

OSIsoft PI Data Management System in the PSCC

CM4120
Chemical Plant Operations
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Outline

- Intro to PI Data Archival and Retrieval System
- System Architecture
- How to access our process data

Process Data Archival & Retrieval System

- Long-term (years) data storage & retrieval
- Link process control systems with business management systems
- Provide data for production and compliance reporting
- Optimize use of disk storage and quick recall of archived data
- Access to real-time process data w/out risking unauthorized access to control system

Typical Uses of a Process Data Archival & Retrieval System

- Link to supervisory control or process monitoring applications
- Store manually-recorded or laboratory data
- Management and production reporting
- Engineering analysis or quality assurance analysis
- Production information to suppliers or customers

PI – Plant Information System

OSIsoft, Inc: Global company



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www.osisoft.com

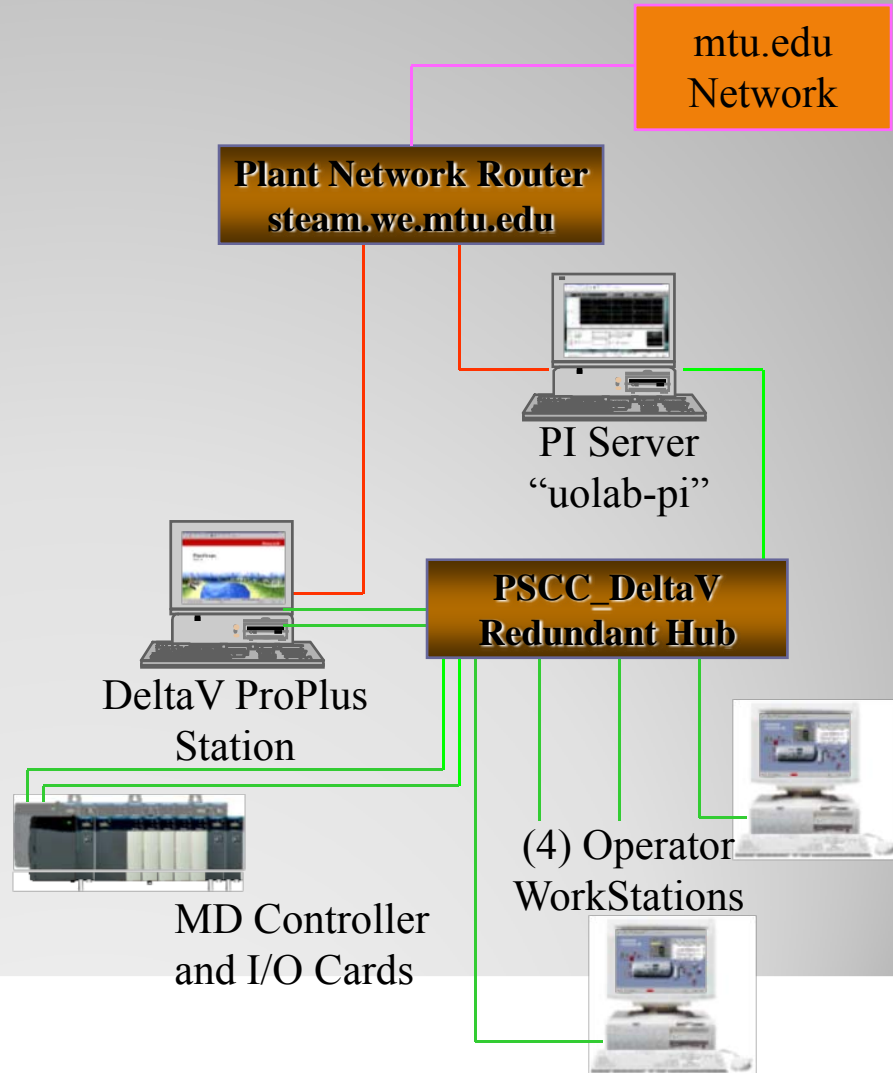
PI – Plant Information System



- PI Server
- Interfaces
- ProcessBook client
- DataLink client
- Batch Management, SPC, Performance Equations, etc.

Emerson Process Management DeltaV and OSIsoft PI in PSCC – Networking

- PSCC_DeltaV (green) is a secure Control Network
- Plant Network (red) is local network for plant operations
- Plant data is available to the outside thru alias “steam.we.mtu.edu”



PI – How it works

- PI “tag” is configured for every piece of data to archive
- Tags are scheduled to retrieve data periodically (or, on the occurrence of an event)
- Data are brought into the archive thru filtering and compression algorithm
- Data must pass the filter and compression tests to be archived
- Archive can also store manually entered (lab) data and text strings

Getting Started with DataLink:
Enable PI DataLink in MS Excel:
Two links on course web page



Then run Excel to import data into
your spreadsheet

PI ProcessBook:

From computer labs: Start →

All Programs → PI System → PI ProcessBook



References

www.OSIsoft.com , OSIsoft, Inc., Jan. 2009.