Introductions

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A Rockwell Automation Virtual Event

**June 10 – 19, 2020
Online/Virtual Seminars & Labs
Registration opens in May**

RSView32 Notice of <u>Discontinuation</u>

- **Current Lifecycle Status "Active Mature"---Still sold but newer products are available**

- **Supported on Win 7 32 bit (not Win 10)**

Components of a FactoryTalk View SE system

Development environment

RSView32 Works

FactoryTalk View Studio Enterprise

This is also the main tool used to migrate RSView32 applications

Single station runtime system

RSView32 Runtime

FactoryTalk View SE Station

Station applications can have either "local" or "network" scope

Distributed runtime system

RSView Active Display Server

FactoryTalk View SE Server / Client

A FactoryTalk View SE client file is created, then run on a client PC

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3 basic steps to migrate an RSView32 application

Migration from RSView32 to FactoryTalk View SE is easier than any other conversion

Prepare

- Understand the components of the FactoryTalk View SE system

- Evaluate your application for what will and won't migrate

- Backup the RSView32 application

Migrate

- Convert the RSView32 HMI tag database to SQL Server Express format

- Create a new application in FactoryTalk View Studio

- Import the RSView32 application into FactoryTalk View SE

Complete & verify

- Configure communications

- Complete migration of system components using conversion tools

- Test your application

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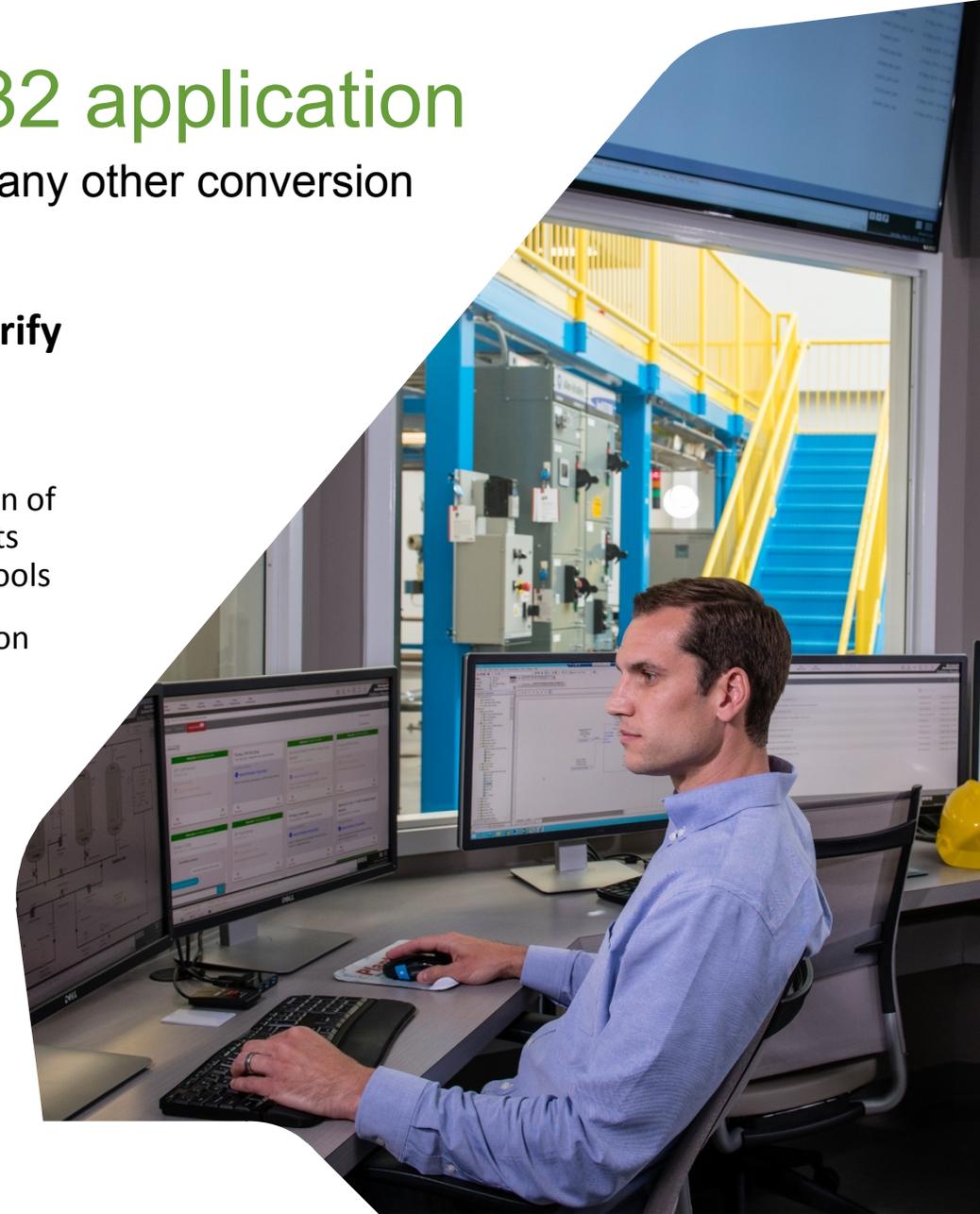
Migrating the RSView32 application – tools and utilities

Tools and utilities for migration

Most tools installed with FactoryTalk View Studio

Alarm Migration tool

- Converts HMI alarms to FactoryTalk Alarms
- Converts alarm tags to a format usable by the FactoryTalk Alarms and Events server
- Available in Knowledgebase AID [QA51785](#)

Tag Import and Export wizard

- Built into FactoryTalk View Studio
- Used to export HMI tag information to a .CSV file, which can then be:
  - Imported into a FactoryTalk Alarms and Events server
  - Edited using Excel, then re-imported into an application

Legacy Tag Database conversion utility

- Installed with FactoryTalk View v6.1 or later
- Also available in Knowledgebase AID [QA11595](#)
- Converts tag database from old (Watcom) format to new (SQL Server Express) format that supports 64-bit systems
- Allows you to import RSView32 project into FactoryTalk View SE on a 64-bit machine

HMI Tag to Direct Reference Converter wizard

- Converts HMI tag database references in graphic objects to direct controller tag references
- Available in Knowledgebase AID [QA521](#)
- Can be used with both View SE and View ME

RSView32 to FactoryTalk View SE Migration Guide

RSView®32 to FactoryTalk® View SE Migration

FactoryTalk® View Site Edition (SE) supports importing and reusing RSView®32 projects. The conversion process successfully retains most of the core RSView32 project, including graphic displays, animated objects, text, tags, alarms, expressions, and macros.

FactoryTalk View SE supports both stand-alone and distributed versions. The stand-alone version, called FactoryTalk® View SE Station, has characteristics in common with RSView32 runtime software. The FactoryTalk View SE distributed components include FactoryTalk View Studio, FactoryTalk View SE Server, and FactoryTalk View SE Client. The distributed version has many of the same capabilities as RSView32 Active Display System. Keep these distinctions in mind as you convert your projects.

Migrating the RSView32 application – considerations

Upgrade or innovate?

- Innovation can provide you with a more modern interface for your operators, maintenance, and engineering
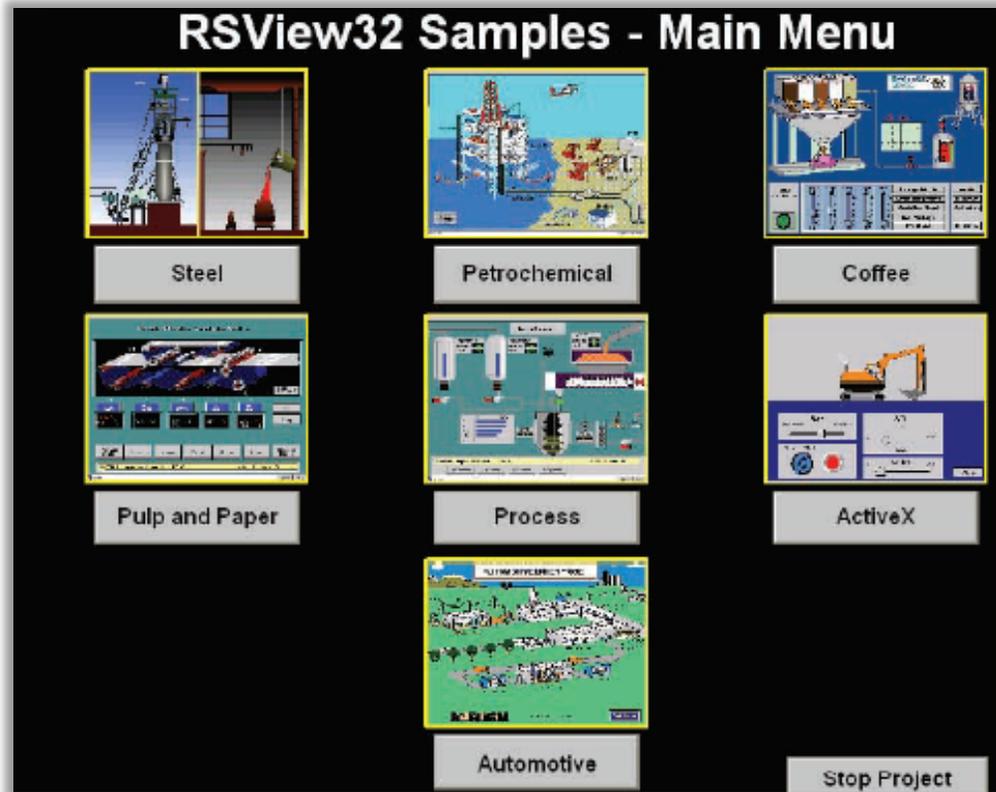
Upgrade or Innovate?

- Pre-built Rockwell Automation Libraries are designed to provide complete **control and visibility**
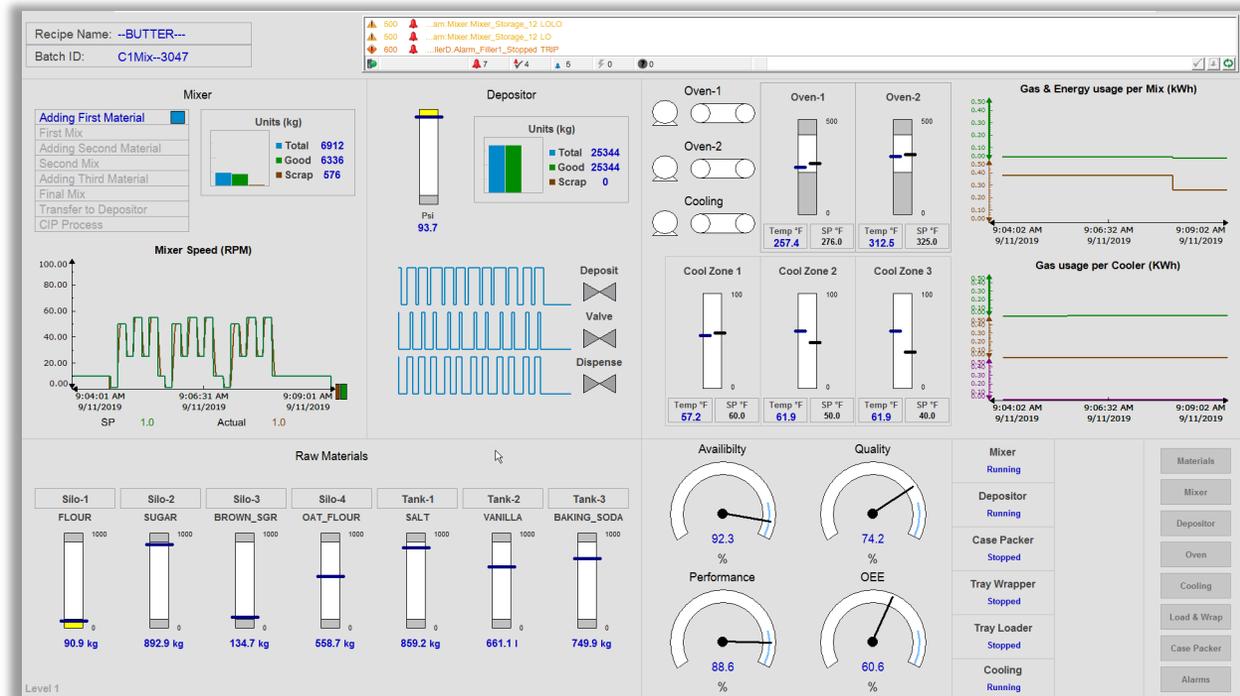
VBA execution in RSView32 vs. FactoryTalk View SE

VBA EXECUTION MODEL IN RSVIEW32

VBA executes on server, functionality based on HMI tag manipulation with no exposure to client graphical objects

HMI Client　　　　**HMI Client**

HMI Server
- VBA
- HMI Tags
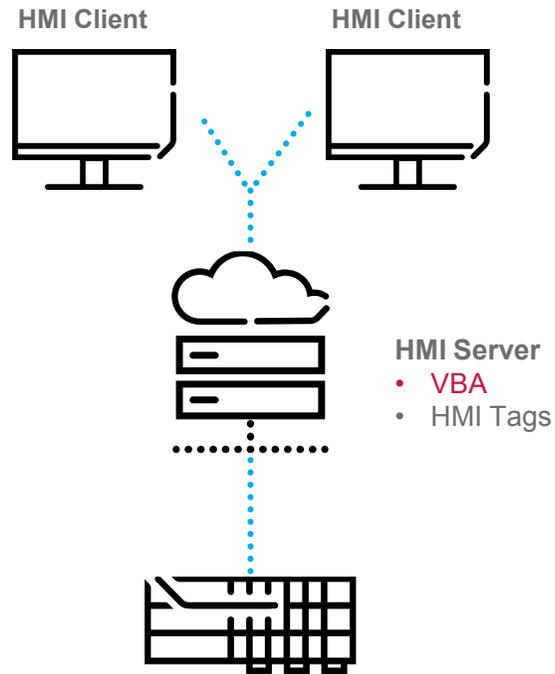
VBA EXECUTION MODEL IN FACTORYTALK VIEW SE

VBA executes on clients, functionality based on events from graphic objects

HMI Client　　　　**HMI Client**
- VBA　　　　　　　　 - VBA

HMI Server
- HMI Tags

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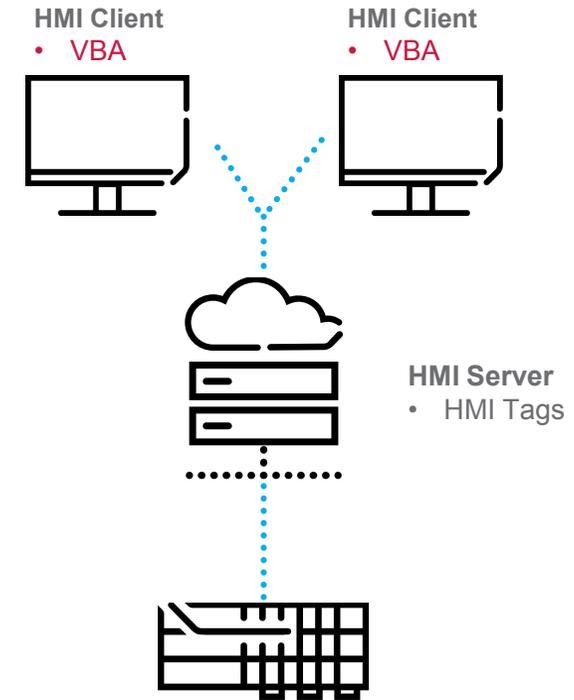
Direct referencing

HMI TAG DATABASE

HMI Clients use HMI Device Tags in the the HMI tag database for communications with a controller. Both RSView32 and FactoryTalk View SE support HMI Device Tags.

HMI Client

HMI Tag Database
- Device Tags
- Memory Tags
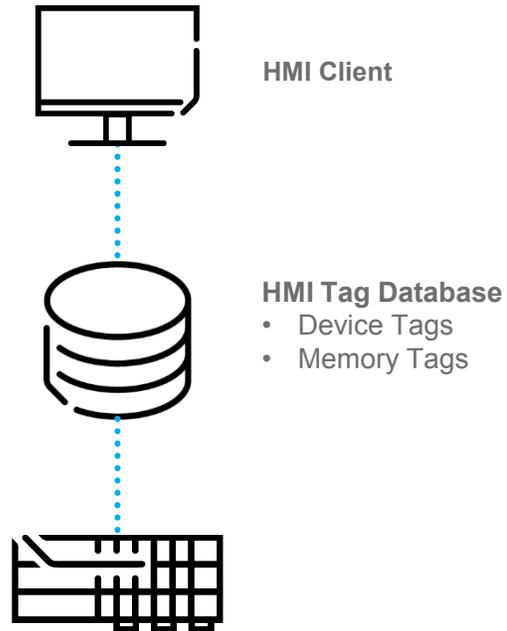
DIRECT REFERENCE TAGS IN FACTORYTALK VIEW SE

HMI Clients can use either HMI Device Tags or go directly to the controller with a Direct Reference Tag.

HMI Client

HMI Tag Database
- Device Tags
- Memory Tags
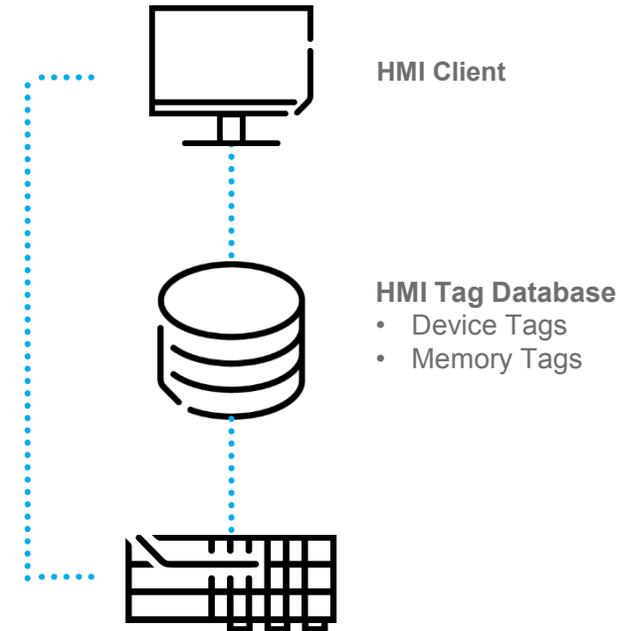
FactoryTalk Alarms and Events

DEVICE-BASED ALARMS
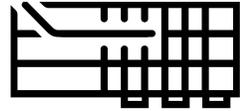
- Pre-built alarm instructions that are programmed in a Logix5000 project and then downloaded into a Logix controller.
- The controller detects alarm conditions and publishes event information, which is routed through the system for display and logging.

TAG-BASED ALARMS

- Software-based tag servers monitor data tags for alarm conditions and publish event information for display and logging.
- Tag based alarm monitoring is supported by Logix controllers, PLC-5 controllers, SLC 500 controllers, or any third-party device through OPC Data Access (OPC-DA).

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Key considerations

ACTIVEX CONTROLS

ALARMING

USERS & SECURITY

COMMUNICATIONS

VBA SCRIPTING

DIRECT TAG REFERENCING

Exploring mobile options

Go mobile! And improve operator effectiveness

FT View SE

FT ThinManager — A Rockwell Automation Technology

FT ViewPoint

STANDARD CLIENT

- Full client installation

- Can use tablet for other things, like a laptop

REMOTE DESKTOP

- Terminal services

- Single remote client setup

- Easy to maintain clients

- Needs infrastructure

- Effective for small solutions

- AID 554813 Remote Desktop Services

BROWSER

- Mobile devices

- Extension of FactoryTalk View

- See and interact with HMI screens via a web browser

- Displays rendered in HTML5

- Supports a full range of mobile devices

Getting more from your mobile HMI

It's more than just smaller displays!

At home, in the office, or on the run, mobile HMI makes everyone more productive and effective.

Reference this whitepaper to learn 10 tips that will help you design your HMI with mobility in mind to enable not only operators but everyone responsible for keeping the plant running.

Rockwell Automation

Designing for Mobility

Top 10 design tips for a mobile HMI with FactoryTalk ViewPoint

Publication FTALK-WP012

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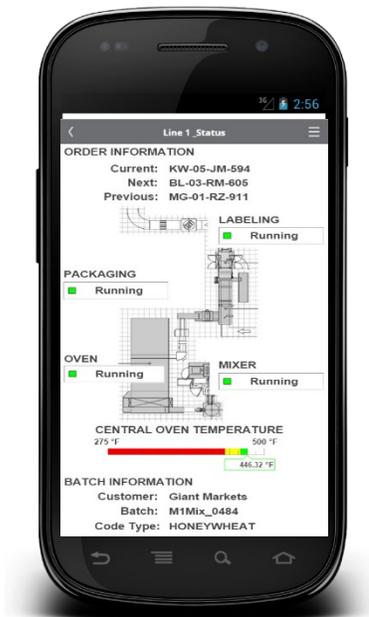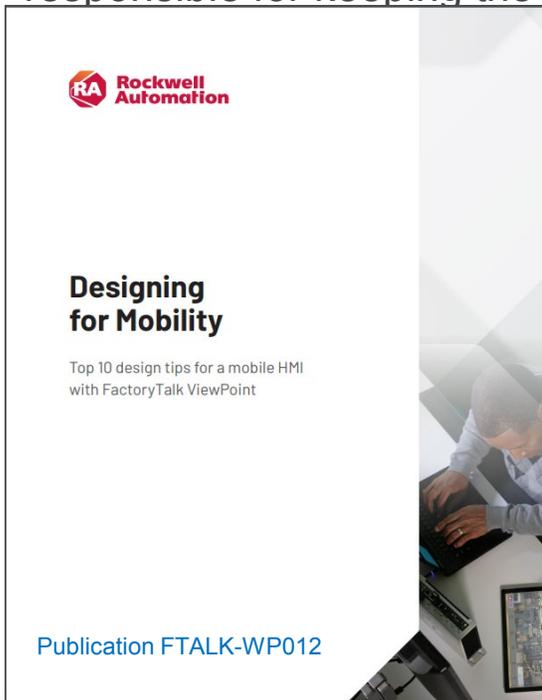
Modern Client Architecture (ThinManager/thin clients)

Content Delivery and Device Management

Content Types

HMI
ERP
MES
CMMS
™

Web
Content

…AND MORE!

Configuration

*ThinManager® provides **secure** configuration and **delivery** of content*

THINMANAGER®
A Rockwell Automation Technology

Delivery

Devices

Users

User X

Group X

Role X

Locations

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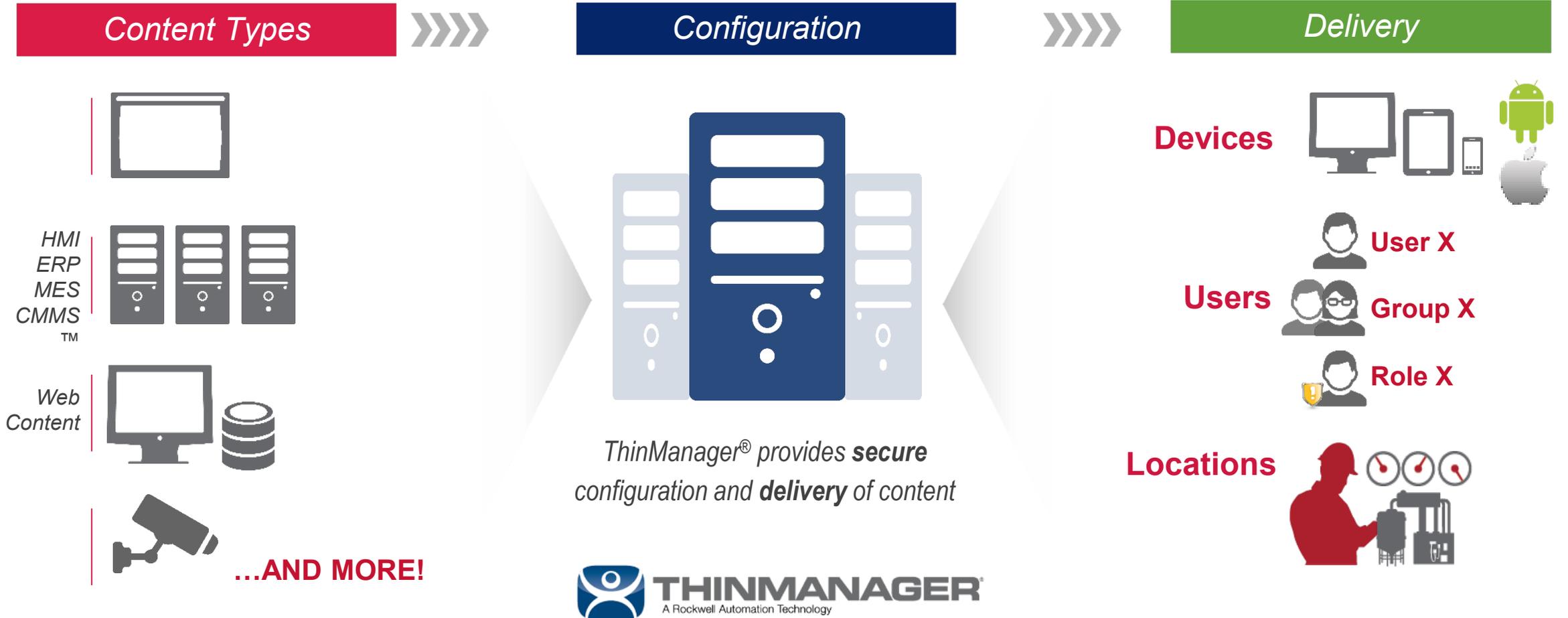
Commercial incentives to migrate

Rockwell Automation makes it easier to migrate with the StepForward program

StepForward program reduces the cost of modernization for RSView32 users

"Trade in" RSView32 licenses toward purchase of FactoryTalk View SE

Ask about RSView32 StepForward benefits from Encompass Partners

Rockwell Automation offers a broad line of industrial PCs that can be paired with FactoryTalk View SE when required

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Wonderware InTouch and Intellution/GE iFIX/FIX

- Rockwell Automation provides HMI project conversion services at <u>no charge</u>
  - InTouch, versions 6.x to 10.x
  - iFIX, version 2.5 to 5.5
  - FIX, versions 6.0 and 7.0
- Projects are converted to RSView®32 and imported to a FactoryTalk® View Site Edition (SE) Local Station application
- **Work with your local Reynolds Company Specialist to submit projects for conversion**

- **<u>Not a turnkey project conversion service</u>**
- **All converted projects will require verification and testing by application 'owner'**

Conversion Service – What's New

InTouch and iFIX

- As of April 1, 2020, each project submitted will include a signed Technical Support Services Agreement

- Confirms the end user owns rights to all files being submitted

- Goal is to protect all parties involved in conversion

iFIX

After some experience, better results are found if the following two files are included with the other iFIX project files:

- Driver configuration with the project files (FIX.SCU)
- CSV tag database export file

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Technical Support Services Agreement

A. The "Parties". The parties to this Agreement are:

Name: Rockwell Automation, Inc. ("Rockwell Automation")	Name: Click here to enter text. ("Company")
Address: 1201 S. Second St. Milwaukee, WI 53204	Address: Click here to enter text.

B. "Scope Statement".

C. "Term"

Competitive HMI Conversion Service Scope ("Services")

Rockwell Automation will convert a Wonderware InTouch or IFix application to RSView32, using an automated conversion utility. Conversion output will include the RSView32 project with conversion logs detailing any objects or displays that did not convert. Rockwell Automation will also import the resulting RSView32 application into a FactoryTalk View SE Local Station application, and will provide that project backup .APA. Conversion is not complete; only displays and tag databases are converted. Resulting application will require verification and testing by Company or authorized party, who will assume complete system responsibility. Conversion results will vary on a case by case basis; some application conversions will be more complete than others.

Once conversion scope is agreed upon, application conversion may require up to two weeks. Application conversion time may vary, depending on project scope.

D. The Terms and Conditions for the Services are attached as Exhibit A.

THE PARTIES ACKNOWLEDGE THAT EACH HAS READ THIS AGREEMENT, UNDERSTANDS IT, AND AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

"ROCKWELL AUTOMATION":
By: _____
Name: _____
Title: _____
Date: _____

"COMPANY":
By: _____
Name: _____
Title: _____
Date: _____

- Projects are submitted for conversion via Reynolds Company Specialist or Rockwell Account Manager

- Projects are first converted to RSView®32 via utilities; includes log files and a list of any displays that were not converted

- RSView®32 application is imported into FactoryTalk® View SE Local Station app returned as an .APA backup

- Eliminates the need to use Legacy Tag DB Utility – tag database is already converted for use on 64-bit OS

- Restore with FactoryTalk® View Application Manager (v6.10 or later) on a 32-bit or 64-bit PC
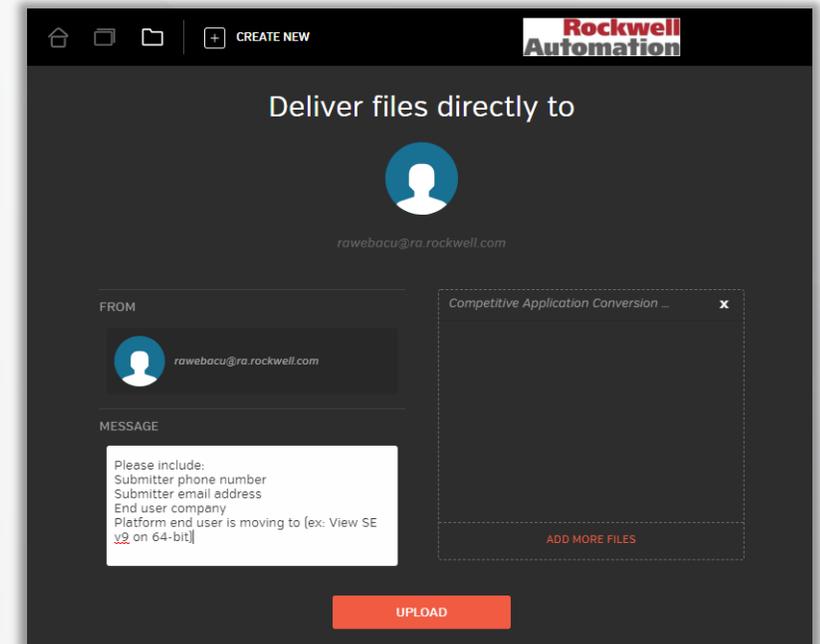
iFIX / FIX32

- **Graphic displays** with basic objects

- **Animation** including visibility, sliders, size (width/height), rotation, position, fill, color

- **Parameter files** (TagGroups are converted to parameter files; unique identifier in all of the tag groups to placeholders)

- **Data Sources** - The conversion utility will map tag data sources to the corresponding tag name converted to RSView®32 where possible. Data Sources such as historical data and global variables that do not map to tags will be listed in the conversion exception reports.

- **Tag database** - iFIX tags will be mapped to RSView®32 tags. This mapping will include at least the tag name, type, and data source, minimum, and maximum.

RSView32 tag type	iFix Block Type
Analog tag	AA, AI, AO, AR, BB, CA, ETR, FN, HS, LL, PA, PID, RB, RM, SD, SQD, SQT, SS, TR, DT, SC, EV, PG, TT
Digital tag	DA, DI, DO, DR, BL, MDI, TM
String tag	TX

InTouch

- Graphics and tag database files are converted

- Scripts, ActiveX controls, and .NET controls are not converted

- Any supplemental files or data are not converted and will not be returned with the converted project

- ArchestrA projects will not convert; only the InTouch component can be converted

- Depending upon the project, the utility may not support conversion; please be aware that some or all of the graphics may not convert

ACU Conversion Wizard - Step Three

Upload InTouch project
The final step is providing us with information about the project and end customer, and submitting the application.

We are now using the Hightail file transfer utility for file submission. Click here to submit a project. You will be directed to a Hightail file upload site for the RAWebACU team. Please enter your name and email, note that this is a Wonderware project, and include the following in the Message field, as shown below:

- Your name and company
- Your phone number
- End customer name and potential software revenue
- Whe

This inform
are any pro

If you have

Welcome to Rockwell Automation's large file transfer cloud service.
Send files easily and securely to Rockwell Web ACU

Full Name: (Optional)

Email: Your email address

Subject: (Optional)

Message: (Optional)

SELECT FILE

SEND IT

By clicking on the 'Send it' button, you agree to Hightail's Terms of Services.

- A zip file will containing the following:
  - **RSView®32 project** – project that can be imported into FactoryTalk® View SE
  - **Application Scripts Log.txt** – list of all script code in the project
  - **Conversion Database Exception Log.txt** – exception report for tag database conversion; lists any problems found in the tag database conversion
  - **Conversion Graphics Exception Log.txt** – exception report for graphic (display) conversion; lists any unsupported objects found in the project
  - **Conversion Tag Mapping.csv** – shows where tags in the InTouch or iFIX project can be found in the converted RSView®32 tag database
  - **Exceptions.txt** – lists any displays that could not be converted at all by our utility
- FactoryTalk® View SE Local Station project backup .APA
  - Restore .APA with the FactoryTalk® View v6.1 or later Application Manager (.APA can be restored on 64-bit PC)

Where do I start?

Find the RSView32 to FactoryTalk Migration Guide, as well as other white papers, manuals, and product information on the Rockwell Automation Literature Library

View tips and tricks and how-to videos on the YouTube FactoryTalk View playlist

Read our blog, view other HMI webinars and find other helpful material on rockwellautomation.com

When you're ready to modernize, your **local distributor or Rockwell Automation sales representative** can help you:

- Build your modernization roadmap

- StepForward program options

- Find the right engineering assistance

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Thank you!