

# Simplified delivery of centralized applications and information to virtually any device, user or location.



#### **ThinManager Delivers**

ThinManager allows you to easily manage the configuration of end-user terminals and the delivery of all of your centralized applications and content to those terminals.

#### **Ease of Use**

ThinManager's wizard-based configuration allows administrators to easily set up advanced functionality for end-user devices such as PCs, thin clients and mobile devices. Thin-Manager also makes it easy to customize the content delivered to the terminal based on who is logged in and what role they play in your work environment.

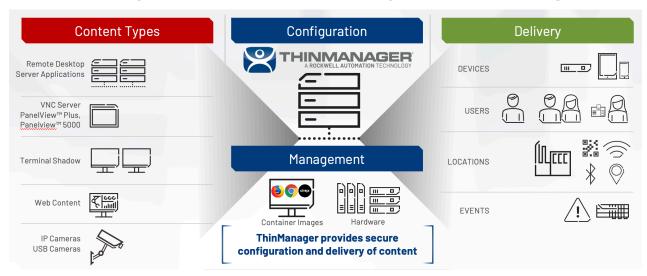
#### **A Complete Solution**

ThinManager is the only platform that manages both the server side and the terminal side of modern computer networks offering full server failover and redundancy options to keep your resources in an "always on" state, reducing downtime and lowering your Total Cost of Ownership.



Experience unparalleled flexibility for your industrial networks by centrally managing every thin client, PC and mobile device from one powerful software platform.

#### ThinManager - Secure Content Delivery and Device Management









# Enhance Productivity, Visualization, Security and Mobility



Successfully managing industrial data and application delivery determines how efficient and lean you can run your modern production facility. Ensuring that content is securely delivered to the right person at the right time and place is crucial to expanding a modern competitive edge.

A complete delivery solution manages devices, users, locations, and the events that happen in those locations. By centrally managing devices and data, a modern system can deliver industrial productivity content from machine to human in various ways. Content delivery might be determined based on a user's role, their location in the plant, or based on an event such as an alarm.

ThinManager® is designed to provide secure, centralized management of modern industrial visualization systems. Below is a brief overview of the various ways ThinManager delivers industrial content to enhance productivity, security, and visualization.



<u>Devices</u> - Completely manage thin client hardware from a single, centralized console. ThinManager manages content delivered to thin clients, traditional PCs and modern mobile devices. The platform contains many modules that expand the utility of the end user device such as easily adding authentication parameters, or setting custom keyboard access, or providing customized screen layouts based on who is using the terminal. ThinManager also manages IP and USB cameras and can push that video content to any of the managed user terminals.



<u>Users</u> - ThinManager Users are automatically synced from Active Directory. This allows IT to maintain network access control (authentication). OT teams can then deploy content to their teams and devices based on the needs of the production environment (authorization). Deliverable content can be assigned to users based on their role, location or a specific event that happens in production.



<u>Locations</u> – Easily setup location parameters that allow for highly restricted mobile content delivery. Content can be authorized for certain areas of the plant and not others, when using a mobile device. This can assist with keeping users in line-of-sight with the equipment they operate, increasing safety and productivity.



**Events** - Automatically notify users when events are triggered. For example, a system alarm can launch an IP camera feed at a terminal to visually inspect the area in question. Using ThinManager Logix PinPoint™, you can access a visual interface of Studio 5000, with automated controller project navigation, to troubleshoot production alarms from operator work terminals.







ThinManager 13 has added many new features that will increase productivity, visualization, security & mobility.

**VERSION 13/13.1/13.2** 

NEW FEATURES





#### **PRODUCTIVITY**

- **REST API**
- Database Health Check
- Support for Cookies in Web Browser Containers
- Sound in containers
- MSI patch adoption
- Wireless thin client hardware support

#### Easily validate and scale large systems

Support for REST API allows ThinManager administrators to take full control of their deployment(s) and manage assets at scale. Automated database health check ensures your deployment stays optimized. Cookies and sound are now supported in ThinManager containers. Capability to sign containers upon creation of containers. User modified or created container images may be installed into ThinManager. MSI patch adoption simplifies Microsoft updates. Support for wireless thin client from OnLogic.



#### VISUALIZATION

- **Event Based Content Delivery**
- Canned virtual screen layouts
- Modern icon set

#### Deliver content based on what just happened

Event based content delivery will automatically creat an action based on preset event configurations. Pre-designd virtual screen layouts are now available to reduce commissioning time for customized screen layouts. New icons.



#### MOBILITY

Sound redirection for iTMC, aTMC

#### Sound is now fully mobile

Full sound support is now available in the Apple and Android mobile applications from ThinManager.



#### **SECURITY**

- Custom CA Certificates for Web Browser Containers
- RA Firewall Utility adoption
- **HTTPS** boot
- **Certificate authentication**
- Flexible container certificate policy
- Secure boot protocol

More built-in security

Web browser containers now support custom CA certificates to support facilities that operate with limited or no cloud connectivity. Support is also available for the RA Firewall Utility that allows non-IT personel to securely open necessary ports for their customized installations.

No longer rely on traditional ThinManager firmware delivery (TFTP,

port 4900). ThinManager will now default to boot over HTTPS if the port 8443 is open and TFTP boot can be enabled/disabled. Ability to create an "E Signature" Event action leveraging event-based content delivery. Create a Pass-through event that returns the credentials via the selected login method; ability to add permissions and access groups as necessary. CFR 21 Part 11 Compliance. Flexible badge enrollment provides login options allow manual login fallback and card registration at the terminal.

NEW v13.2

NEW v13.0

Certificate authentication during synchronization of primary and secondary ThinManager Servers. Device authentication using TPM (Trusted Platform Module) to ensure proper firmware delivery. Flexible container certificate policy to specify whether signed or unsigned containers are allowed. Secure boot protocol to validate firmware and bootloader trust (ASEM hardware only).



**Device authentication** 







# VERSION 12.1 NEW FEATURES

ThinManager 12 has added many new features that will increase productivity, visualization, security & mobility.





#### **VISUALIZATION**

Container Display Client™ can use either server or thin client resources Enhanced Container Images: Chrome, Firefox, Citrix (Storefront support)









#### **SECURITY**

Allow user to change the database password in UI



#### **MOBILITY**

ThinManager User manual unlock



Containers can now be hosted on thin clients, using the required resources to run the web-based session to be sourced from the designated thin client. Firefox or Chrome browsers can be launched by the Container Application. It is recommended that a terminal have at least 8 GB of RAM to host containers.

Container applications can also launch the Firefox or Chrome browser with the capability to launch .ica files. These are compatible with Citrix StoreFront.

#### **Change Existing DB Password**

ThinManager Administrators can change te database password without knowing the previous set password. Users can also do a vacuum to reduce the database size upon start-up or shutdown of the system.

#### ThinManager User Manual Unlock

ThinManager user accounts can be manually unlocked in the Admin console using the User Configuration wizard. This can be done at any time, regardless of the Account Lockout Period duration.



#### MISC

SysLog compatible reporting Updates to expired subscription

#### SysLog Compatible Recording

ThinManager events can now be viewed in SysLog Servers instead of only ThinManager interface's Event Logging tab. View events in the SysLog Event viewer based on what is configured in the ThinManager Server Configuration wizard.

#### **Updates to Expired Subscription**

On an expired subscription, terminals will continue to boot and receive configuration, however the design time environment will have limited functionality. Terminals booted without a license will receive a renewal notification every 2 hours that can be closed by clicking "OK"...







# VERSION 12 NEW FEATURES

ThinManager 12 has added many new features that will increase productivity, visualization, security & mobility.





- Inherited Display Clients
- Localization Phase 2\*
- Filter Display Clients during selection
- Add Active RDS Server Property to TermMon
- Custom Hotkeys based on terminal
- VersaView 6300 Support
- Updated RDP Module\*



- Device/Area/Location dependent PIN
  Authentication
- Logging for administrative changes
- Override authentication method at terminal/location
- Association of unknown badge at terminal



- Web Browser Display Client
- Portrait Mode\*
- Second VV5200 Monitor Resolution Support



- Localization Phase 2\*
- Portrait Mode\*

### Web Browser Display Client

The new Browser Display Client can run locally in the ThinManager thin client, removing the need for a server-side browser process to be instantiated.

#### **User Display Client with inherited Display Clients**

Similar to nested locations, this feature aligns to the way Locations work with inherited Display Clients.

#### **Localization - Phase 2**

Localization of all strings and on-terminal commands and prompts.

#### **Device/Area/Location dependent PIN Authentication**

In addition to using a location to authenticate mobile devices, administrators can also require a security PIN based on location.

#### Allow Filtering of Display Clients during selection

Easily filter the list of display clients during configuration.

#### **Logging for Administrative Changes**

Additional log information available, e.g. changes to PXE configuration.

#### **Second VV5200 Monitor Resolution Support**

When connecting a second monitor to an integrated display, the

secondary monitor can now have a resolution independent of the main monitor.

#### **Add Active RDS Server Property to TermMon**

If you have a terminal configuration for Failover, we expose which is Primary. They might want to build a dashboard showing primary and secondary servers, controllers that are online, current sessions IDs. Now can be part of an SE display.

#### **Custom Hotkeys**

Ability to assign a hotkey directly to a terminal. For example, an administrator can assign a hotkey for entering a scan result at a scanning station.

#### Override authentication method at Terminal/Location

Ability to override settings e.g. to select logged user at a terminal instead of ThinManager.

#### Association of unknown badge at terminal

Prompt at the terminal for unknown user versus only being available in ThinManager console. Username and password must be known. Allows individual to register their own badge.

#### **Portrait Mode\***

Ability for ThinManager displays to be presented in portrait format.









## VERSION 11 FEATURES RELEASED V11.0-V11.2

ThinManager 11 added many new features that increase productivity, visualization, security & mobility.



#### **Updated RDP Module**

More current technology, supports more complex control architectures (DMZs, etc.), RD gateway support enables future of the ThinManager gateway, plus improved audio & video streaming over RDP.

#### **VNC username & tunnel support**

Encrypting the communication for client-server and shadowed terminals.

#### Localization - Phase 1

Phase 1 of Localization will provide support for non-English keyboards. The On-Screen Keyboard (OSK) will be configurable for other languages as well. Prompts will be addressed in Phase 2 which will be included in version 12. There are no plans to change the ThinManager Admin Console to other languages. It will remain in English.

#### **UEFI Support**

Prior to ThinManager version 11, the ThinManager firmware required a traditional BIOS. Hardware manufacturers have started to drop support for Legacy BIOS. By supporting UEFI, ThinManager will continue to be viable on the latest x86 thin/zero clients. UEFI will also enable secure boot options for the VersaView 5200 family in the future.

#### **Display Client Groups**

Similar to other ThinManager objects, Display Client grouping will allow for better organization of Display Clients – especially for larger deployments.

#### More Flexible Touchscreen Navigation

USB touchscreen module will be configurable for touch and hold time period to present Display Client selection and/or other ThinManager actions (i.e. Tile, Calibrate, etc.)

#### **MultiMonitor Enhancements**

ThinManager now supports more monitors and an intuitive drag and drop configuration interface.

#### Freeform MultiMonitor

ThinManager now allows for custom layouts for your MultiMonitor displays instead of a preconfigured layout. Our simple drag to place interface makes it a snap.

#### Automatic Reconfiguration of displays on lost monitor

After a boot, press any key to continue to boot with a bad monitor unless hardware is set to automatically reconfigure.

## TM-FTVSE integration and Allen-Bradley hardware support versions 10.0-12.0

### New ThinManager commands natively available in FTVSE

Additional ThinManager ActiveX events are now native in FTVSE from the Function categories e.g. [Terminal Name] and [IP address]. More information available directly from FTVSE.

#### FT Activation/Common Installer

ThinManager 11.0 will provide an option to use traditional Master Licensing or FactoryTalk Activation.

#### **FTVSE Licensing Benefits**

With FactoryTalk View SE 11 and ThinManager 11, using FactoryTalk Activation, a single FactoryTalk View SE Client license will enable the delivery of an unlimited number of SE Client sessions (MultiSession and/or Failover) to a terminal.

#### **Authentication Pass Through**

ThinManager can now pass 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 in subsequent releases.

#### VersaView 5200, 6300 Support

Support for latest thin client hardware.









# MULTISESSION\* /various sources and easily customize every screen to display your content. MULTIMONITOR

## MultiSession is the core technology that allows ThinManager to securely deliver user applications and content from multiple sources.

ThinManager's MultiSession technology allows administrators to deliver applications and resources from various sources such as Remote Desktop Servers, IP and USB cameras, other terminals, VMWare, Hyper-V and even Citrix servers to virtually any end-user device. ThinManager creates unique sessions for each authorized user to access centralized applications.

ThinManager easily manages these sessions allowing end users to have access to multiple applications through a single terminal. Users no longer have to worry with applications that compete for resources on a single PC or working on more than one PC at a time to compensate for power hungry programs. ThinManager can deliver everything you need through a single thin client terminal.

# Run multiple sessions across multiple monitors.

Drive multiple\* 4K monitors from a single thin client. Assign multiple applications and screen configurations to every monitor to ensure everything in your plant stays in view.



\* Supports as many monitors as your selected hardware supports. Appropriate hardware required. Up to 7 monitors are supported by the VersaView 5200 Multi 4K display from Allen-Bradley pictured above.

ThinManager's MultiMonitor feature allows users to display multiple monitors attached to a single thin client\*. The number of screens which can be configured is now limited only to the hardware support. MultiMonitor can be used to span sessions across monitors and/or run individual or multiple sessions on each monitor. Touchscreens are also supported.

The latest update to MultiMonitor completely recreates the configuration wizard for deploying multiple monitors

with ThinManager. Now you can simply drag and drop your monitor arrangements to easily customize your plant floor view in minutes.

MultiMonitor supports spanned resolutions up to 8192 x 8192 with 64K colors for MS Server 2012 and newer. MS Server 2008 and prior are limited to a spanned resolution of  $4096 \times 2048$ . ThinManager supports 4k single monitors with up to  $3840 \times 2160$  resolution (client device graphics must support 4k).







USER
AUTHENTICATION

Increase security and accountability with multiple user authentication options

#### Securely deliver applications and data to every user, device and location

Access to sensitive data and content is one of the most important security concerns for modern industrial environments. With new technologies like mobility and cloud computing becoming more common, automation

facilities require additional solutions to meet their industry-specific needs. ThinManager's centralized content management provides automation administrator's the ability to deliver productivity applications based on a

user's role and/or their location in the facility. In addition, ThinManager supports multiple forms of user authentication to ensure that only the right person, in the right place, receives the intended content.



## Active Directory Syncing

Windows® accounts are required to start sessions on the Remote Desktop Server. Each Terminal needs a unique Windows account. The current Active Directory integration allows the ThinManager administrator to connect to the Active Directory, search for users, and reference an AD account as its Windows account. This increases security, accelerates configuration and reduces naming errors.

#### **Authentication Pass Through**

ThinManager can now pass 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 in subsequent releases.

#### **RFID Badge Readers**

RFID readers come in many form factors and are used in numerous applications and 0EM solutions including: multifunction printers, kiosks, building and door access, point-of-sale and computer logon. This new USB badge reader module will enable ThinManager to support a broader range of badge reader manufacturers. This particular module will work for badge readers that emulate a keyboard.

#### **Smart Card Reader**

Faster than the traditional username and password, smart card readers allow for the user to swipe, tap, or insert a smart card to prove the identity of that user. Handy for touchscreen terminals where a keyboard might not be optimal. Card readers can also be used in part with a password for even more security. ThinManager now supports NLA (Network Level Authentication) policies depending on the configuration and desired method of use.

#### **PIN Authentication**

Administrators can now set up and use a PIN instead of or in conjunction with a password. PINs can be revealed or hidden when entered and PIN complexity requirements are adjustable. This method can be combined with badges, biometrics and manual logins.

### Biometric - (Mountable) Fingerprint Reader Support

Multiple fingerprint readers are supported from various third party vendors.

### Biometric - (Wearable) Nymi Band Authentication Support Phase 1

Updated Smart Card Module will pass Nymi Band identifier from NFC Reader to a smart card or a Nymi-SDK-enabled application running in session on a ThinManager terminal.



#### **Password Caching/Rotation**

Administrators can now configure a time period for password caching. For example, users can enter a password at start of shift, but then only use a badge for the remainder of their shift. ThinManager can also rotate your password for AD users if your IT security policy requires periodic password changes.







## VIRTUAL SCREENS

Create composite applications with customized layouts on a single hi-resolution monitor.



Design custom screen layouts to deliver applications and content from multiple sources.



#### **Virtual Screens**

Virtual Screens allow multiple sources of content to be arranged on the screen in almost any way imaginable. Administrators can create custom-sized screen overlays to design "composite applications" from available user content on any terminal.

Virtual Screens are set up in a very similar manner to camera overlays. As with most ThinManager features, Virtual Screens are easily created using the wizard-based configuration tool. Simply enter screen coordinates and overlay sizes, then assign applications and content into the spaces you choose.

Display your Virtual Screens on most mobile devices.



#### **Session Scaling**

Session Scaling allows for applications to be auto-scaled to fit a particular layout or monitor resolution. Applications no longer have to be rewritten to accommodate varying resolutions. Session Scaling is the perfect complement to Virtual Screens as it will automatically fit your content into the overlays created.

#### 4k Resolution

Because Virtual Screens encourages adding even more content to the operator experience, ThinManager supports 4K resolution\* to enhance the clarity of additional content and applications. This also allows for a single 4K monitor to act as four physical monitors operating at  $1920 \times 1280$  without the additional costs of mounting and wiring four physical monitors.

\* Appropriate hardware required.





# CAMERAS, SHADOWING

Factory Talk

ThinManager offers a variety of ways to view content from other thin clients as well as PanelView Plus and PanelView 5000 EOIs.





Easy setup with multiple viewing options. Monitor HD H.264 video at 30fps with IP or USB cameras. Take advantage of IP or **USB** cameras to expand your view.

#### **Setup is Easy**

Just configure the camera with an IP address to add it to your network, define it as a display server, and then deploy it as a window or as part of a group of windows.

#### **Multiple Viewing Options**

Users have the option to choose a single camera display, several cameras with multiple displays, or as an overlay in an existing application. Users can define their own custom layout of the camera overlays or choose from predefined layouts. ThinManager also allows the ability to choose whether or not the IP camera feeds are to be tiled.

#### Manage the Bandwidth

If your thin client is equipped with dual Ethernet ports, it is possible to directly connect an IP Camera into the 2nd Ethernet port on the thin client. This greatly decreases network activity, instantly freeing up more bandwidth.

#### Advantages

IP camera support gives users the ability to see around the corner and through the walls. Use it to expand the line of vision in a production process or as a security tool to monitor every part of a facility at the same time. Thin Manager makes it easy to define and deploy a wide variety of cameras.



#### Administrative Shadowing

ThinManager administrators have the ability to shadow every terminal directly from the ThinManager interface. Simply click the show tab after selecting the terminal you wish to shadow. You can even shadow individual monitors connected to the terminal you are shadowing.



#### **Terminal to Terminal Shadowing**

There are many times that a user needs to see what is being displayed on another terminal. ThinManager's Terminal to Terminal Shadow feature lets users easily view content from other sessions running on other terminals. This feature alone makes troubleshooting much less time-consuming.



#### **VNC Viewing**

VNC display clients also allow users, based on permissions, to access content directly from other devices like PanelView, PanelView Plus and PanelView 5000 as well as any other device that has a VNC server built in. These features work on mobile tablets as well.

Shadowing allows an administrator, or a user, to view or operate a terminal remotely.

VNC sources can be shadowed and deployed to any terminal.

Display your Cameras, Shadows and VNC sources on your mobile devices.









# Apps-WinTMC™, iTMC™, aTMC™

Run existing applications on mobile devices without writing code.



# WinTMC allows you to manage your PCs and host applications centrally, simplifying network-wide updates and significantly reducing your TCO.

### WinTMC brings ThinManager Ready Client functionality to your Windows PC

You can use versatile ThinManager functions such as SmartSession™, MultiSession™, AppLink™, Instant Failover, and other features on your Windows PC. You will now have more options when managing, configuring, and designing your entire Remote Desktop Server Network.

#### **Remotely Manage your PCs**

By centrally configuring WinTMC, you can also directly manage all of your networked PCs directly from ThinManager. Network Administrators can use ThinManager's shadowing capability to remotely view and control the PC's desktop even when the user does not have an active terminal server session.

### Run applications on your PC and/or Remote Desktop Servers

Some users may have the need to run local applications. With WinTMC they can easily switch between applications running locally and WinTMC remote desktop server sessions.

#### WinTMC provides flexibility to upgrade over time

WinTMC can be configured to act just like a ThinManager Ready thin client. This is ideal for gradually moving from PCs to dedicated ThinManager Ready thin clients, providing flexibility in your IT budget to invest in new thin client hardware as needed.

#### WinTMC & Tablets

ThinManager's Windows® client application can be used with tablets running full Windows 10 or higher to create a thin mobile experience on a Surface Pro tablet or other Windows 10 enabled device.

#### WinTMC, iTMC and aTMC bring ThinManager functionality to virtually any mobile device!

ThinManager provides a client app for Windows 10, Apple iOS and Android OS devices allowing them to operate as thin clients. These mobile apps let you deliver existing content to mobile devices. Use your HMIs and other applications on the move without writing any code.

### ThinManager mobile apps common functionality:

- Managed Users
- · Location-based mobile platform
- ActiveX Control
- Bar Code and QR Scanning
- MultiSession
- · Client to Client Shadowing
- Instant Failover
- Full Display Client overrides (Resolution, Login, Color Depth, etc).
- Disabling of Remote Desktop Servers
- USB and IP Camera Display Clients
- Full range of function keys, special keys (e.g. control, alt, F1, F2, etc).
- Custom background settings for company logo, etc.

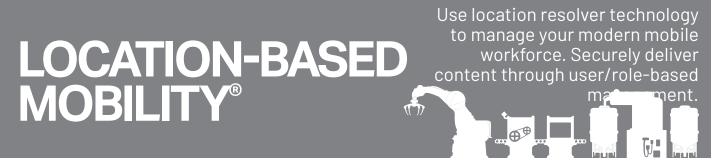
Display your Virtual Screens, Tiled Sessions, Cameras, Shadows and VNC sources on most mobile devices.











# Deliver your applications to mobile devices\* as easily as you deliver them to PCs and thin clients.

ThinManager provides the ability to deliver the right content to the right person in the right place with location-based mobility. Applications and information can now be delivered based on location. This allows your staff the option to have information automatically become available on mobile devices upon entering a defined location or scanning a location ID. The information is removed from the screen when the user leaves the defined location. ThinManager stores all data on servers—no data is saved locally. If a device is lost or stolen, no information will be compromised.

\*Requires iTMC mobile client available from the Apple App Store or the WinTMC or aTMC mobile client available from the ThinManager Downloads page.









Use QR Codes, Bluetooth, WiFi and GPS to define locations and deliver content to mobile devices.

ThinManager uses location resolver technologies that allow you to define your workspace as a location-based mobile facility. This allows administrators to secure tethered workstations and mobile devices by delivering applications and content only to specific areas where that content is allowed to be accessed.

Location setup and configuration are easily managed using the ThinManager wizard-based setup tools. Administrators have full control over how locations and users are defined.

Extend security by creating geofences. Geofences are configured by combining two or more resolver technologies. For instance, by nesting a QR code within a specific WiFi access point, administrators can deliver content when that code is scanned from within the WiFi access point and take away and/or deny access to the content when a person leaves the WiFi access area.

#### Multiple authentication techniques and Active Directory syncing give administrators full control over terminal and application access.

Allow users to identify themselves at any terminal using a standard login, an RFID proximity card, a USB flash key or a biometric security device. Increase security by layering multiple authentication methods.

ThinManager User Services can automatically deliver a user's content to any terminal they authenticate to. Allow programs to "follow" users throughout the entire plant. Even if content is already assigned to the terminal, ThinManager User Services can deliver additional content, on the fly, based on the user's role. Access and content can also be assigned at a group level. Use scheduling to limit a specific user to a weekly, daily or hourly schedule or disable the terminal itself at any time you choose.

Drop the ActiveX control into your applications and you can program terminal and user specific functionality including session switching, event logging, and terminal status and management.

All sessions require a Window's user account. ThinManager User Services can automatically sync with your Active Directory allowing system admins to maintain user network security while allowing engineering and plant floor administrators to manage content delivery to the plant floor.

ThinManager delivers your content to mobile devices using secure, location-based solutions.



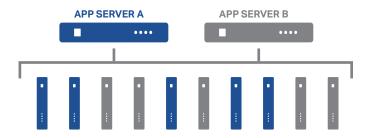






# Server Load Balancing. Auto-Configuration. SMARTSESSION Choose from a variety of notification features to keep everyone informed. ANOTIFICATIONS Server Load Balancing. Auto-Configuration. Choose from a variety of notification features to keep everyone informed.

SmartSession determines the best server for each client session. Instant Failover runs sessions on a secondary server to prevent downtime. ThinManager provides multiple notification options for administrators and users when certain events are executed within ThinManager's network.



Send emails from the ThinManager system directly to your authenticated email systems or send important notifications directly to an employee's mobile device.

#### **SmartSession**

Numerous applications require multiple Remote Desktop Servers to support all of your thin clients. How do you decide which clients connect to which Remote Desktop Services servers? Why not let ThinManager decide for you?

When you use the SmartSession feature, you add the power of load balancing. SmartSession analyzes differing CPU levels, memory levels, and current session information and automatically calculates the best server for your next client session.

If you add clients and require more server power to support them, simply drop another Remote Desktop Server onto your SmartSession group and it will be balanced with the existing group. Activate queuing to minimize the server stress and disk trashing that can occur when many clients try to start sessions simultaneously. Queuing brings clients on in an orderly fashion and keeps your systems running smoothly.

#### **Instant Failover**

ThinManager also provides the added safety of instant server failover. If a server does go offline, ThinManager immediately switches all clients to the backup without interruption.



#### **Authenticated email**

Authenticated email allows emails to be sent directly from corporate mail servers without the use of a proxy server.



#### **SMS** messages

SMS allows text messages to be sent to users' mobile devices for instant insight into operational events.



#### **Terminal messages**

Messages can also be sent directly from Thin-Manager to any terminal for real-time notifications to operators.



#### Reporting

Reporting allows historical documentation of every device, user and location that is managed within a ThinManager environment. Reports can be scheduled and sent at regular intervals if needed.







## CONTAINERS/ API TOOLS

Containers provide content hosting and delivery options that can reduce infrastructure requirements for visualization



# Containers provide another powerful content delivery mechanism for administrators who wish to expand the use of existing compute infrastructure

#### **Web Browser Display Client - Enhanced Images**

Containers can now be hosted on thin clients, using the required resources to run the web-based session to be sourced from the designated thin client. Firefox or Chrome browsers can be launched by the Container Application. It is recommended that a terminal have at least 8 GB of RAM to host containers. Container applications can also launch the Firefox or Chrome browser with the capability to launch .ica files. These are compatible with Citrix StoreFront.



#### **VISUALIZATION**

Container Display Client™ can use either server or thin client resources Enhanced Container Images: Chrome, Firefox, Citrix (Storefront support)







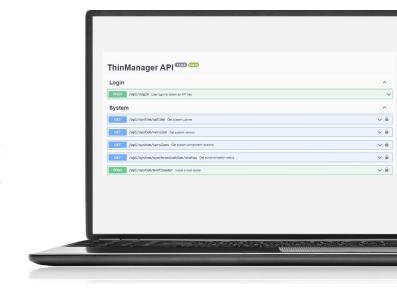
#### **Signed Containers, Custom Containers**

**NEW v13.1** 

Capability to sign containers upon creation of containers. Also user modified or created container images may be installed into ThinManager.

# Reduce total cost of ownership with enterprise configuration management capabilities (API)

- Commission ThinManager at scale across an enterprise
- Enable partial backup and restore of system database
- Validate IT standard requirements such as DNS and PXE settings
- Documentation with engineer's choice of interface including Swagger









Complete Platform. Scalable Solution.

## **LICENSING**

\*As of December 31, 2019, Enterprise Server and Enterprise Site products have been discontinued from sale, but remain available for support.



#### Unique hardware enabling technology. Scalable thin client solution.

#### Flexible Volume Licensing

ThinManager's new flexible volume licensing (V-FLEX) allows users to purchase a single connection license or buy in bulk to take advantage of built-in volume-based discounts. V-FLEX licensing can be used across your facilities and domains as you see fit. We now offer two tiers of support coverage in our Software Maintenance packages – 8x5 and 24x7. Better yet, the first year is included!

#### **Subscription**

ThinManager can now be licensed by annual subscription. Whether you choose FactoryTalk™ Activation or ThinManager Activation, we have you covered. If your organization prefers paying annually for software, we can now accommodate you. This is the perfect option for any business that expects changes in the number of end-user seats needed year to year.

#### ThinManager Activation (TMA) or FactoryTalk Activation (FTA)

Beginning with ThinManager version 11 and FactoryTalk View SE version 11, users have a choice on how they wish to activate their licenses. They can choose traditional ThinManager Activation (TMA) or FactoryTalk Activation (FTA). For instructions on ThinManager Master License activation please see <a href="https://thinmanager.com/activate">https://thinmanager.com/activate</a>. If using FactoryTalk Activation, you must change the Licensing Mode in ThinManager by clicking the Install ribbon followed by the License Mode icon. You can activate your license using the FactoryTalk Activation Manager from the machine where ThinManager is installed, if it has access to the Internet, or from <a href="https://activate.rockwellautomation.com">https://activate.rockwellautomation.com</a>.

Feature	TMA	FTA
Supports Redundancy	Χ	Χ
Available on the eCommerce Portal		Χ
Automatic Activation Updates Available		Χ
Centralized or Remote License Hosting		Χ
Ability to Rehost Activations within the Tool		Χ
Manage Activations Across the Enterprise Online	Χ	Χ
Can be used to Activate Software on Offline Computer	Х	Х
Offered in Subscription and Perpetual + Maintenance	Х	Χ
Supports ThinManager Versions 10 and earlier	Х	

#### **Redundancy**

Full-Redundancy uses a redundant pair of servers storing configurations on both with a fully accessible ThinManager GUI. Taking measures to eliminate downtime is crucial in today's production and business environment. Now you can add redundancy to your ThinManager environment at a lower cost per license.

#### **Software Maintenance**

Support for ThinManager software comes in two flavors—24x7 and 8x5, depending on the times and level of support you might need. All current Software Maintenance subscribers receive complimentary version upgrades.

#### **Upgrades**

Using an older version of ThinManager? Not current on your Software Maintenance plan? We offer a path to quickly get all of your ThinManager installations up-to-date. For more information, please contact insidesales@thinmanager.com.

#### Run the numbers... download our ROI Calculator.

We have created a tool to help you calculate the savings when converting to ThinManager thin client technology. Download the free tool today! https://thinmanager.com/roi







## V-FLEX LICENSING

\*As of December 31, 2019, Enterprise Server and Enterprise Site products have been discontinued from sale, but remain available for support

Purchase, Activate and Assign ThinManager Connection Licenses, as needed, Across Multiple Facilities and Geographies with Volume Discounts.



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

Deliver ThinManager client connections with maximum flexibility on an as-needed basis to any of your facilities around the world. ThinManager V-FLEX licensing is a single ThinManager XLr individual terminal connection license that can be purchased one at a time in any quantity and deployed over an unlimited number of ThinServer pairs (primary/backup) at an unlimited number of locations on multiple networks.

#### Advantages of a V-FLEX licensing package:

- Central management of ThinManager client connections.
- Use across multiple facilities—no limitations on the number of locations, networks and servers.
- Ability to purchase and add additional licenses only when and where they are needed with volume discount pricing.
- Access to a private ThinManager license server portal for creating and distributing licenses for use.

#### A customer has 3 facilities with the following terminal counts:

Facility A = 27, Facility B = 33, Facility C = 18 Total terminal count = 27 + 33 + 18 = 78.

- 78 terminal count falls into the 50-99 band which includes 8x5 Software Maintenance.
- The customer decides to purchase 100 terminal connections instead. Now they have spare connections and receive the advantage of the next pricing band which qualifies for an increased volume discount. Adding Redundancy would be an additional cost based on the pricing band but would not increase initial or renewal Software Maintenance costs.
- Since the licensing is V-FLEX, the customer can deploy specific quantities at specific locations on as many independent ThinManager instances as needed up to the total quantity of terminal connections purchased.
- At the extreme, in this example, 100 terminal connections could be deployed across 100 independent facilities (1 each) running redundant ThinManager instances.
- The annual 8x5 Software Maintenance renewal would be 20% of the base license price at the purchased pricing band. 24x7 Software Maintenance is available at 30% of the base license price. Please contact your ThinManager channel partner for pricing.



**27** 



33



10

#### Single New V-FLEX Purchase=**100**

The customer received a volume purchase discount and was able to deploy licenses in exact counts needed. Now they have 22 additional connection licenses that can be deployed across existing or new facilities without restriction.

A **V-FLEX** license will license all product features for one terminal device. Redundancy requires the redundant adder license per terminal.

The ThinManager server does not require a license.

Unrestricted Available V-FLEX=**22** 



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