# Visualization

2020

**Rockwell Automation**

Tomas Knobloch
Solution consultant Process & SW

# Agenda

**1** Visualization Portfolio

**2** PanelView™ Plus 7 and FactoryTalk® View ME

**3** PanelView™ 5000 with Studio 5000 View Designer®

**4** FactoryTalk® View SE

**5** ThinManager® and VersaView® Thin Clients

**6** What's Next in Visualization

# Visualization Portfolio

# Visualization Solution

Where to find the basic overview

# Electronic Operator Interface (EOI) Portfolio

### Component EOI
### PanelView™ 800

- Optimized for compatibility with Micro800™ and MicroLogix™ controller
- Design and configure with CCW
- Panel-mount display devices
- Connectivity to L1, L2, L3 Logix controllers

### Advanced Graphic Terminals
### PanelView™ Plus 7 Standard and Performance

- Run FactoryTalk® View Studio Machine Edition software
- Mobile Enabled
- Standard – For applications with 100 or less replace screens and faceplates
- Performance – For larger applications
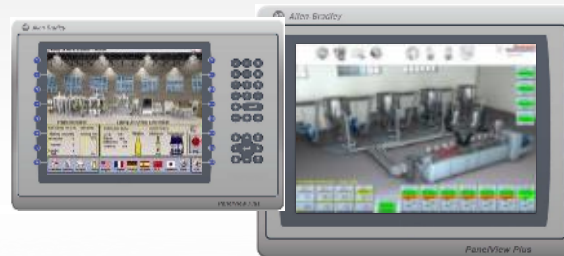
### Advanced Graphic Terminals
### PanelView™ 5000 PV5310 – PV5500

- Studio 5000 environment for enhanced integration with Logix Controllers
- Reduced development time
  - Scalable vector graphics
  - Advanced animation
  - Logix based alarms
- Advanced runtime environment

### Tethered Terminal
### MobileView™

- Run FactoryTalk® View Studio Machine Edition software
- Integrated hard-wired E-stop
- Generation II Terminals
  - Junction Box Identification
  - Illuminated E-stop

**Increasing Features / Performance**

# Industrial Computers Portfolio

| Industrial PC | Midrange PCs / Monitors | Advanced Industrial PCs | Harsh Environment Industrial PCs |
| --- | --- | --- | --- |
| ThinManager® Thin Clients | VersaView® 5000 | 6181P | 6181X |
| ▪ Versatile sizing and configurations for single up to multiple 4K monitor connections | ▪ PCs and monitors for mid-sized applications | ▪ Run large applications with speed and reliability on 6181P | ▪ Designed and validated for 24/7/365 use in C1D2 / ATEX harsh environments<br>▪ New: Multi-touch PCAP unit |

# Visualization Software Portfolio

**SCALABLE VISUALIZATION**

## Machine-Level HMI
FactoryTalk® View Machine Edition
Studio 5000 View Designer®
- PanelView™ Plus 7
- PanelView™ 5000

## Scalable HMI Software
FactoryTalk® View Machine Edition
FactoryTalk® View Site Edition
- Station (ME and SE)
- Server / Client (SE Only)

## Extending the HMI
FactoryTalk® ViewPoint
- WEB access to FTView ME, SE applicationsUntether op
ThinManager
- Thin clients and content delivery management

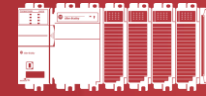**Rockwell Automation**

# PanelView 800

# PanelView™ 800 Graphic Terminals

- Optimized for compatibility with Micro800® and MicroLogix™ controllers
- Enables connectivity with CompactLogix™ 5370 L1, L2, and L3 controllers
- Offers remote monitoring and troubleshooting of terminal using a Virtual Network Computing (VNC) server
- Includes high-resolution display with light-emitting diode (LED) backlight supporting 65K colors
- Offers flexible application modes in landscape and portrait
- Supports email notification over encryption and email configuration during runtime and design time
- Allows FTP access to alarm history, recipe and data log files

Connectivity with CompactLogix™

High-resolution displays

Built-in Ethernet and serial communication ports

# PanelView™ Plus 6
## End of Life

# PanelView Plus 6 Discontinuation

PanelView Plus 6 terminals will now tentatively be discontinued on **30 SEPTEMBER 2021**

**4" Terminals**

(Includes Compact & Low Reflective)

**6" Terminals**

(Includes Compact)

**All Display Modules**

**All Logic Modules**

(Includes Marine & Conformal Coat)

**7" Terminals**

(All configurations)

**10" Terminals**

(All configurations including Compact)

**12" Terminals**
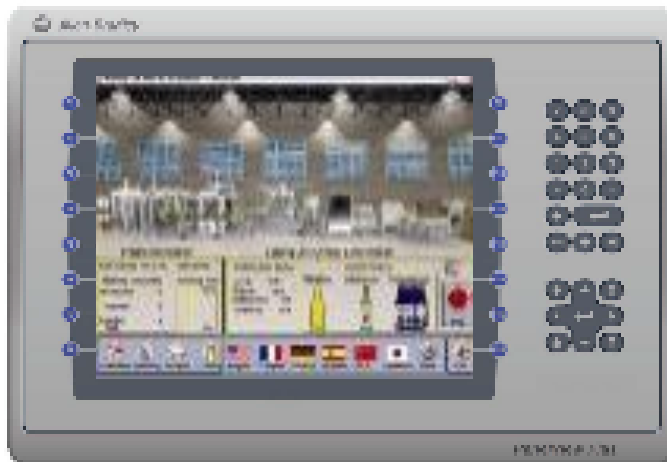
(All configurations)

**15" Terminals**

(All configurations)

# PanelView Plus 6 Discontinuation

Easy migration

## Easy migration to PanelViewPlus 7
## No need to modify the application and .MER file
## … but  Ethernet ONLY !!!

# PanelView™ Plus 7

# PanelView™ Plus 7 Performance Graphic Terminal



Armor



Stainless



## Scalable Solution

- Ideal for larger, more complex applications
- No limit (based on memory and CPU)

## Efficient Hardware Design

- Wide range of screen sizes (widths): 7", 9", 10", 12", 15" 19"
- Options for on-machine and hygienic applications
- Resistive touch screen or keypad options
- Low-profile painted aluminum bezel
- Innovative panel clamps help reduce installation time

## High Performance

- Dual Ethernet connectivity for Device Level Ring topologies
- Windows® CE extended features, including email and text notification
- Mobile ready with VNC support and FactoryTalk® ViewPoint
- Remote access, PDF reader, FTP server, Active X capabilities

## Enhanced Development Experience

- Faceplates and Add-on Instructions can save 50–90% development time
- Quickly create copies of a terminal with SD card to reduce your time to market or restore

# PanelView™ Plus 7 Standard Graphic Terminal



## Scalable Solution

- Ideal for smaller machines that only need a connection to one controller
- Supports up to 100 screens and 500 alarms (V11.00)

## Efficient Hardware Design

- Offers display sizes from 4...15 in. with wide screen and keypad options
- Resistive touch screen
- Low-profile painted plastic bezel
- 2-inch panel depth helps reduce cabinet space
- Innovative panel clamps help reduce installation time

## Performance Capabilities

- Features single or DLR Ethernet
- Includes email and texting notification capabilities
- Monitors applications from a remote location with VNC connectivity

## Enhanced Development Experience

- Faceplates and Add-on Instructions can save 50–90% development time
- The SD card can copy and restore the operator interface quickly

# PanelView™ Plus 7
# Stainless & Conformal Coating

# PanelView Plus 7

Stainless Steel Series B and Performance Conformal Coated Terminals



## Overview

- Stainless Steel Series B units offer the highest level of ingress protection within the PanelView family. They are built to survive harsh wash-down environments while meeting National Sanitary Foundation (NSF) requirements.

- PanelView Plus 7 conformal coat terminals offer increased protection of internal electronics

## Key Features

- **Stainless Steel Series B**
- IP69K, NEMA 4X, CE, UL
- Stainless Steel 304 bezel
- Replaceable blue food-grade silicone gasket (FDA 21 CFR 177.2600)
- Conformal coated (ISA 71.04 G3)
- 9" W and 12" W Brandless
- NSF certifications

- **PanelView Plus 7 Conformal Coat**
- Same features as PanelView Plus 7 with conformal coating

## Customer Benefits

- **Stainless Steel Series B**
- Field replaceable gasket makes it easy to maintain the environmental rating through periodic maintenance
- IP69K offers superior protection in harsh wash-down environments
- National Sanitary Foundation (NSF) rating assures compliance in Food / Pharma industries

- **PanelView Plus 7 Conformal Coat**
- Additional protection of electronics for harsh manufacturing environments such as tire and rubber

Rockwell Automation
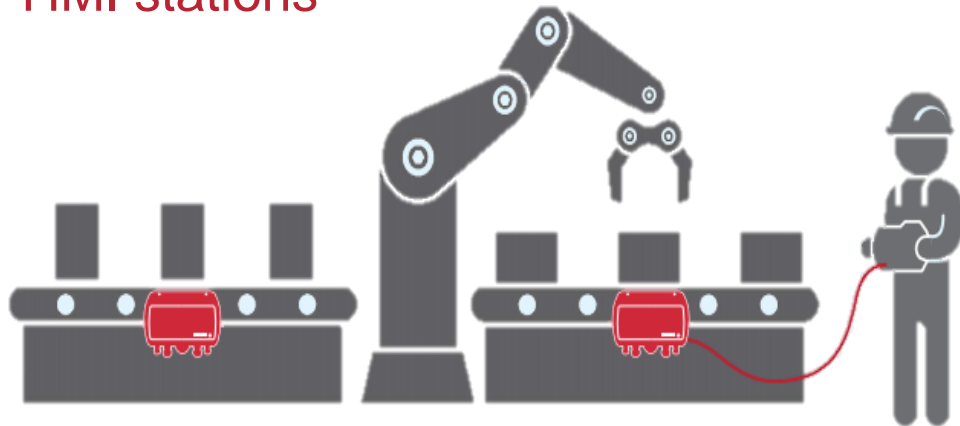
# MobileView

# MobileView™

Tethered Graphic Terminals



Take your application to the operator!

# MobileView™ Tethered Applications

- **HMI Applications with line of sight requirements**
  - **Setup/calibration** activities where an operator needs to be **in close proximity** to application with access to HMI
  - Applications requiring local safety functionality through **E-Stop or enabling switch**
  - **Maintenance applications**
  - Applications **requiring one or multiple mobile HMI stations**

# 2nd Generation **MobileView™** and Junction Box

- 3 Cable lengths: 5M, 10M, 15M
- **Illuminated E-STOP**
  - Positive indication to an operator when hardwired E-Stop is active
- **Safety Bridging**
  - Allows MobileView™ to be unplugged without tripping the E-Stop circuit
  - **10 second window** to insert bridge connector or MobileView™ terminal
- **Box ID Functionality**
  - Provides location awareness to tell the MobileView™ where it is plugged in
  - Serve up dedicated screens based on Junction Box ID
- **Two variants** available in the IP65 Junction Box (TUV SIL 3 certified)
  - Cable glands/grips
  - On-Machine connectors

# PanelView™ 5000 with Studio 5000 View Designer®

**Rockwell Automation**

# PanelView™ 5310 Graphic Terminal

- **For mid-size and smaller applications**

- Same core features as PanelView™ 5510

- 6", 7"W, 9"W, 10", 12"W

- 1.46 GHz Processor, 1 GB RAM, 4 GB update

- Runs v4 and newer Studio 5000 View Designer® software

- Touch screen only with aluminum bezel

- Single port Ethernet

- DC power

- **The connectivity to 1 controller only**

- **100 Displays**

- **4000 Logix Tag based Alarms**

- **1000 Logix Device(ALMD, ALMA) based Alarms**

# PanelView™ 5510 Graphic Terminal

- For full scale applications

- 7", 7"W, 9"W, 10", 12"W, 15", 19"

- Resistive touch screen with navigation button and keypad options

- 1.46 GHz dual-core processor, 1 GB RAM, 4 GB update

- Runs v4 and newer Studio 5000 View Designer® software

- User interface button

- Device Level Ring Ethernet

- DC power

- The connectivity up to **4** controllers

- 100 Displays

- 16 000 Logix Tag based Alarms

- 4000 Logix Device(ALMD, ALMA) based Alarms

# Studio 5000 View Designer®

Part of Studio 5000

# Studio 5000 View Designer®

Scalable Graphics



**+1000 MORE**
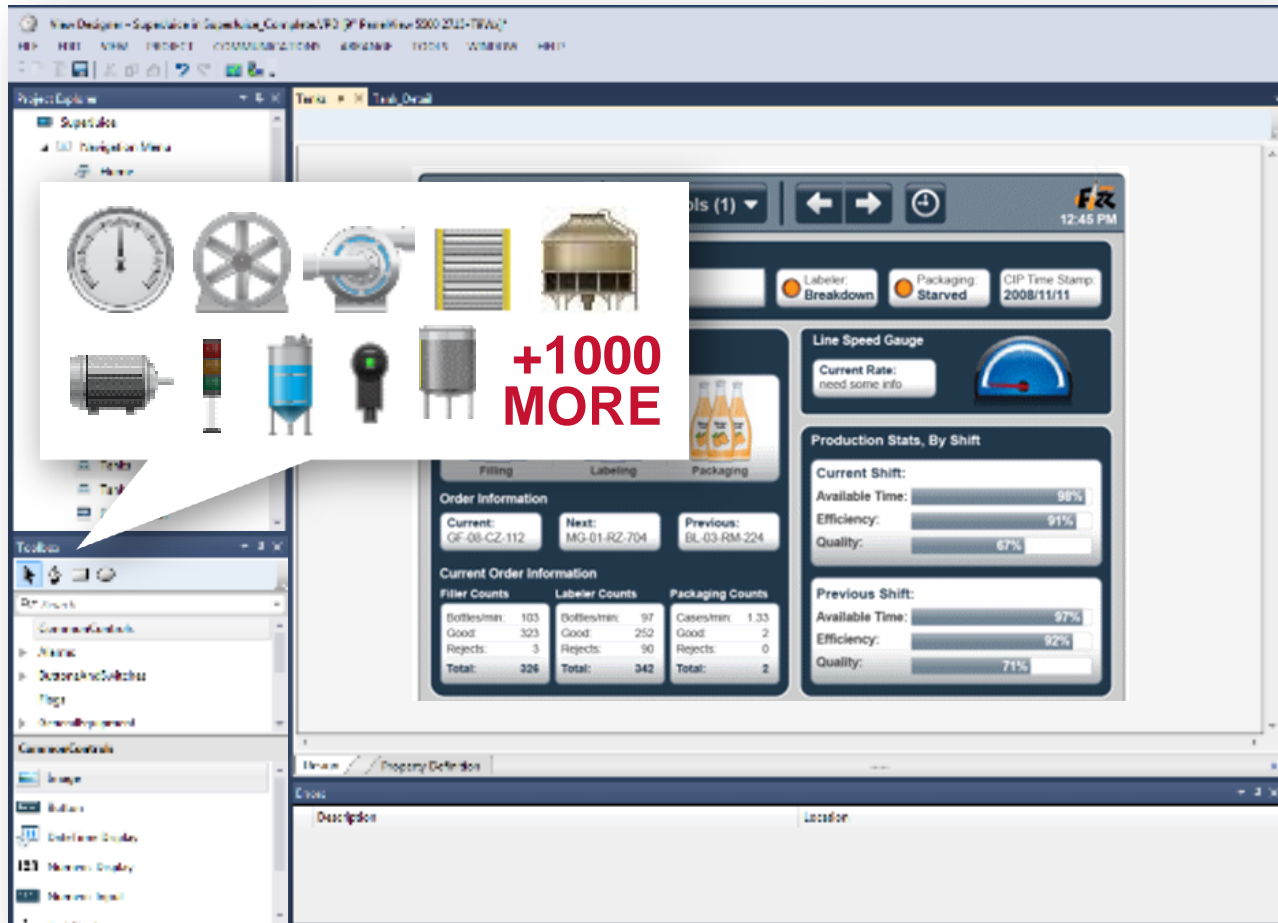
10"

19"

# Studio 5000 View Designer® Basic Features

Overview
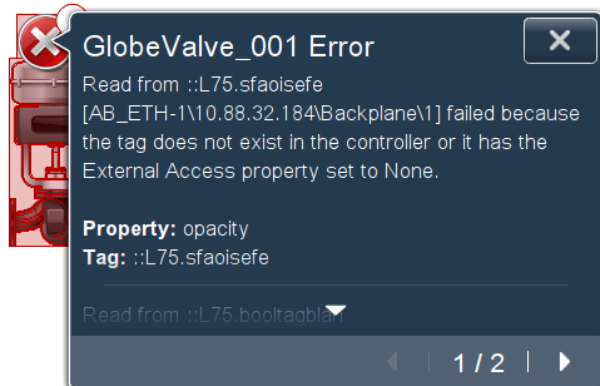


**Enhanced integration with Logix saves time when developing a system**

- Logix based alarms (Device and Tag based)
- High speed button control
- Create reusable screens and add-on graphics with Logix-typed properties
- Support for Logix tag extended properties
- Load program and firmware from removable media
- Emulator
- Data Logging
- Historical Trending
- Binding of element properties to tags and expressions
- Color and state tables
- Events and commands
- Runtime language switching
- VNC support
- Email Notification

# V7 View Designer Release Planned for Q2 CY2020

V7 aligned with Logix V33 – planned for May 2020

- *Subject to change*

  - Alarm history viewer
    - View up to 40,000 historical alarm records
  - Support for at least 2500 states in a state table
    - Useful for fault code messages
  - Larger keypad option
    - Easier data entry with gloved operation
  - Bindable ImageName property on Image element
    - Easier to swap images based on machine or process conditions
  - Configurable screen update rates
    - 100 ms, 250 ms, or 500 ms selectable update rates for screens
  - Adopt FactoryTalk® Linx for View Designer
    - Easier configuration of HMI to controller paths



Normal          Large

# PanelView 5000 / PanelView Plus 6, 7

Price comparison

| Product | Description | List Price |
|---------|-------------|------------|
| | | |
| 2711PC-T10C4D8 | PanelView Plus 6 Compact | € 2.390,00 |
| 2711P-T10C21D8S | PanelView Plus 7 Standard | € 1.740,00 |
| 2713P-T10CD1 | PanelView 5310 | € 1.420,00 |
| | | |
| 2711P-T10C4D8 | 2711 PanelView Plus 6 | € 4.240,00 |
| 2711P-T10C4D9 | 2711 PanelView Plus 6,  Extended Features | € 4.500,00 |
| 2711P-T10C22D9P | PanelView Plus 7 Performance | € 2.670,00 |
| 2715P-T10CD | PanelView 5510 | € 2.040,00 |

# Industrial Computers
# Thin Clients
# Monitors

# VersaView 5000 family

# VersaView® 5400 Industrial Computers



## Enhanced Performance

- Includes quad core Intel Atom E3845 CPU, 4 GB of RAM and a 128 GB solid-state drive
- Supports Windows® 7, WES 7, and Windows 10 operating systems
- **NO CUSTOMIZATION POSSIBLE**

## Modern Design

- Integrated display features edge-to-edge, all glass, ten-point multi-touch screen
- Available in 12 in., 15 in., 19 in., 22 in. – all wide screen
- Full high-definition resolution is available at 1920 x 1080
- 2-inch panel depth helps reduce cabinet space

## Flexible Options to Meet Your Needs

- Non-display option provides dual external display output ports
- Operates in environments that range from -20…+60 °C
- Mounting options include wall, VESA mount, DIN Rail, bookshelf and machine

# VersaView® 5100 Monitor



## Efficient Computing Solution

- Can be used in scalable compute solution
- Connects to the 1756 compute module in a ControlLogix® chassis with the display port plug-in or directly connects to the CompactLogix™ 5480 controller

## Modern Design

- Edge-to-edge, all glass, ten-point multi-touch screen
- Available in 12 in., 15 in., 19 in., 22 in. – all wide screen orientation
- Full high-definition resolution is available at 1920 x 1080
- 2-inch panel depth helps reduce cabinet space

# VersaView® 5200 Thin Clients

## ThinManager® Seamless Integration

- Thin client architecture allows for deployment of less expensive hardware
- Reduces management and hardware costs while increasing security
- Provides a number of features, tool and methods of access that make it simple to monitor and adjust user sessions from anywhere

## Integrated Display Modern Design

- Edge-to-edge, all glass, ten-point multi-touch screen
- Available in 12 in., 15 in., 19 in., 22 in. – all wide screen orientation Full high-definition
- 2-inch panel depth helps reduce cabinet space

## Flexible Options to Meet Your Needs

- Non-display options offered in single, dual, dual 4K, and multi 4K display options
- Mounting options include wall, VESA mount, DIN Rail, bookshelf and machine

# VersaView 5000

Available I/O Ports
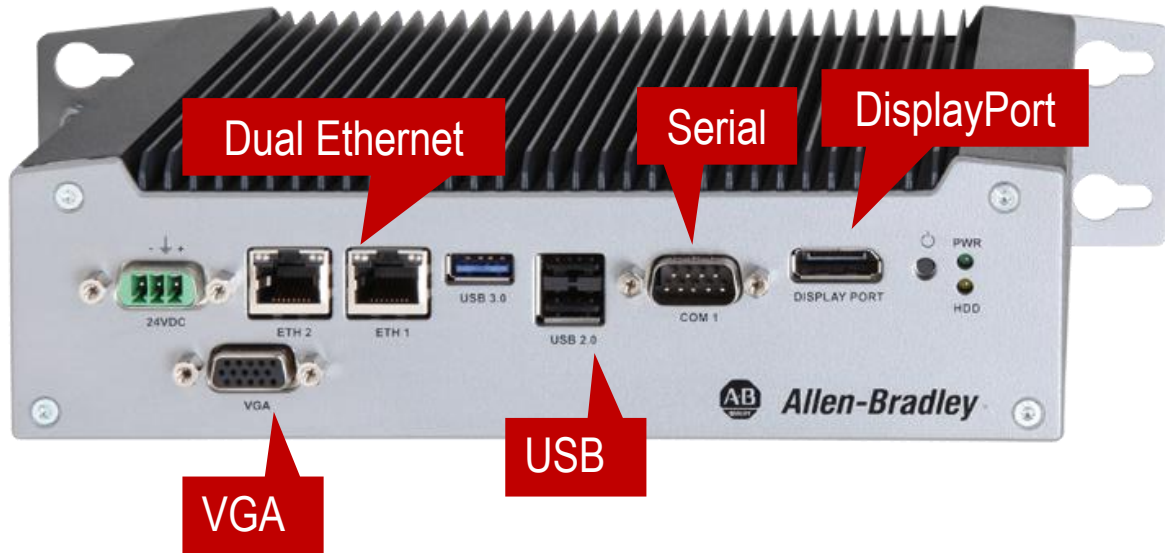


- All systems are 24V DC – an optional external AC/DC adaptor will be offered
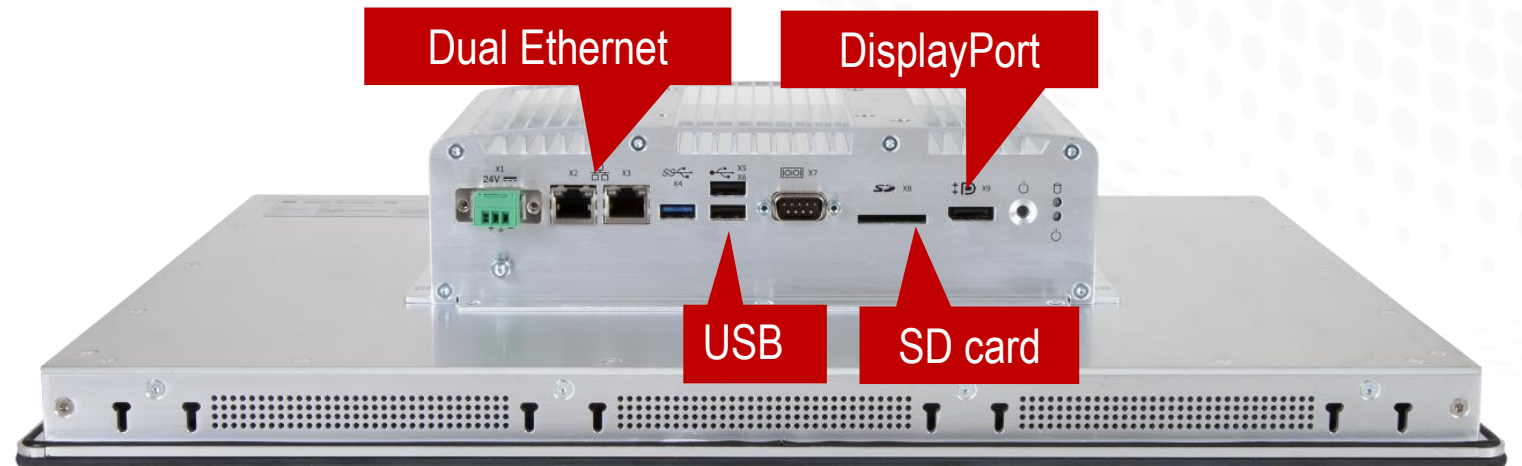
# VersaView® 5200 Non-Display Thin Clients

**VersaView® 5200 Single Display Thin Client**

More compact design targeted for cost-conscious applications

Single DisplayPort video output

**VersaView® 5200 Dual Display Thin Client** (optional conformal coat)

Single core Intel Atom CPU to meet standard application needs

Dual external display output

Hazardous location certified

**VersaView® 5200 Dual 4K Display Thin Client**

High-performance quad core Intel Atom CPU for demanding applications (complex virtual screens, multi-session, multiple IP camera feeds and more)

Dual 4K Displays, 1x DisplayPort, 1x HDMI

**VersaView® 5200 Multi 4K Display Thin Client**

High-performance quad core Intel i5 CPU for applications requiring multiple displays with demanding applications

Three or seven 4K Displays, 3x DisplayPort, 4x mini DisplayPort (optional)

*Front*

*Back*

# VersaView 6181P family

## Integrated Display Computers

# VersaView 6181P family

Two lines

- **Performance** models include **i3** CPU with 4 GB RAM and resistive touch

- **Advanced** models include **i7** CPU with 8 GB RAM and projected capacitive touch

- Screen sizes/form factors
  - 4:3 available in 12" (305 mm) (Performance only), 15" (381 mm), 17" (432 mm) and 19" (483 mm)
  - 16:9 widescreen available for Advanced models in 15" (381 mm) and 19" (483 mm)
  - Non-display models and non-display in-cabinet server models

- Addition DC power options available

- Additional storage options:
  - 32 GB SLC industrial flash solid-state drive
  - 256 GB MLC industrial flash solid-state drive
  - RAID 1 (mirroring) expansion capability (non-display model only)

# Anatomy



Single or Multi-touch Touch Screens

Aluminum or Stainless Steel Bezel

LED Indicators

User Interface Button (UIB)

Installation Assist Clip

Lockable USB 3.0 Port
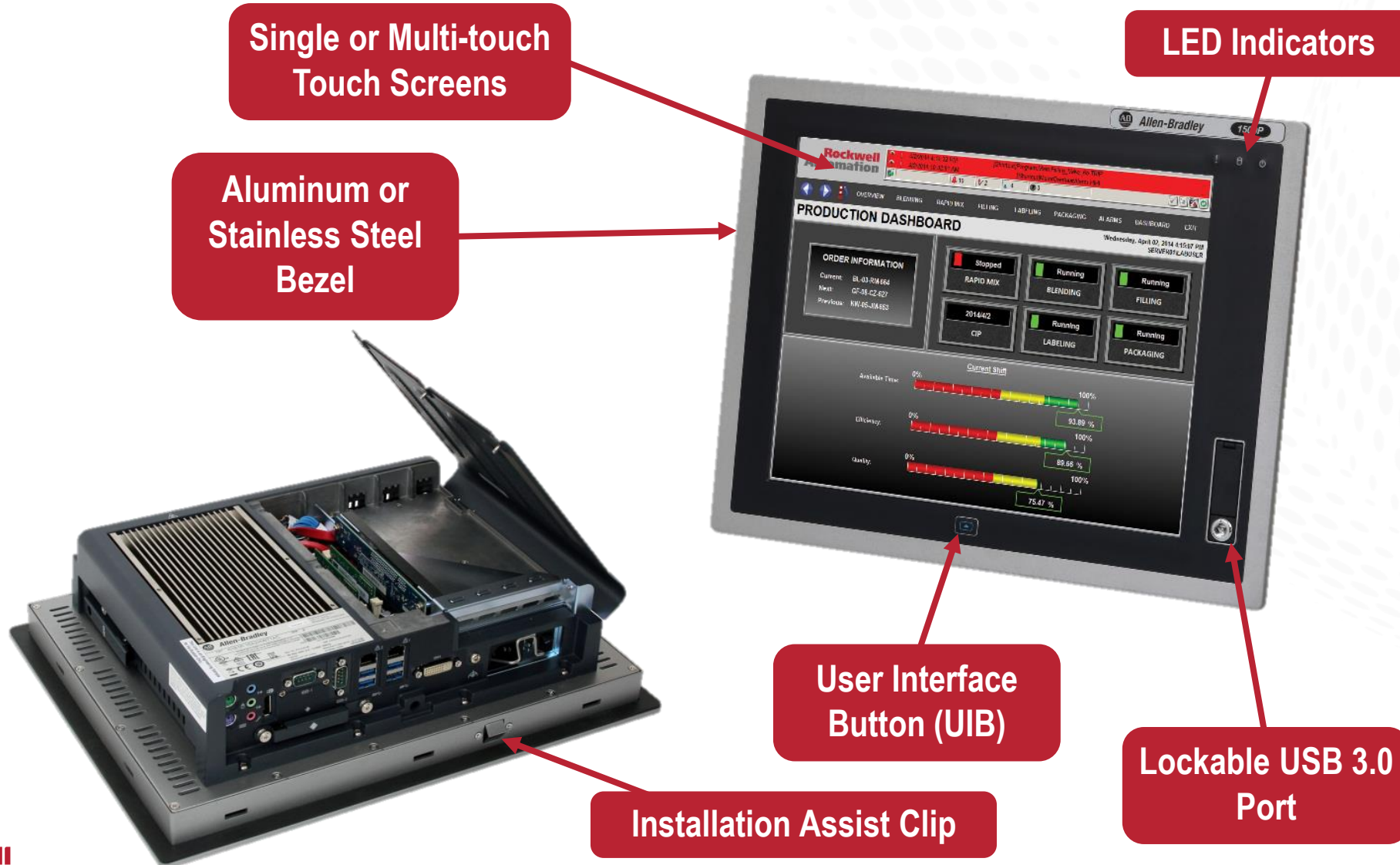
# 1200XT Industrial Computer



## Flexible options

- Available with or without an integrated 12 in. touch screen display
- Computers can be mounted in the same enclosure with a Logix-XT Controller without requiring additional heating and cooling equipment
- Memory, CompactFlash drives, and solid-state drives (SSD) can be easily upgraded in the field

## Solution for Extreme Environments

- Handles conditions down to -20°…70° C(backside only)
- Provide ATEX, IECEx and UL certification for hazardous locations

## High Performance

- Intel Dual Core i3, 2.1 GHz processor
- 8 GB RAM (16 GB System Max)
- 128 GB Solid-State Hard Drive
- Windows® 7 or Windows 10

Rockwell Automation

# 6181X Industrial Computer with 12" PCAP Multi-Touch Screen

Designed for extreme environments -20°C…70°C and hazardous locations

- IECEx, ATEX Zone 2, US/CAN Class I Division 2, Class II Division 2 and Class III Division 1 Certifications

- INMETRO certification for Brazil

- Wide temperature range including wet screen operation

- Thin/Thick Glove settings with multi-touch support

- 1300-nit LCD display – Sunlight readable

- SunShield Accessory for IR/UV Thermal Heating and LCD damage protection

Addition to Current 6181X family Available Jan 2020

For larger display Haz Loc Applications: Use 6186M Monitors (12",15", 17" and 19") with 6181X Non-Display PC

# Virtualization

# Virtualization Basics

**74%**

**Customers see a 74% decrease in total cost of server ownership with virtualization***

*https://www.vmware.com/pdf/TCO.pdf

# Virtualization - Definitions

Definitions

## Virtual Machine

- A file(s) that acts like a physical computer within virtual system (runs the OS). Also called an image.

## Hypervisor

- A piece of software that manages the allocation of the physical resources (hosts) to the virtual machines.



## vMotion

- A feature of VMware vSphere that allows for live migration of a virtual machine between the physical servers (or hosts). The applications are continuously available during the migration.

## VMWare HA (High Availability)

- A feature of VMware vSphere that in the event of a failure (physical host or virtual machine), allows for the virtual machines to be restarted on another host automatically.

## VMWare vSAN

- A feature of VMware vSphere that allows physical servers to share their internal storage as a virtual storage area network
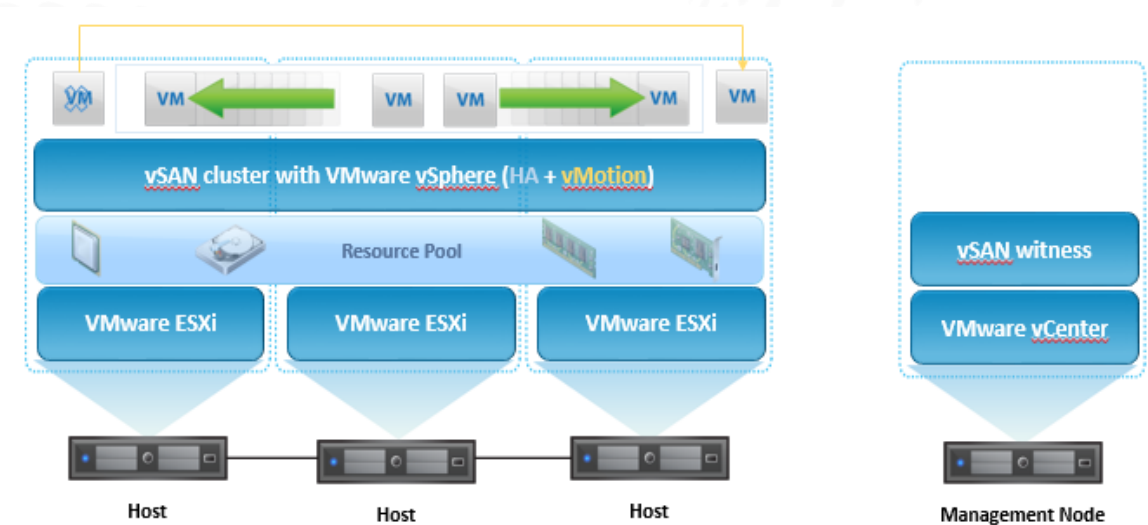
# What is Virtualization?

Virtualization breaks the link between operating system and physical hardware

By breaking the dependency of the OS to the physical server, resources in the host can be shared leading to the following benefits:

- **Scalability**
  - Can easily scale up and out

- **Downtime Avoidance**
  - Delivers high availability and fault tolerance
  - Delivers quick deployment and replacement

- **Lower Total Cost of Ownership**
  - Decrease the server footprint in your facility and realize savings over the lifetime of your assets

- **Ease of Management**
  - One pane of management
  - Visibility into the system state helps reduce cyber security risk

Hypervisor
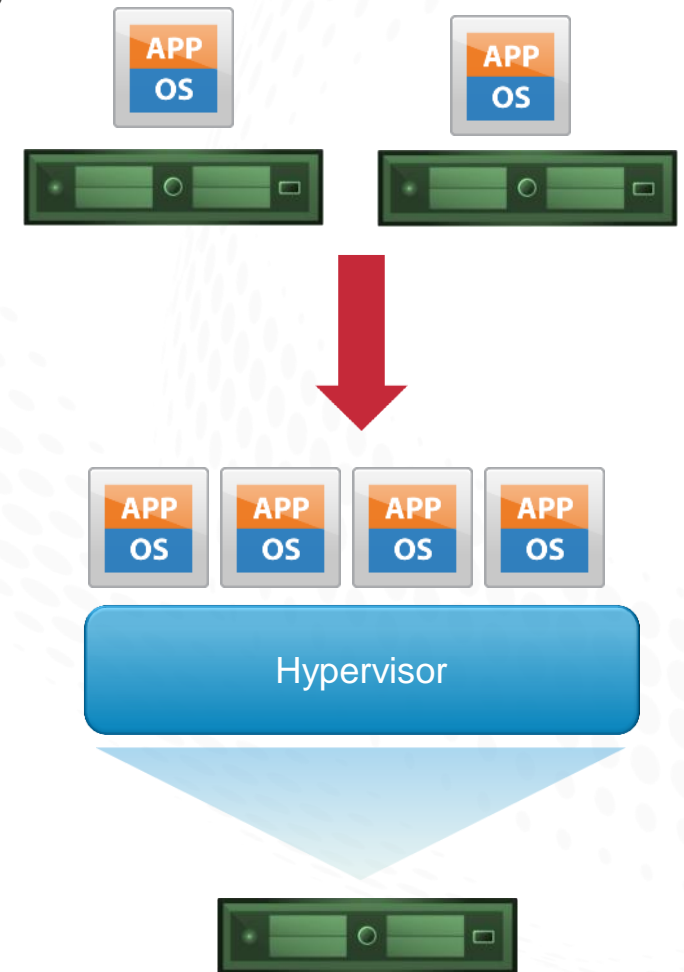
# Rockwell Automation Options for Virtualization

# What is the VersaVirtual™ Appliance?

Entry-level virtualization appliance that comes complete with managed services

- The VersaVirtual Appliance is a hyper converged (compute, networking and storage) appliance for entry-level virtualization in a managed environment, with optional capabilities for additional managed services.

- It is a ready-to-use, cost-effective solution for small- to medium-sized applications

- It enables customers to run multiple applications in one location, and doesn't require specialized IT/OT skills to set up.



The VersaVirtual Appliance can run a number of applications including:

- FactoryTalk® Suite of software

- Operator workstations

- Engineering workstations

- Third-party applications

# The VersaVirtual™ Appliance: Bridging the Gap

This offering bridges the gap between the VersaView Computers and the Industrial Data Center (IDC). The VersaVirtual Appliance:

- Allows a **virtualized environment** with less complexity and a lower price point than the IDC
- Showcases the benefits of virtualization as an **attractive architecture** for a manufacturing environment
- **Comes with valuable managed services** that include support, remote monitoring and administration

**Breaks down the barrier for entry** for industrial automation customers who want to virtualize but are challenged by solution complexity, administrative skill and infrastructure costs

# VersaVirtual™ Appliance 1000



## Capability

- 5-15 Virtual Machines (VMs)
- Uplink: 2 ports copper 10GB links
- One-host solution with VMware vSphere and vCenter

## Included Support Services

- 8x5 next-business-day hardware replacement
- Monitoring and Administration services, allowing customers to focus on their application data. Includes 24x7 system support

## Use Case

A one host solution is ideal for non-critical application use. For situations where a test bed virtual infrastructure is needed, or a non-critical production application

**26 000 $**

# VersaVirtual™ Appliance 2000



## Capability

- 5-15 Virtual Machines (VMs)
- Uplink: 2 ports copper 10GB links
- 2 node vSAN cluster with management node
- N+1 failure redundancy

## Included Support Services

- 8x5 next-business-day hardware replacement
- Monitoring and Administration services, allowing customers to focus on their application data. Includes 24x7 system support

**53 000 $**

## Use Case

An ideal architecture for running production-critical applications for small-to medium-sized plants or production areas.

Hardware and software redundancy combine to minimize production risk of both failures and regular maintenance activities.

# Industrial Data Center (IDC) E2000/E3000

+

## Capability

- 20+ images
- Scalable to customer requirements
- Multi-node vSAN cluster with management node
- Uplink: SFP+ (1Gb/10Gb)

## Support Services

24x7 System support

8x5 NBD Hardware replacement*

Monitoring and Administration (Uplift)

## Use Case

An ideal architecture for running production critical applications for medium to large sized plants or production areas.

Hardware and software redundancy combine to minimize production risk of both failures and regular maintenance activities
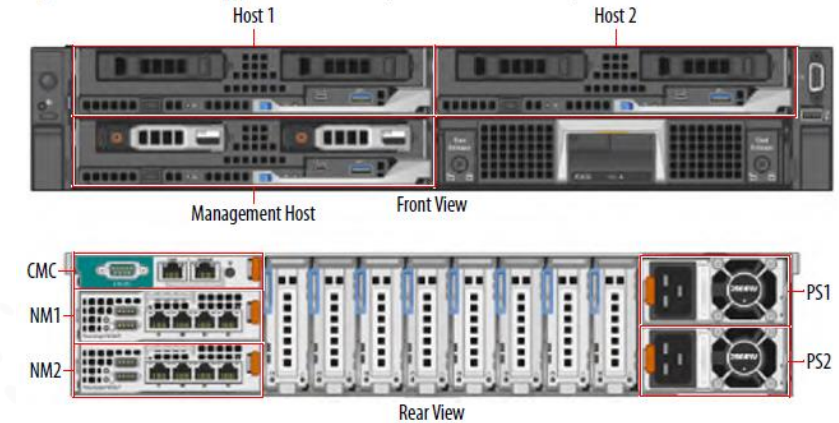
## > 100 000 $

Rockwell Automation

# VersaVirtualTM Appliance

What is in



Figure 1 - VersaVirtual Appliance Overview (VV2000 model shown)

|  | **1000** | **2000** |  |
|---|---|---|---|
| **Server** | Intel Xeon Silver 4114 10 core - One server sled<br><br>96 GB RAM | Intel Xeon Silver 4114 10 core – two server sleds sharing resources as one cluster<br>128 GB RAM | Both allow customers to run up to approximately 15 images. This is due to the redundancy nature of the 2000 |
| **Storage** | 2 TB usable | 2 TB usable | While the 2000 has more server sleds, the redundancy cuts the usable space |
| **Network I/O** | 10G networking internal to server communication<br>**Uplink:** 2 ports copper 10 GB | 10G networking internal to server communication<br>**Uplink:** 2 ports copper 10 GB | |
| **Virtualization** | vSphere Standard | vSphere Standard<br>vSAN Standard | vSAN is the software package that allows for the shared storage across the servers |

**24x7** remote monitoring and administration, 1 year hardware / software **warranty**

# How the **VersaVirtual Appliance** fits into the Industrial Infrastructure



VersaVirtual™ Appliance

Third party **application**

Network core and distribution

Stratix® 5410

Stratix® 5410

Stratix® 5410

Stratix® 5400

5069 Compact I/O™
*1 GB 50 Device DLR Ring*

PanelView™ 5000 Series

CompactLogix™ 5480

VersaView® 5100 Monitor

*100 MB 50 Device DLR Ring*

Engineering Workstation

PowerFlex® 755T Drives

Kinetix® 5000 Series

Kinetix® 5000 Series

VersaView® 5400
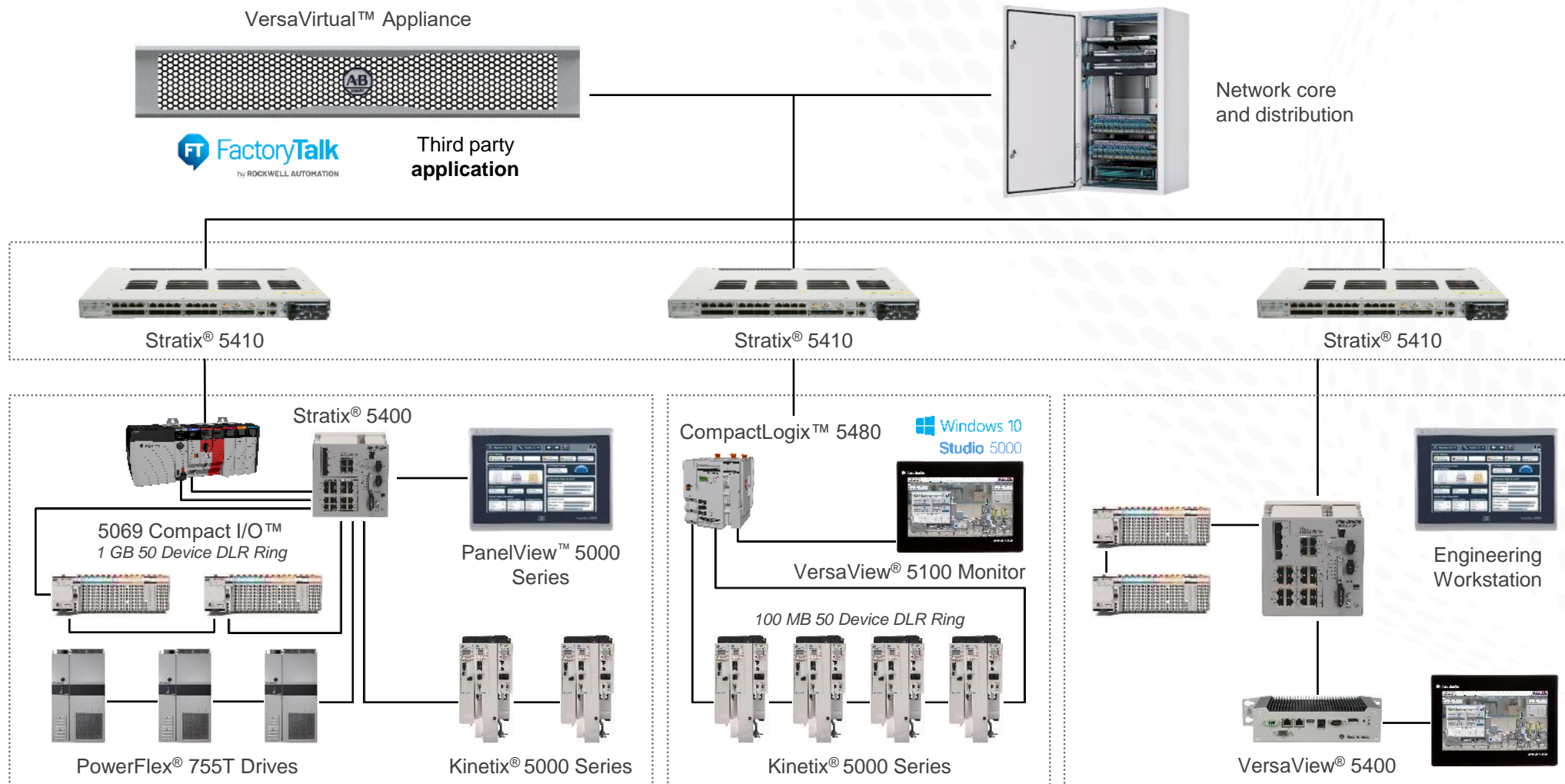
# Visualization Software

# RSView 32

# Early notice: RSView32 moving to End of Life

- To align with Rockwell Automation product lifecycle policy for operating system support and system security, **RSView32 is moving to End of Life status**

- <u>Change coming in next 4-6 weeks</u>, with period of 2 years from EOL to Discontinuation during which additional license purchases can be made

- Discontinuation date : **April 2022**

## Customer facing

- RSView32 Migration webpage on rockwellautomation.com with links and benefits of modernizing

- Update of RSView32 to FT View SE <u>Migration Guide</u>

- YouTube content around migration how-to

## Internal

- BU will share registered RSView32 customers in your region

- Suggestions and collateral for building a migration program to find and capture RSView32 customers and modernize them - to FactoryTalk View SE +

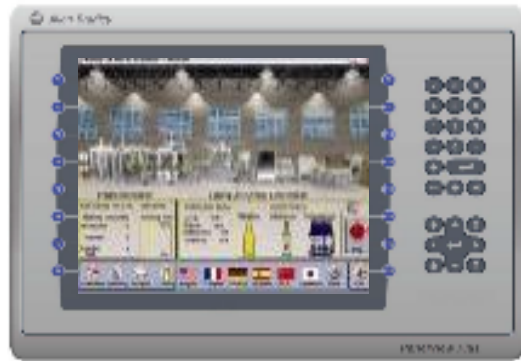- Commercial migration program updates and documentation (StepForward program)

# FactoryTalk View ME
## Machine Edition

# FactoryTalk View ME

## The Development tool for:

- PanelView Plus
- PanelView Plus CE
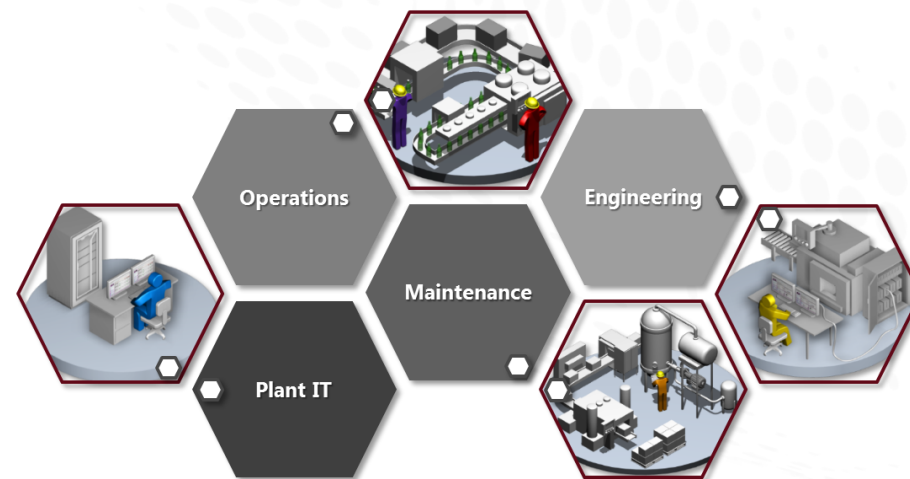- PanelView Plus 6
- PanelView Plus 7
- MobileView

# FactoryTalk View SE

**Site Edition**

# FactoryTalk® View SE

Higlights

# Modern Trending: TrendPro

Advanced Trending and Analysis

## Overview

- Easy configuration for FactoryTalk® Live Data, FactoryTalk® View SE datalogs, or FactoryTalk® Historian tags

- Display FactoryTalk® Alarms and Events history on the trend with historical data

- Create ad hoc trends through a user-friendly interface, then save and share them with other users

## Benefits

- Perform ad hoc analysis on the fly – select tags from the system for cross correlations

- Statistical and sampling calculations

- Analyze process variations between batch runs by overlapping multiple time periods
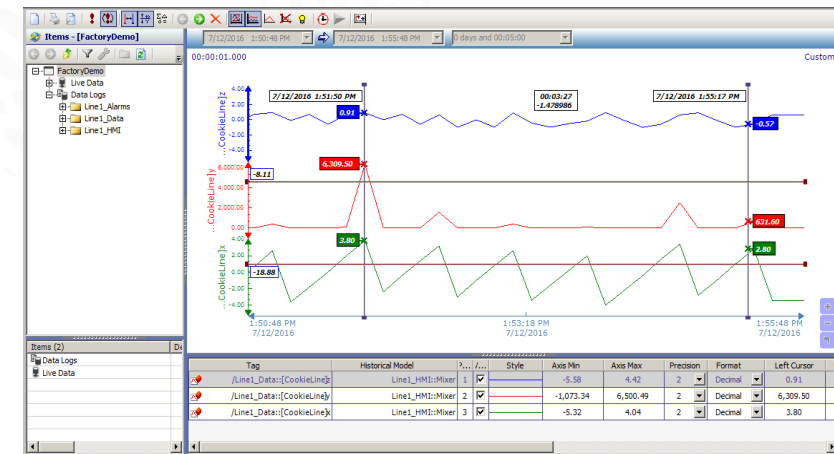
# FactoryTalk® Alarms and Events

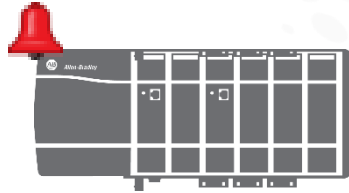Alarming Capability Integrated with FactoryTalk® View SE

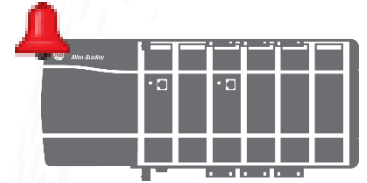Rockwell Automation

# FactoryTalk Alarms and Events

Alarm Options

**Server**
Tag Based Alarms

**Logix**
Instruction Based Alarms

**Logix**
Tag Based Alarms

Version 9

Version 16

Version 31
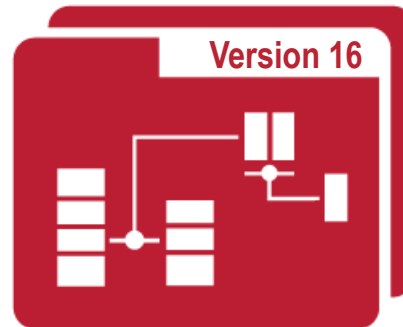
# Scalability and Extended System Sizing Recommendations

FactoryTalk® View SE v11.0

- V11.0 supports in one application:
  - Up to 120 FactoryTalk® View SE clients
  - Up to 200* FactoryTalk ViewPoint mobile clients
  - Up to 1 million tags
  - Up to 100,000 alarms
  - Up to 10 HMI, Alarm, and Data servers per application (redundant or non-redundant)
- Simpler approach to system sizing using specific architecture/design considerations

*When configured with 4 FactoryTalk® ViewPoint servers, 50 FactoryTalk® ViewPoint clients per server

Refer to *Design Considerations – FactoryTalk® View Site Edition* for detailed system architecture best practices

*FactoryTalk®* View SE HMI Clients    *FactoryTalk®* ViewPoint Clients *(Web/Mobile)*

= 120    = 200*

*FactoryTalk®* View SE HMI Servers    *FactoryTalk®* ViewPoint Servers

**Rockwell Automation**
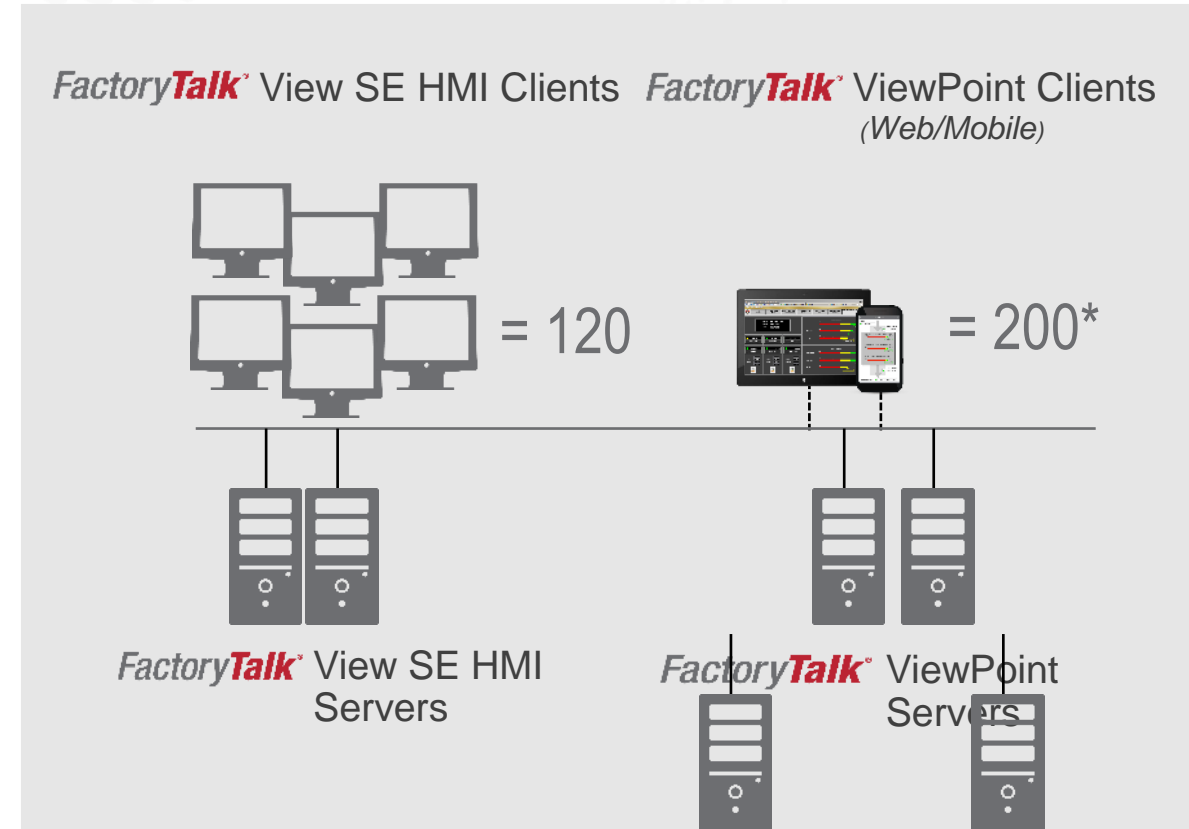
# FactoryTalk® View SE Product Line

## Development Environment

- FactoryTalk® View Studio Enterprise        9701-VWSTENE

## FactoryTalk® View Site Edition Server (Distributed)

| | |
|---|---|
| • Unlimited Display with FactoryTalk® Linx | 9701-VWSS000LENE |
| • 250 Display with FactoryTalk Linx | 9701-VWSS250LENE |
| • 100 Display with FactoryTalk Linx | 9701-VWSS100LENE |
| • 25 Display with FactoryTalk Linx | 9701-VWSS025LENE |

## FactoryTalk® View Site Edition Clients

| | |
|---|---|
| • Full Client (Read / Write) | 9701-VWSCWAENE |
| • View Only Client | 9701-VWSCRAENE |

## FactoryTalk View Site Edition Bundles

- FactoryTalk View SE Unlimited Display Server, 10 R/W Clients, 1 FT VP Client
- FactoryTalk View SE Unlimited Display Server, 25 R/W Clients, 1 FT VP Client

## FactoryTalk® View Site Edition Station (Standalone)

| | |
|---|---|
| • Unlimited Display with FactoryTalk Linx | 9701-VWSB000LENE |
| • 250 Display with FactoryTalk Linx | 9701-VWSB250LENE |
| • 100 Display with FactoryTalk Linx | 9701-VWSB100LENE |
| • 25 Display with FactoryTalk Linx | 9701-VWSB025LENE |
| • 15 Display with FactoryTalk Linx | 9701-VWSB015LENE |

# Where to Find Additional Information

- Visit the <u>FactoryTalk View SE page</u> on the Rockwell Software® website for
  - Product Demo / Videos
  - Customer Stories
  - Product Profiles
  - User Guides
  - Ordering Information
  - System Requirements

- Visit the <u>FactoryTalk View SE Playlist</u> on YouTube

# Last NEWs !!!

# New collateral – FactoryTalk View

- 21 CFR P11 white paper – guidelines for FT View SE in a regulated environment

  New doc ID: FTALK-WP017A-EN-P

- Designing for Mobility white paper – design tips for FactoryTalk ViewPoint and other mobile options

  Updated to include FT ViewPoint Mobile features/navigation, references to other mobile solutions (ThinManager, VNC, TeamONE…), more discussion on adoption of ISA-101 standards

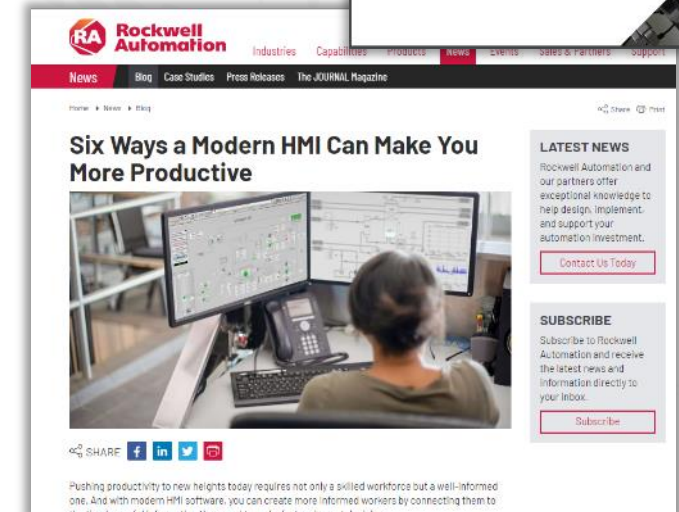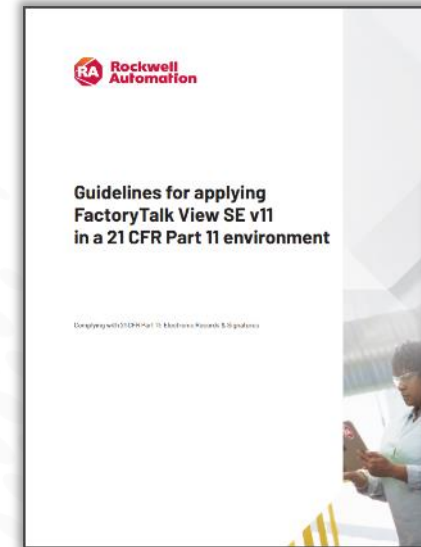- Blog: Six Ways a Modern HMI can Make You More Productive

  Share blog links on social media!

  Upcoming related blogs:

  Mar 18: Improve your alarming and respond to issues faster

  April 15: Rethink what's possible with a modern HMI

# FactoryTalk® View v12.0 Planned Enhancements

V12 aligned with Logix V33 - planned for May 2020

- Continue driving operator and design productivity, scalability, sustainability, and integration
- *Subject to change*

## FactoryTalk® View SE

- Studio Refresh and Modernization
- On-screen Data grid control for displaying SQL Data
- Server Side Scripting (Phase 1)
- Integration with third-party Encompass™ partners
- Continued enhancement of Electronic Signature
- Organize displays into folders

## FactoryTalk® View ME

- Studio Refresh and Modernization
- Organize displays into folders
- PVP7 Operating System Update (Phase 1)
- XY Plot

## FactoryTalk® ViewPoint

- Mobile OSI PI Trending
- Support for display folders
- Web-based data grid control

## FactoryTalk® Alarms and Events

- Support device-based alarms in second instance of FactoryTalk® Linx Data Server
- Modernize UI of server-based alarm editor
- Support metadata in device-based alarm messages
- Support ADDA (Automated Device Diagnostics and Analytics) from Logix enabled devices

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# StepForward program
# for Visualization software

# Visualization software StepForward program overview

Program intent

**StepForward for Visualization software is provided for different scenarios**

- **RSView32 to FactoryTalk View SE migration**

    RSView32 is legacy HMI software – the StepForward program gives end users a financial incentive to migrate/modernize, but continue to use Rockwell Automation HMI

- **Competitive migration**

    Incentive to migrate from competitive HMI products to FactoryTalk View SE

- **FactoryTalk View ME to FactoryTalk View SE migration**

    Migration from PanelView Plus or FactoryTalk View ME Station to a standalone or distributed PC-based HMI

- **Smaller to larger upgrade for all visualization products**

    Provides credit to expand system

# ThinManager

# ThinManager® Is…

The Global Leader for Industrial Thin Client Management & Mobility

**THINMANAGER®**
A Rockwell Automation Technology

BOOST **PRODUCTIVITY**

ENHANCE **VISUALIZATION**

EXTEND **SECURITY**

SMART **MOBILITY**

## Software Platform

Secure, centralized configuration and delivery of applications and content to every PC, thin client, mobile device and user

## Simplifies Device Management

Increases safety & security with visualization & authentication features to help reduce your maintenance & downtime

## Built-in Mobility Solution

Relevance® allows applications and content to be securely delivered to mobile devices at specific locations within your facility

# ThinManager®

Content Delivery and Device Management



## Content Types

*PanelView™ Plus*
*PanelView™ 5000*

*HMI*
*ERP*
*MES*
*CMMS™*

*Web Content*

*IP Camera*
*USB Camera*

**…AND MORE!**
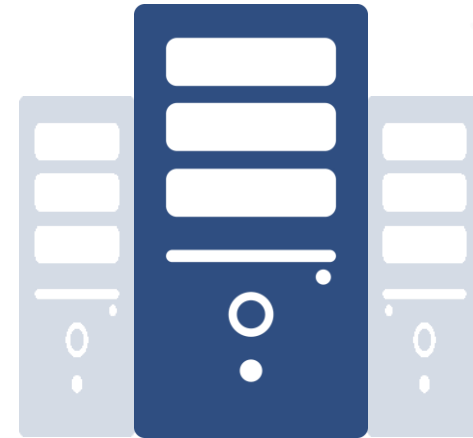
## Configuration

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

**THINMANAGER®**
A Rockwell Automation Technology

## Delivery

**Devices**

**Users**
User X
Group X
Role X

**Locations**

**Rockwell Automation**

# ThinManager

" RD architecture + ThinManager

**RD Servers running the applications**



### Control room
- Terminal shadowing
- Multi sessions, Tiling
- Multi Monitor

### Offices
- Office thin clients
- Terminal shadowing, Multi sessions, Tiling

### Process network

Analysis    HMI    MES    Reports    LIMS

IP, USB cameras

### Process
- Terminal shadowing
- Multi sessions
- Industrial ThinClients
- Redundant Ethernet
- Tiling

### Mobile devices

**THINMANAGER**
A Rockwell Automation Technology

Rockwell Automation

# ThinManager V-FLEX Licensing Overview

Flexibility

Users now have the ability to purchase single **ThinManager connection licenses** that have no network or location restrictions and provide for bulk purchase discounts.

**ADVANTAGES OF V-FLEX LICENSING:**

- Central management of ThinManager client connections

**ThinManager V-FLEX licensing is a single ThinManager XLr individual terminal connection license that can be purchased one-at-a-time in any quantity.**

They can be deployed over an unlimited number of ThinServer pairs (primary/backup) at an unlimited number of locations on multiple networks.

**CLIENT CONNECTIONS**
Sold in Packs of 5, 10 or 25.

| TERMINAL COUNT | DISCOUNT % |
|----------------|------------|
| 1-4 | N/A |
| 5-49 | 45% |
| 50-99 | 50% |
| 100-249 | 60% |
| 250-499 | 65% |
| 500+ | 70% |

# Other SW News

# FactoryTalk® VantagePoint

Commercial Considerations

**Please note that FactoryTalk VantagePoint is still a shipping product that we support today.**

A roadmap has been identified and is being executed to provide current FactoryTalk VantagePoint users with a **migration path to FactoryTalk InnovationSuite offerings**. In the meantime, we are working on what the commercial migration path will look like and it is important to note that

**we have not identified an end-of-life date for the product.**

At this time we are considering **all new product features for FactoryTalk InnovationSuite rather than FactoryTalk VantagePoint** and releases will be limited to platform updates and bug fixes only.

**The next expected release for VantagePoint is v8.2 expected in April 2020.**

**Rockwell Automation**

# Thank You

www.rockwellautomation.com