



## Information on the Spot- PI data on my device

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# What is PI Coresight?

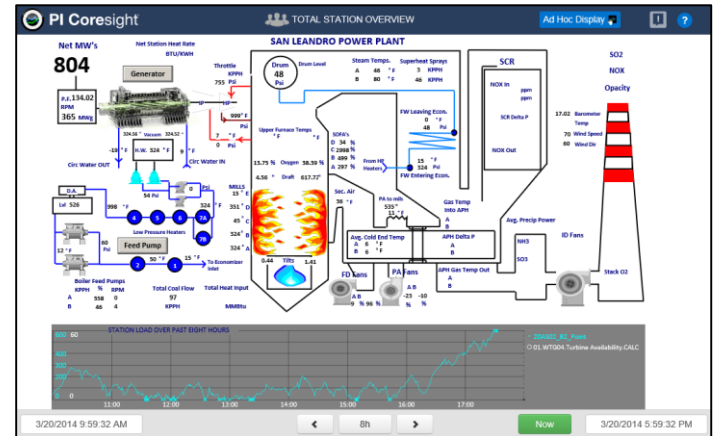
A web-based product for:

- Ad-hoc analysis
- Quick investigation
- Collaboration
- Rapid deployment



# PI Coresight 2014

## Ad hoc analysis + authored displays



# PI Coresight 2014

## Transitional release with Big New Features

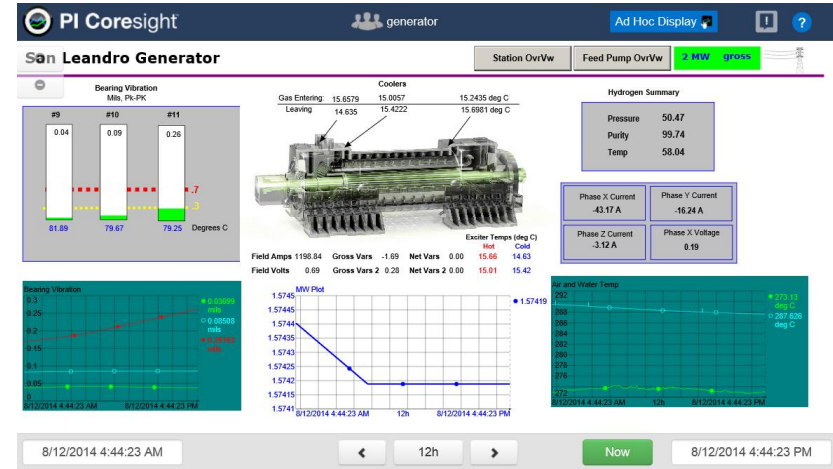
- Moving from desktop browser only to phone, tablet, and desktop
- Making PI ProcessBook displays available on new devices and combine them with new visualization tools
- Improving performance and scalability

# PI Coresight 2014

*I need to access my graphic displays and real-time data using any modern browser so that I can trouble shoot problems without special software installed.*

## PI ProcessBook Display Viewing

- Viewable on any modern browser
- Displays organized by import folder
- No special software needed on the client machine



# DEMO

# San Leandro Generator

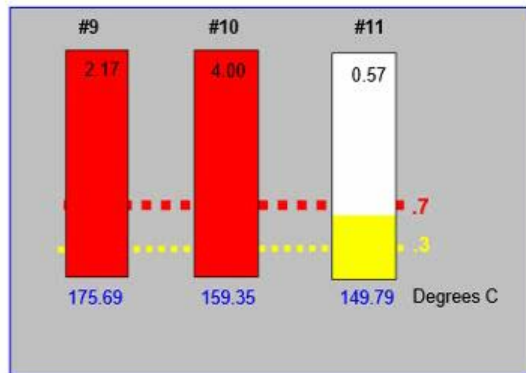
Station OvrVw

Feed Pump OvrVw

**415 MW gross**

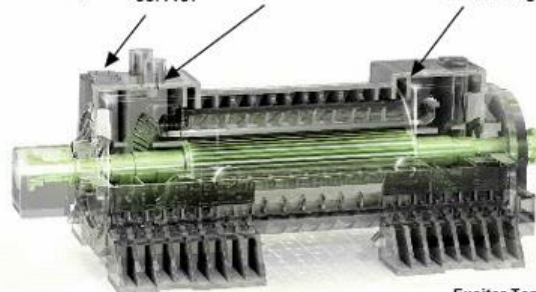


Bearing Vibration  
Mils, Pk-PK



Coolers

Gas Entering:	41.0442	43.2864	47.163 deg C
Leaving	33.1197	30.7904	30.815 deg C



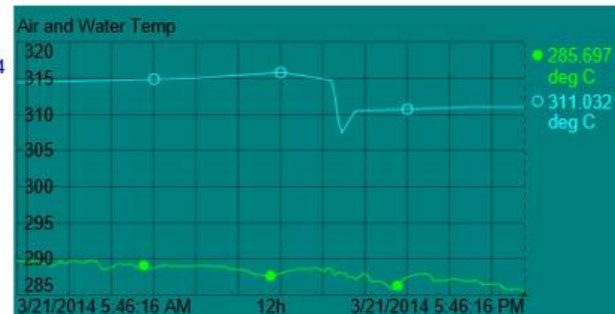
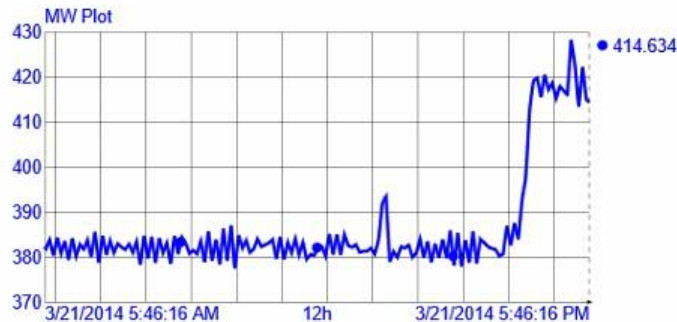
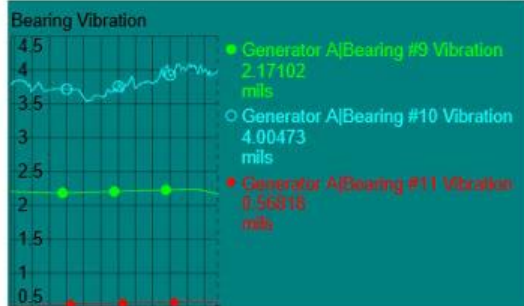
Hydrogen Summary

Pressure	58.45
Purity	99.74
Temp	100.25

Phase X Current 10004.75 A	Phase Y Current 10120.26 A
Phase Z Current 9837.21 A	Phase X Voltage 114.22

Exciter Temps (deg C)

Field Amps	2927.26	Gross Vars	89.45	Net Vars	84.24	Hot	41.04	Cold	33.12
Field Volts	225.75	Gross Vars 2	89.77	Net Vars 2	82.82		43.29		30.79



# Difference between web and native viewing

## Not supportable on the web:

- VBA script
- ActiveX Controls

## Different interaction:

- One time range
- Element Relative Displays with URL

## Not in PI Coresight 2014:

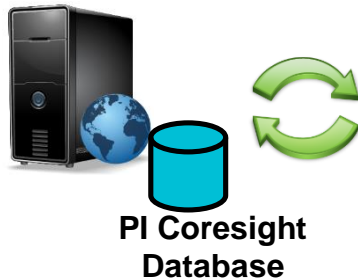
- Trend Cursor, Trend Zoom
- Unsupported Symbols
  - Batch View
  - SQC Chart
  - XY Plot
  - Logarithmic scale
  - Regression line on a trend
- ODBC datasets



# Easily Make Displays Available

- Save PI ProcessBook file in PDI or SVG format
- Automatically organized by folder structure
- Displays are automatically imported and/or updated

PI Coresight 2014



Import Folder



PI ProcessBook Displays



# DEMO

PI ProcessBook - [Area 1 Turbines]

File Edit View Insert Tools Draw Arrange Window Help

3/19/2014 3/21/2014

### Turbine Overview

Unit 1 - Gas	
Duct Burner1010 MMBtu	Gross mW 166 mW Heat Rate6995 Btu/kWh Fuel Gas1010 MMBtu/Hr Comp In T 156 Deg F

Unit 2 - Gas	
Duct Burner1001 MMBtu	Gross mW 543 mW Heat Rate9798 Btu/kWh Fuel Gas1001 MMBtu/Hr Comp In T 142 Deg F

Unit 3 - Steam	
	Gross mW 366 mW

Ambient Conditions	
Temperature	92.4
Barometric Pressure	29.3
Humidity	35.7

Fuel Rates (MMBtu)	
Site Fuel Energy	3900
Fuel Use Today	27300
Fuel Use Yesterday	43400

Heat Rates (Btu / kWh)	
Gross Heat Rate	6975
Net Heat Rate	10100
Steam Adj. Heat Rate	6750

Plant Output (mW)	
Gross Power	1154
Parasitic Load	73.4
Net Power	1080

Net to Market 1080 mW

Ready Server Time NUM

PI Coresight - Internet Explorer

http://cs2014beta/Core PI Coresight

### PI Coresight

### Turbine Overview

Unit 1 - Gas	
Duct Burner 1010 MMBtu	Gross mW 166 mW Heat Rate 6995 Btu/kWh Fuel Gas 1010 MMBtu/Hr Comp In T 156 Deg F

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Net to Market 1080 mW

8h Now

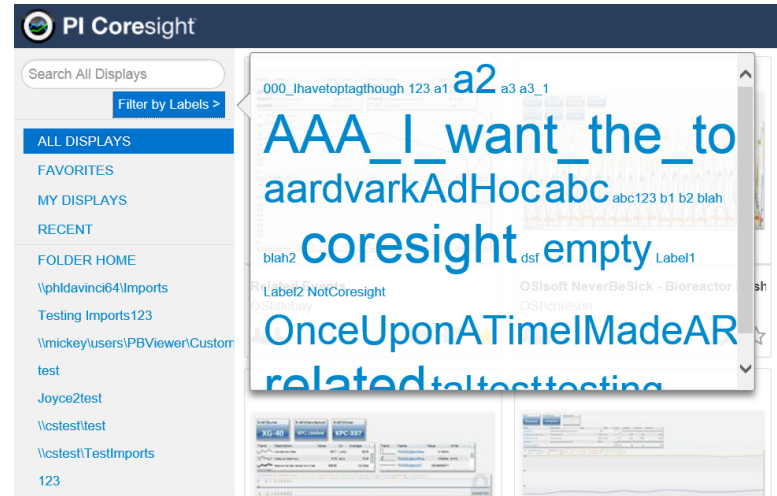
3:12 PM 3/21/2014

# PI Coresight 2014

*I need to quickly filter the list of displays to see only the ones I am interested in so I don't waste time hunting for what I want.*

## New Home Page

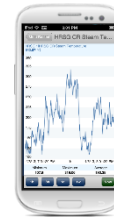
- Available using any modern browser
- Find and open native Coresight or PB displays
- Organize displays with folders or labels
- Administrator can manage any display



# PI Coresight on mobile devices

*Quickly Find and Use PI Data using Small Form Factor Devices*

- Fast and easy access to PI System data
- View PI ProcessBook displays
- Designed for small screens
- Viewable on any device

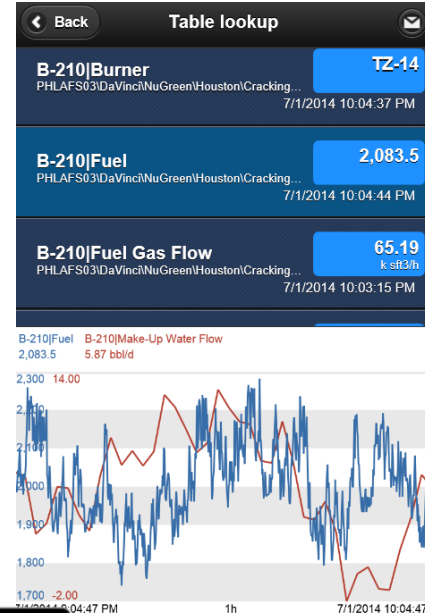


# PI Coresight 2014

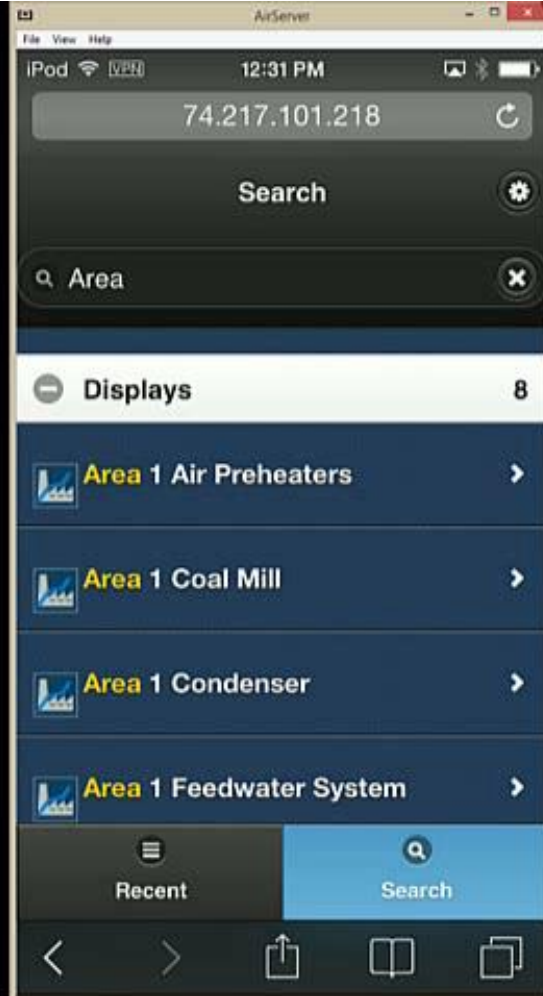
*I need access to my data and displays from anywhere and with any device, so I can solve problems even before I get there.*

## Mobile site

- Automatically displayed on small screen devices
- Find and display native Coresight and PB displays
- Full display, data item, and asset search



# DEMO



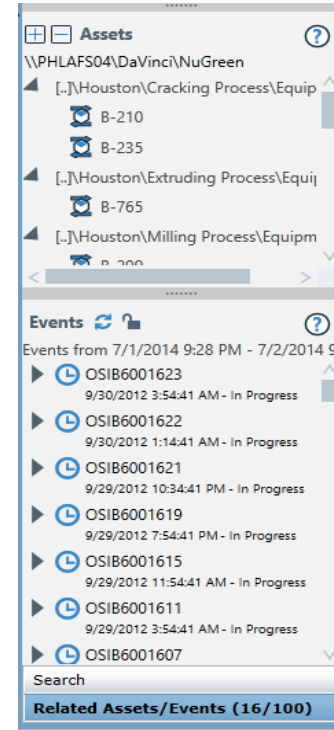


# PI Coresight 2014

*I need to search against millions of assets or events and return search results within seconds so I can solve problems in a timely manner.*

## Search service

- Returns search results in a fraction of the time compared to previous versions
- Functional with larger AF and EF databases
- Infrastructure to deliver new abilities

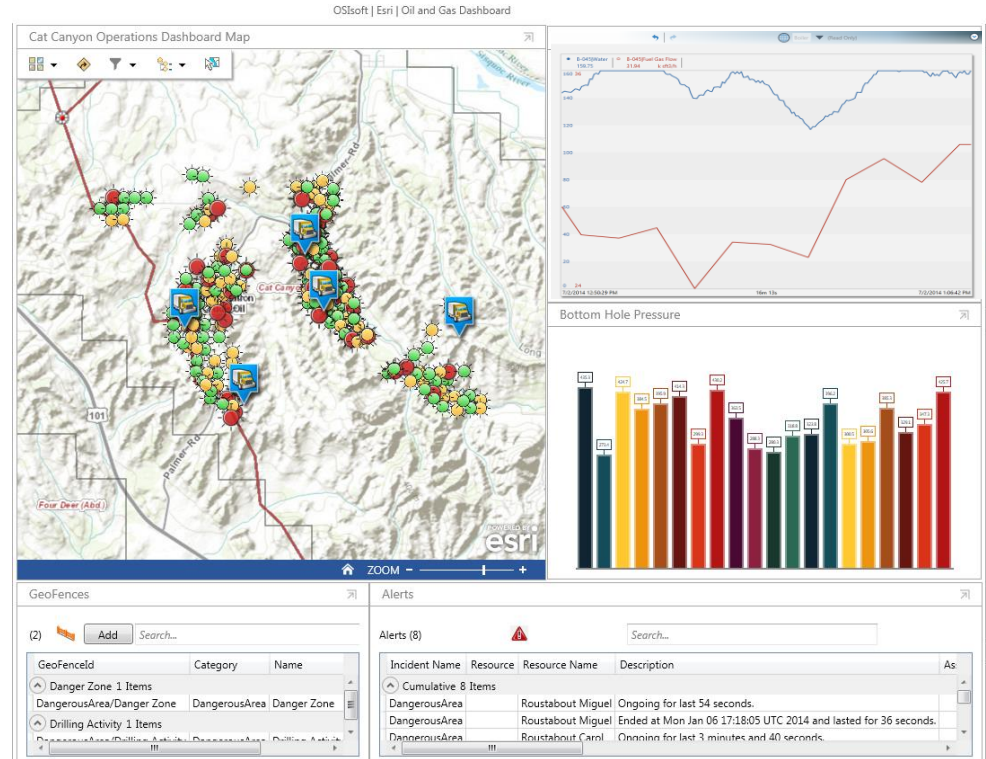


# PI Coresight 2014

*I need to integrating PI Coresight with business applications and portal sites to get a complete view of operations.*

## New URI parameters

- Hide Toolbar, Timebar
- Set element of interest for PB displays
- Set time zone for the current display



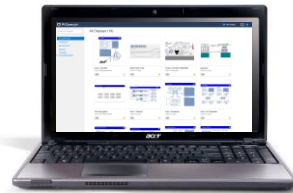
# What works where?

Desktop browser  
only



Displays built  
in PI Coresight

Any modern browser



Homepage



Mobile site



PB Displays



Native Apps



iPad  
iPhone

# What's next?

## PI Coresight 2015 and beyond

# Future Data in PI Coresight 2015




1. Current Time indicator

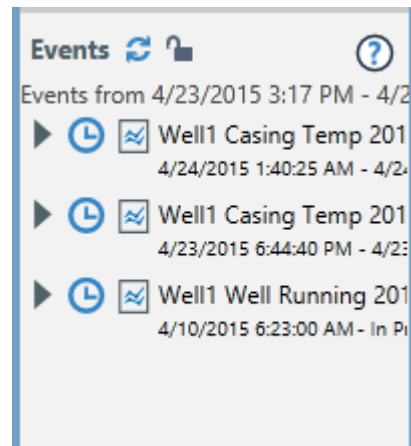
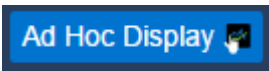


2. Actual vs. Forecast- everything updates!



# Just Future Data?

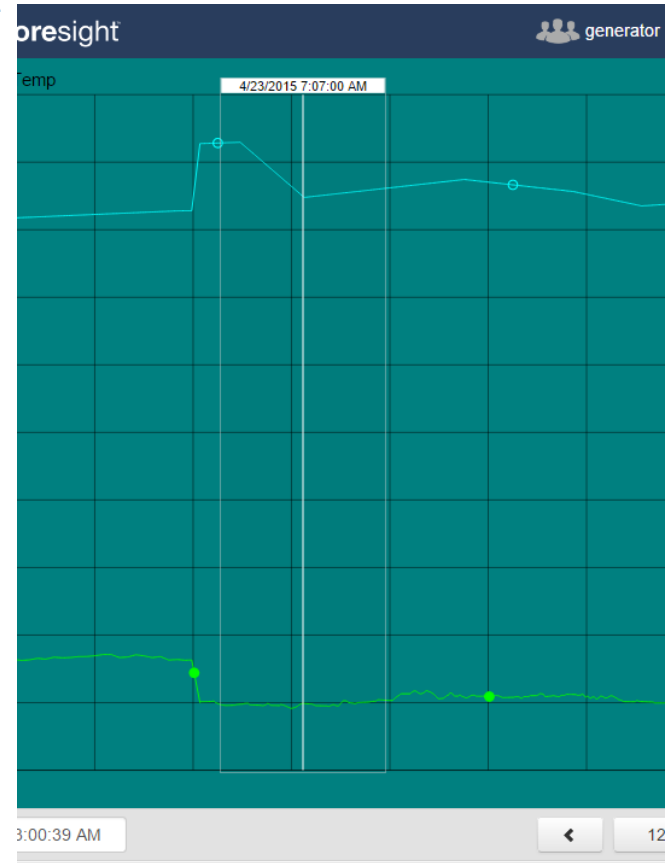
- Ad hoc display- all visible data items moved to a table
- Related Events- based on data items and time range
-  • Email link- using local mail client



# PB Trend Cursor in PI Coresight



- PI ProcessBook trend cursor
  - Available on pop-up trend
  - Click/tap to place
  - Drag to move or delete



# Show only important data items – PI AF 2015



- Hidden property
  - Not returned by PI Coresight search
  - Still returns a value if already on a display



- Excluded property
  - Not returned by PI Coresight search
  - Does not return a value if already on a display

Group by:  Category

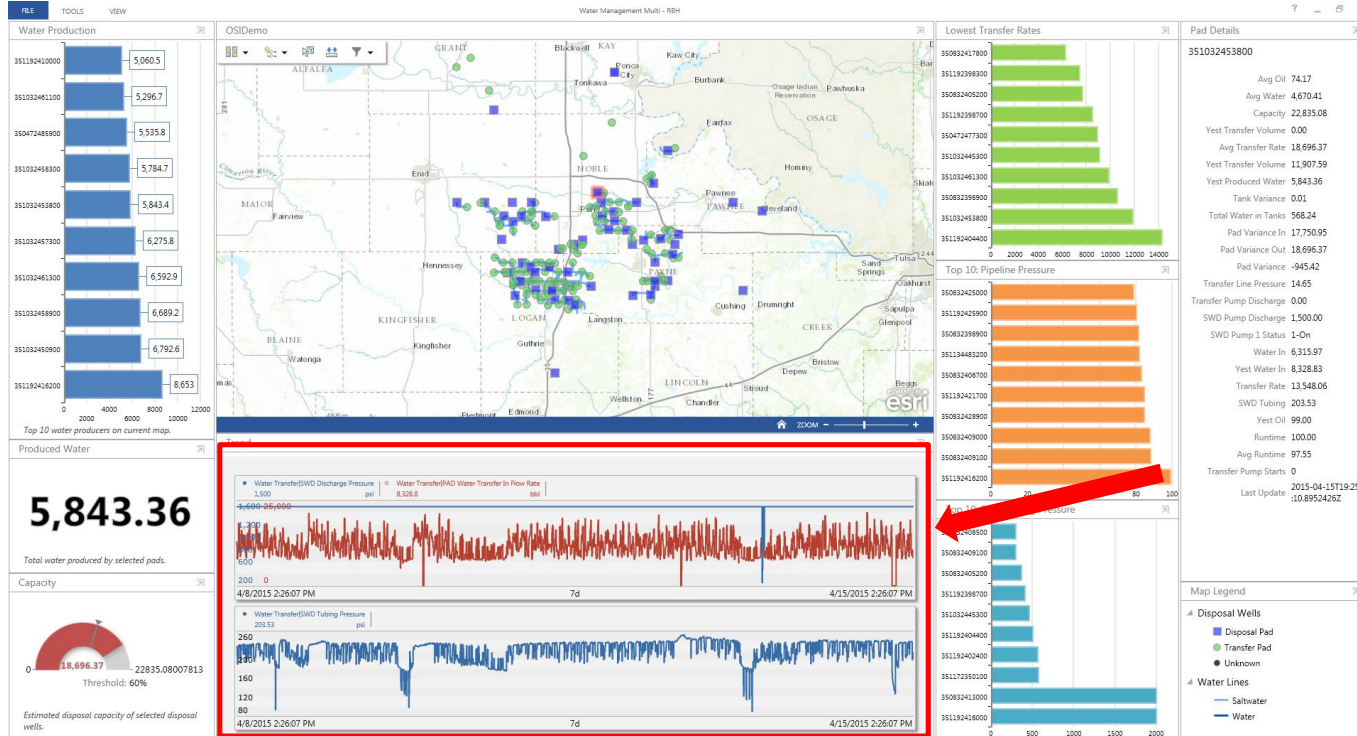
Name:	Production target
Description:	
Properties:	Hidden
Categories:	<input type="checkbox"/> Configuration Item
Default UOM:	<input type="checkbox"/> Excluded
Value Type:	<input checked="" type="checkbox"/> Hidden
Default Value:	0 mscfd
Data Reference:	<None>

Two teal arrows point from the 'Hidden' and 'Excluded' options in the 'Categories' section to the right.

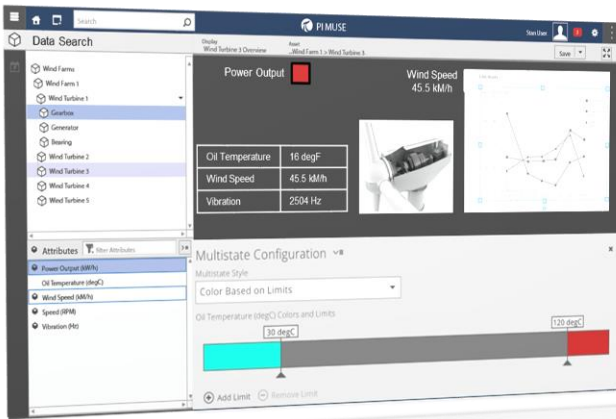


# The power of integration

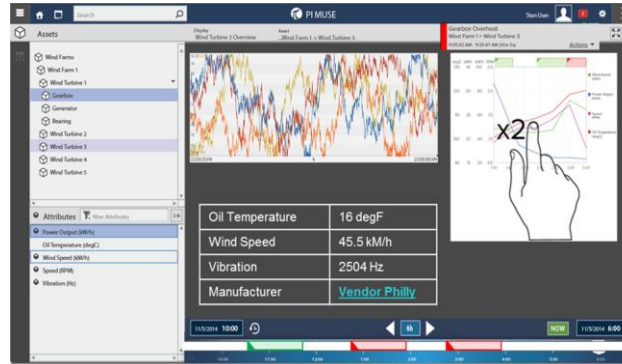
## Esri Operations dashboard at Devon Energy



# Visualization for today's PI System



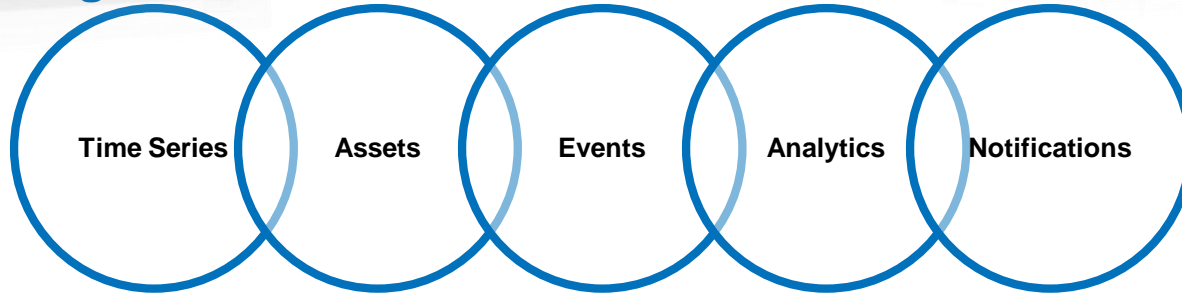
Authoring

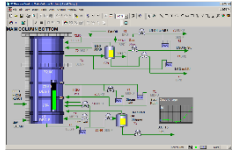


Monitoring



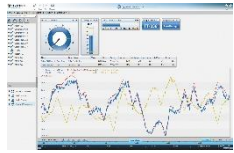
Ad Hoc Analysis





## PI ProcessBook

Display Editor  
Process Monitoring



## PI Coresight™ 2.x

Ad Hoc Analysis  
PB Display Viewer

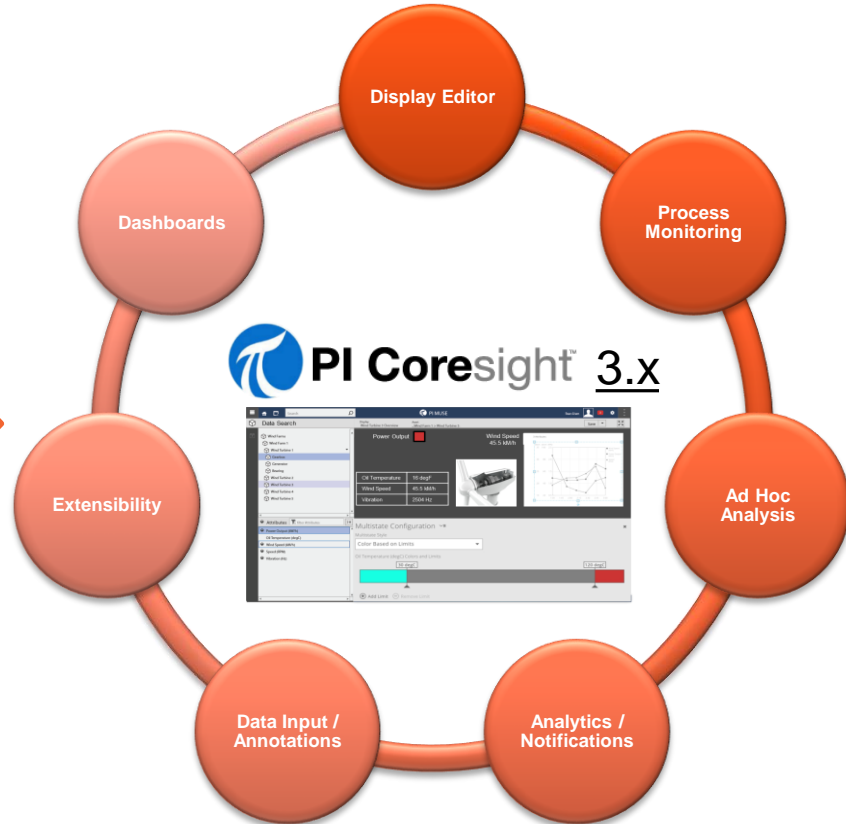


## PI WebParts

Dashboards



**TODAY (2015)**



**FUTURE (2016+)**

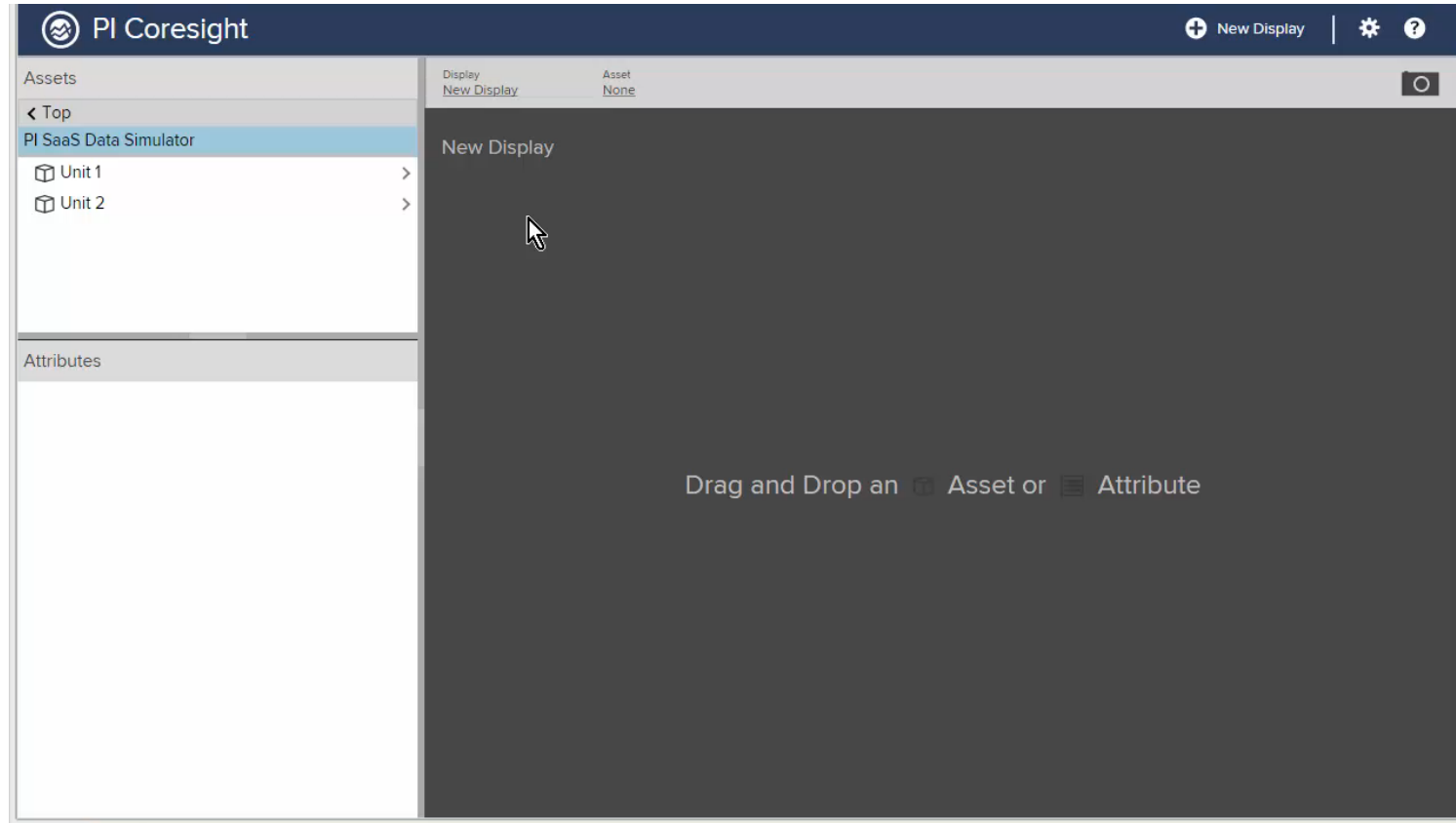


# PI Coresight™ 3.x

The following is a glimpse of what the development team is working on in support of the PI Coresight 3.x vision.

The functionality displayed is subject to change.

# Draw me a picture



# Questions?

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