L06 - Building FactoryTalk® View SE Applications

FactoryTalk® View Site Edition Lab

PUBLIC
A View for Every Manufacturing Scenario

**FactoryTalk® View Machine Edition**
- Machine-Level HMI
- PanelView™ Plus and Compact

**FactoryTalk® View Site Edition**
- Scalable PC Based HMI
- Industrial and Non-Industrial Computers and Monitors

**FactoryTalk® ViewPoint**
- Web-Based HMI
FactoryTalk®™ View Site Edition

Station

Distributed

Scalable from a single station to a centralized distributed architecture

FactoryTalk® View Studio provides a common development tool for Station and Distributed Applications
PanelView™ Plus with ViewPoint

Support single client connection to a PanelView™ Plus

FactoryTalk® View SE Station with ViewPoint

Gain web browser access to your single station nodes

FactoryTalk® View SE Server with ViewPoint

Extend your distributed system to mobile web clients like the Microsoft Surface Pro Tablet
FactoryTalk® View SE 8.0
August 2014 Release

Streamlined Installation
- Unattended Install
- Streamlined Client Install
- FT Historian Connectivity Tools

Improved Run-Time Experience
- Confirmation Popup*
- Button Enable Disable*
- Improved display of screen values
- Enhanced surface area for touch animation*
- New User Group Security functions

Alarming Improvements
- Alarm Severity Improvements
- Configure Alarm Sounds for Banner
- Out of Scope alarm occurrence handling
- Alarm Banner Sort Order improvements
- Alarm Log Viewer Improvements

Configuration and Application Building
- Capture Value before Change
- Remote Studio for Network Station
- VBA import and export

Expanded Operating System Support
- Windows 8
- Windows 8.1 Update
- Windows 2012 Server R2
- Cache Management Tool
- Last release supporting Older Microsoft® Operating Systems

* Supported in FactoryTalk® ViewPoint 8.0
What is this lab about?

Exploring Demo Application

Graphics and animation

Test running displays

Configuring and running an HMI client file

Intro to FactoryTalk® Alarms and Events

Data log models and trends

Simple VBA coding

Intro to FactoryTalk® ViewPoint

Includes updated V8.0 Material!
Where to Find Additional Information

- FactoryTalk® View Site Edition web site

http://www.rockwellautomation.com/rockwellsoftware/products/FactoryTalk®-view-se.page?#overview

Before you can optimize production, you need to understand where efficiencies can be gained in your plant. To do this, you need a clear view across entire lines and production processes. FactoryTalk® View Site Edition (SE) is a supervisory-level HMI software for monitoring and controlling distributed-server/multi-user applications. It provides a comprehensive and accurate picture of operations, meeting the demands of multiple stakeholders including engineering, maintenance, operations, and production Information Technology (IT).

FactoryTalk View SE provides robust and reliable functionality in a single software package that scales from a stand-alone HMI system to a distributed visualization solution. As our customers have experienced over the past few years, FactoryTalk View SE enables you to take advantage of mobility, virtualization, and other new technologies, meeting HMI challenges in process, batch and discrete applications and delivering critical visibility when and where you need it.
Questions?
Backup Slides

FactoryTalk® View SE Version 8.0 Detailed Slides
Summary of Release

- Products and Services Released:
  - FactoryTalk® View Site Edition 8.0
  - FactoryTalk® View Machine Edition 8.0
  - FactoryTalk® ViewPoint 8.0
  - FactoryTalk® Services Platform 2.70
  - FactoryTalk® Alarms and Events 2.70
  - RSLinx Enterprise 5.70
  - RSLinx Classic 3.70
  - FactoryTalk® Activation 3.62.01

FactoryTalk® ViewPoint version now aligned with FactoryTalk® View ME and SE
Streamlined Installation

FactoryTalk® View SE 8.0 Feature Information
Unattended Installation

An unattended install capability is now supported in version 8.0.

Use scripting in a command line or batch file to automate installation of all FactoryTalk® View components.

**OVERVIEW**

You can typically use this mode during large-scale rollouts when it might be too slow and costly to have administrators or technicians interactively install the software on individual computers.

In the unattended installation, you enter a specified command line with multiple parameters.

During the installation process, instead of prompting you for installation and configuration information interactively, the process follows the parameters you specified in the command lines.

**BENEFITS**

- Use a batch file (.bat) to automate installation

```
Setup /Q /AcceptAllLicenseItems /Product="Site Edition Client" /AutoRestart
```
Streamlined Client Installation

OVERVIEW

During FactoryTalk® View Site Edition installation, you can choose to install the client install portal feature.

It allows you to install Site Edition Client through a web browser in a distributed system.

BENEFITS

- From a web browser, use this address to display the new client install portal - http://<servername>/ftviewclient
- The client portal page will be displayed and allow you to install client required components.
This installation option allows you to create Historian SE points from trends and display data from FactoryTalk® Historian on the trends.

**OVERVIEW**

- Streamlines time to install and configure a View / Historian system
- Align with Station, Studio, and Client installation

**BENEFITS**
Improved Runtime Experience

FactoryTalk® View SE 8.0 Feature Information
Confirmation Popup

OVERVIEW
You can choose to show a confirmation popup dialog box and configure the appearance when executing commands or actions on buttons, numeric inputs, string inputs, or objects with touch animation.

BENEFITS
- Enable operations to confirm they want to take requested action before it occurs.
- Remove the need to use a display graphic to perform this native action.
- Supported in ViewPoint 8.0
Button Enable / Disable

OVERVIEW

Uses a tag name or expression to determine whether the state of a button should be enabled or disabled.

BENEFITS

- Eliminate need to "stack" buttons for different operations
- Provide native options for how buttons or touch animation operates on an operator screen
- Choose look of button when in disabled state – add icon, image, or change text to grayscale.
- Supported in ViewPoint 8.0
Improved Display of Screen Values

You can configure to show the digit grouping of a value at run time.

The digit grouping symbol uses the numeric format of the current runtime language.

The format can be configured in the Windows Region and Language settings of Control Panel.

### OVERVIEW

- Clarifies display of numbers for operators
- Improves how numbers are displayed on screens when different regional settings are required.

### BENEFITS
Enhanced Surface Area for Touch Animation

**OVERVIEW**

You can specify the rectangular bounding box or the object outline as the touch area.

**BENEFITS**

- Provides better control of touch animation surface area
- Allows operator to avoid overlapping selection areas
New User Group Security functions

Two new security functions:
- **CurrentUserGroups()** – This function returns the FactoryTalk® user group list of which the current user is a member. This function is available in VBA only.
- **CurrentUserHasGroup()** – This function returns whether the current user is assigned to the specified FactoryTalk® user group. Also supported in View ME.

**BENEFITS**
- Enables evaluation of a user’s membership in a security group from a display screen.
- Dramatically reduces the amount of VBA Code or Expressions that were previously needed to evaluate a user’s security group membership in a runtime client.
Configuration and Application Building

FactoryTalk® View SE 8.0 Feature Information
Capture Value Before Change

When you change the numeric or string input value, the previous value is logged and shown in the Diagnostics List.

- Provides improved tracking of operator actions
- Improves support for 21 CFR Part 11 compliance
- Streamlines troubleshooting process
Connect to Network Station with a Remote View Studio

OVERVIEW

Allows remote View Studio administration of Network View Site Edition Station.

BENEFITS

- Remotely administer Network scope Station similar to Distributed View SE
- Allows users to not install Studio on same computer as Station
You can import or export VBA code that is stored with the objects on displays using the Graphic Import / Export Wizard.

**XML File:**
- Screen Attributes
- VBA Code

**Benefits:**
- VBA code is embedded in Graphic file and can now be part of the XML export
- By including this in the export, a user can modify the VBA code externally and import it back into the project using the Graphic Import Export Wizard
- This can really streamline the bulk engineering of graphic displays in a View SE Project
Leverage Application Documenter for Better Troubleshooting

OVERVIEW

Use Application Documenter to create a report of a FactoryTalk® View SE Application.

The report will show detailed configuration information of different components of a View SE Application.

BENEFITS

- The report can be viewed from a web browser
- Now users have the capability to send this report to another user or Rockwell Automation Technical Support for evaluation.
- Previous releases required this report to only be viewed from the same computer the application was hosted on.
Alarming Improvements

FactoryTalk® Alarms and Events 2.70 Feature Information
Alarm Severity Improvements

OVERVIEW

Tag Based FactoryTalk® Alarms and Event alarms now support linking Severity with a Controller tag.

BENEFITS

- Better integration with controller based alarm strategies
- Allows user to change Alarm Severity levels from an HMI Screen
Configuring Alarm Sounds for Banner

OVERVIEW
Support to configure sounds and status tags for alarm priorities in the Alarm and Event Banner object at design time.

BENEFITS
- Configure specific sound based on Priority from Alarm Banner
- Configure Status Tags for each Priority
Out of Scope Alarm Occurrences

OVERVIEW

Support to show or hide the out of scope alarm occurrences in the Alarm and Event Summary object at run time

BENEFITS

- Clear away out of scope alarm occurrences in order to streamline an operator’s time to understand alarm status
- Also available as a VBA function

- To show the out of scope alarm occurrences in the event list at run time, select this check box.
- To hide the out of scope alarm occurrences in the event list at run time, clear this check box.
- Clearing this check box does not limit the out of scope alarm occurrences that the Alarm and Event Summary receives; it only limits the out of scope alarm occurrences that the Alarm and Event Summary displays.
- This check box is selected by default and can be configured at design time.
New Alarm Banner Sort Order

OVERVIEW

Support to sort the banners by Event Time in the Alarm and Event Banner object at run time.

BENEFITS

- Choose between Alarm State – Priority – Event Time or Event Time – Priority for how the alarm list in the Banner is sorted
- Sorting by Event Time provides a streamlined method for operations to evaluate most recent alarms
Alarm Log Viewer Improvements

New Edit filter button is added in the toolbar of Alarm and Event Log Viewer to support creating a custom filter for the events displayed in the Alarm and Event Log Viewer at run time.

In Design-Time, support to filter the alarm and event information by Event Time in Alarm and Event Log Viewer. The filter by Event Time shows the events that match your defined time criteria in Alarm and Event Log Viewer.

OVERVIEW

- From a run-time View SE Client, be able to edit an existing filter to quickly get the alarm history information needed
- Set up your run-time client Alarm Log Viewer to be filtered based on Event Times to streamline your investigation of alarm history

BENEFITS
Expanded Operating System Support

FactoryTalk® View SE 8.0 Feature Information
Windows 8, Windows 8.1 Update and Windows 2012 Server R2 join the list of supported operating systems in this release.
Cache Management Tool

Because of changes in Internet Explorer 10 and later, FactoryTalk® View SE 8.0 has created a new Cache File Management Tool to manage temporary internet files.

OVERVIEW

Because of changes in Internet Explorer 10 and later, FactoryTalk® View SE 8.0 has created a new Cache File Management Tool to manage temporary internet files.

BENEFITS

- Designed to handle FactoryTalk® View's requirements when used on computer with Internet Explorer 10 and later
- The FactoryTalk® View 8.0 CPR 9 SR 7 release dropped support for Windows 2008 Server SP 1.

- The FactoryTalk® View 8.0 CPR 9 SR 7 release will be the last View release that will support any version of Windows XP, Vista, and Windows 2003 Server.