# FactoryTalk® View Site Edition

Powerful, scalable visualization solutions

To meet plant floor expectations, HMI software must meet the demands of multiple stakeholders.

- Engineering and Maintenance demand ways to quickly develop applications, scale architectures, and easily maintain systems once deployed.
- Operations demands easy to understand display screens, quick access to alarming, and system-wide diagnostics.
- Production Information Technology (IT) demands system-wide security, web capabilities, highly available systems and alignment with virtualized solutions.

FactoryTalk View Site Edition (SE) meets the demands of each of these groups, providing robust and reliable functionality in a single software package that scales from a stand-alone HMI system to a distributed visualization solution. With FactoryTalk View SE, HMI challenges in process, batch and discrete applications are managed in a single software solution that enables critical visibility in realtime when and where you need it.



# **Features and Benefits**

## **Premier integration with Logix controllers**

- No need to create and maintain a separate HMI tag database define tags once in the Logix controller, then access them throughout your system.
- Referencing Logix controller tags directly from HMI displays provides optimized communications and display of data.
- Subscribe to Logix controller-based alarms to display, annunciate, and manage them in the HMI.
- Logix extended tag properties with translated text reside in the controller and can be accessed by the HMI, reducing duplication errors and streamlining project design.

## **Productivity**

- Take advantage of rich, reusable graphics and animation capabilities with Symbol Factory graphic library, Global Objects, and Rockwell Automation Process Object Library faceplates.
- Integration with ThinManager software enables a single sign-in for operators by passing login credentials from ThinManager to FactoryTalk View SE clients.
- Application edits can be automatically rolled out to a running system .

## **Alarm configuration and management**

- View and interact with alarm conditions throughout the architecture with easy-to-use graphical alarm objects.
- Categorize alarms into alarm groups to control how they are viewed, filtered, and annunciated.
- Align with ISA 18.2 alarm management standards with built-in alarm features.

## Mobility

- Mobile HMI provides continuous system visibility anytime, anywhere.
- Extend your applications to your favorite iOS or Android mobile device for improved real-time decision making.
- Publish HMI screens as-is, or create mobile device-specific screens for better visibility on a smaller screen.



# **Engineering and Maintenance**

Delivering tools to quickly develop applications, scale architectures, and easily maintain systems.

#### **DESIGN TIME EFFECTIVENESS**

- FactoryTalk® View Studio provides a centralized development environment for managing and editing any components in the HMI application.
- Make and save edits to the application while the system is running with changes rolled out to clients dynamically.
- Optimize development effort by creating master graphical Global Objects that can be reused on multiple displays. At runtime, use parameters to pass and display data from multiple sources on different instances of the same Global Object.
- Quickly find and replace tags or string values throughout the application using the Find/Replace function. Then leverage the Cross-Reference capability to open a list of tag references in the project with a hot link to jump to each specific reference.
- Use the test run feature for screen validation when tags or parameter files are connected to a data source.
- Multi-language support with runtime language switching: multiple-language implementations can be accomplished by defining language context in simple to use lookup files.
- · Easily edit displays, alarms, and tags with XML Export.
- Rapidly configure and control your application with pre-defined faceplates from the Rockwell Automation Library of Process Objects that link to corresponding control elements in the Logix controller.
- Integration with Studio 5000 Architect<sup>™</sup> allows access to reusable engineering content from previous projects to speed development.

#### **SATISFYING VALIDATION REQUIREMENTS**

FactoryTalk View SE software can aid in manufacturing environments subject to regulatory compliance or in any system looking to track critical operator actions. FactoryTalk View SE software can enforce user verification, as well as E-Signature approval by a second user, before a change is committed. All HMI operator activity can be tracked in a system-wide audit trail. When FactoryTalk View SE software is deployed with FactoryTalk AssetCentre software, HMI applications can be automatically backed up and stored in



a version control system. Operator actions (audits) can be displayed, along with process data values and alarm events, on the TrendPro trend object – creating a comprehensive view of alarms, operator actions, and system reaction.

#### SCALABLE ARCHITECTURE TO MEET YOUR NEEDS

- Scale from single station to multi-client / multi-server systems.
- Architect the right solution to meet today's needs while supporting future expansion as your system grows.

• Expand the capabilities of the system by integrating and sharing data with other Rockwell Software products.





# Build a better view with FactoryTalk View Site Edition.

Designing and testing displays is simple with features like parameterized screen testing. This allows you to validate that variable tags passed to a display are working as expected.

# **Operations**

Delivering robust applications with easy to understand display screens, quick access to alarming, and system-wide diagnostics.

#### **EXTENSIVE ALARM CAPABILITIES**

Alarm monitoring is a critical function the operator must perform. The ability to quickly visualize the situation and navigate to a more detailed screen is essential when monitoring an alarm condition. Alarm management components in an HMI system must provide reliable, real-time visibility into critical conditions that require immediate attention. FactoryTalk Alarms and Events allows:

- Viewing of, and interaction with, alarm conditions throughout the architecture with easily configured Alarm Summary and Alarm Log graphical objects.
- · Alarm Grouping provides logical organization and management of alarms.
- Support for server tag-based alarms, where data points in the controller are polled by FactoryTalk Alarms and Events looking for a state change as an alarm condition.
- Support for Logix instruction-based alarms, where alarms are configured in controller alarm logic instructions, and alarm status is detected by the controller as that logic is executed. Alarms are time stamped and pushed to the HMI only on state changes, reducing network traffic and resulting in more accurate alarm time stamps.
- Support for Logix tag-based alarms, where alarms are defined on tags, and are
  evaluated in the controller. Logix tag-based alarms are evaluated in the controller
  separately from logic execution, resulting in an efficient alarm system using less
  controller memory.

#### **SYSTEM WIDE DIAGNOSTICS**

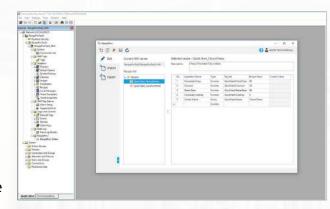
FactoryTalk® products report, route and store information about events that happened in a system and correlate the information across multiple devices to provide a system-wide diagnostic solution for troubleshooting and determining root cause.

#### **RECIPE MANAGEMENT**

Define a group of tag values as a recipe with FactoryTalk View SE RecipePro+. Recipe functionality makes it efficient to download or upload many tag values simultaneously, often

for machine setup or changing production settings. The RecipePro+ recipe manager allows for editing of recipes at both design and run time, and stores recipe definitions in an external recipe file. This makes it easy to create, view, edit, or backup recipes outside of the HMI system.

For RSView32 users, RecipePro+ provides automatic conversion of existing RSView32 RecipePro projects, making it easier to migrate your visualization solution to FactoryTalk View SE software.





FactoryTalk Alarms and Events capability aligns with the ISA 18.2 alarming standard. You can select alarms to Shelve, which removes them from visibility for a configured amount of time.

# **Production IT**

Delivering system-wide security capabilities, web capabilities, and support for virtualization and high availability.

Information convergence between manufacturing and business systems is crucial to drive greater business agility. To support, accelerate, and secure this convergence, Rockwell Automation and Cisco Systems have collaborated to develop **Converged Plantwide Ethernet (CPwE) Architectures** to provide education, design guidance, recommendations and best practices.

#### **STAY SECURE**

Security on the production floor is critical. Restricting who has access to the system and tracking changes when they are made is expected in today's environment. With FactoryTalk®, production system security can be integrated with an existing IT Infrastructure. This works by leveraging Windows authentication services and other security access procedures such as enforcing unique passwords or automatically locking out accounts after unsuccessful logon attempts. Security administrators have the ability to further restrict access based on line-of-sight for machine level applications.

#### **REDUCE RISK BY MAINTAINING VISIBILITY**

Implementing a redundant server configuration ensures visibility to the system should a hardware or network failure occur. The underlying FactoryTalk services provide health detection between FactoryTalk View components and automatically switch over to the secondary server in the event of a failed primary server. All clients are then switched over to the new active server to allow continuity for operations personnel to control vital plant processes in realtime.

#### STEP INTO THE WORLD OF VIRTUALIZATION

All components of a FactoryTalk View SE system have been tested in a virtualized environment and come with VMware® Ready Status. To further support virtualization, Rockwell Automation offers <u>Virtual Image Templates</u> that provide pre-installed FactoryTalk View SE on the appropriate Microsoft operating system, minimizing the setup and configuration time required to deploy FactoryTalk View SE in a traditional IT environment.

# **Technology Partnerships**

### Microsoft

Creatively applied technology can drive innovation in many ways – from manufacturing methods to business models. Rockwell Automation® and Microsoft® have joined forces to accelerate this innovation for both Operations and IT practitioners, empowering them to apply solutions in transformative and powerful new ways.

## **Cisco Systems**

Rockwell Automation and Cisco are committed to being the most valuable resource in the industry to help manufacturers improve business performance by bridging the technical and cultural gaps between plant-floor and higher-level information systems. Through successful collaboration on products, services and educational resources, these industry leaders enable manufacturers to converge their network infrastructure and tightly integrate technical and business systems using EtherNet/IP – the world's leading open industrial Ethernet network.

# **Extending Your HMI**

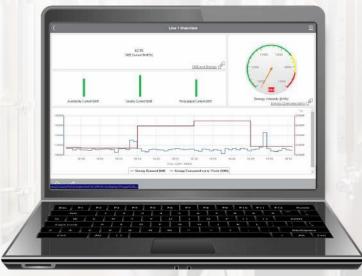
Delivering anytime, anywhere access to contextualized manufacturing data for more informed, faster business decisions.

#### HISTORICAL AND TRENDING DATA AT YOUR FINGERTIPS

FactoryTalk® Historian establishes a reliable foundation for capturing the data you need to improve operations. Powerful reporting and trending tools provide critical insight into performance parameters and are available at high speed and full resolution for any control system or human-machine interface (HMI) software.

#### THE GATEWAY TO A WEALTH OF INFORMATION

Most of what manufacturers need to know about their production operations is buried in their greatest hidden asset—their manufacturing data. FactoryTalk VantagePoint EMI is the gateway to that data and enables individuals to explore the wealth of information buried within the data. This software offers mobile access via any smartphone or tablet, and the ability to view web-based reports and KPI dashboards delivered through the software portal.



Real-time data coming from the controller can be contextualized against historical data from FactoryTalk Historian.

#### **MAKE YOUR HMI MOBILE**

FactoryTalk ViewPoint allows you to view and interact with your FactoryTalk View SE applications from a web browser or your favorite mobile device, providing continuous system visibility and improving real-time decision-making. As an add-on to FactoryTalk® View SE and PanelView™ Plus, FactoryTalk ViewPoint delivers:

- A truly interactive web based HMI experience without requiring any additional development.
- Full support for graphics and configured animations.
- Configurable security to provide users with read only or read-write access.
- · Real-time and historical trending.
- A maintenance free browser-based client with no additional software to install and configure.
- Support for Windows, iOS, and Android with HTML 5 rendering.



