



ProcessBook, DataLink & RtWebParts: 新功能

李捍永 & Felicia Tan,
技术工程师

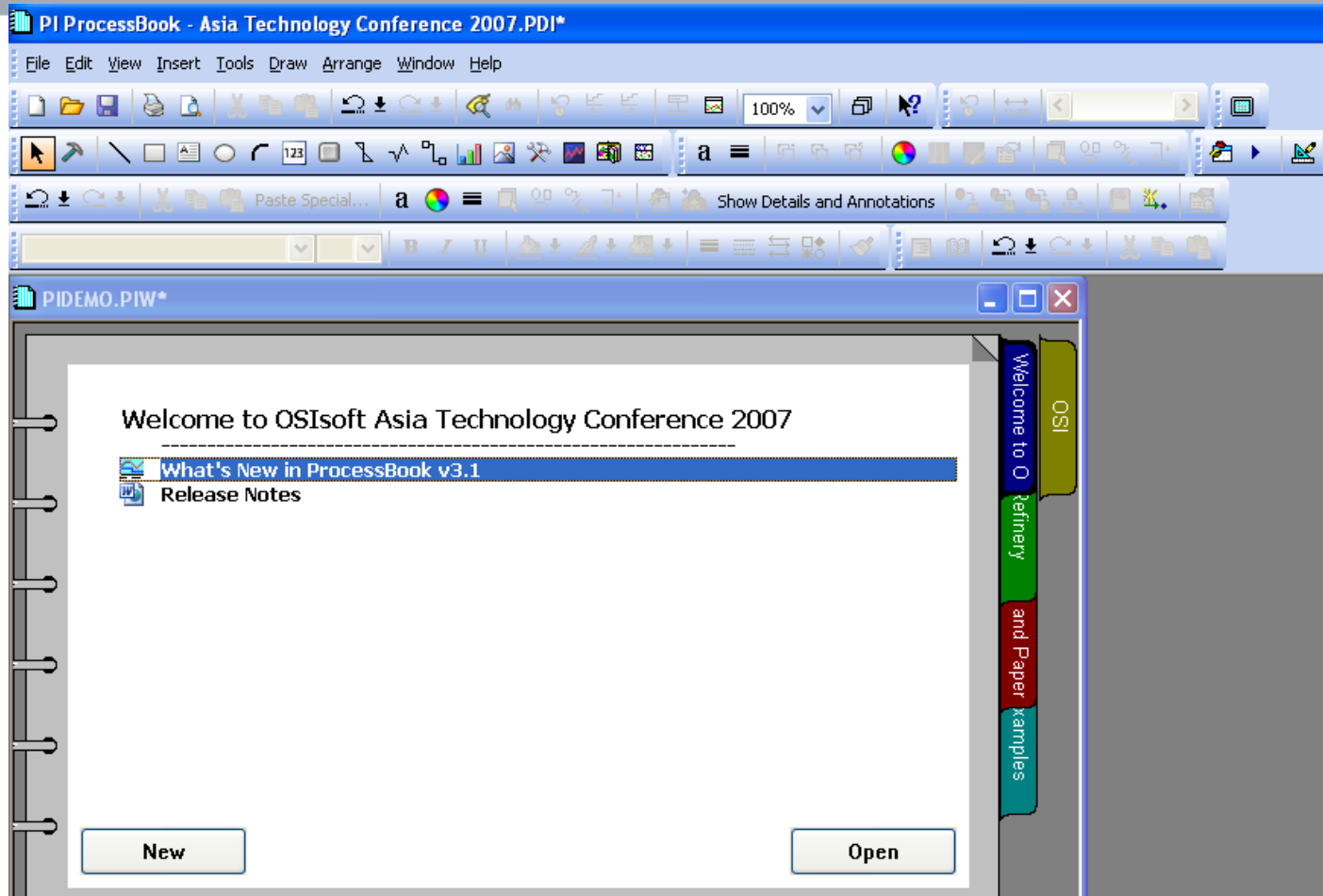
Agenda

- ProcessBook
- DataLink and DLES
- RtWebParts

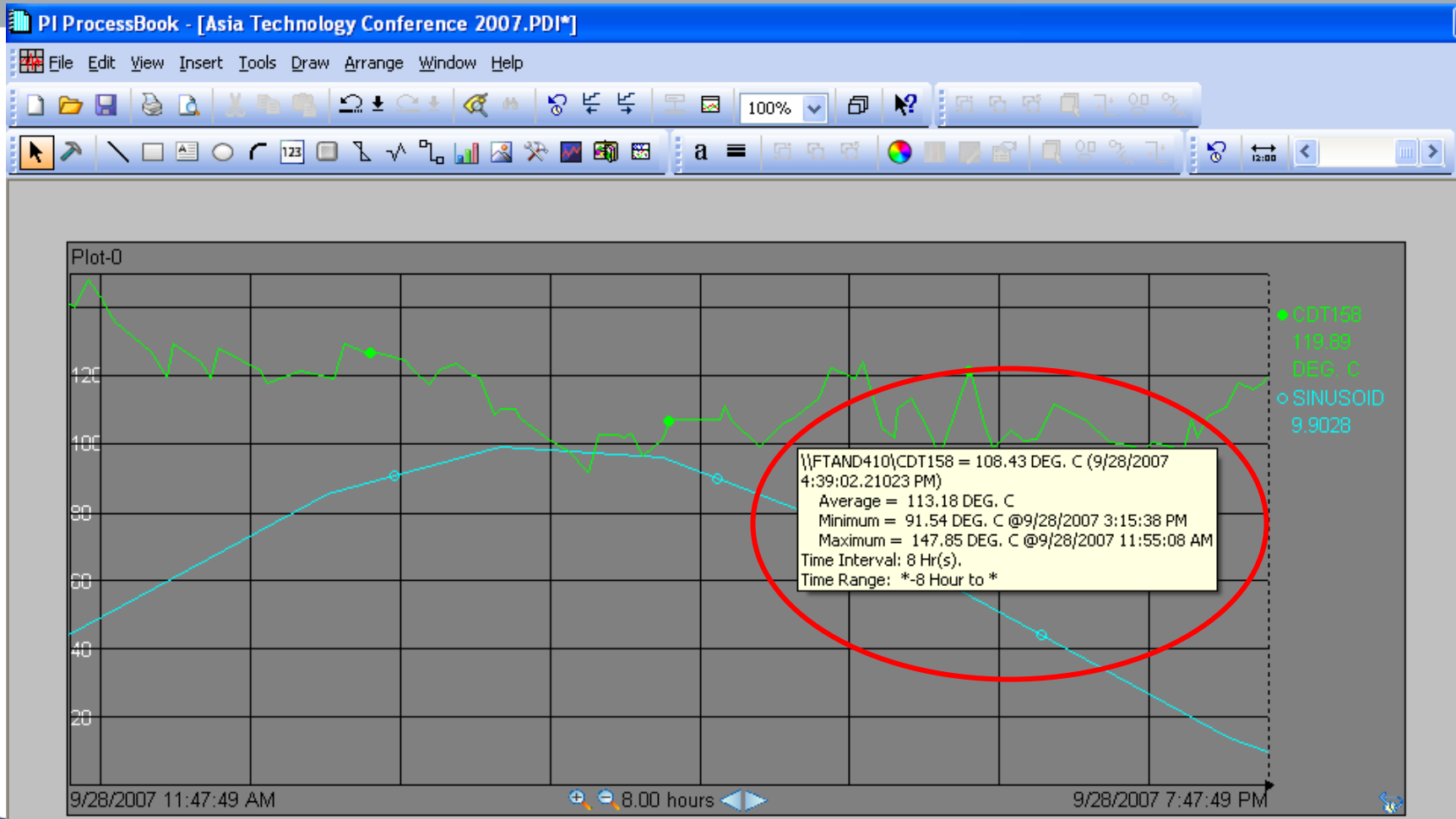
PB 3.0: Richer Experience

- 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

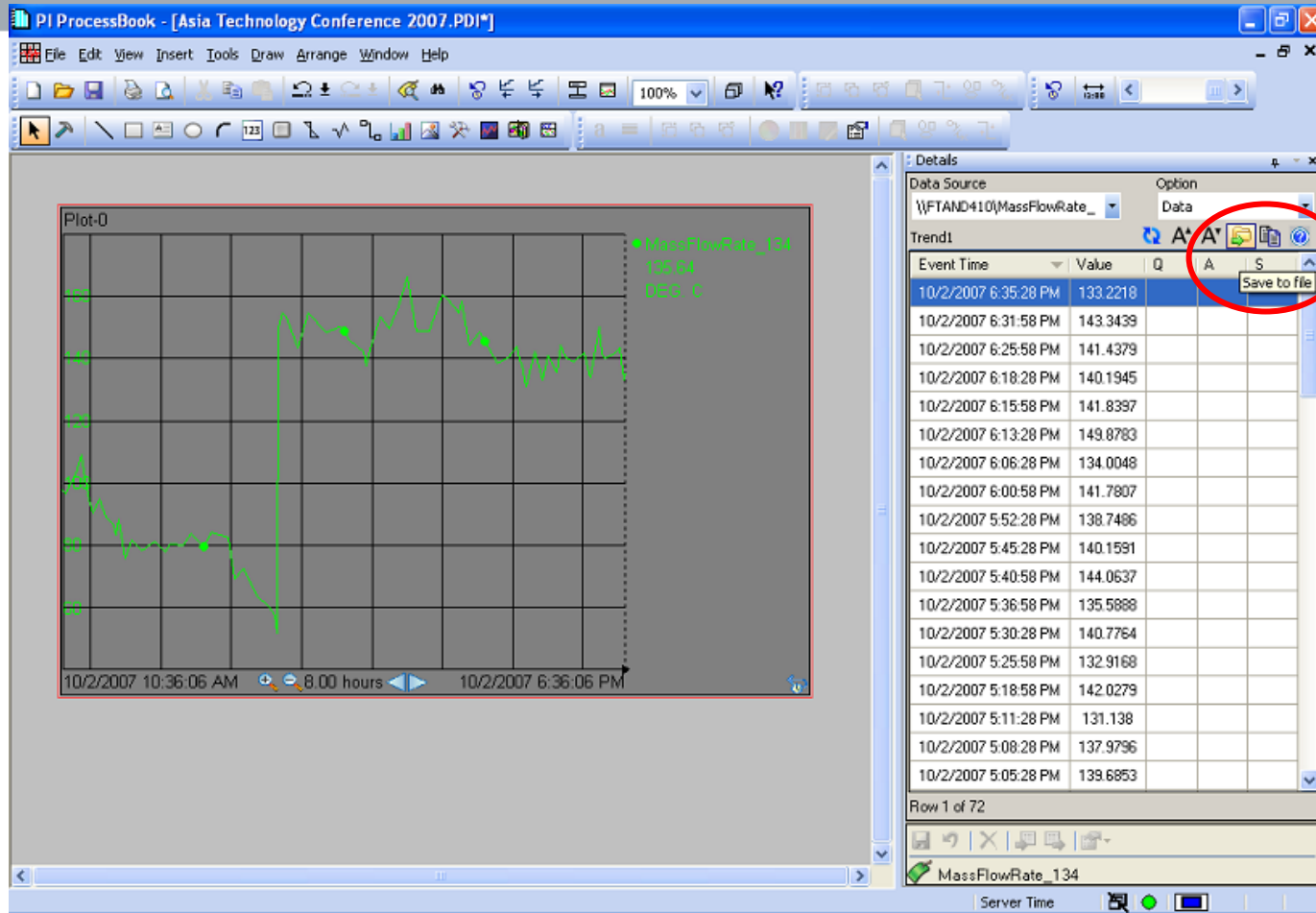
New Look PB 3.1



Tooltips Statistics



Details



Save to file

And the rest

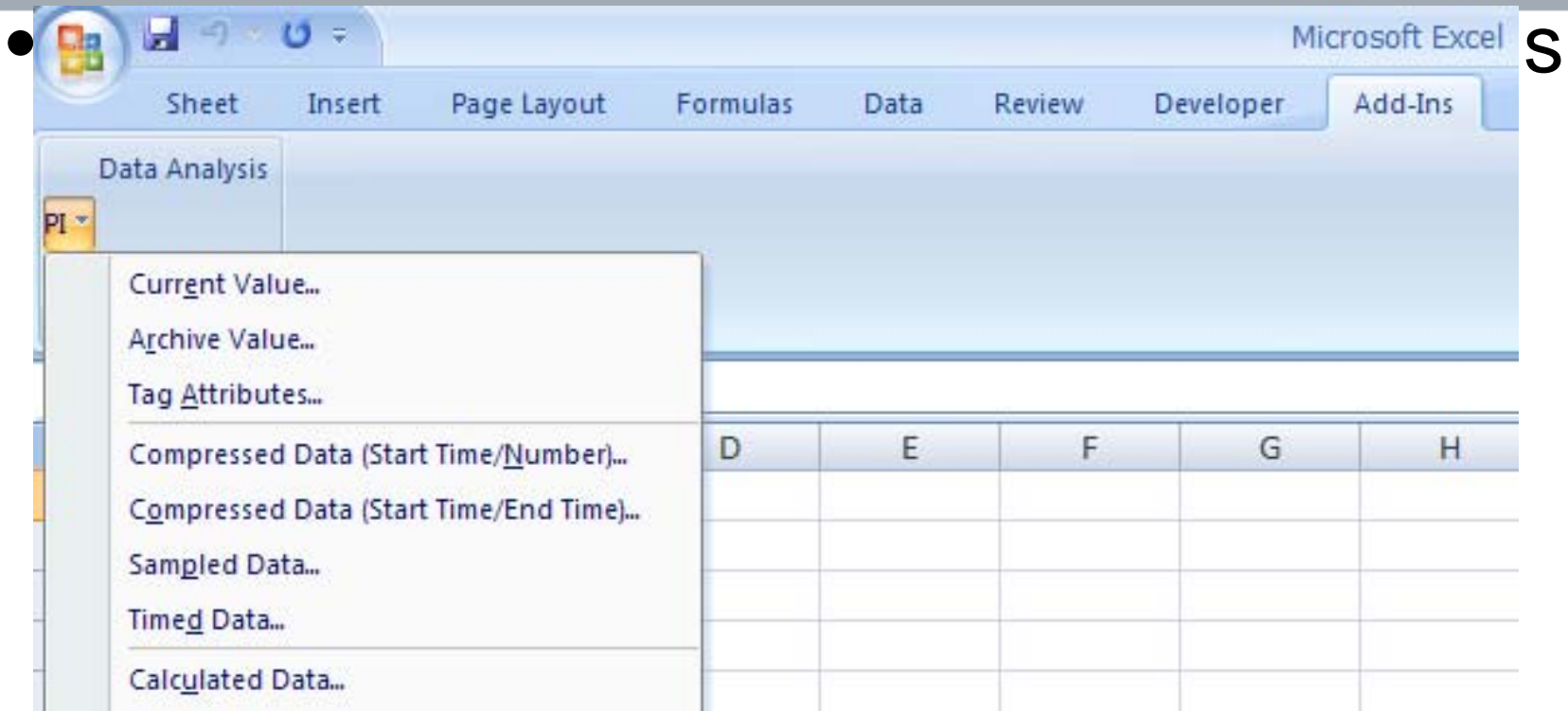
- Hide individual traces on a trend
- New Formatting toolbar and Format painter toolbar
- Improved performance and support for very large displays
- AF modeler installed by default

DataLink

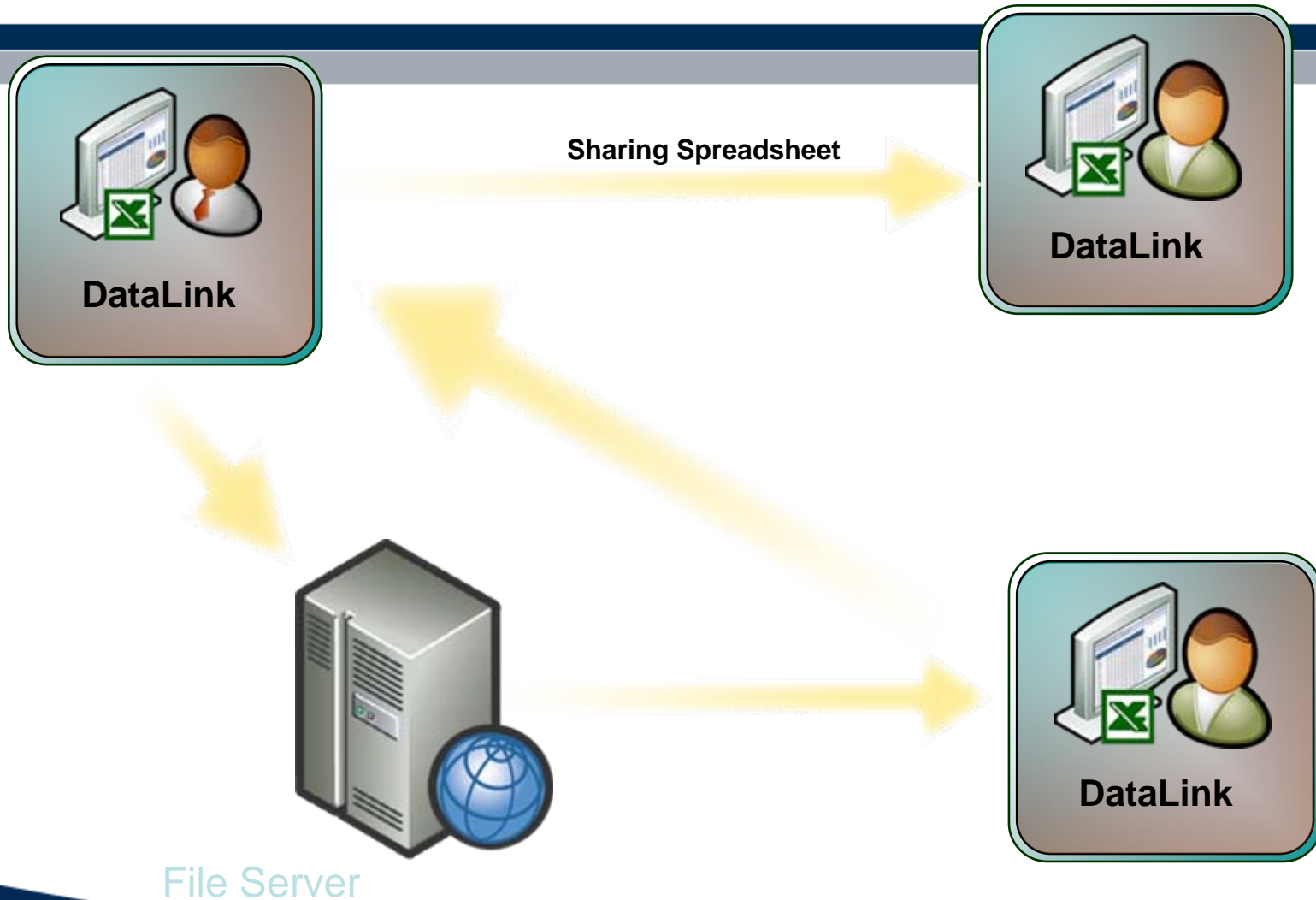
Excel 2007 & MOSS

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

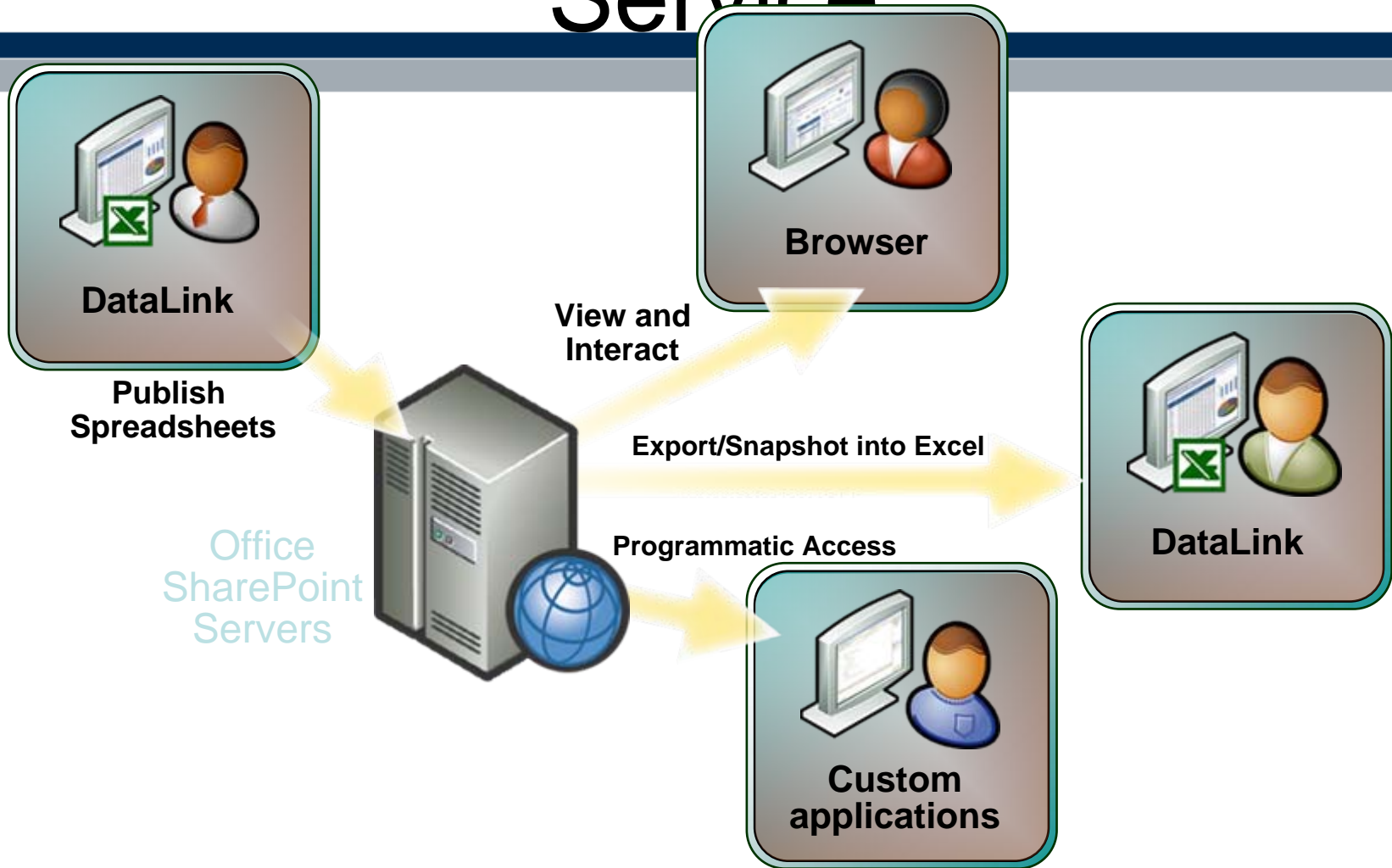
Current Datalink in Excel 2007



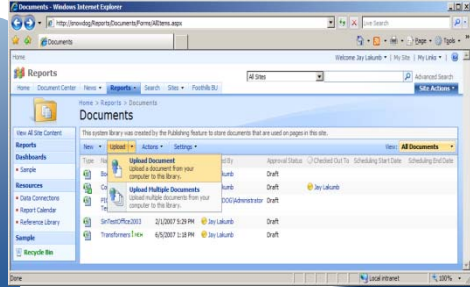
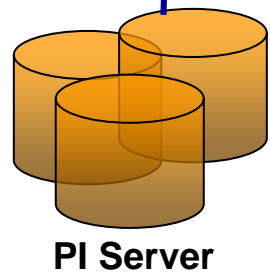
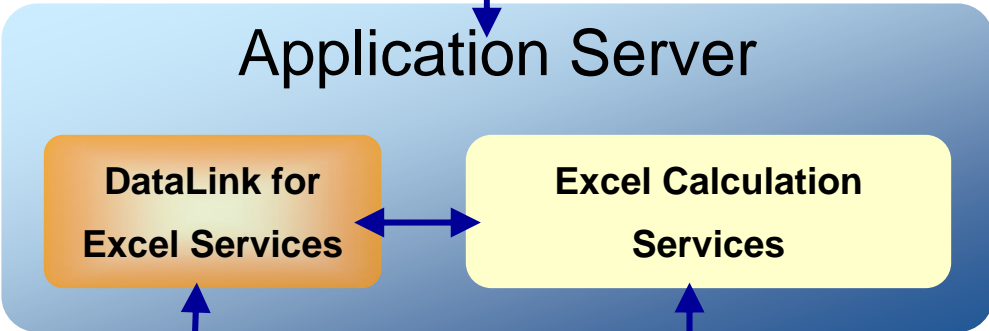
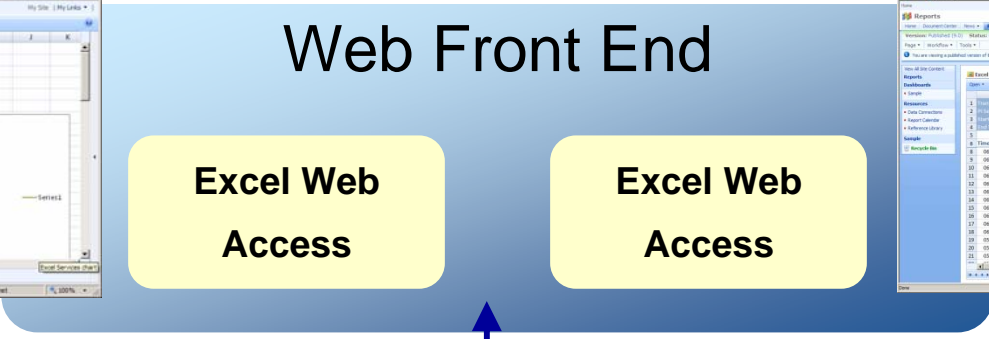
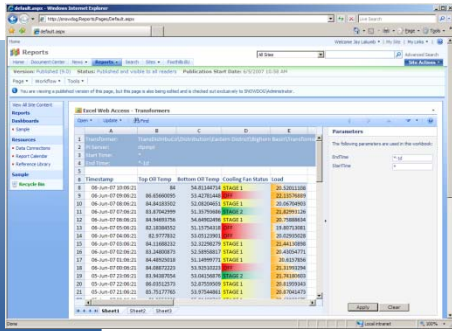
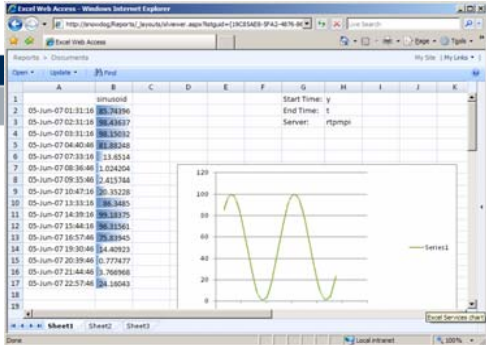
Current Excel usage



With Excel 2007 and Excel Service



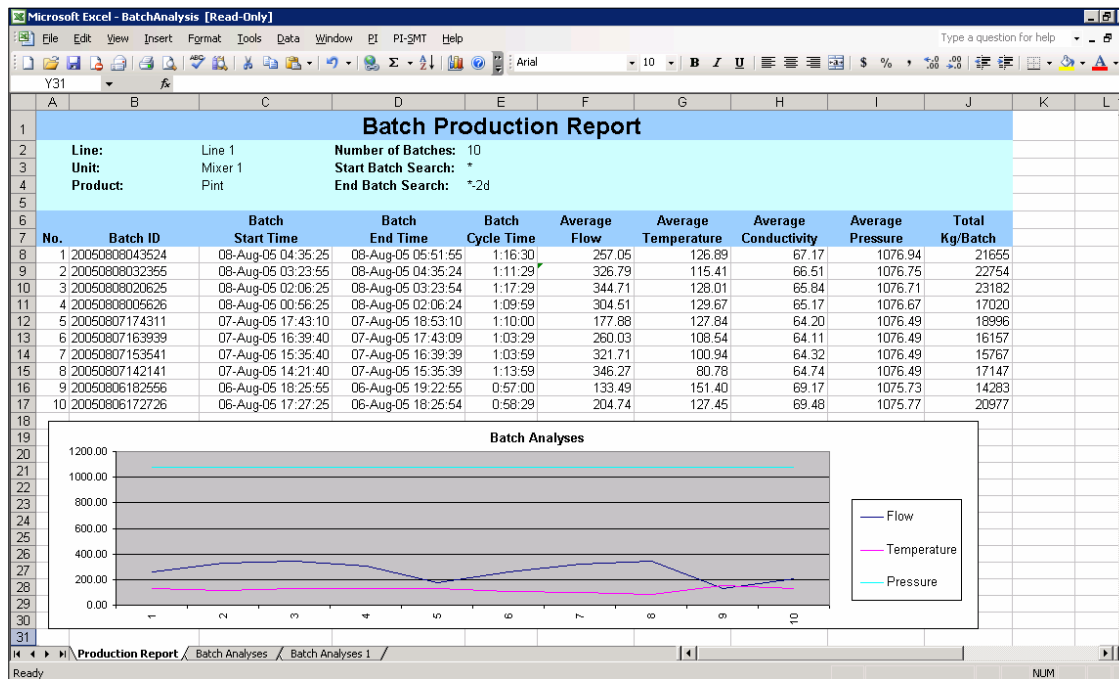
DLES – Architecture



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 (MOSS)
 - 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

The screenshot displays the Microsoft Excel 2007 ribbon interface for the 'PI' (Point In Time) tab. The ribbon is organized into four main sections:

- Single Value Functions:** Includes icons for Current Value, Archive Value, and Tag Attributes.
- Multiple Value Functions:** Includes icons for Compressed Data (Start Time/Number), Compressed Data (Start Time/End Time), Sampled Data, and Timed Data.
- Calculation Functions:** Includes icons for Calculated Data, Advanced Calculated Data, and Time Filtered.
- Utility Functions:** Includes icons for Point ID to Tag, Attribute Mask to Tag, Alias, and Property.

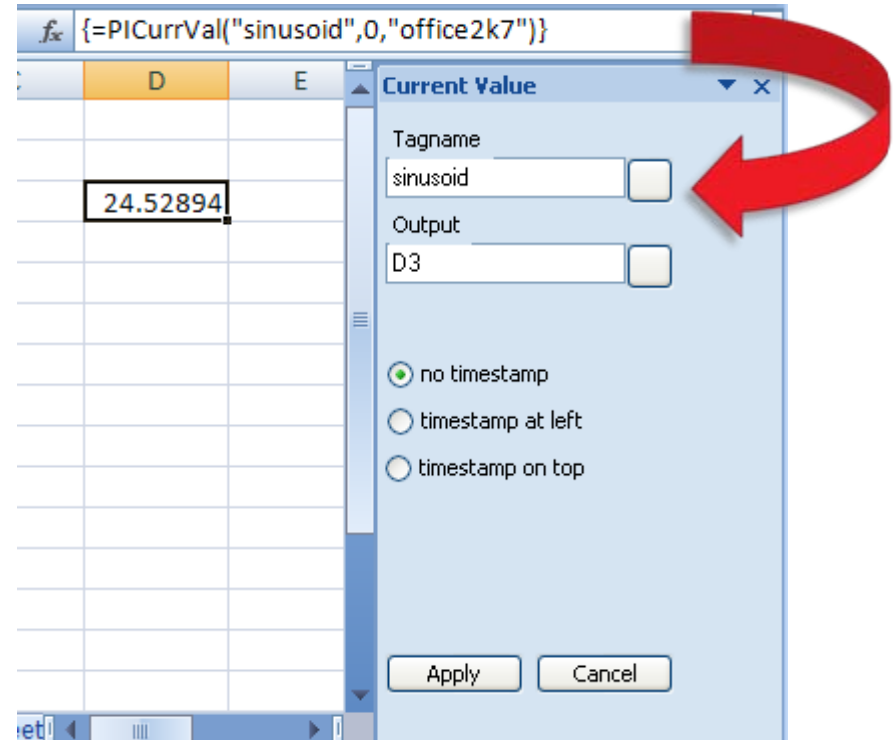
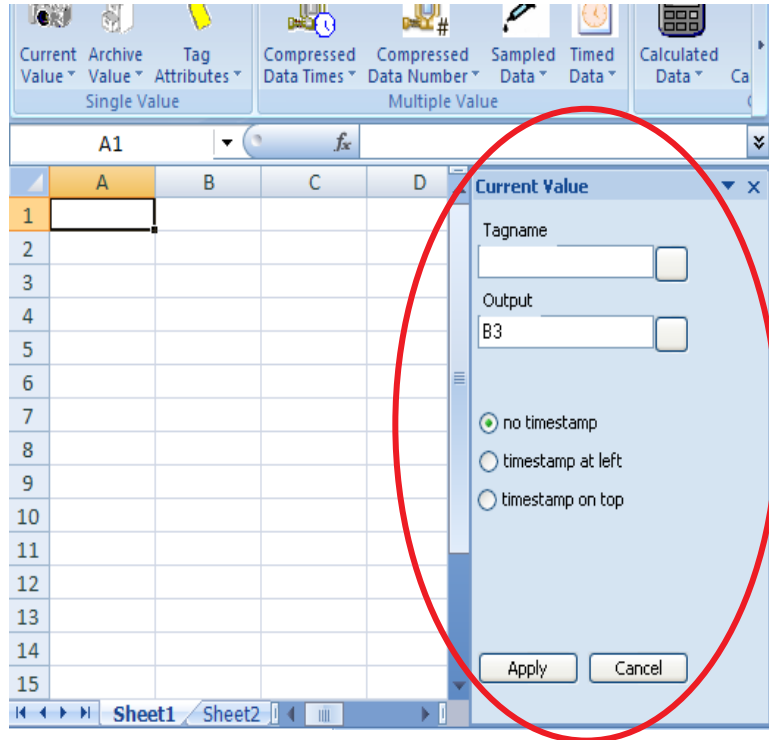
The 'Developer' tab is also visible, showing a 'PI' sub-tab with a 'Calculations' group containing 'Calculated Data', 'Advanced Calculated Data', 'Time Filtered', and 'Point ID to Tag'. A red circle highlights the 'Calculated Data' dropdown menu, which is expanded to show the following options:

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

The text 'Get time-weighted total, average, minimum, maximum, stdev, or range over a specified time period.' is circled in red in the original image.

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 active cell contains a formula: `=PINotificationSearch(0, "LITWAREDEMO", "Normal", "L", "DU,SA,PR,AK,AC,CN,CM,AE", 23)`. The spreadsheet data is as follows:

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	

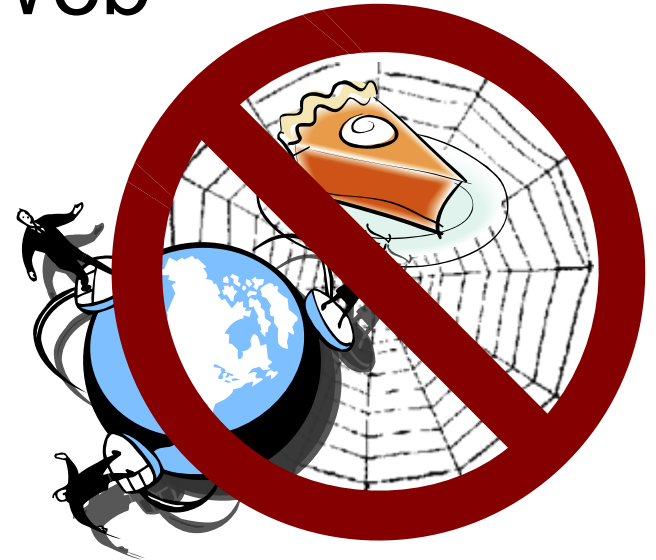
A 'Notification Search' dialog box is open, showing search criteria for the 'LITWAREDEMO' system. The search results table is:

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 6:06	7/31/2007 6:09	00:02:42	OutsideControl	Normal	No	Sen

RtWebParts

What is RtWebParts?

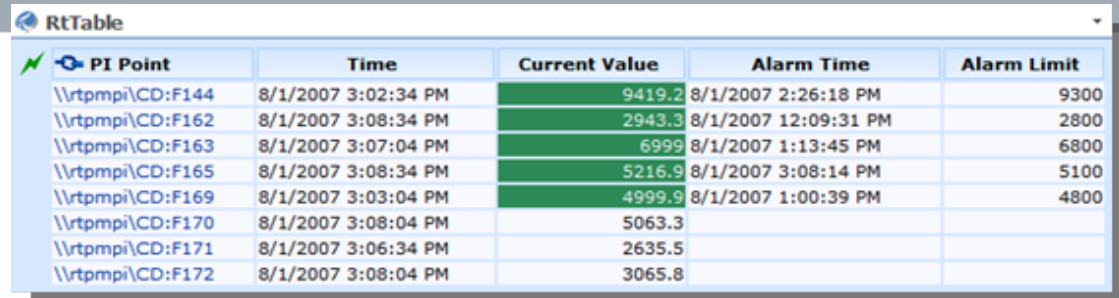
- RtWebParts – PI on the Web



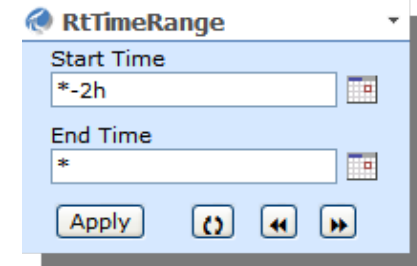
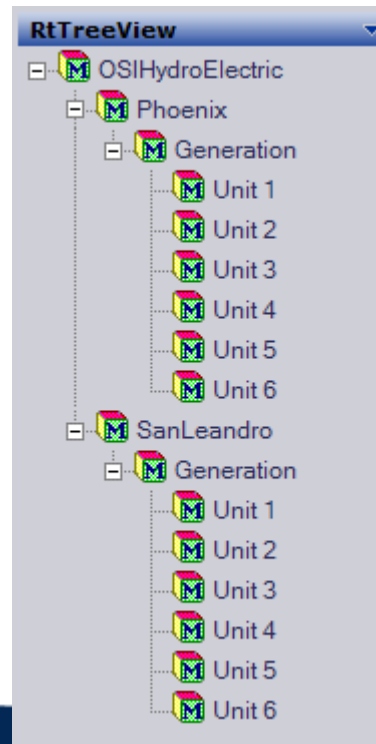
- Relies on the Microsoft SharePoint Portal Platform
- Gets Data from RtBaseline Services

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

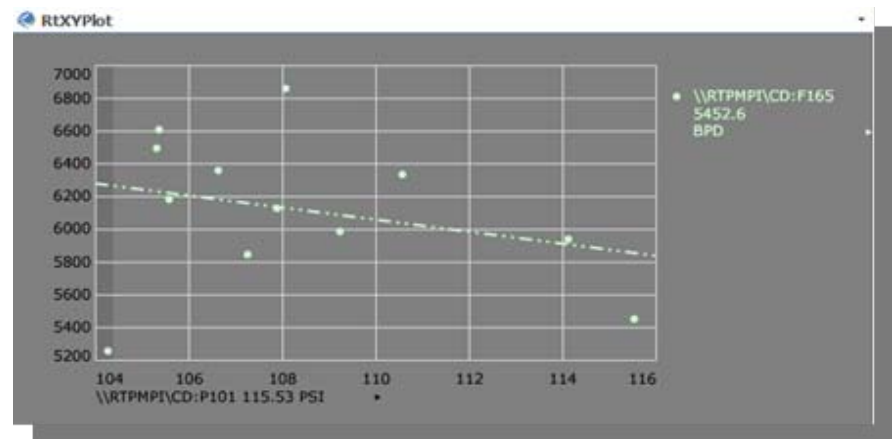
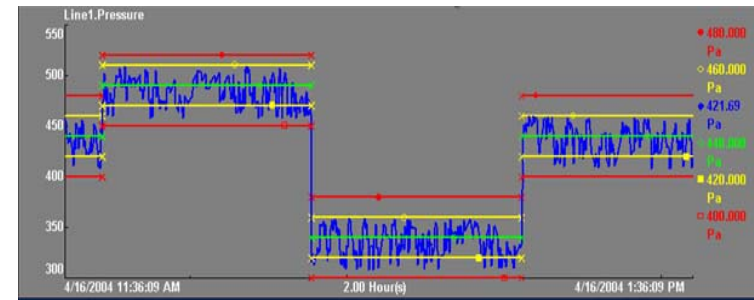
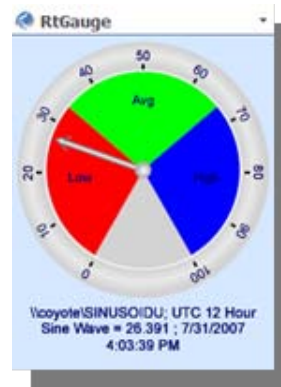
Start Time
*-2h

End Time
*

Apply [Refresh] [Previous] [Next]

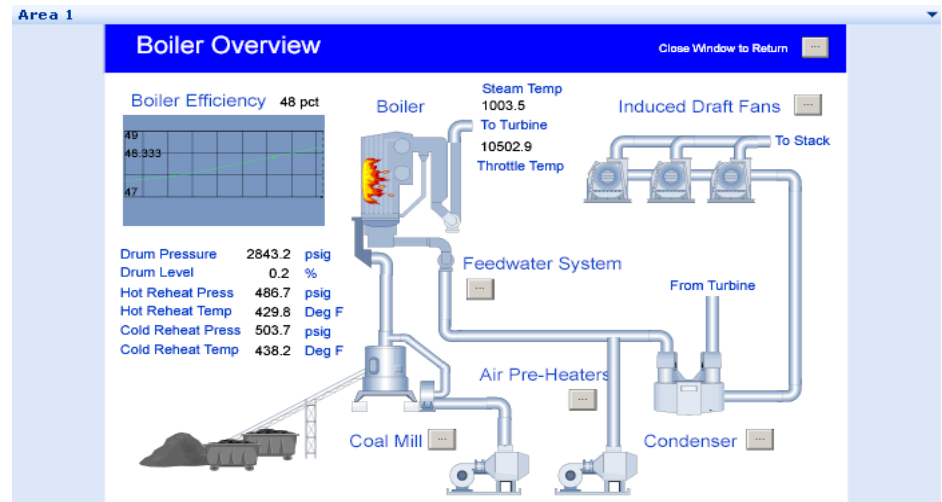
Looking at RtWebParts

- 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