

OSISOFT ASIA TECHNOLOGY CONFERENCE 2007



Universal Platform, Infinite Possibilities

What's New: ProcessBook, DataLink and RtWebParts

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&
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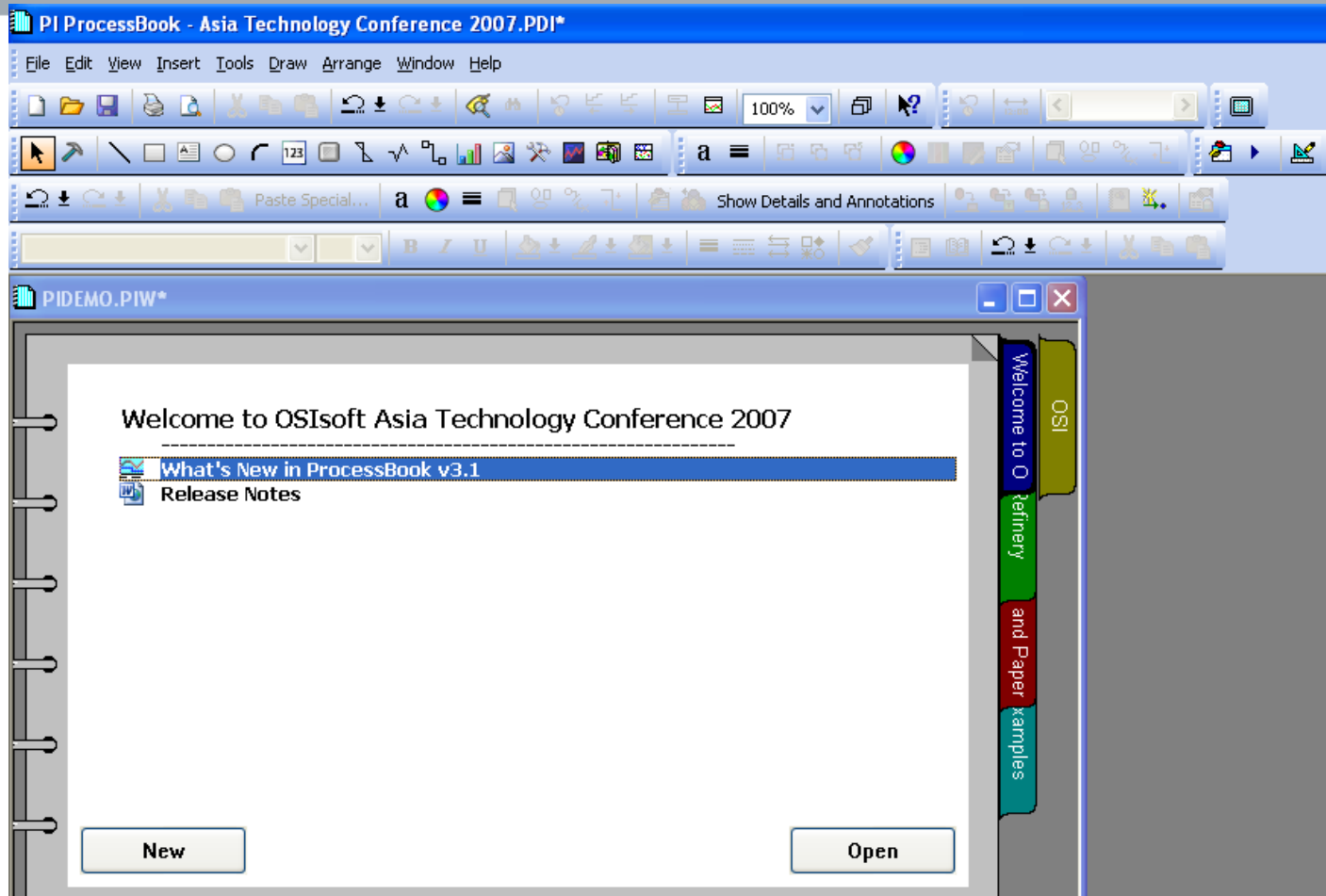
Agenda

- ProcessBook
- DataLink and DLES
- RtWebParts

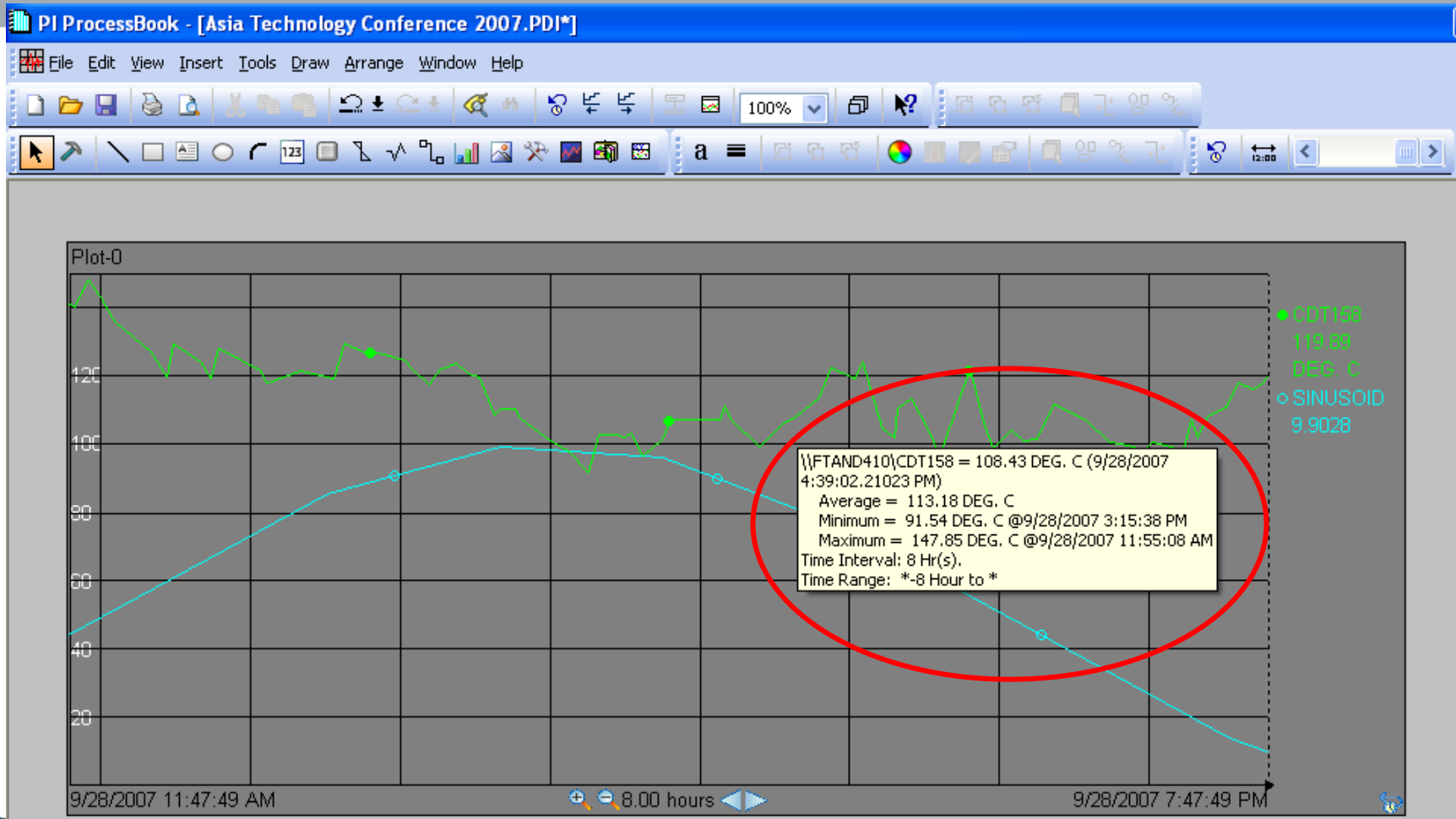
PB 3.0: Richer Experience

- More data and more types of data
 - Sub-second time
- Highlight attributes about data events
 - Questionable, Substituted, Annotated
- XY Plot with data pairing options
- Client time Vs Server time
- Allow user's domain login
- Non-intrusive error reporting

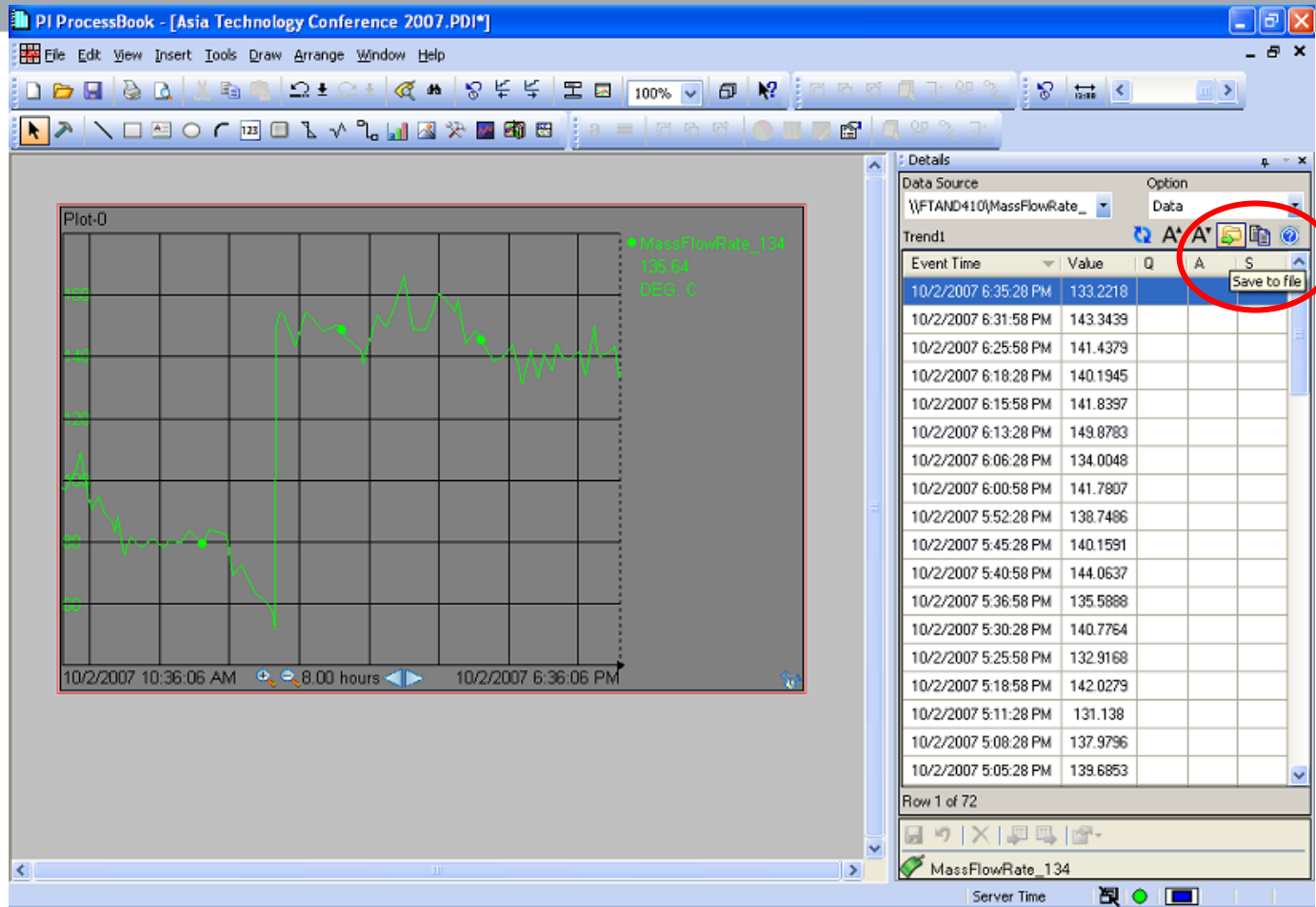
New Look PB 3.1



Tooltips Statistics



Details



Save to file

And the rest

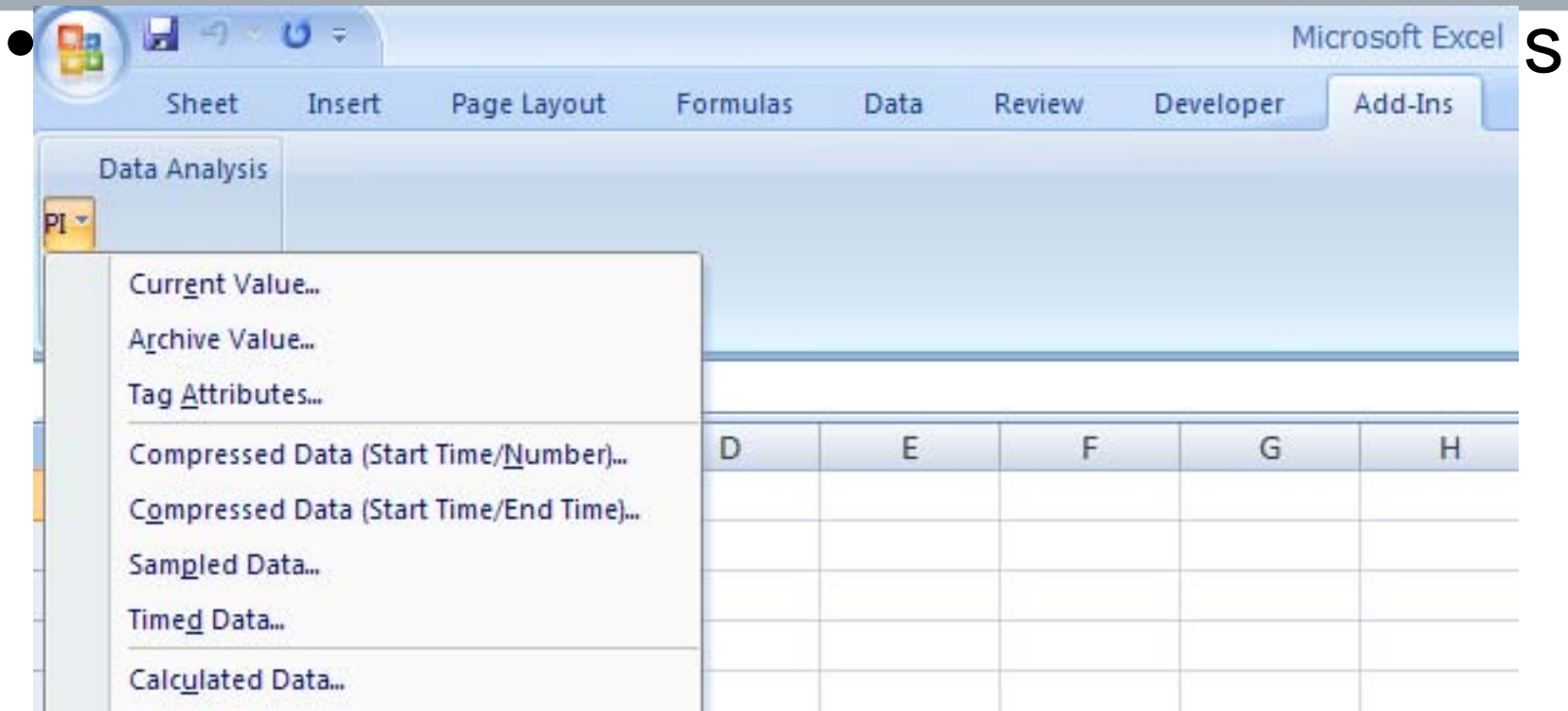
- Hide individual traces on a trend
- New Formatting toolbar and Format painter toolbar
- Improved performance and support for very large displays
- AF modeler installed by default

DataLink

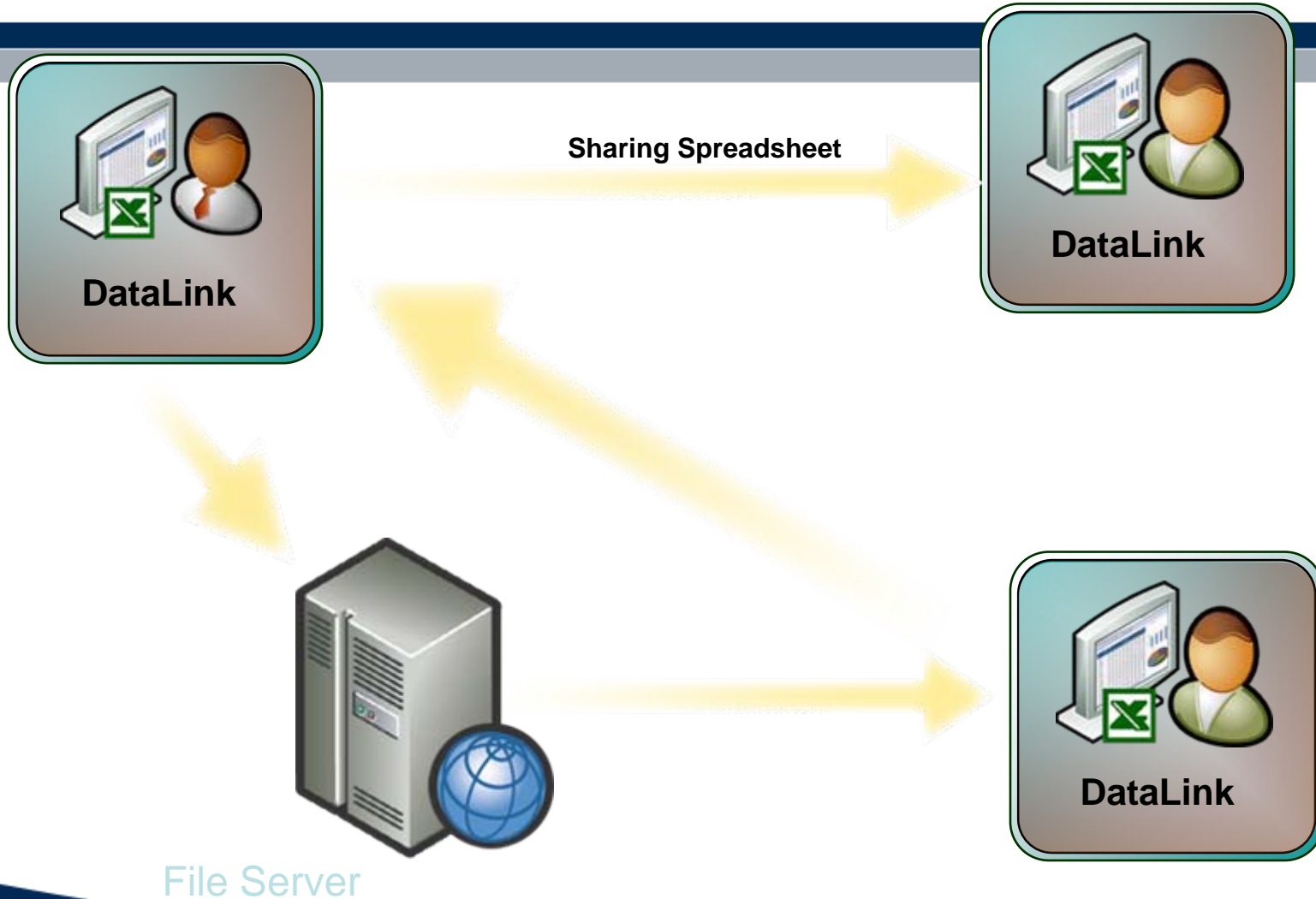
Excel 2007 & MOSS

- Excel 2007
 - Datalink is supported
- Microsoft Office Sharepoint Server (MOSS)
 - Datalink for Excel Service (DLES)

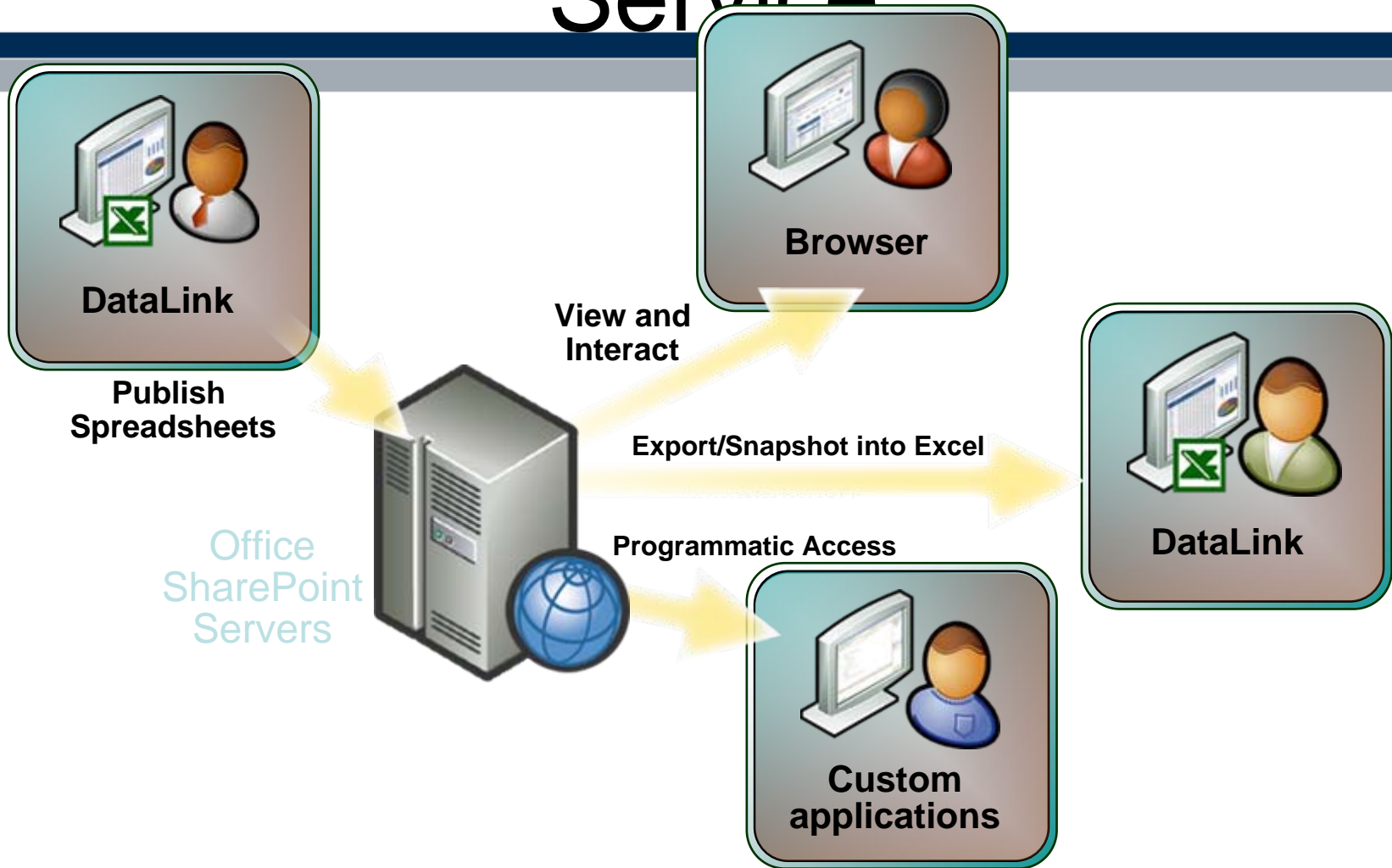
Current Datalink in Excel 2007



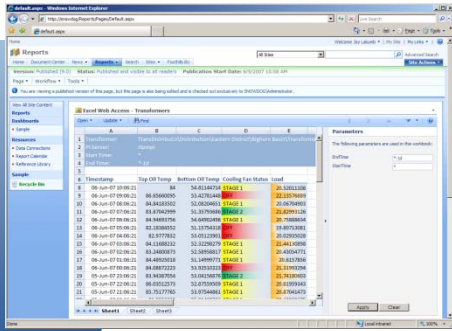
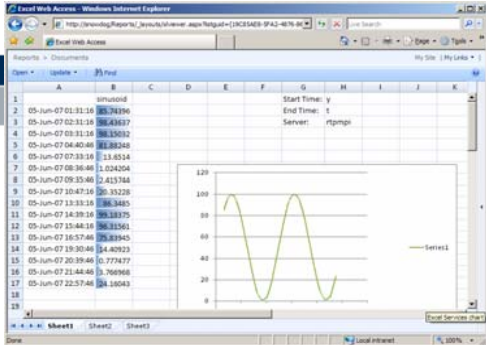
Current Excel usage



With Excel 2007 and Excel Service



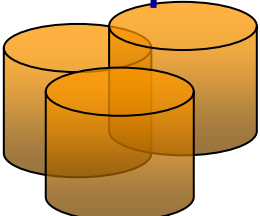
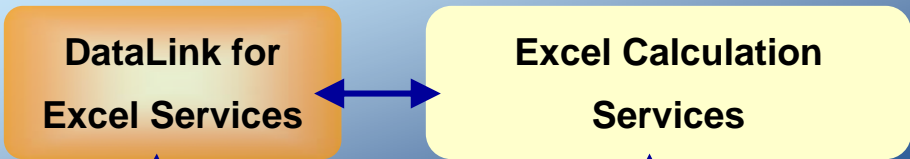
DLES – Architecture



Web Front End



Application Server

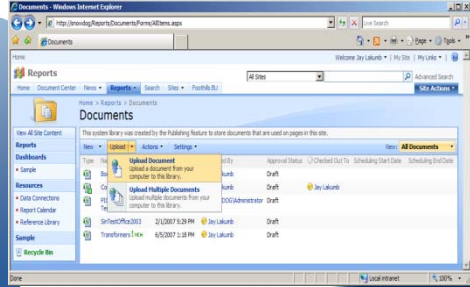


PI Server



SharePoint Content Database

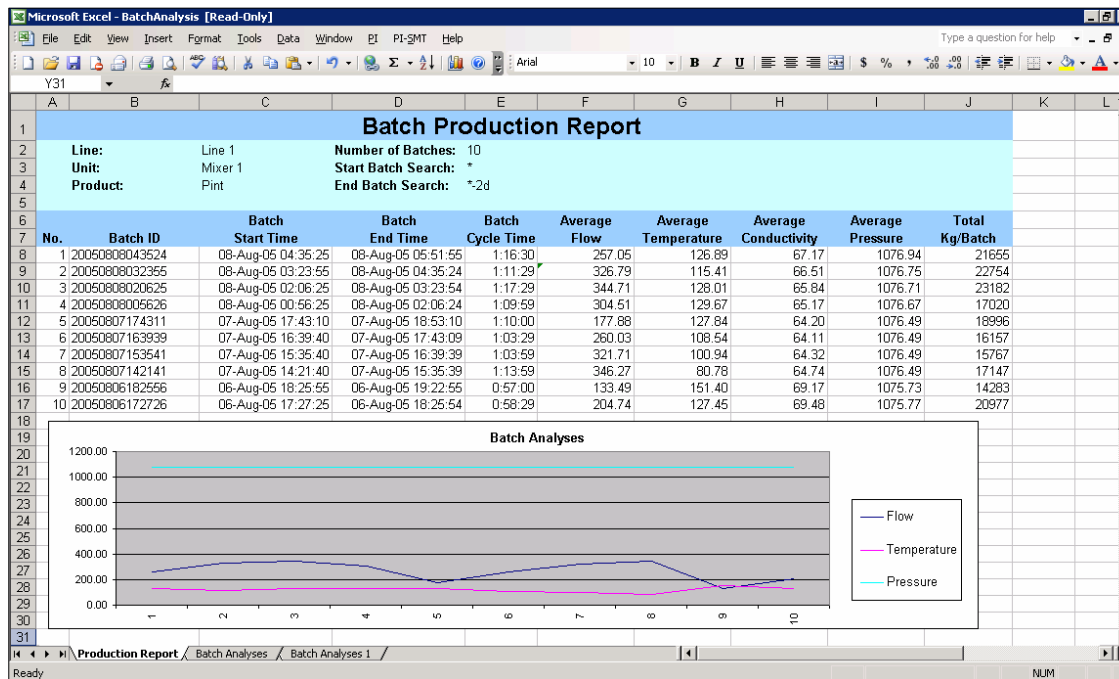
DataLink Spreadsheets



Demo Video

Current feature of DLES

- Support for DataLink functions
- Support for BatchView functions



DLES – System Requirements

- **Server**
 - Windows Server 2003
 - Office SharePoint Server 2007
 - Enterprise edition only
 - SQL Server
 - 2005, Express, or 2000
 - PI Server 3.3 or higher
- **Excel Client**
 - Excel 2007, or
Excel 2003/XP/2000 with free Office 2007 Compatibility Pack
 - DataLink Add-In, or
BatchView Add-In
- **Web Client**
 - Internet Explorer 6 or 7, or
other standard Web browser
 - [Optional] Excel 2007, or
Excel 2003/XP/2000 with free Office 2007 Compatibility Pack

What's Coming

- Current DataLink Function with new experience
- Publish spreadsheet on the website (DLES)
- New data formatting features
- Increased limits
 - More data - 1M rows by 16K cols
- Improved performance
 - Faster, multi-threaded Excel calculation engine

New UI in Excel 2007

- Ribbon makes it easier to find the right function

Book1 - Microsoft Excel

Home Insert Page Layout Formulas Data Review View Add-Ins PI

Current Value Single Value Functions Archive Value Tag Attributes Multiple Value Functions Compressed Data (Start Time/Number) Compressed Data (Start Time/End Time) Sampled Data Timed Data Calculation Functions Calculated Data Advanced Calculated Data Time Filtered Utility Functions Point ID to Tag Attribute Mask to Tag Alias Property

Developer PI

Calculated Data Advanced Calculated Data Time Filtered Point ID to Tag

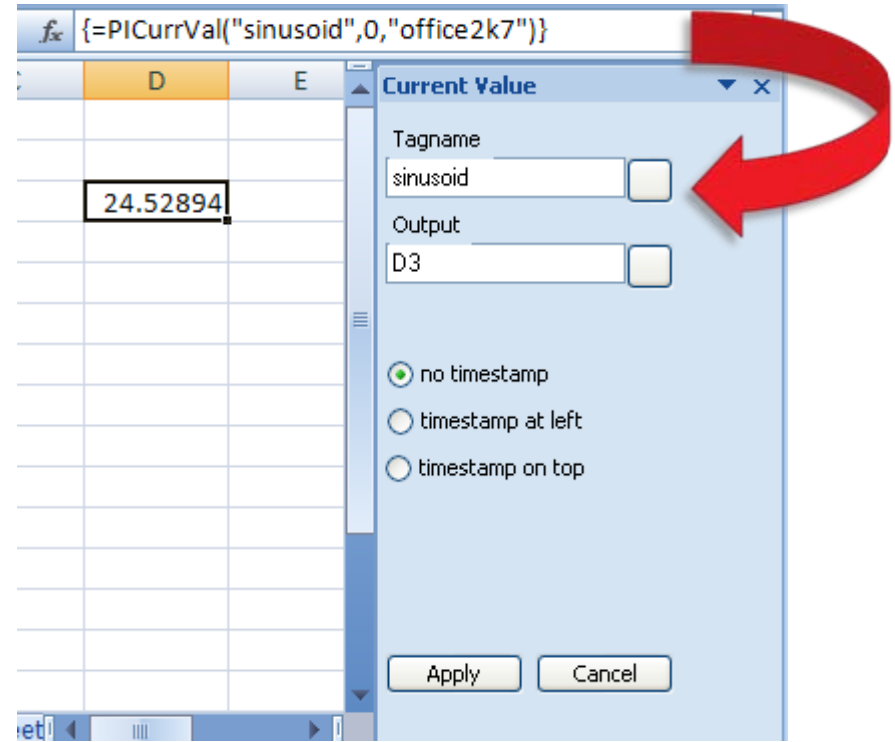
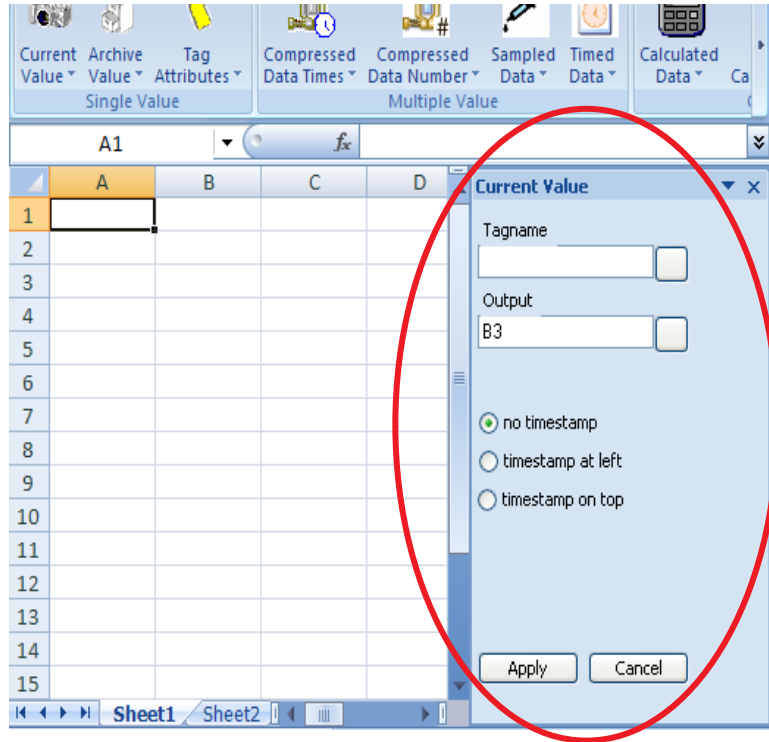
Calculated Data

Get time-weighted total, average, minimum, maximum, stdev, or range over a specified time period.

Calculated Hourly Data for Yesterday
Calculated Daily Data for Last Week
Calculated Daily Data for Last Month

New UI in Excel 2007

- Task pane makes it easier to modify a function



Formatting Features in Excel 2007

- Reports and tables are visually pleasing and provide instant feedback to find relevant data

| 6 | Timestamp | Top Oil Temp | Bottom Oil Temp | Cooling Fan Status | Load | |
|----|--------------------|--------------|-----------------|--------------------|---------|-------------|
| 8 | 06-Jun-07 10:56:17 | 82.06562805 | ↓ | 52.39182663 | STAGE 1 | 20.23855972 |
| 9 | 06-Jun-07 09:56:17 | 82.3996582 | → | 53.36613464 | STAGE 1 | 21.20740128 |
| 10 | 06-Jun-07 08:56:17 | 84.5425415 | → | 53.63465118 | STAGE 2 | 20.74373055 |
| 11 | 06-Jun-07 07:56:17 | 82.96215057 | → | 53.04167938 | STAGE 1 | 20.51634407 |
| 12 | 06-Jun-07 06:56:17 | 84.37345886 | → | 53.7178154 | STAGE 1 | 20.11353683 |
| 13 | 06-Jun-07 05:56:17 | 86.36122131 | → | 52.98049164 | OFF | 20.6163578 |
| 14 | 06-Jun-07 04:56:17 | 85.26107788 | → | 52.96185684 | OFF | 19.67745018 |
| 15 | 06-Jun-07 03:56:17 | 83.11886597 | ↑ | 54.72557449 | STAGE 1 | 19.84714508 |
| 16 | 06-Jun-07 02:56:17 | 81.49597168 | ↓ | 52.21590424 | STAGE 1 | 19.99525833 |
| 17 | 06-Jun-07 01:56:17 | 82.89220428 | ↑ | 54.4969635 | OFF | 20.74225426 |

New Feature

- Support for PI Notifications

The screenshot displays a Microsoft Excel spreadsheet with a custom 'PI' ribbon. The formula bar shows a complex function: `=PINotificationSearch(0, "LITWAREDEMO", "Normal", "L", "DU,SA,PR,AK,AC,CN,CM,AE", 23)`. The spreadsheet contains a table with the following data:

| Duration | State | Priority | Acknowledged | Action | Contact | Contact Method | Acknowledge |
|-----------|----------------|----------|--------------|--------|----------------------|----------------|-----------------------------|
| 00:00:05 | OutsideControl | Normal | No | Sent | Administrator_Email1 | Email | |
| 00:02:30 | OutsideControl | Normal | No | Sent | Jay Lakumb | Email | Acknowledge |
| 00:02:42 | OutsideControl | | | Sent | Administrator_Email1 | Email | |
| 162:01:25 | OutsideControl | | | Sent | Jay Lakumb | Email | |

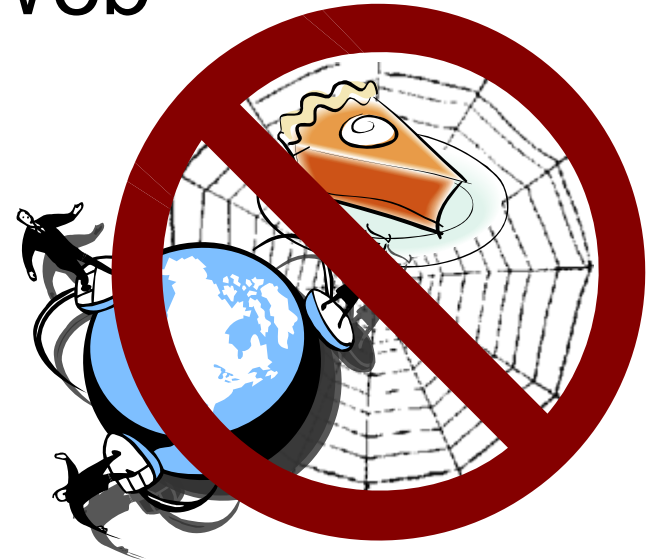
A 'Notification Search' dialog box is open, showing search criteria for the 'LITWAREDEMO' system. The 'View Notifications' dropdown is set to 'Timerange'. The dialog includes a table of search results:

| Start Time | End Time | Duration | State | Priority | Acknowledged | Action |
|----------------|-------------------------|----------|----------------|----------|--------------|--------|
| 7/31/2007 6:40 | Active | Active | OutsideControl | Normal | No | Sen |
| 7/31/2007 6:40 | 7/31/2007 6:41:00:01:20 | | OutsideControl | Low | No | Sen |
| 7/31/2007 6:17 | 7/31/2007 6:20:00:02:30 | | OutsideControl | Normal | No | Sen |
| 7/31/2007 6:1 | | | OutsideControl | Normal | No | Sen |
| 7/31/2007 6:06 | 7/31/2007 6:09:00:02:42 | | OutsideControl | Normal | No | Sen |

RtWebParts

What is RtWebParts?

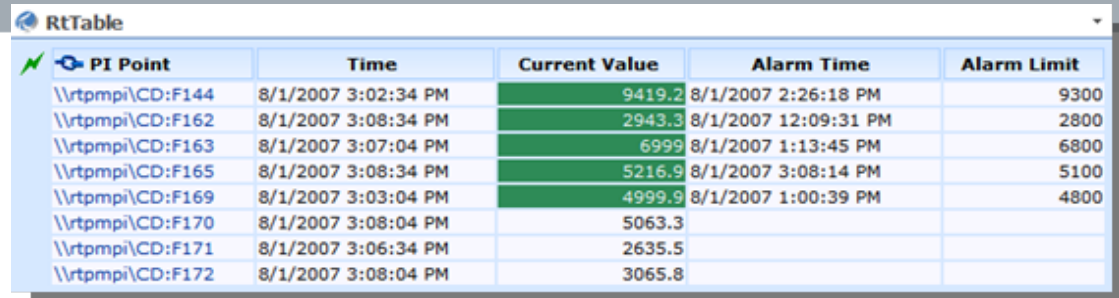
- RtWebParts – PI on the Web



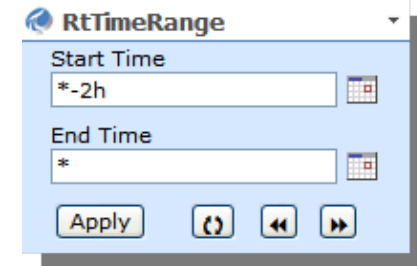
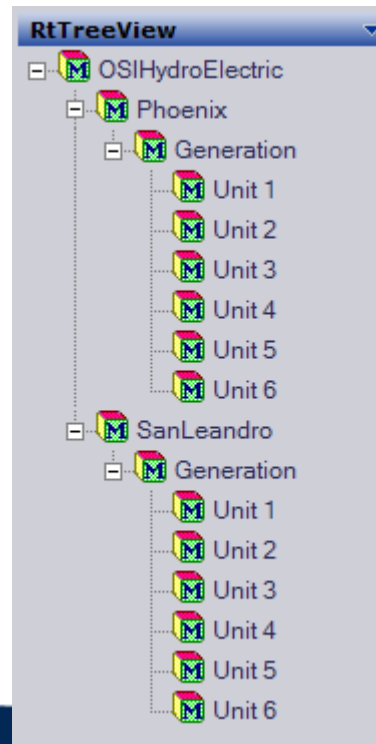
- Relies on the Microsoft SharePoint Portal Platform
- Gets Data from RtBaseline Services

Looking at RtWebParts

- RtTimeRange
- RtTreeView
- RtTable
- RtTrend
- RtGauge
- RtXYPlot
- RtValues etc



| PI Point | Time | Current Value | Alarm Time | Alarm Limit |
|-----------------|---------------------|---------------|----------------------|-------------|
| \\rtpmi\CD:F144 | 8/1/2007 3:02:34 PM | 9419.2 | 8/1/2007 2:26:18 PM | 9300 |
| \\rtpmi\CD:F162 | 8/1/2007 3:08:34 PM | 2943.3 | 8/1/2007 12:09:31 PM | 2800 |
| \\rtpmi\CD:F163 | 8/1/2007 3:07:04 PM | 6999 | 8/1/2007 1:13:45 PM | 6800 |
| \\rtpmi\CD:F165 | 8/1/2007 3:08:34 PM | 5216.9 | 8/1/2007 3:08:14 PM | 5100 |
| \\rtpmi\CD:F169 | 8/1/2007 3:03:04 PM | 4999.9 | 8/1/2007 1:00:39 PM | 4800 |
| \\rtpmi\CD:F170 | 8/1/2007 3:08:04 PM | 5063.3 | | |
| \\rtpmi\CD:F171 | 8/1/2007 3:06:34 PM | 2635.5 | | |
| \\rtpmi\CD:F172 | 8/1/2007 3:08:04 PM | 3065.8 | | |



RtTimeRange

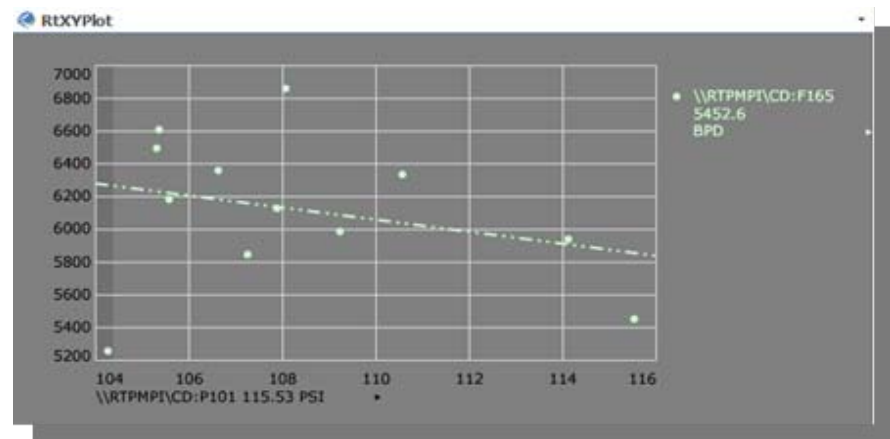
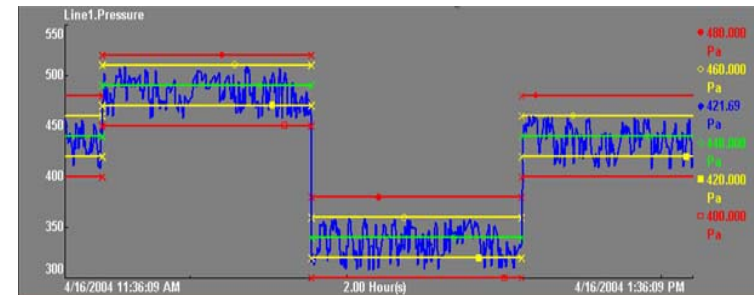
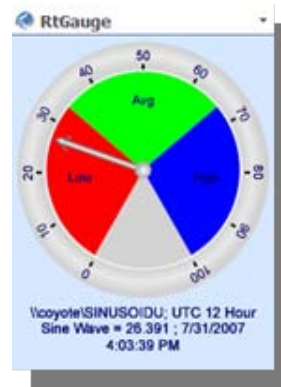
Start Time
*-2h

End Time
*

Apply [Refresh] [Previous] [Next]

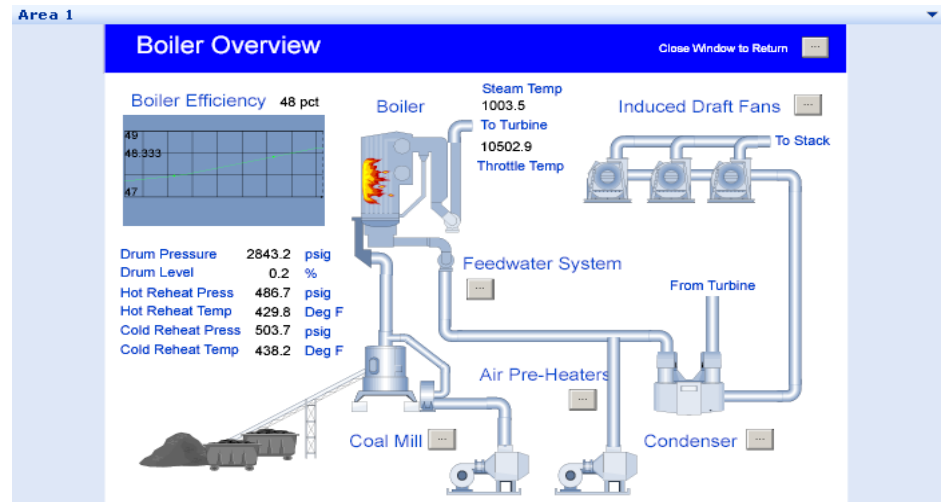
Looking at RtWebParts

- RtTimeRange
- RtTreeView
- RtTable
- RtTrend
- RtGauge
- RtXYPlot
- RtValues etc



Leveraging ProcessBook

- RtGraphic
 - SVG-Based
 - Lightweight
- RtActiveView
 - Supports PDIs
 - Requires ActiveView License & Installation



What's new (in RtWebParts v1.2)?

- Released January 10, 2007
 - **High Availability**
 - Expensive Query Handling
 - Complex Web Service Support
 - RtGraphic Support for Multistate Symbols
 - Japanese Language Pack

What's new (in RtWebParts v2.0)?

- Released June 21, 2007
- MOSS!
 - Workflow
 - Content Management
 - Excel Web Access Web Part
- New Ad hoc Trend
(URL-Configurable)

What's next?

- RtWebParts v2.1
 - Contextual Web Part for Batch Searching
 - Tabular Web Part Enhancements
- RtWebParts v2.2
 - AF 2.0
 - PI Notifications
 - Language Packs

Requirements

- Microsoft Windows 2003 Server SP1 or greater.
- Microsoft Internet Information Server (IIS) 6.0 with Windows Script Host (WSH) enabled.
- Microsoft .NET framework 3.0 and ASP.NET 2.0 enabled
- Windows SharePoint Services 3.0 or Microsoft Office SharePoint Portal Server 2007
- SQL Server 2000 or MSDE
- Access to PI server 3.3x

The End