



PI ICE Deployment

Industrial Evolution's Experience with PI ICE Implementations

Roland Heersink, CEO
Sylvain Dubois, VP Operations



OSIsoft User Conference
Monterey, March 2002





Presentation Outline

- Introduction to Industrial Evolution
 - What we do
 - Relationship with OSIssoft
- ICE projects
 - Getting started
 - Some screen captures
 - Advantages & Features
 - Beta version details
- Getting started at your site





Industrial Evolution

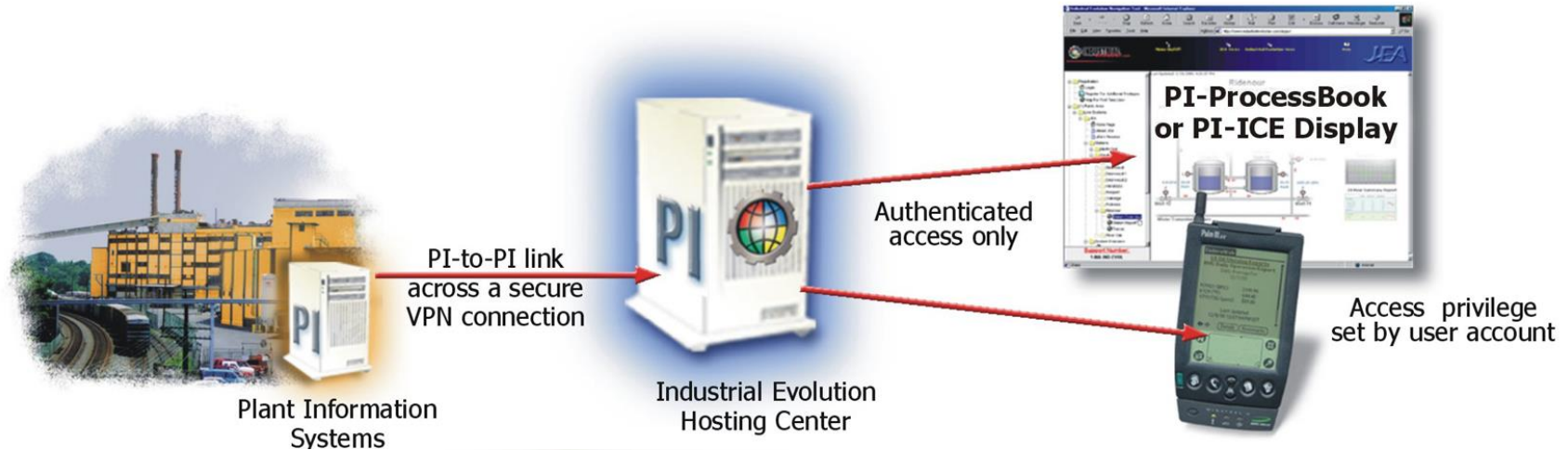
- Co-founded with OSIsoft in 3/2000
 - OSIsoft holds ~25% equity share
- OSIsoft builds software product
 - PI, ICE, ACE, MDB, RLink, etc...
- Industrial Evolution delivers web services using OSIsoft technologies
 - AnyWhere, AnyTime, etc...
- Complementary partnership





Industrial Evolution

- Delivers secure zero-footprint web access to real-time data by authorized users
 - Data comes from PI Systems, other historians, control systems, lab systems, etc...





- Objective:**
Help increase operating performance at customer sites



OS/soft User Conference Monterey, March 2002





Industrial Evolution

**Real-time
collaboration**



Secure
VPN Link



**Industrial
Evolution**



Management:
Wireless Access



Vendors:
Inventory Management



Experts:
Remote Consulting



Suppliers:
Remote Support

**PI ICE or
ProcessBook
Displays**





Industrial Evolution's ICE Projects

- First deployment in November 2001
 - Implemented alpha-ICE in pilot project with live customer data
- Upgraded to Beta in February 2002
 - Implemented two customer projects with live data as pilot tests
- Working with OSIsoft to provide customer & user feedback on ICE





Industrial Evolution's ICE Projects

- ICE is designed specifically as an intranet product
- Industrial Evolution will integrate ICE into its data hosting environment
 - Makes ICE ready for internet use
 - Security
 - Redundancies
 - Bandwidth
 - etc...





ICE Projects

Project #1

- Water Treatment Plant
JEA, Jacksonville, Florida

Project #2

- Natural Resource Facilities
Undisclosed North American location





ICE Projects

● ICE Server Requirements (from OSIsoft)

➤ Hardware

- Pentium 800 MHz
- 256 Mb RAM
- 30 Gb Hard Drive

➤ Software: PI ICE plus...

- Windows 2000 Server
- SQL Server 2000 (not an evaluation copy)
- PI-UDS 3.3
- PI SDK





ICE Projects

- Client Software Requirements
 - Internet Explorer 5.5+
 - Medium security
 - Enable ActiveX downloads & use
 - Adobe SVG Reader (~2MB)
 - Microsoft Digital Dashboard (~100kb)





ICE Projects

Step 1: Build the base dashboards

- Give all users a starting point to view data

Actions:

- Login to the Admin account
- Create a home dashboard
 - Combine web parts into a single view
 - SVG Graphic, Trend, Snapshot, etc...

Note: need to do this from a remote terminal, so that the path saved for the various paths has the proper DNS and not Localhost





ICE Projects

Step 2: Configure the user accounts

- Give all users the individual privileges they need

Actions:

- Create the desired user accounts
- Map each user to a PI account per the privileges they need





Some ICE Screen Shots

Connect to icebox.industrialevolution.com



Connecting to icebox.industrialevolution.com

User name: 

Password:

☐ Remember my password

OK Cancel



Some ICE Screen Shots

Home Page - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites Media

Address <http://icebox.industrialevolution.com/Dashboard/dashboard.asp?DashboardID=http://icebox/DAVCatalog/ICE/Private/JEA/Welcome/> Go

JEA Home Page Content | Layout | Settings

Home Page Current Report Eight Hour Average Report Twenty-Four Hour Average Report

Content Viewer

INDUSTRIAL evolution **AnyWhere™ - AnyTime™** Web-based Information Access ...using the PI ICE software from **OSIsoft**

Ridenour Reservoir Overview

PI-ProcessBook
Dynamic SVG Graphics

Ridenour Reservoir Levels (24 Hr)

No Data to Plot

Ridenour Total Flow (24 Hr)

No Data to Plot

Microsoft Internet Explorer

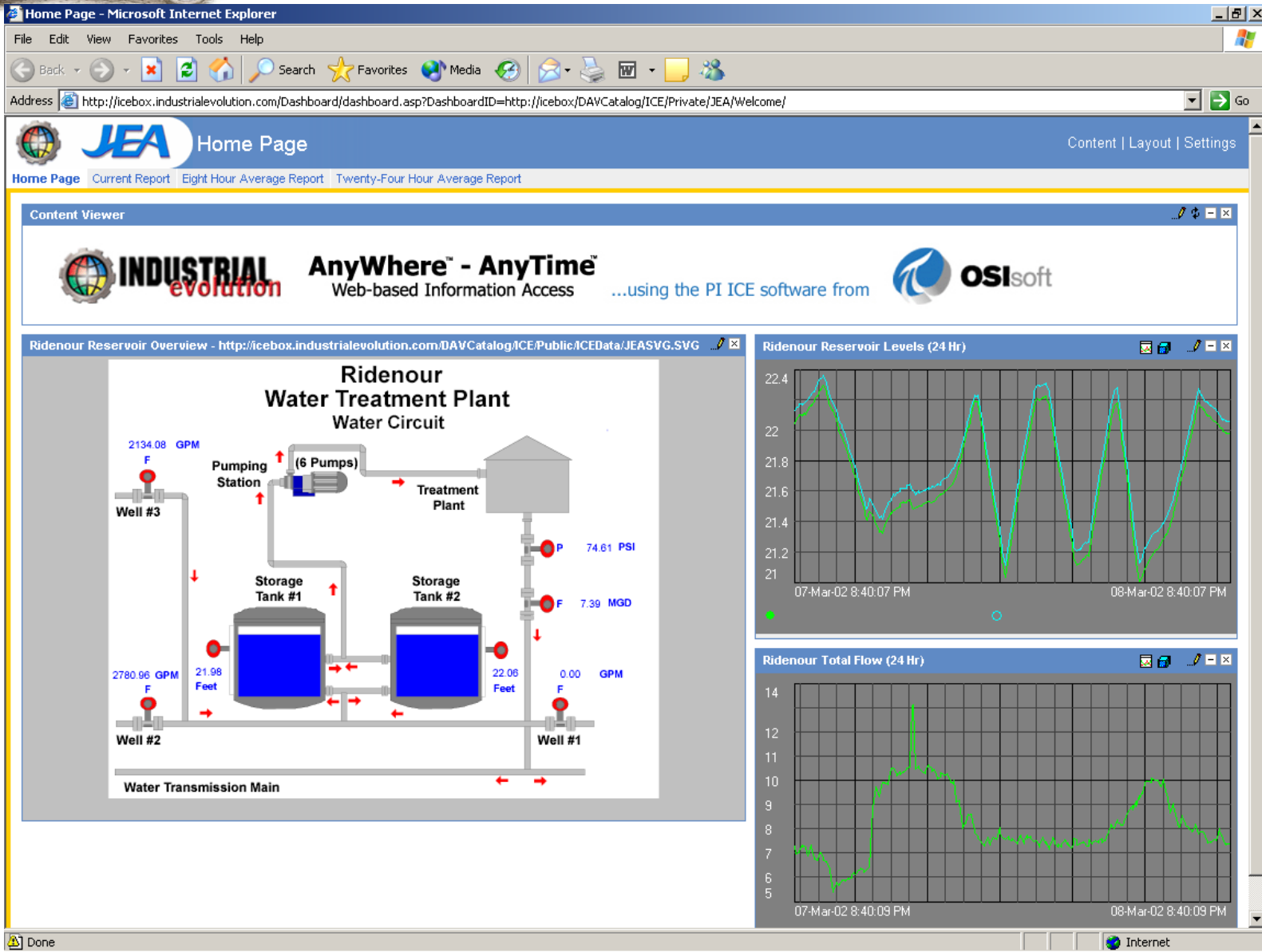
An ActiveX control on this page is not safe.
Your current security settings prohibit running unsafe controls on this page.
As a result, this page may not display as intended.

OK

Done Internet

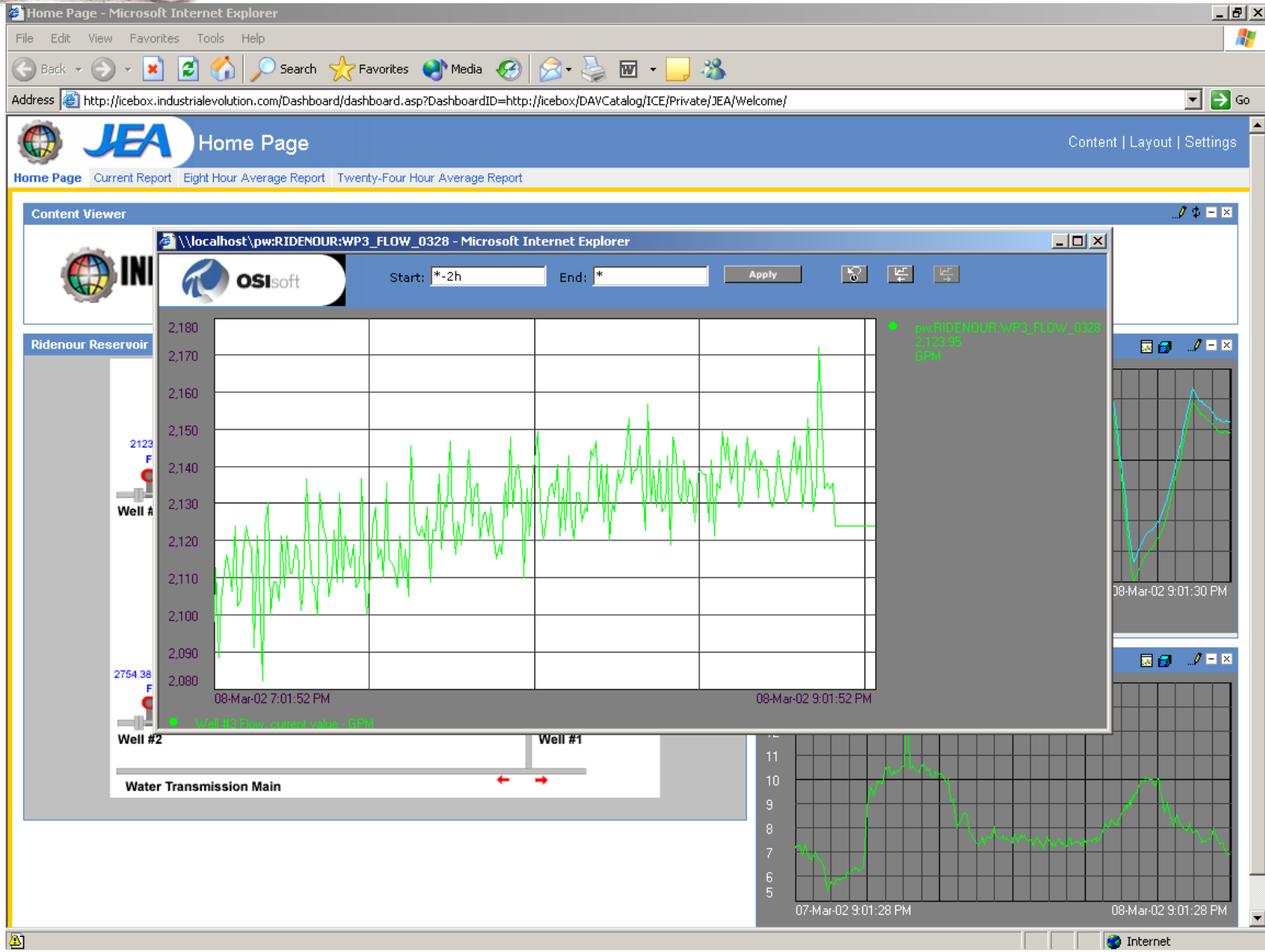


Some ICE Screen Shots



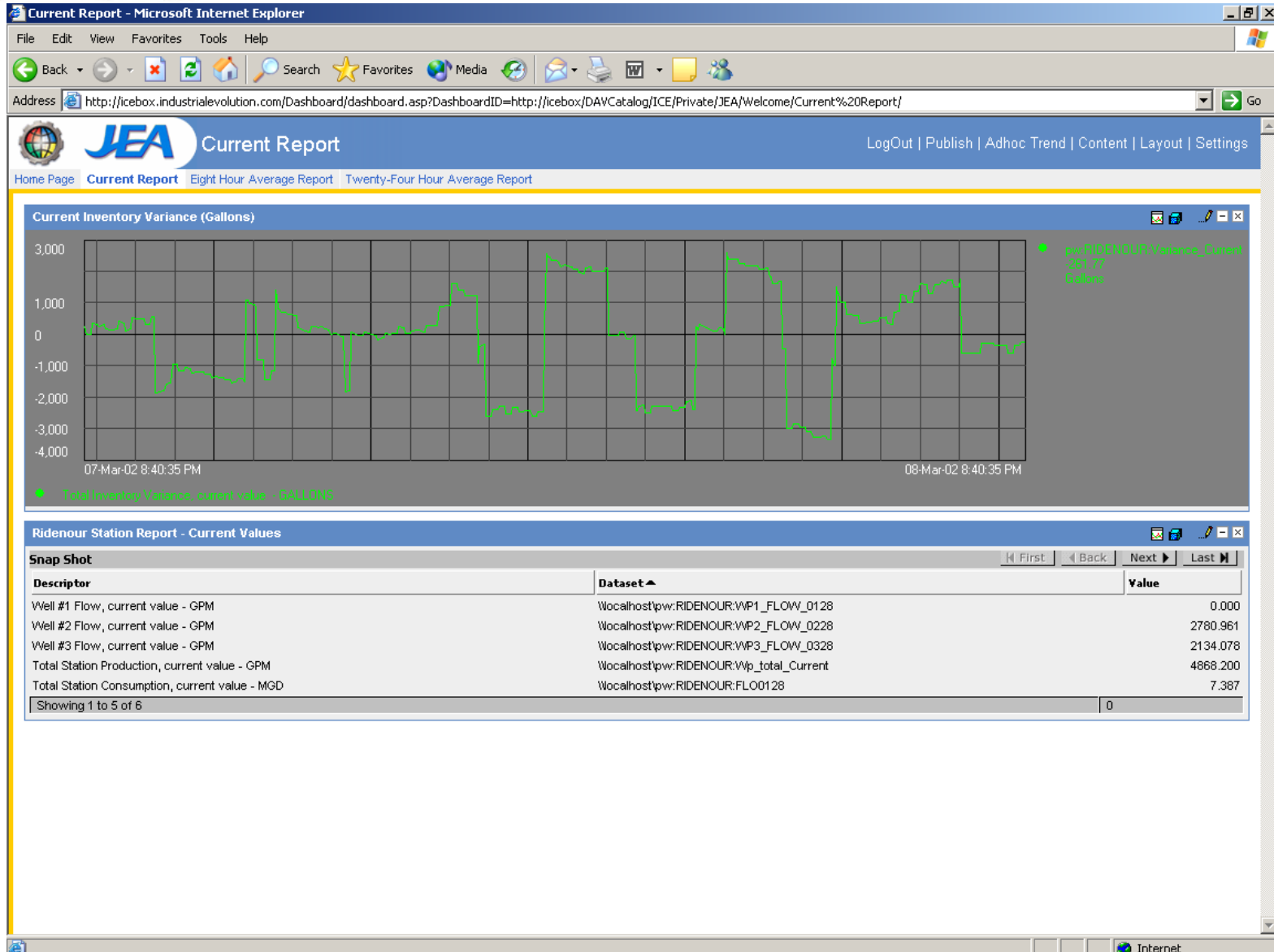


Some ICE Screen Shots





Some ICE Screen Shots





User Feedback

Advantages

- Good start for non-expert users
 - Lower barrier to use
- Good flexibility
 - Any user can re-arrange page as needed
- Drill-down capability
 - Can create trends, etc. for any variable
- Full data access
 - Tag search allows access to any networked tag





User Feedback

Disadvantages

- Not for the “power user”
 - Use PI ProcessBook instead
- Requires download to get started
 - But only once
- Layout limited to Digital Dashboard format
 - Every “standard” approach has this restriction!





Implementer Feedback

Advantages

- Easy, central maintenance of web pages
- Users can drive own changes
- Custom web parts for ICE extensions

Disadvantages

- None identified but there are some beta limitations





Implementer Feedback

Beta Limitations

- Occasional run-time errors
- Only one Snapshot web part per dashboard
- Cannot format pages on the ICE server directly - must configure pages from a remote machine

Beta version still being updated





Getting Started with ICE for your site

Two options:

- Download ICE to use with your PI System
 - Need PI 3.3
 - Need web server: Win 2000, SQL Server, etc.
- Join the ICE Try & Buy Program
 - Activate PI-to-PI and go...





PI ICE Try & Buy Program

Objective:

- Fast, easy & low-cost evaluation of ICE with own data

Deployment:

- PI-to-PI data to Industrial Evolution PI Server
- ICE provides access via the web

Features:

- No on-site software installation
- Check out benefit of data sharing with others





PI ICE Try & Buy Program

- Scope:
 - 50 tags, 2 displays, 2 user accounts
 - PI-to-PI with 1x/minute data update
 - 24/7 help desk from IE & with backup by OSIsoft
- Offered by OSIsoft & Industrial Evolution
 - Further details available on handout

