

Powerful, scalable visualization solutions

## Advantages

- Scalable HMI solutions from single station to multi-client / multi-server systems
- Continuous system visibility through FactoryTalk and redundancy-enabled HMI, Alarm, and Data Servers
- Integration and sharing of data with other Rockwell Software products
- Restricted access to control system assets and ability to meet the most stringent security requirements such as FDA 21 CFR Part 11
- Alarm management through a comprehensive alarm summary and alarm history viewer
- Highly reliable client and server communication
- Fast and reliable data access to the Logix Family of Controllers
- Easy connectivity options for non-Logix and 3rd-party controllers
- Reduction in application development time with global objects, pre-engineered faceplates, and tag-less HMI Server
- Extended visualization and real-time decision capabilities to web-enabled users

*Build a better view  
with FactoryTalk View  
Site Edition.*



## Overview

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

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

FactoryTalk View Site Edition 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 when and where you need it.

LISTEN.  
THINK.  
SOLVE.

# Engineering and Maintenance

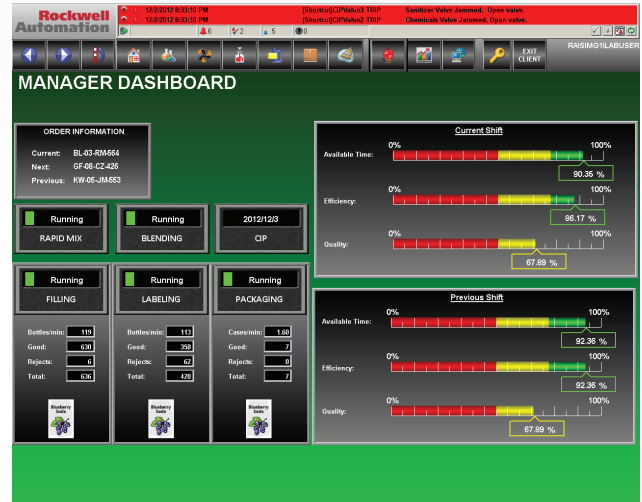
*Delivering tools to quickly develop applications, scale architectures, and easily maintain systems.*

## Design Time Effectiveness

FactoryTalk® View Studio provides a centralized application framework for managing and editing any of the components of an HMI solution. Import / Export a component from previous work or leverage pre-engineered faceplates to speed along application development. While commissioning the system or in full operation, make edits to the application while the system is running. Once the edits are saved, the changes are rolled out to the clients dynamically.

With Global Objects you can create a core set of functionality to build out a library of faceplates or other common components to be used on multiple graphic screens or multiple instances on a single graphic screen. These objects can be defined with parameters that are passed in at runtime for each unique instance. From maintainability perspective, when the base object is edited, all linked instances of the object are updated with the changes – all while the system is running! This reduces the overall maintenance effort and the probability of introducing errors.

Finding and replacing a tag or string value in an HMI application can be time consuming and prone to errors. Using the built-in Find and Replace capability streamlines this operation for you. Leveraging the Cross-Reference capability, you can get a complete listing of where the specified string is referenced throughout the application. Selecting any one of the items in the list opens it for editing without having to search for the project file.



The new gradient shading capability enhances graphical look and feel while maintaining operator effectiveness.

## Scalable Architecture to Meet Your Needs

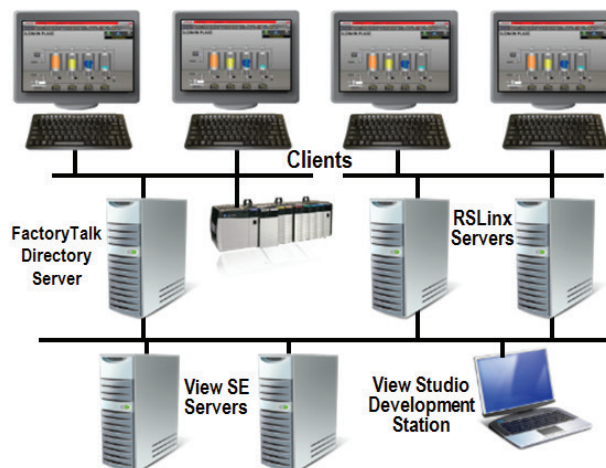
Architect the right solution to meet today's needs while supporting future expansion as your system grows. FactoryTalk View Site Edition (SE) is scalable from a single station HMI to a multi-client / multi-server site-level supervisory solution. Within a complex architecture, the use of FactoryTalk® Live Data optimizes connections between FactoryTalk View SE and other FactoryTalk-enabled products, providing highly-reliable communication within the architecture. This provides optimized, real-time data transfer and more reliable, efficient connections to data servers. FactoryTalk View SE accesses other FactoryTalk-enabled components through the FactoryTalk Directory. The directory is a common address book that tracks the location of other servers configured in the system in order to enable sharing of data.

### FactoryTalk View SE Station



Common development environment with FactoryTalk View Studio

### FactoryTalk View SE Distributed

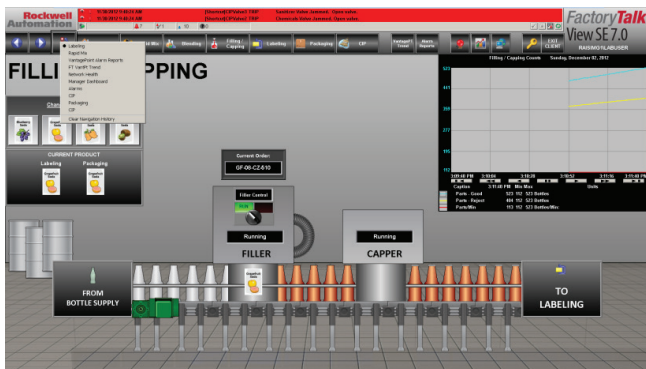


# Operations

*Delivering robust products that have easy to understand display screens, quick access to alarming, and system-wide diagnostics.*

## Operator Effectiveness

The ability to quickly visualize the situation and navigate to a more detailed screen is essential when monitoring an alarm condition. With web browser style navigation buttons, you can quickly navigate to previous screens or select a specific screen from the history list.



The ability to enhance the graphical look and feel with tools like gradient shading gives operators a better ability to interpret machine or system performance.

## Alignment with Standards

To align with ISA Standard 18.2, FactoryTalk Alarms and Events support all of the standard alarming states, including the Shelved state- similar to the Suppressed state but with an expiration time. Select one or more alarms to shelve in order to remove them from visibility. The shelved alarm will become visible again when the shelve time expires, or when the alarm is manually unshelved.

## System Wide Diagnostics

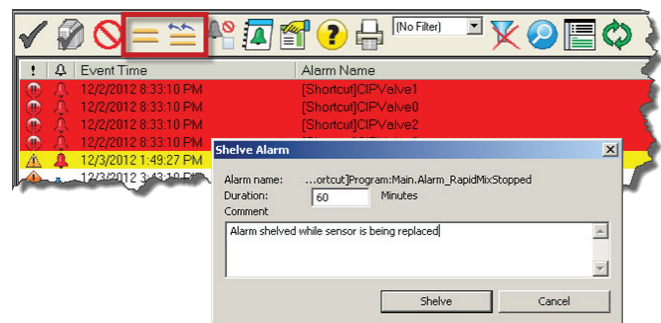
FactoryTalk® Diagnostics allows FactoryTalk-enabled products to report, route and store information about events that happened in a system . This information can be correlated across multiple PCs in order to provide a system wide diagnostic solution for trouble-shooting and determining root cause.

## Extensive Alarming Capabilities

Alarm monitoring is a critical function the operator must perform. Providing the alarm management components in an HMI solution is a requirement. FactoryTalk® Alarms and Events provide reliable, real-time visibility into critical conditions that require immediate attention. Operators view and interact with alarm conditions throughout the integrated architecture with easy-to-use graphical items, Alarm Summaries and Alarm Logs.

FactoryTalk Alarms and Events support two different types of alarming options –tag based alarms and device based alarms (which reside in the Logix controller).

- Tag-based Alarms are similar to traditional alarm systems where data points in the controller are polled looking for a state change as an alarm condition. All processing and alarm management is done at the server level.
- Device-based Alarms are alarmed based instructions (ALMA and ALMD) that reside in the Logix controller. All of the alarm detection and management is done in the controller. Clients are set up to be notified when an alarm condition has occurred in the controller. Because alarms are detected in the controller, network traffic is reduced (no longer polling tags for alarm condition), and alarm time stamps are more accurate.



New FactoryTalk Alarms and Events capability aligns with the ISA 18.2 alarming standard. Now, 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, alignment with virtualization, and high availability.*

## Stay Secure

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

## Satisfying Validation Requirements

For critical operations like set point changes, the system requires user verification. Additional controls are available to support validation requirements such as 21 CFR Part 11. All activity is then logged through FactoryTalk® Diagnostics, a common diagnostic sub-system across all FactoryTalk products and can be used to generate validation audit reports.

## 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 components and automatically switch over to the secondary server in the event of 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 real-time.

## Web Visibility into Production Systems

FactoryTalk ViewPoint extends a FactoryTalk View HMI application to a web browser interface for the casual user outside the production environment. Create View SE screens and publish them to the FactoryTalk ViewPoint server for web clients to access. Changes to View SE graphic displays are automatically synchronized with the ViewPoint server.

## 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 Virtual Image Templates 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.

### Get More Information

For ordering information, contact your local Rockwell Automation® sales office or Allen-Bradley® distributor. Or learn more by visiting

<http://discover.rockwellautomation.com/HMI>

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