

# Proficy HMI/SCADA iFIX 5.



## Innovation that drives results



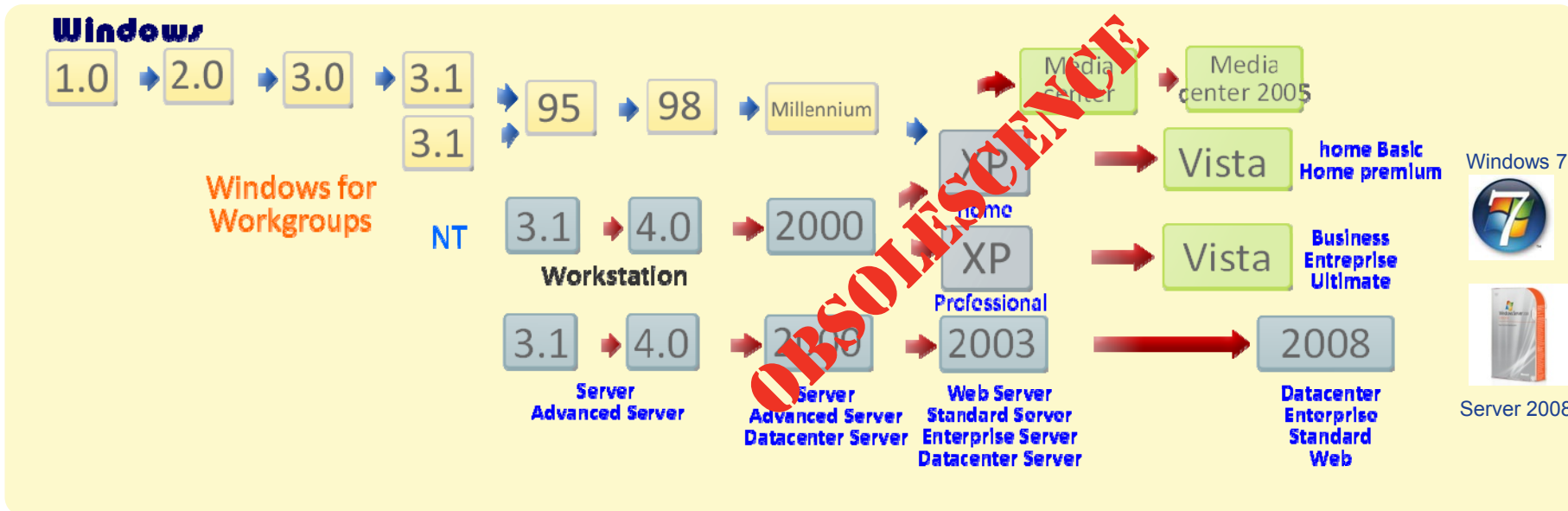
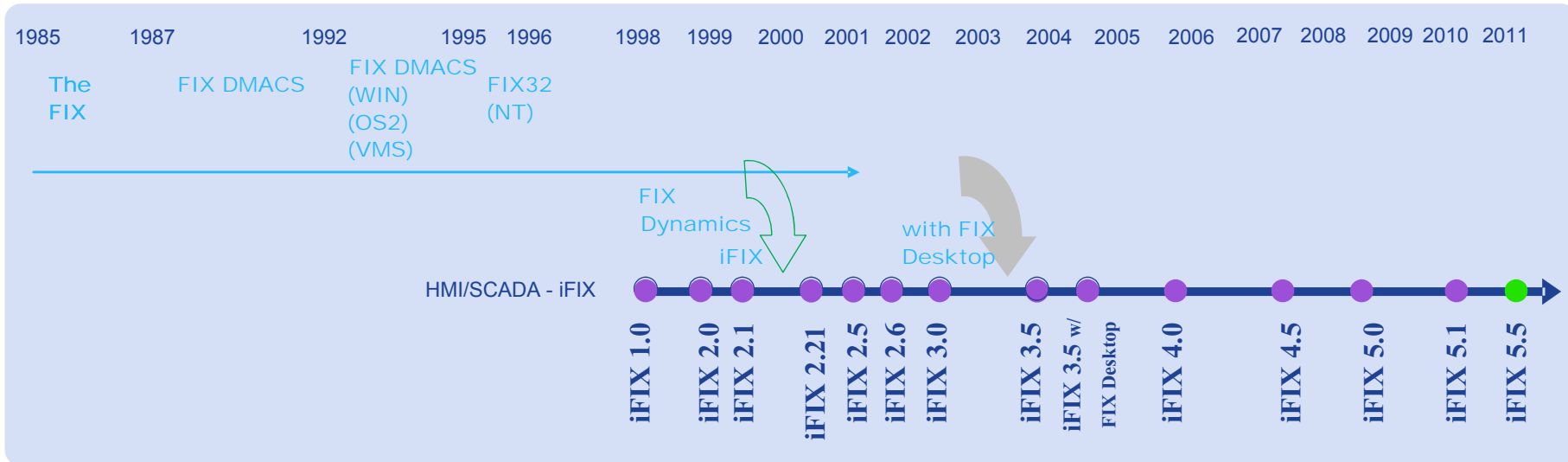
We innovate so you can drive  
results for your operations.

Innovation that drives  
**results.**



# A look back

## 25 Years of continuing innovation!



# Proficy HMI/SCADA – iFIX Key Themes



# Proficiency HMI/SCADA – iFIX

## 5.5 At a Glance



### Main Customer Benefits

A rich set of capabilities that enable

- Operator Consistency & Productivity
- Developer Productivity
- Information Mobility
- Performance & Reliability
- Voice of Customer

### Operator Consistency & Productivity

Workflow Trigger for Operational SOPs

- iFIX Scripting support to bring in SOP regimen through Workflow in Operations
- Consistent Alarm Responses, Safety Procedures, Good Manufacturing Practices

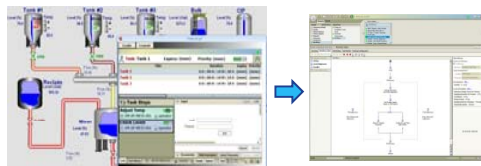
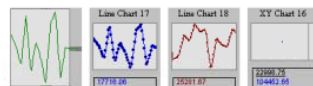


Chart Enhancements

- Stackable Axis for multi pen trends, thumbnail mode, duplication in run mode.



### Developer Productivity

Universal Component Host

- Host .NET/WPF/Winform Controls
- Expose Control properties similar to ActiveX
- VBA support to exposed properties

Water Industry Components

- Water Solutions Pack 2008 (minus esig & Hach) now included standard.

OMAC Solution Components

- OEM Solutions Pack now included. . 2 dynamo sets and 14 picture templates are included

Sustainability Metrics Components

- Historian Write and Export Wizards included

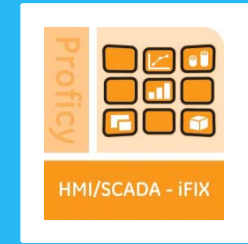
### Information Mobility

WebSpace Enhancements

- Relay Server to expand WebSpace Scalability
- WebSpace Session Balancing With Relay Server
- « Loose » mode for full screen Desktop Viewing
- Server & Client Windows 7/2008 R2 64 bit support
- iPad support for Client App through iTunes (app coming in 2012)

# Proficy HMI/SCADA – iFIX

## 5.5 Customer Benefits



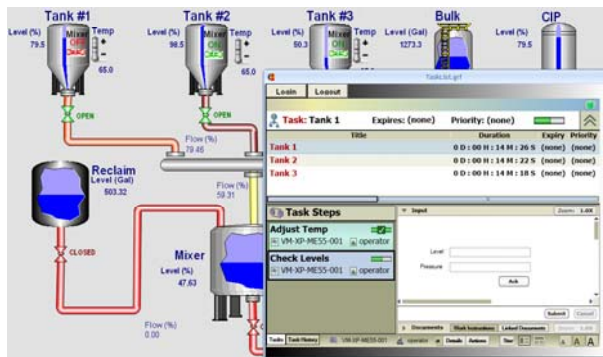
## Operator Consistency & Productivity

# Proficy HMI/SCADA – iFIX

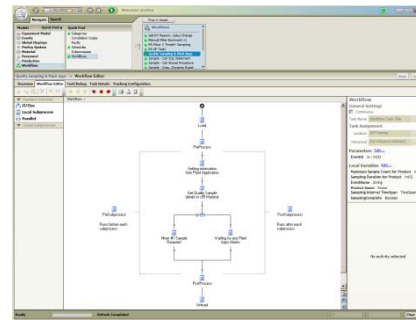
## Operator Consistency & Productivity



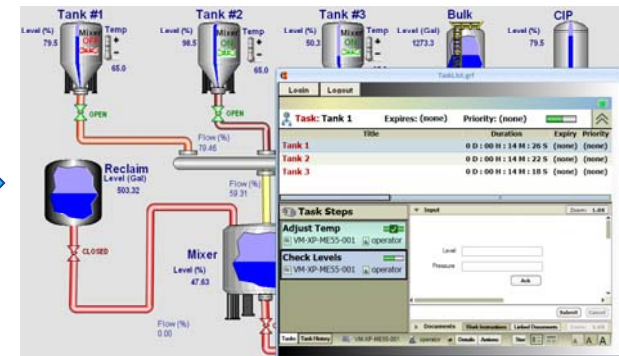
- Bring in the SOP regimen into operations through Proficy Workflow
- iFIX scripting integration with Proficy Workflow allows for process, event/alarm and safety based SOPs to be part of Operator's daily SCADA interactions



Manual Initiation of Operational Workflows by SCADA Operator



Trigger the Workflow Tasks Co-ordination



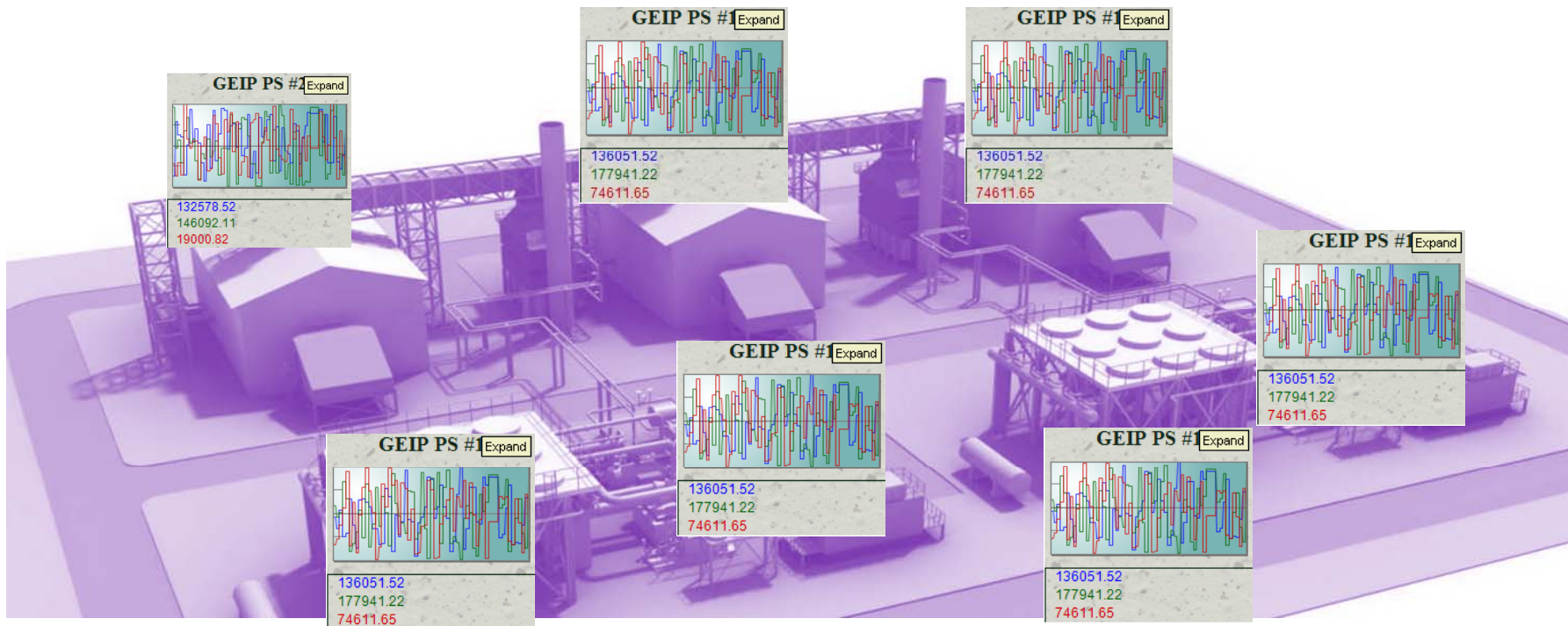
Operator Interaction with Workflow Task Steps

# Proficiency HMI/SCADA – iFIX

## Operator Consistency & Productivity



- Chart Thumbnail Mode for Operational Overviews
- Thumbnail Mode is efficient and brief on information displayed
- Operator has the flexibility to Expand-Contract in Run Mode





# Proficiency HMI/SCADA – iFIX

## Operator Consistency & Productivity



- Ability to Auto-Generate & Duplicate Charts on the Fly
- Operators can diagnose an event, alarm or process behavior by starting at a Chart template for that anomaly and generate trends for related parameters on the fly

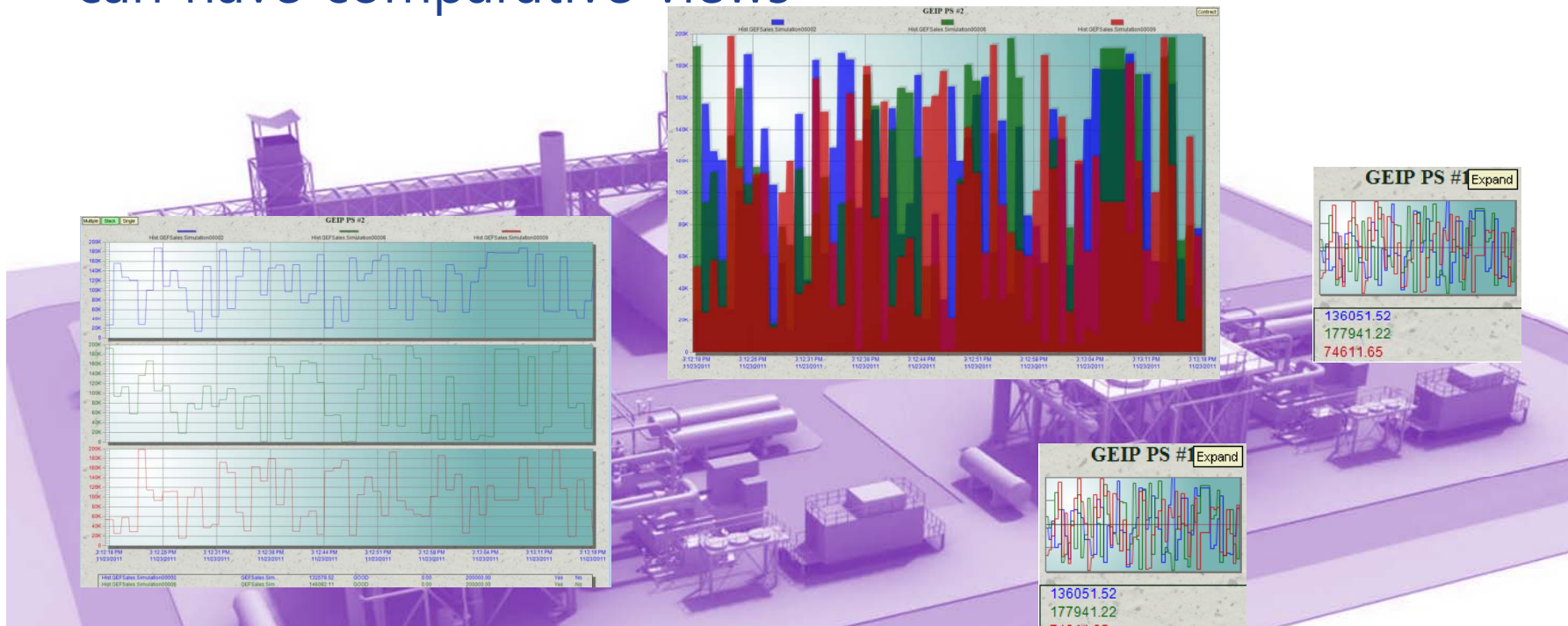


# Proficy HMI/SCADA – iFIX

## Operator Consistency & Productivity

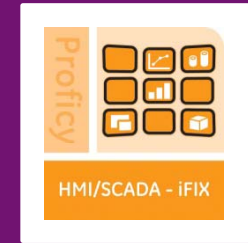


- Y-Axis stacking on the fly for alternative views
- Anti-aliasing support for Periodic Overlays, so Operator can have comparative views



# Proficy HMI/SCADA – iFIX

## 5.5 Customer Benefits



## Developer Productivity

# Proficy HMI/SCADA – iFIX Developer Productivity



- .NET component hosting supporting .NET, WPF and WinForms in addition to ActiveX
- .NET components behave like regular controls and allow Animations & Scripts to be attached to exposed properties

The screenshot illustrates the workflow for integrating a .NET component into the iFIX HMI/SCADA environment. It shows the Proficy iFIX Workspace (Configure) with the .NET Component Browser open, displaying a tree view of components including NetMeterCtrl. A preview of the NetMeterCtrl component is shown as a circular gauge. The Basic Animation Dialog is open, showing configuration options for the NetMeterCtrl component. The Code Editor shows the code for the NetMeterCtrl1 component, including a PropertyChanged event handler.

**.NET Component Browser**

- .NET Components
  - .NET Framework
    - Windows Forms
    - Windows Presentation Framework
  - Sample Components
    - IndustrialGadgetDotNet1
    - IndustrialGadgetDotNet2
      - GadgetBaseControl
      - NGPropertyPage
      - NetDisplayCtrl
      - NetLEDDisplayCtrl
      - NetMeterCtrl
      - NetSliderCtrl

**Basic Animation Dialog**

General: Object Name: NetMeterCtrl

Description:  Enable ToolTip  Enable Highlight  Enable Select

Color:  Foreground  Edge  Background

Movement:  Position: 0.0  Scale:  Rotate

Fill:  Fill Percentage

Visibility:  Visible

Command:  Click

Current Command: (None)

Additional Animations:  Advanced Animations

Buttons: OK, Help, Configure...

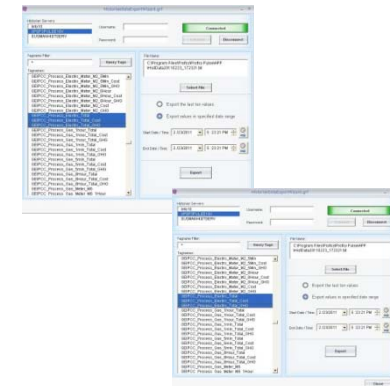
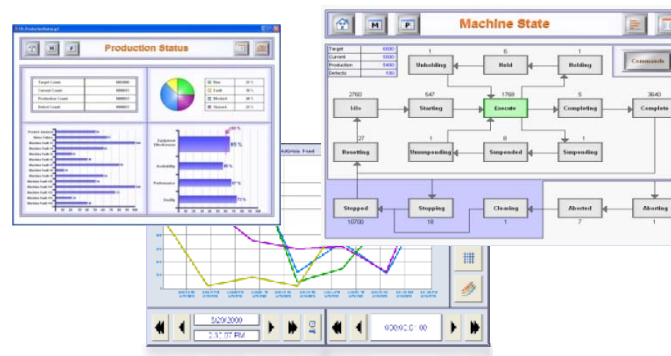
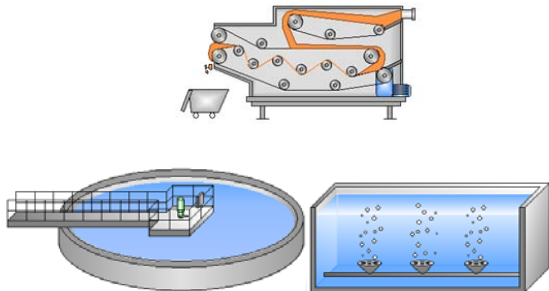
**Code Editor**

```
NetMeterCtrl1  
PropertyChanged  
Private Sub NetMeterCtrl1_PropertyChanged(ByVal param1 As OnChange  
PropertyChanged  
End Sub
```

# Proficy HMI/SCADA – iFIX Developer Productivity



- Water Industry dynamos and wizards are part of the Dynamos Sets
- OMAC compliant Packaging operations dynamos and wizards included in Dynamo Sets
- Historian Data Entry and Data Export Wizards are included in the Dynamos Sets



# Proficy HMI/SCADA – iFIX

## 5.5 Customer Benefits



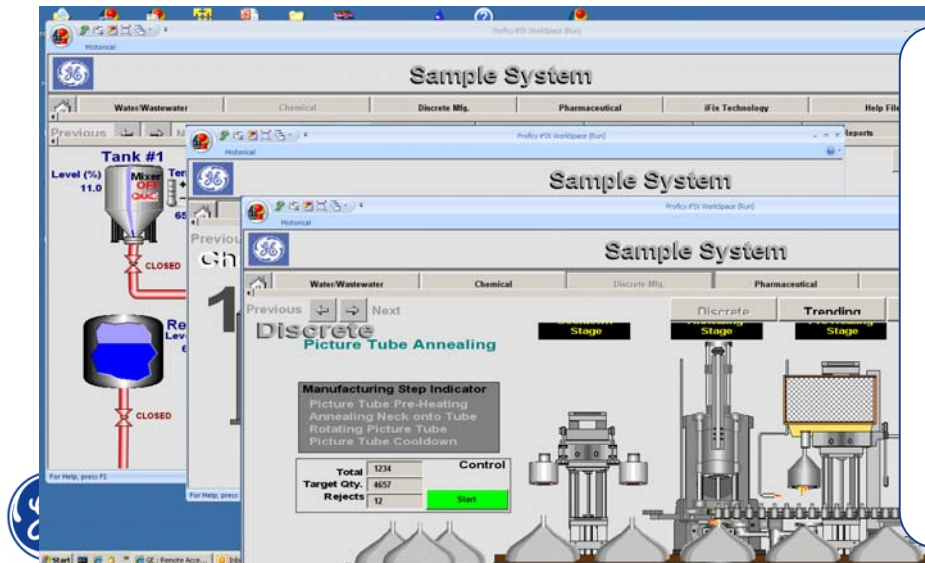
## Information Mobility

# Proficy HMI/SCADA – iFIX

## Information Mobility



- New WebSpace Client Mode allows for WebSpace to run without being embedded in a browser
- iPad support with GE HMI/SCADA branded app. releasing on iTunes in March
- Runs on Tablets as a Windows control embedded in compatible browsers



**On the TABLET**

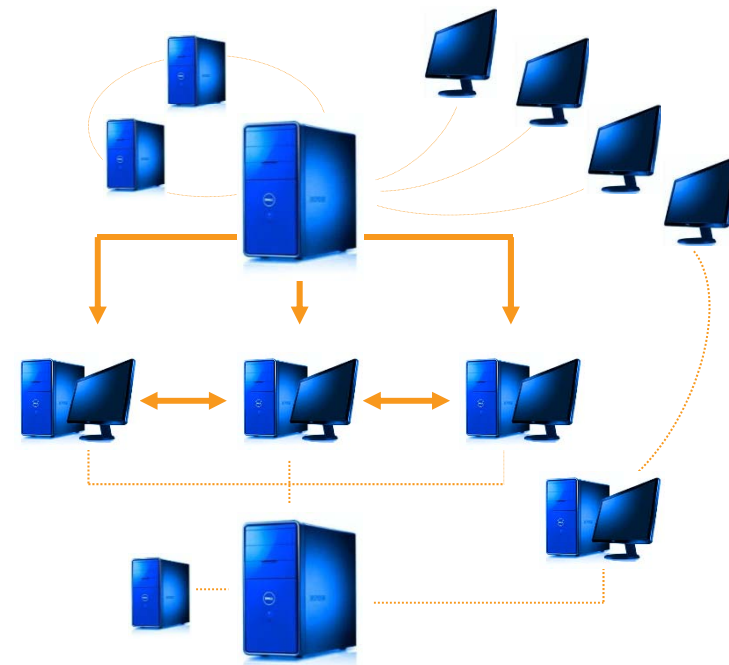


# Proficy HMI/SCADA – iFIX

## Information Mobility



- Windows 7 (64 bit only) and Server 2008 R2 support
- WebSpace Relay Server functionality:
  - for enhanced scalability
  - also provides **session balancing** on dependent Servers





# Proficy HMI/SCADA – iFIX

## 5.5 Customer Benefits



## Performance & Reliability

# Proficiency HMI/SCADA – iFIX

## Performance & Reliability



### *TCPtask & RDA*

Modification to Message handling over the network between SCADA and Client

- Previous network throughput caps removed improving the utilization of network speed and bandwidth
- Resultant scalability on clients with efficiency of service to SCADA clients is much higher
- Alarm and Graphics intensive applications now process their requests and queues at a much higher speed

# Proficiency HMI/SCADA – iFIX

## Performance & Reliability



### *Failover Client Behavior*

### Removal of dependency of Dynamic Connections

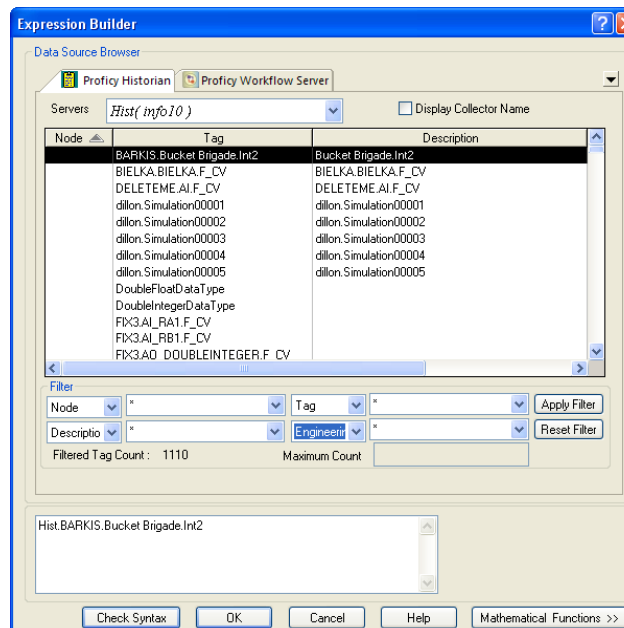
- Clients now have the control of deciding on connection to the Server
- Highly reliable behavior as the SCADAs are left to do what they do best and Clients now do what they do best
- Periodic health checks from Clients ensure Clients always have the right connection.

# Proficy HMI/SCADA – iFIX Performance & Reliability



## *Historian 4.5 Support*

- Support for browsing 10 million tags from Historian Servers
- Additional filters in the Expression builder to improve Search and Browsing
- User Defined browsing count to improve accessibility and performance



# Proficy HMI/SCADA - iFIX

## Performance & Reliability



*IGS Basic included with iFIX SCADA licenses!*

- Connects to 1000's of different devices
- Include powerful troubleshooting tools
- Support protocols such as DNP3 and BACNET (optional premium package)
- Multiple and simultaneous device communications

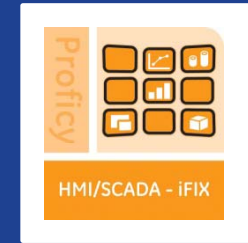
More flexibility & power

Reduce your implementation costs – access all drivers with a single license

Advanced Simulator Driver	InTouch Client Driver	Simatic 505 Serial
Allen-Bradley Bulletin 900	IOTech PointScan 100	SIXNET EtherTRAK I/O
Allen-Bradley ControlLogix	Krauss Maffei Ethernet	SIXNET UDR
Allen-Bradley DF1	Memory Based Driver	SquareD Serial
Allen-Bradley DH+	Mettler Toledo Continuous Mode Serial	System Monitor
Allen-Bradley Ethernet	Micro-DCI	Telemecanique Uni-Telway
Allen-Bradley Unsolicited Ethernet	Mitsubishi CNC Ethernet	Thermo Westronics Ethernet
Analog Devices	Mitsubishi Ethernet	Thermo Westronics Serial
Aromat Ethernet	Mitsubishi FX	Tiway Host Adapter
Aromat Serial	Mitsubishi FX Net	Torque Tool Ethernet
AutomationDirect Direct Net	Mitsubishi Serial	Toshiba Ethernet
AutomationDirect EBC	Modbus ASCII	Toshiba Serial
AutomationDirect ECOM	Modbus Ethernet	Toyopuc PC2 Serial
AutomationDirect K Sequence	Modbus Plus	Toyopuc PC3/PC2 Ethernet
Backhoff TwinCAT IO	Modbus RTU Unsolicited	User-Configurable (U-CON) Driver
Busware Ethernet I/O	Modbus Serial	WAGO Ethernet
Contrex M-Series	ODBC Client Driver	Yaskawa Memobus Plus
Contrex Serial	Omron FINS Ethernet	Yaskawa MP Ethernet
Cutler Hammer	Omron FINS Serial	Yaskawa MP Serial
Cutler Hammer ELC	Omron Host Link	OPC UA client plug-in
Custom Interface	Omron Process Suite	Yokogawa Controller Serial
Dataforth IsoLynx	Omron Toolbus	Yokogawa CX
DDE Client Driver	OPC DA Client Driver	Yokogawa Darwin
DeviceNet (Hilscher Universal)	Optimization OptiLogic	Yokogawa DX
Fuji Flex	Opto 22 Ethernet	Yokogawa DXP
GE CCM	Partlow ASCII	Yokogawa HR
GE Ethernet	Philips P8/PC20	Yokogawa MW100
GE Ethernet Global Data (EGD)	Profibus (Hilscher Universal)	Yokogawa MX100
GE Focas1	SattBus Ethernet SattBus Serial	Yokogawa YS100
GE SNP	Scanivalve Ethernet	BACnet I/P
GE SNPX	Siemens S5	Fisher ROC Serial
Hilscher Universal Driver	Siemens S5 3964R	Fisher ROC Plus Serial
Honeywell HC Ethernet	Siemens S7 200	Triconex Ethernet
Honeywell UDC	Siemens S7 MPI	DNP Master Ethernet and serial
Honeywell UDC Ethernet	Siemens TCP/IP Ethernet	SNMP
Idec	Siemens TCP/IP Unsolicited	Ping
Intelligent Actuator Super	Simatic 505 Ethernet	



# Proficy HMI/SCADA – iFIX 5.5 Customer Benefits



## Voice of Customer

# Proficiency HMI/SCADA - iFIX

## Voice of Customer

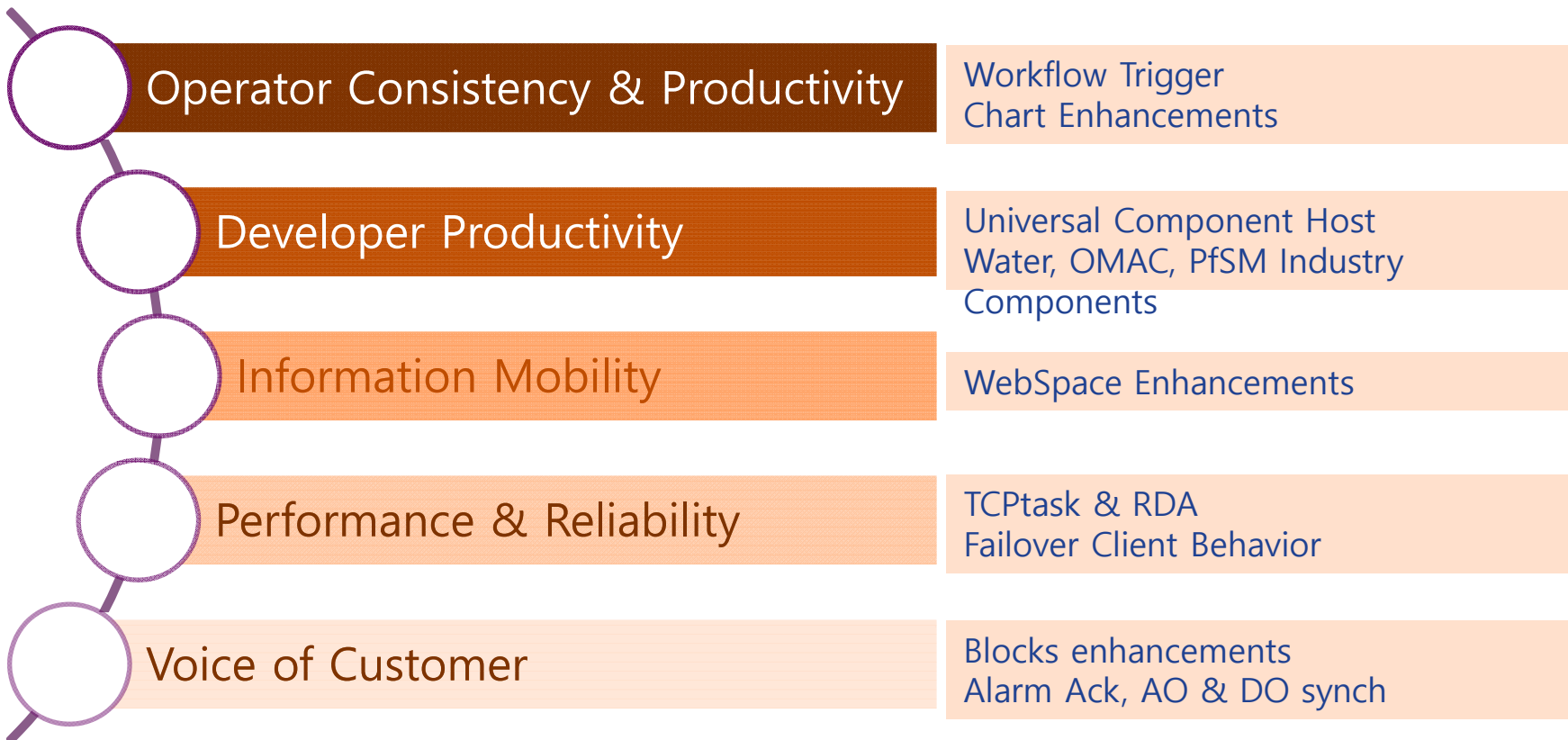


- Individual block COMM alarm suppression
- Alarm Acknowledgement synchronisation with PLC Alarms
- Analog & Digital Outputs synchronisation with PLC registers

The image displays three overlapping configuration windows from the iFIX software:

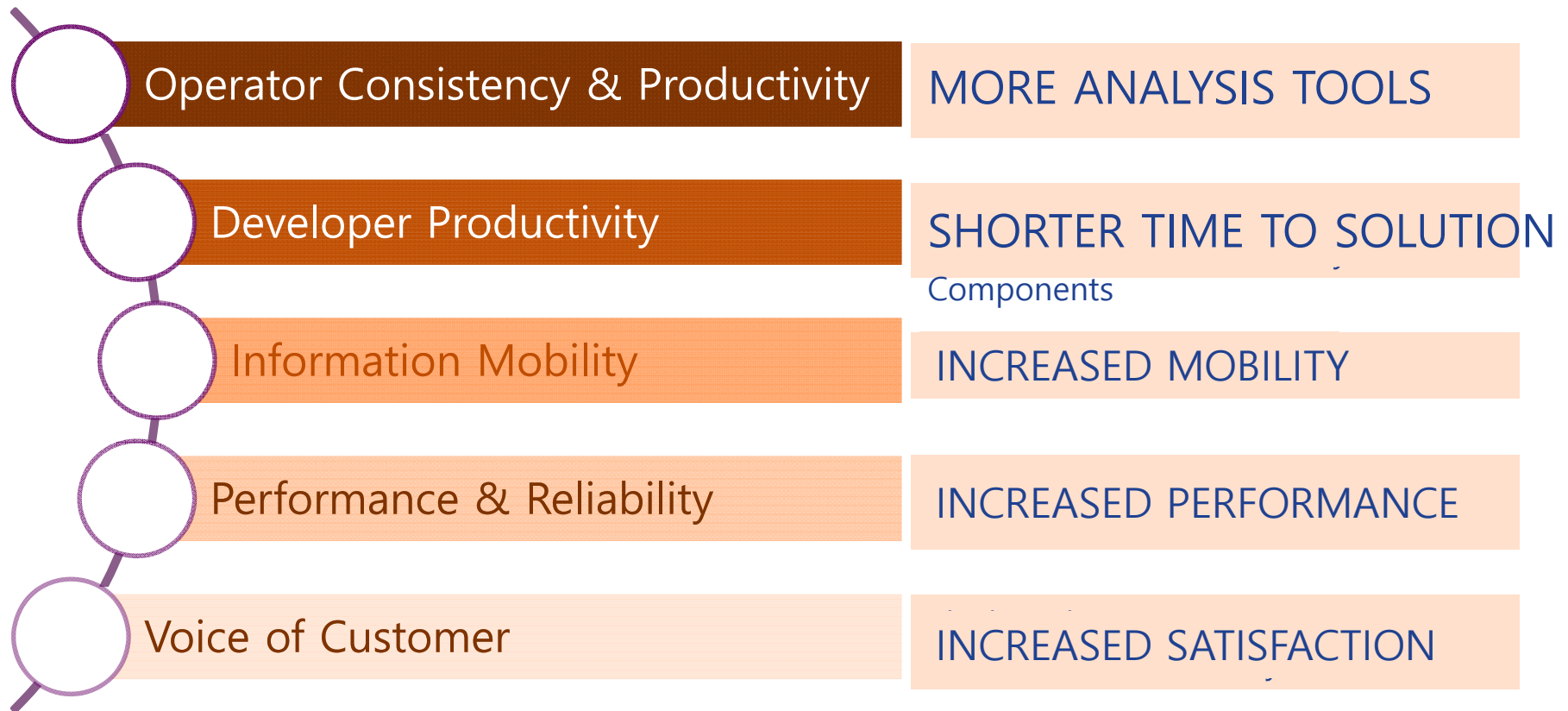
- Analog Alarm - [AA]**: Shows settings for enabling alarming, alarm options (Remote Ack, Alarm Suppression, Target Value: 50), and alarm areas (ALL). It includes a table for alarm options with columns for Type, Value, Priority, Contact, Out Mode, Delay Time, and Re-Alarm.
- Digital Alarm - [DA]**: Shows settings for enabling alarming, alarm priority (LOW), alarm type (Change of State), and contact name (CTK\_DA\_DO\_F\_CV).
- Digital Output - [CTK\_DA\_DO]**: Shows settings for tag name (CTK\_DA\_DO), addressing driver (MBE Modbus Ethernet v7.42b), I/O address (Device0:400108:1), and output options (Invert Output, Write if different).

# Proficiency HMI/SCADA – iFIX SUMMARY





# Proficy HMI/SCADA – iFIX SUMMARY



# Questions ?

