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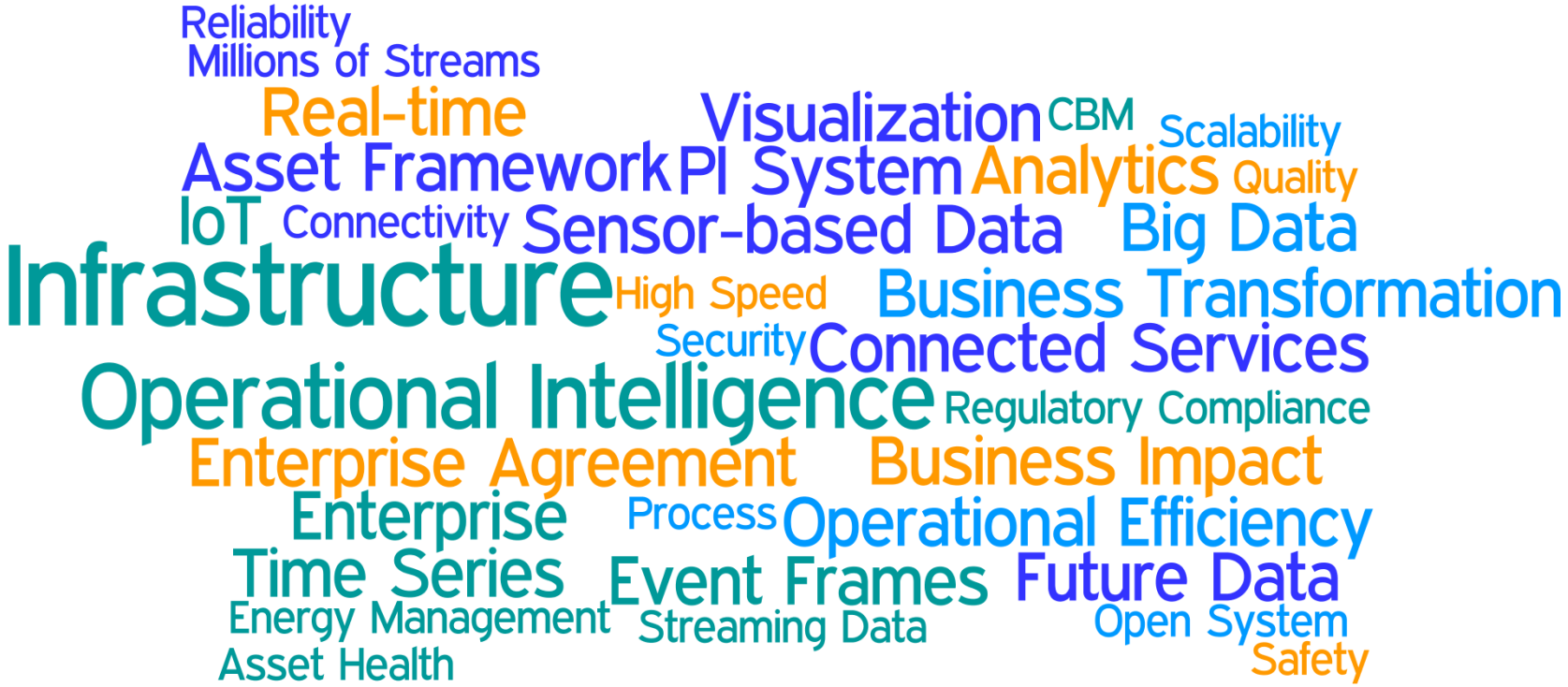
April 4-8, 2016 | San Francisco
TRANSFORM
YOUR WORLD

Conference Theme and Keywords



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PI Integrator for Esri ArcGIS

Sparkling Maps are just the beginning

Presented by **Michelle Kuiee, OSIsoft**

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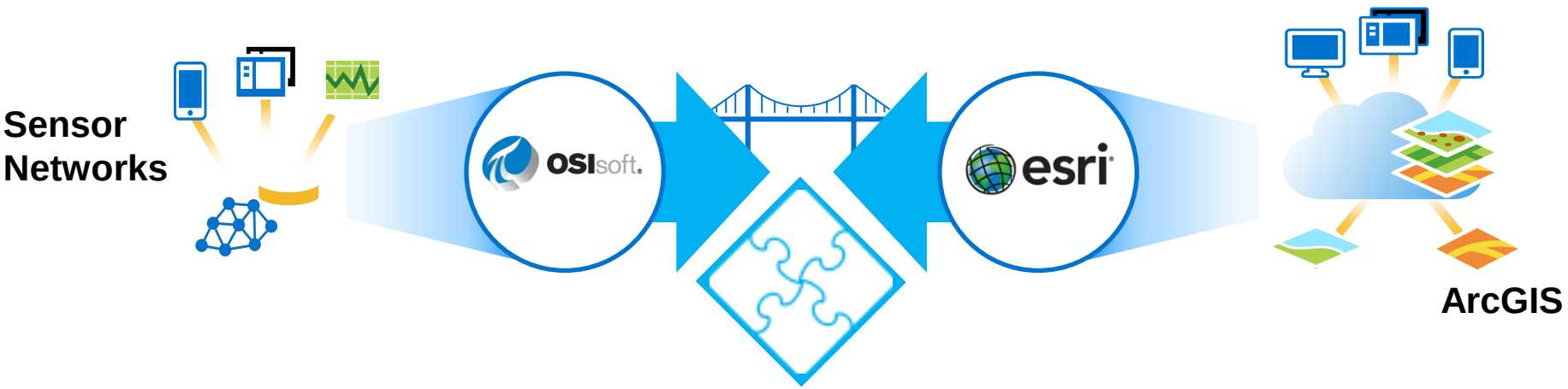
Two companies One Vision

We believe data in the hands of smart people can create amazing insights, business improvements, and value



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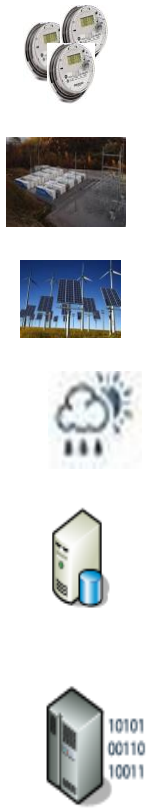
Before the Integrator - How did data get to ArcGIS?



PI Interfaces / Connectors

PI Notifications

PI Event Frames

PI Analytics

PI AF

PI Server

PI Developer Technologies

Your Dashboards

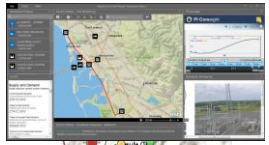
Operations Dashboard for

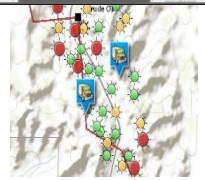
ArcGIS Online / Portal for ArcGIS

operation view

web map

feature layers





feature layers

ArcGIS

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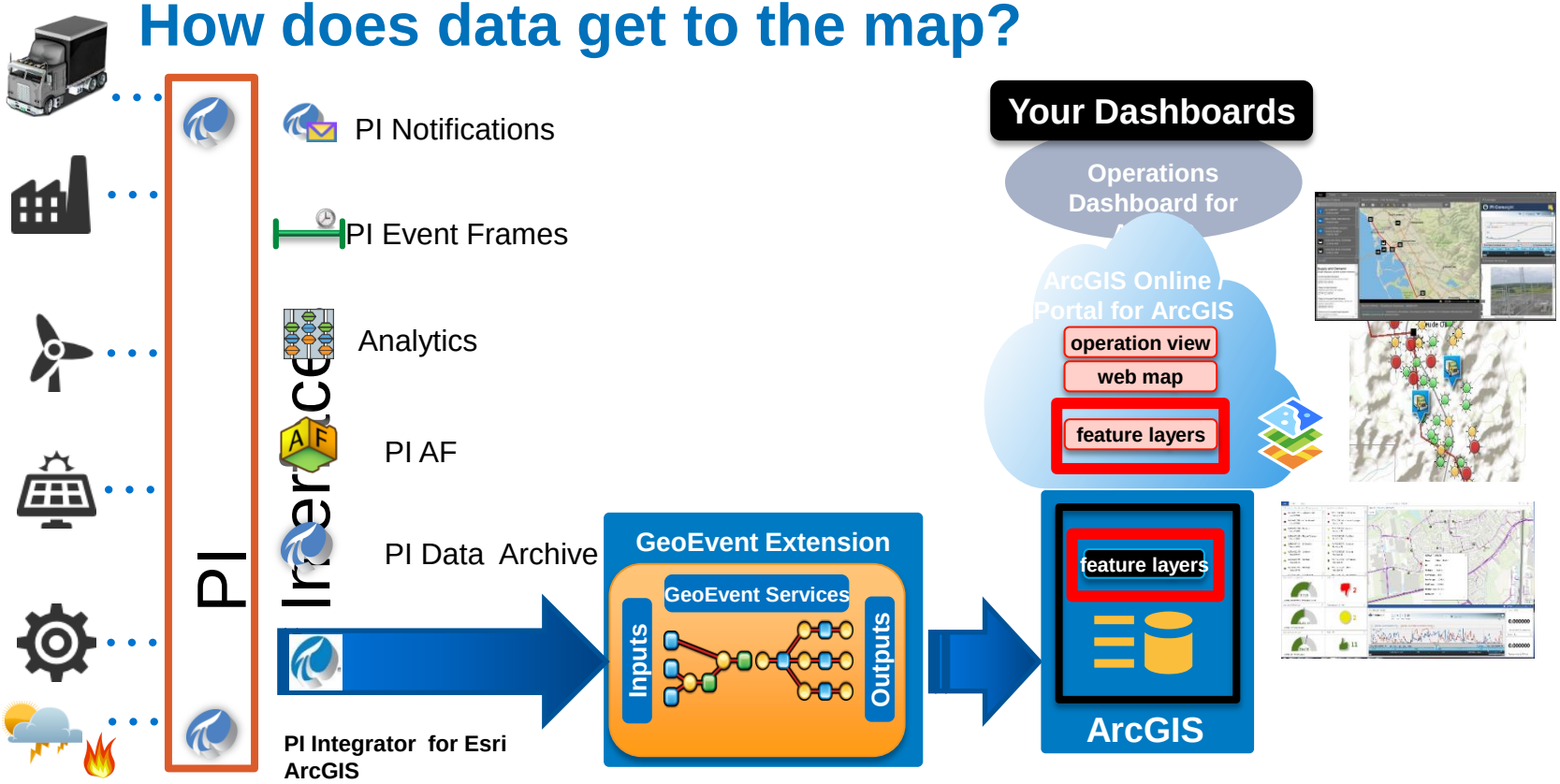
How does data get to the map?



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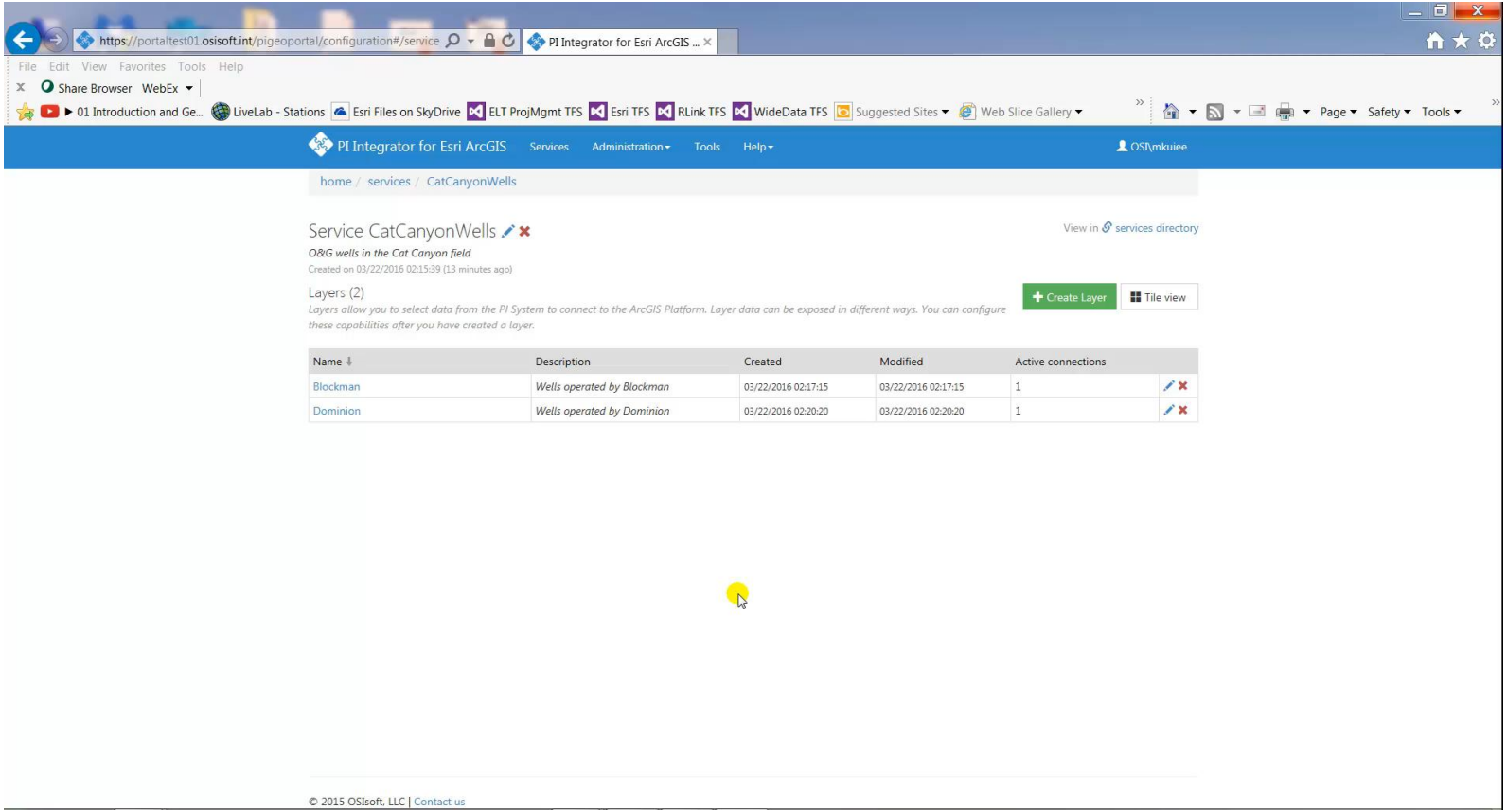
How easy is it?



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Customer Use Cases

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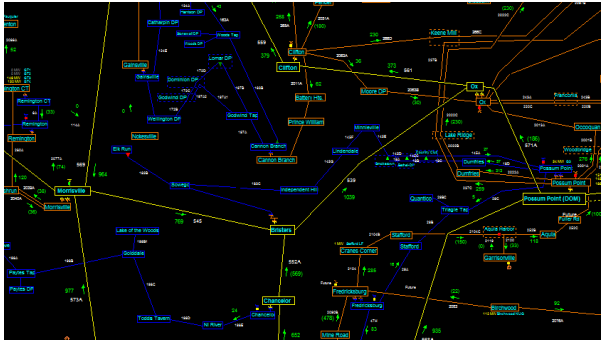
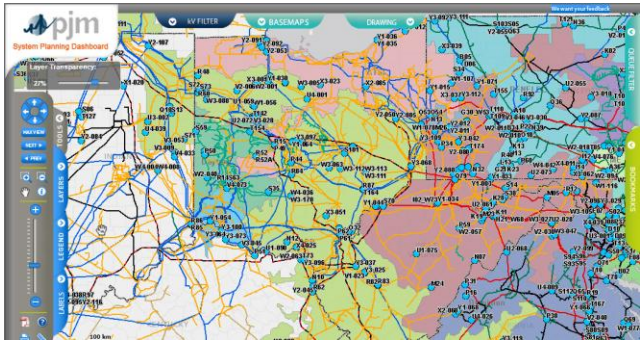
PJM – Multiple data source to manage the grid





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PJM Dispatch Interactive Map Application (DIMA)

"Best tool Dispatch Operators have had in years"

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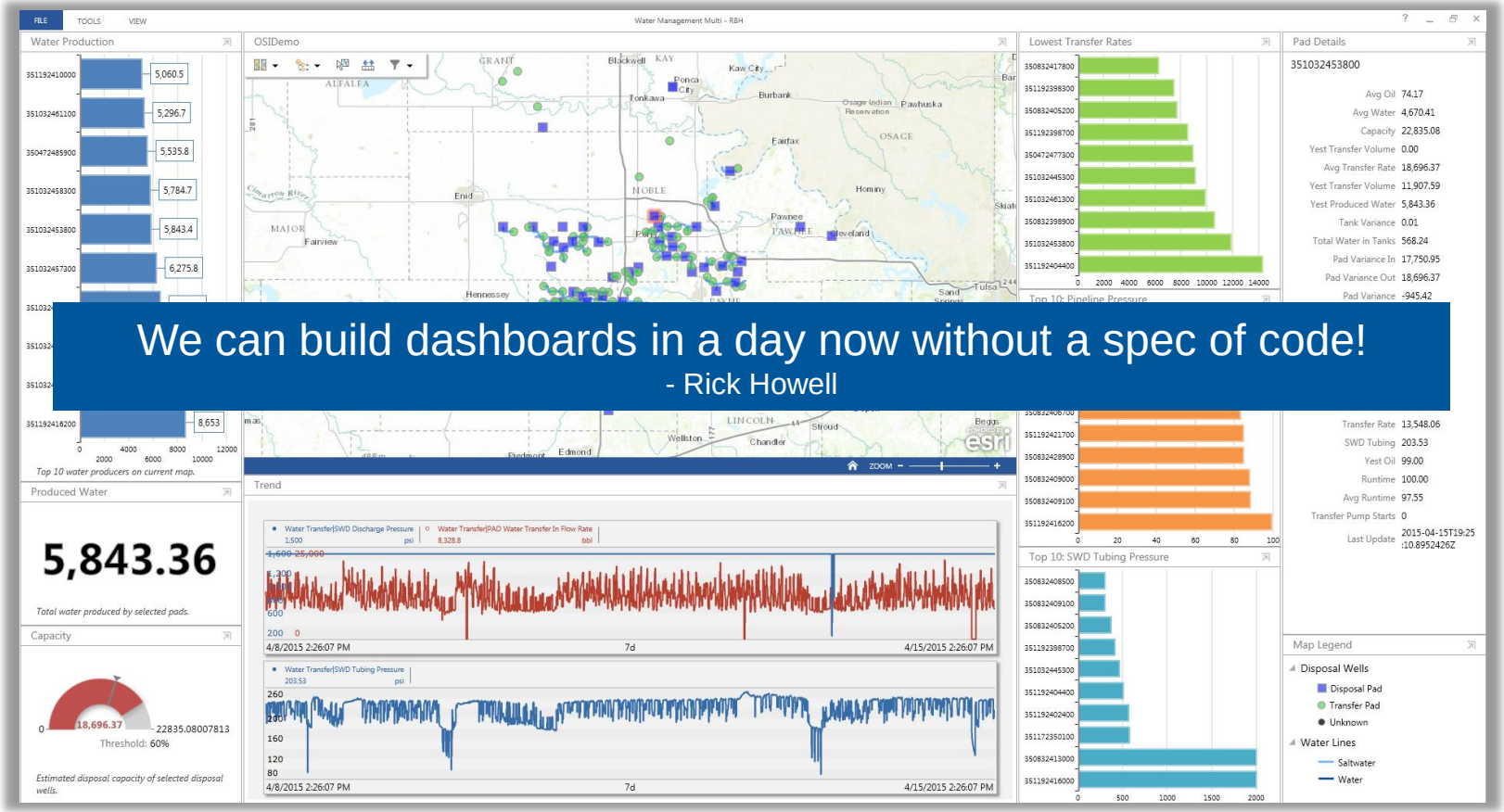
Devon Energy – E&P Water Management Application



We can build dashboards in a day now without a spec of code!

- Rick Howell

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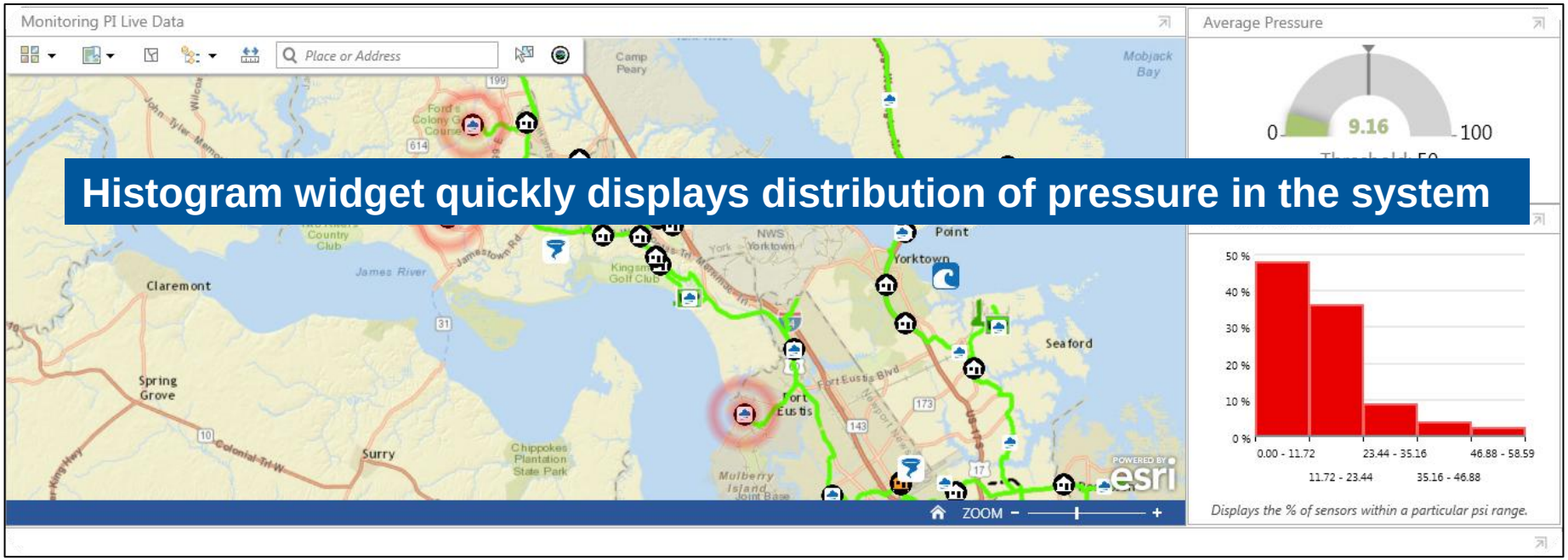
Hampton Roads Sanitation District

ArcGIS built in geo spatial analysis adds value to real time data



Histogram widget quickly displays distribution of pressure in the system

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SDG&E

Circuit Watch List – Processbook VBA Application

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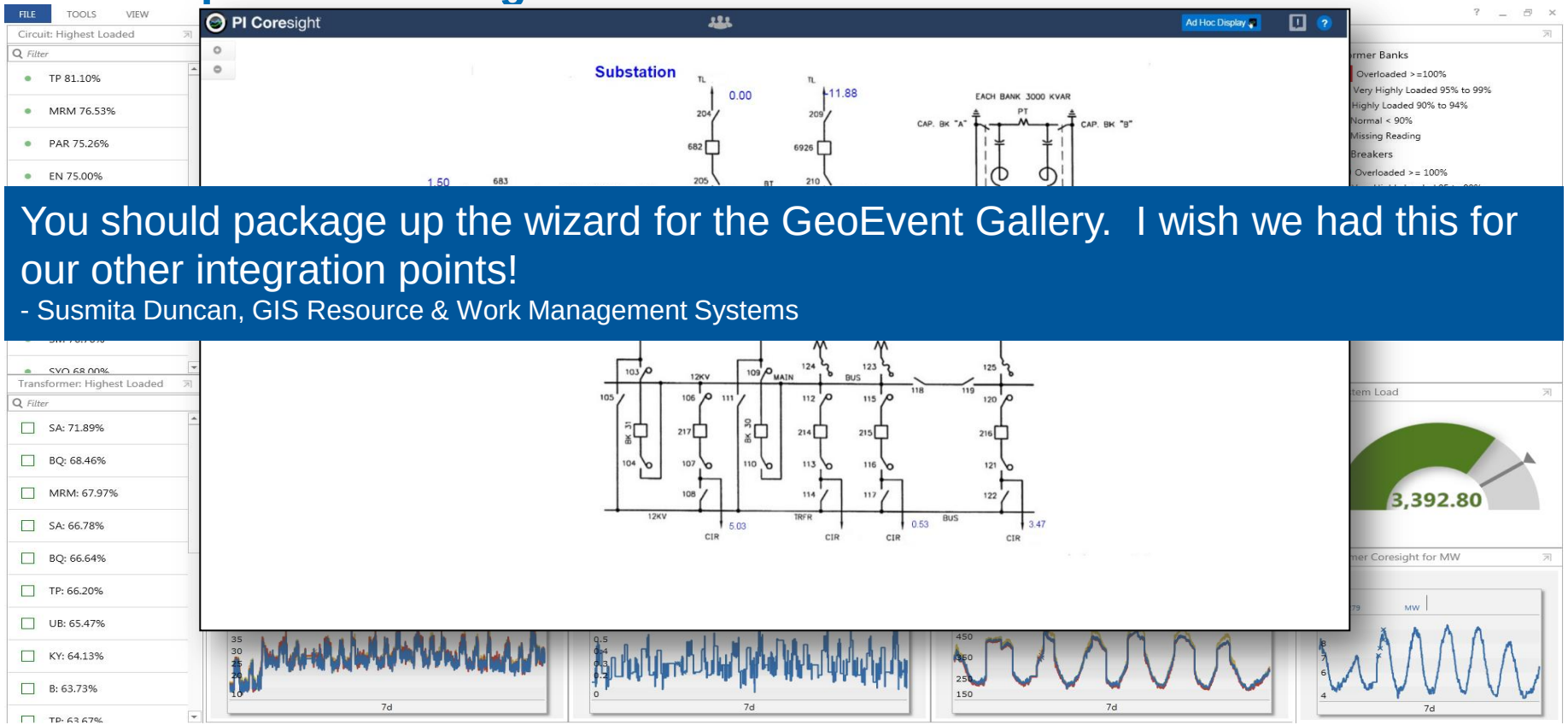
SDG&E

Averted potential outages



You should package up the wizard for the GeoEvent Gallery. I wish we had this for our other integration points!

- Susmita Duncan, GIS Resource & Work Management Systems

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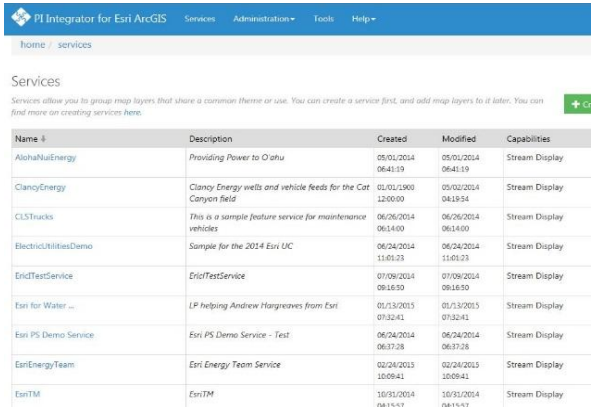

PI Integrator for Esri ArcGIS

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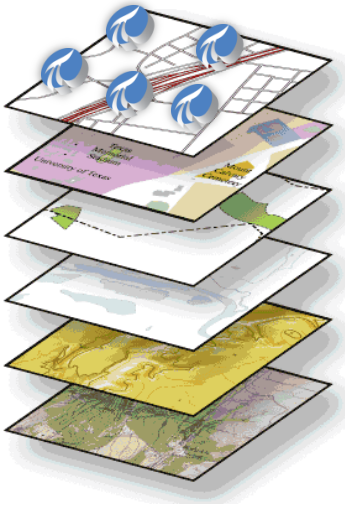
Features of the ArcGIS Integration



- Any PI System data can update new or preexisting Esri Feature Layers
  - Data is selected through a graphical wizard with no coding required
  - Esri software configuration is done automatically
    (no custom Esri objects are created)
  - PI AF databases can be jump-started using preexisting Esri Feature Layers
- Esri Feature Layers are visualized using standard Esri clients
- Esri client tools can easily integrate with PI Coresight
  - Historical trends of real-time data are automatically generated for selected map feature
  - Element relative displays are updated for selected map feature
- ArcGIS Asset Extractor
  - Reads Feature Layer data to build AF Template and extracts features from the layer to create AF Elements from the Template

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Recap and Coming Attractions

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Delivered in Esri Integrator 2015 (4Q15)

- ArcGIS 10.3.1 support
- Native Operations Dashboard widgets
  - Ad-Hoc Trends
  - Coresight Displays – including Processbook
- Performance Counters
  - NOC Monitoring/Management
  - Application Server
  - Data Relay

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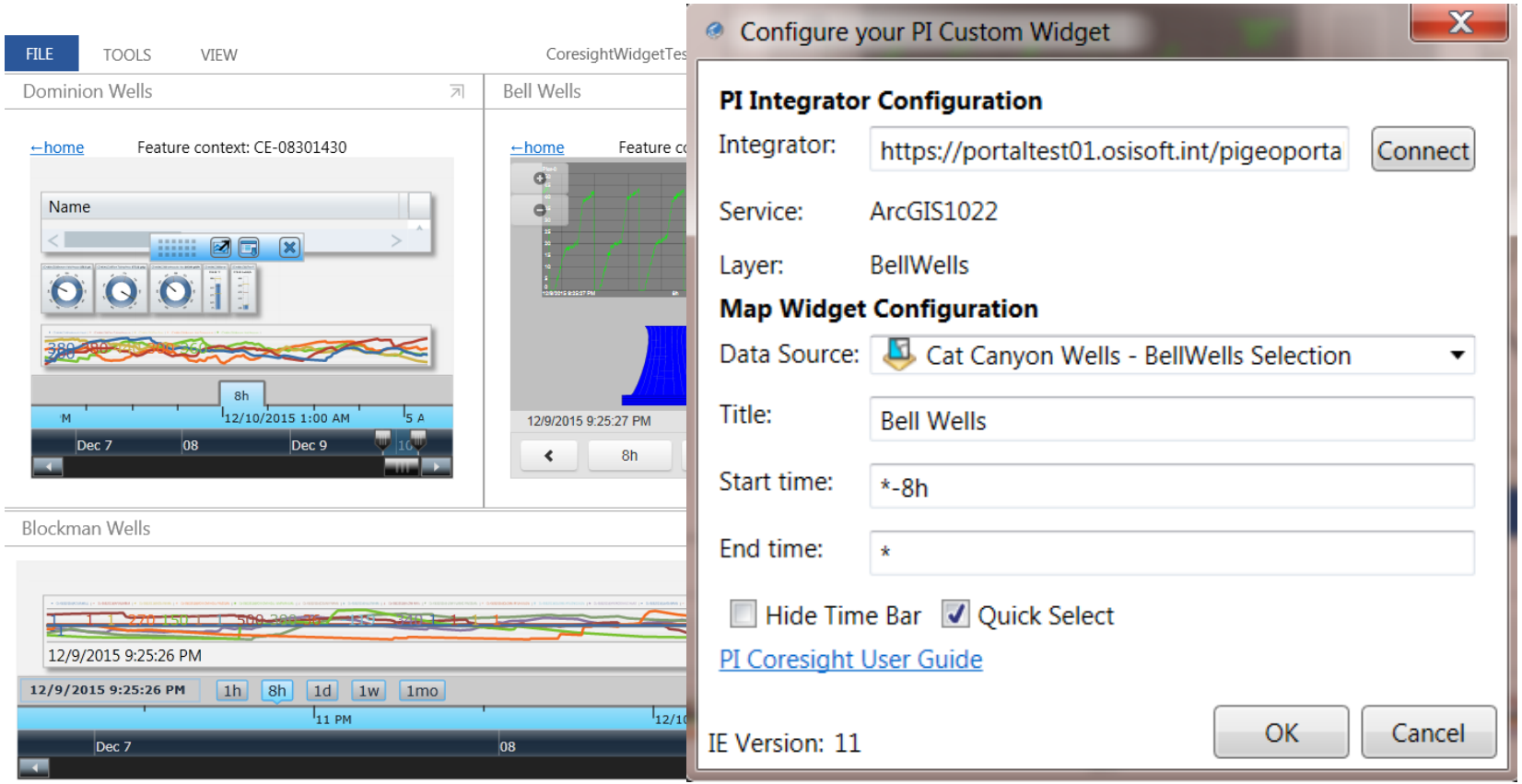
Native Coresight Widgets for ArcGIS Operations Dashboard



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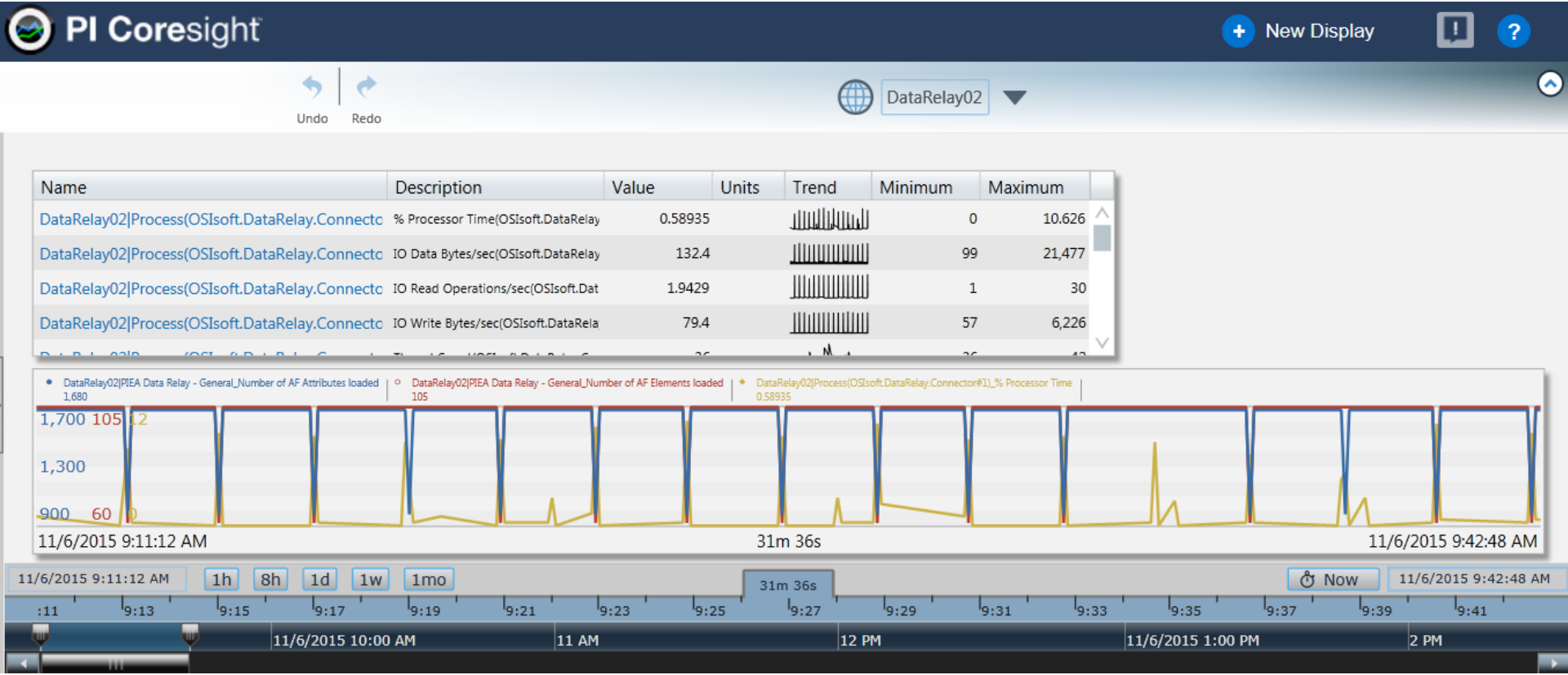
Data Relay Performance Counters



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What's next for the PI Integrator for Esri ArcGIS

Manageability

- Enhanced publication identification for troubleshooting
- ArcGIS environment clean up when Integrator objects are deleted

More Widgets

- Support mobile devices
- Add widgets for ArcGIS WebApp Builder

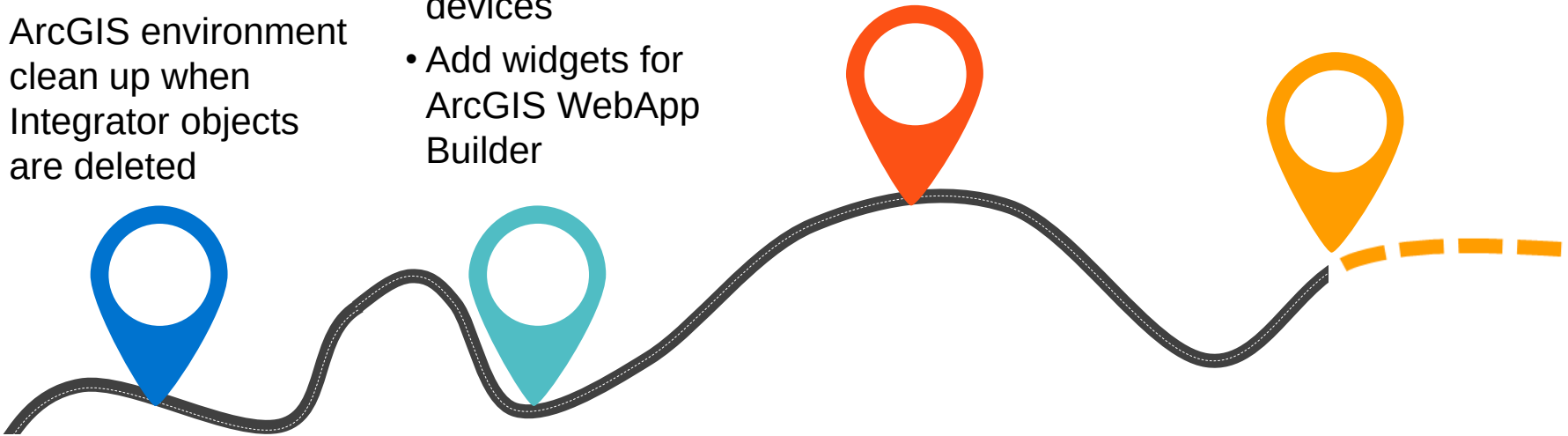
Event Frames in ArcGIS

RESEARCH:

Rewindable Maps

Asset Sync

Asset



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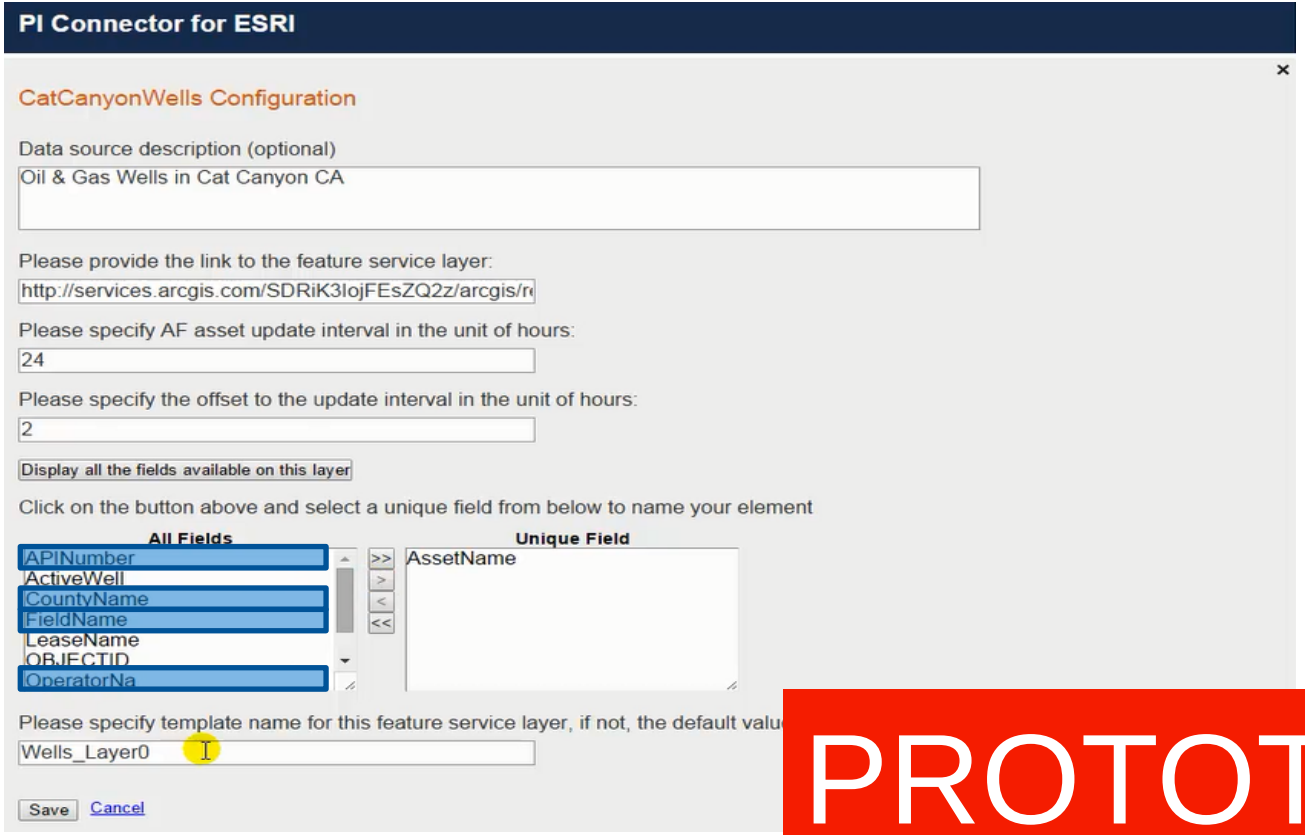
PI Connector for Esri ArcGIS



PROTOTYPE

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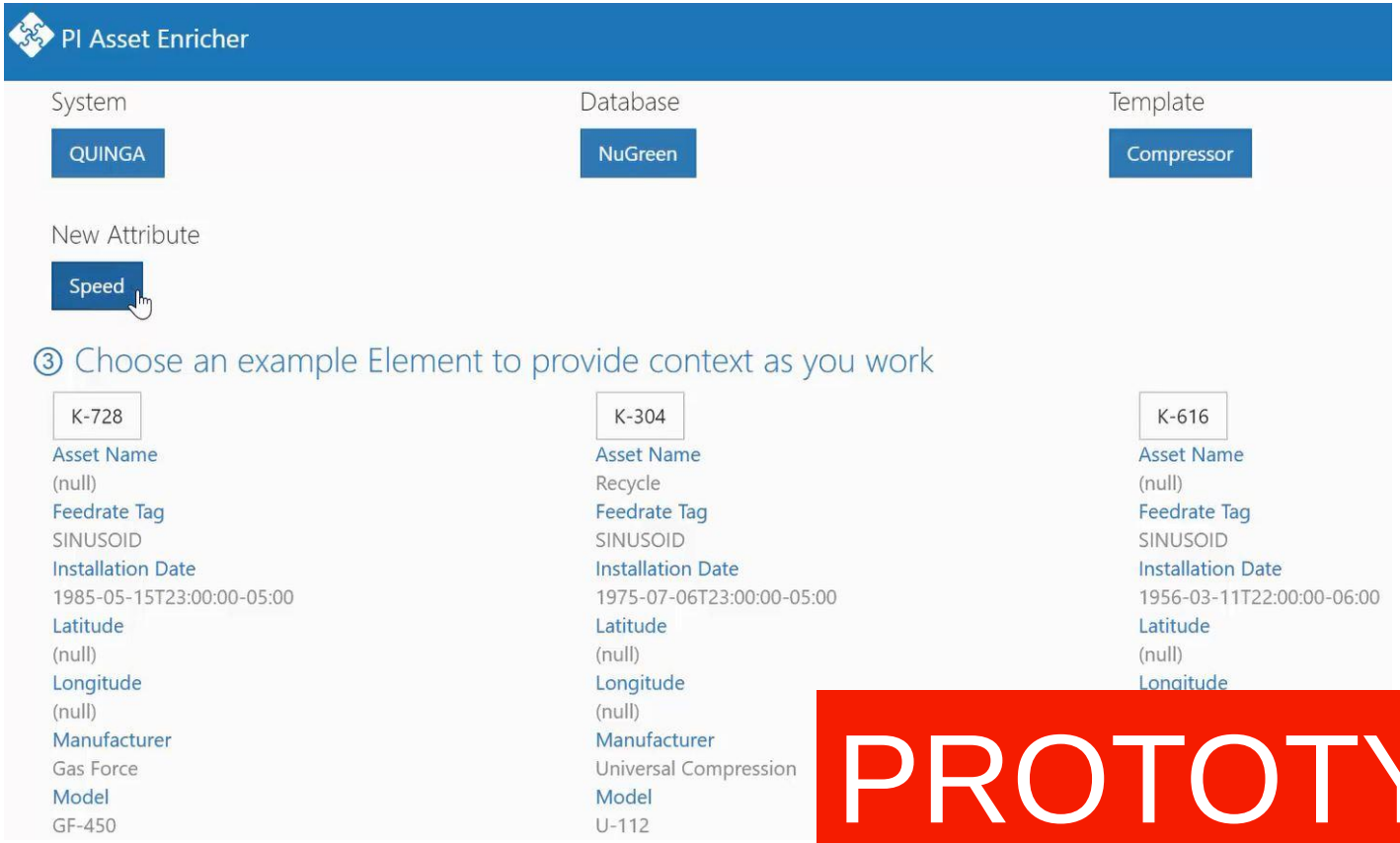
Asset Enhancer



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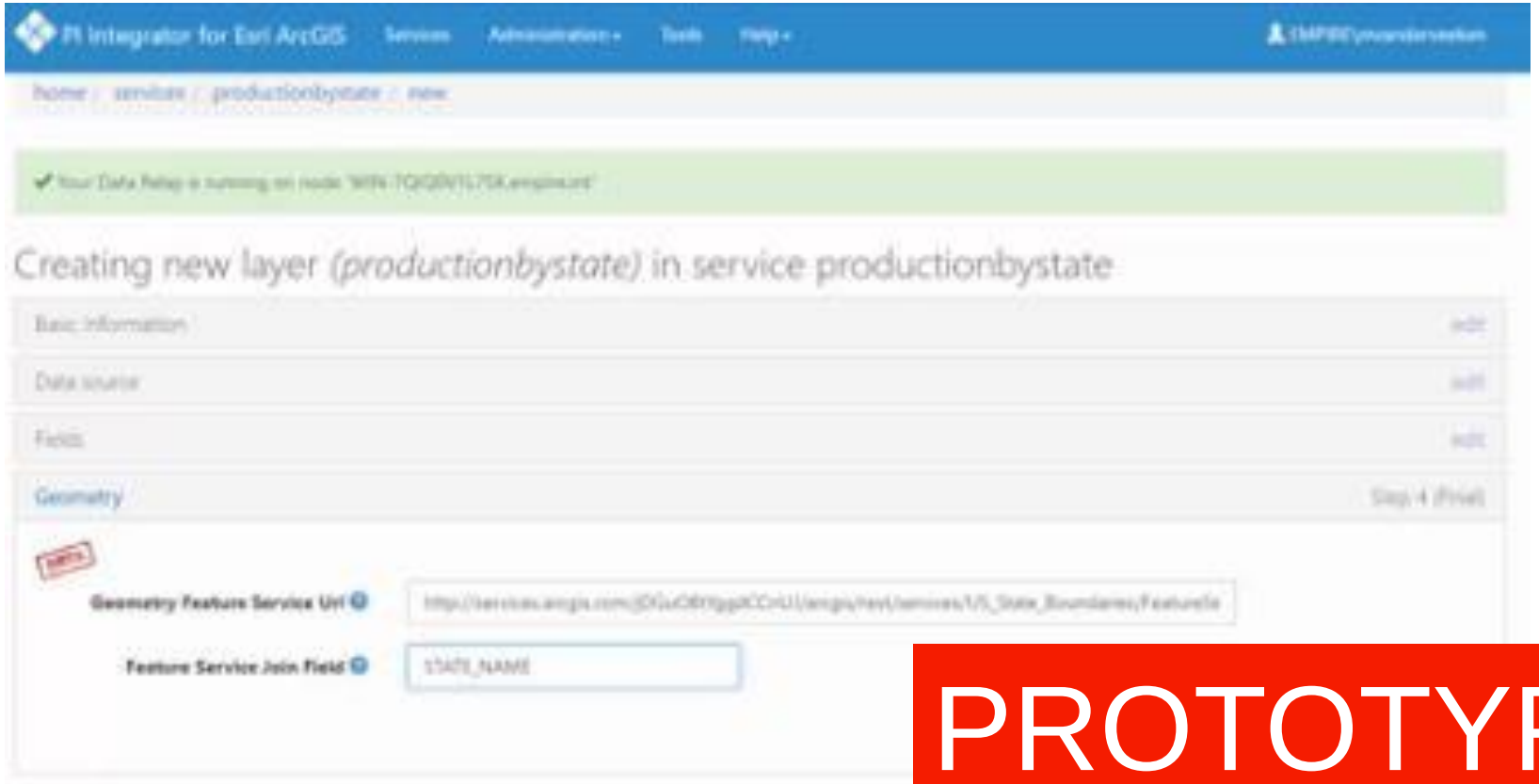
Related Feature Service



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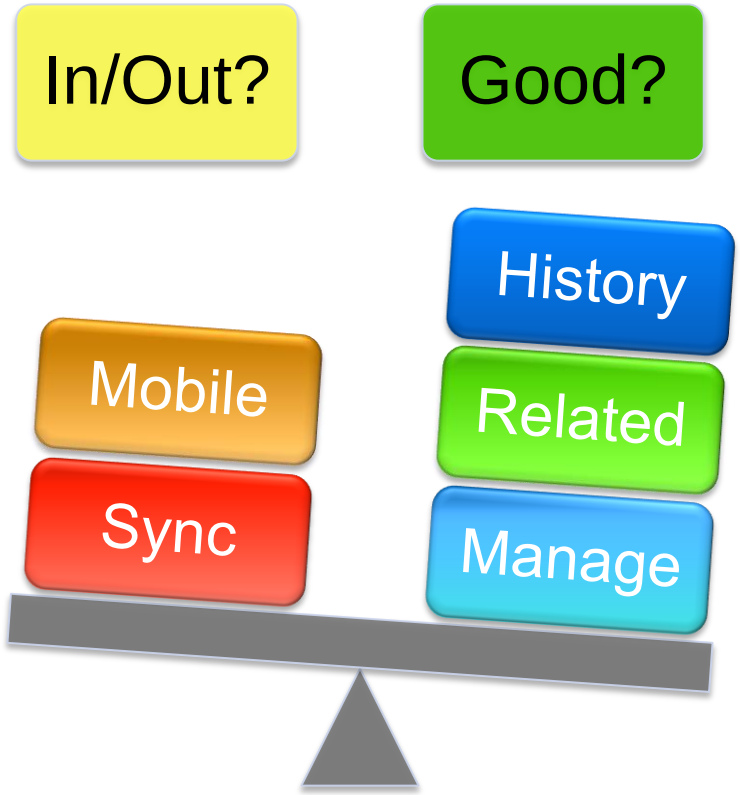

BetaIntegratorforEsri@OSIsoft.com

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Esri Integrator Team Needs you!

- We need feedback!
  - PI Connector for Esri ArcGIS
  - Delete WizardStream Layers
  - Replay History
- Please drop a line to:

BetaIntegratorforEsri@OSIsoft.com

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Beyond the Sparkle

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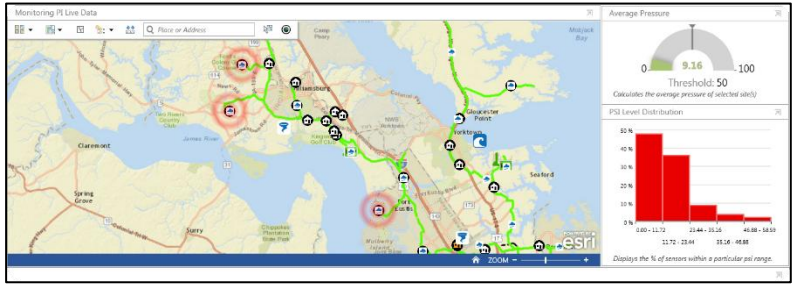
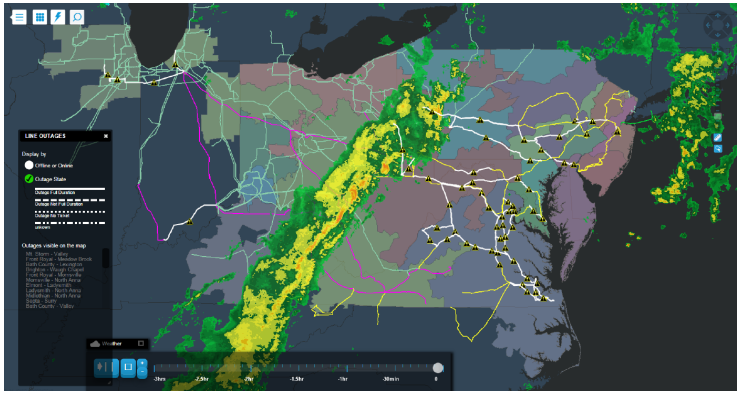
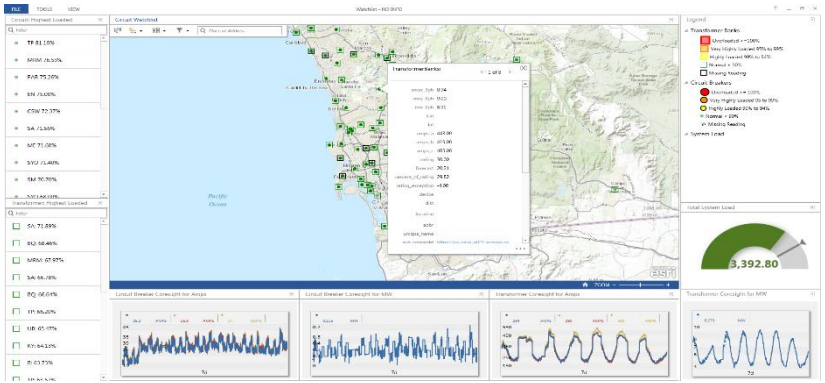
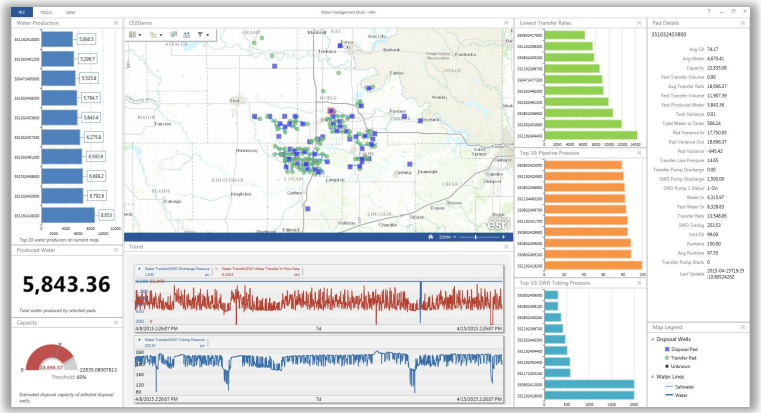
Beyond Sparkling Maps









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Spatial Analysis

- Exploit real time data in a spatial context
- Explore geographical relationships
  - Ask questions
  - Explore the data
  - Analyze and model
  - Interpret results
  - Make decisions

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Customer Presentations at UC 2016

- **The Making of a PI System Data/Esri ArcGIS Operational Dashboard -** Hampton Roads Sanitation District
- **Using Operational Real-time Data to Improve Dispatchers Situational Awareness –** PJM
- **Use Cases of the PI Integrator for Esri ArcGIS in Distribution –** SDG&E
- **"Equipment" Failure is Not an Option –** PowerStream
- **Commercial/Residential Solar Programs –** Arizona Public Service

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감사합니다

谢谢

Danke

Gracias

Merci

Thank You

ありがとう

Спасибо

Obrigado

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Questions

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

State your **name & company**

Please remember to…

Complete the Online Survey for this session

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