



expanding **human possibility**®

What's New with ThinManager v13.1

Nick Neppach • ThinManager Application Engineer • Feb 2023



PUBLIC

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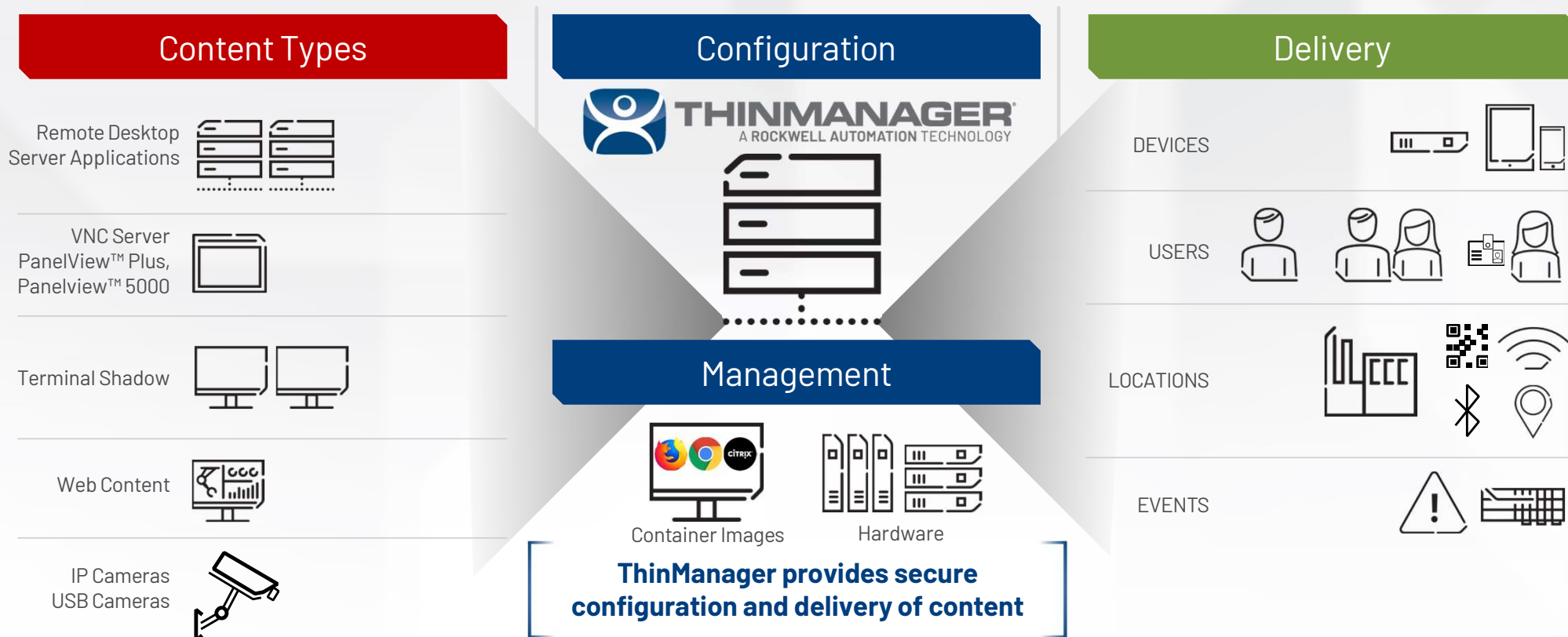


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Overview

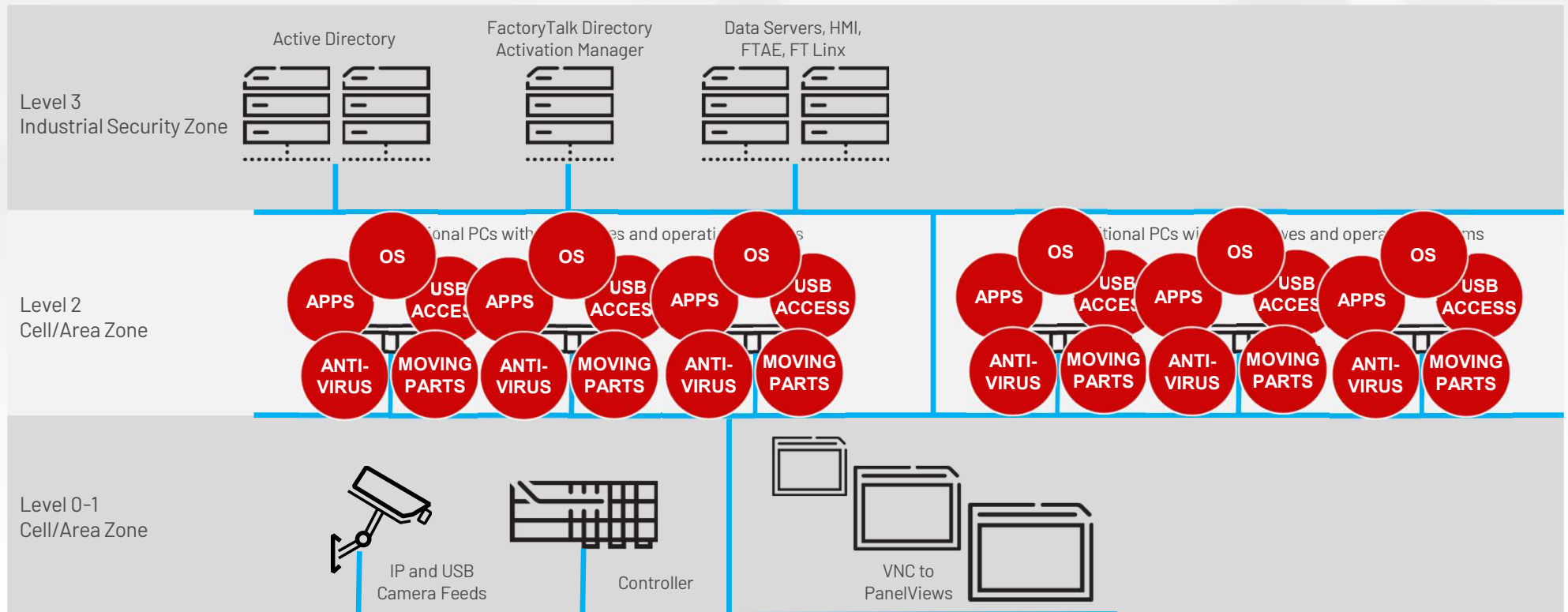
Secure content delivery to every user, device and location

Centrally manage the secure deployment of your industrial applications to devices and users based on their role and/or their location in the facility.



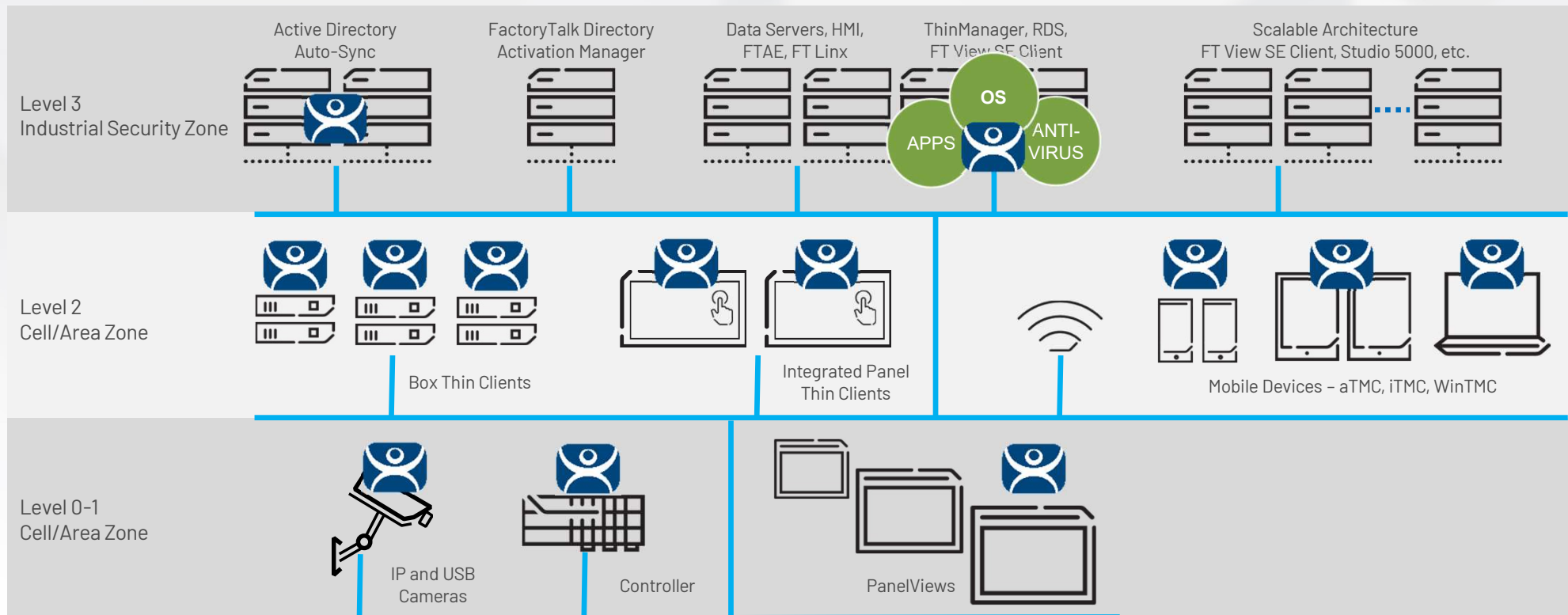
Traditional automation networks can waste time and resources

Dedicated PCs with local operating systems and applications compound unplanned downtime and maintenance



Server-client architecture reduces total cost of ownership

Replace PCs running local content with diskless, secure thin clients that are managed centrally





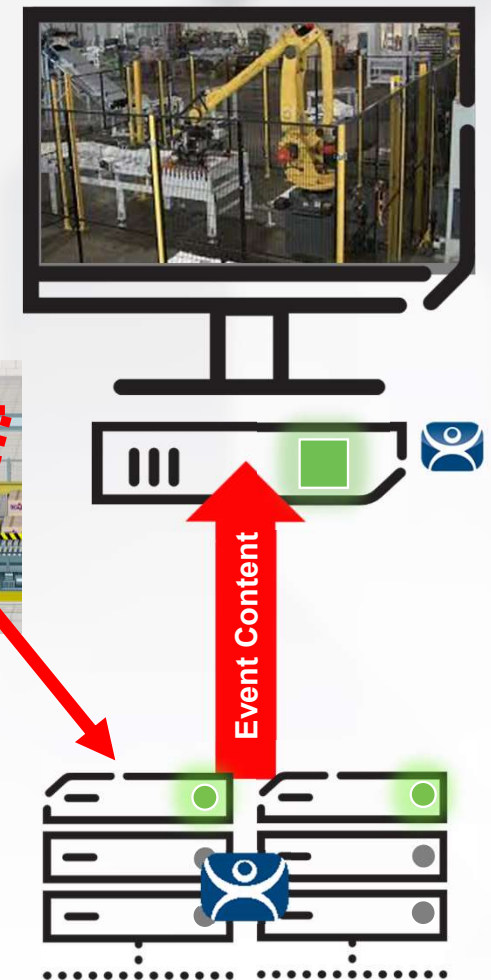
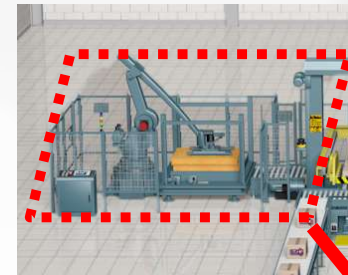
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New Features

Event Based Content Delivery

Enable users to respond faster when problems arise with automated visual content delivery

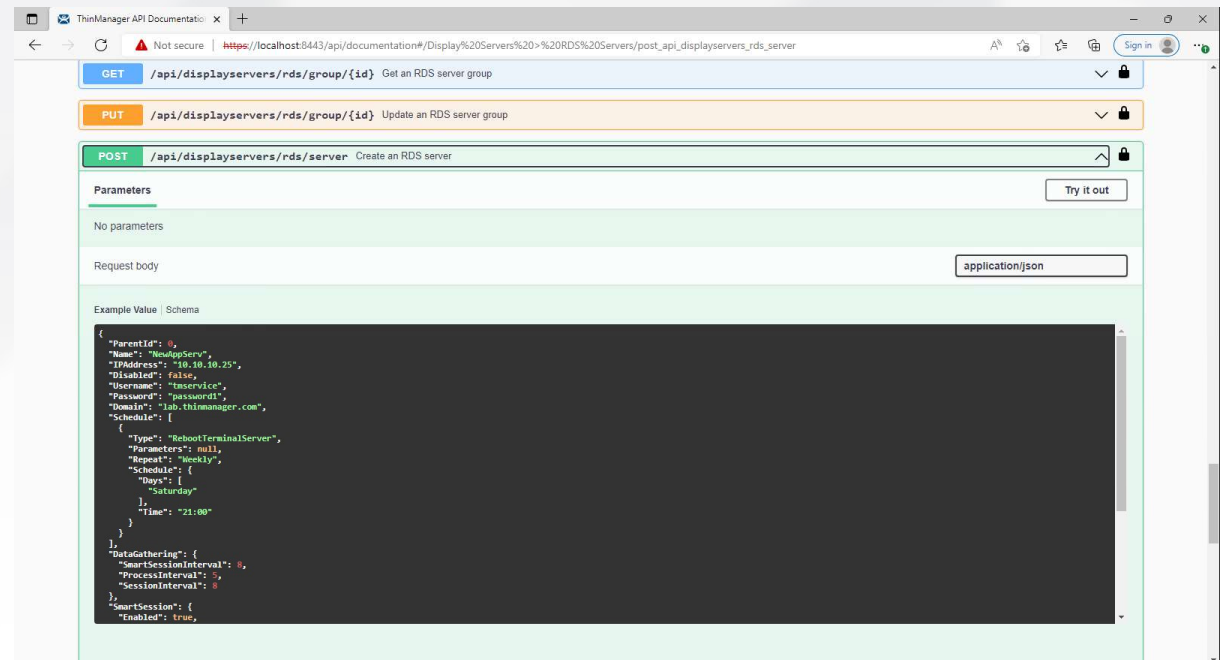
- Events are created from external sources and are triggered in ThinManager from variable properties configured in TermMon.
- Once a trigger is received from another application, ThinManager can execute a variety of actions including:
 - **Add Display Client** – New content on a terminal
 - **Switch or tile display clients** – Change visualization
 - **Permissions** – Add or remove user permissions
 - **Pass through event** – Actions triggered outside ThinManager
- **Example:** If a safety perimeter is breached, then display a camera feed



REST API

REST (Representational State Transfer) conforming API for Scripted Deployments and IT System Validation

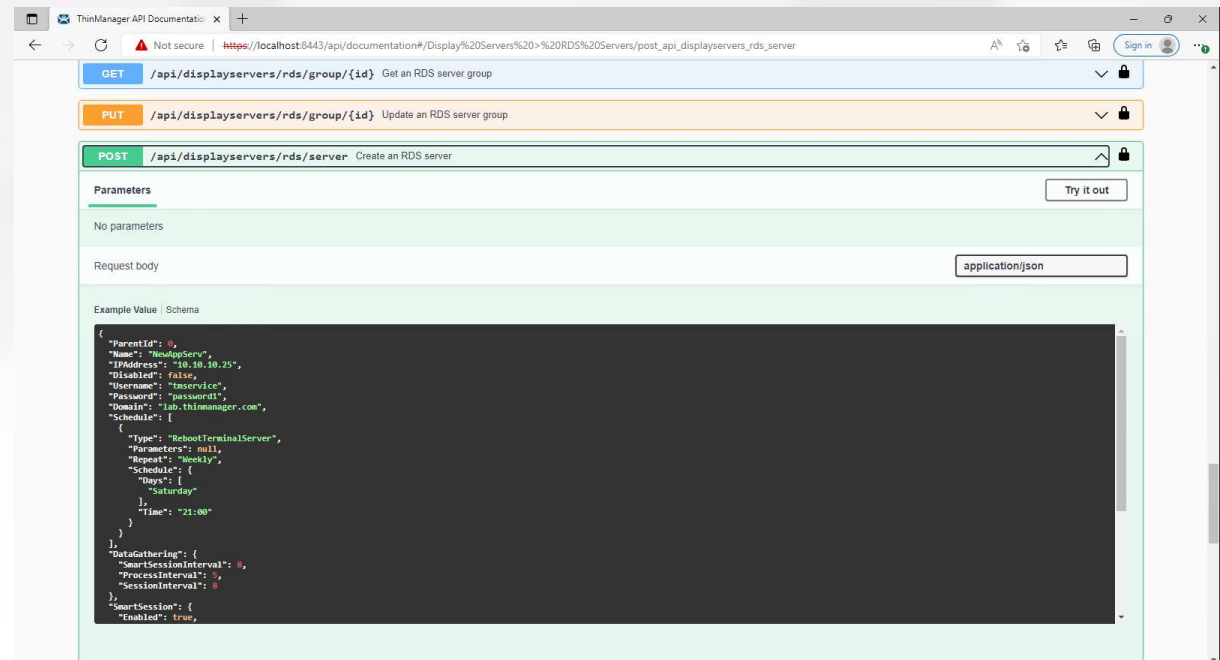
- Accessible from the engineer's choice of interface:
 - Swagger (documentation & test)
 - PowerShell
- API Key for Authentication can be generated as an Application Key or a User Key
 - User API Key inherits ThinManager Security Group permissions

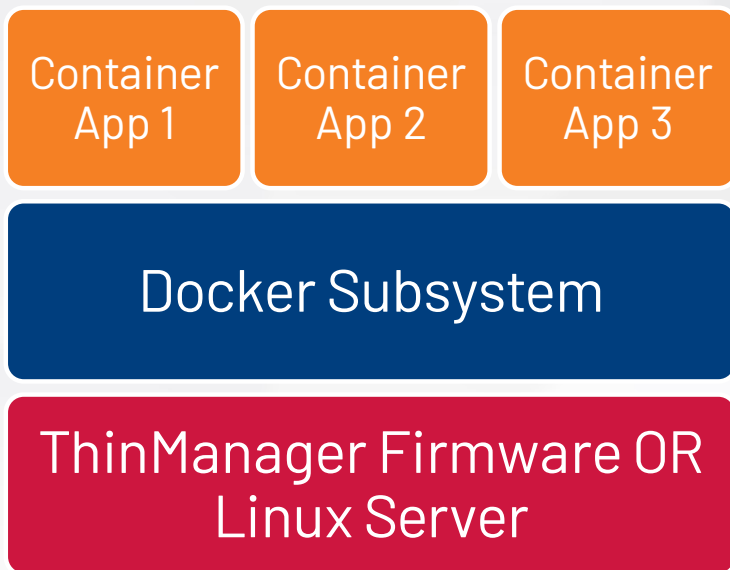


REST API

REST (Representational State Transfer) conforming API for Scripted Deployments and IT System Validation

- Validate system deployments against IT security standards
- Deploy a complete system without the ThinManager Admin Console
 - Commission ThinManager at scale
- Supported actions:
 - Create (Post)
 - Delete (Delete)
 - Modify (Put)
 - Monitor (Get)





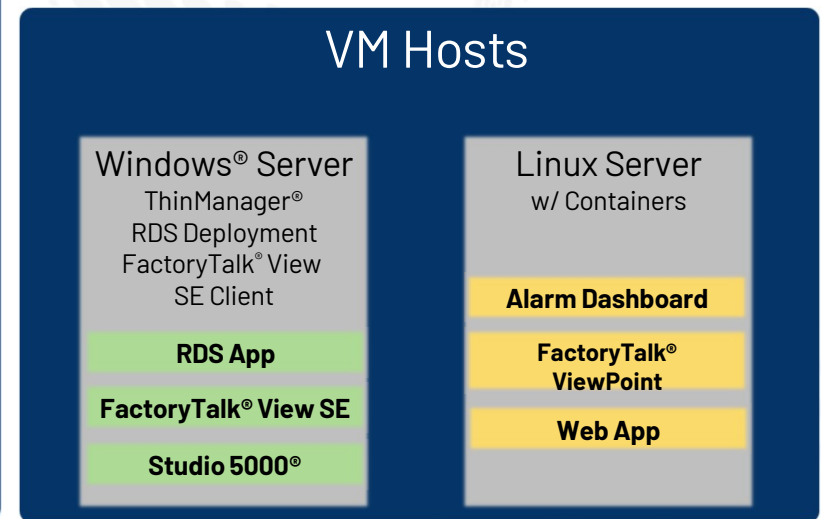
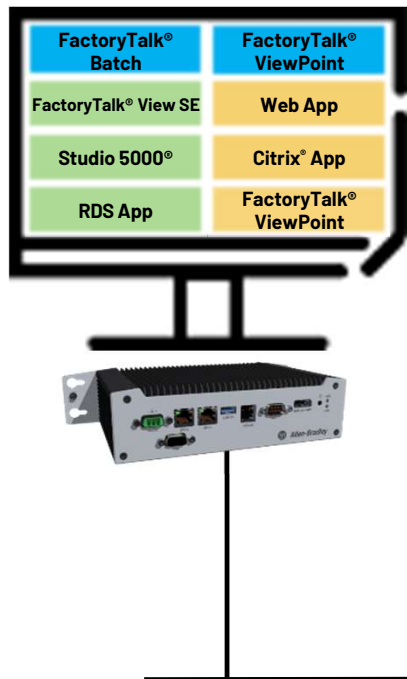
Definition

Container

A specialized, lightweight, and isolated Linux[®] virtual image made to run a specific application with all its dependencies

ThinManager – Flexible Container Hosting

Host web-based applications using containers on local and remote thin clients as well as Windows® and Linux Servers



Deploy using modern IT platforms

Security Delivery

Containers signed

Capability to sign containers upon creation of containers

Enhanced security with modules signed

Delivery over port 8443 if available

Install Container Image

Installed Containers

	Image Name	Version	Saves State	Signature
rome_with_ctrix_client-13.0.0-93.tar.gz	thinmanager/terminal_pro...	13.0.0	No	
efox-13.0.0-93.tar.gz	thinmanager/terminal_pro...	13.0.0	Yes	
efox_with_ctrix_client-13.0.0-93.tar.gz	thinmanager/terminal_pro...	13.0.0	No	
btx-13.0.1.tar.gz	thinmanager/terminal_pro...	13.0.1	No	

Secure boot

Adopt modern IT protocol secure boot

Only applicable for supported ThinManager Ready hardware vendors – coming soon!



Custom Containers

Bring your own containers

User modified or created container images may be installed into ThinManager



Enable remote and cloud native architectures

HTTPS Boot

Faster boot time over wide area networks

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

Requires hardware that supports certificates (currently all ASEM 6300 hardware)

Now able to enable/disable TFTP boot



Hardware Integration

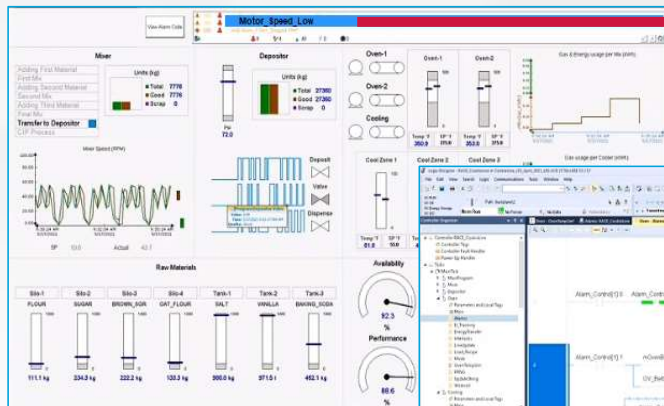
ASEM 6300 with ThinManager Ready capability

Over 15,000 configurations now available to ship with ThinManager BIOS in addition to or instead of Windows OS



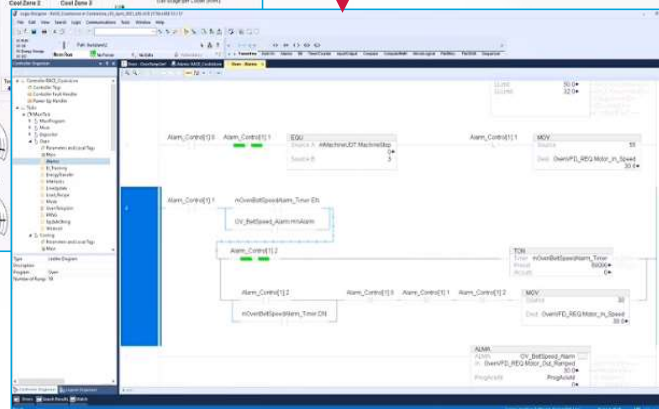
What is ThinManager Logix PinPoint?

ThinManager Logix PinPoint is a software application providing a visual interface of Studio 5000 with automated controller project navigation used for troubleshooting production operations from operator work terminals



Studio 5000 Logix Designer®

Includes View-Only
Studio 5000 license!

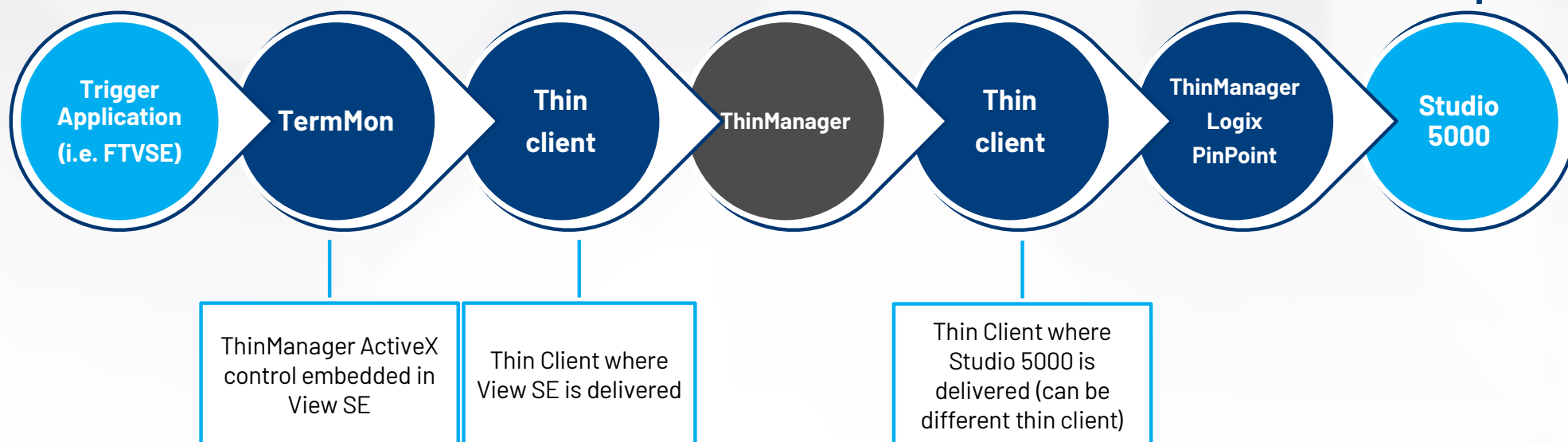
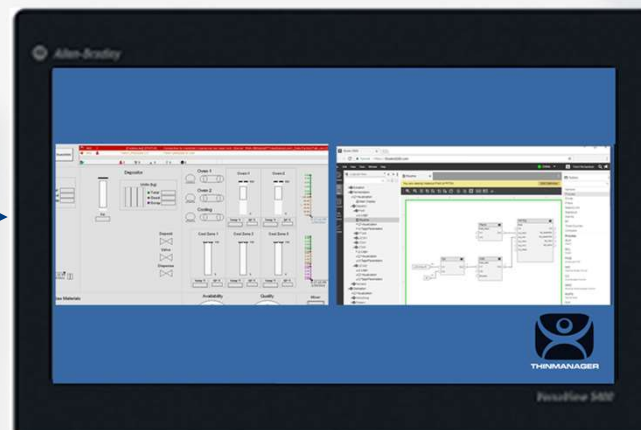


Example Implementation:

1. Navigate to Alarm Summary
2. Select an Alarm
3. Watch the associated controller code appear in Studio 5000 Logix Designer

How it works

ThinManager Logix PinPoint is a C# application that connects to Logix Services to automate Logix through ThinManager generated events





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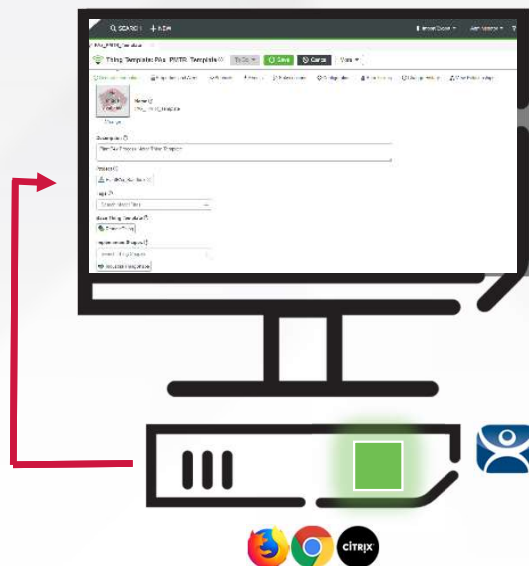
Containers

Thin Client container hosting for visualization

Centrally virtualized hosts with thin clients as edge compute

Why

- Reduce need for server-based resources to host containerized applications
- Reduces overall footprint of devices running local OS
- Mitigate cybersecurity vulnerabilities
- Secure IT owned assets from installation of drivers and malware
- Allow decoupling from Active Directory
- Reduce IT maintenance time of web browser hosting
- Custom containers



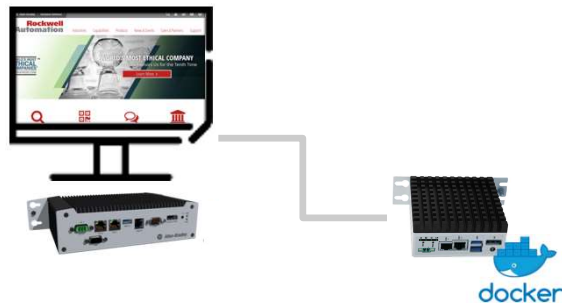
How

- Host web applications using containers on local and remote thin clients
- Currently supporting: Firefox, Chrome, Citrix® StoreFront
- Web browser container managed by ThinManager host removes RDS deployment requirement for web applications
- Pre-populate configuration, remote commissioning
- 8GB RAM recommendation for thin client container hosting

Summary: Container Host Deployments



Option 1: Terminal hosts own container



Option 2: Remote physical terminal hosts container

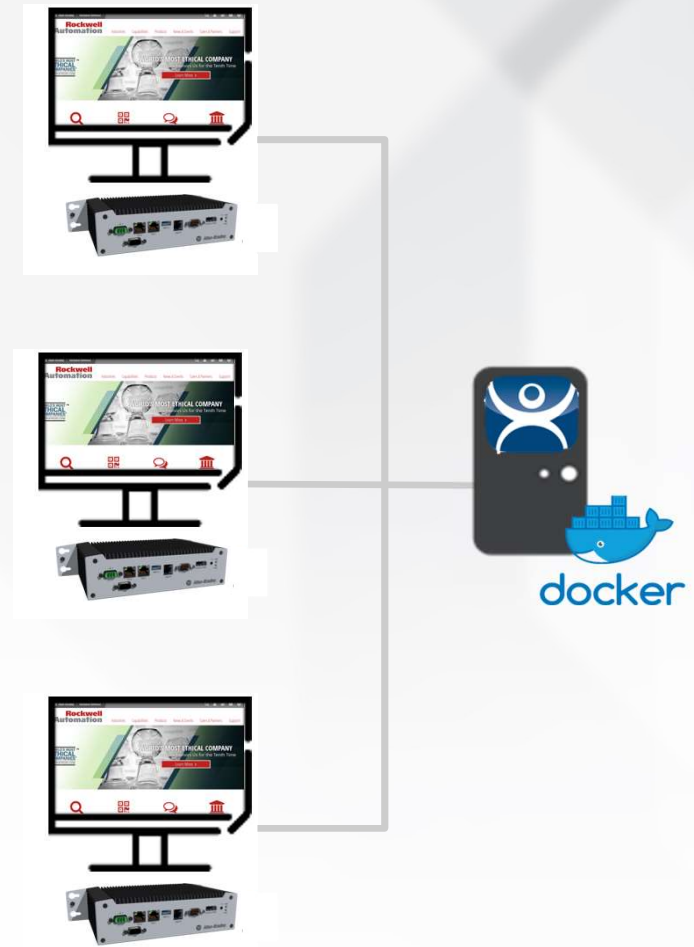


Option 3: Linux® Server hosts container

Example

Virtual PXE Container Server

Create a virtual PXE image on a server rack or hardware box that can serve containers to remote terminals.

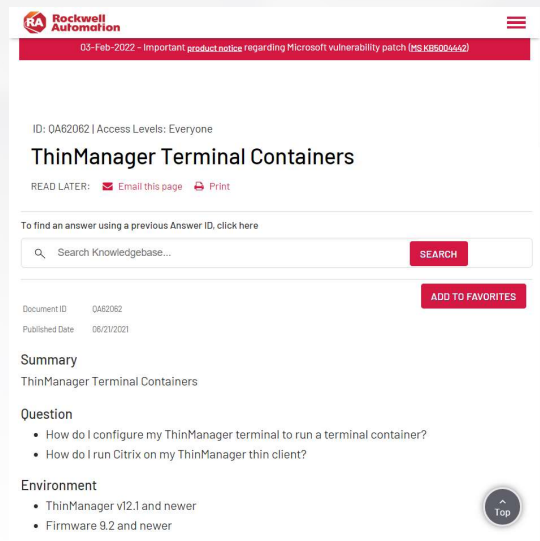


Resources

How to deploy:

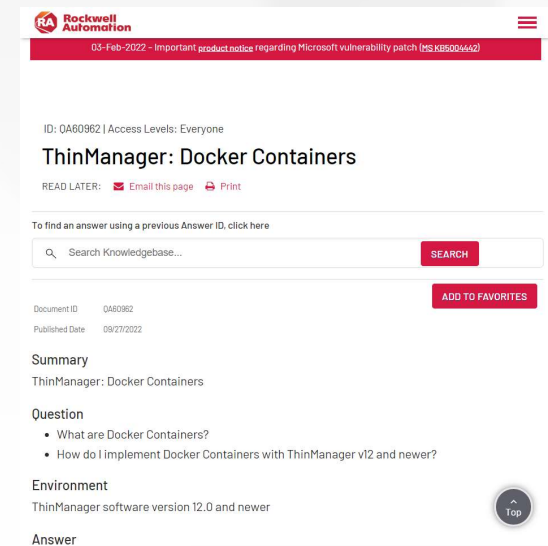
Terminal Containers

[Technote 1131790 - ThinManager Terminal Containers](#)



Server Containers

[Technote 1129746 - ThinManager: Docker Containers](#)





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Demo



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Questions



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