

Regional Seminar Series



PI for Office Enabling Advanced Batch Visualization

October 7, 2010

Todd Brown Center of Excellence Engineer - Pharma & Life Sciences OSIsoft, LLC.

Real Time Information - Currency of the New Decade

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Today's Goals





Learn about the value of Microsoft and OSIsoft integration



Learn about PI Webparts and PI DataLink for Excel Services and how they complement each other



Learn about how batch data can be displayed on the web



Answer Questions



Inspire Action





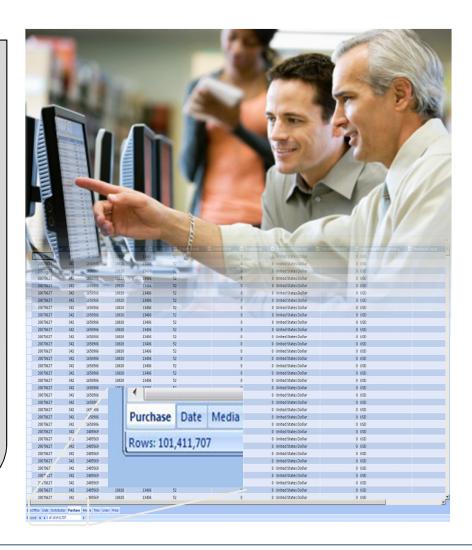
Empowering the End User





Excel. 2010

- Enable users to perform self-service analysis and intuitively build their own BI solutions
- Allow users to interactively explore and perform calculations on large data sets
- Integrate data from multiple sources
- Minimize dependence on IT support

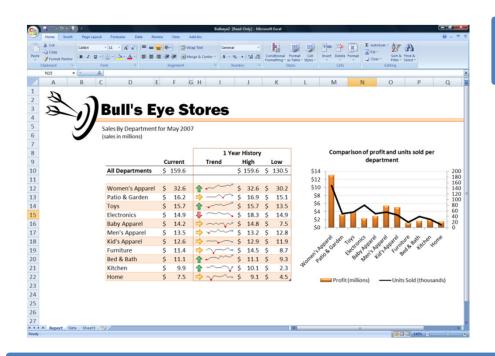


Powerful Personal Analysis Tools



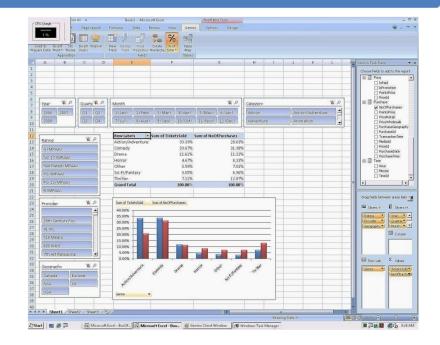


Excel. 2010



Improved formatting and charts

Easier navigation with Slicers



- •Advanced Visualizations like new chart types to discover patterns, highlight trends, and spot exceptions
- •Slicers to slice and dice through large amounts of data and identify trends
- •PivotTables to interactively explore your data and summarize it in useful reports
- •Named Sets to quickly identify and work with a relevant set of data every time

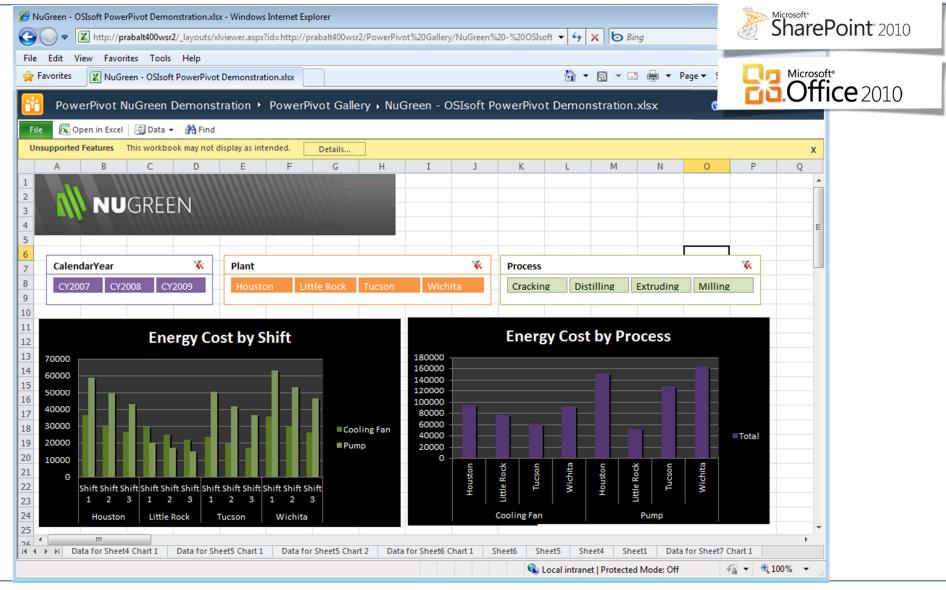
PI and PowerPivot for Excel 2010





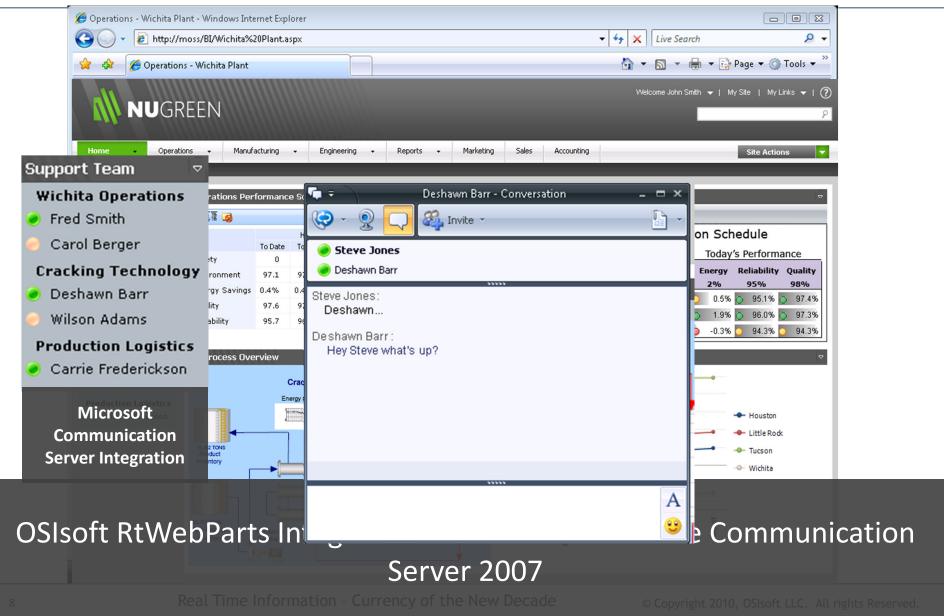


PI and PowerPivot for Sharepoint 2010



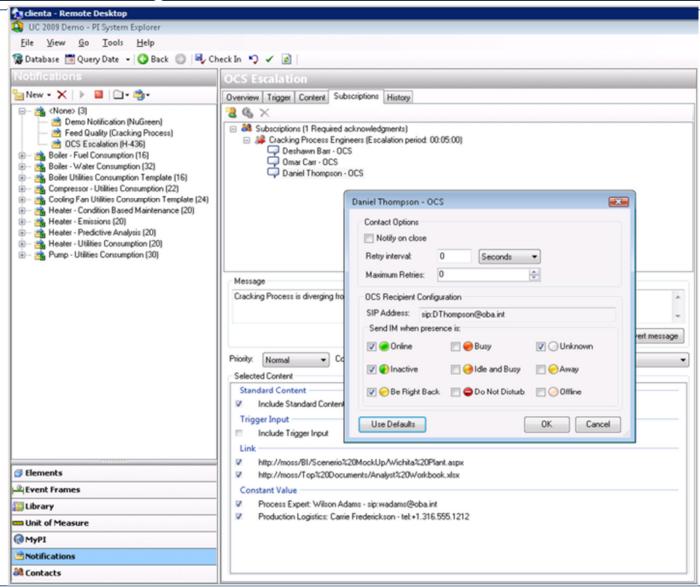


PI WebParts Integration with Microsoft OCS





PI Notifications Integration with Microsoft OCS





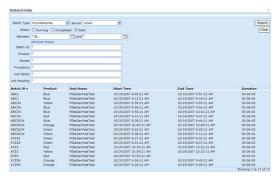
PI WebParts & PI DataLink Server



PI WebParts & PI DataLink Server



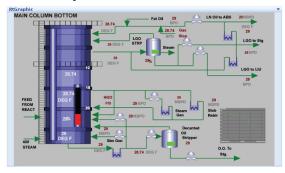
PI BatchTable



PI Gauge



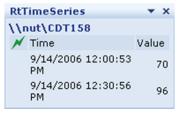
PI Graphic / PI ActiveView



PI TimeRange



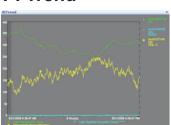
PI TimeSeries



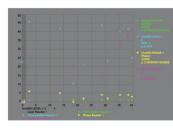
PI Table



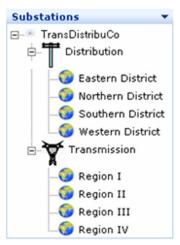
PI Trend



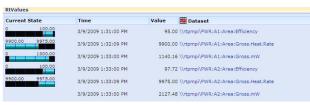
PI XYPIot



PI TreeView



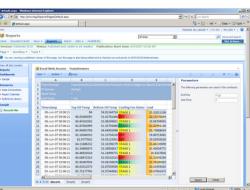
PI Values



PI Messenger



PI DataLink Server



Current Batch Production Status Across Different Factories or Sites





Drill Down Into a Process Area for More Details (

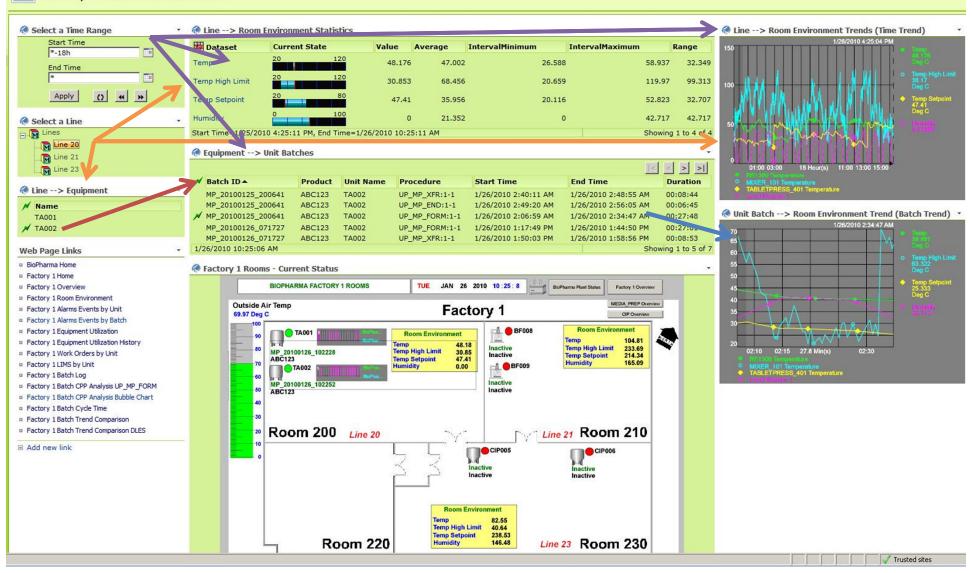




Room Environment

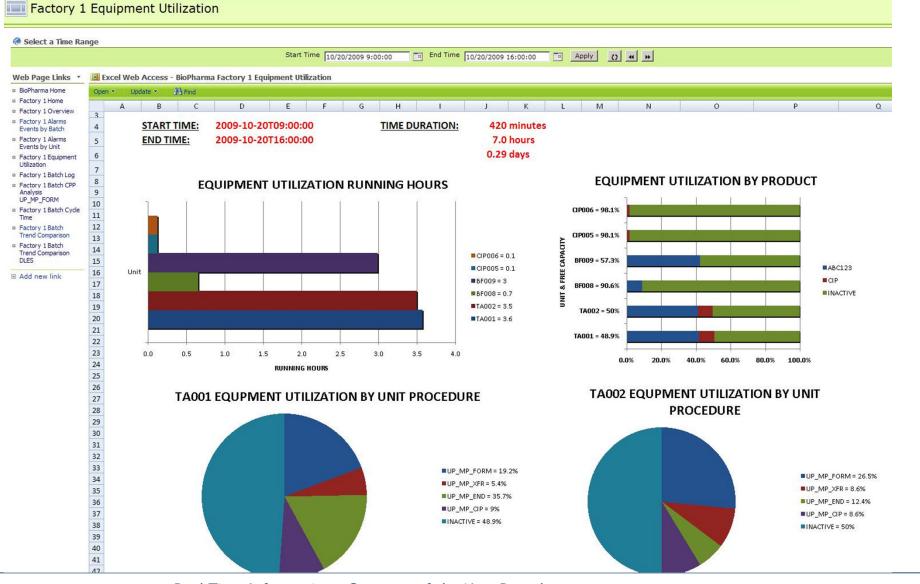






Equipment Utilization

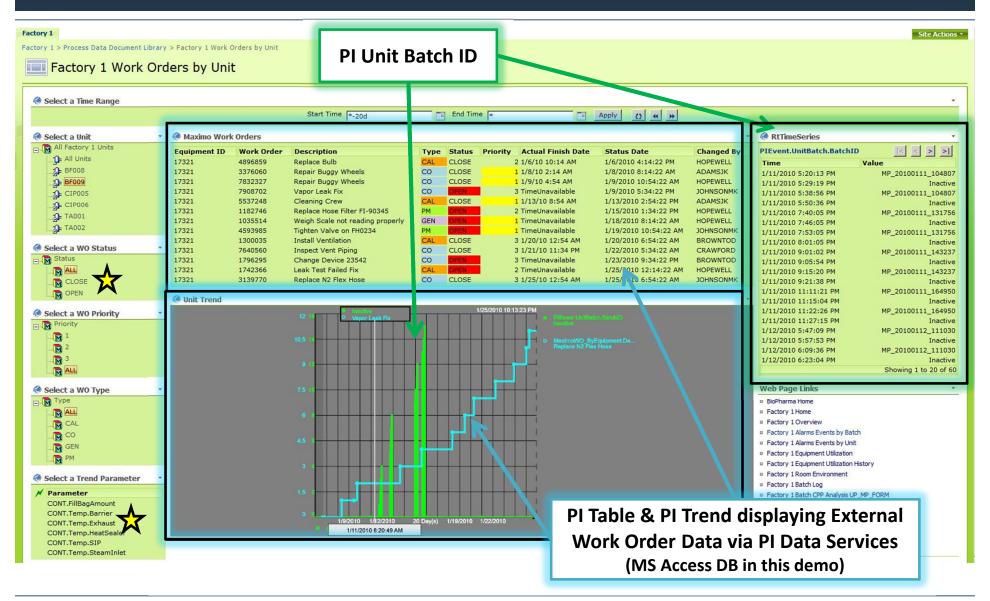




Work Orders [& Batch] by Unit







Work Orders [& Batch] by Unit - Data Filtering

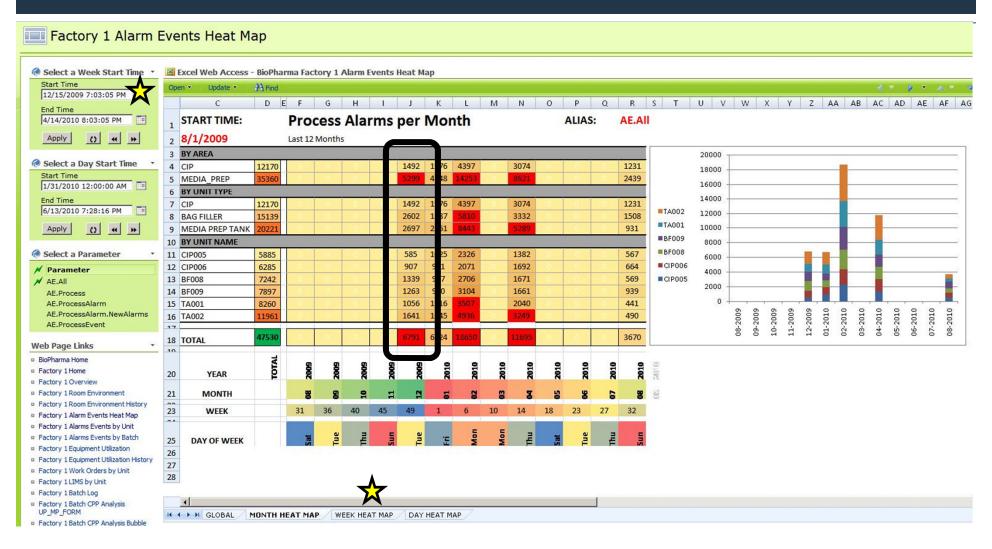
OSIsoft.

(Viewing External Relational Data w/Pl Data)



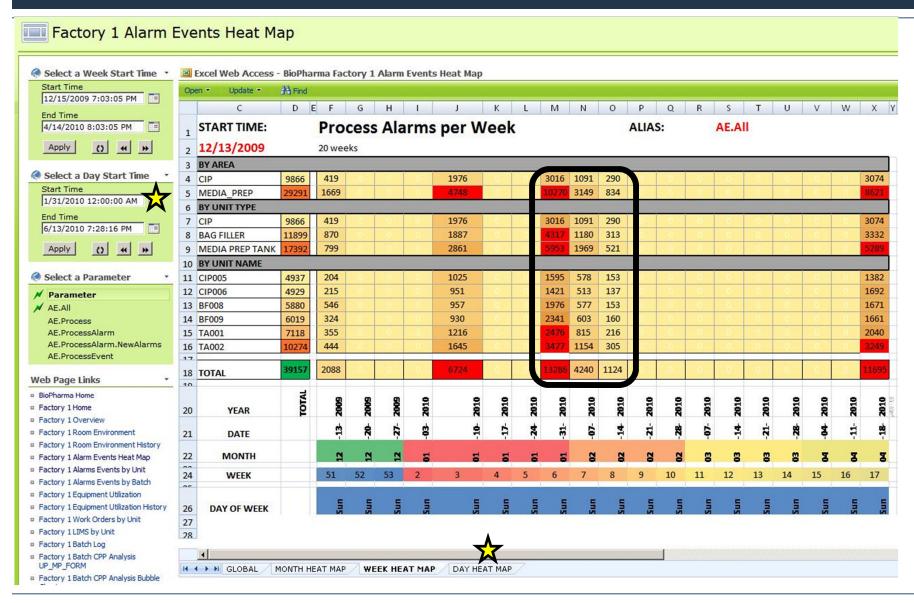
Alarm & Events Heat Map - By Month





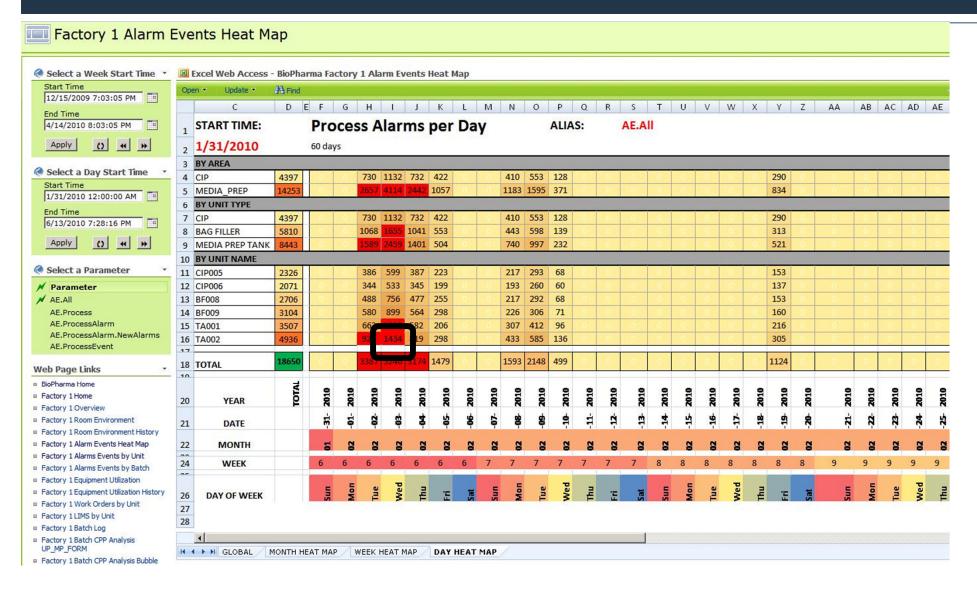
Alarm & Events Heat Map - By Week





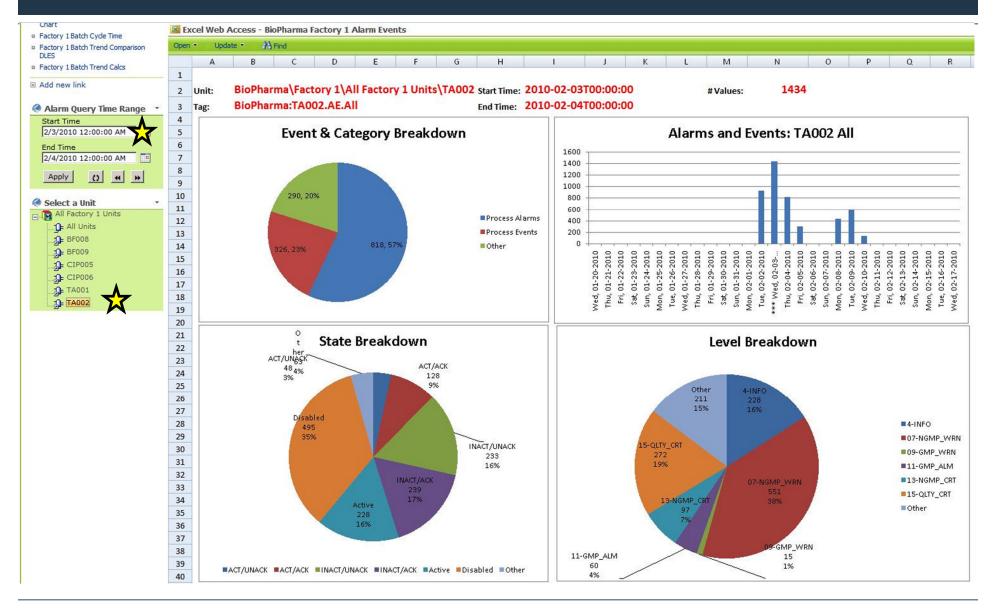
Alarm & Events Heat Map - By Day





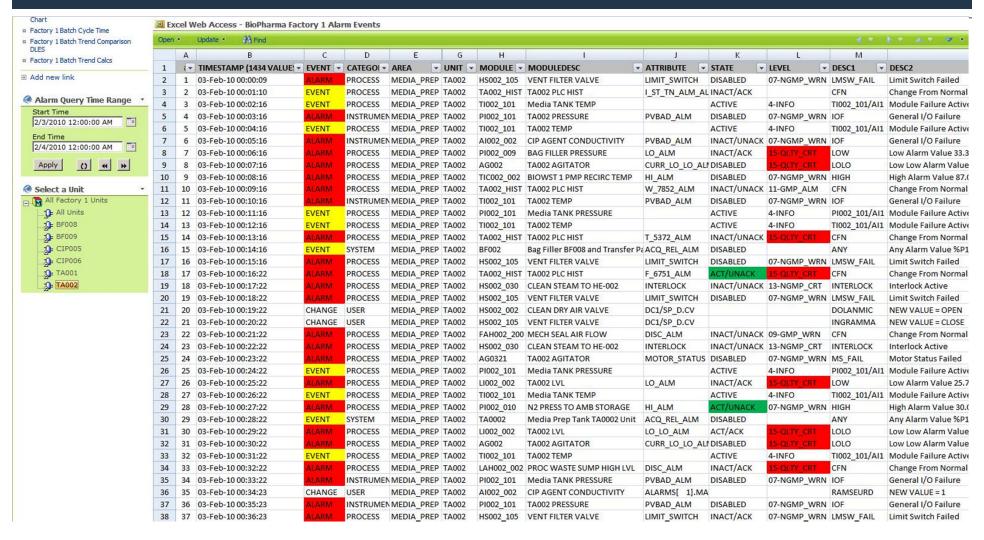
Alarms & Events by Unit - Detailed Graphs (oslsoft.





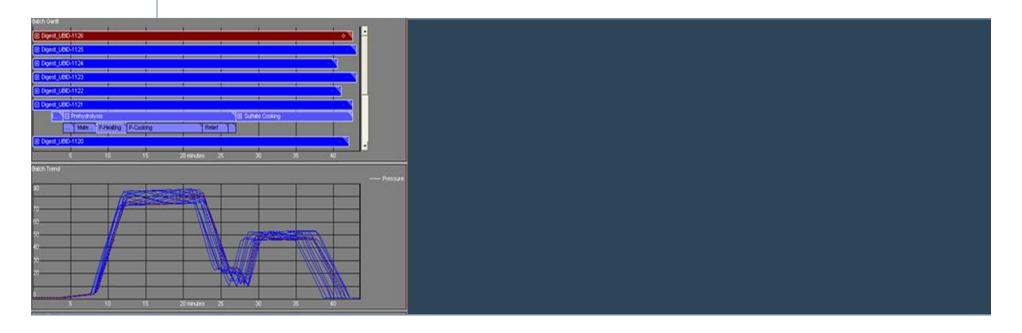
Alarms & Events by Unit - Detailed Parsed Alarms





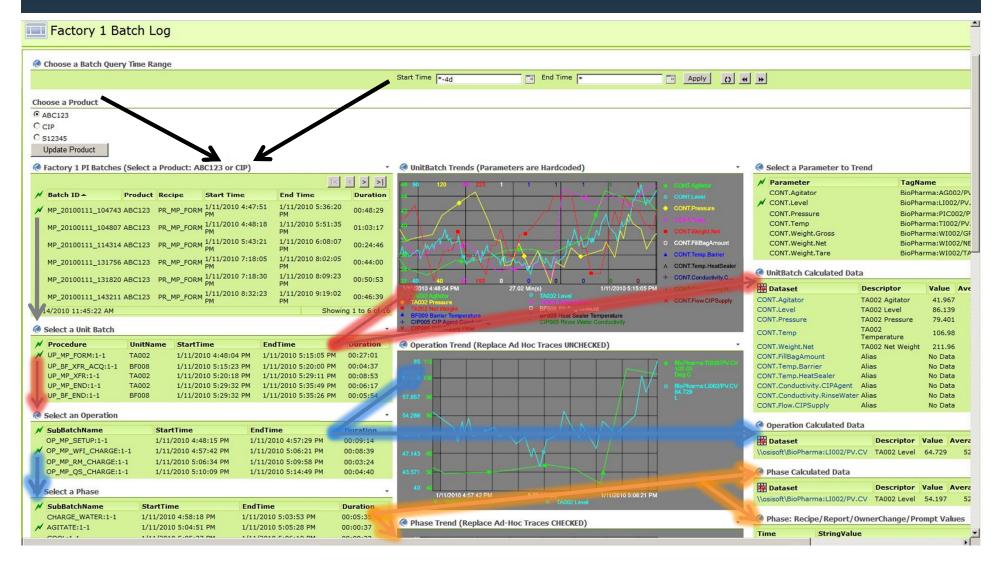


... and Now Batch ...



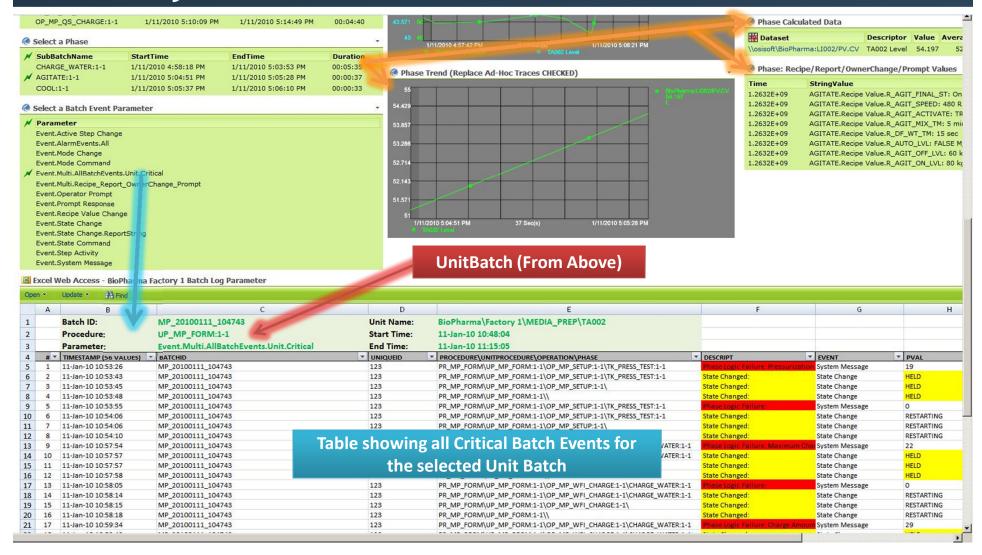
Batch Log - Drill Down UPs, OPs, Phases





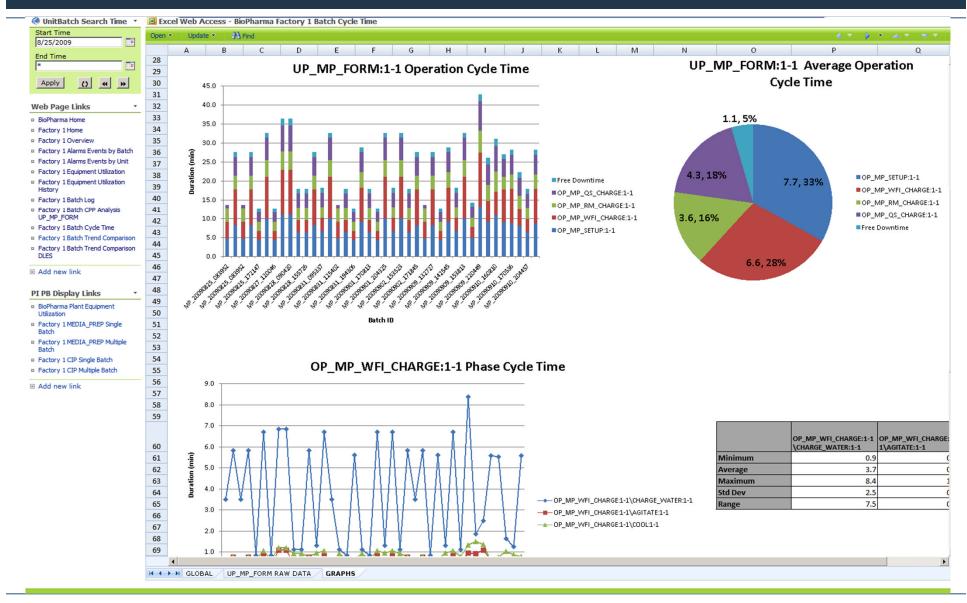
Batch Log - Batch Event Parameters, Alarm & Events by Batch





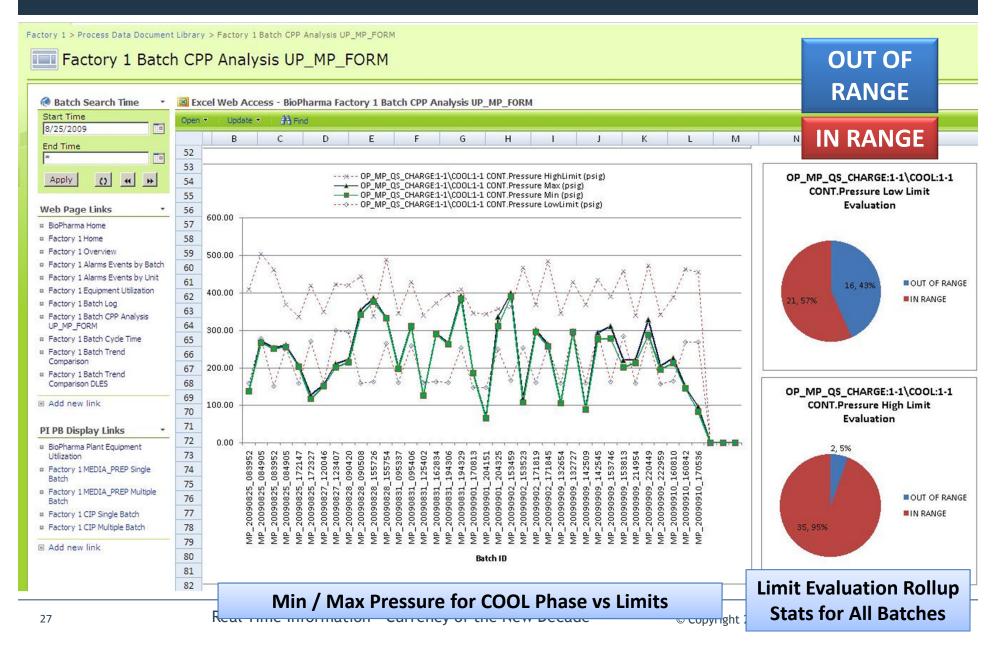
Batch Cycle Time (Across a Range of Batches)





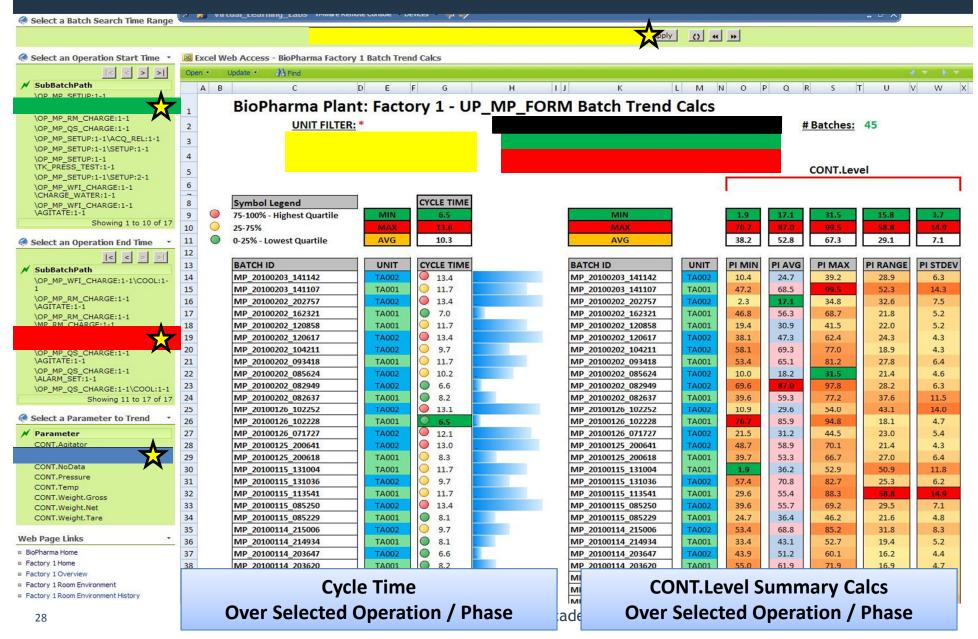
Critical Process Parameters Across Batches





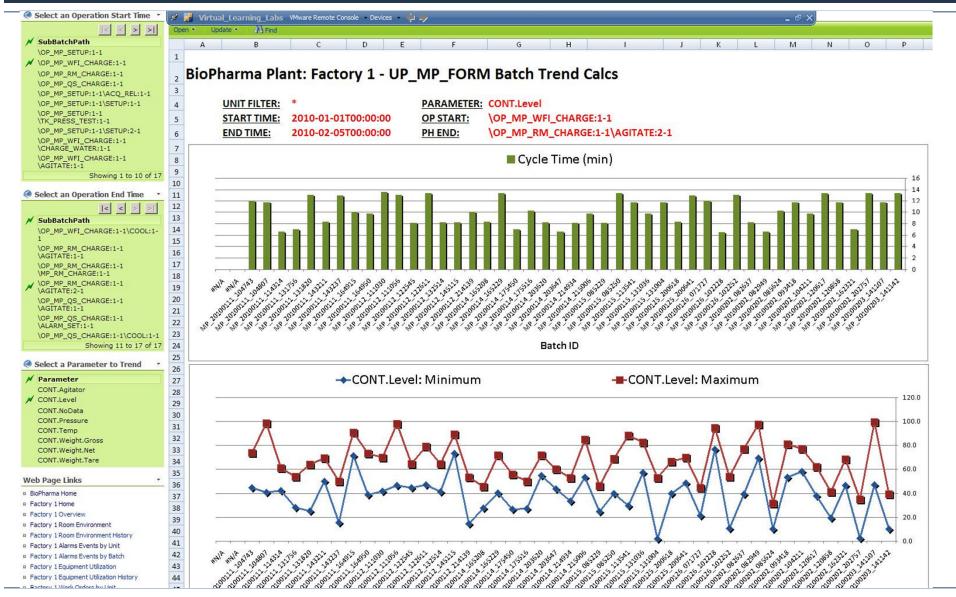
Cross Batch Trend Calculations





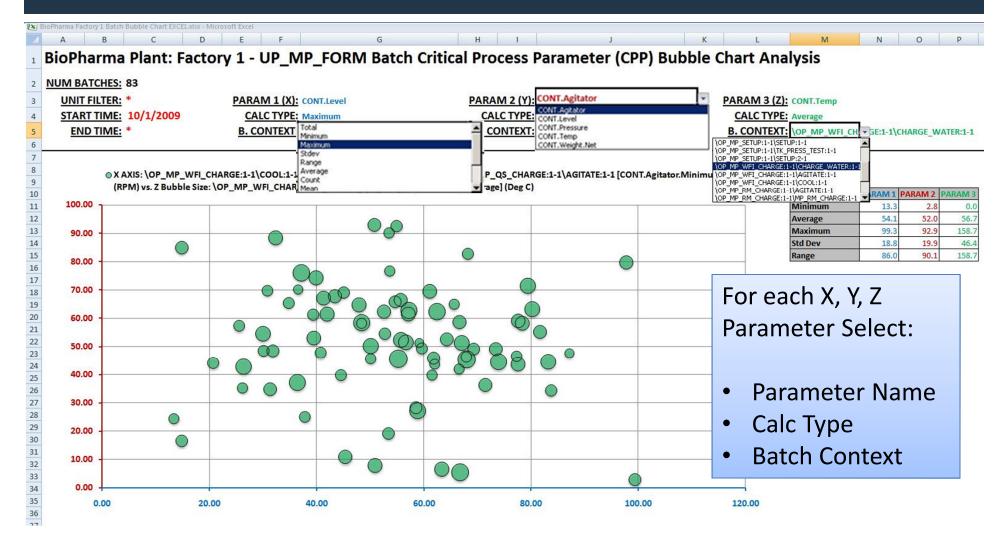
Cross Batch Trend Calculations





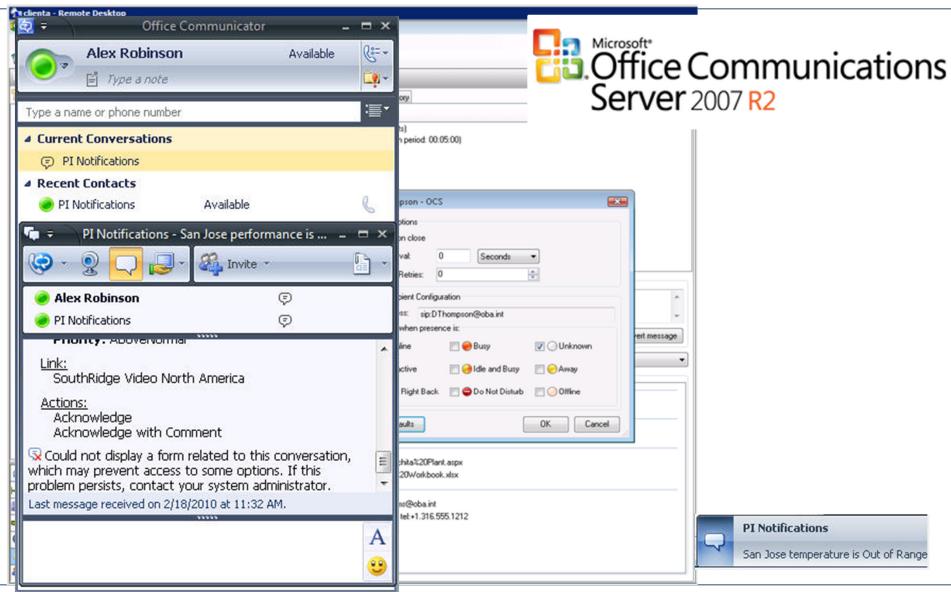
CPP XY Bubble Chart Analysis





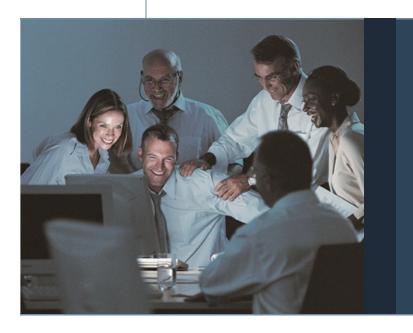


PI Notifications Integration with Microsoft OCS



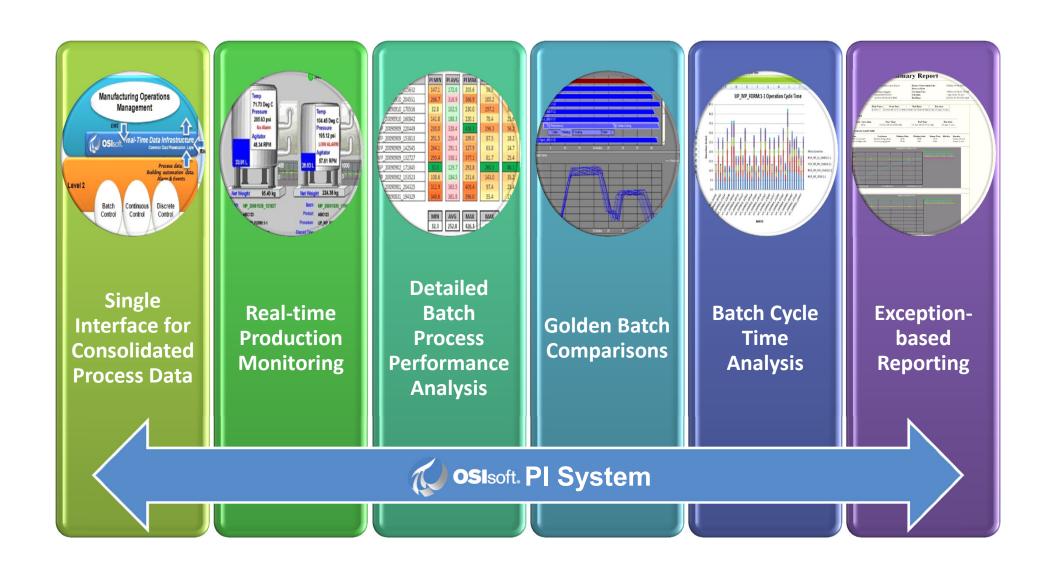


Conclusions



In Summary: Why Store Batch Context in PI?





Conclusions and Key Takeaways



SharePoint & PI WebParts Provides Instant Access to Real-Time and Historical Information



PI DataLink for Excel Services Unlocks Additional Value



Additional OSIsoft & Microsoft Integration Significantly Raises the Bar

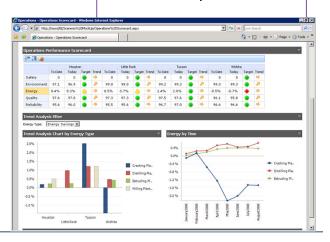
- Increases Enterprise
 Visibility of Assets &
 Plant Floor Data
- Facilitates
 Communication &
 Collaboration
- RIGHT data, RIGHT CONTEXT, in REAL-TIME
- Familiar and Dynamic User Interface Increases User Adoption
- Configuration Based Solution

- Equipment & Batch Based Reports exposed through web browser
- Integrates easily with PI WebParts
- Leverage Excel 2007/2010 Conditional Formatting & Graphics to identify process trends
- Configuration Based Solution
- <u>Excel Services Requires</u>
 <u>Microsoft SharePoint</u>
 <u>2010 Enterprise</u>

- PI Notifications and Office Communications Server
- PowerPivot Integration
- Integration with BI Platform: Analysis Services & PerformancePoint Services
- SharePoint Enterprise Search
- InfoPath Forms Server
- SharePoint Business Connectivity Services









Thank you

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