

# **OSIsoft at Ergon**

Presented by Steve Elwart, P.E., PhD Director of Systems Engineering, Ergon Refining, Inc.



# Eigon Refining, Inc. a company that works

"Providing Retail Service at the Wholesale Level."

- Leslie B. Lampton, Founder





#### More Information is required every day

- Ergon operates with a lean management & professional staffing structure
- Business model is to invest in tools to make quick decisions.

#### OSIsoft has proved to be a great asset to our business

"OSIsoft has proven to be the best process data warehouse we've found"

#### OSIsoft products has proven to be Ergon's data warehouse

 OSIsoft products have yielded benefits beyond our expectations in ways we did not originally envision.

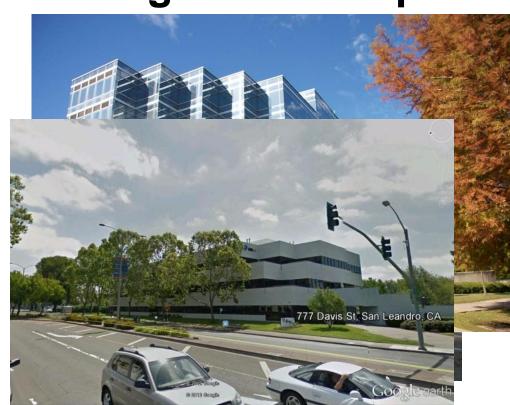
## Ergon and OSIsoft – A Long Partnership

- First bought PI in September 1995
- First ran on a Solarisbased Foxboro I/A Application Workstation
- Later, moved to a desktop Windows PC
- Data now goes back to November 2000



## Ergon and OSIsoft – A Long Partnership

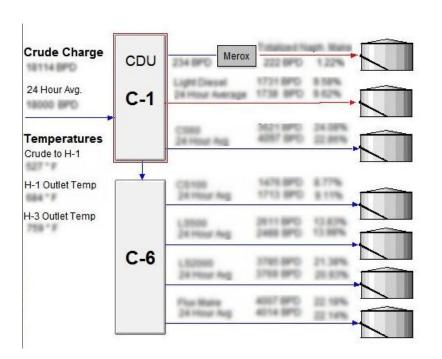
- Moved to a server class machine in October 2002
- Converted to PI High Availability in 2009
- Virtualized the servers in September 2012



## OSIsoft is a critical supplier for Ergon

- PI saved us \$\$Millions in litigation costs.
- Environmental compliance has been made easier.
- Safety systems have been improved.
- Product quality has increased.
- "We can't run the pilot plant without PI."

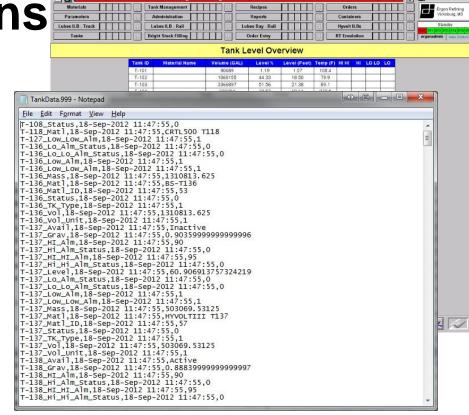
#### PI Process Book / PI Datalink



4	Α	В	W	AF
1	Select (x)	Tag	exdesc	pointsource
12	x	HVY DIESEL TO CRUDE	TagAvg('HEVYD_TANKS:HD_TO_CRD.RO01','*-1d','*')	C
13	x	LIGHT DIESEL TO CRUDE	TagAvg('LGHTD_TANKS:LD_TO_CRD.RO01','*-1d','*')	C
17	x	Barometric Pressure		D
18	x	Dew Point		D
19	x	Inside Humidity		D
20	x	Server Room Termperature		D
21	x	OSBL - H2S Monitor		DV
22	x	OSBL - H2S Monitor		DV
23	x	OSBL - LEL Monitor		DV
27	x	DEW POINT ANALYZER		E
28	x	AI_207:INPUT.PNT		F
29	x	Mid-Columbia_firm_on-peak_spot		HTML
30	x	Mississippi River Stage at Vicksburg		HTML
31	x	MS_River_Vicksburg_Elevation		HTML
33	x	SY.PING.OPCServer		J
35	x	SY.PING.PLCServer		J
36	x	SY:GUARDHOUSE		J
37	x	SY:PINGFOXBORO		J
38	x	SY:PINGJACKSON		J
39	x	LIMSCDUDIESELCONTROLCAPI_GR		Lab
45	x	TI-5198/PV.CV_Temp		OPC
46	x	SY.Ping.DVAW01	10.10.37.45	PING
47	x	SY.Ping.DVAW02	10.10.37.45	PING
48	x	SY.Ping.EYS011	10.10.37.11	PING
49	x	SY:FOXSTATUS	PS=F	S

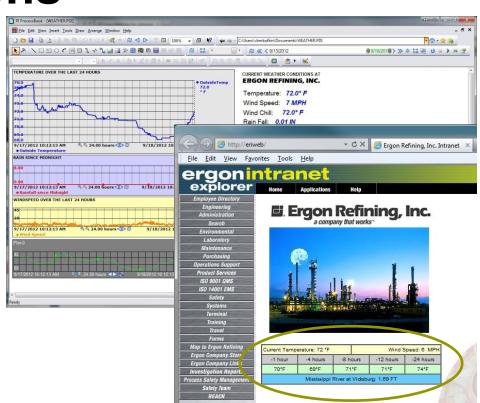
#### PI Batch File

- Reads text files from a myriad of sources
  - Terminal Blending System
  - Terminal Tank Gauges
  - Laboratory Information System
  - Any CSV file



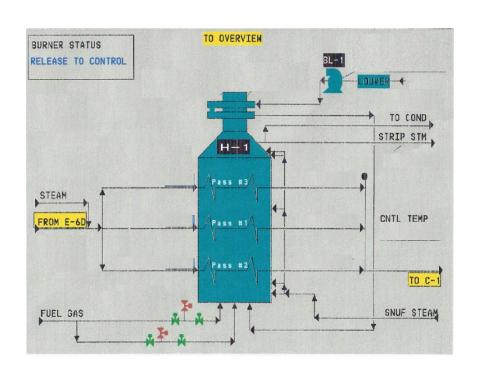
#### PI Davis Vantage Pro/Pro+

- Used to monitor current weather conditions
- Displayed on the Intranet web page through PI ODBC Interface
- Personnel notified on inclement weather.



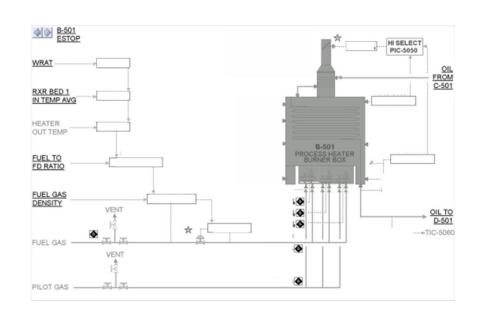
#### Foxboro AP51

 Brings in data from the Foxboro System



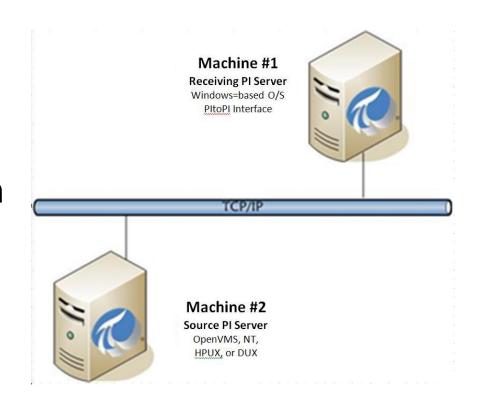
# PI OPC HDA - Brings in Data From:

- DeltaV Control System
- PLC's
- Coriolis Meters
- Refinery Tanks



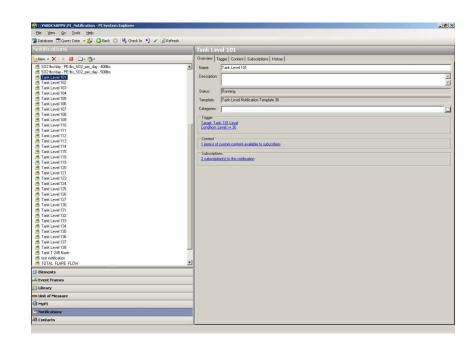
#### PI to PI Interface

- Used for server failover
- Replaced in 2009 with High Availability
- May be used to provide real time information to vendor.

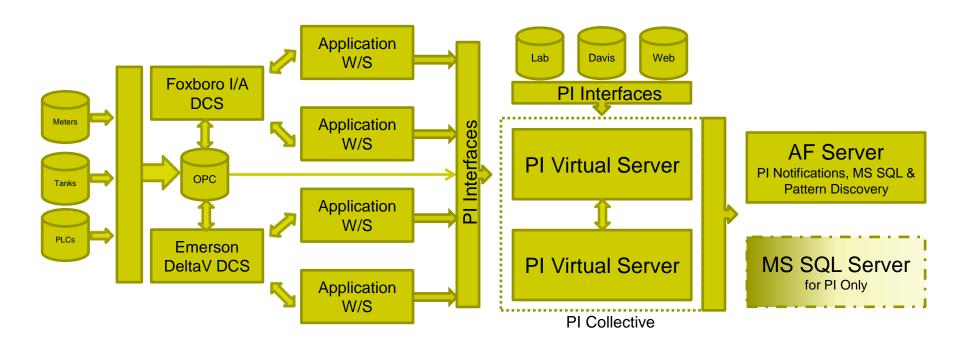


PI Notifications - Used for:

- H2S Monitoring
- Tank Levels
- Wind Speed
- Temperatures



# Ergon Refining's PI Infrastructure



#### **Future Directions**

- October 2012 PI 2012 on all servers
  - Includes Server 2008 R2 for all servers
- <u>February 2013</u> Implement PI Asset Framework on the DCS Conversion

## "Blue Sky" Projects

#### Transpara<sup>TM</sup> Visual KPI

- This will allow our users access to critical KPI and PI data across all platforms and devices.
- Planned on being Ergon's "dashboard solution".



# **Blue Sky" Projects**

#### PI Coresight

- More easily develop ad-hoc PI graphics and trends to aid in analysis and troubleshooting.
- Users can easily display their data without having to worry about formatting and building displays.
- Will allow users to access data from any device or platform.



#### **Contact Information**

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# THANK

