



# Verso Paper Corporation and OSIsoft Enterprise Agreement and Managed PI Presented by John Hume

Maine

The Way Life Should Be

**Empowering Business in Real Time**  
**PI Infrastructure for the Enterprise**

# Verso Paper Corp - Androscoggin Mill

- ❖ One of four Coated Paper Mills in the Verso Group
- ❖ Produce 500,000 ton/year Coated Paper and Pulp for Magazines and Periodicals
- ❖ Consume 1.2MM tons of wood/yr and 40Mgal/day of water.
- ❖ Produce 125MW electricity
- ❖ Annual Sales \$1,628.8 million (2007)
- ❖ Publicly traded as VRS

# History



**1999**

IP buys  
Corporate PI  
Licenses

**2006**

10 servers,  
130K points,  
47 interface  
systems,  
65 interfaces

**FEB  
2008**

Sartell  
Mill  
installs  
Managed PI

**MAY  
2008**

mPI  
Install  
Complete

**2000**

Andro's first PI  
Installed:  
4 Servers,  
5K process  
points,  
10K scanner  
points

**Aug  
2006**

IP Divests  
4 Coated  
Paper  
Plants;  
Verso  
purchases  
EA

**MAR  
2008**

Andro  
begins  
mPI  
Install

## Similar Features

- ❖ Both get unlimited PI points
- ❖ Both get all standard interfaces
- ❖ Both have 24x7 access to technical support

## What's New?

- ❖ OSIsoft will upgrade/patch/tune all PI components
- ❖ OSIsoft will monitor and alert Verso and/or fix problems detected by the Managed PI system
- ❖ Single Point of Contact for managing Verso and OSIsoft's relationship
- ❖ Access to the Center of Excellence (CoE) for strategic and tactical advice to get more value out of PI
- ❖ UC Vouchers
- ❖ Training Vouchers

## Why does it matter?

- ❖ 10 servers – all 2+ major version back
- ❖ 65 interface instances
  - ❖ Version inconsistent
  - ❖ Require frequent reboots
- ❖ 5 legacy interfaces
  - ❖ OPC and DCOM and XP
  - ❖ ABB Quaker Link Moore ICI & GE Cimplicity
- ❖ 1 PI Administrator



# EPM Planning at Androscoggin

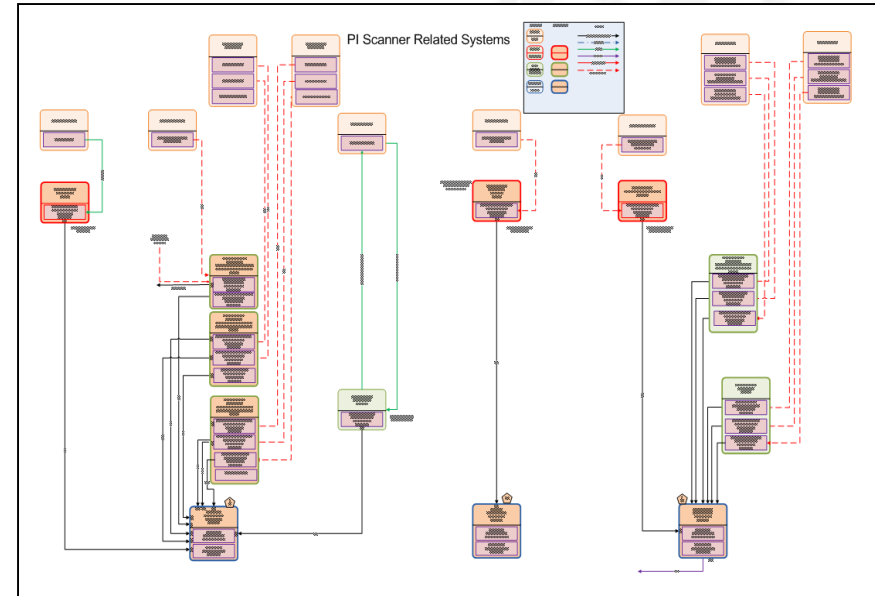
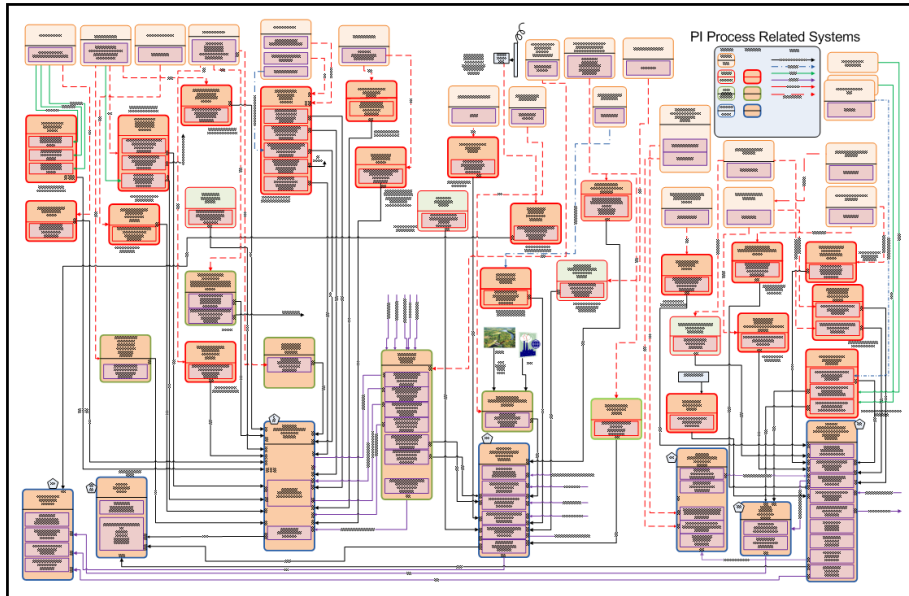


- ❖ 1 month to survey
- ❖ 2 months to build detail system drawing
- ❖ Implementation plan developed from analysis & drawing
- ❖ Decided on an “On the Fly upgrade” approach
  - ❖ No scheduled shutdown
  - ❖ Areas prepared for intermittent PI outages

# Enterprise vs. Old Corporate Agreement



## Why?





# Week 1: Roll-Out



- ❖ 2 Field Service Engineers
- ❖ 1 Enterprise Project Manager turned temporary FSE
- ❖ Final Planning Session
  - ❖ PI Administration, Plant Process Management and OSIsoft
    - ❖ Set Scope
    - ❖ Develop schedule
    - ❖ Plan reboots
      - ❖ Each server needs 2 upgrades - Known Issue 17138OSI8
      - ❖ 3.xx to 3.4.370 .76 to 3.4.375.79
    - ❖ Add Managed PI and SMTP to OSIsoft NOC
- ❖ Perform 1<sup>st</sup> upgrade to set timing for rest of week



# Week 1: Results



- ❖ Double PI Server version upgrades take 2.5 hrs/server
  - ❖ 10 PI servers upgraded
- ❖ All servers tuned & tested
  - ❖ Queues
  - ❖ Backups
  - ❖ Time Zone
  - ❖ Trust Table
  - ❖ Clients installed (PB/DL/SMT)
  - ❖ Debugging (Dr. Watson/MS Debug)
  - ❖ SDK
- ❖ Managed PI installed and configured
- ❖ mPI on 2 Interface Systems
  - ❖ OPC interfaces upgraded
- ❖ PltoPI upgraded - 16 instances
- ❖ MCN installed

## ❖ Interface Computers

### ❖ 31 remaining

- ❖ Upgrade interfaces

- ❖ Tune

- ❖ Install Managed PI

### ❖ 15 interface types

- OPC
- APACS
- RSLinx
- HTML
- ABB Quaker Link
- ABB DIU
- Moore
- Modbus Plus
- PI-Batch
- GE-Simplicity
- UNIX Fox-AIS
- Fox XP
- ABB 1180
- PItoPI
- Ulma



# Week 2: Results



- ❖ 3 OSIsoft Field Support Engineers
- ❖ Averaged 10 interfaces / day
- ❖ UNIX not monitored
- ❖ 2 Interface systems merged
- ❖ Managed PI installed but follow up required
- ❖ NOC monitoring 57 of 65 interface instances

# Week 3+: Follow-up



- ❖ Continue resolving missing Managed PI information
- ❖ NOC monitoring 57 of 65 interface instances
  - ❖ 2 NT systems cannot be monitored
  - ❖ 1 Ulma interface not in production
  - ❖ Home grown interface not monitored
  - ❖ 1 UNIX
  - ❖ 3 in process



# NOC Support Results



- ❖ Low memory alerts
- ❖ Unresponsive Interfaces
- ❖ Tags reporting I/O Timeout
- ❖ Follow the sun support via VPN
  - ❖ Perth, Singapore, San Leandro, Czech Republic, Montreal, Germany, Bahrain
- ❖ Provided NOC with instructions for determining priority alerts
- ❖ Working to help NOC discern real problems from process down time
- ❖ NOC has become primary Interface support with VERSO as Secondary
- ❖ **Took 3 week vacation – NO PROBLEMS!**



# Value Now!



- ❖ 3 weeks to PI Done Right!
  - ❖ Without the EA, time to upgrade/patch/tune is indefinable
- ❖ Stable PI environment
  - ❖ OSIssoft updated systems for recent Security Patch
- ❖ OSIssoft Eyes & Ears
  - ❖ More ZZZ's at night
- ❖ Shift activities from fighting fires to adding value



# Value Over Time!

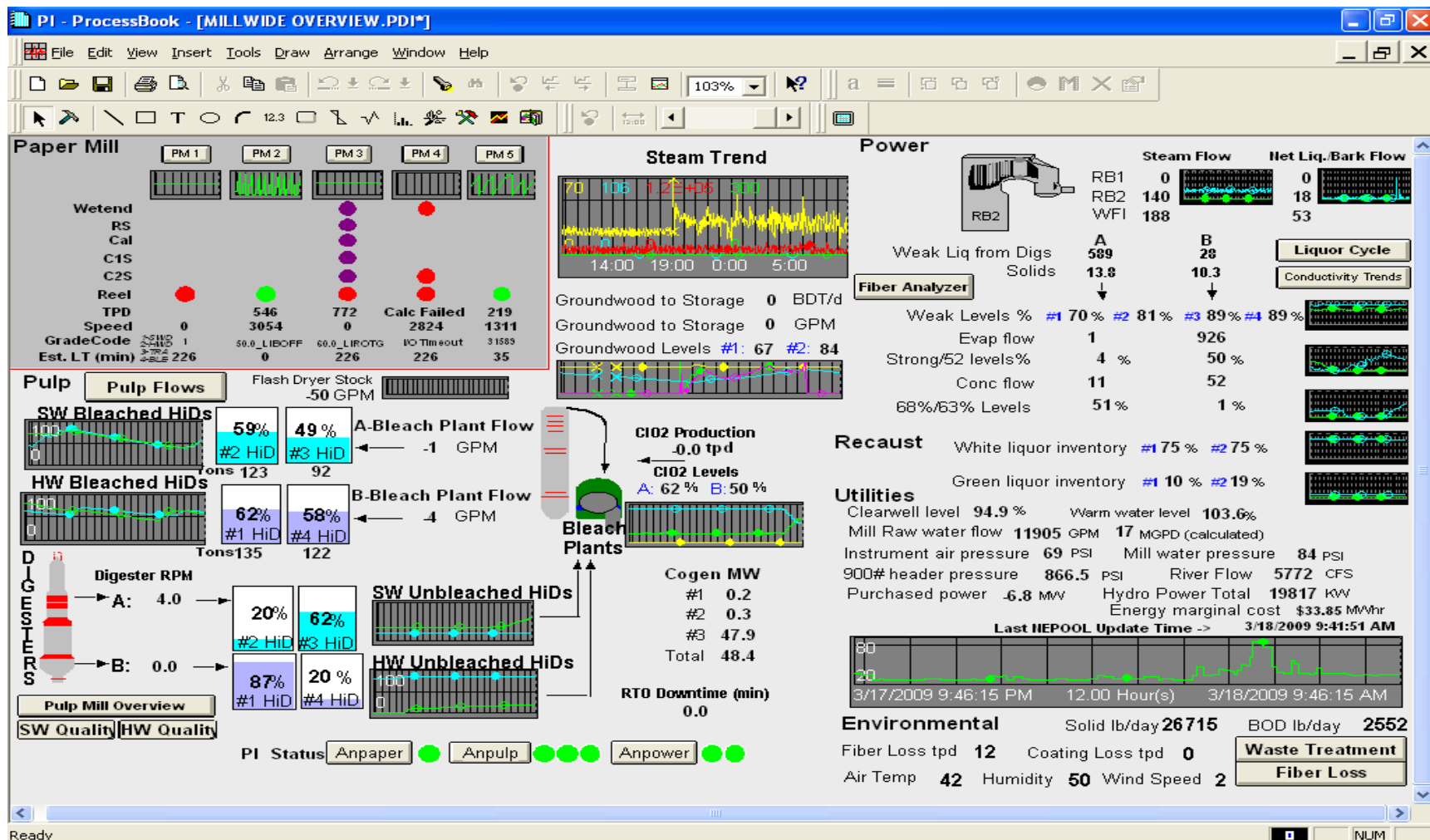


- ❖ Next Steps: Involve Center of Excellence
  - ❖ Lower cost of ownership by evaluating and restructuring complex PI architecture
  - ❖ Implement High Available Servers and Redundant interfaces
  - ❖ Automatic PI software updates
  - ❖ Explore VM
  - ❖ Explore Web Based PI access
  - ❖ Hold Value Realization Process to identify business and process initiatives where PI can add value

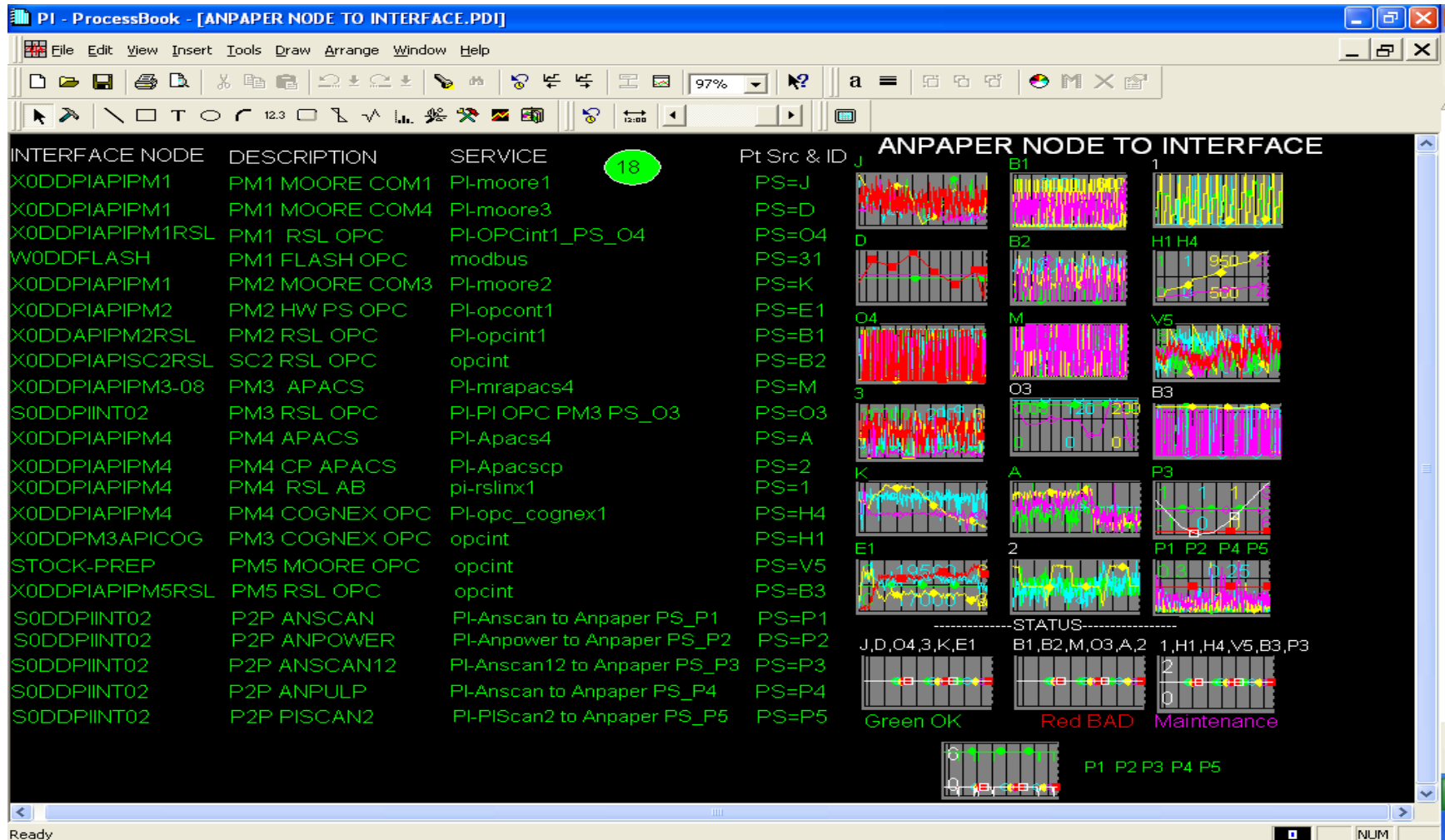




# Operations at a Glance mPI



# mPI Area at a Glance



# Questions

