PI System for Critical Operations and Advanced Analytics

Mana Afshari & Joy Wang, OSIsoft





Keeping the PI System Secure & Reliable

- Complex architecture
- New projects
- Exhaustive testing & validation
- 3rd party applications
- Downtime





PI System - 2019 and Beyond

Harden the core



Focus on **security** & **reliability** of data infrastructure

Ease

the management



Bring more manageability & control to deployments

Extend

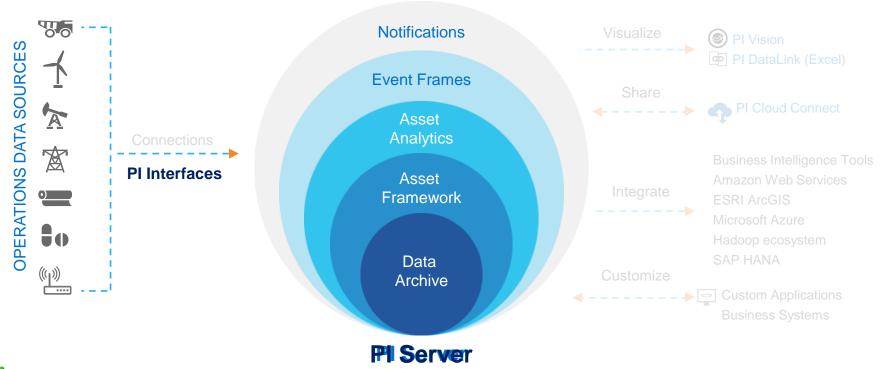
the reach



Grow collection, integration & access capabilities



Ph System of the PI System





Hardening the Core of the PI System

PI Server 2018 SP2 and critical operations

Supported for extended period of time

Critical software bugs & security vulnerabilities

Harden the core



Focus on **security** & **reliability** of data infrastructure

Select PI Interfaces & health of data flow

PI Interfaces health data sent to PI Server & OCS, simultaneously



PI Server – Roadmap



Developing Now

Usability and Performance Improvements

Improved search performance, query PI Analysis Service runtime information, improved functions for calculations

More Control over Upgrades and Deployments

Providing ways for system administrators to keep their PI System current on fixes for critical bugs and security vulnerabilities, without requiring extensive resources.

Improved Reliability

Focusing on bug fixes and quality updates.



Performance and Memory Improvements



Researching Future

Support for Modern Authentication

Streamlined Deployment

Manageable Systems **Increased Value & Scope of Data**



Easing Deployments & Improving Manageability

Ease

the management



Bring more manageability & control to deployments



Patches vs full upgrades



End to end test scripts across the PI System



Deployment templates and installation scripts for cloud platforms



Extending the Reach across the Enterprise

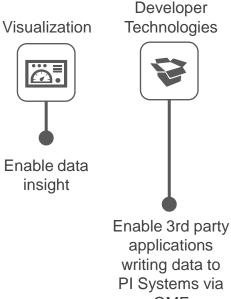
Extend the reach



Grow collection, integration & access capabilities



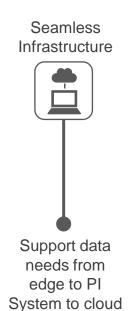
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Integration



Different Types of Analytics





Advanced Analytics for Critical Operations

What's happening?

Why is it happening?

What's likely to happen?

What do I need to do?

Challenge: Lost between OT data & IT tools

OT data

How do we get started?

Which cloud platform?

How do I find a data scientist?

How do we scale?



What data do I need?



What am I doing???





















PI Integrators speed the process that brings trustworthy data to many unique analytics tools

















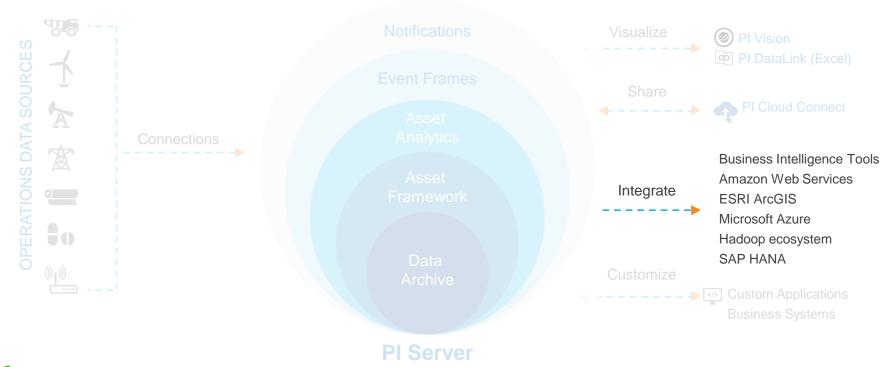




SAP HANA



PI System







Hadoop HDFS

Amazon S3

Apache Kafka

Data Lake

Messaging Hub

GIS

New!

New!

Azure Data Lake Store

SAP Streaming Analytics

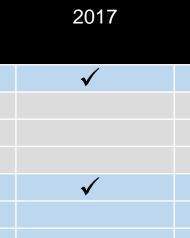
ArcGIS GeoEvent Server

Azure IoT Hub or Event Hubs

Amazon Kinesis Data Streams

PI Integrator for

Business Analytics



PI Integrator for

SAP HANA

PI Integrator for

Esri ArcGIS

2017 SP1

PI Integrators – Roadmap



Developing Now

Considering Next

OSIsoft's Product Roadmap is subject to change and is for INFORMATIONAL PURPOSES ONLY.

Google Cloud Platform

Integration



Researching Future

MathWorks MATLAB Integration

PI Integrator for SAP HANA: **Compatibility & Architecture**

Compatibility w/ latest SAP HANA release, plus UI & architecture updates for better maintainability and supportability moving forward.

PI Integrator for SAP HANA: **Streaming Analytics**

Migrate SAP HANA Streaming Analytics support to Apache Kafka

PI Integrator for Esri ArcGIS:

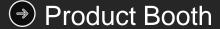
Compatibility with the latest releases and updates from Esri products

Manageable System Increased Value & Scope of Data



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Data Science Enablement

@ Yosemite Ballroom Product Expo – Hilton



Insight: PI Integrators and OSIsoft Cloud Services for time-series Data Science Enablement

Thursday - 11:30am

Product Track - Hilton



PI Integrator for Business Analytics: In-depth Tutorial

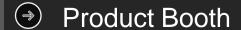
Thursday - 2:00pm - Nikko

The Value of Combining SAP HANA IoT Integrator by OSIsoft and SAP's Analytic Cloud Platform for Self-service Analytics

Friday – 9:00am – Parc 55

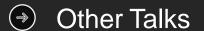






- Calculations & Events
- PI Data Archive
- PI Asset Framework
- PI System for Critical Ops.

Product Expo - Hilton



Day 2 – 2:30 pm "Effortlessly deploying a PI System in Azure or AWS" Tech Talk – Parc 55

Day 3 – 10:30 am

"Aggregate: PI System 2018
SP2 and your Critical
Operations"

Product Track – Hilton



Day 3 – 2:00 pm "PI System Quick Start Templates for AWS"



Communicate with OSIsoft Product Managers



https://feedback.osisoft.com

If it is not shared on the feedback portal, it didn't happen!



Contact Information





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Questions?

Please wait for the microphone

State your name & company

Please remember





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OSIsoft.

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MERCI

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ESKERRIK ASKO

TEŞEKKÜR EDERIM

ХВАЛА ВАМ

ありがとうございました ĎAKUJEM
SIPAS JI WERE TERIMA KASIH MATUR NUWUN
UA TSAUG RAU KOJ
ТИ БЛАГОДАРАМ
СИПОС

