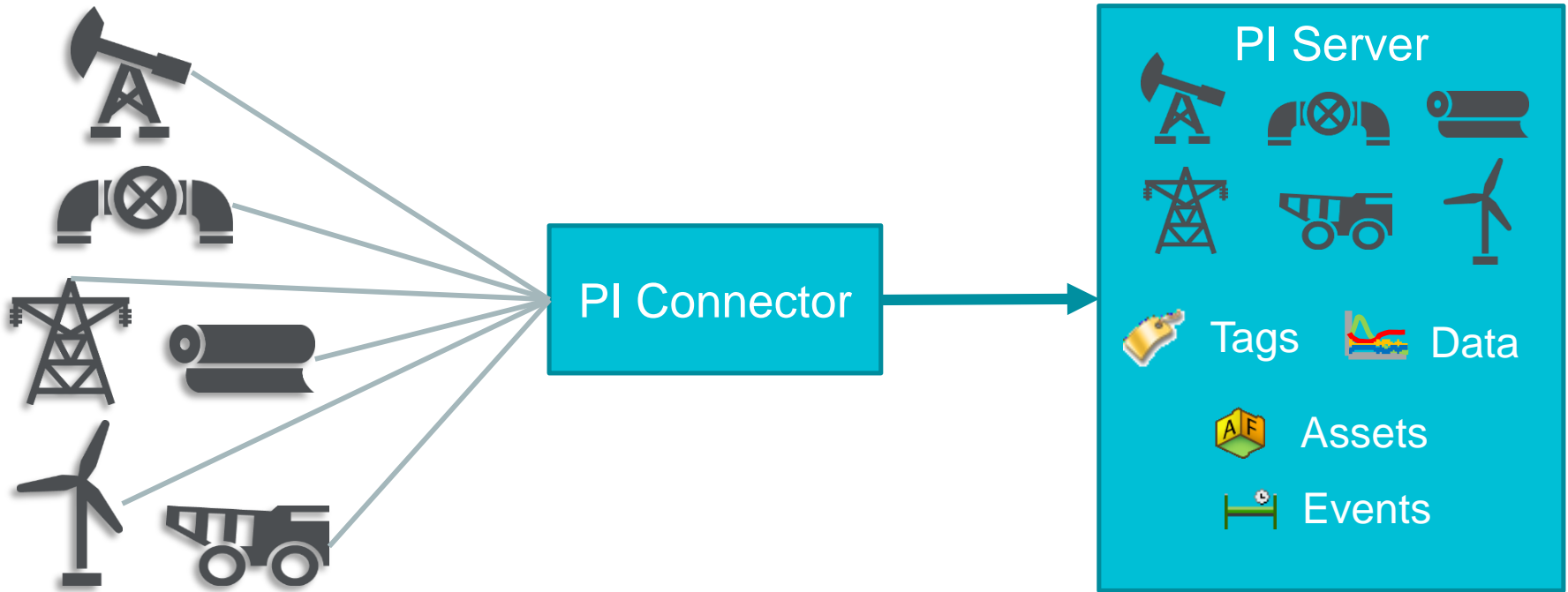
Challenges We Have Heard

- Spend lots of time configuring tags
- Challenging to configure interface
- Time consuming to build an asset model
- Collect high speed data
- Collect data from many new systems



PI Connectors:

Strong connections to your data sources



Advantages of PI Connectors

- Auto-create assets and tags
- Auto-discovery of assets and tags
- Collect event data type (Event Frames)
- Simple configuration
- Higher speed
- Ability to run on Linux

PI Connector for CygNet



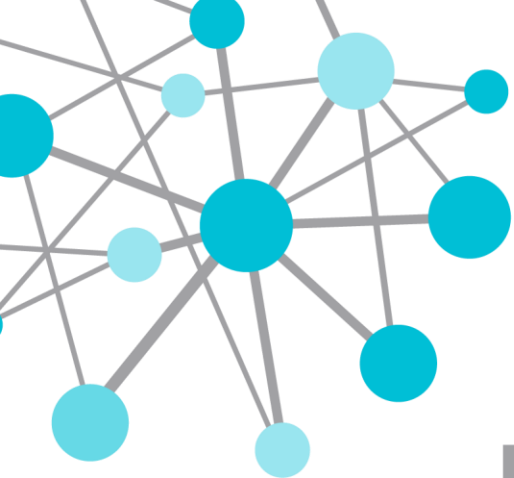
- CygNet, a Weatherford company
- Leading SCADA in Oil & Gas upstream
- Foundation for many applications and solutions

PI Connector for CygNet



- CygNet SCADA system collects data from various assets, such as:
 - Batteries (Oil treatment facilities)
 - Communication Devices
 - Wells
- Real-time data and metadata

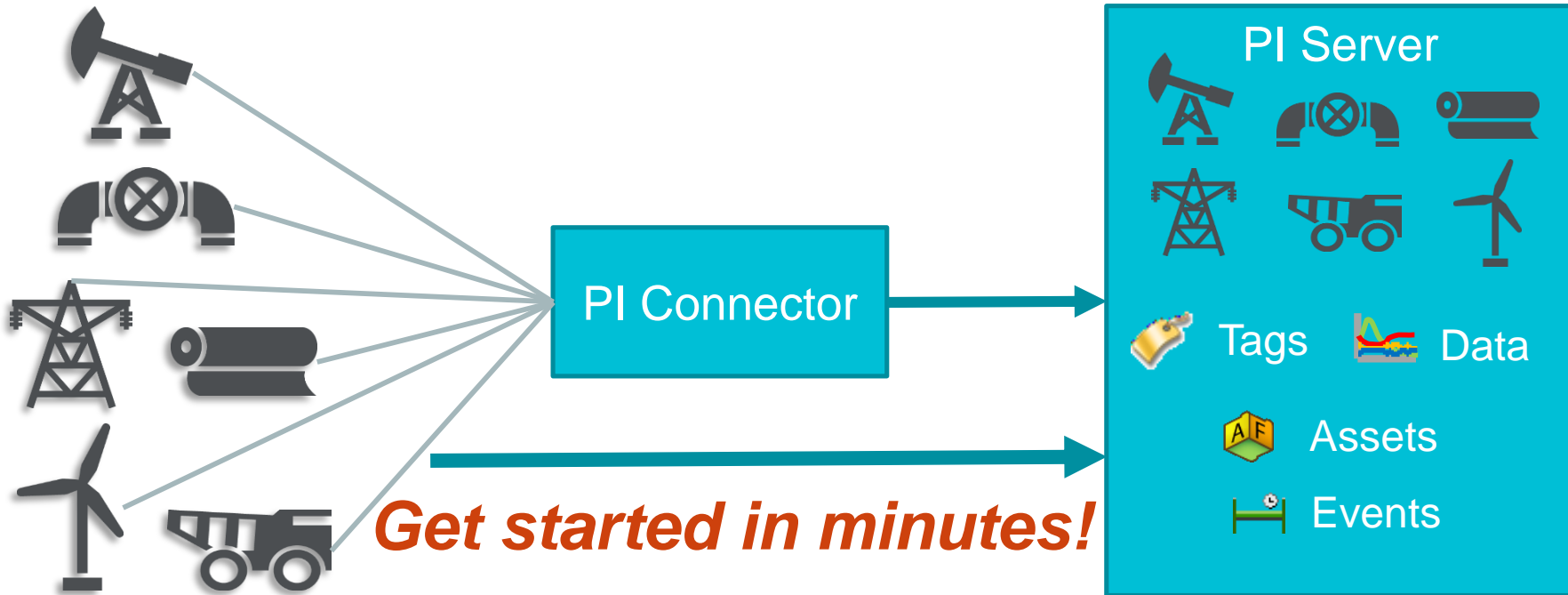




DEMO

PI Connectors:

Strong connections to your data sources



PI Connector for Wonderware Historian

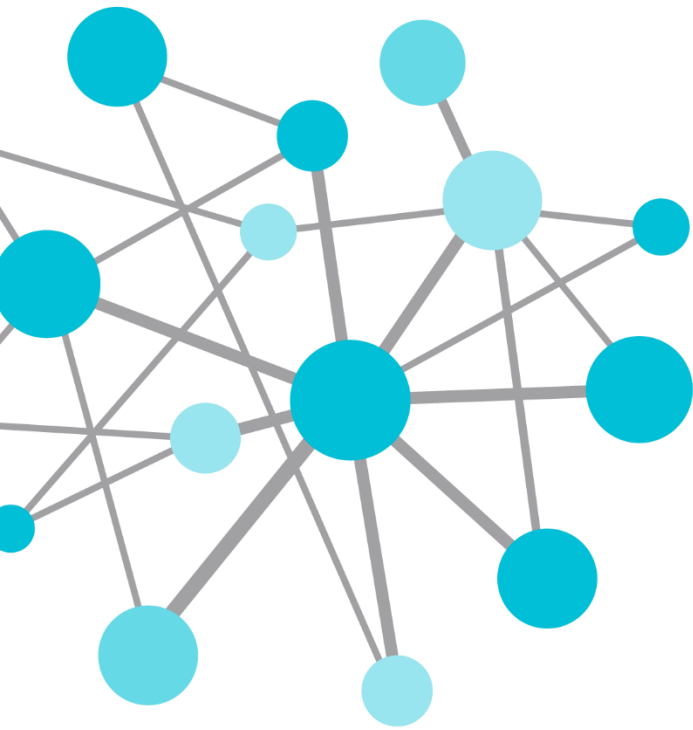


- Previously known as Wonderware InSQL
- Collect data to roll-up into corporate PI System

PI Connector for WITSML



- Looking for advisory customers
- Advisory board concept
- Engage around use cases for data
- Current partner effort lead by Industrial Evolution



WITSML Interface Development: PROGRESS REPORT

Presented by **Shaun Wright**, Industrial Evolution



WITSML Interface Development:

A PROGRESS REPORT BY INDUSTRIAL EVOLUTION



What is WITSML?



Why is I/F needed?



Challenges faced

- Wellsite Information Transfer Standard Markup Language
- Standard communication protocol for Oil & Gas upstream companies
- Used to standardize data definitions among operators, drilling contractors, vendors and regulatory agencies

- To exchange PI data with WITSML compliant applications
- Drilling operations optimization
- Increased safety
- Reduced rig downtime and equipment damage
- Systems integration and interoperability

- Lack of consistency of attribute definition within the standard
- Vast amounts and types of data.
- PI is time-series data by tag; WITSML is static asset data by attribute
- Need to search on mixed time-stamped dynamic and static data

Project Description

- Devon Energy: Lead client
- Scope: Inbound data (i.e. WITSML to PI) initially
- Technical approach
 - PI AF based (not the traditional PI tag structure)
 - Template driven
 - Integration with mud, surveys & BHA data through Peloton's WellView

Progress Report

- Initial version is testing on Devon's QA test bed
- Currently interfaced to five rigs
- Next steps
 - Formal acceptance and deployment
 - Include real-time monitoring of torque and drag
 - WITSML streams from additional vendors
 - Roll out to other clients

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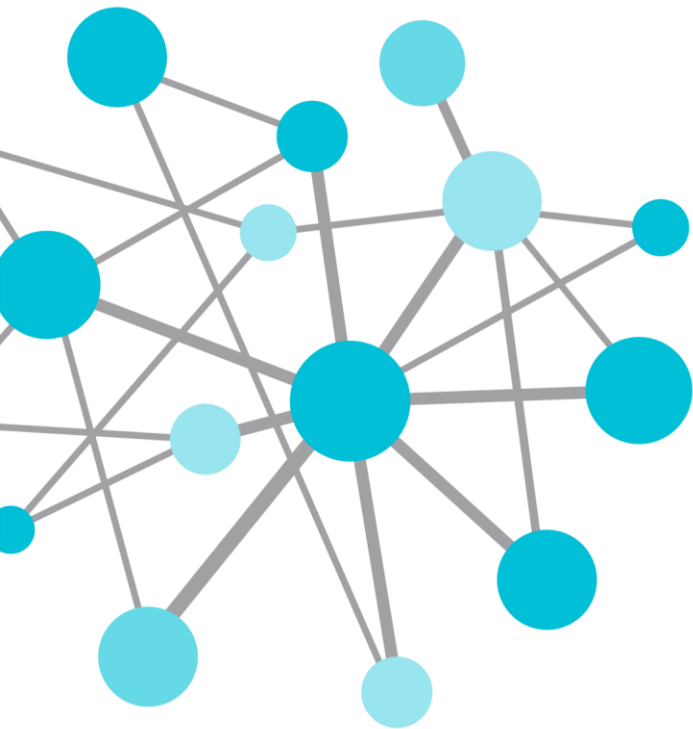
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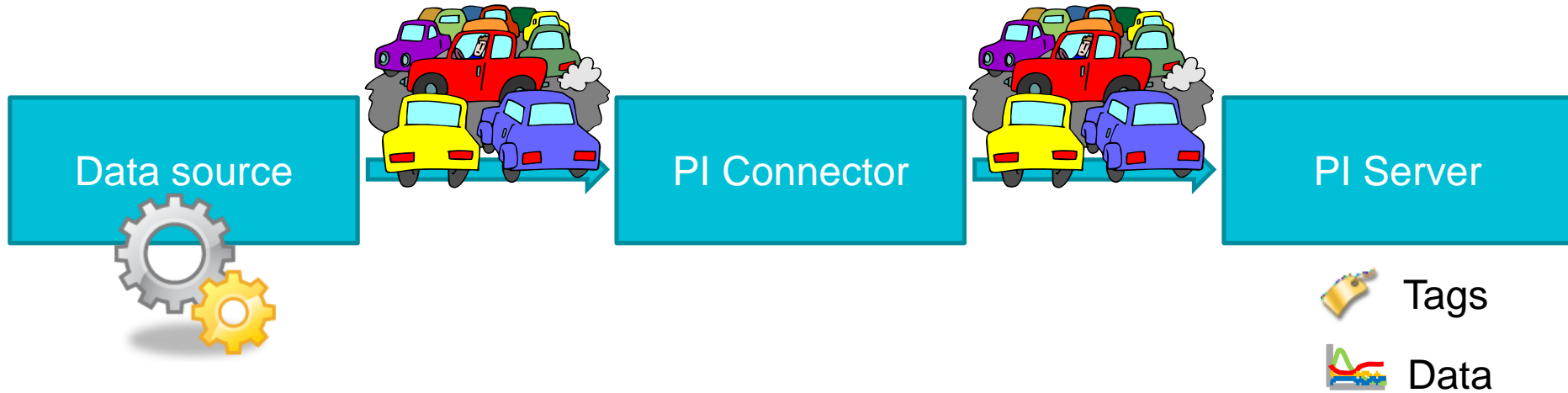
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THANK
YOU

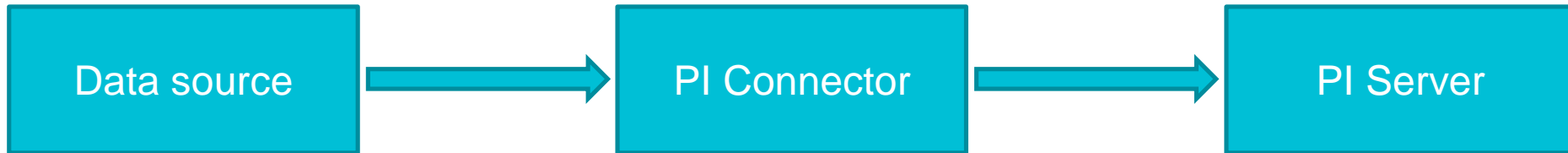
Brought to you by  **OSI**soft.

Can I opt out of collecting some of the data?



Can I opt out of collecting some of the data?

GOAL – Make it easy for you to collect data



Under consideration:

1. Filter out asset types you don't want
2. Filter out data you don't want from a specific asset type
3. Preview of what will be created in PI Server

