User Group 5.17.18
ThinManager / FactoryTalk View SE

PUBLIC
ThinManager Overview

v10
ThinManager® Is…
The Global Leader for Industrial Thin Client Management & Mobility

- **A software platform** for automation networks that enables secure, centralized configuration and delivery of applications and content to every PC, thin client, mobile device and user.
- **Increases safety and security** through powerful visualization and authentication features to help reduce your maintenance and downtime by simplifying the management of all devices and users.
- Offers a **built-in mobility solution** -- Relevance®, the only location-based mobile management platform, allows applications and content to be securely delivered to mobile devices at specific locations within your facility.
Delivering the Connected Enterprise

Increase your productivity, visualization, mobility and security from one easy-to-use, centralized and scalable management platform.

- **Productivity** – ThinManager provides a powerful set of tools that lets you focus on producing more with less downtime.
- **Visualization** – Centralized management of applications and visual sources, all from a single user interface.
- **Security** – Allows you to configure multiple forms of user authentication including RFID badges, biometrics and more.
- **Mobility** – Deliver the right content to the right person in the right place with ThinManager Relevance.
The Connected Enterprise securely manages application delivery to devices, users and locations.

ASSIGN AND DELIVER CONTENT IN THREE WAYS

- By Device
- By User
- By Location

**Content Types**
- HMI
- MES
- CMMS
- ERP
- Web Content
- IP/USB Cameras
- Terminal Shadow
- PanelView Plus

**Devices**
- Thin/Zero Clients
- Mobile Devices
- PCs

**Users**
- Individuals
- User Groups

**Locations**
- Facility
- Lines/Areas
- Assets/Devices

Windows Based
VNC
Web Content
IP/USB Cameras
Terminal Shadow
PanelView Plus
Manage Every Device, User & Location

Centralized servers host applications.

ThinManager provides secure configuration and delivery of content to any combination of device, user and location.

**CONTROL ROOM**
- Deliver sessions to multiple monitors and/or virtual screens on a single thin client.

**USERS**
- ThinManager can easily assign content to users. This allows applications to follow a user as they move from terminal to terminal.
- VersaView 5200 Industrial Thin Clients
- Deliver applications based on what is assigned to the terminal or user.
- Get mobile access to applications specific to a user’s role.
- Deliver content to the right person at the right time and place.

**PLANT FLOOR**

**OFFICES**
- Manage & deliver virtual desktops while running PCs as a thin client.
- Access feeds from USB & IP cameras.
- PanelView Plus Remote Desktop to HMI (via VNC)
ThinManager Release 10

What’s New - https://www.youtube.com/watch?v=lr677tJLrVI

January 2018
ThinManager 10.0 Release Summary

PRODUCTIVITY
- Authentication Pass Through
- Tiling, Virtual Screen and Camera Support for WinTMC
- VNC Support for PanelView 5000

VISUALIZATION
- Separate Active X Events
- Support for up to 6 monitors on a single terminal (compatible hardware required)

SECURITY
- PIN Authentication
- Password Caching

MOBILITY
- iPhone Device as a Beacon
- Enhanced Touch Support
- Support for Wearables (Hololens)

MISC.
- Server 2016 Support
- Multiple Domain Support
- Improved Session Scaling Performance
- Writable Custom Variables

Requires FTV10 – Feb 1, 2018
Productivity Features ThinManager Release 10

Authentication Pass Through
ThinManager can pass Relevance User credentials natively to supported HMI products using a token based technology. FactoryTalk View SE will be the first HMI to support this. Capability will be made available to other HMI vendors.

Tiling, Virtual Screen and Camera for WinTMC
WinTMC will now have support for Tiling, Virtual Screens and Cameras, composite applications can be delivered to PCs and Windows tablets running Windows 10 or higher. This is the first of our mobile clients to support these features. Other mobile clients will follow suit in a subsequent release.

VNC Support for PanelView 5000
Visualization Features  ThinManager Release 10

**Separate Active X Events**
Previously, an ActiveX event gets raised and the EventCode would determine which event occurred. Now the events will be raised separately, reducing the need for scripting.

**MultiMonitor Supports 6 Displays**
Added support for a 6th display. This is in alignment with FTView’s support for 6 displays.
Security Features ThinManager Release 10

PIN Authentication
Use a PIN instead of a password.

Password Caching
Configurable time period for password caching (i.e.: use password at start of shift, but then only use badge remainder of shift).
Mobility Features ThinManager Release 10

Support for Wearables
ThinManager 10 includes a new client for Microsoft Hololens, supporting 2D content as well as QR Code scanning and Bluetooth beacons.

Mobile Device as a Beacon
With ThinManager 10, Bluetooth enabled devices can be used as a beacon for authentication.

Additional Location Resolvers
Will leverage Cisco’s HyperLocation and BeaconPoint technologies to improve indoor location resolving.
Additional Features ThinManager Release 10

**Server 2016 Support**
General improvements that improve compatibility with Server 2016

**Multiple Domain Support**
ThinManager can now work with additional trusted domains.

**Improved Session Scaling**
Session scaling can now be offloaded to the Graphics Processing Unit (GPU) for Intel HD Graphics chipsets.
VersaView® 5200 Dual Display Box Thin Client

- Works exclusively with ThinManager® software for centralized management solutions
- Targeted for heavier industrial applications
- Built-in wall mount bracket
- Dual video output (2560x1600 maximum resolution)
  - DisplayPort + VGA ports for flexibility
- Dual network, 3x USB, RS-232 serial output for application flexibility
  - Use with touch screens, keyboards, and mice
- -20–60 °C operating temperature range - fanless
- 12-24V DC Power
- DIN and VESA mount accessories available
VersaView® 5200 Single Display Box Thin Client

- Works exclusively with ThinManager® software for centralized management solutions
- Targeted for cost-conscious applications
- Compact size with wall mount standard
- Single DisplayPort Video output (2560x1600 maximum resolution)
  - Ideal for Full HD displays
- Single network, 4x USB, and audio output for application flexibility
  - Use with touch screens, keyboards, and mice
- 0–50 °C operating temperature range - fanless
- External AC/DC power adapter (100–240V) included
- DIN and VESA mount accessories available
VersaView® 5200 Integrated Display Thin Client

- Works exclusively with ThinManager® software for centralized management solutions
- All-in-one design with integrated touch screen
  - Edge-to-edge glass for easy cleaning
- 12.1 in – 21.5 in, 16:9 displays – Full HD native 1920x1080 resolution available
- IP65 sealed when panel mounted
- Single additional external display via DisplayPort
- Dual network, 3x USB, RS-232 serial output for application flexibility
  - Use with external keyboards and mice
- 0–50 °C operating temperature range - fanless
- 24V DC Power
Licensing

CLIENT CONNECTIONS
Sold in Packs of 5, 10 or 25

ENTERPRISE SERVER
Unlimited Client Connections Including Full Redundancy

ThinManager® Also Offers Redundant Licensing Options to Ensure High Availability
FactoryTalk® View Site Edition & FactoryTalk® ViewPoint

What’s New in v10.00
**FactoryTalk® View Site Edition**

**At a Glance**

**Premier Integration with Logix**
- Direct reference tags and extended tag properties
- Controller instruction- and tag-based alarming (new)

**Modern HMI**
- One design tool (FactoryTalk® View Studio) to configure and manage station and distributed applications with 5000+ graphic objects
- Global objects and parameter passing enable productivity
- Thin-client pass-through authentication from ThinManager®

**Information-enabled**
- Native integration with live data, historian data, and alarm data sources within new trend control
- Mobile HMI available on platform of your choice with FactoryTalk® ViewPoint

**System Approach**
- Library of preconfigured objects and faceplates
- Continuous system visibility through server redundancy
- Pre-installed virtual images and system characterization for optimal system performance

**Visualization Platform for The Connected Enterprise!**
FactoryTalk® ViewPoint
At a Glance

Interactive HMI Experience
• Graphics and Animations
• Read and Write Security Settings
• Real-time and Historical Trending
• Mobile Alarm Management

Easy HMI Set Up
• Lower-maintenance client
• No client software to install or configure

Cross Platform Client Support
• Desktop: Windows
• Mobile: iOS, Android

Anytime, anywhere information availability on a device of your choice!
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## FactoryTalk® View SE v10.00 Release Summary

### NEW FEATURES

- ThinManager® Integration
- Trending enhancements
- Recipe management enhancements
- ASM multi-monitor framework
- Redundancy enhancements
- Embedded web browser control

### RUNTIME

- Local Message Display with dynamic message file

### DESIGN TIME

- Reducing the Microsoft SQL footprint
- Migration of legacy HMI tag alarming to FactoryTalk® Alarms and Events
- Improved usability in Studio 5000® Design Software

### ALARMING

- Logix Tag-Based Alarms
- Alarm Commands
- Alarm Remark

### MOBILITY

- Mobile recipe support
- Mobile alarm history

### COMMUNICATION

- Alias topics
- OPC UA support
- Scalability

(FactoryTalk® ViewPoint, FactoryTalk® Linx)
Scalability and New System Sizing Recommendations

Overview
- FactoryTalk® View SE systems scale from small to very large systems
- Deploy a successful system architecture for large systems using tested sizing recommendations and design considerations

In a single application:
- Up to 80 FactoryTalk® View SE clients
- Up to 100* FactoryTalk® ViewPoint mobile clients
- Up to 750,000 tags
- Up to 100,000 alarms
- Up to 10 HMI, Alarm, and Data servers per application (redundant or non-redundant)

Benefits
- Simpler approach to system sizing using specific architecture/design considerations

System sizing recommendations are based on specific design considerations

* When configured with 2 FT ViewPoint Servers, 50 FT ViewPoint clients per server
ThinManager® Integration

Overview

• Pass-through log in from ThinManager to launched FactoryTalk® View SE clients
• Log in to ThinManager client, if matching user exists in FactoryTalk® Security, login information is passed through to FactoryTalk View SE

Benefits

• Save time by logging in to the system once
• Log in to ThinManager once, even if multiple FactoryTalk View SE clients are launched

ThinManager provides secure configuration and delivery of content.
Trend Pro: FactoryTalk® Alarms and Events Data Source

Overview
• Ability to add a FactoryTalk® Alarms and Events alarm as a trace
• Will automatically query alarm history and display alarm events on trend
• Data sources now include: Live Data, FactoryTalk® View SE datalog, FactoryTalk® Historian, and FactoryTalk Alarms and Events

Benefits
• Optimized display of event information with real-time and historical data on the trend
• Easy to add both ad hoc at runtime and design time
• Helps troubleshooting efforts
Trend Pro: Trend Templates

Overview
• Save ad hoc trends to the HMI server
• Recall from any other client

Benefits
• Ad hoc trends created for troubleshooting can be saved by one operator and available to all others.
• Saved as part of the HMI project via backup & restore
• Supported by redundancy
ASM Multi-Monitor Framework
FactoryTalk® View SE Client

Overview
- Native integration of multi-monitor support within a single client
- Configured in the client setup file
- Supports up to six monitors natively

Benefits
- Easy configuration of additional monitors on a per-client basis; saved in the .cli file
- Not dependent on the application
- Easy drag of content to different monitors
- Still uses a single client license and one .cli file
Redundancy Usability Enhancements

Overview

- Copy from primary to secondary at initial creation automatically
- Replicate active to standby, even in the active server is the secondary
  - Runtime changes made to the secondary are not lost
- Restart services and replicate automatically without reboot
- Save project edits to both servers
  - Reduces the need for formal replication
- Force failover programmatically
  - Via command or in FactoryTalk® View Studio
- Better display of redundancy status at runtime
  - As a function or display status
- FactoryTalk® Alarms and Events: improved uptime and alarm annunciation behavior during redundancy change over events
Embedded Web Browser Control

Overview
- Embed web page content directly on HMI displays
- Supports HMTL5

Benefits
- No need for an external browser
- Aggregate visual content from different sources on a single HMI display
- Choose the control from the drawing toolbar
- Easier to configure and maintain

Content originating from a website, like FactoryTalk® VantagePoint®
Runtime Enhancements

FactoryTalk® View SE v10.00 Feature Information
Dynamic Local Message File

Overview
- Tag specifies local message file at runtime
- Single control can display message from any file

Benefits
- Simplifies HMI application
- Easier to implement local message files on faceplates
- Eliminate stacked Local Message Display controls
Keypad Layout Improvement

**Overview**
• Improved layout on built-in keypad

**Benefits**
• More operator-friendly
• Tag name no longer displayed by default; custom captions displayed instead
Design Time Enhancements

FactoryTalk® View SE v10.00 Feature Information
SQL Server for HMI Tag Database

Overview
- Adopt Microsoft SQL “Local dB” technology
- ‘Hides’ usage of Microsoft SQL from user; similar to old WATCOM database usage
  - SQL Management tools are not needed

Benefits
- SQL Server Express no longer required to be installed for HMI tag database
- Eliminates IT concerns over FactoryTalk® View
- Reduces customer fear and uncertainty over using a “SQL Server”
- Reduces concern of MS legacy support of 2008
- Reduces number of Microsoft SQL Servers in a facility

For details see AID 1062654: FactoryTalk View v10.0 Migration to SQL LocalDB FAQ
Migrate Legacy HMI Alarming to FactoryTalk® Alarms and Events Tag-based Alarming

**Overview**

- FactoryTalk® View v10.00 is the last release to support legacy HMI tag alarming
- Users of an older project using HMI tag alarming are prompted with the suggestion to migrate alarming during upgrade to v10.00

**Benefits**

- FactoryTalk Alarms and Events will continue to be supported and enhanced
- FactoryTalk Alarms and Events provides more granular control, better UI components, integrated history
- The migration tool is installed with FactoryTalk® View SE for ease of use. Prior to v10.00, this tool was available in the Knowledgebase in AID 45583

**FactoryTalk View v10.00 will be the last release to support legacy HMI tag alarming**
Improved Usability in FactoryTalk® View Studio

Overview
- Improved layout of FactoryTalk View Studio Environment
- Automatic dock of Object Explorer and Property Panel
- Multi-select and delete of components

Benefits
- More designer-friendly
- Significant reduction in mouse clicks
Improved Client Configuration Workflow

Overview
• Improved workflow for client setup

Benefits
• Configure the most common options first
• Advanced settings are optional
• Easier and more intuitive
Alarming
FactoryTalk® Alarms and Events
Logix Tag-Based Alarming

Simple alarm setup and configuration

• Single environment – deploy alarms when creating control elements in Studio 5000 Logix Designer®
• One place to go to add and configure alarms
• One click to add alarms from the objects definition
• Pre-defined alarms on every object
• Allow users to select alarms for each instance

• Available in the Logix 5380, 5480 & 5580 Family of Controllers – v31

Benefits

• Seamless integration to FactoryTalk® Alarms and Events system and HMI display controls
• No additional software configuration
Overview
- Perform FactoryTalk Alarms and Events alarm actions using FactoryTalk® View SE commands
  - Acknowledge
  - Disable/Enable
  - Reset
  - Shelve/Unshelve
  - Suppress/Unsuppress

Benefits
- Control alarm actions from a screen or faceplate
- Migrate from legacy HMI alarms with no loss in functionality
FactoryTalk® Alarms and Events: Alarm Remark

Overview
- Add a user-defined comment to the FactoryTalk Alarms and Events History Log
- Can be associated with a tag or a message by itself.
- Logged in context with username, area, alarm server, computer name
- All remarks are logged with a Severity = 0

Benefits
- Easy to capture operator comments when an alarm is resolved
- Remark generation and remark message can be done manually or programmatically
- Migrate from legacy HMI alarms with no loss in functionality
Communications

FactoryTalk® Linx
Introducing FactoryTalk® Linx

- Name changed to appropriately reflect FactoryTalk Linx as the premier communications service included with FactoryTalk® software portfolio
- Revised name for FactoryTalk Linx Gateway provides a closer tie between the communications service and purchased OPC option

* RSLinx® Classic and FactoryTalk® Live Data retain original names
**OPC UA Connector for FactoryTalk® Live Data**

**Overview**
- New FactoryTalk® Linx OPC UA connector allows FactoryTalk® software to interface with third-party OPC UA data servers
- OPC UA data definitions merged into FactoryTalk® Live Data namespace
- TCP data exchange eliminates DCOM

**Benefits**
- Nothing new to buy / upgrade to FactoryTalk® Services Platform v3.00
- Permits FactoryTalk® Software to interface with third-party data servers
- More productive system namespace browsing
- Enhanced security and stability
Platform Support

FactoryTalk® View SE v10.00 OS Support and System Release
### OS Platform Support

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*The latest operating system info can be found at the Rockwell Automation Compatibility and Download Center*
Summary of System Release
February 2018

Products and Services Released:
• FactoryTalk® Services CPR 9 SR 10
• Studio 5000 Logix Designer® v31
• FactoryTalk® View Site Edition 10.00
• FactoryTalk® View Machine Edition 10.00
• FactoryTalk® ViewPoint 10.00
• FactoryTalk® Services Platform
• FactoryTalk® Alarms and Events
• FactoryTalk® Linx 6.00
• RSLinx® Classic
• FactoryTalk® Activation
Thank You!