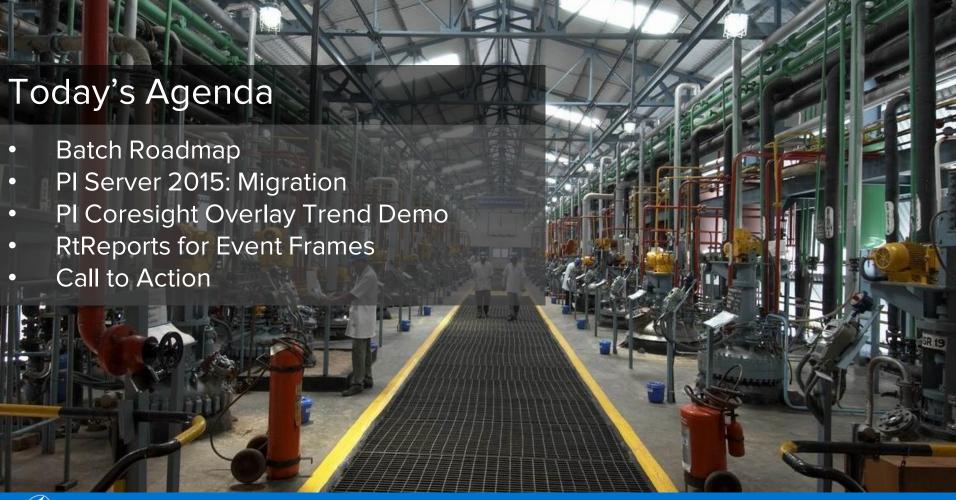# Batch Users: Batch Migration to Event Frames

Presented by David Casazza, Product Manager

David Spiese, Center of Excellence
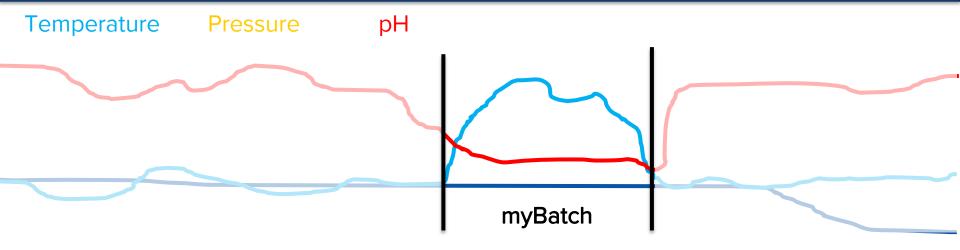
OSIsoft.
USERS CONFERENCE 2015

Batch Customers

Today's Agenda

- Batch Roadmap
- PI Server 2015: Migration
- PI Coresight Overlay Trend Demo
- RtReports for Event Frames
- Call to Action

Current State of BATCH Capabilities in the PI System

	Database First Released	Supporting Data Structure	Overlapping Events on Unit	Scalability / Performance	High Availability	Data Access Technologies
PI Event Frames	**Nov 2011** PI Server 2010 R3 Data Stored in AF DB (SQL Server) ✔	**Supports Templates & is flexible.** Event attributes can be easily tailored to business needs. ✔	**Yes: Unlimited Events on a Unit at a Time** See a full picture of your asset. Batches, excursions, downtimes. ✔	**Millions of Events** Most types of customer searches will perform better ✔	**Yes: HA Supported** Event Frames can be architected via a HA write AF Architecture ✔	**Newer Technologies** PI AF SDK, PI OLEDB Enterprise, PI Web Services, PI JDBC, PI Web API ✔
PI Batch	**March 2001** PI Server 3.3.361.43 Data Stored in Proprietary Tag Structure in Data Archive	**Fixed & not flexible.** Supports Batch ID, Product, Recipe, Procedure, and nothing else.	**No: 1 Unit Batch on a PI Unit at a time** Customers create 'phantom PI Units' in MDB to get around this.	**Tens of Thousands of Events** Batch customers have complained about performance on systems with many batches.	**No: HA is not supported with PI Batch** Long-standing request from batch customers.	**Older Technologies** PI SDK, PI ODBC Client

Current State of BATCH Functionality in the PI System

BES / MES Interfaces	DB Storage & Audit Trail	Excel Integration	Trend Single Batch	Overlay Trend Batches	Compliance Reporting

PI Event Frames

PI Interfaces	AF/Event Frames	PI DataLink	PI Coresight	PI Coresight	RtReports

Development in Progress! Coming Soon!

PI Batch
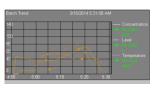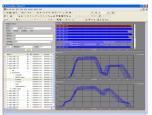
PI Interfaces	Batch	PI BatchView	PI BatchView	PI BatchView	RtReports

Batch Roadmap

PI Event Frames Roadmap

| 2012 | 2013 | 2014 | 2015 | 2016 |

2012
- **PI AF**: PI Event Frames Database
- **PI AF SDK**: Programmatic Access

2013
- **PI Coresight**: Related Events
- **PI Coresight**: Hierarchical Events
- **PI Event Frames Generator**
- **PI System Access**: PI OLEDB Enterprise, PI Web Services, PI JDBC

2014
- **PI AF Analytics**: Event Detection
- **PI DataLink 2014**: Events in Excel
- **PI AF 2015**: EF Value Capture, Locked EFs
- **PI AF 2014**: Audit Trail Viewer
- **PI Web API**: Initial EF Support
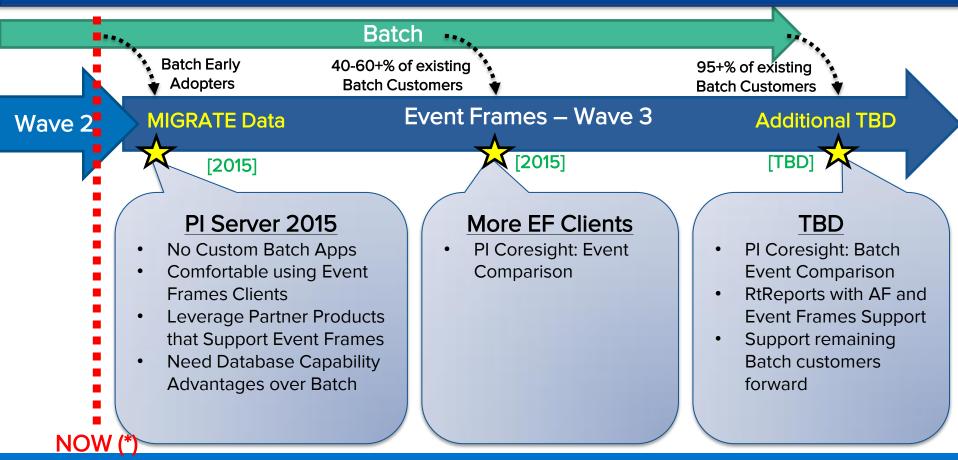
2015
- **PI Server 2015**: Batch to EF Migration

- [TBD]
  - PI Coresight: Event Comparison

2016
- [TBD]
  - PI Coresight: Batch Event Comparison
  - RtReports
  - PI Coresight: Process Monitoring
  - PI Notifications

In Development (not released)

Event Frames & Batch Roadmap Strategy – Wave 3
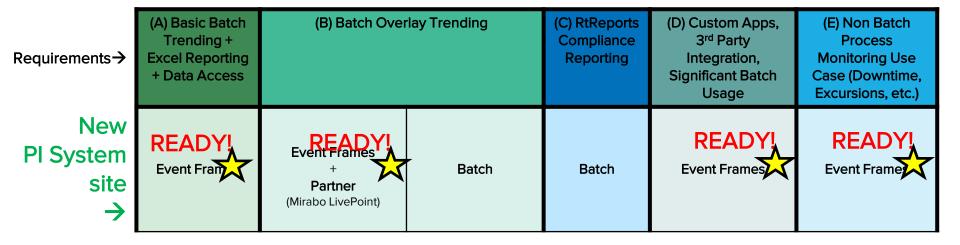
Batch

Wave 2

Batch Early Adopters

40-60+% of existing Batch Customers

95+% of existing Batch Customers

MIGRATE Data

Event Frames – Wave 3

Additional TBD

[2015]

[2015]

[TBD]

NOW (*)

PI Server 2015
- No Custom Batch Apps
- Comfortable using Event Frames Clients
- Leverage Partner Products that Support Event Frames
- Need Database Capability Advantages over Batch

More EF Clients
- PI Coresight: Event Comparison

TBD
- PI Coresight: Batch Event Comparison
- RtReports with AF and Event Frames Support
- Support remaining Batch customers forward

Event Frames – Wave 3

	(A) Basic Batch Trending + Excel Reporting + Data Access	(B) Batch Overlay Trending		(C) RtReports Compliance Reporting	(D) Custom Apps, 3rd Party Integration, Significant Batch Usage	(E) Non Batch Process Monitoring Use Case (Downtime, Excursions, etc.)
Requirements→						
Existing Batch Site →	READY! Event Frames + PI Server 2015 (Migration)	READY! Event Frames + Partner (Mirabo LivePoint) + PI Server 2015 (Migration)	Batch	Batch	Batch Custom Batch applications will not work against Event Frames following migration.	READY! Event Frames

Batch or Event Frames for a NEW PI System ?

Event Frames – Wave 3

	(A) Basic Batch Trending + Excel Reporting + Data Access	(B) Batch Overlay Trending		(C) RtReports Compliance Reporting	(D) Custom Apps, 3rd Party Integration, Significant Batch Usage	(E) Non Batch Process Monitoring Use Case (Downtime, Excursions, etc.)
Requirements→						
New PI System site →	READY! Event Frame ★	READY! Event Frames + Partner (Mirabo LivePoint) ★	Batch	Batch	READY! Event Frames ★	READY! Event Frames ★

PI Server 2015: Batch to Event Frames Migration
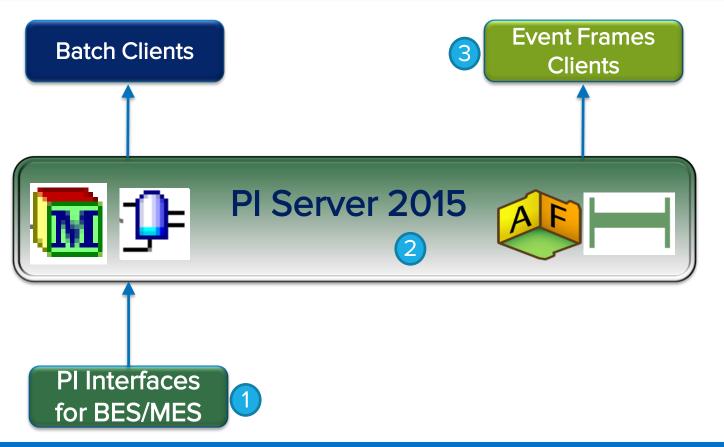
Batch to Event Frames Migration Process

Batch Clients

PI Server 2014 or older

PI Interface for BES/MES 1

1 Upgrade Interfaces

2 Upgrade Server

3 Install Event Frames Clients

4 Migrate Batch Data

5 Switch Interfaces

Batch to Event Frames Migration Process

Batch Clients

Event Frames Clients ③

PI Server 2015 ②

PI Interfaces for BES/MES ①

① Upgrade Interfaces

② Upgrade Server

③ Install Event Frames Clients

④ Migrate Batch Data

⑤ Switch Interfaces

Batch to Event Frames Migration Process

Batch Clients

Event Frames Clients — 3

Read Only

PI Server 2015 — 2

4

5

PI Interfaces for BES/MES — 1

1 Upgrade Interfaces

2 Upgrade Server

3 Install Event Frames Clients

4 Migrate Batch Data
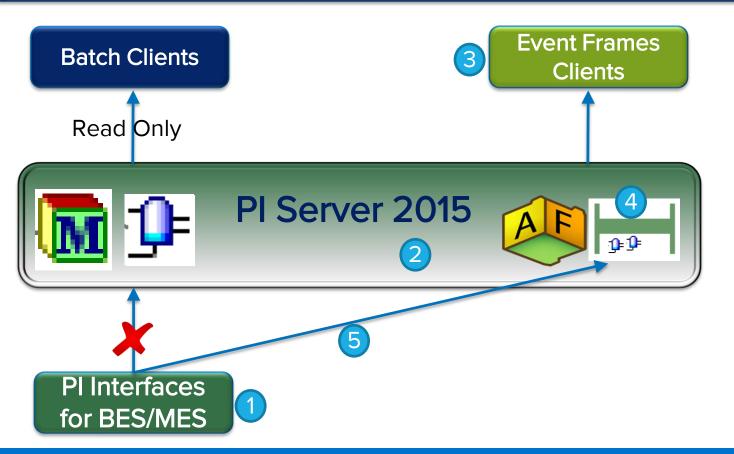
5 Switch Interfaces

How do I migrate PIBaGen to EFGen?

After Migration:

- Import PIBaGen configuration into EFGen
- Get the latest version of EFGen for your testing

You can start testing Migration with the upcoming release of PI Server 2015

Confirm it works for you!

You'll need a copy of your production data and a test environment:

- PI Data Server
- AF Server
- Event Frames Generator
- Batch interfaces v4.0

Places to Get More Information:

- Tomorrow – Hands On with Batch to Event Frames Migration
- EF & Batch to Event Frames Migration Booths
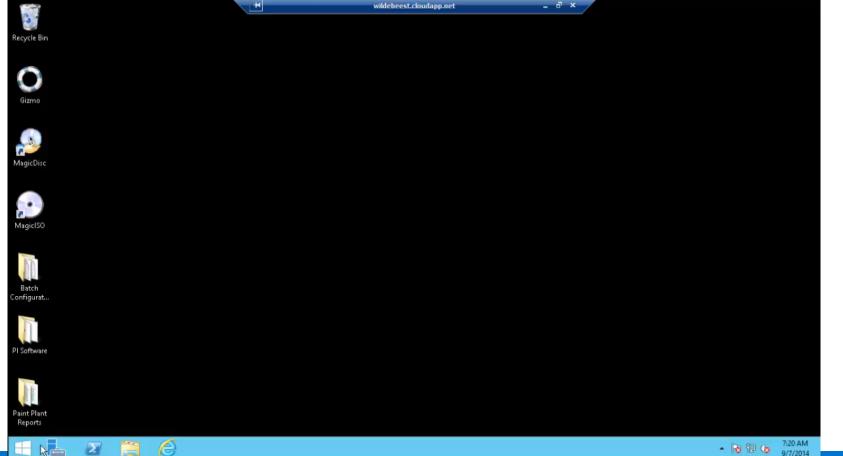- Documentation with PI Server 2015:
    What's new with PI Server 2015

- Check AFLink Status
- Analyze and view Analysis Report before Migration
- Migrate to Event Frames
- Verify Migration Report after Migration
- View Migrated Event Frames

PI Coresight
(Batch Overlay in Development)

DEMO

- Launch Batch Overlay
- Drill into child operations/phases
- Drill into Gantt Chart
- Show In-progress Batches
- Show Trends with Gantt Chart
- Create new Overlay Trends
- Add new Trends with Referenced Asset

This is currently in development

- A BETA is currently available for customers to test
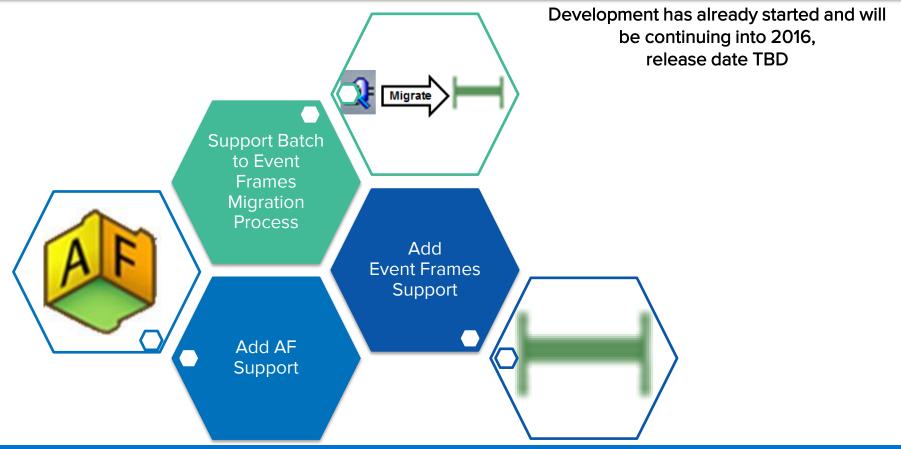- Let us know if you are interested in testing at the PI Coresight Booth or contact the Product Manager

RtReports

In case you haven't heard …

- OSIsoft has updated RtReports – RtReports 3.4
- OSIsoft is continuing to **enhance** RtReports

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- Show how RtReports 3.4 templates work in RtReports 4.0 with NO changes:

  - In the Editor

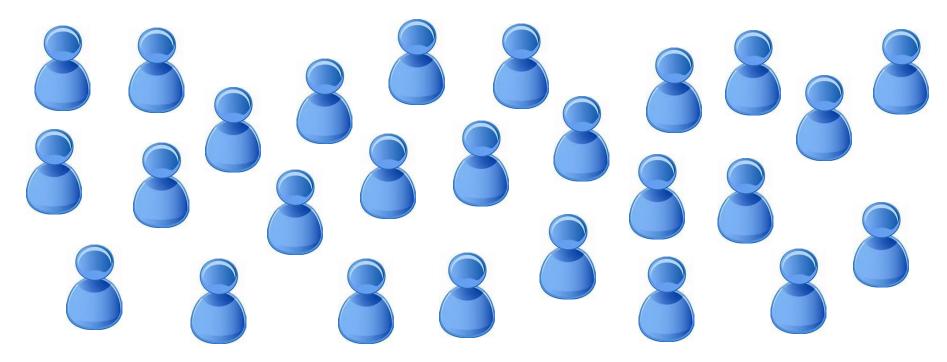 - In the Generator

This is currently in development

- We are looking for customers to lend us their data for testing
- We are looking for customers to help test an upcoming BETA
- Let us know if you can help

Conclusions

So what does all this mean for Batch Customers?

Many of you will start adopting Event Frames in 2015!

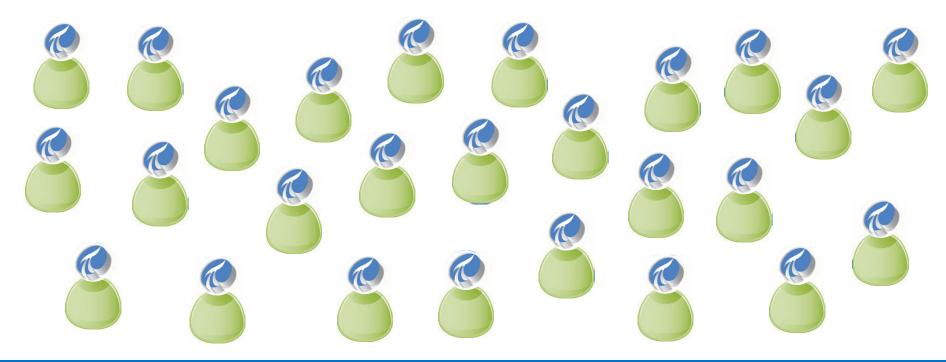**Event Frames Clients available now; PI Server 2015 – Batch Migration; More Event Frames Client support coming.**

ALL of you should start getting ready NOW!!!

Start implementing AF; Start getting familiar with Event Frames on demo & test systems.

Bright Future for Batch Ahead

Event Frames – Contact Us!

David Casazza

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Product Manager

OSIsoft, LLC
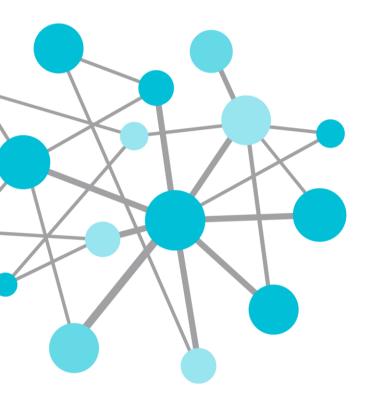
David Spiese

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OSIsoft, LLC

Questions

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

State your
name & company

THANK YOU

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