



OSI 2007 : C.S Lui

OSI Company Overview



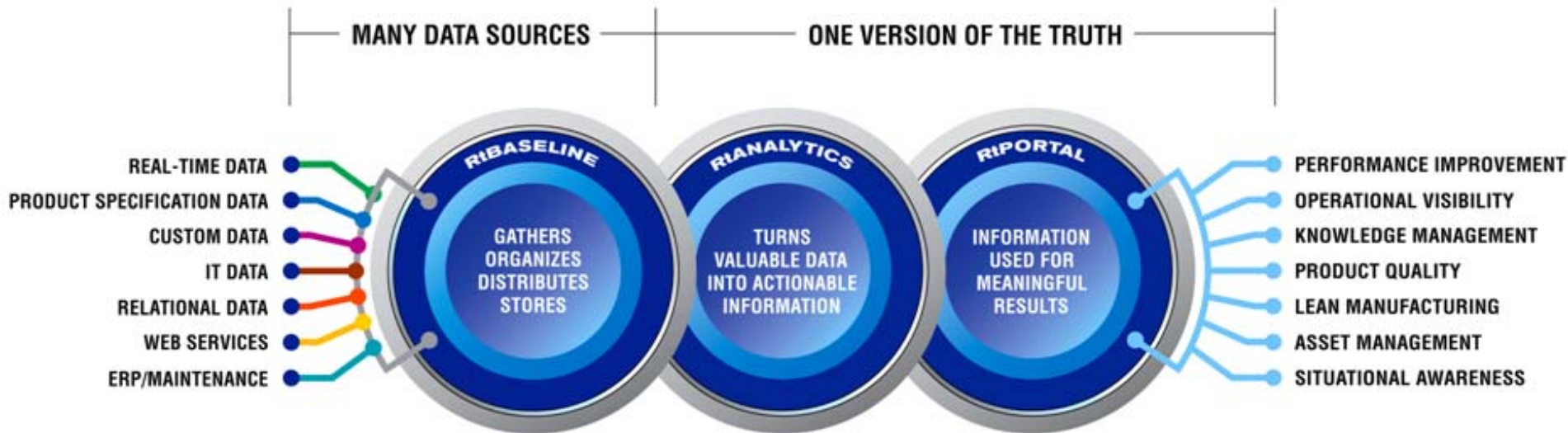
- **Founded in 1980**
 - OSIsoft is profitable
- **Pre-eminent Real-time Enterprise Performance Management Solution Provider**
 - ~\$150 Million annual revenues, 500 professionals
 - Over 11,000 installations
- **Global reach and support**
 - Worldwide Headquarters in San Leandro, California, USA
 - Regional Offices in Seattle, Houston, Cleveland
 - Offices in Australia, NZ, Germany, Belgium, Singapore, Brazil, Canada, Mexico, UK, China
 - Acquisition Sigmafine from KBC, Wonderware Developers and office at Johnson City, Mexico Distributors, Canada Distributors, Consultant VMI (Vendor Management Inventory), ProcessPoint (Product Life Cycle)
 - Follow-the-sun 24/7 Support Structure round the world
- **Worldwide Technology Partners**
 - Microsoft Gold Certified Managed Partner
 - SAP Certified
 - CISCO Certified



- *Who we are*
- OSIsoft delivers Real-Time Performance management software to the world's to 6 core Industries:
 - Power and Utilities (Transmission, Substation, Distribution, Water Distribution, Waste Water Treatment)
 - Oil & Gas
 - Chemical and Petrochemical
 - Metal & Mining (Steel, Coal, Gold, etc)
 - Pharmaceutical
 - Pulp and paper

How we are different

- As the real-time data platform at more than 11,000 locations worldwide, our software crosses IT and process boundaries to incorporate and display critical operational information.
- *How we deliver value*
- The OSIsoft platform provides comprehensive visibility into operations, unlocking the potential for timely analysis—fueling critical, informed and profitable actions.



The OSIsoft platform provides comprehensive visibility into operations, unlocking the potential for timely analysis –fueling critical, informed and profitable actions.

RtPM Leverages Over 500 Information Sources

-     
-      
-   
Managing The Process Better: *Turning Your Data Into Gold™*
-   
A SIEBE COMPANY
-  
-   
Modicon Square D Telemecanique *Hartmann & Braun*
-    
Landis & Gyr *ABB Process Analytics*

Some Application Examples...

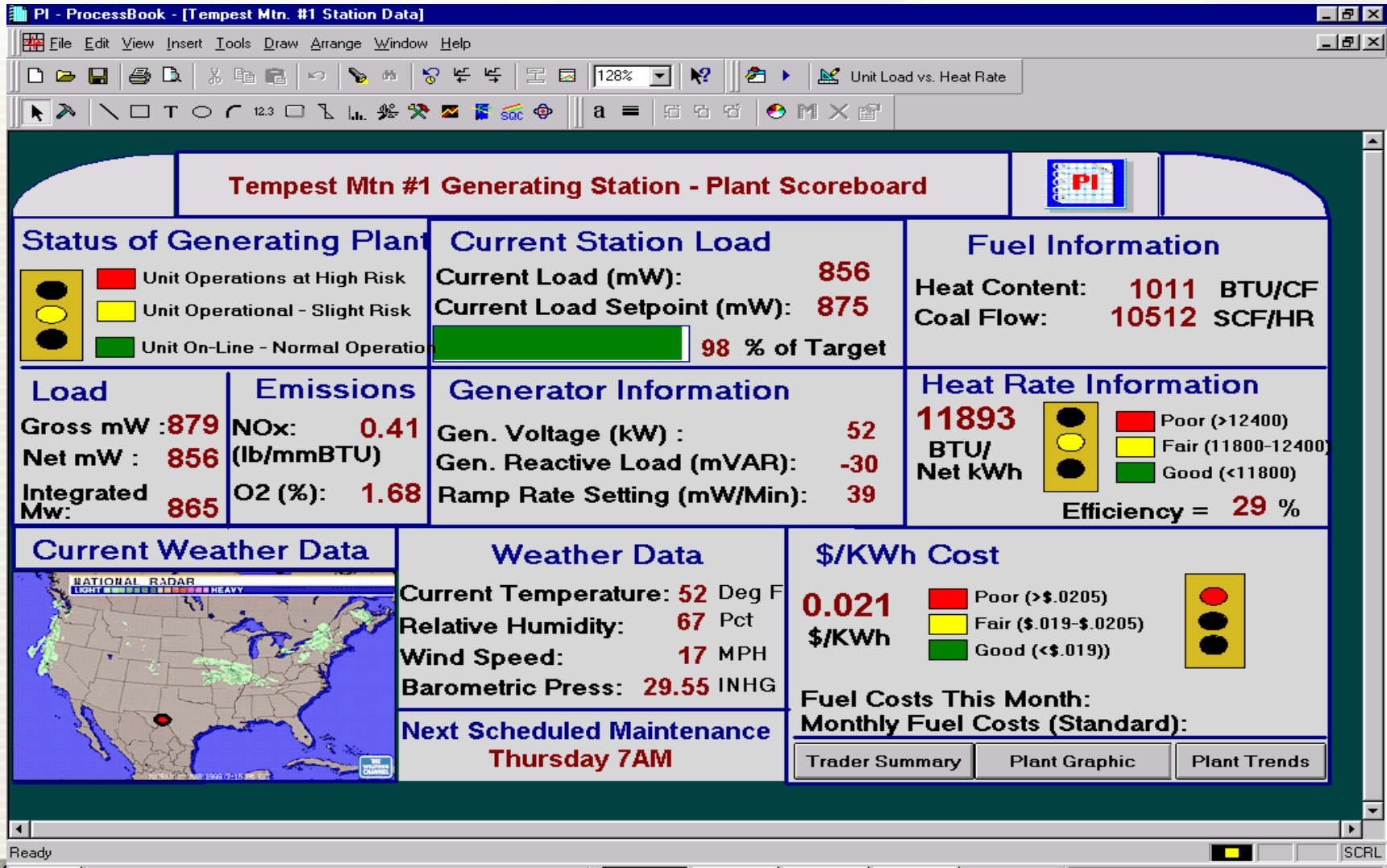


Alarm Management
Analyzer Performance
Automated Reports
Balanced Scorecards
Baseline "Best Practices"
Batch Quality Monitor
Certificate Of Analysis
Compliance Documentation
Condition Based Maintenance (CBM)
Continuous Emissions Monitor (CEM)
Control Loop Monitor
Data Reconciliation
Downtime Monitoring
E-Commerce
Energy Mgmt System
Environmental Compliance Monitor
General Ops Doc & Equipment Specs
Hazardous Waste Tracking
Hierarchical Process Data Views
Inventory Mgmt
IT / Systems Monitoring
Key Performance Indicators (Kpi)
Lab Quality Data Integration
Lost Opportunity Module
Maintenance History Or Status
Maintenance Lockout Procedures

Manufacturing Intelligence Data
Manual Data Recording
Material Balance
Material Usage Tracking
Multi-Plant Equipment Performance Monitor
Operations Desktop
Operator Handover
Operator Envelope Data
Paper Machine Grade Management
Paper Machine Lost Opportunity Module
Paper Machine Performance Monitor
Plant Performance Overviews
Process Monitoring
Process Performance Analysis
Product Compliance Reporting
Product Development Trials
Product Pricing
Production Data Integration To ERP
Production Plan Versus Target Data
Production Plan Versus Actual Data

Pulp & Paper Mill Steam Energy Monitor
Pulp Mill Tracking
Quality Monitoring/Analysis
Reliability Centered Maintenance Support
Reservoir Control & Production Operations
Root-Cause Analysis
Shared Inventory Mgmt Service
Shift Production Monitor
Six Sigma
SPC/SQC Production Quality Control
Security System Integration
Steam Turbine Performance Analysis
Substation Load Monitoring
Substation Transformer Asset Mgmt
Supply Chain Mgmt
Total Effective Equipment Productivity
Troubleshooting Equipment Startups
Utilities Mgmt
Virtual On-Line Analyzer In Refining
Waste Treatment Monitor
Weather Data Import

Plant Scoreboard for Management



Power Generation - Global Overview



	Current Available MW	Current Setpoint MW	Current Actual MW	Error % ACE code	Status	Cost \$/kWh	Derating Average 7 Days	Next Planned Outage	Emission Status	Heat Rate
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San Leandro - Unit 1 500 MW - Coal	500	500.0000	499.7364	0.05%	AGC	0.015	456	April 16	NonCompliant	10405
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[Detail](#)

San Leandro - Unit 2 350 MW- Coal	294	287.0000	286.6273	0.13%	AGC	0.016	334	November 22	Compliant	11443
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[Detail](#)

San Leandro - Unit 3 300 MW CT - Natural Gas	300	0.0000	0.0000	N/A	AGC	N/A	299	January 8	Compliant	N/A
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[Detail](#)

San Leandro - Unit 4 200 MW CT - Natural Gas	200	0.0000	0.0000	N/A	AGC	N/A	200	May 27	Compliant	N/A
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[Detail](#)

San Leandro Weather

Seattle Upstream - Unit 1 400 MW Hydro	400	344.0000	343.6126	0.11%	AGC	0.014	365	September 12	Compliant	N/A
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[Detail](#)

Seattle Upstream - Unit 2 400 MW Hydro	400	336.0000	335.6030	0.12%	AGC	0.013	361	August 9	Compliant	N/A
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[Detail](#)

Seattle Downstream - Unit 1 250 MW Hydro	250	220.0000	220.9961	0.45%	AGC	0.015	226	March 30	Compliant	N/A
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[Detail](#)

Seattle Downstream - Unit 2 250 MW Hydro	250	250.0000	250.9961	0.40%	AGC	0.016	234	April 2	Compliant	N/A
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[Detail](#)

Seattle Weather

Cleveland - Unit1 400 MW Nuclear	400	400.0000	400.9961	0.25%	Base	0.012	396	June 11	N/A	N/A
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Cleveland Weather

Montreal - Unit 1 300 MW - C. cycle - Oil/Gas	240	210.0000	210.9961	0.47%	Base	0.018	283	October 17	Compliant	9698
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Montreal Weather

[Detail](#)

Reliant - Fleet Summary



Reliant ActiveView - Microsoft Internet Explorer

Address: http://mipiita/gie/

Reliant Resources GENERATION INFORMATION ENVIRONMENT

ActiveView Technical References System Support FAQs Contact Us Home

Active View Home
 Summary
 EAST_MW
 RELIANT_MW
 WEST_MW

VALUE FROM SERVER NOT PI-to-PI

RELIANT GENERATION SUMMARY

PENNSYLVANIA SITES		NEW JERSEY SITES		FLORIDA SITES		TEXAS SITE	
BLOSSBURG - CT1	0.01	GILBERT - U1	NO PI	INDIAN RIVER - U1	0.00	CHANNELVIEW - U1	180.53
DEEP CREEK - U1	-0.55	GILBERT - CT2	NO PI	INDIAN RIVER - U2	38.30	CHANNELVIEW - U2	-0.01
DEEP CREEK - U2	-0.62	GILBERT - CT3	NO PI	INDIAN RIVER - U3	43.78	CHANNELVIEW - U3	-0.07
HAMILTON - U1	0.02	GILBERT - CT4	NO PI	INDIAN RIVER - CTA	-0.10	CHANNELVIEW - U4	184.44
HUNTERSTOWN - CT1	0.02	GILBERT - CT5	NO PI	INDIAN RIVER - CTB	-0.08	ARIZONA SITES	
HUNTERSTOWN - CT2	0.09	GILBERT - CT6	NO PI	INDIAN RIVER - CTC	-0.19	DESERT BASIN - CT1	172.30
HUNTERSTOWN - CT3	0.02	GILBERT - CT7	NO PI	INDIAN RIVER - CTD	-0.14	DESERT BASIN - CT2	152.20
HUNTERSTOWN TRUST - U1	NO PI	GILBERT - CT8	NO PI	OSCEOLA - CT1	0.00	NEVADA SITES	
HUNTERSTOWN TRUST - CT2	NO PI	GILBERT - CT9	NO PI	OSCEOLA - CT2	0.00	BIG HORN - CT1	NO PI
HUNTERSTOWN TRUST - CT3	NO PI	GILBERT - CT10	NO PI	OSCEOLA - CT3	0.06	BIG HORN - CT2	NO PI
HUNTERSTOWN TRUST - CT4	NO PI	GLEN GARDNER - CT1	NO PI	ILLINOIS SITES		CALIFORNIA SITES	
MOUNTAIN - CT1	0.00	GLEN GARDNER - CT2	NO PI	AURORA - U1	-0.48	COOLWATER - U1	-1.00
MOUNTAIN - CT2	0.00	GLEN GARDNER - CT3	NO PI	AURORA - U2	0.41	COOLWATER - U2	37.54
ORRTANA - U1	0.24	GLEN GARDNER - CT4	NO PI	AURORA - U3	0.60	COOLWATER - CT3	80.14
PINEY - U1	-0.04	GLEN GARDNER - CT5	NO PI	AURORA - U4	-0.82	COOLWATER - CT4	162.84
PINEY - U2	0.00	GLEN GARDNER - CT6	NO PI	AURORA - U5	-0.01	COOLWATER - U3	-0.18
PINEY - U3	0.00	GLEN GARDNER - CT7	NO PI	AURORA - U6	-0.04	ETIWANDA - U4	-0.18
PORTLAND - U1	84.84	GLEN GARDNER - CT8	NO PI	AURORA - U7	-0.05	ETIWANDA - U4	-0.18
PORTLAND - U2	75.21	GLEN GARDNER - CT9	NO PI	AURORA - U8	-0.03	MANDALAY - U1	-0.09
PORTLAND - CT3	0.00	GLEN GARDNER - CT10	NO PI	AURORA - U9	-0.04	MANDALAY - U2	79.44
PORTLAND - CT4	0.00	SAYREVILLE - U1	NO PI	AURORA - U10	-0.02	ORMOND BEACH - U1	0.00
PORTLAND - CT5	1.10	SAYREVILLE - U2	NO PI	SHELBY - GT-A	0.00	ORMOND BEACH - U2	0.60
SHAWNEE - U1	0.00	SAYREVILLE - CT3	NO PI	SHELBY - GT-B	0.00		
TITUS - U1	Bad Input	SAYREVILLE - CT4	NO PI	SHELBY - GT-C	0.00		
TITUS - U2	43.20	SAYREVILLE - CT5	NO PI				
TITUS - U3	43.48	SAYREVILLE - CT6	NO PI				
TITUS - CT4	Bad Input	WERNER - CT1	NO PI				
TITUS - CT5	Bad Input						
TOLNA - CT1	0.01						

Reliant - ActiveView Turbine Display



Reliant ActiveView - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://rripita/gie/

Reliant Resources GENERATION INFORMATION ENVIRONMENT

ActiveView Technical References System Support FAQs Contact Us Home

Active View Home
West
Desert Basin
U1 BLADE PATH TEMPS
U1 GAS TURBINE STAT
U2 BLADE PATH TEMPS
U2 GAS TURBINE STAT

BLADE PATH TEMPS

1101F (16) 1 1094F
1074F (15) 2 1074 F
1091F (14) 3 1080F
1111F (13) 4 1095 F
1091F (12) 5 1040F
1078F (11) 6 1089 F
1089F (10) 7 1051F
1084F (9) 8 1097F

BLADE PATH SETPOINT 1084 F
DIFFERENTIAL -0 F
HIGHEST #13 1111 F
VARIANCE 27 F
AVERAGE 1084 F
SPREAD 44 F
LOWEST #5 1039 F

EXHAUST TEMPS

AVERAGE 1100 F		SETPOINT 1102 F	
1	2	3	4
1112	1094	1088	1086
5	6	7	8
1102	1112	1114	1091
9	10	11	12
1111	1108	1111	1083
13	14	15	16
1098	1090	1096	1102

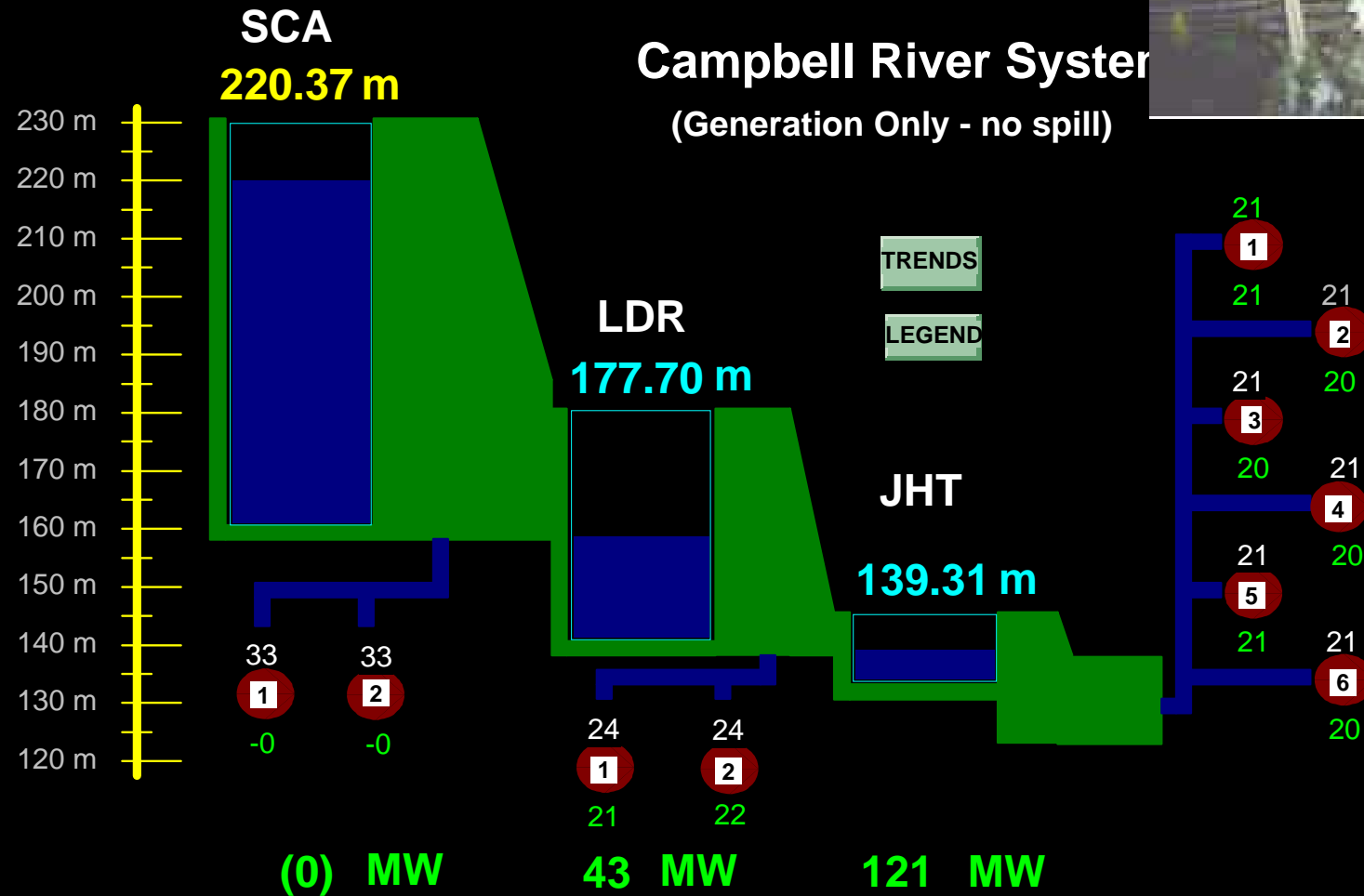
DISC CAVITY TEMPS		COOLING VALVE	
#	TEMP	F	%
#2	716	F 717	100 %
#3	762	F 775	44 %
#4	689	F 725	
#4 DOWNSTREAM		404	F
ROTOR COOLING AIR		TEMP 392 F 56 %	

BLADE PATH GRAPH

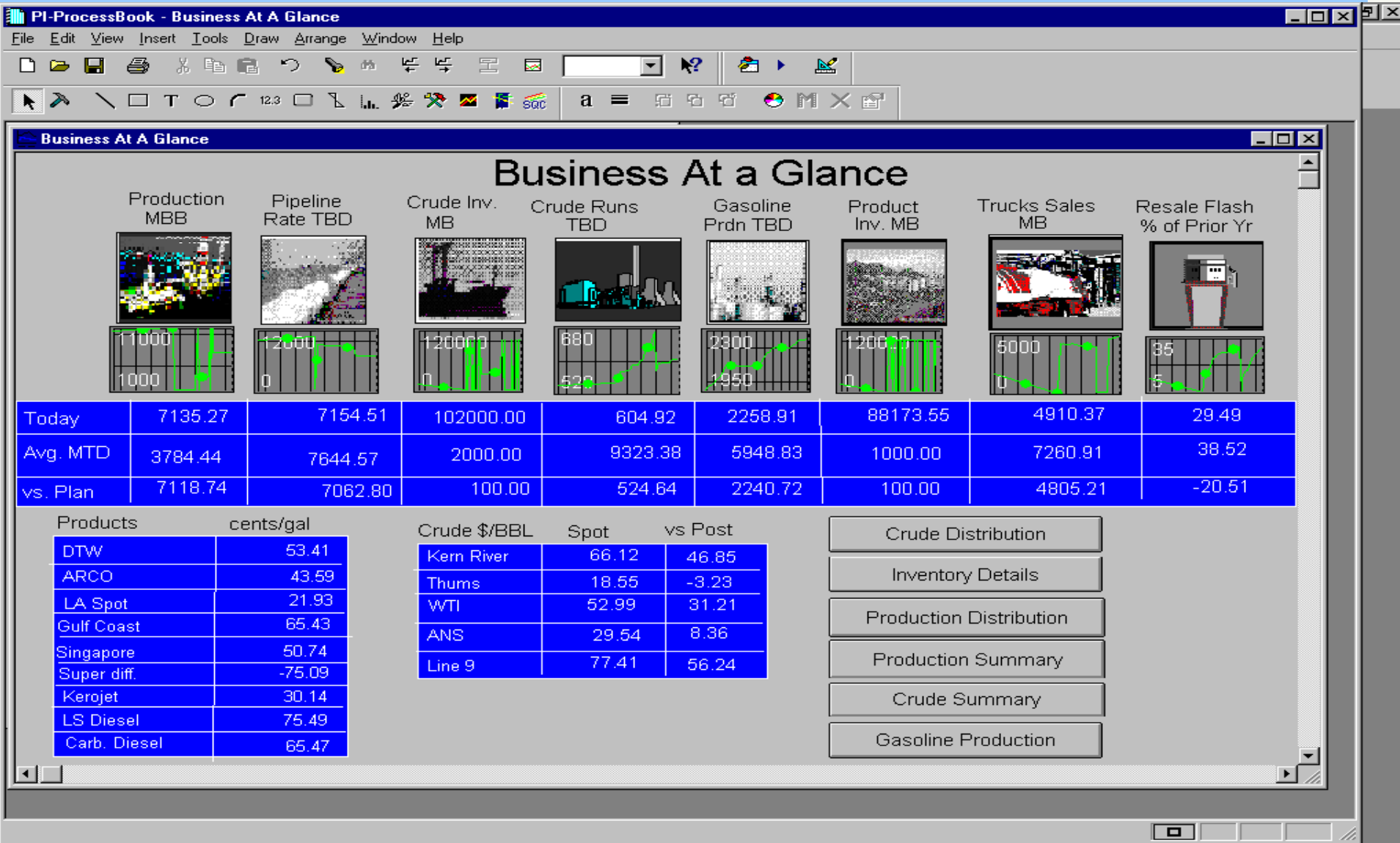
SETPOINT PROCESS

EXHAUST TEMP GRAPH

SPEED 3601 RPM CT MW 172 MW FUEL FLOW 77 KPPH T2C 772 F P2C 227 PSIA IGV POS 96 % INLET AIR 56 F



Management Overview

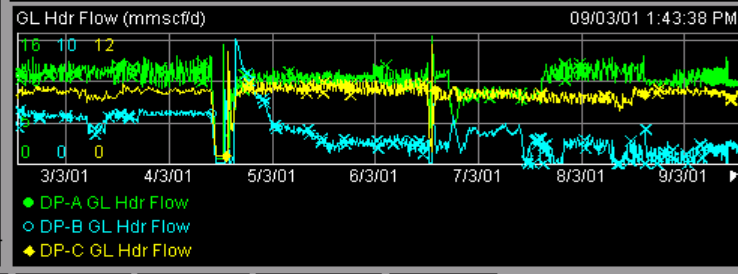
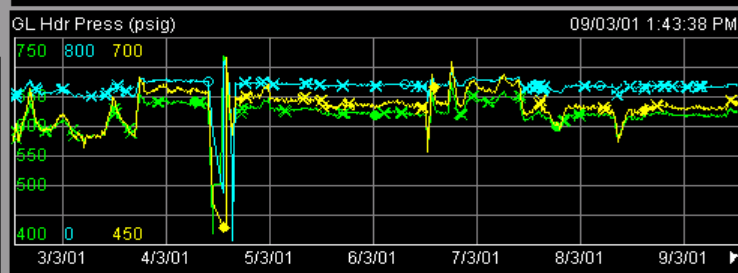
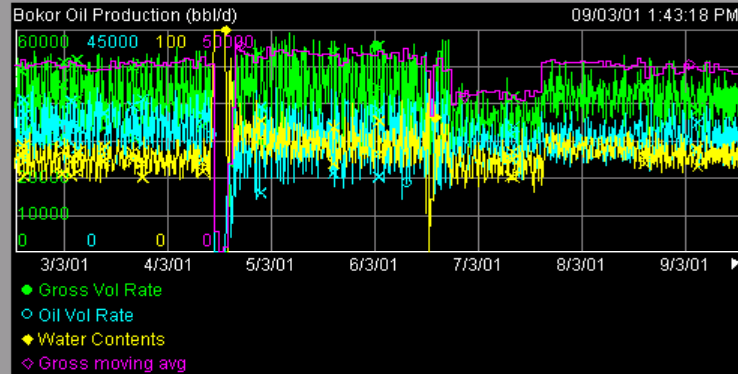
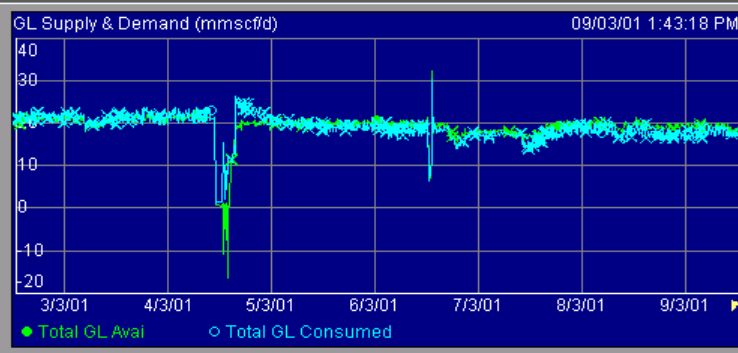
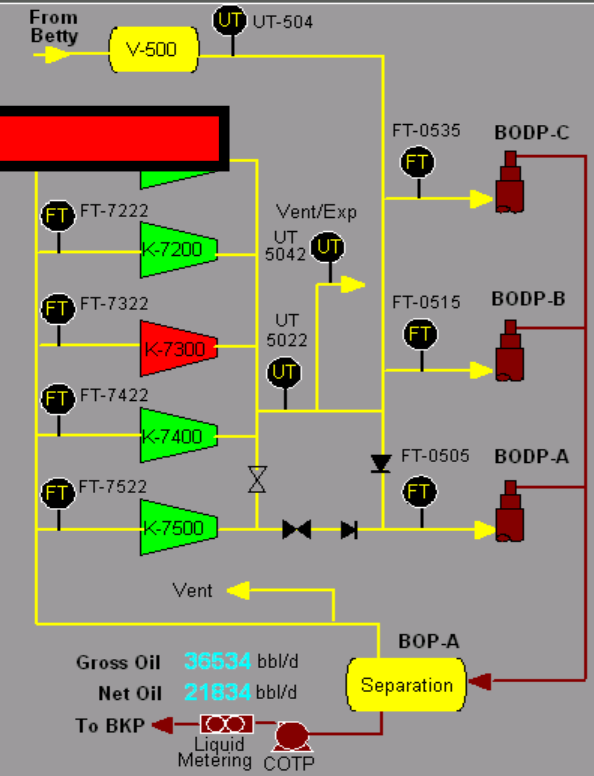


SKO

BOKOR CAO Gas Lift Distribution Summary

09-Mar-01 13:52:55

Summary Gas Balance			
		mmscf/d	psig
Compressor			
K-7100	UT-7122	2.689	39
K-7200	FT-7222	2.353	
K-7300	FT-7322	0.069	
K-7400	FT-7422	2.255	
K-7500	FT-7522	4.247	
Total		(11.676)	
Gas Lift Available			
Gas From Betty	UT-504	7.701	625.2
Comp Gas Disc	UT-5022	11.115	626.7
Gas Vent/Exp	UT-5042	0.000	625.4
Total		(18.641)	
Gas Lift Consumed			
BODP-A	FT-0505	9.871	623.4
BODP-B	FT-0515	1.075	616.0
BODP-C	FT-0535	6.751	620.0
Total		(17.518)	

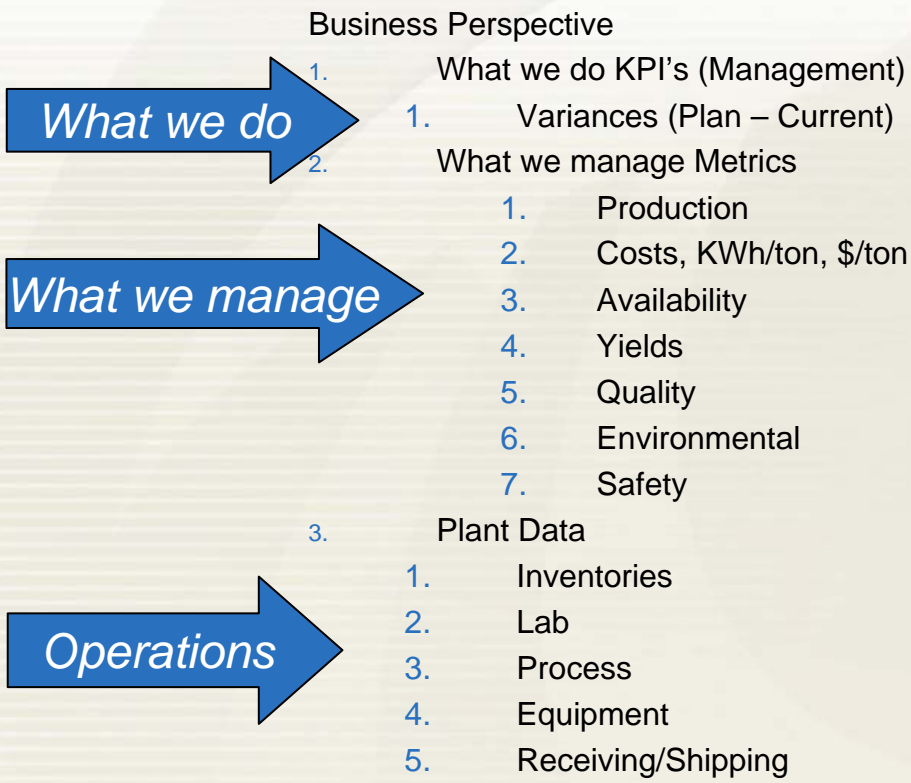
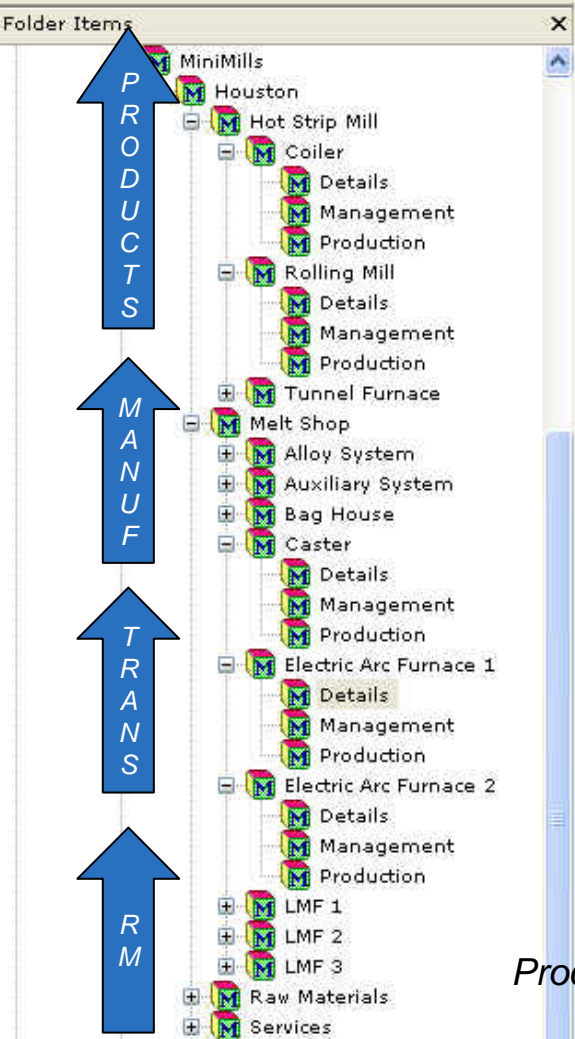


Derived Value ()

GL Input Gas (mmscf/d)

BODP-A	Set Point.V.	Measured.V.	BODP-B	Set Point.V.	Measured.V.	BODP-C	Set Point.V.	Measured.V.
BO-101	1.200	1.197	BO-201	0.210	0.211	BO-301	0.550	0.549
	0.900	0.89		0.162	0	BO-302	1.000	0.609
BO-104	0.667	0.66	BO-203	0.186	0.186	BO-303	0.470	0.477
BO-105	0.660	0.525	BO-204	0.000	0.000	BO-304	0.670	0.667
BO-106	0.706	0.707	BO-205	0.120	0.011	BO-305	0.430	0.537
BO-107	0.036	0.036	BO-206	0.625	0.560	BO-306	0.480	0.481
BO-108	0.680	0.616	BO-207	0.114	0.114	BO-307	0.360	0.362
BO-109	0.700	0.570	BO-208	0.290	0.286	BO-308	0.799	0.824
BO-110	0.870	0.871	BO-209	0.130	0.130	BO-309	0.533	0.535
BO-111	0.520	0.222	BO-210	0.000	0.000	BO-310	0.364	0.363
BO-112	1.286	1.471	BO-211	0.560	0.570	BO-311	0.600	0.604
BO-113	0.838	0.838	BO-212	0.500	0.264	BO-312	0.890	0.891
BO-114	0.250	0.206	BO-213	0.355	0.111			
BO-115	0.600	0.600	BO-215	0.289	0.000			
BO-116	0.400	0.399	BO-216	1.007	0.000			
BO-117	0.038	0.038	BO-217	0.030	0.030			
BO-118	0.775	0.768						
Total	(11.125)	(10.640)	Total	(4.577)	(2.619)	Total	(7.146)	(6.781)

Example for Basic Industries



Process and People

Web Part Page - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Address http://mobilevbc/personal/vbc/MiniMills%20SVG/MetalCompany.aspx

Home Documents and Lists Site Settings Help

MetalCompany

My Lists

- Collahuasi
- MiniMills SVG
- Private Documents
- Shared Documents
- My Pictures

My Pages

No pages.

RtTimeRange

Start Time 4/10/2006 1:19:01 PM End Time 4/11/2006 1:19:01 PM

RtTreeView

- MiniMills
 - Houston
 - Hot Strip Mill
 - Melt Shop
 - Alloy System
 - Auxiliary System
 - Bag House
 - Caster
 - Details
 - Management
 - PI-BaGen
 - Production
 - Electric Arc Furnace 1
 - Electric Arc Furnace 2
 - LMF 1
 - Details
 - Management
 - PI-BaGen
 - Production
 - LMF 2
 - LMF 3
 - Raw Materials
 - Aditive Crusher

RtGraphic

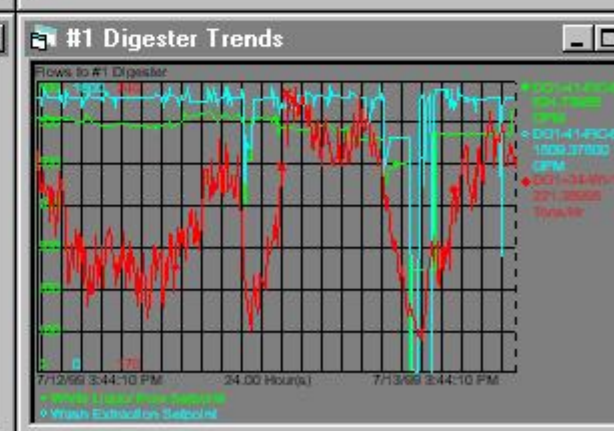
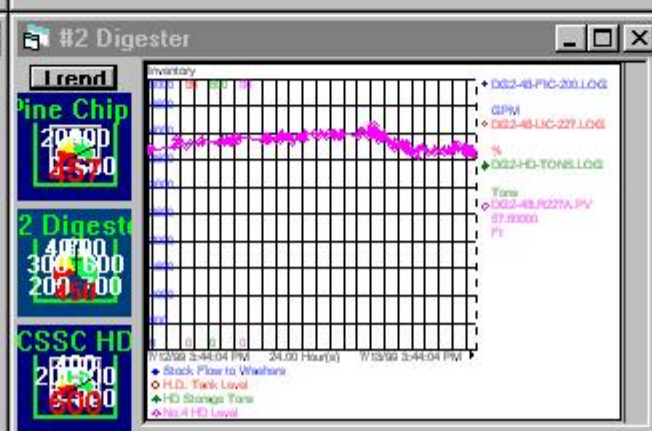
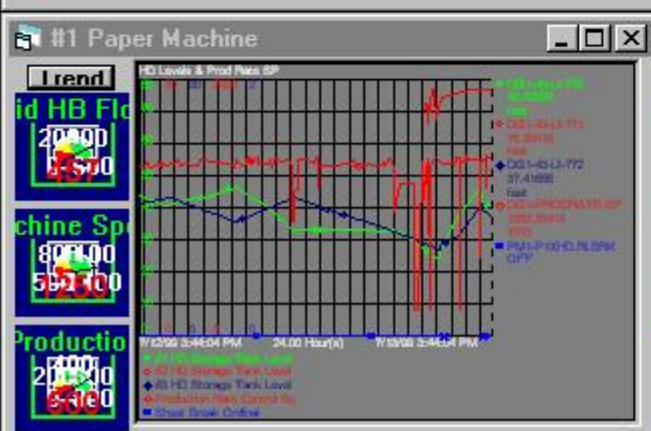
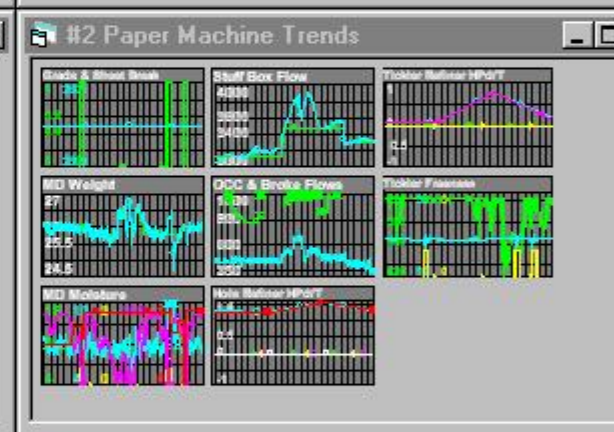
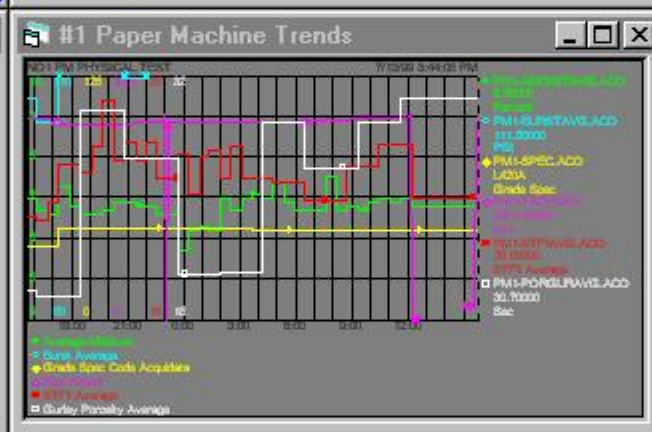
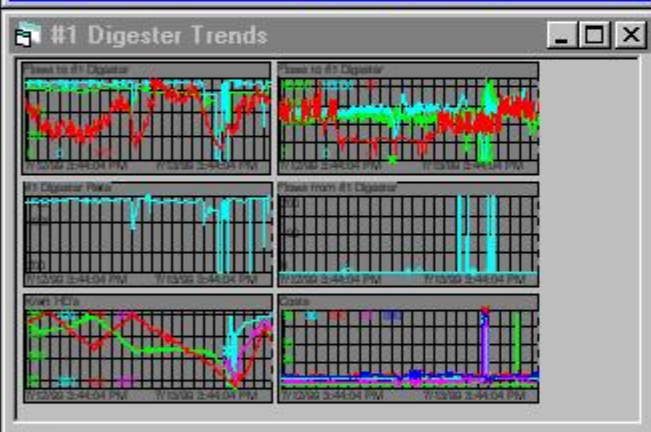
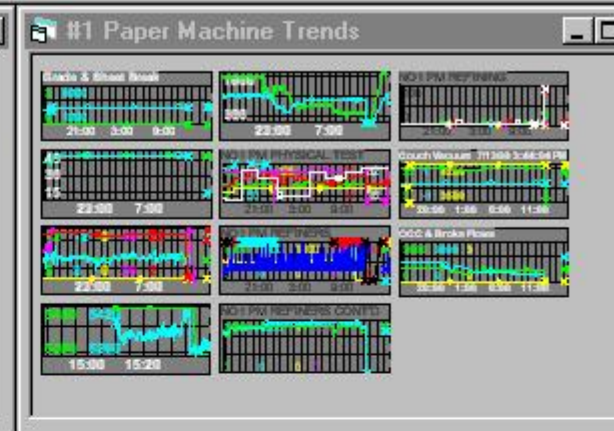
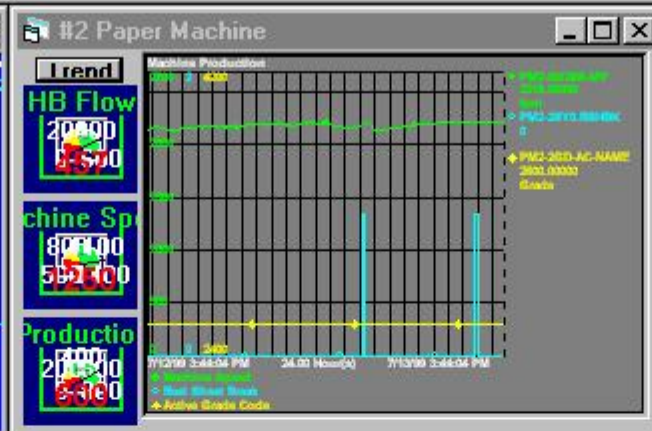
There were errors

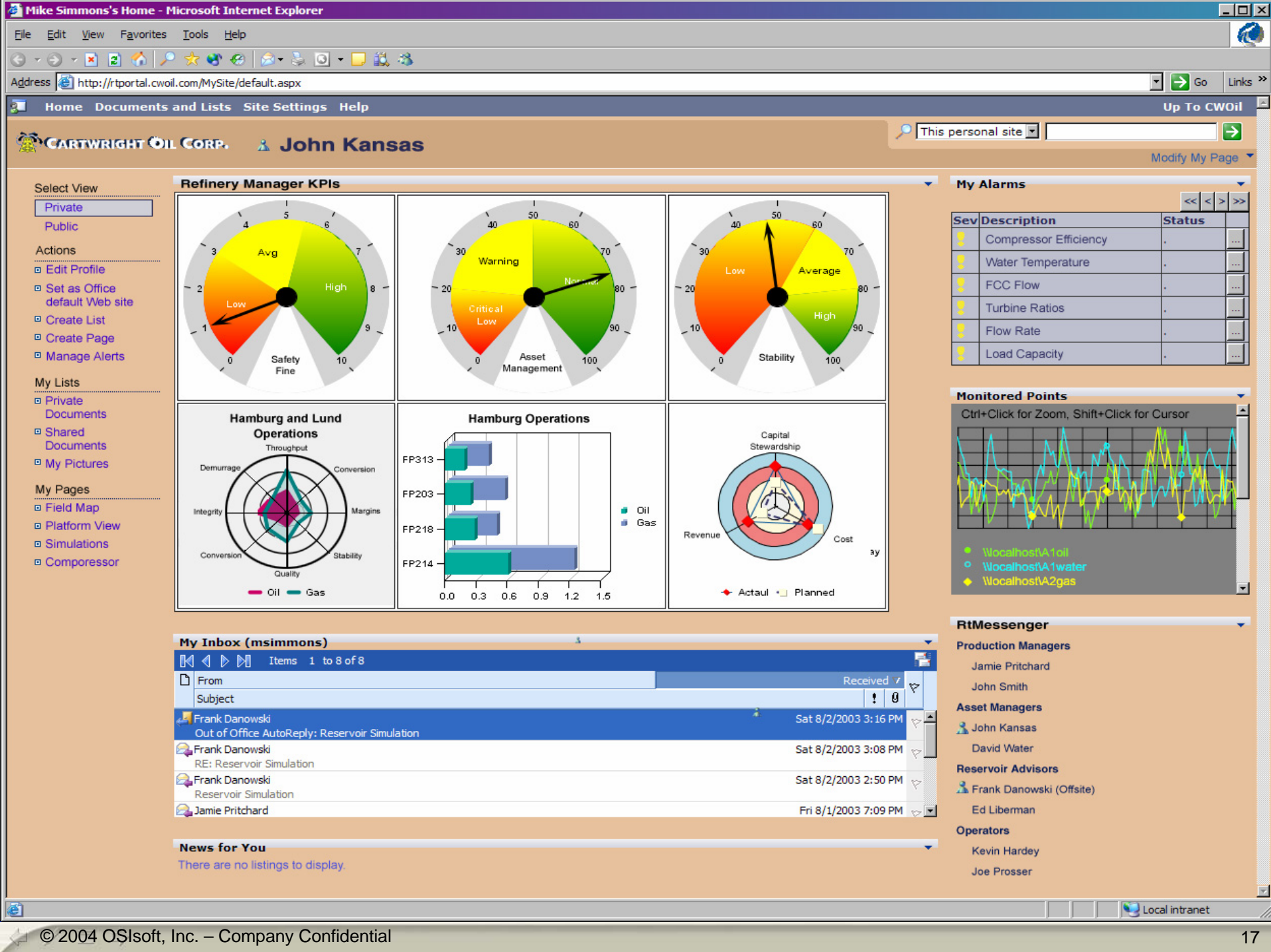
RtTrend

Done

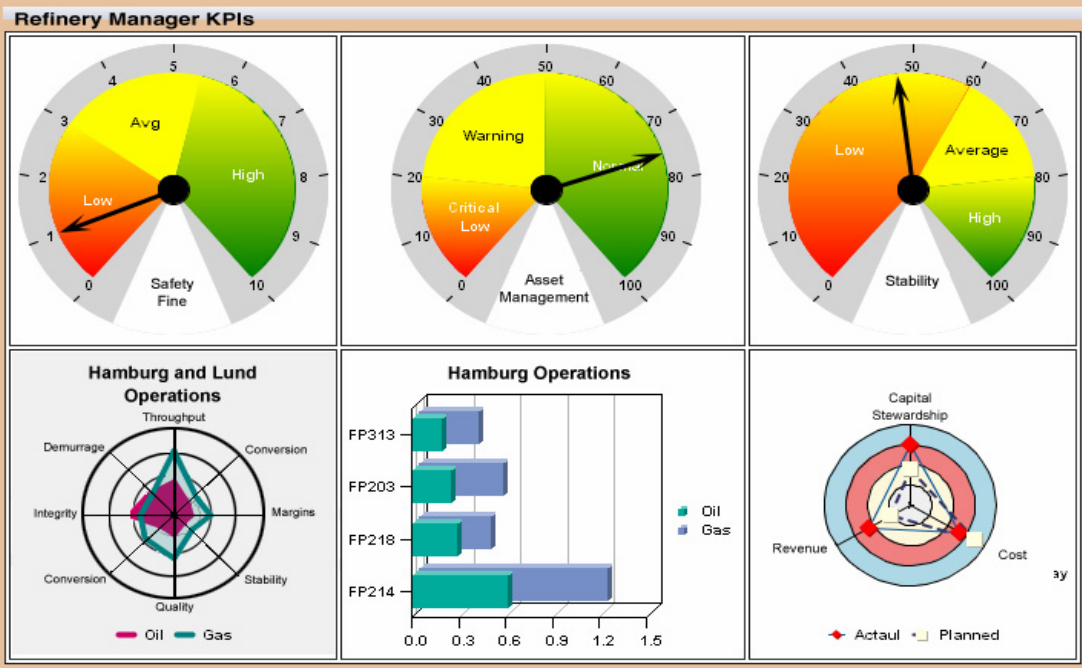
Start

PI ProcessBook - [MINIM... Web Part Page - Mic... C:\OAB DEMO\MiniMills2... PI Admin >> PI Applications >> 4:41 PM



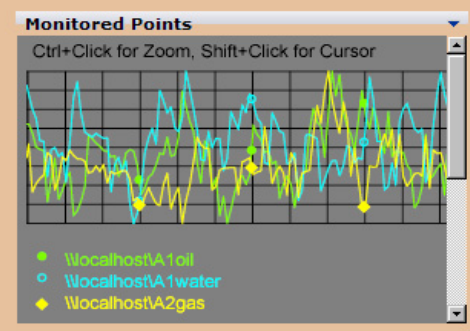


- Select View
- Private
 - Public
- Actions
- Edit Profile
 - Set as Office default Web site
 - Create List
 - Create Page
 - Manage Alerts
- My Lists
- Private Documents
 - Shared Documents
 - My Pictures
- My Pages
- Field Map
 - Platform View
 - Simulations
 - Compressor



My Alarms

Sev	Description	Status
4	Compressor Efficiency	...
4	Water Temperature	...
4	FCC Flow	...
4	Turbine Ratios	...
4	Flow Rate	...
4	Load Capacity	...



My Inbox (msimmons)

Items 1 to 8 of 8

From	Subject	Received
Frank Danowski	Out of Office AutoReply: Reservoir Simulation	Sat 8/2/2003 3:16 PM
Frank Danowski	RE: Reservoir Simulation	Sat 8/2/2003 3:08 PM
Frank Danowski	Reservoir Simulation	Sat 8/2/2003 2:50 PM
Jamie Pritchard		Fri 8/1/2003 7:09 PM

- ### RtMessenger
- Production Managers**
- Jamie Pritchard
 - John Smith
- Asset Managers**
- John Kansas
 - David Water
- Reservoir Advisors**
- Frank Danowski (Offsite)
 - Ed Liberman
- Operators**
- Kevin Hardey
 - Joe Prosser

News for You
 There are no listings to display.

Visualization – Transmission and Distribution



OSI Asia Pacific Organization Chart

Asia Pacific

C.S Lui
V.P Sales

Australia / NZ

Robert
MD

China

C.S Lui
MD

Japan

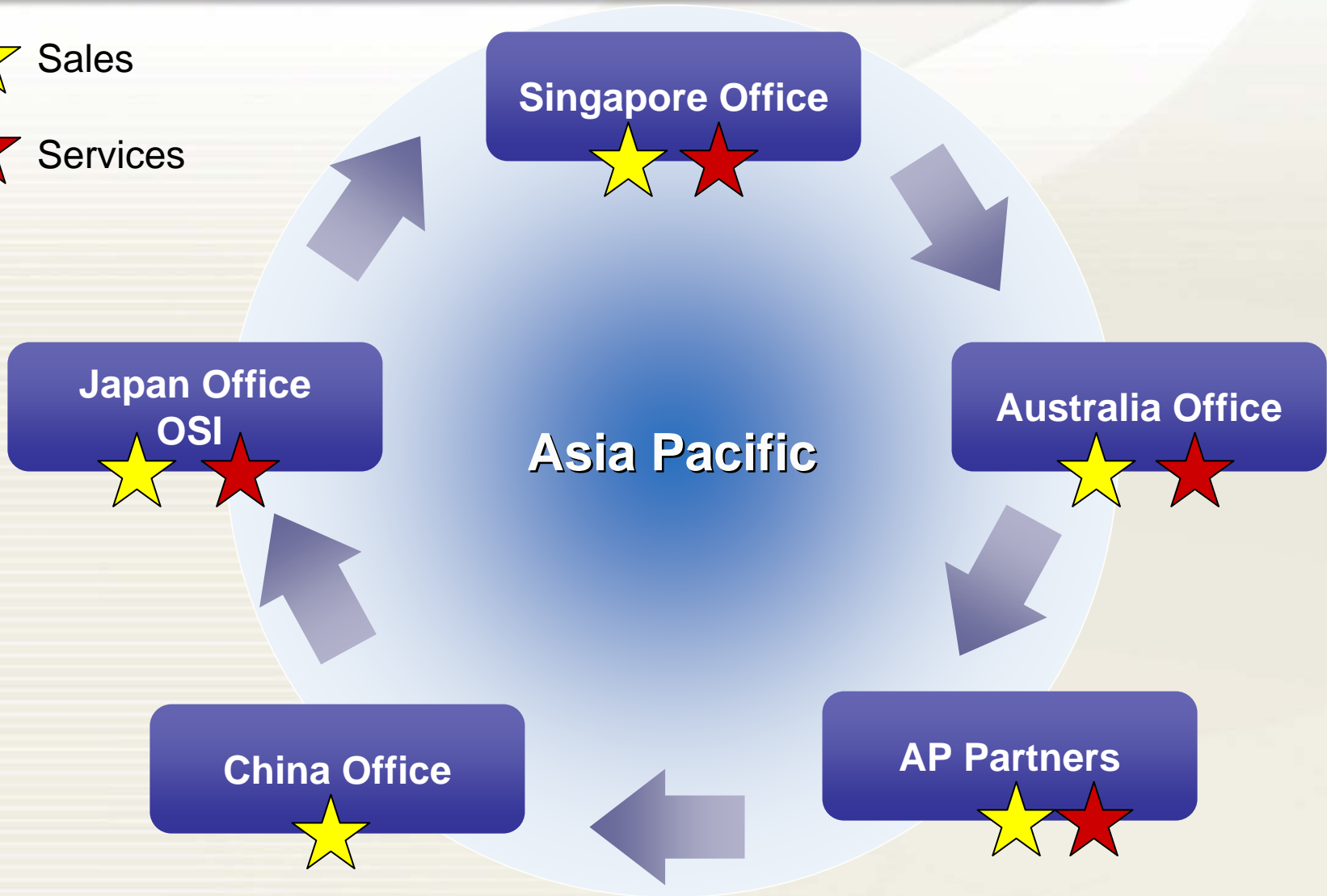
Yanagimoto
MD

Singapore

C.S Lui
MD

Roadmap Driven

-  Sales
-  Services



- **How do I Monitor the KPI (Key Performance Indicators).**
- **How can I increase my Customer Satisfaction and Better Understand their demand**
- **How can I Determine the Actual Production and cost of Production at any time and identify amount of losses and where the losses are ?**
- **How can I reduce our Maintenance Cost and Increase Safety ?**
- **How can I put in my expertise and monitor the efficiency, perform simulation and built model to better understand our process. How can we change with changes in the business ?**
- **How can I Integrate The Plant Information to Business System to provide an Integrated ERP system.**
- **How can I have a Robust system and system protected for long term investment.**

How can I Go About Doing All These in One way Or Another ?

**OSI
PI System**

- You Would be able to see how your needs can be fulfill by OSI Suite of PI Products
- You would get to Discover the ways and new things through customers, Customers Presentation and OSI Presentations and Partners Applications
- You would know our Development Road map and how this would help or change your path forward

Special Thanks For This Seminar



- To All The Customers Presentors
- To All The customer attendees
- To Our Partners

Thank you... and Enjoy...