

ProcessBook 3.0 ActiveView 3.0

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OSISOFT USERS CONFERENCE 2004

D I S C O V E R Y O U R P O R T A L T O P E R F O R M A N C E

ProcessBook Enhancements

- For the User
- For Building and Managing Displays
- For Integration with RtPortal
- For Application Development



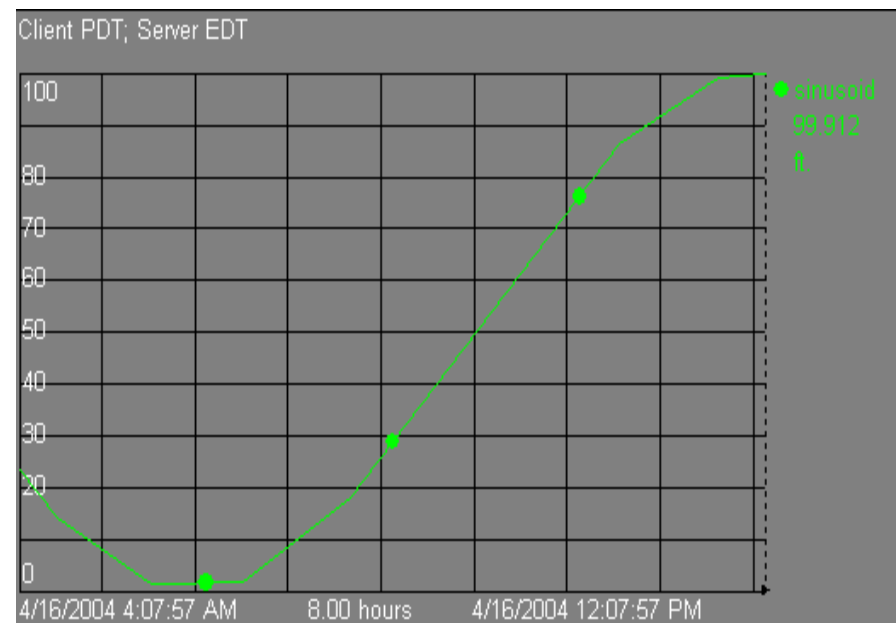
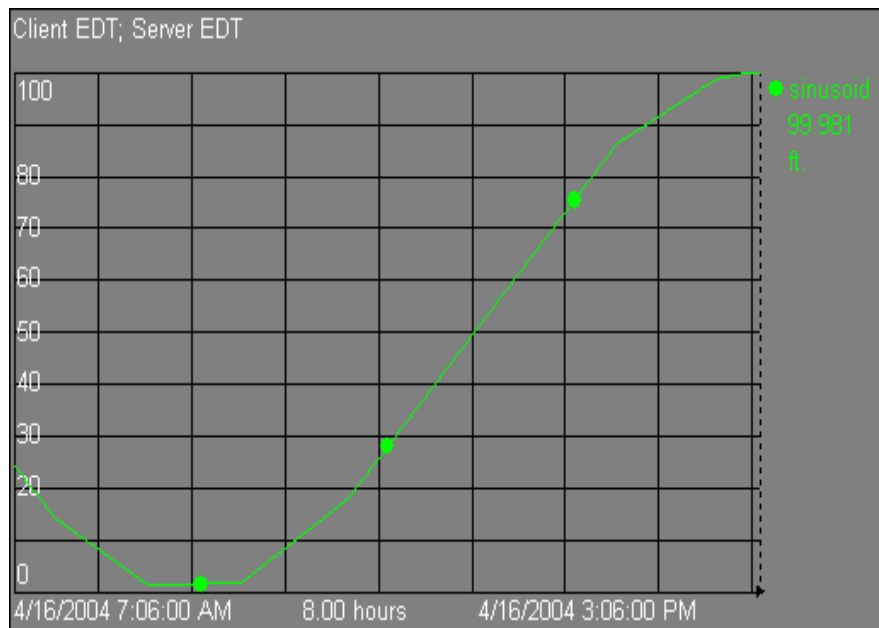
Enhancements for the User

- Client / Server time per display
- Trend enhancements
- Module Relative Displays
- Display of data for Time and String Tags
- Showing the Questionable, Annotated, and Substituted data flags
- Engineering units (UOM)
- XY Plot



Time Zone Setting

- One PI Server; clients in different time zone
- Setting is per display



Trend Enhancements

- Maximum number of traces is configurable
- Icons on top of trend
- Sub-second resolution
- Easier dataset manipulation



Module Relative Display Add-In

- Define a dynamic symbol once
- Change what it references dynamically
- Provided with ProcessBook 3.0
- Uses IContextDataResolver interface



Demo of Enhanced User Features

Tag Search

Basic Search | Advanced Search | Alias Search

PI Server: Point Type: Point Class:

Tag Mask: Point Source: Engineering Units:

Descriptor: Value:

Server | Tag | Description

Ready | List Count: 0

Buttons: Favorites, Connections..., Search, Abort, Reset, Select All, Pt. Attr..., Print...

PI Connection Manager

Connect | Edit | Help

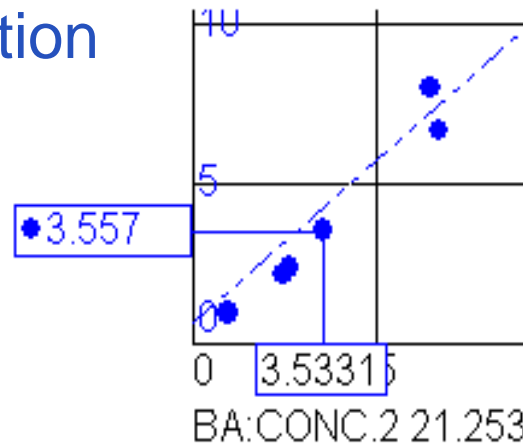
Connection Status	Since	User	PI Version
<input checked="" type="checkbox"/> localhost	3/30/2004 4:29:3...	piadmin	PI 3.4.363.68
<input checked="" type="checkbox"/> philly	3/30/2004 4:29:1...	piadmin	PI 3.3.362.61
<input checked="" type="checkbox"/> phoenix	3/30/2004 4:35:4...	piadmin	PI 3.3.362.47

Default Server: philly

Close

X-Y Plot Analysis

- Data Cursor via mouse and arrow keys
- Zoom and un-Zoom
- Linear Regression by Least Squares
- Statistics and raw data tables
- Ad-hoc trend
- Supports automation



X-Y Plot Data Sources

Plot Numbers or Strings from:

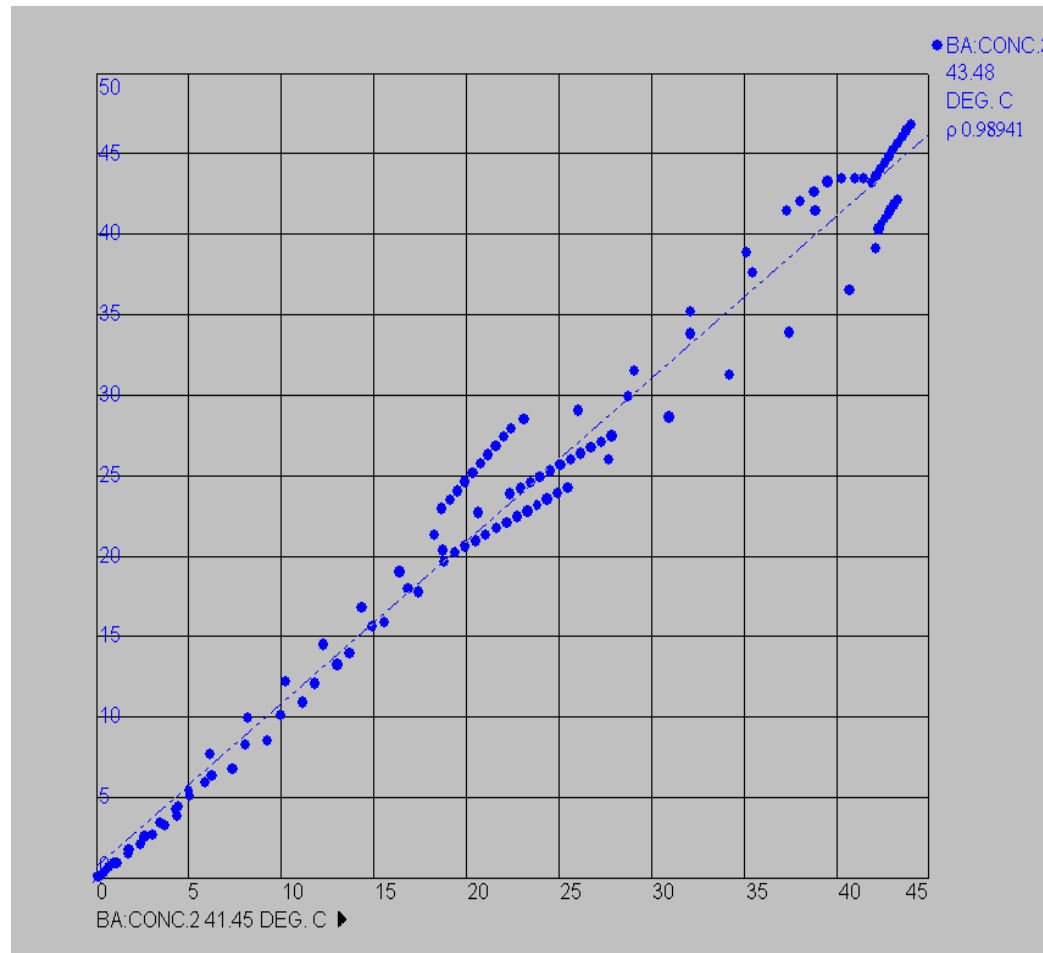
- Recorded Values in PI
- Interpolated Values from PI
- Calculations or Summaries from PI
- Relational Database Queries
- Custom Datasets



X-Y Pairing methods

- X Data is recorded or interpolated data
- Y Data may be:
 - Paired with X data event by Time
 - Synchronize: query for Y using X times
 - Match: pair by time, exactly
 - Match or Previous: pair by time or use event just earlier
 - Match or Next: pair by time or use event just after
 - Paired with X data event by index:
 - Recorded: possibly time shifted
 - Interpolated: possibly time shifted

X-Y Plot Demo



Building and Managing Displays

- More powerful Links
- Build displays in Layers
- Connect your Symbols
- Troubleshooting using the new error icon and status dialog



More Powerful Links

- Links can now be configured to use relative paths first
- No special distinctions between different path types (DOS, UNC, URL)
- Support for .SVG file types in links
- SharePoint Server Support

Layers

- Logically group/display symbols
- Layer properties
 - Active
 - Visible
 - Locked
 - Status bar



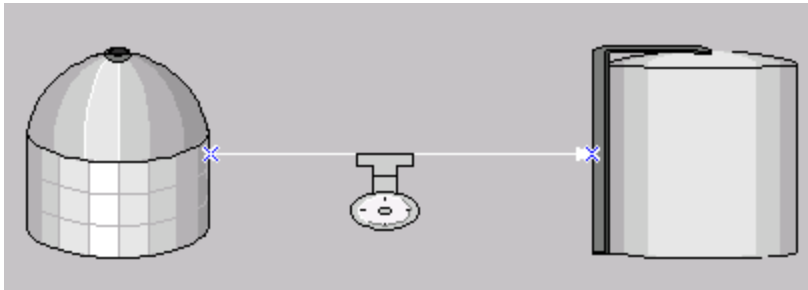
Connect your Symbols

- Connectors between symbols
- Connectors move with connected symbols
- Attachments can be added to connectors and move with the connector
- Symbols can be “spot lighted” to show connected symbols

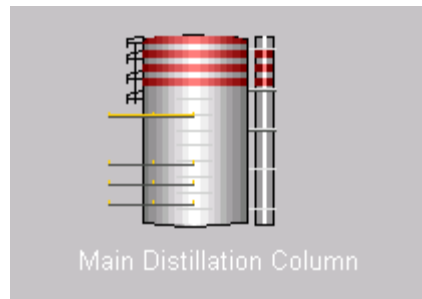


Attachments


- Connector attachments

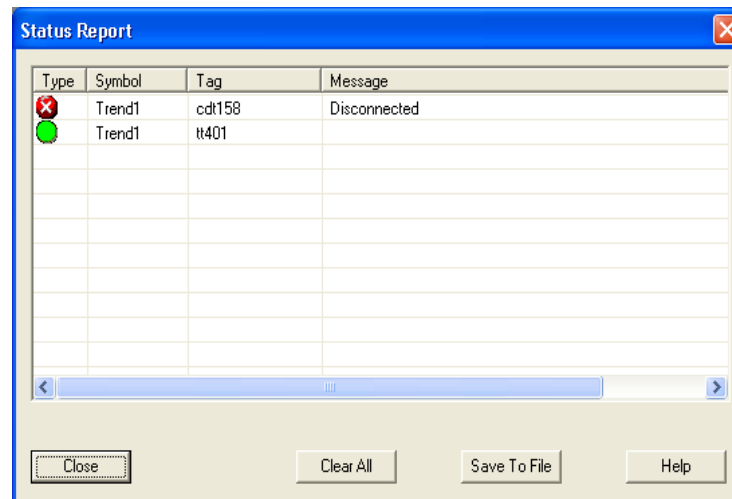


- Symbol attachments



Troubleshooting your Display

- Status dialog 
- Moving away from error dialogs to updating the Status dialog





RtPortal Integration

- SVG is now a first class file type. You can save directly to SVG and load directly from SVG
- ProcessBook supports direct editing of displays on a properly configured SharePoint Server
- SVG add-in now supports the XY Plot, Layers, Connectors and NamedValues



Demo



Team Web Site
Shared Documents


Select a View













All Documents
Explorer View

Actions

Alert me
Export to spreadsheet
Modify settings and columns

Share a document with the team by adding it to this document library.

New Document | Upload Document | New Folder | Filter | Edit in Datasheet

Type	Name	Modified	Modified By	Checked Out To
	10858test	3/31/2004 11:07 AM	OMICRON\jcouchara	
	10891test	3/31/2004 12:02 PM	OMICRON\jcouchara	
	11006 table test	4/2/2004 11:11 AM	OMICRON\LHABIG	
	AdHocTrendTest	3/31/2004 10:03 AM	OMICRON\skorostin	
	BAR-1	3/30/2004 3:56 PM	OMICRON\cnorton	
	Copy of THREE	4/3/2004 10:42 AM	OMICRON\Dadair	
	DIANNOILBU	4/2/2004 11:02 AM	OMICRON\Dadair	
	DiannTableTe	3/30/2004 2:35 PM	OSIBuild	
	DiannTreeGr	4/3/2004 1:08 PM	OMICRON\Dadair	
	DimaTest	3/25/2004 2:49 PM	OMICRON\Drogovoy	
	Dimatest	3/25/2004 3:00 PM	OMICRON\Drogovoy	
	FIXEDANDCC	3/29/2004 11:06 AM	OMICRON\Drogovoy	

View Properties
Edit Properties
Edit in PI ProcessBook
Delete
Check Out
Version History
Alert Me
Discuss
Create Document Workspace

Enhancements for Application Developers

- Named Values
 - Display
 - Symbol
- New Custom Dataset Interface
 - IDataProvider3
 - Provide enhanced user interface control
 - Integrated with PISDK
- New Data Context Interface
 - Implemented with IContextDataResolver
 - Add-ins can be developed to provide context to displays.
 - Modules
 - Batches
- .Net Tips for Developers

Custom Dataset

- Only need to implement 1 interface, `IDataProvider3`
- Fully integrated with the PI-SDK; no more ADO recordsets
- Customizable column selection and placeholder dialogs
- Supports multi-state and bar symbols

.Net Add-ins

- Lessons learned
 - The devil is in the details
 - Reference counting
 - Your new best friend
 - » Marshal.ReleaseComObject(dp)
 - Obtain a reference at every level
 - bad
 - » Symbol sym = pbApp.ActiveDisplay.Symbols(1)
 - good
 - » Display disp = pbApp.ActiveDisplay
 - » Symbol sym = disp.Symbols(1)
 - » Marshal.ReleaseComObject(disp)
 - » Marshal.ReleaseComObject(sym)
 - Will provide a .Net template add-in

ActiveView 3.0

- Installation/Download enhancements
- Support for new ProcessBook features
 - Layers
 - Module Database Access

