OSIsoft.

REGIONAL SEMINARS 2012

The Power of Data

PIMS Deployment Strategy

Presented by **Ron Snyder, Hatch Consulting**

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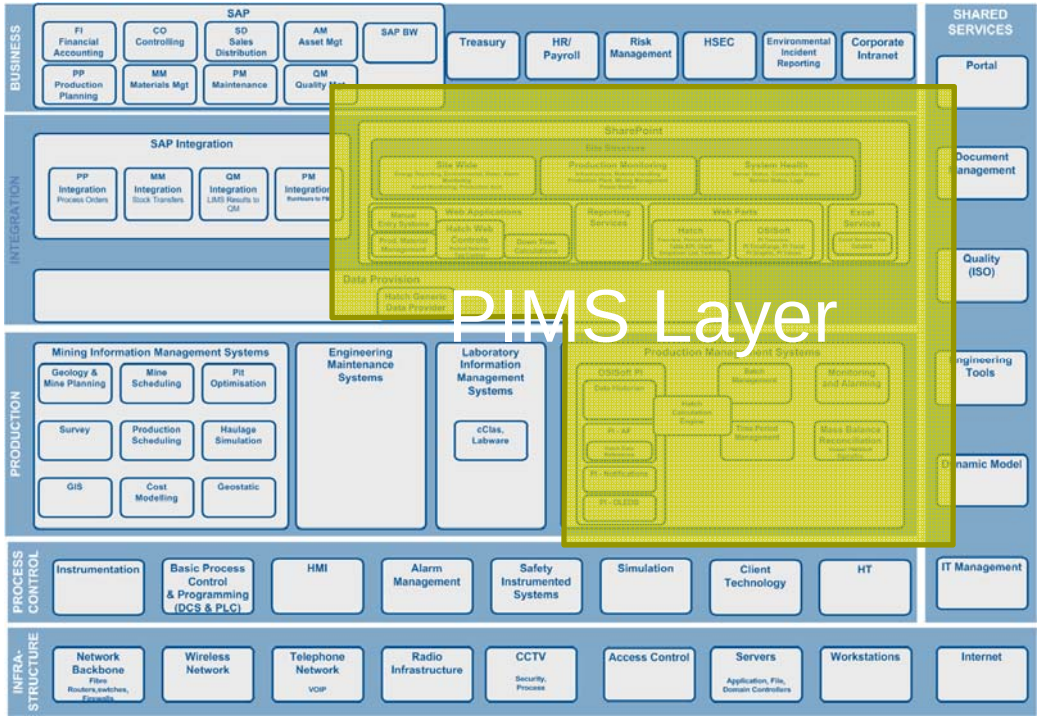
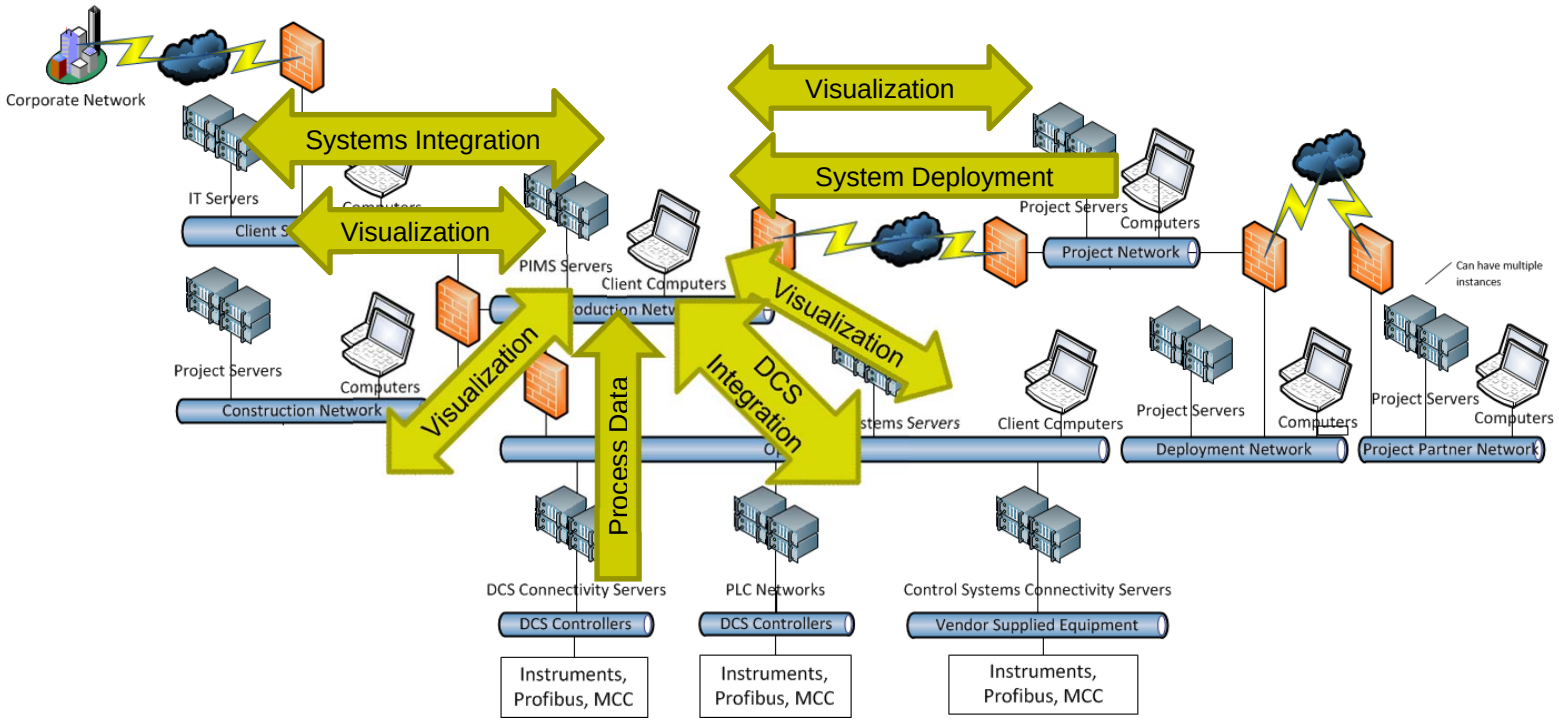
Presentation Overview

- Infrastructure
- System landscape overview
- Visual layer
- Systems deployment

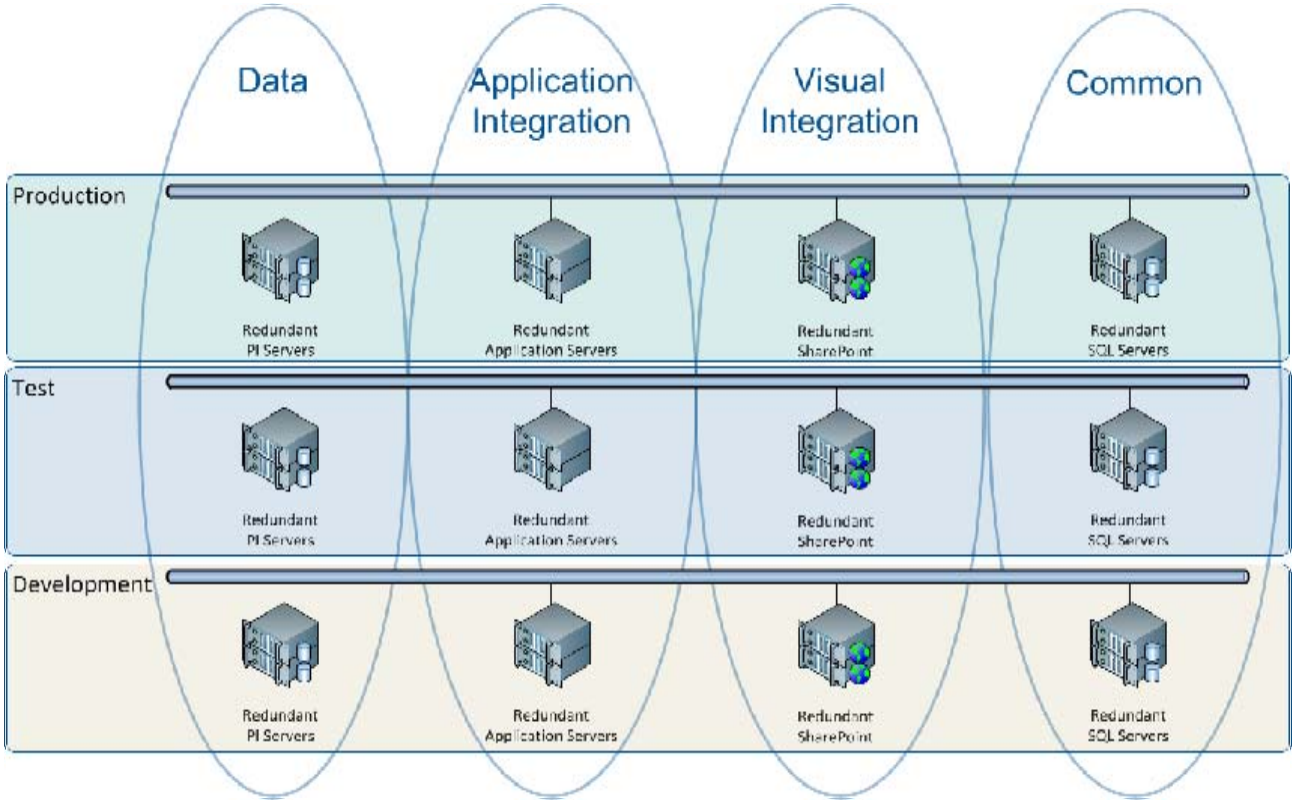
Production Systems Stack



Multiple multi-layered networks

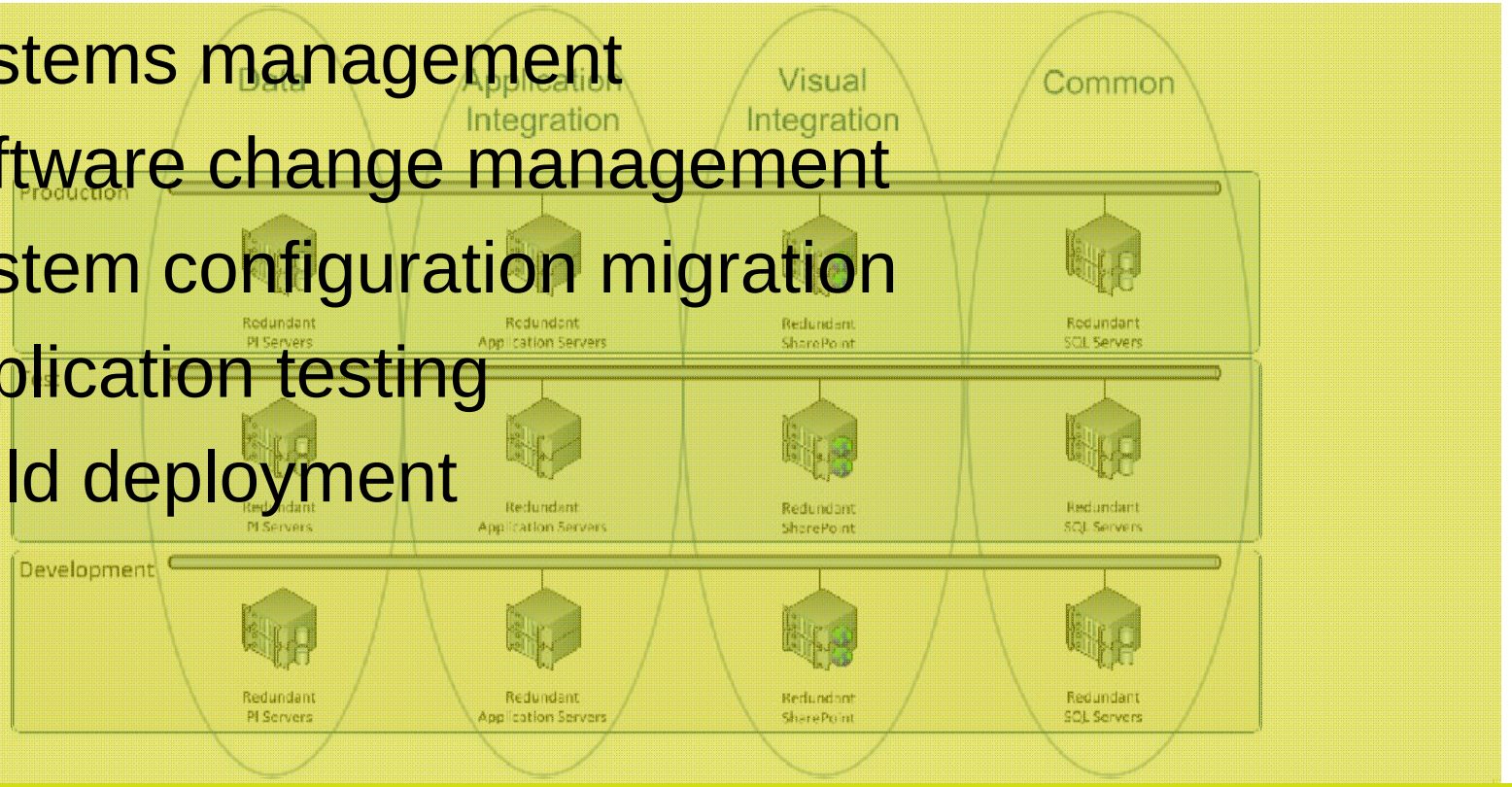


Three Tier Systems Landscape

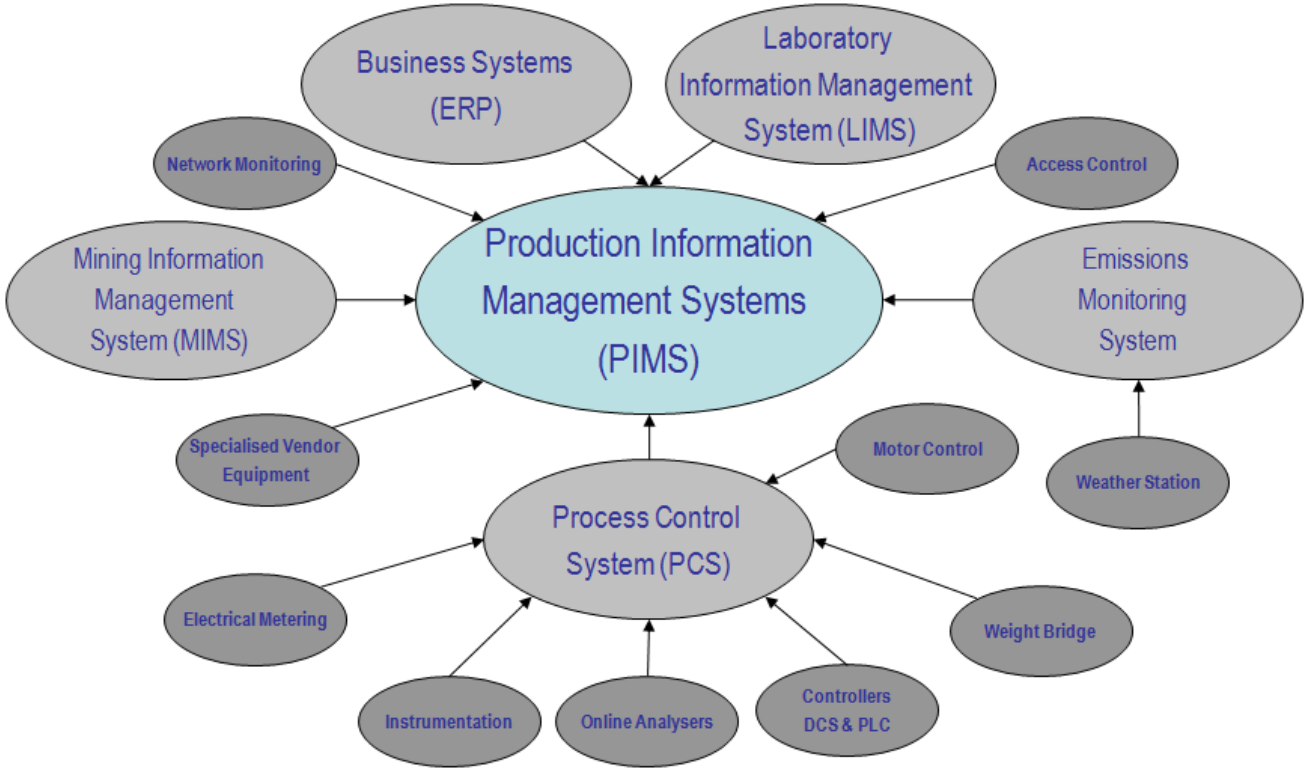


Three Tier Systems Landscape

- Systems management
- Software change management
- System configuration migration
- Application testing
- Build deployment

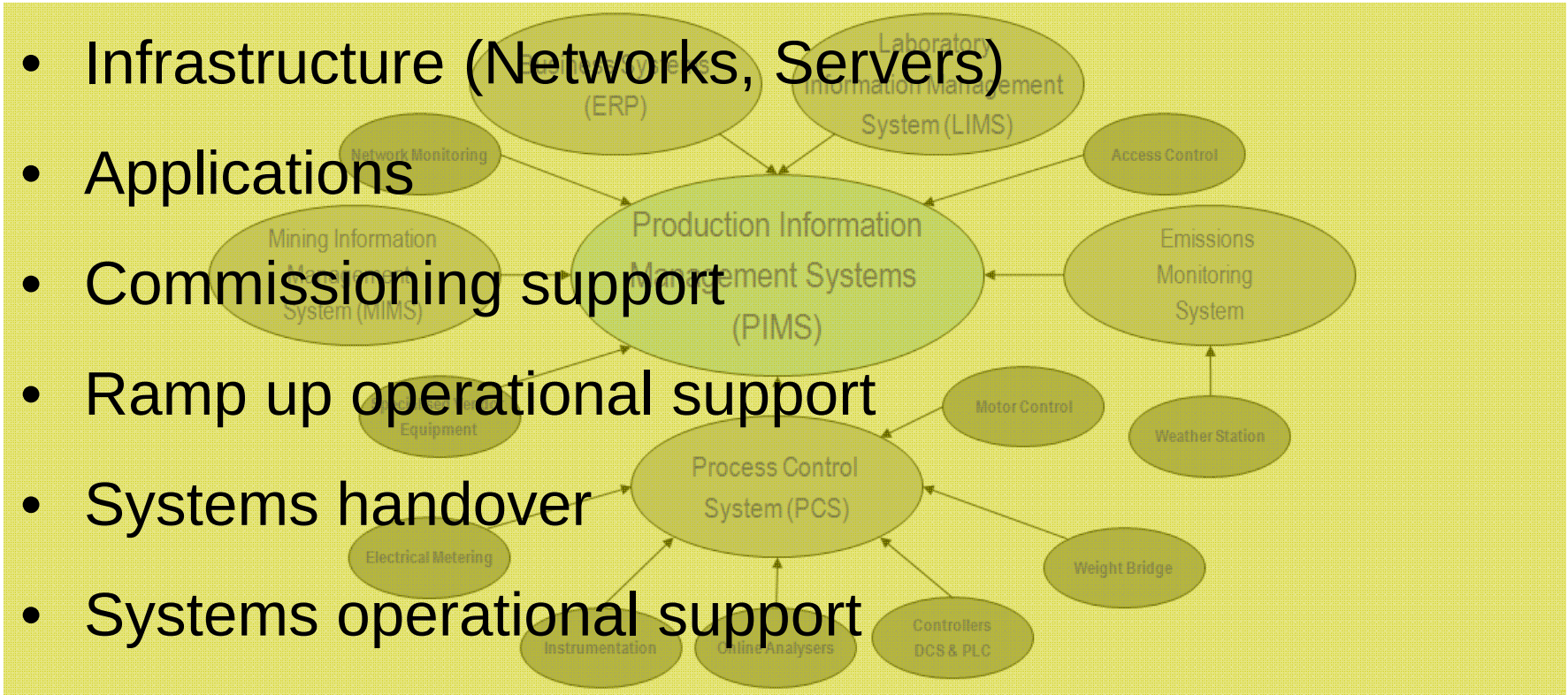


Phased Deployment



Phased Deployment

- Infrastructure (Networks, Servers)
- Applications
- Commissioning support
- Ramp up operational support
- Systems handover
- Systems operational support



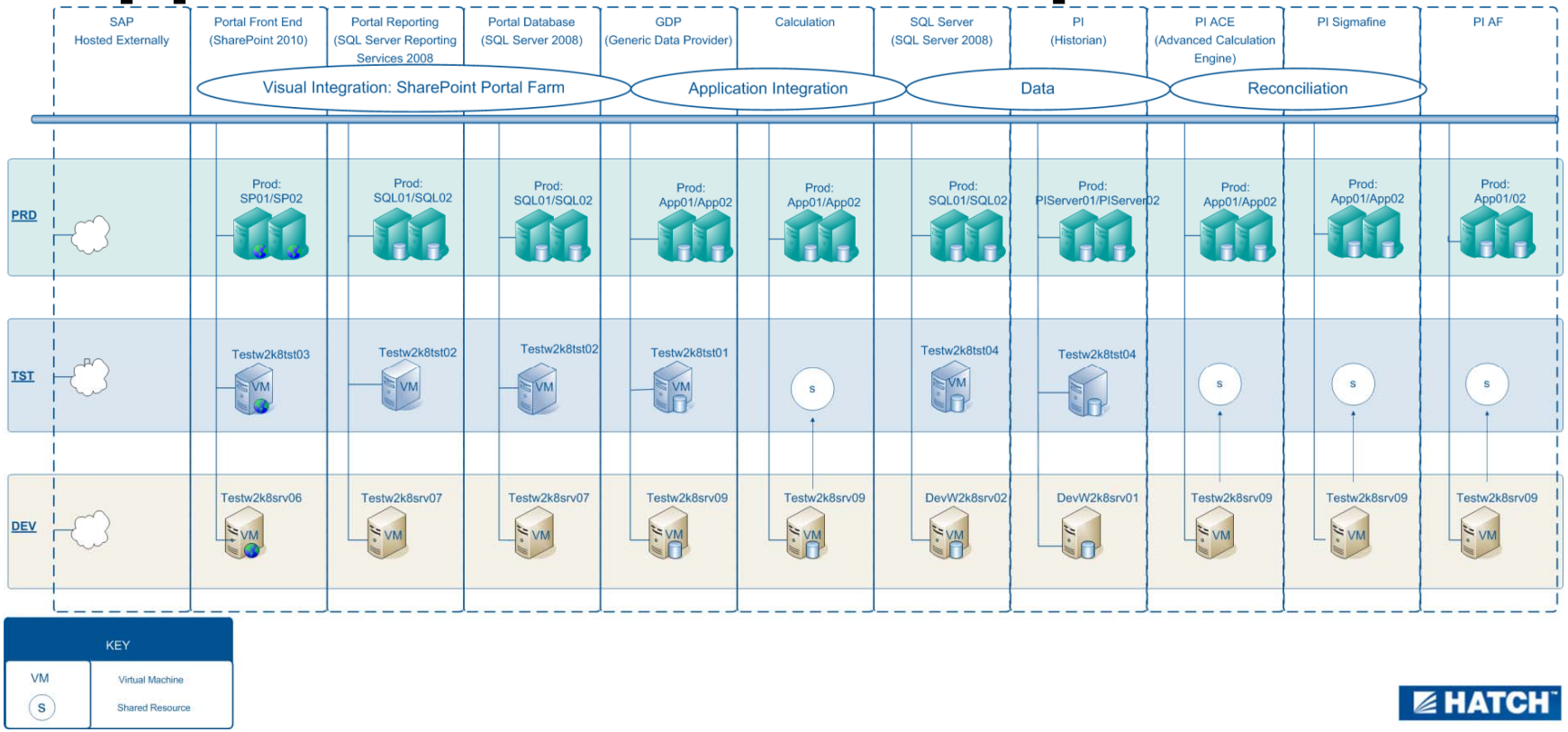
Systems Design Considerations

- Applications
  - Commercially available software
  - Single data source transparent to the end user
  - Thin client visualization (SharePoint Portal)
  - Life of plant data
  - Integrated visualization tools (Commissioning, Operations)
- Environment
  - Virtualized Infrastructure
  - Continuous deployments using scripts
    - PowerShell, SQL Scripts and TFS
  - SMT, AF Builder

Application Software Base

- OSISoft
  - PI Server
  - AF Server
  - RT Webparts
  - PI Notifications
- Microsoft
  - OS (64 bit)
  - SQL Server
  - Reporting Services
  - Development Environment
- Hatch
  - Generic Data Provider
  - Calculation Engine (Based on AF, OSI SDK and PE)
  - Webparts (TreeView, Trend, Table and Period Selector)
- Xen

Application Services Map

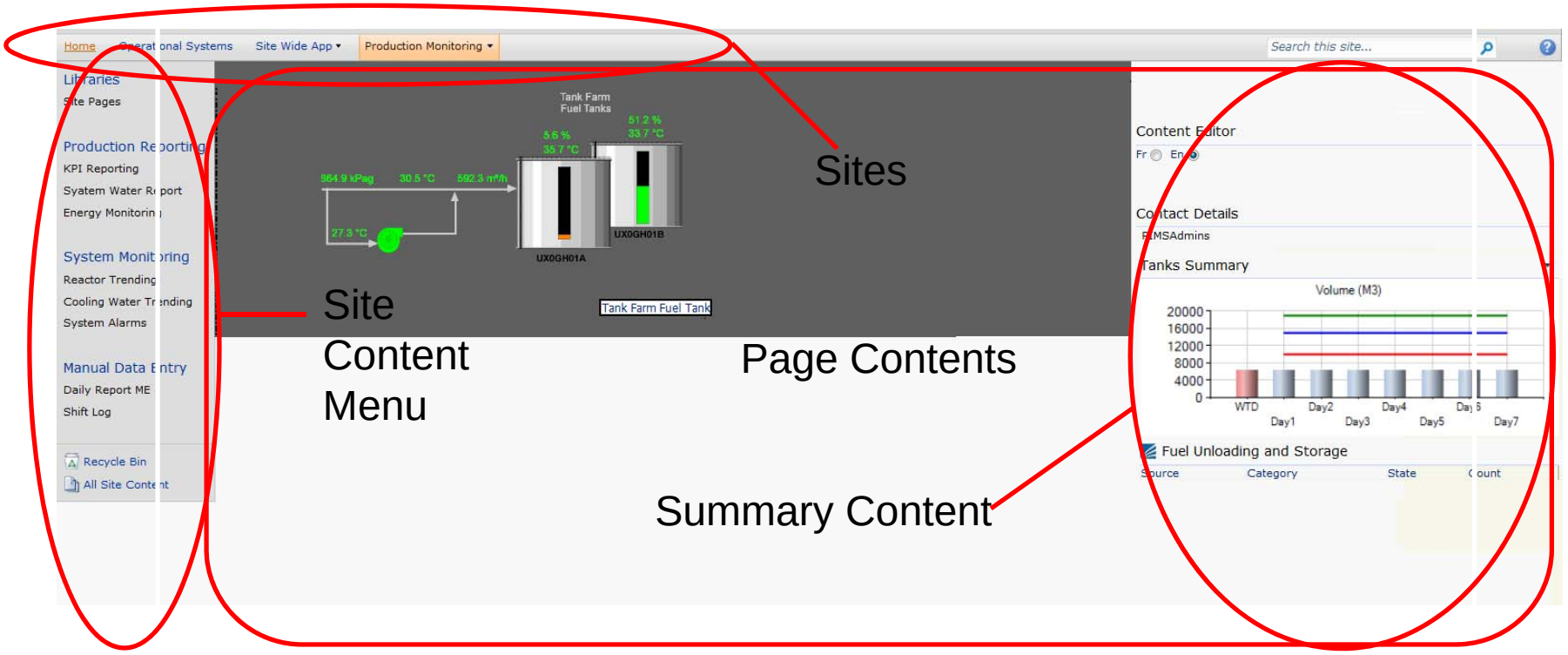


HATCH

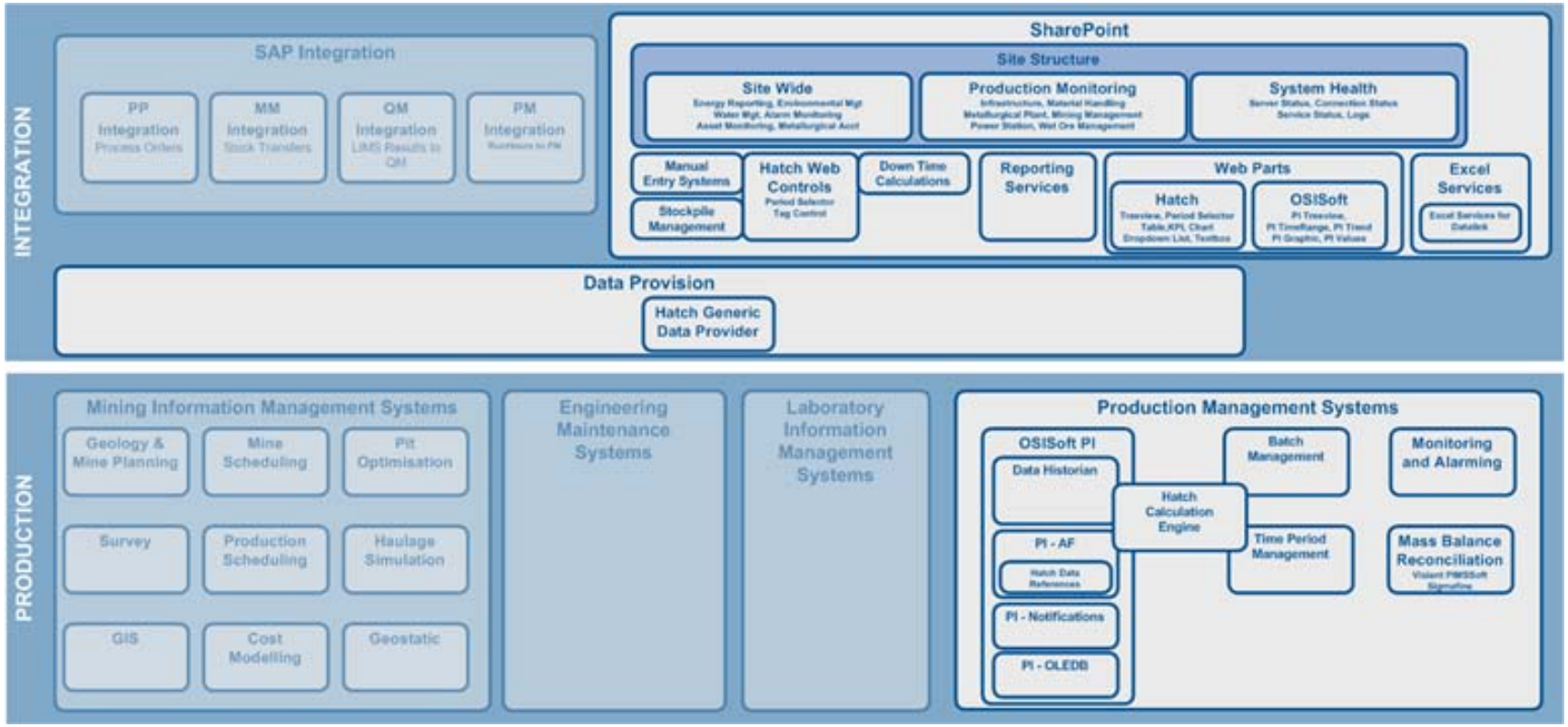
Visual Integration

- Portal
- 3 Layer architecture
  - Presentation
  - Business logic
  - Data source
    - Unified data source through Hatch GDP
      - ODBC (MS SQL, Oracle, XML etc)
      - PI server data
- Webparts & Reporting Services

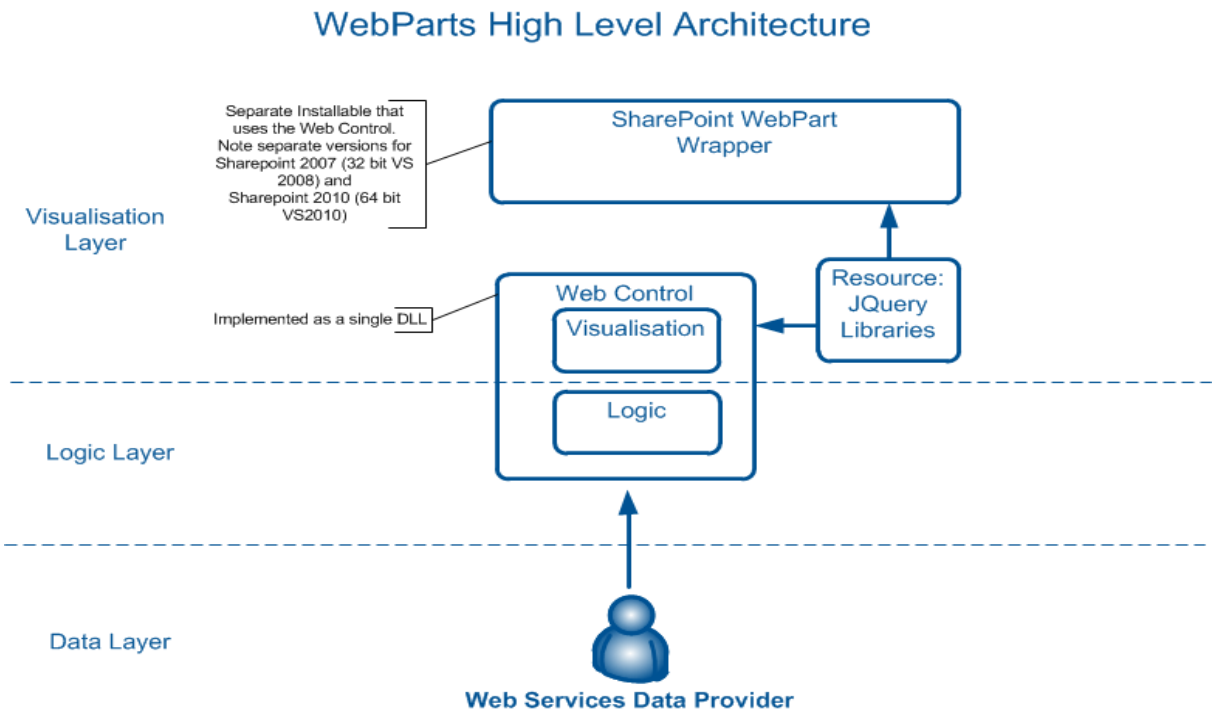
Portal Format



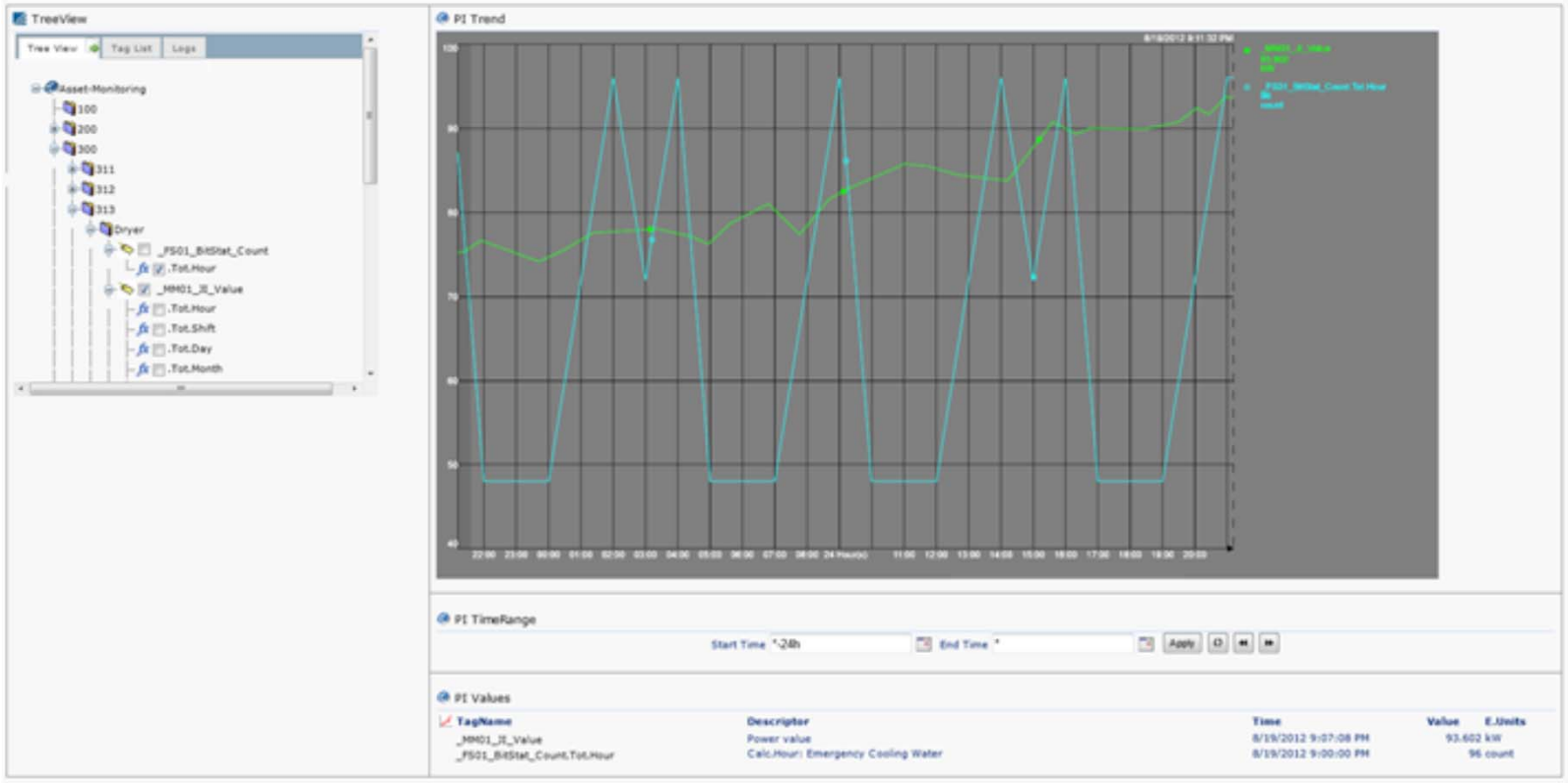
Portal Components



Basic Webpart Architecture

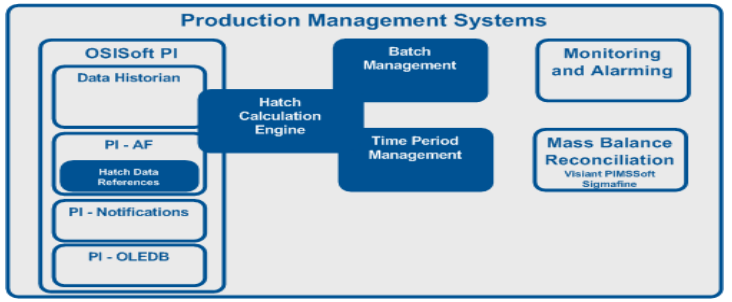


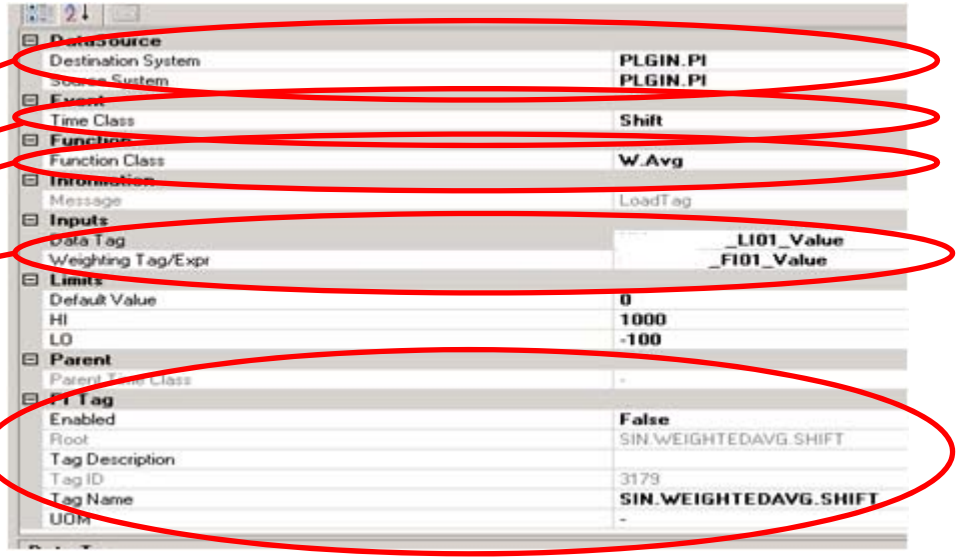
Treeview WebPart Example



Calculation Engine

- Calculation Engine developed to be generic in nature
  - Made up of a number of separate components that work together
    - AF/Data References
    - Engine/scheduler
    - Time Period Generators
    - Generic Data Provider
- Configuration visualised in AF
  - Source/Destination Systems
  - Time Class
  - Function
  - Input tags
  - Result tag





Benefits

- Unified data set in standard format
- User based configured
- Web pages (template based)
- Prebuilt content ready for early deployment
- Multi Environments:
  - Continuous site deployment
  - Reusable development processes

THANK YOU

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