WW HMI SCADA-12
System Platform Best Practices 2: InTouch View Applications

Presented By:

Brian Martin
Technical System Consultant
Invensys Wonderware Brand

brian.martin@Invensys.com
In this session you will learn ways to best configure InTouch applications to take advantage of current features such as Managed Applications, ArchestrA Graphics and standards.
Agenda

- The Technology and Our Path Forward
- Questions for the Audience
- Why ArchestrA Graphics
- Demonstration of Classic InTouch Development
  Still the World’s best HMI!
- Demonstration of IDE InTouch Development
  What not to do
- Did you Know
- Demonstration of QuickView Client
  Future Proofing
Technology is Moving Forward

Software technologies

COM
Traditional InTouch graphics

.NET
ArchestrA Graphics

Bridge to future

New generation HMI

I WANT YOU
Old HMI design, the Past
New High Performing HMI, the future
Situational Awareness
Questions for You

How many of you are still using stand alone InTouch?
How many of you are still using it because you can simply create tags?
How often do you add tags while you are creating graphics?
How many of you are using ArchestrA Graphics?
How many of you are using multiple graphics on one InTouch Window?
How many of you want to be prepared for next 10 years or more?
Why ArchestrA Graphics

- Manage Graphics across InTouch Applications
  - Plant-wide standards
  - Shared Process graphics

- System Platform
  - Check Out/Check in, version, change log – for every graphic

- Named Elements
  - Every Graphic Primitive has a name

- Multi-developer

- Graphic are applets
  - with local variables & logic

- Nested standards
  - Standards within standards

- More Animations
  - Sophisticated animation configuration

- Import existing InTouch Graphics

The Short List

- .NET Support
  - .NET Controls
  - .NET Scripting

- Resolution Neutral
  - Vector based

- Advanced Graphics
  - Smoothing, Transparencies, Fills – Gradients, Patterns, Textures
  - Group Editing, Rotation anchors
InTouch only Development Demo

Steps:
1. Create New InTouch Application using Application Manager
2. Create Tags
3. Create Window
4. Draw crude graphic and link to tags
5. Switch to Runtime and Test
6. Switch back to WindowMaker and Modify
7. Add new tag
8. Add visualization to window
9. Switch to WindowViewer
InTouch IDE Development Demo

Steps:
1. Create New InTouch Application using IDE
2. Create Tags
3. Create ArchestrA Graphic
4. Draw crude graphic and link to tags
5. Create InTouch window and add Graphic
6. Switch to WindowViewer and test
7. Switch back and Modify
8. Add new tag
9. Add Visualization
10. Switch to WindowViewer
Did you Know?

Customer Images
No Distribution
Did you Know?

Customer Images
No Distribution
Did you Know?

Customer Images
No Distribution
QuickClient Utilization

Formally know as ThinView
QuickClient Introduction

What is it?
Why use it?
How to use it?
QuickClient Introduction

What is it?

• Out-of-the-box InTouch application with...
  - Automatic Navigation
  - Preconfigured Alarm Displays
  - Preconfigured Trend Display
  - Information Server Access

Why use it?

• Automatic Navigation / Self Aware Navigation
• NO WindowMaker development necessary
• PERFECT for demo/test scenarios
• Works with WSP and InTouch only systems
QuickClient Introduction

No need to EVER develop in WindowMaker
Can be added to ANY InTouch or WSP system
Works in 2012 (RTM), 2012 R2, and 2014 Beta
Simple and Easy for start/test/demo application(s)
All navigation automatically built for all graphics/objects
...

SO WHAT!?!?!
QuickClient Introduction

How to use it?

1. Import QuickClient aaPKG
QuickClient Introduction

How to use it?

2. Update settings in ArchestrA Graphics
QuickClient Introduction

How to use it?

3. Configure Model and/or Graphic Toolset(s)
QuickClient Introduction

How to use it?

3. Configure Model and/or Graphic Toolset(s)
QuickClient Introduction

How to use it?

1. Import QuickClient aaPKG
2. Update settings in ArchestrA Graphics
3. Configure Model and/or Graphic Toolset(s)
4. Go into Runtime
QuickClient Introduction
QuickClient Introduction

How about a more complex example?

QuickClient Visualization Workflow

1. Rename all contained graphics to start with “_”
2. Define a new graphic named “_DefaultGraphic” and put all the “parts” together
3. View in Runtime
QuickClient Introduction
## QuickClient Introduction

So how does this work again?

<table>
<thead>
<tr>
<th>Custom Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galaxy Name</td>
<td>Tells navigation control what galaxy to go to get list of objects and graphics from</td>
</tr>
<tr>
<td>GR Name</td>
<td>Tells navigation control what machine contains the galaxy database</td>
</tr>
<tr>
<td>Object Default Graphic Name</td>
<td>Tells the navigation control what graphic to attempt to open when an Application Object is selected/clicked</td>
</tr>
<tr>
<td>Hide Objects Starting With</td>
<td>Tells the navigation control to hide objects and graphics starting with this character or string</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>
QuickClient Introduction

What kind of effort is required to use this?

Existing App’s

- Usually VERY easy to add.
  - Rename graphics
  - Configure properties

New Apps

- VERY easy
ThinView v1.2 download on WDN
My Final Question...

Why aren’t you using ArchestrA Graphics?

The Last Question
The Industrial Software Revolution Begins Now

invensys™