

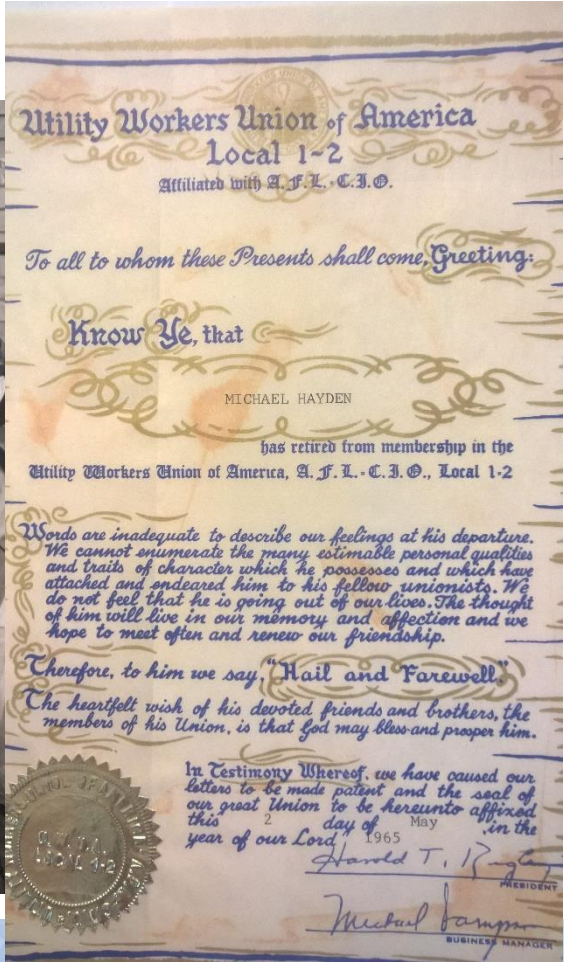
OSIsoft Product Roadmap

Mike Hayden

November 8, 2017



Welcome and thank you for attending



Official Roadmap



My Support

Contact Us

Things to Do

- [Generate a License File](#)
- [Open a New Support Case](#)
- [Download Software](#)
- [Update My Profile](#)

| Featured Products | Q1 2017 | Q2 2017 | Q3 2017 | ▼ | Q1 2018 | Q2 2018 | Q3 2018 - Q4 2018 | Q1 2019 - Q2 2019 |
|--|---------|---------|---------|---------|---------|---------|-------------------|-------------------|
| Cloud Services | Q1 2017 | Q2 2017 | Q3 2017 | Q4 2017 | Q1 2018 | Q2 2018 | Q3 2018 - Q4 2018 | Q1 2019 - Q2 2019 |
| PI Cloud Connect | | ■ | | | | | | |
| Visualization View more | Q1 2017 | Q2 2017 | Q3 2017 | Q4 2017 | Q1 2018 | Q2 2018 | Q3 2018 - Q4 2018 | Q1 2019 - Q2 2019 |
| PI Vision | | ● | | ● | | | | |
| PI DataLink | | ● | | ■ | | | | |
| PI Manual Logger | | | ● | | | | ● | |
| PI ProcessBook | | ■ | | ■ | ● | ● | | |
| RtrReports | | | | ● | | ● | | |
| PI Coresight | | ● | | | | | | |
| Integrators | Q1 2017 | Q2 2017 | Q3 2017 | Q4 2017 | Q1 2018 | Q2 2018 | Q3 2018 - Q4 2018 | Q1 2019 - Q2 2019 |
| PI Integrator for Business Analytics | | ■ | | ● | | | | |
| PI Integrator for Esri ArcGIS | | | | ● | | | | |
| PI Integrator for SAP HANA | | ● | | | | | | |
| PI Integrator for Microsoft Azure | | ■ | | ● | | | | |
| Developer Technologies | Q1 2017 | Q2 2017 | Q3 2017 | Q4 2017 | Q1 2018 | Q2 2018 | Q3 2018 - Q4 2018 | Q1 2019 - Q2 2019 |
| PI Web API | | ● | | ● | | | | |
| PI ODBC Driver | | | | | | | | |
| PI OLEDB Provider | | | | ■ | | | | |
| PI OPC HDA Server | | | | | | | | |
| PI AF SDK | | ● | | ● | | | | |
| PI OLEDB Enterprise | | | | ■ | | | | |
| PI JDBC Driver | | | | ● | | | | |
| PI OPC DA Server | | ● | | | | | | |
| PI Server View more | Q1 2017 | Q2 2017 | Q3 2017 | Q4 2017 | Q1 2018 | Q2 2018 | Q3 2018 - Q4 2018 | Q1 2019 - Q2 2019 |
| PI Data Archive | | ● | ■ | ● | | | | |
| PI AF | | ● | | ● | | | | |
| Notifications | | ● | | ● | | | | |
| PI ACE | | | | | | | | |
| PI for StreamInsight | | | | | | | | |
| PI System Health | | | | | | ● | ● | |
| PI System Directory | | | | ● | | ● | | |
| Interfaces & Connectors View more | Q1 2017 | Q2 2017 | Q3 2017 | Q4 2017 | Q1 2018 | Q2 2018 | Q3 2018 - Q4 2018 | Q1 2019 - Q2 2019 |



The OSIssoft Portfolio

Connectivity

Connectors /
Interfaces



Embedded
Connectors



Edge
Historian

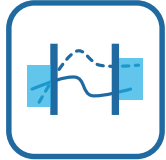


Enterprise

Notifications



Event
Frames



Developer
Technologies



Server



Asset
Analytics



Health
Tooling



Visualization

Vision



Manual
Logger

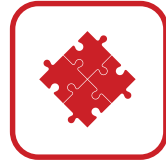


Datalink



Integration

BA



SAP



Esri



Microsoft



Enterprise wide
Streaming
Queries



Cloud Services

Cloud Connect



Data Sharing



Display Sharing



Accessing Operational Data



OSIsoft is the source for operational data: Connectivity

Connectivity

Connectors / Interfaces



Embedded Connectors



Edge Historian



Enterprise

Notifications



Event Frames



Developer Technologies



Archive



Asset Analytics



Health Tool



Visualization

Vision



Manual Logger

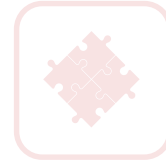


Datalink



Integration

BA



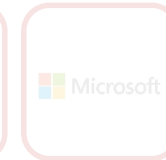
SAP



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Enterprise wide Streaming Queries



Cloud Services

Cloud Connect



Data Sharing



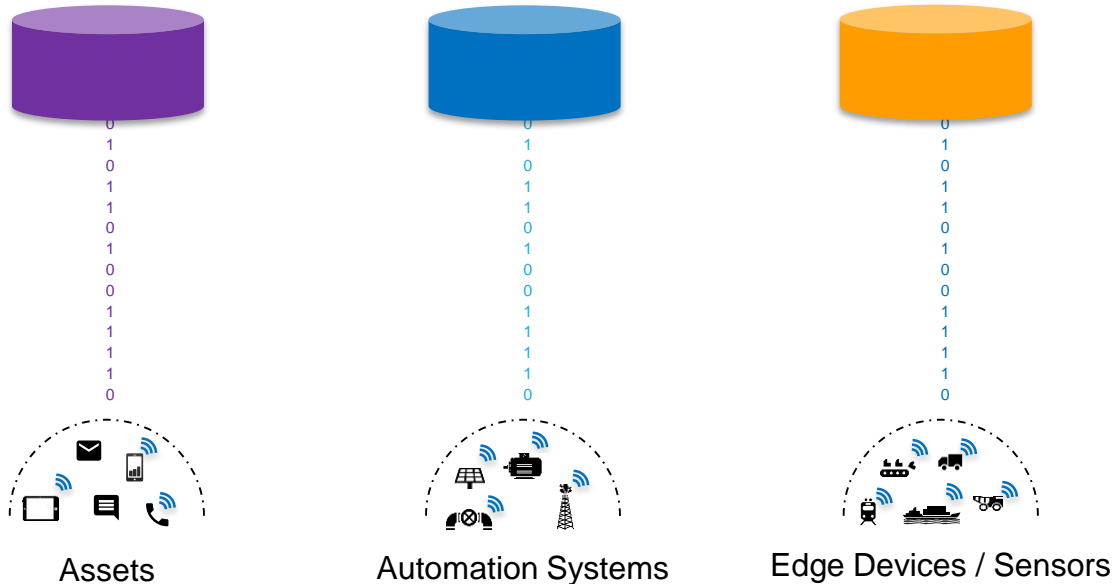
Display Sharing



The Industrial Internet of Things (IIoT) has inherent risks and challenges

Data Silos

One version of the truth?
Data is isolated from other use cases
Data management challenges



Assets

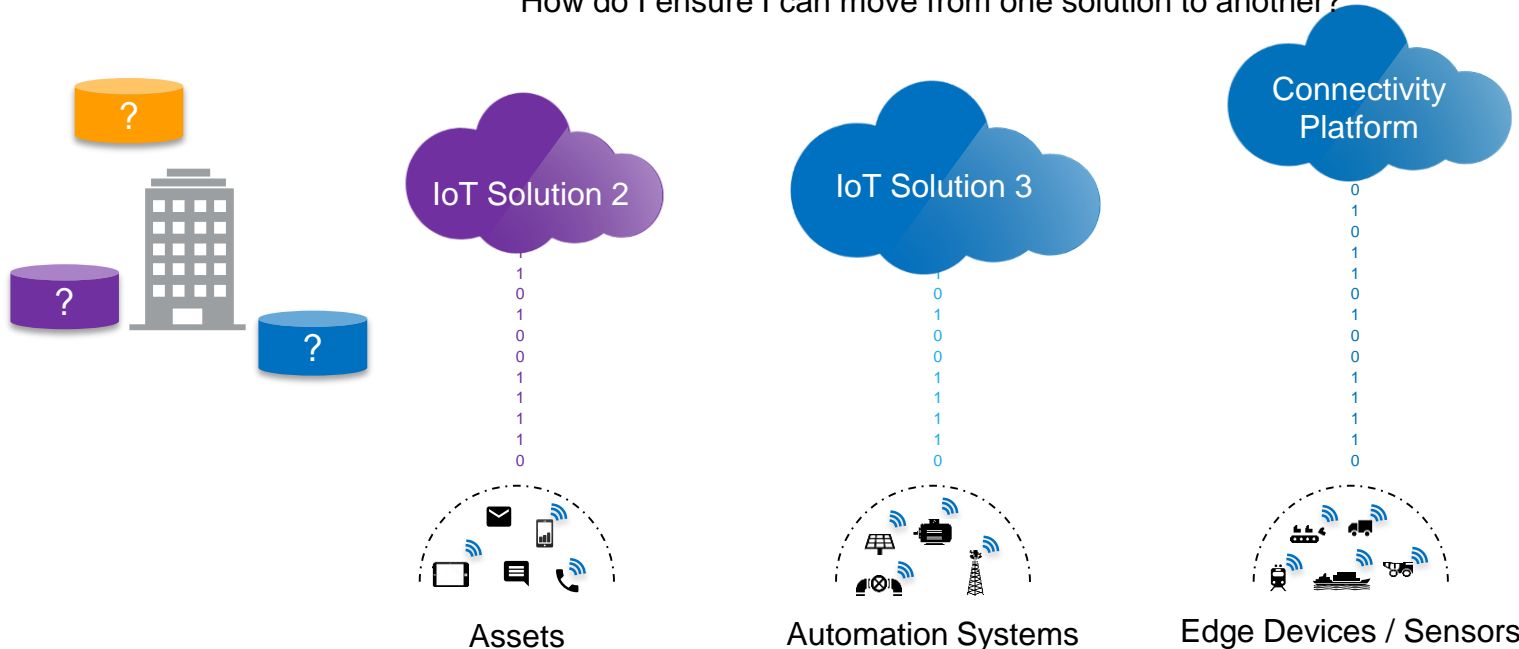
Automation Systems

Edge Devices / Sensors

IIoT risks and challenges: Data Ownership

Data Ownership

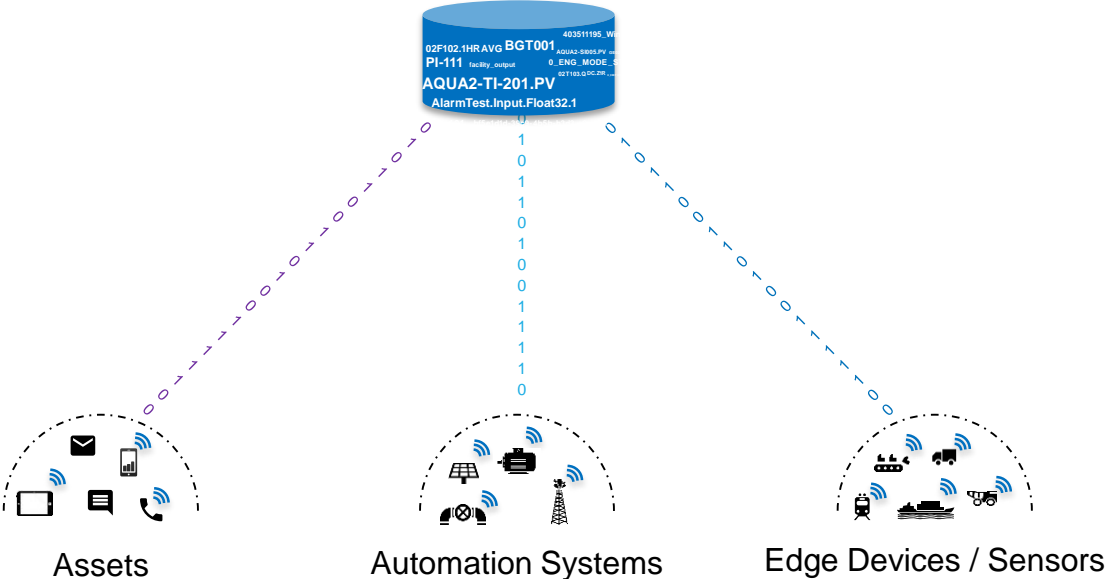
Do I have access to my own data?
How do I ensure I can move from one solution to another?



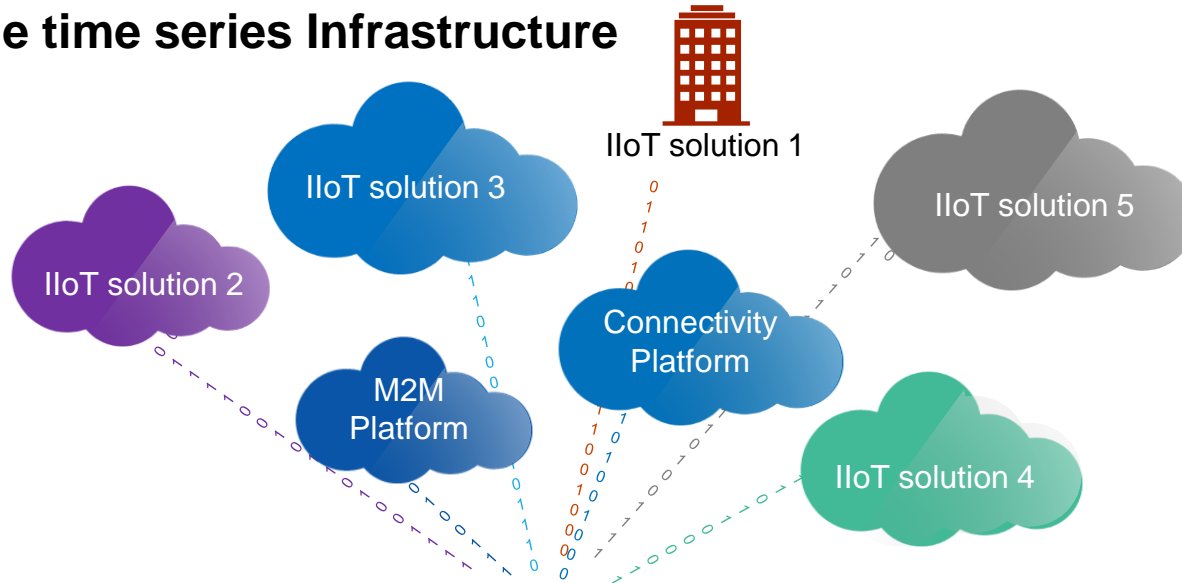
IloT risks and challenges: Data Context

Data Context

Understanding the criteria to analyze data is as important as the data itself
The further data moves from SME's the more important context is



Extending the time series Infrastructure



OSIsoft®
Enterprise Operations Infrastructure



Edge Devices / Sensors



Automation Systems

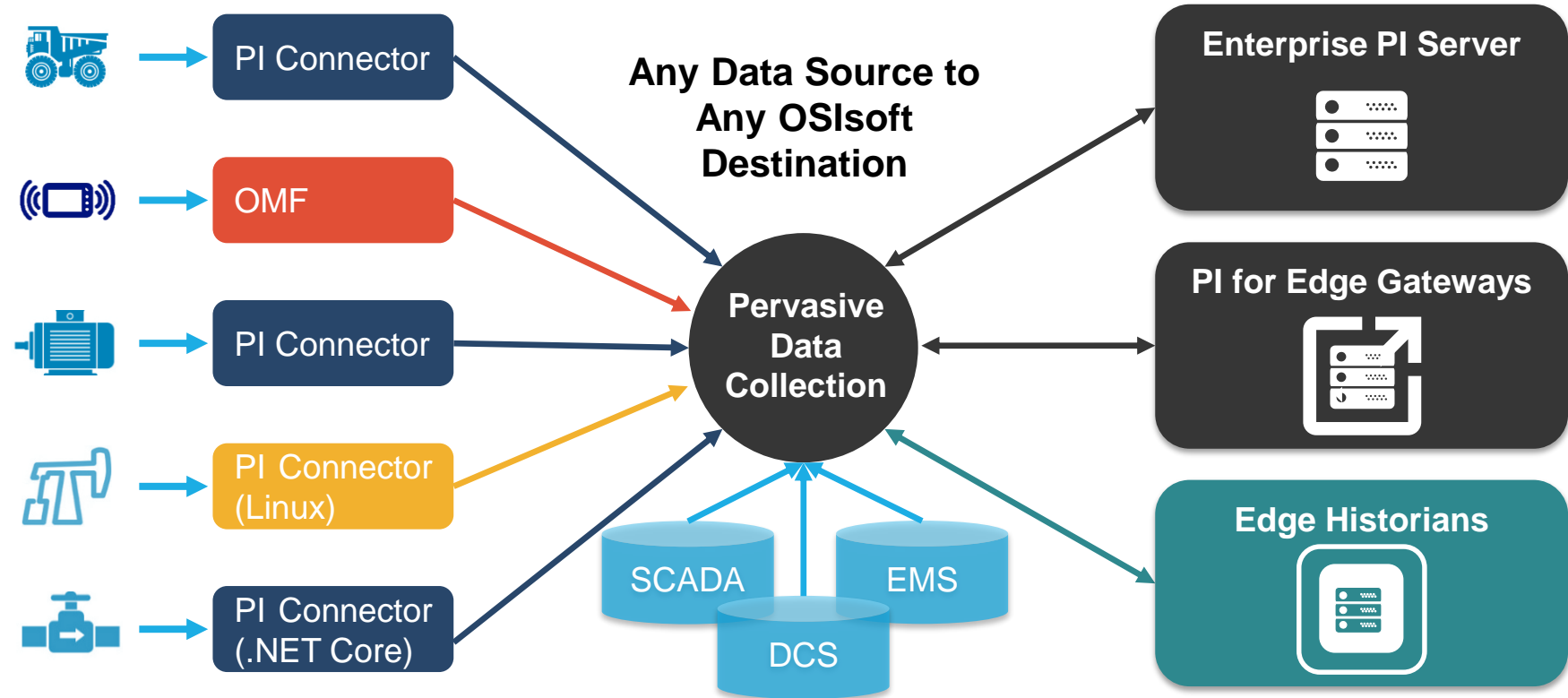


Assets



IIoT solutions

OT Data Ownership



Partner Enablement

Monico
(OMF application)



HPE
(PI System deployment)

Dell
(PI System deployment)



Partners
(PI Connector on Linux (native))

Cisco
(PI Connector on Linux (.NET Core))



Stratus IoT Solutions
(OMF application)



Evolution of the Enterprise

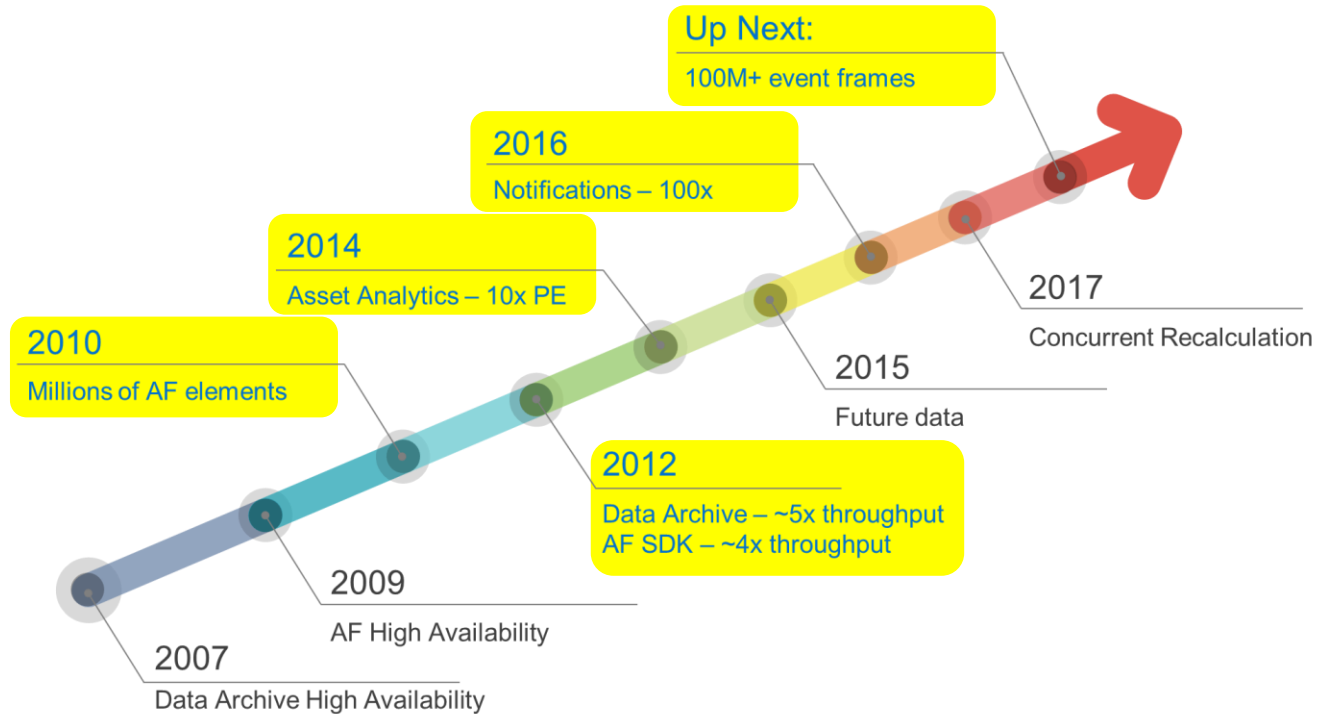


Expand the PI System: Performance and Scalability

Expand



Increase the **volume & velocity** of operations data



Extend the PI System: Data Quality

Extend



Associate **quality** information with measured values

Data Collection



Collect quality information from source systems

Storage



Natively associate quality information with data

Asset Analytics



Calculations take into account quality of inputs

Developer's Technology



Ingress and egress of data with quality via programmatic means

Visualization



Display data with quality information

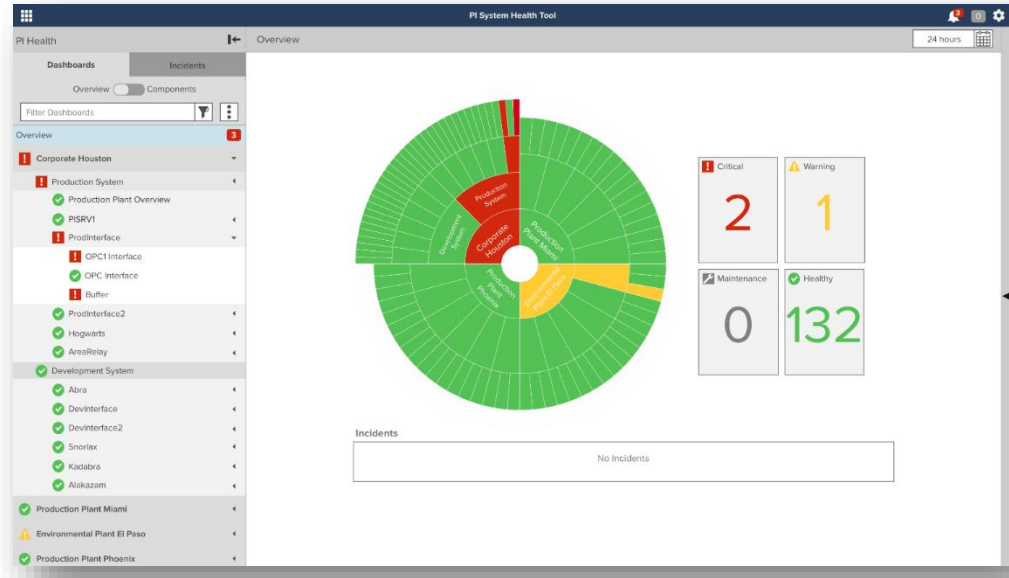


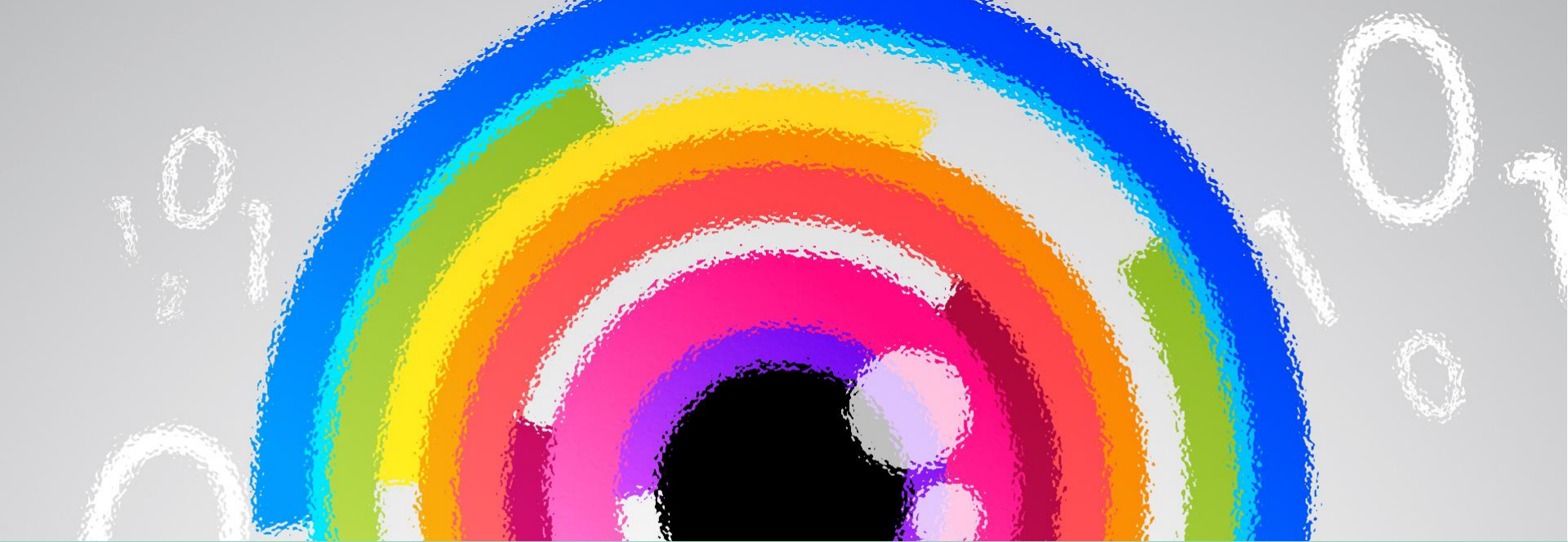
Ease of use with the PI System: Management and Administration

Ease



PI system tools
designed to work
across the enterprise



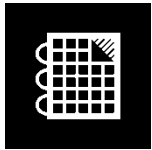


Visualizing Operations Data



An Integrated Visualization Platform

Today



PI ProcessBook

Display Editor
Process Monitoring



PI Coresight

Ad Hoc Analysis
PB Display Viewer



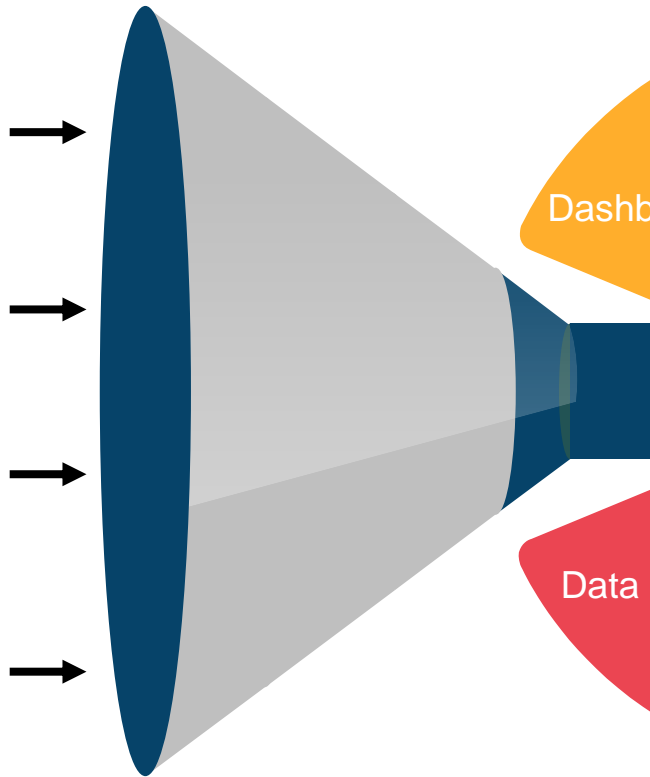
PI WebParts

Dashboards

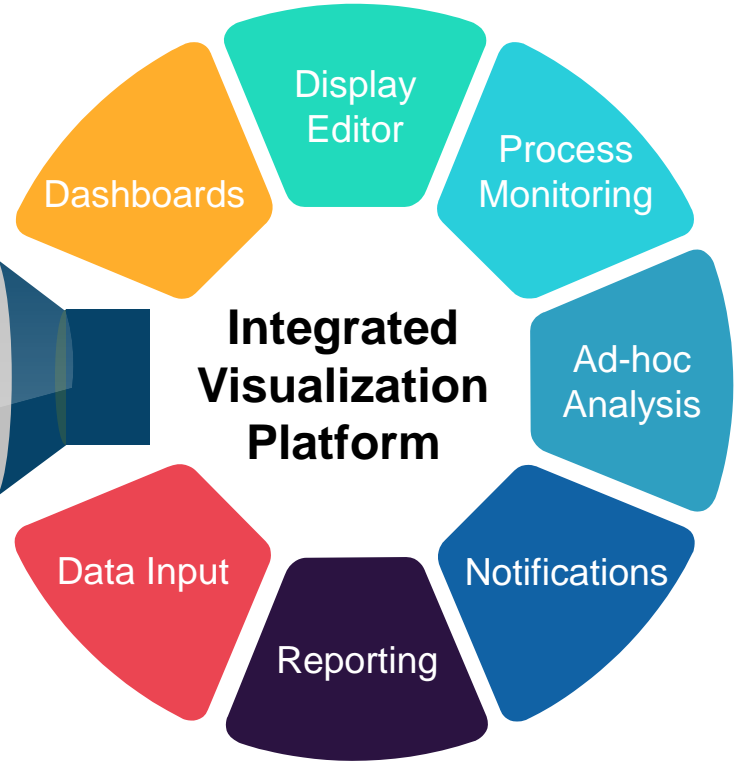


PI Manual Logger

Manual Data Entry



Tomorrow



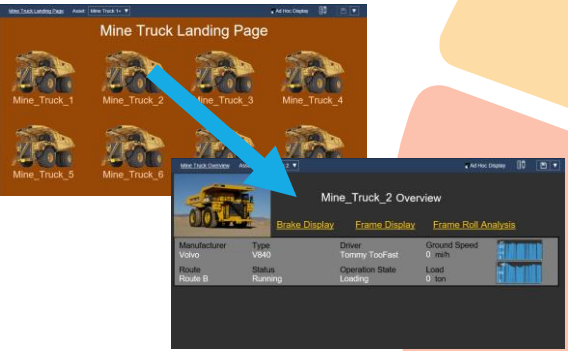
One Vision:

A unified visualization infrastructure to support your needs across the enterprise in a seamless, powerful, extensible environment.



PI Vision 2017

Drill-in Navigation



Collections

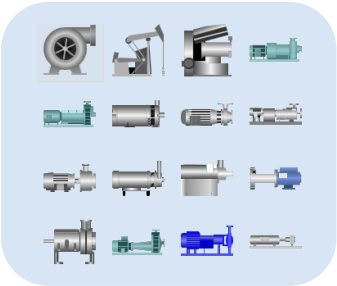


Pinned Events

Search Results

- OSisoft_201581181621 (CLEANING) 8/11/2015 4:16:21 AM - 8/11/2015 6:46:49 AM
- OSisoft_2015810231135 (CLEANING)
- OSisoft_201581202655 (CLEANING)
- OSisoft_2015810232451 (CLEANING)
- OSisoft_20158519028 (CLEANING)
- OSisoft_201585185135 (CLEANING)
- OSisoft_2015853150 (CLEANING)
- OSisoft_201584104839 (CLEANING)
- OSisoft_201584103941 (CLEANING)

Graphic Library



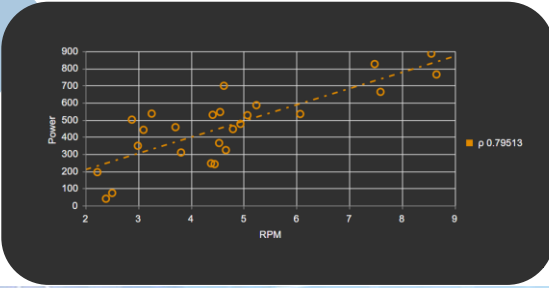
Events Table

| Event Name | Asset | Start Time | End Time | Acknowledgment |
|---|-------|----------------------|----------------------|----------------|
| Engine Temperature High 2017-01-26 06:21:43.000 | SP4 | 1/26/2017 6:21:43 AM | 1/26/2017 7:57:43 AM | Acknowledge |
| Engine Temperature High 2017-01-26 07:14:43.000 | SP6 | 1/26/2017 7:14:43 AM | 1/26/2017 8:22:43 AM | Acknowledge |
| Gas Tank Level Low 2017-01-26 07:23:43.000 | SP8 | 1/26/2017 7:23:43 AM | 1/26/2017 7:32:13 AM | Acknowledged |
| Gas Tank Level Low 2017-01-26 07:34:13.000 | SP8 | 1/26/2017 7:34:13 AM | 1/26/2017 7:36:13 AM | Acknowledged |
| Engine Temperature High 2017-01-26 08:25:13.000 | SP6 | 1/26/2017 8:25:13 AM | 1/26/2017 8:25:43 AM | Acknowledged |
| Engine Temperature High 2017-01-26 08:29:43.000 | SP6 | 1/26/2017 8:29:13 AM | 1/26/2017 8:57:13 AM | Acknowledge |

Asset Comparison Table

| Asset | Manufacturer | Driver | Engine RPM | Load | Status |
|---------------|--------------|----------------|------------|--------|---------|
| Mine Truck 1 | Caterpillar | Jason Rice | 0 | 0 | Running |
| Mine Truck 2 | Volvo | Tommy TooFast | 0 | 0 | Running |
| Mine Truck 3 | Komatsu | Edna Thompson | 1,682.6 | 159.87 | Running |
| Mine Truck 4 | Caterpillar | Revill Swivel | 0 | 0 | Running |
| Mine Truck 5 | Volvo | John Sintias | 0 | 0 | Running |
| Mine Truck 6 | Komatsu | Steve Kwan | 1,744.9 | 194.14 | Running |
| Mine Truck 7 | Volvo | Brian Bostwick | 0 | 0 | Running |
| Mine Truck 8 | Caterpillar | Steve Kia | 0 | 0 | Running |
| Mine Truck 9 | Caterpillar | Justin Brown | 0 | 0 | Running |
| Mine Truck 10 | Volvo | Bob Bonkers | 1,719.7 | 157.74 | Running |

XY Plot





Enterprise Wide Queries



Answering enterprise questions

Connectivity

Connectors



Embedded Connectors



Edge Historian



Enterprise

Notifications



Event Frames



Developer Technologies



Archive



Asset Analytics



Health Tool



Visualization

Vision



Manual Logger

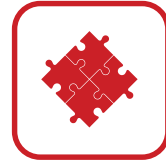


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Enterprise wide Streaming Queries



Cloud Services

Cloud Connect




Data Sharing




Display Sharing




Questions customers want to answer



What is my overall production in each region over the last year? How does this change over time?



Did I produce within my compliance goals? When did I not comply? On which assets?



What assets are performing the best and worst? What factors are contributing to that performance? Which assets are most in need of maintenance?



Deep Query Vs. Wide Query

What is a Deep Query vs. A Wide Query

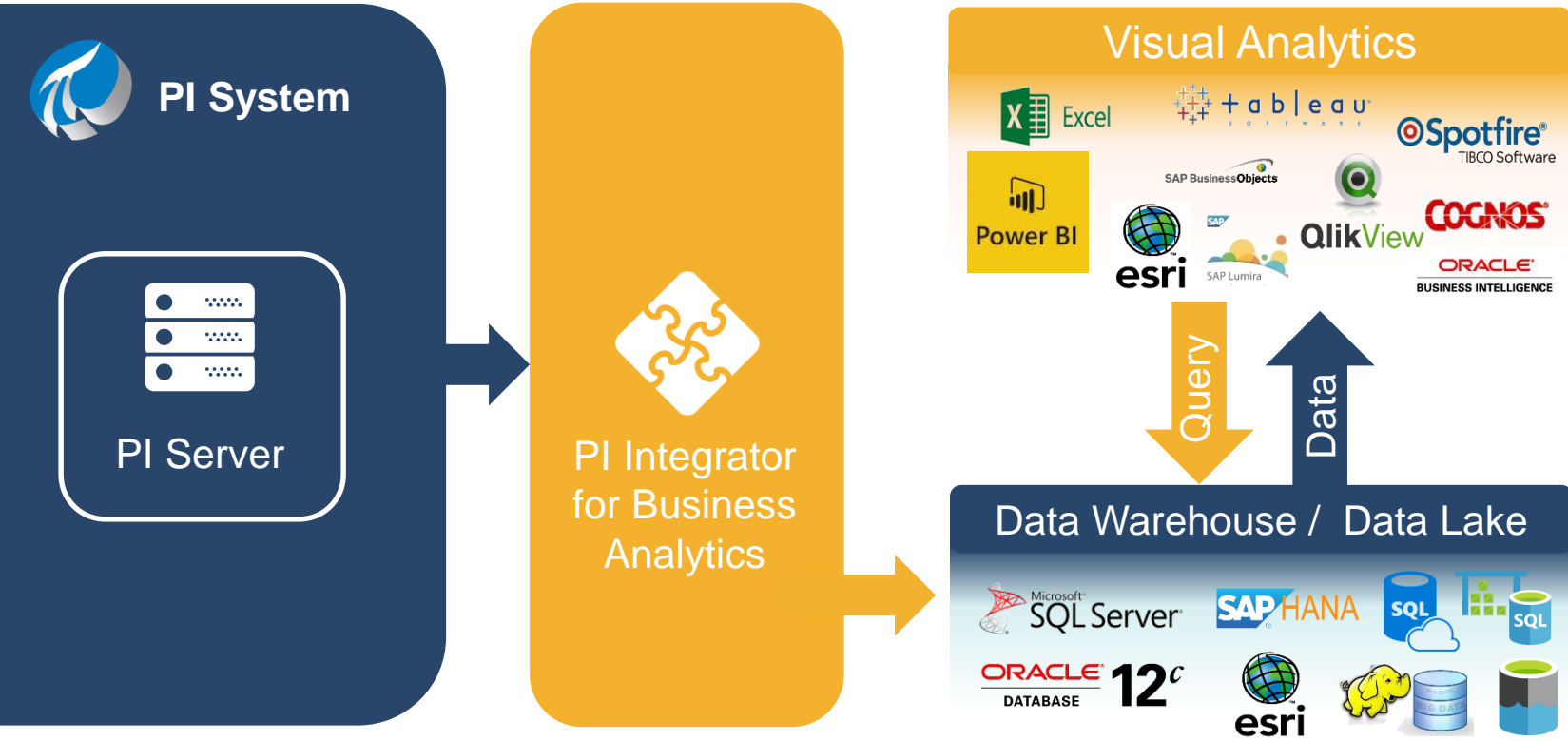
- Deep Query = For the meter at 123 Washington St., which days in the last 20 years had missing readings?
- Wide Query = Which meters in Zip Code 01234 had missing readings yesterday?

Types of Wide Queries

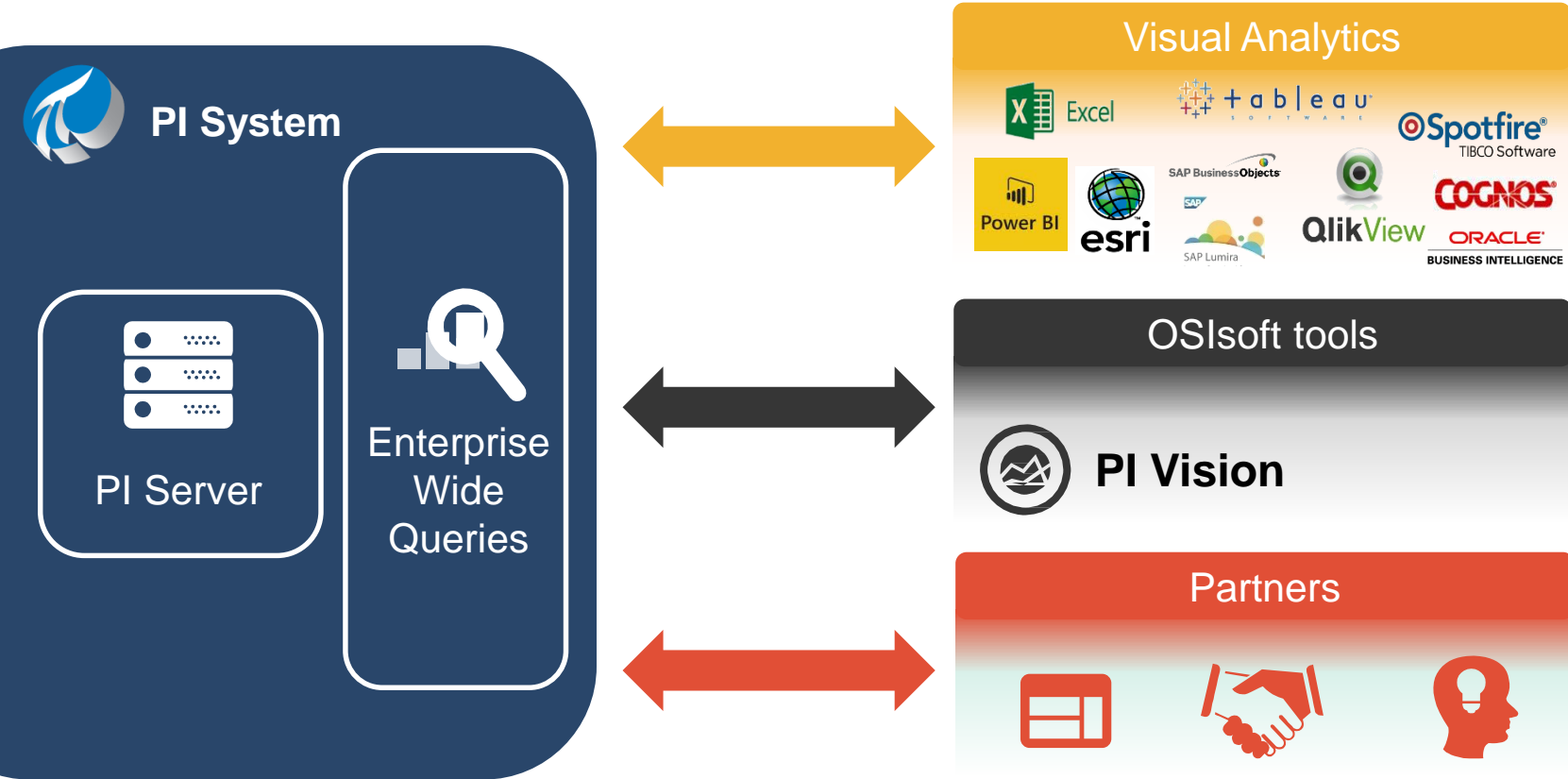
- Fleet Asset Performance
- Pattern Searches
- Aggregates across assets
- Performance diagnosis
- Asset Maintenance Diagnosis



Can be answered today using PI + Integrators



Direct Access from PI Vision, Partner Apps, and BI Tools



Complimentary positioning

Integrators

Blend operational data with business data for complex analyses

Enterprise Wide queries

Native query surface for fleet wide questions

APIs

Open APIs for custom built solutions needing to query PI





Complementary Cloud Services



Creating added value for our customers

Connectivity

Connectors



Embedded Connectors



Edge Historian



Enterprise

Notifications



Event Frames



Developer Technologies



Archive



Asset Analytics



Health Tool



Visualization

Project Vision



Manual Logger



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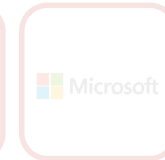
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Enterprise wide Streaming Queries



Cloud Services

Cloud Connect



Data Sharing



Display Sharing



감사합니다

谢谢

Danke

Merci

Gracias

Thank You

ありがとう

Спасибо

Obrigado



Questions?

Please wait for the **microphone** before asking your questions



Please state your **name & company**

Please don't forget to...

complete the Post
Event Survey

