



GIS and Real Time Data

Bringing Together Space and Time

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About Esri India



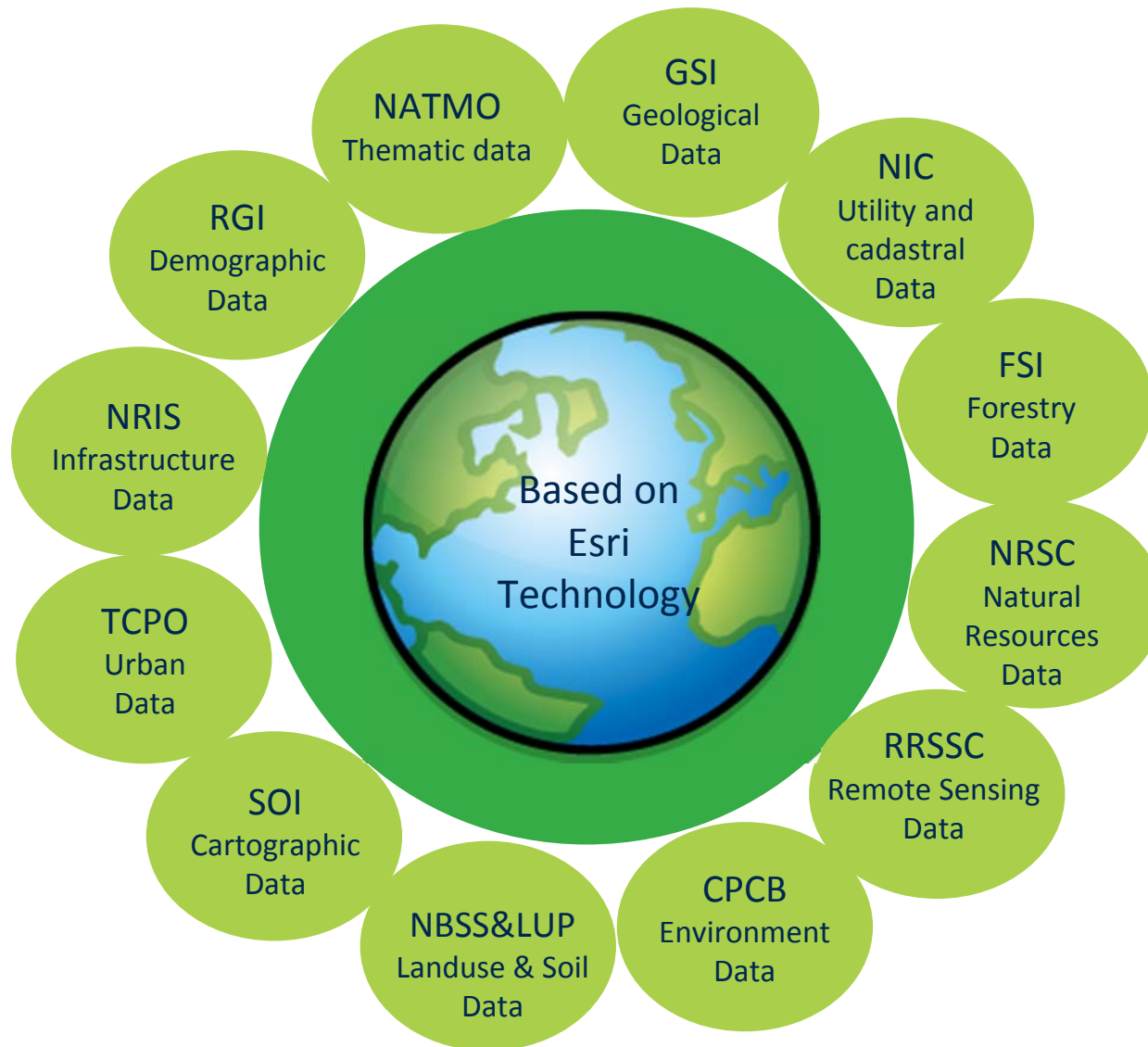
- **Market leading GIS software & solutions company in India**
- **Esri technology is backbone to most of major National projects in India**

is a joint venture, since 1996, between



- **Global IT services and software solution provider**
- **Ranked among India's Top 20 IT Services players**
- **SEI CMM Level 5, CMMi Level 5 certified**
- **Esri Inc. is a global leader in GIS software**
- **Flagship ArcGIS® platform**
- **More than 300,000 customers worldwide**

Esri Technology Is Core to All Geospatial Based Project In India



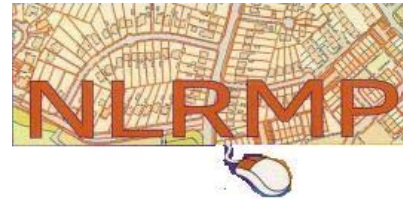
Esri Technology Is Backbone For Major Programs In India



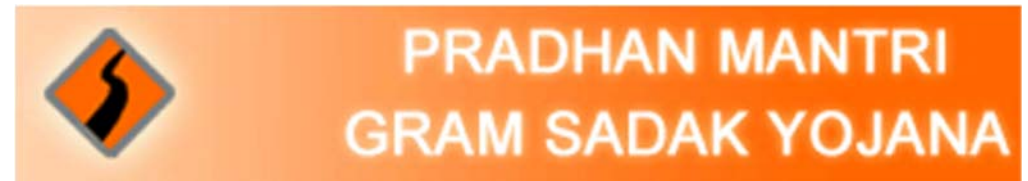
CRRI



R-APDRP



CCTNS



Sarv Siksha Abhiyaan

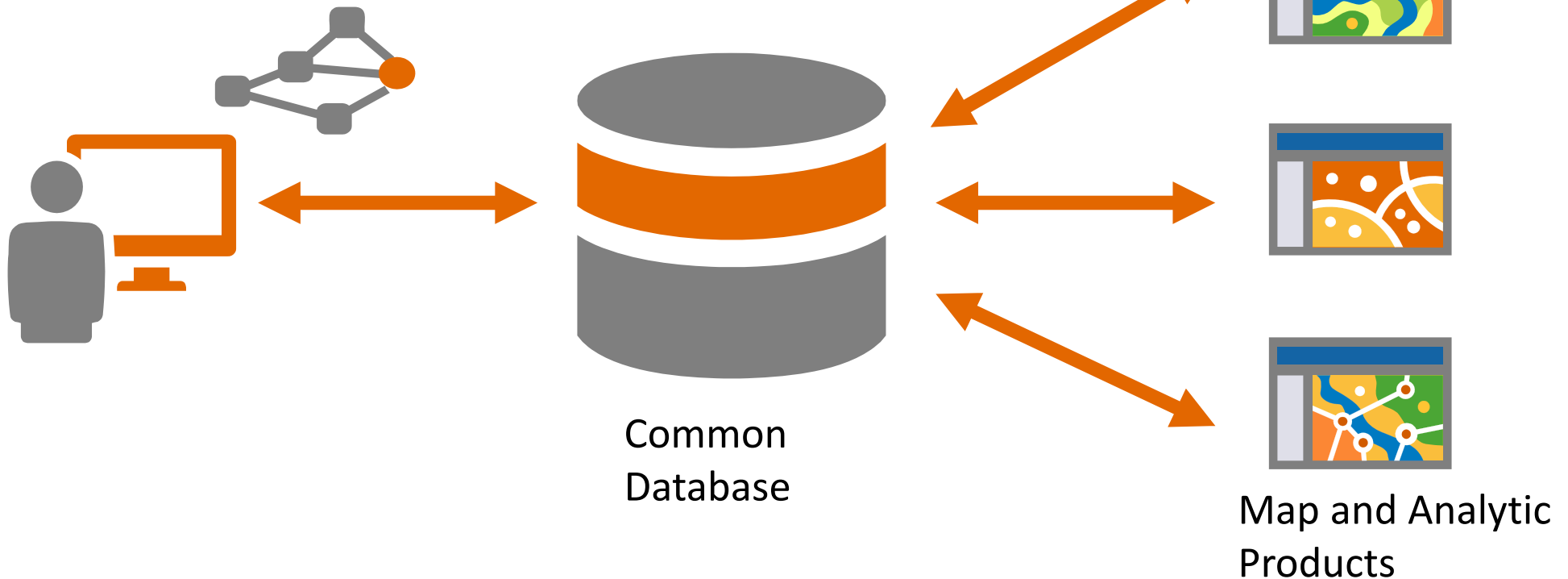


...and many more

GIS

A System for Managing and Applying Geographic Information

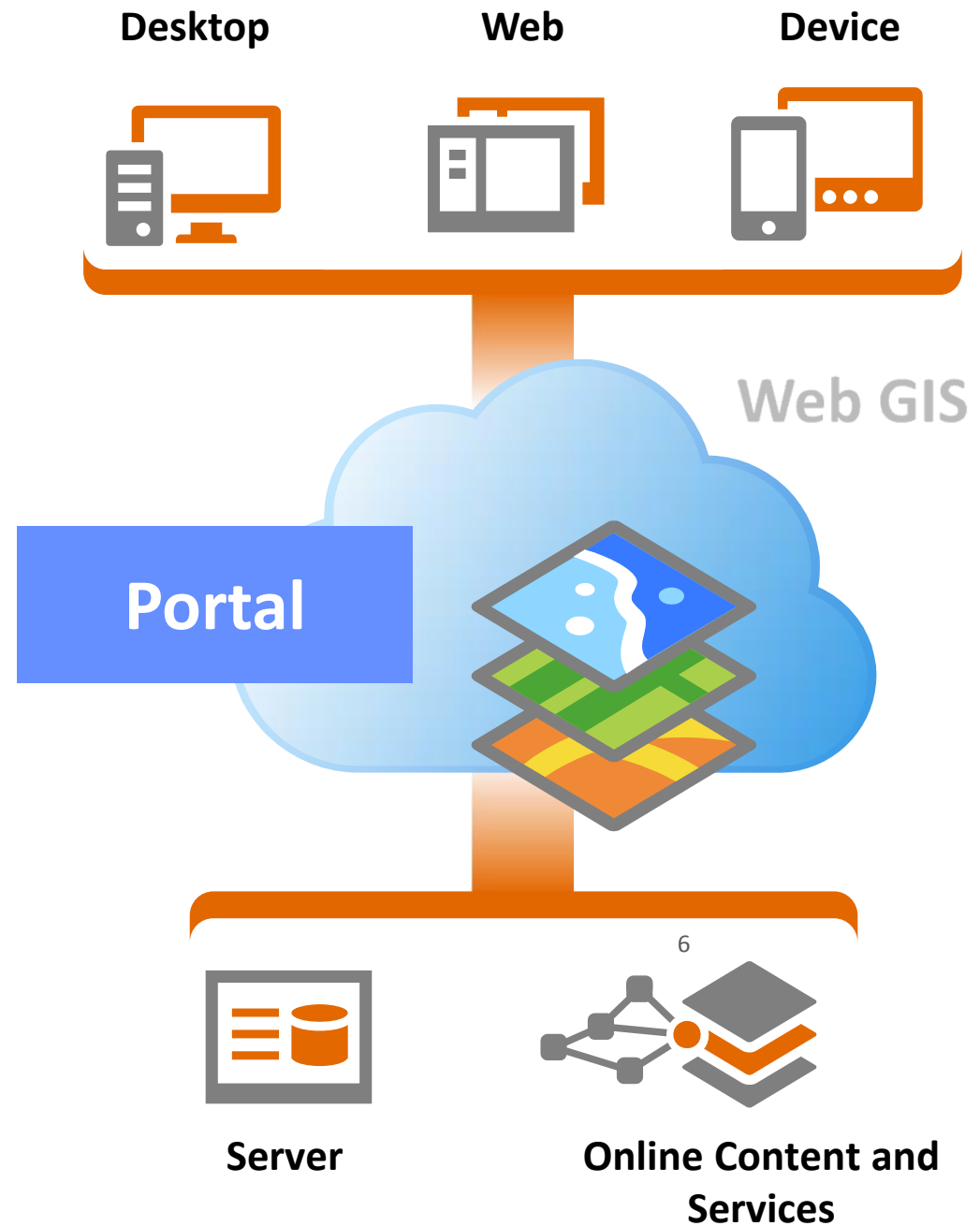
Data Creation
Workflows



Collect Once, Use Many Times

ArcGIS is a Platform

Simple
Integrated
Open



GIS & Real Time Data Integration Will Transform Our Organizations

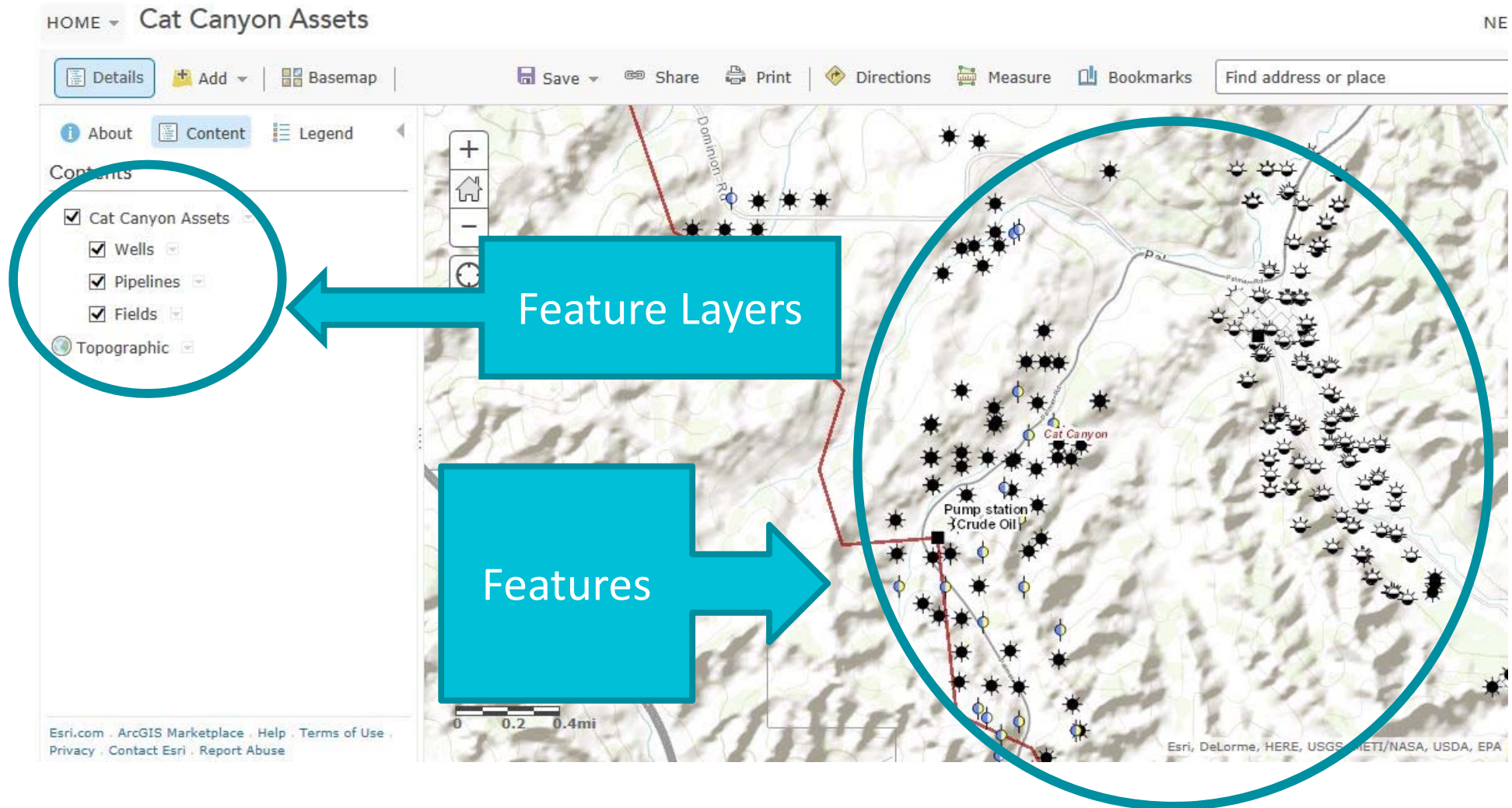
Our Partnership Enables This Transformation



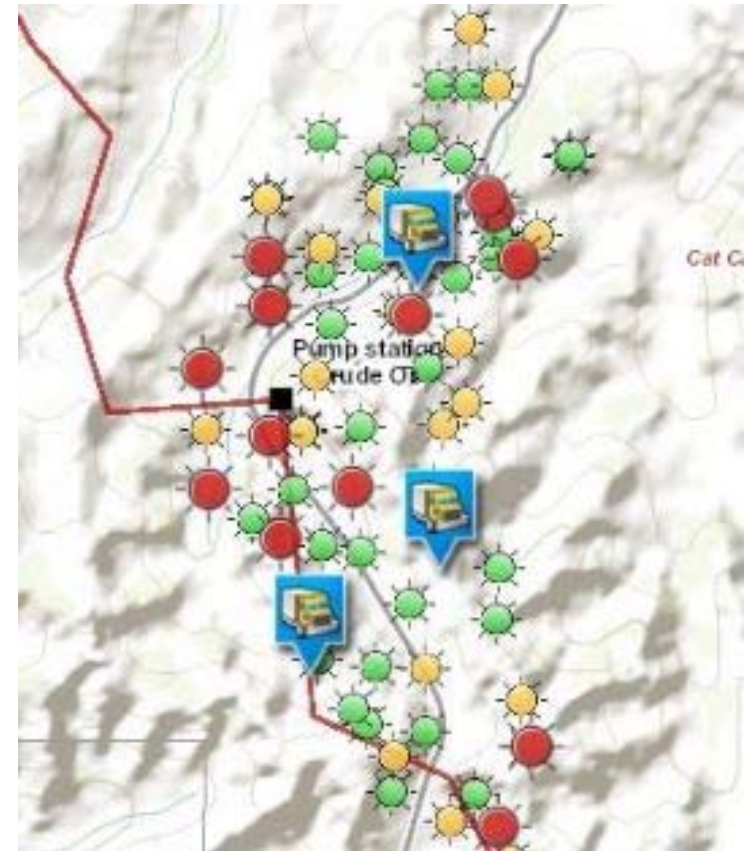
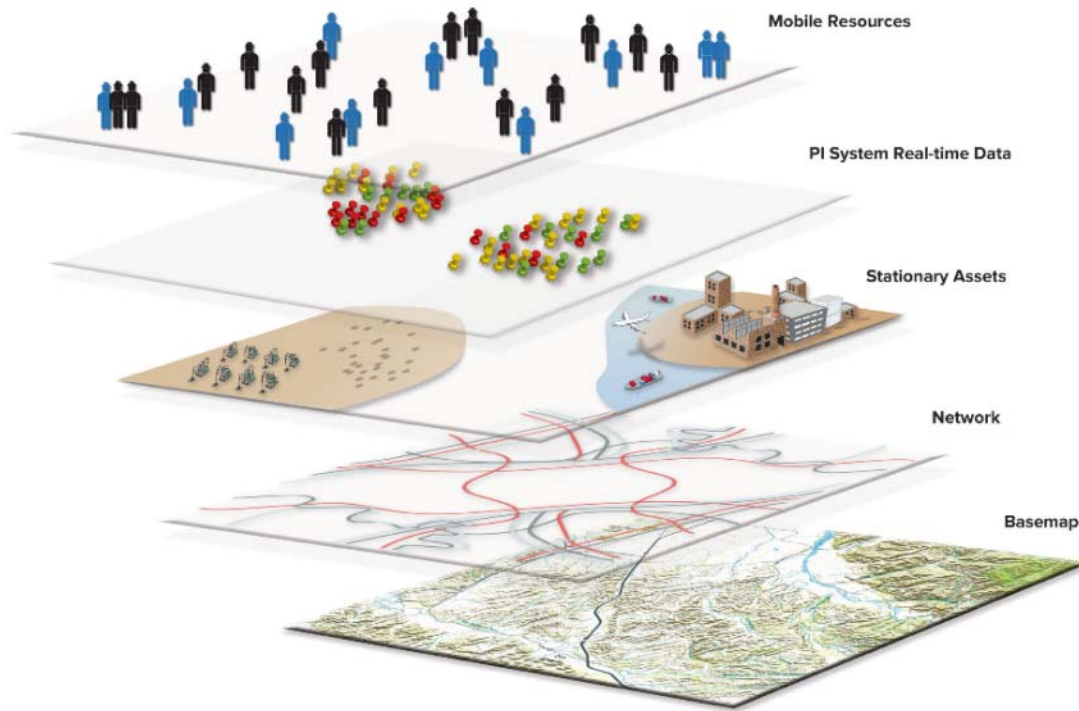
Connecting Space and Time

- Serve Assets For Mapping As Features
- Add Dynamic Features To Maps
- Dig Deeper Into Historical Data From A Feature
- Spatial Aggregation Provided With The Map
- PI And Arcgis Provide New Ways To Monitor Assets, Including Heat Maps

What's on a Map



Why are layers important



What Data is in PI?

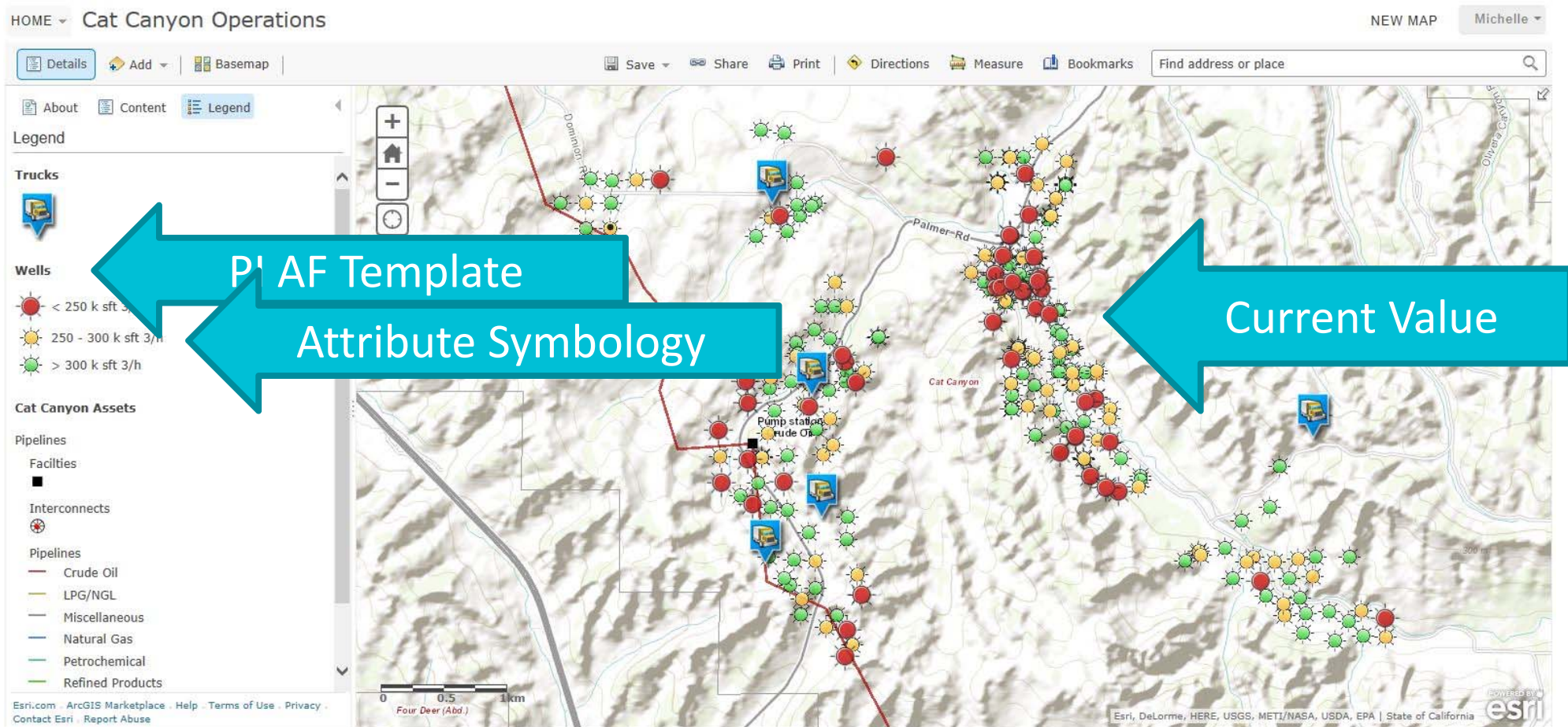
The screenshot shows the 'Elements' pane on the left, listing various elements under the 'Cat Canyon' folder. A blue oval highlights the 'Elements' pane. The main pane shows the 'Attributes' tab for element 'CE-08300101'. A blue arrow points from the 'Elements' pane to the 'Attributes' tab, and another blue arrow points from the 'Attributes' tab to the 'Templates' pane in the adjacent screenshot.

Name	Value
ActiveWell	Y
APINumber	08300101
AssetName	CE-08300101
Bottom H...	304.04745
Bottom H...	263.12661743164062
CountyNa...	Santa Barbara
FieldName	Cat Canyon
Flow Rate	416.95938110351562
Flow Tubi...	
Geometry...	
Hydrostat...	
LeaseName	
OBJECTID	4
OperatorNa	Clancy Energy
TypeText	Oil & Gas
Well_Type	OG

The screenshot shows the 'Cat Canyon template' configuration window. The 'Attribute Templates' tab is selected, showing a list of attributes. A blue oval highlights the 'Cat Canyon template' in the 'Library' pane. The 'ActiveWell' attribute is selected in the list.

Name	Description
ActiveWell	
APINumber	
AssetName	
Bottom Hole Pressure	
Bottom Hole Temperature	
CountyName	
FieldName	
Flow Rate	
Flow Tubing Pressure	
GeometryLatitude	
GeometryLongitude	
Hydrostatic Head	
LeaseName	
OBJECTID	
OperatorNa	
TypeText	
Well_Type	

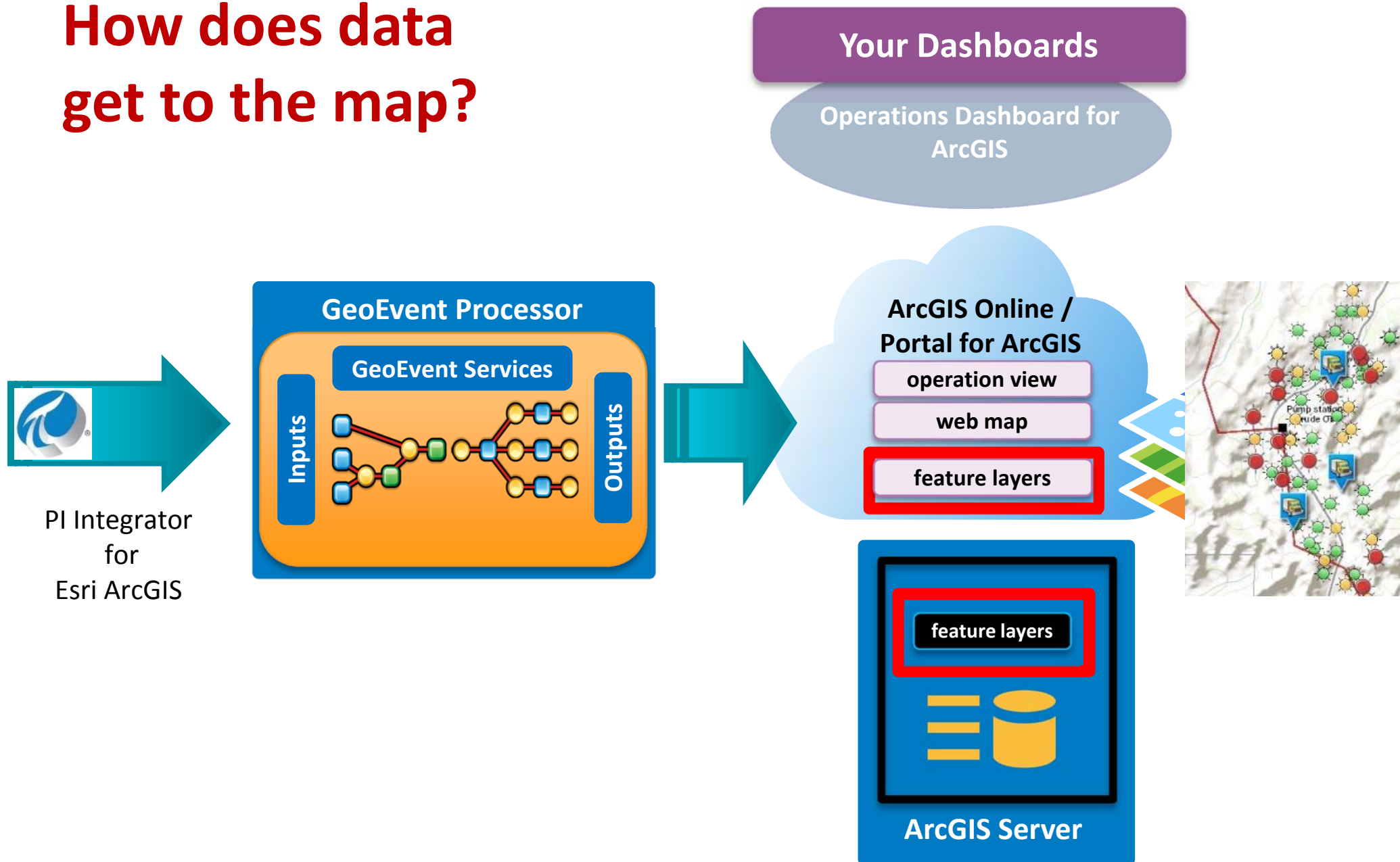
PI System Data Animates the Map



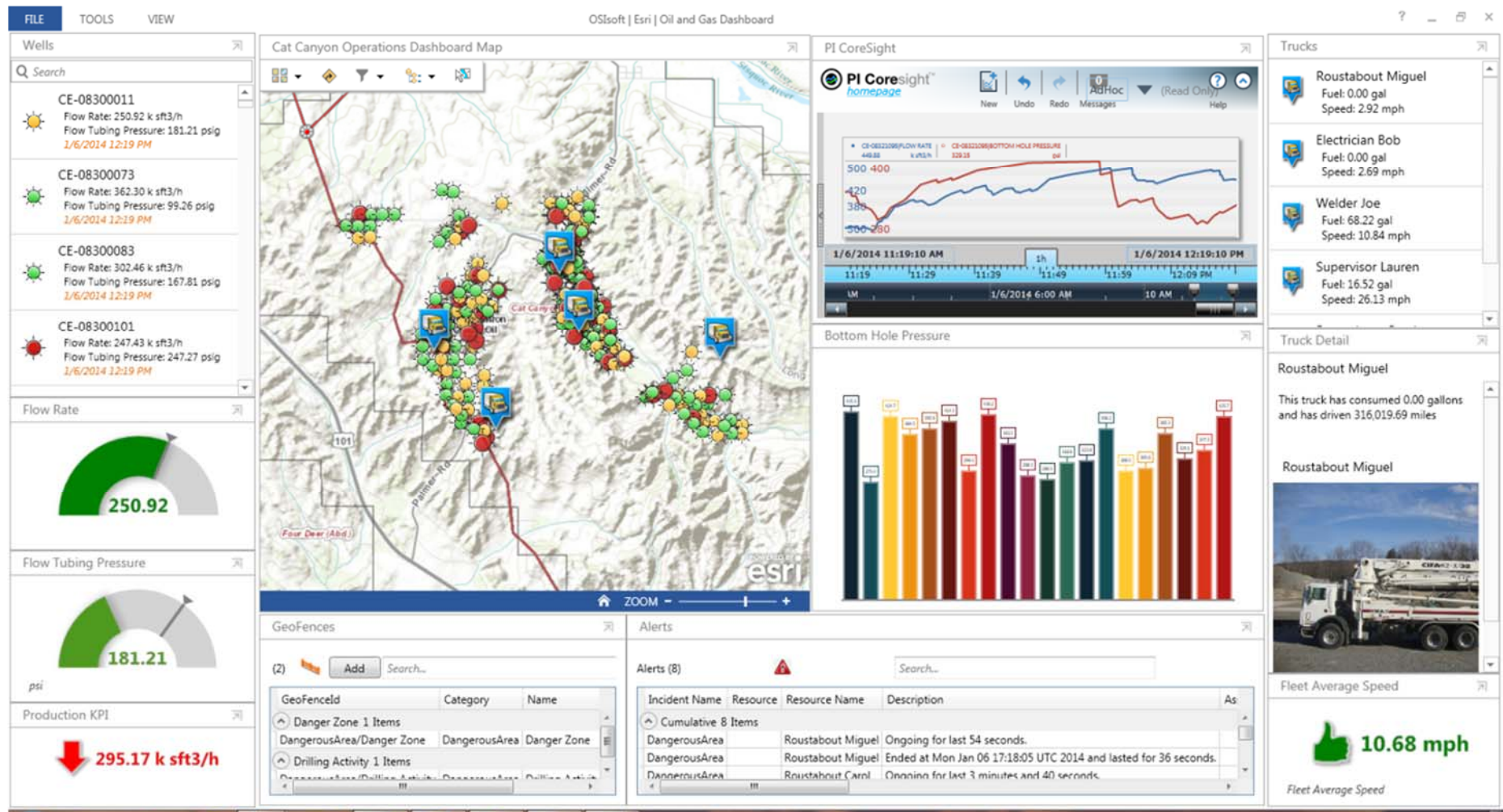
We do the work for you with each layer

- Automatic Configuration
 - ArcGIS GeoEvent Processor Input Connector
 - ArcGIS GeoEvent Processor Output Connector
 - ArcGIS GeoEvent Processor Workflow
- Create PI Coresight Endpoint

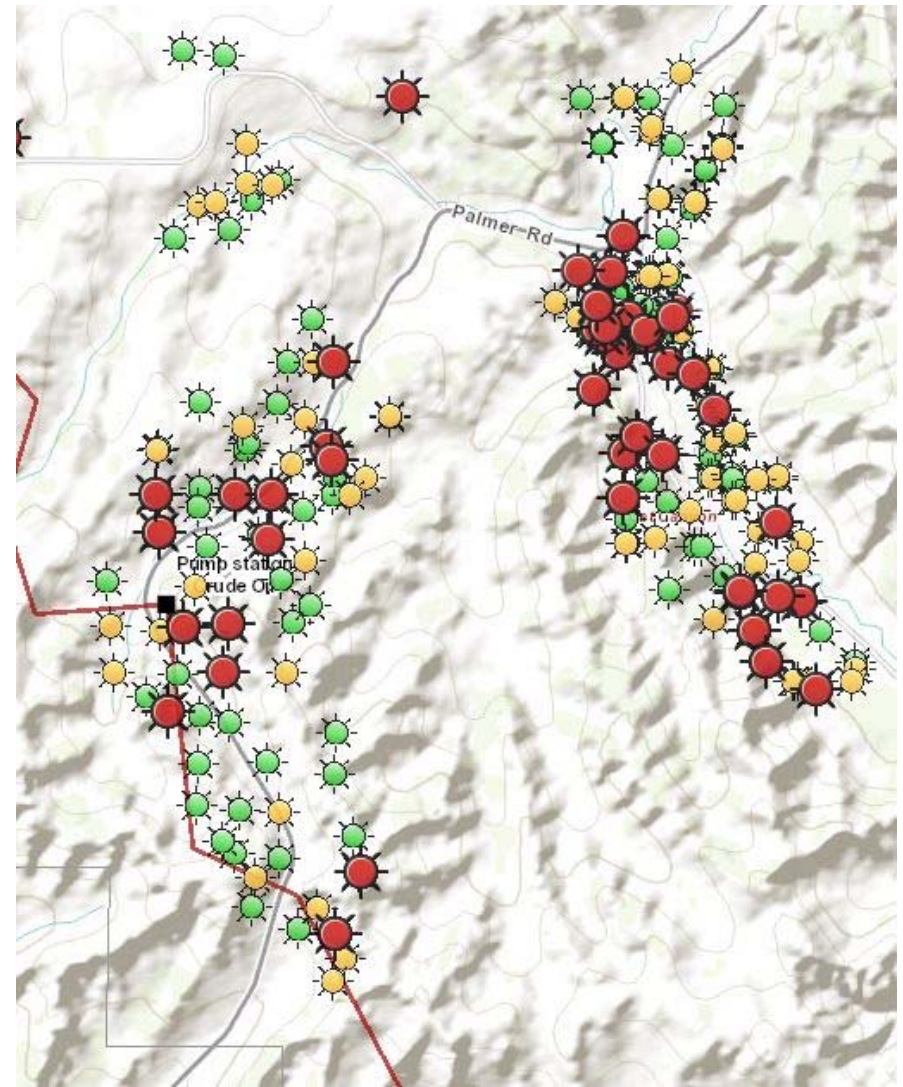
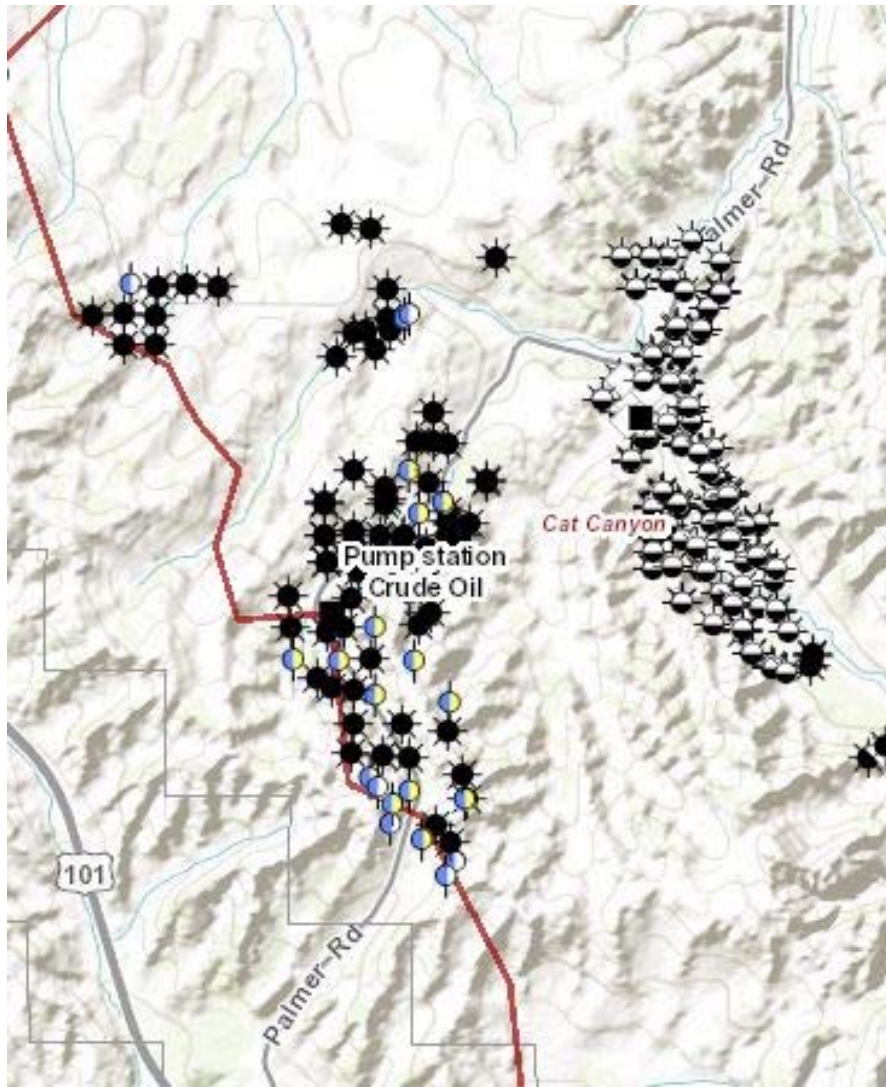
How does data get to the map?



Bring your Maps to Life



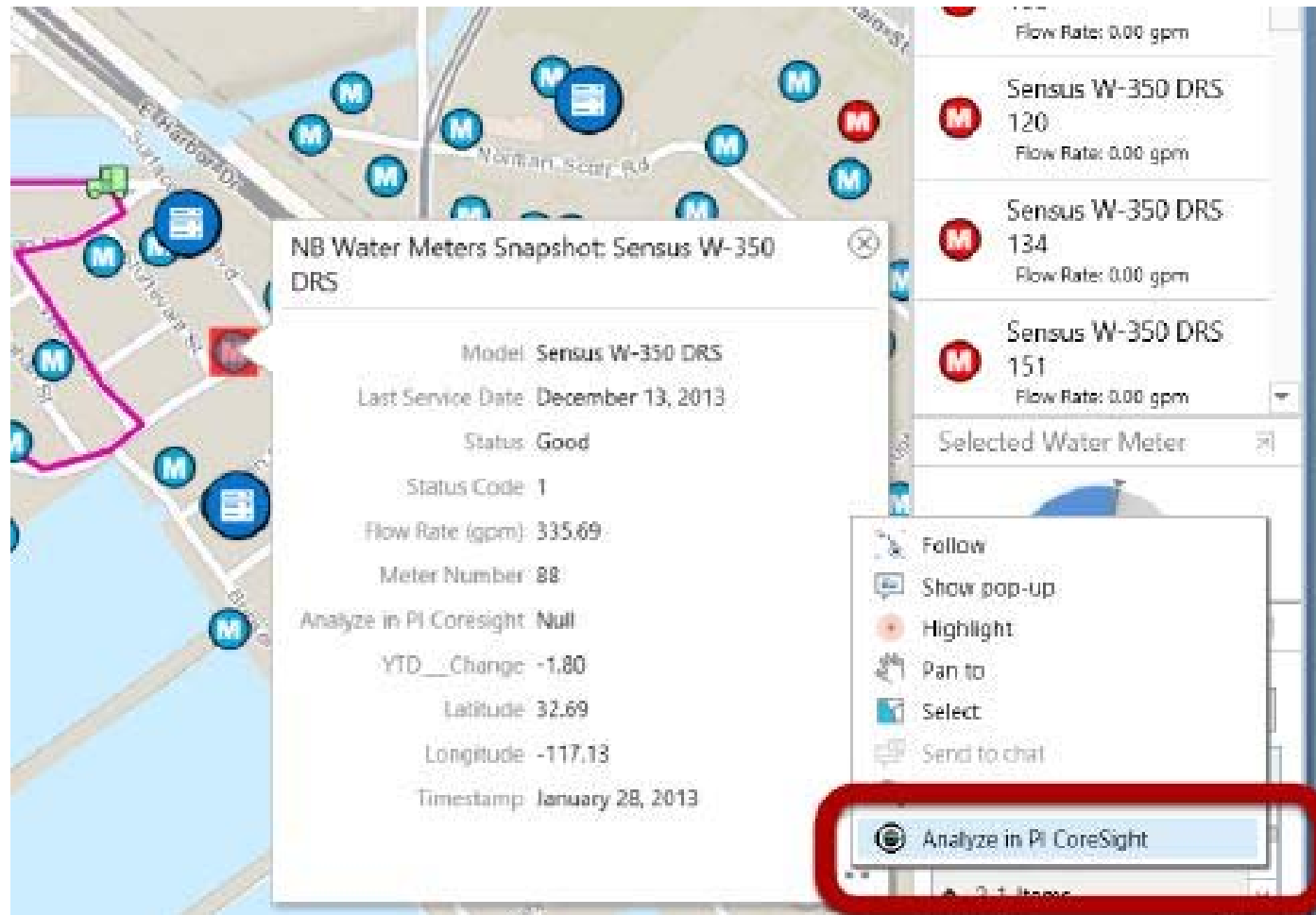
Before and After



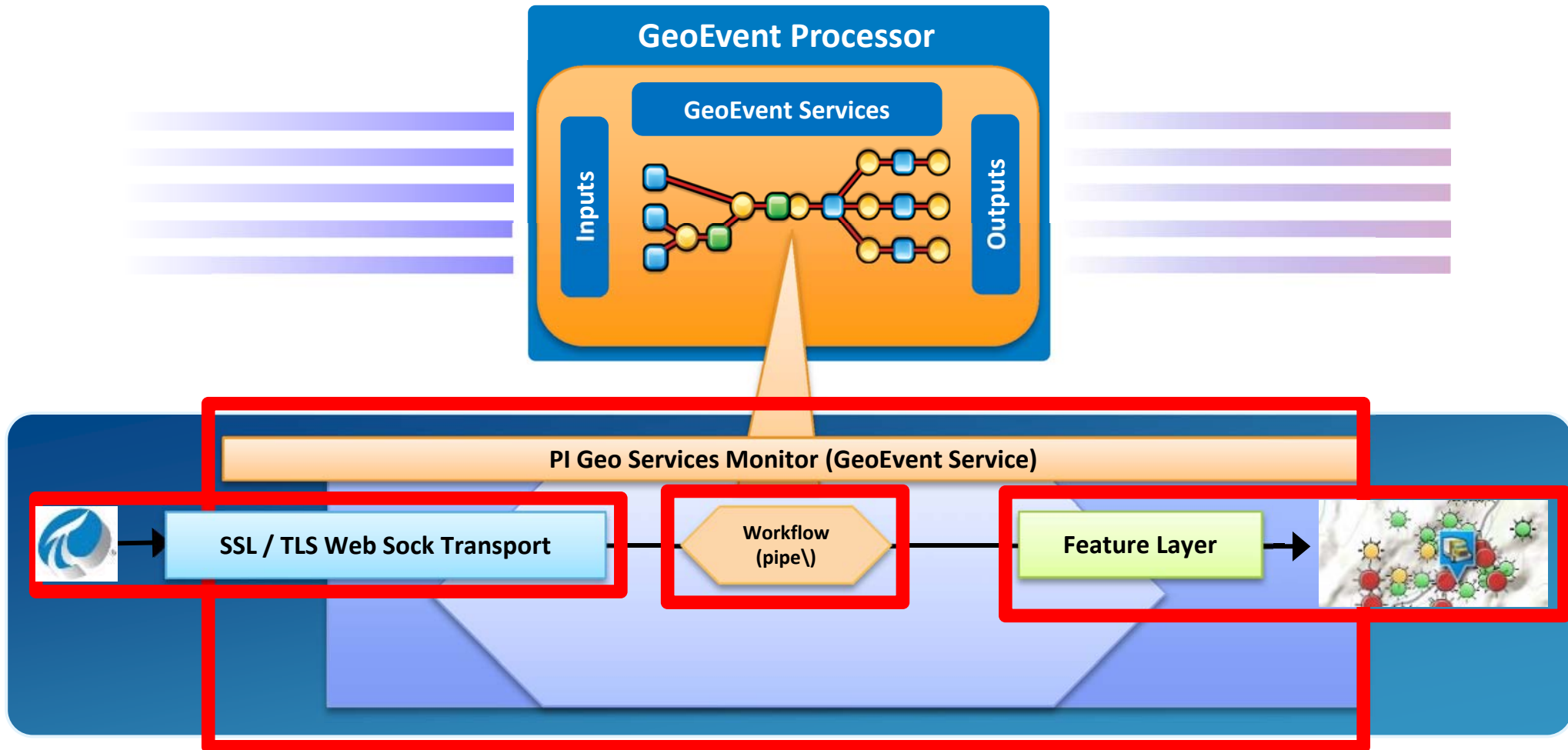
How PI System enhances ArcGIS

- Change color, size or icon based on PI value
- Live AF Attribute values in ArcGIS 'pop up'
- Track location of movable assets in real time
- Launch PI Coresight in context
 - Ad Hoc Trend
 - Processbook Viewer Display (coming soon)

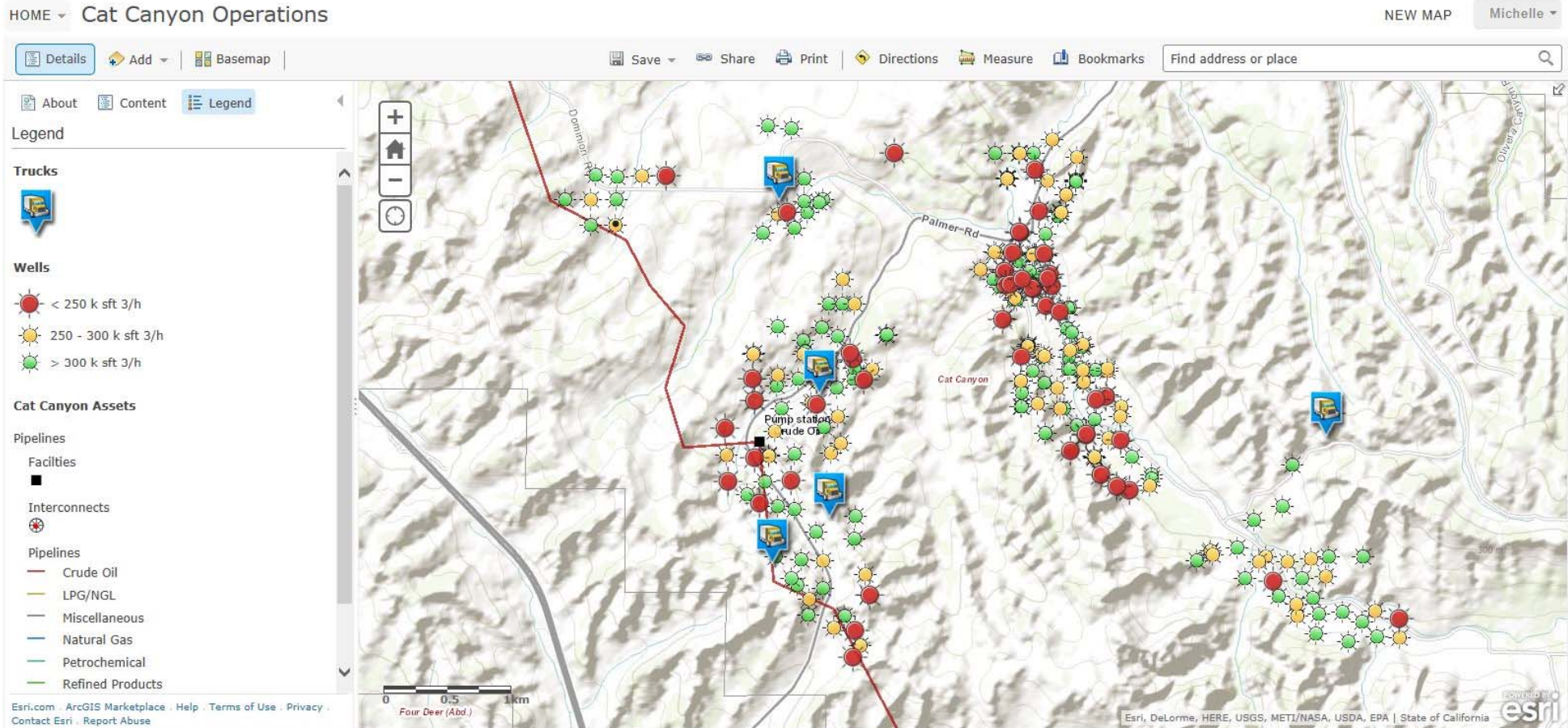
Drill into your PI data directly from the map



Stream Service Configuration Results



Rewindable Maps



Create Event Frame on GeoFence or Trigger



Notification with PI Data Near Location



From: PINotifications@pischool.com [<mailto:PINotifications@pischool.com>]

Sent: Friday, February 14, 2014 10:01 AM

To: Michael Jarvis

Subject: Montreal\\Tank03\\Notifications[Tank Overflow1] generated a new notification event.

Target: **Substation 6-055-301**

Start Time: 2/14/2014 10:00:30 AM Central Standard Time (GMT-08:00:00)

State: Overflow Priority: Normal

*

Attribute	Value	Timestamp
Phase B Med Voltage	10233.4178	2/14/2014 10: 30 AM CST (GMT-08:00:00)
Phase B Low Voltage	200.203269	2/14/2014 10: 30 AM CST (GMT-08:00:00)
Transformer Reactive Power	10662.885	2/14/2014 10: 30 AM CST (GMT-08:00:00)
Transformer Oil Temp	37.0970354832	2/14/2014 10:30 AM CST (GMT-08:00:00)

Actions:

[Acknowledge With Comment](#)

Open PI Data Collection Near a Location

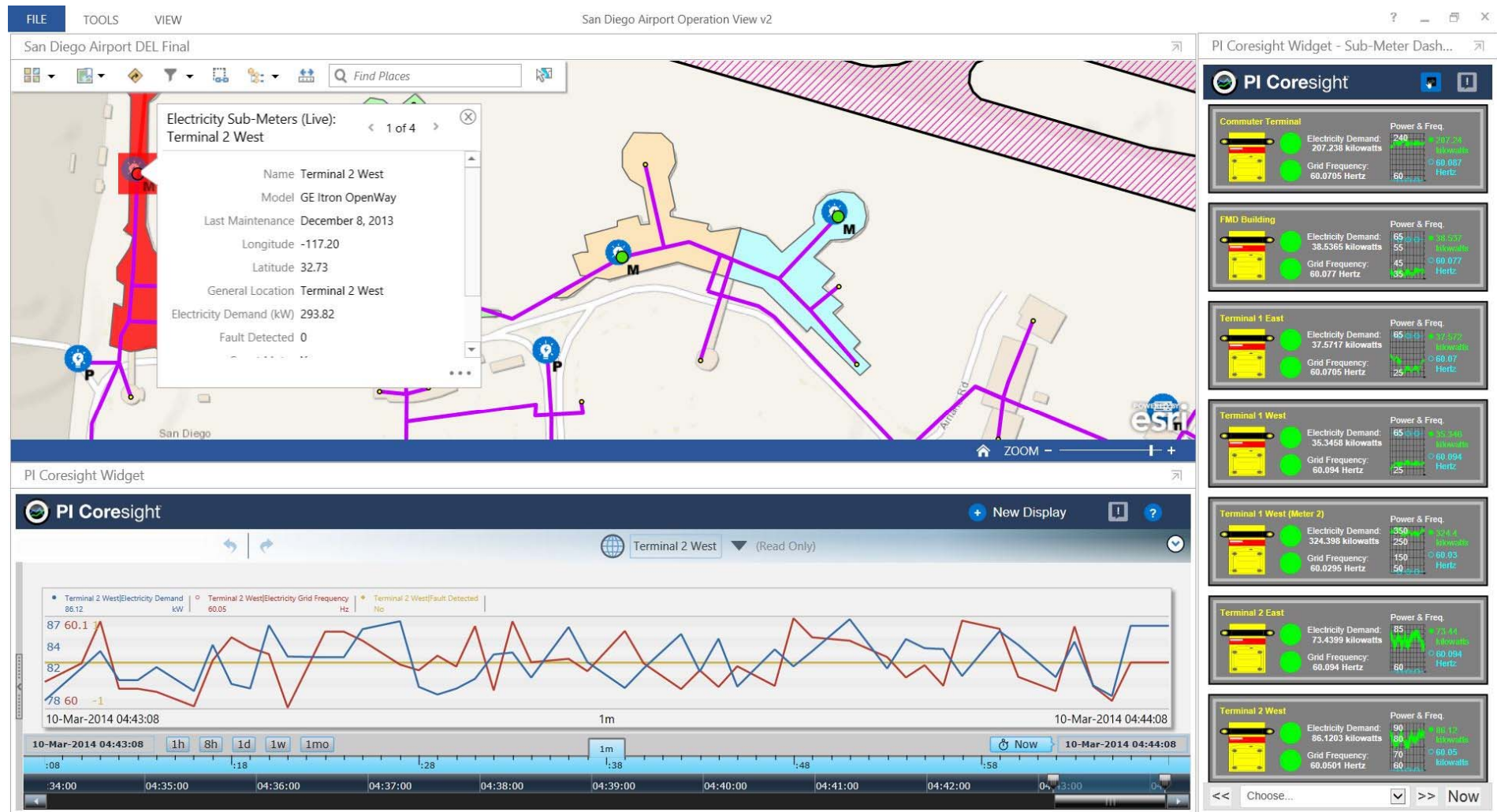


(Event) Template	Oven Inspection	
Asset	Oven 19	
Event Start	5/31/2013 11:45 AM	
Event End	In Progress	
(Attributes)	Timestamp	Value
Flue 1 Status	5/31/2013 11:45 AM	OK
Flue 2 Status	5/31/2013 12:32 PM	Heat gaps
Flue 3 Status		
Comment		
Photo	5/31/2013 11:45 AM	

Notify ArcGIS on Data Alarms / Events



Esri Operations Dashboard: Mash Up PI Tools with Maps & Widgets



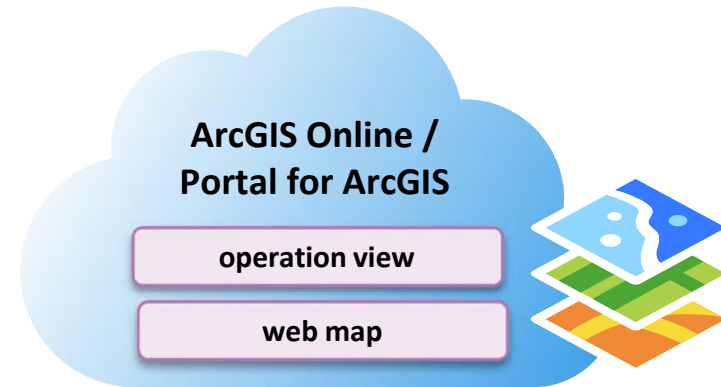
How Do You Want It?

- Two Versions Available
 - Cloud Services
 - On Premises

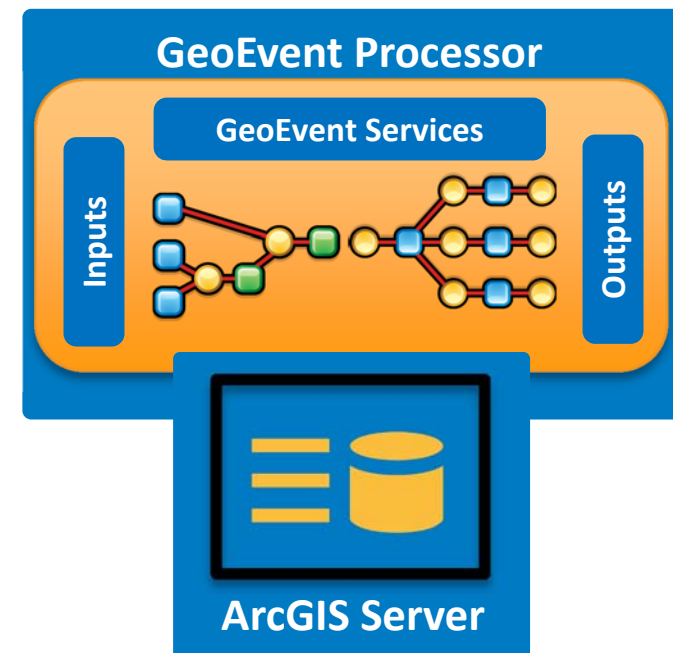
Cloud Architecture



PI Integrator for
Esri ArcGIS



PI System

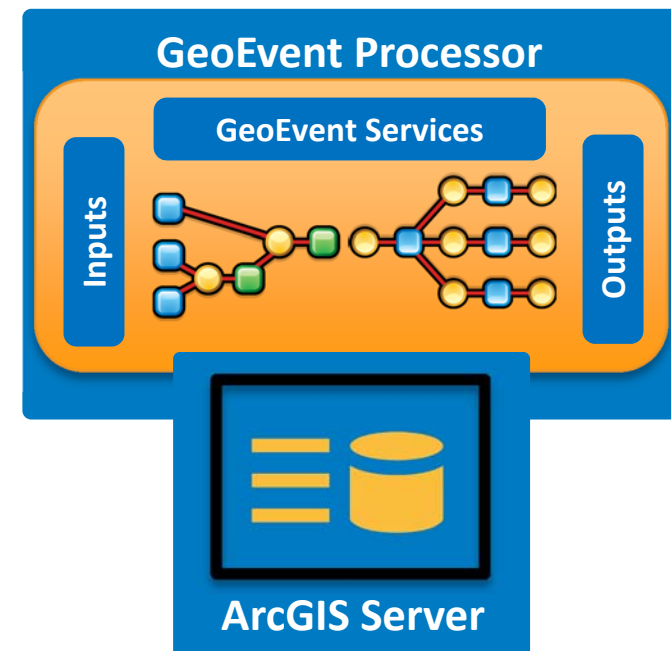


On Premise Architecture



PI System

PI Integrator for
Esri ArcGIS





THANK YOU

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