



# ACP ThinManager Tech Notes

## What's New, or Why Upgrade ThinManager?

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Use the **F1** button on any page of a ThinManager wizard to launch Help for that page.

Visit [www.thinmanager.com/technotes/](http://www.thinmanager.com/technotes/) to download the manual, manual chapters, or the ThinManual.

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Since its introduction in 1999 ThinManager has undergone a number of improvements. But the most significant changes have come with the latest releases. Here is a brief look at what features were added and enhanced since ThinManager 2.3. These are listed in chronological order to show the evolution of the product.

### Introduced in ThinManager 6.0

- **New – Firmware Packages** - ThinManager 6.0 introduces the deployment of the firmware and modules as a package. Different versions of the package can be assigned to individual modules. This allows legacy hardware to keep a version that works for it while new hardware can use newer package versions to take advantage of new features.
- **New – Menu Items** - ThinManager 6.0 includes new menu items to support the use of Firmware Packages. These include Manage>Packages, Install>Firmware Packages, Install>Boot Loader, and Install>Chain Loader.
- **New – Terminal Description Field** - ThinManager 6.0 adds a Description field to the Terminal Configuration so that additional info can be assigned to a terminal.
- **New – USB to VGA MultiMonitor Support** - ThinManager 6.0 supports a USB to VGA converter to turn single monitor thin clients into MultiMonitor thin clients.
- **New – iTMC iPad** - ThinManager 6.0 supports the new ThinManager iPad client. This will turn an iPad into a mobile terminal complete with Display Client application deployment, MultiSession, and Failover.
- **New – Web ThinManager Access** - Screentronix provides a secure VPN that allows you to connect to a ThinManager Server from a remote browser to aid in management.
- **New – Block Mouse Button Functions** - The Mouse Configuration Module has the ability to lock down the mouse buttons, scroll buttons, and scroll wheel.

### Introduced in ThinManager 5.0

- **New – PXE Server** - ThinManager 5.0 includes a PXE server (Preboot Execution Environment) that allows many common thin clients to boot from ThinManager and become ThinManager capable thin clients. This allows you to use the control of management tools of ThinManager with common office thin clients from a variety of vendors.  
A list of many ThinManager capable thin clients is kept at [www.thinmanager.com/complist/](http://www.thinmanager.com/complist/).
- **New – XLI Licensing** – The XLI license bundles all of ThinManager's features into a single license; Terminal Connection, MultiMonitor, TermSecure, and WinTMC. The XLI license also allows the PXE booting of common thin clients.  
The XLI license is available in standard and enterprise licenses.



## Introduced in ThinManager 4.1

- **New – 64-bit version** - ThinManager 4.1 is available as a 32-bit and 64-bit version. The installation program will install the proper version on 32-bit and 64-bit operating systems. It gives you the option of installing the 32-bit ThinManager on a 64-bit operating system.
- **New – Virtualization Support** - ThinManager 4.1 adds the ability connect to VMware ESXi servers to manage and control the virtual machines from within ThinManager.
- **New – Workstation Support** - ThinManager 4.1 adds the ability to connect a thin client to a workstation and remotely run the console session. This can be a physical or virtual workstation.

## Introduced in ThinManager 4.0

- **New – IP Camera Support** - ThinManager 4.0 adds the ability to add IP cameras to the system and display the output on terminals.
- **New – Centralized Master License** - ThinManager 4.0 combines all licenses on a ThinManager Server into one master license.
- **New – Tree Re-organization** - ThinManager 4.0 adds new icons to the ThinManager tree.
- **New – Key Block Single Key Module** - ThinManager 4.0 adds a module that blocks single keys.
- **New – Keyboard Configuration Module** - ThinManager 4.0 adds a module that allows terminals to use non-English (USA) keyboards.
- **Improved – IP Camera Support in TermMon ActiveX** - ThinManager 4.0 adds IP camera manipulation to the TermMon ActiveX/

## Introduced in ThinManager 3.3

- **New – Command Line Options** - ThinManager 3.3 adds a field for command line options in the Initial Program field of the Terminal Configuration Wizard and the AppLink field of the Application Group Configuration Wizard.
- **New – Detail Pane Printing** - ThinManager 3.3 adds the ability to print tabs on the Detail pane with the **View > Print** command from the ThinManager menu.
- **New – Application Group Summary Tab** - ThinManager 3.3 adds an Application Group summary tab that is displayed when the Application Group branch is highlighted.
- **New – MultiMonitor WinTMC** - The new WinTMC client, v2.1, supports multiple monitors on the PC.
- **New – Multicast/Unicast Function** - ThinManager uses Multicast by default when thin clients connect to ThinManager and download the firmware. If the firmware fails to load because Multicast is blocked, the thin client will switch to unicast for that firmware download.
- **Enhanced – Security** - ThinManager 3.3 improves security with enhanced encryption.
- **Enhanced – ThinManager Server Security Groups Interface** - ThinManager 3.3 improves the ThinManager Server Security Groups interface in the ThinManager Server Configuration Wizard.

## Introduced in ThinManager 3.2

- **Renamed – Application Groups** - ThinManager 3.2 renames Terminal Server Groups to Application Groups to better define its role. Application Groups can be either the traditional Terminal Services group or a new Shadowing group.
- **New – Terminal-to-Terminal Shadowing** - ThinManager 3.2 allows terminal-to-terminal shadowing through the use of the new Shadowing Application Group.



- **New - Session Tiling** - ThinManager 3.2 allows the tiling of MultiSession groups to show all sessions at once.
- **New – TermSecure Support for WinTMC** - ThinManager 3.2 includes support for TermSecure in the new v2.0 WinTMC client.
- **New – Enhanced AppLink Folder Path** - ThinManager 3.2 includes a field for a working directory for AppLink.
- **New – Connect-to-Console** - ThinManager 3.2 allows a connection to the console session a terminal server that is displayed for the user via ThinManager instead of starting a new session on the Terminal Server.
- **New – Background Synchronization Check** - ThinManager 3.2 includes a background synchronization check that shows when the last synchronization succeeded.
- **New – Configurable Firmware Packet Size** - ThinManager 3.2 allows the firmware packet size to be adjusted as needed.
- **New – Configurable Shadow Port** - ThinManager 3.2 allows the selection of the port to use for shadowing.
- **New – Full Screen Shadow** - ThinManager 3.2 includes the ability to expand a shadowed session to full-screen size.
- **New - Override** - ThinManager 3.2 includes an Override button to allow an Application Group to use a different login account than the terminal.
- **Enhanced – Auto-Synchronization** - ThinManager 3.2 provides a wizard to make auto-synchronization easy.
- **Enhanced – Monitor Status Lights** - ThinManager 3.2 adds new colors to the terminal monitor lights to include purple when terminals are downloading firmware and yellow when the terminals is waiting for a monitor connection.
- **Enhanced – Find Function** - ThinManager 3.2 increases the Find function on the menu bar to include a search for names, IP addresses, Terminal ID/MAC addresses, and models.
- **Changed – MultiSession Licensing** - ThinManager 3.2 changes the MultiSession license from server-based to terminal-based licensing.

## Introduced in ThinManager 3.1

- **MultiMonitor** - ThinManager 3.1 includes support for ThinManager Ready thin clients that can use up to 5 monitors from a single thin client. Each monitor can display an individual Terminal Server Group session or the monitors can be configured to show a session spanned across several monitors.
- **Reports** - ThinManager 3.1 can generate HTML reports of the terminal configurations, terminal properties, event logs, uptime, and others. New templates can be added to ThinManager as needed.
- **Install Menu Item** - The Manage menu has been re-organized and an Install menu item has been added for tasks like adding licenses, firmware, and modules.
- **Mirrored Redundancy** - ThinManager 3.1 introduces a Mirrored Redundancy that allows a second ThinManager Server maintain the terminal configuration for terminal boot up if the primary ThinManager Server fails. This is a lower cost than full ThinManager Server Redundancy.
- **Application Watchdog in ActiveX** - The TermMon.ocx ActiveX tool has a Watchdog added to eliminate problems caused by applications failing in a session. The TermMon.ocx ActiveX can be configured so that if the application fails or loses data connectivity, the session will be logged off and a new session will be started.
- **Terminal Server Group Settings** - Terminal Server Groups can now be configured to disconnect when it is in the background while another Terminal Server Group is in the foreground, conserving resources while using MultiSession.
- **Touch Screen Calibration for MultiMonitor** - The touch screen modules have MultiMonitor support added to allow use with MultiMonitor ThinManager Ready thin clients.



## Introduced in ThinManager 3.0

- **Clear Terminal ID Button** - The Terminal Hardware Page of the Terminal Configuration Wizard has a button that will remove a Terminal ID from a configuration. This allows a terminal to be reassigned from one configuration to another without requiring the deletion and recreation of the terminal configuration.
- **Disable a Terminal Server** - A Terminal Server can be disabled from ThinManager. Any terminals currently connected to the terminal server will disconnect. This feature allows terminal server maintenance to be performed without having to power off the terminals.
- **Dynamic ThinManager Synchronization** - A backup ThinManager Server can be configured to automatically maintain synchronization with a primary ThinManager Server. No manual synchronization is required.
- **Event Logging** - ThinManager 3.0 has an Event Log tab on the Details pane. It can log Terminal Server events, Terminal events, Terminal configuration changes, and/or, User configuration changes.
- **Historical Logging** - ThinManager 3.0 can log the terminal server CPU and memory usage into a historical log.
- **Multilevel Groups in Tree** - The ThinManager tree now allows nesting of Terminal Groups, creating a multi-level hierarchy for organization.
- **Screen Edge Group Selector** - Users can switch sessions by moving the mouse to the right or left edge of the screen.
- **Send Message to a Terminal** - ThinManager 3.0 allows a message to be sent to a terminal or terminal group from ThinManager. The message does not get sent to the user session, but to the terminal itself.
- **Shadow Function** - ThinManager 3.0 not only allows the shadowing of thin clients to be Allowed/Disallowed, but also has a setting to ask a user if it can be shadowed, warn a user that shadowing will take place, or allow shadowing to take place without notification.
- **SmartSession Functionality** - When a user connects to a Terminal Server Group that is using SmartSession, ThinManager will send them to the terminal server with the lightest load. If that user reconnects using SmartSession, ThinManager will send the user to resume the already open session instead of sending it to start a new session on a different terminal server.
- **Terminal Effects** - Sliding window effects can be used when changing MultiSession groups, when the Group Selector becomes auto-hidden, and when terminal messages removed from view.
- **Terminal Scheduler and User Scheduler** - ThinManager 3.0 contains a Terminal Scheduler that will allow you to Disable, Enable, Reboot, or Reset a terminal or TermSecure User at a regular time.
- **Terminal Server Group Selector** - ThinManager 3.0 has added features to the Group Selector allowing size change and auto-hide.
- **TermSecure** - ThinManager 3.0 introduces a series of security features under the TermSecure name. These features include:
  - **Access Groups:** Access Groups to be created and applied to Terminals, Terminal Groups, Terminal Server Groups, TermSecure Users and TermSecure User Groups. A user will be able to access a Terminal Server Group only if they are a member of the same Access Group.
  - **TermSecure Users:** User profiles can be created and configured with their own Terminal Server Groups and Access Groups. When a TermSecure User logs in to a terminal using TermSecure, they will be allowed access to their own Terminal Server Groups and any of the terminal sessions that they share membership with.
  - **Terminal Main Menu:** TermSecure provides a Terminal Main Menu that allows TermSecure Users to login or switch users on the terminal.
  - **User ID Device:** TermSecure allows the TermSecure User login to be initiated by an Access Control Card or USB Flash Drive.
- **TermSecure User Profiles in Tree** - ThinManager allows the creation of TermSecure User profiles that can be assigned to specific Terminal Server Groups. If this user logs into a terminal, these user-specific Terminal Server Groups will be available.



- **ThinServer and Database Upgrade** - ThinManager has a new database engine and internal structure to improve scalability and power. A thinmanager.db file replaces the thinmanager.cfg file for storing the configuration.
- **Virtual Keyboard** - ThinManager 3.0 allows a virtual keyboard to be displayed on the thin client screen during TermSecure log on for users without an attached keyboard.
- **Improved - Faster Boot Time** - Reduced terminal firmware size allows for faster downloading of the firmware.
- **Improved - Inheritance of Terminal Group Properties** - Early versions of ThinManager allowed Group properties to be configured, and any terminal added to the Group would inherit the Group properties. Each of these settings could be changed to allow the thin client to have a different setting than the Group. Because of the new nested Multilevel Groups in ThinManager 3.0, all Group properties now use a forced inheritance. Once a setting has been selected as a Group property, every Group and terminal beneath it will use that setting.
- **Improved - Restart The Terminal Without Having To Reboot** - A Restart function has been added. **Rebooting** a terminal from ThinManager will cycle power to the terminal so that it will reload the firmware and configuration. **Restarting** a terminal will load configuration changes with the least amount of impact to the terminal. If only the configuration has changed, the terminal will reload the configuration without a complete reboot and reload of firmware. If, however, the firmware has changed, a Restart will reload the firmware also.
- **Improved - ThinManager Tree Pane Editing** - ThinManager now uses a drop-down box to show which ThinManager Server is being displayed in the tree pane. This allows each tree element to be active. Right-clicking on a branch, like Terminal Servers or Terminal Server Groups, will launch the configuration wizard for that component. Double-clicking on a terminal server or terminal server group will launch the wizard for that unit.
- **Improved - Touch Screen Calibration** - A check is performed at the end of the calibration process to validate the calibration points. If a point is not valid, the user is prompted to perform the calibration again.
- **Replaced - Classic Mode** - The original Classic Mode of terminal configuration introduced in ThinManager 1.0 has been eliminated. The Wizard Mode is used for all configurations.

## Introduced ThinManager 2.6

- **WinTMC** - WinTMC is an application for PCs that turns the PC into a fat client. The WinTMC fat client is configured and managed in ThinManager and has ThinManager functions like Failover, Instant Failover, and modules.
- **SmartSession Queuing** - Queuing controls the rate at which ThinManager Ready thin clients connect to a Terminal Server Group with SmartSession, letting them connect in an orderly fashion to lessen spikes in CPU and memory usage.
- **MultiCast** - Allows simultaneous booting of multiple clients using one network data stream, lessening network traffic.
- **Terminal Server Properties** - ThinManager displays the hardware configuration, CPU usage, Memory usage, Uptime, and other properties of any of the Terminal Servers on the network.
- **Graphs** - Graphical trends of memory and CPU load of any Terminal Server are displayed for monitoring server load.
- **SmartSession Rankings** - Real-time ranking of Terminal Server load within a SmartSession group.
- **Remote Connection** - Start a session on any of the Terminal Servers from within ThinManager. Allows terminal server management from within ThinManager.
- **Improved Touch Screen Calibration** - Touch screen modules now have a five point calibration for greater accuracy.
- **Browse Button** - The Initial Program field now has a Browse button to make selection easier.
- **Time Zone Redirection Module** - Allows a client that is connected to a terminal server in a different time zone to display the local time, not the server time.



## Introduced in ThinManager 2.5

- **SmartSession** - When a Thin Client connects to a group that is configured with Smart Session, it is sent to the server with the most available resources. This balances the load among all of the servers, improving performance by not tying a specific client to a specific server.
- **MultiSession** - One client, many sessions across multiple terminal server groups. Thin Clients running Multi-Session can connect to a number of Terminal Server Groups at the same time, starting sessions on a server in each group. The operator at the Multi-Session Thin Client can then select which group (session) to display from a drop-down menu on the Thin Client. All of the sessions continue to run whether they are displayed or not.
- **AppLink** - All of the servers in an AppLink group will have a common identified application. Any Thin Client that connects to this group will only have access to that application - not the Windows desktop, not the start menu, just the application.
- **Enterprise Licenses** - Run an unlimited number of Thin Clients and Terminal Servers with three different levels of Enterprise Licensing from ACP.
- **Shadowing** - View and control any client's screen directly from within ThinManager.
- **Terminal Services Administration** - List and control sessions on any terminal server from within ThinManager.
- **Server Grouping** - Group servers by application or function for greater flexibility. Instead of pointing to a single Terminal Server to host a Thin Client, point to a Terminal Server group. If the first server in a group fails, all of the Thin Clients running on that group will switch to the next server in the group.
- **Support for Microsoft's native RDP protocol** - Results in faster graphics rendering, comm port redirection and high-color (when connected to a Windows 2003 Terminal Server)
- **Support for USB keyboard and mouse** - New mouse modules support USB mice and wheel mice.
- **Support for local flash storage devices (Jump Drives)** - USB ports can be enabled to allow access to a local portable drive. Since this uses a module, it is disabled by default for security.
- **Find** - The tree in ThinManager now has a Find tool to search for groups and terminals by name. This, and Find Next are on the Edit menu.
- **RDP Serial Port Redirection Module** - The new RDP Serial Port Redirection Module makes serial connections easy when using Windows 2003. When this module is added to a terminal, the serial ports in a session are automatically mapped to the serial ports on the client.
- **Screen Saver Module** - This module loads a screen saver on the client to run when the terminal is idle to protect the monitor. Since the screen saver runs on the client, it saves CPU on the terminal server. The screen saver can be set to be deactivated during a specified time period.
- **Key Block Module** - This module traps key strokes and prevents them from being passed to the terminal server to increase security.
- **ThinManager Security Groups** - ThinManager allows different levels of access and functionality based on standard Windows groups. If ThinManager Administrators, ThinManager Power Users, and ThinManager Users groups are created, members of these groups will be granted different rights and privileges.

## Introduced in ThinManager 2.4

- **Configuration Wizards** - Perform most of the configuration through computer directed wizards and walk through any number of complex configuration tasks without the fear of missing an important step.
- **New Tree View of Terminal Servers and connected clients** - See exactly which Windows Terminal Server is hosting each Thin Client. If clients log off one server and switch to a backup server, the new tree will show the status of the .
- **Multiple monitoring connections to redundant ThinManager Servers** - Provided the ability to run the ThinManager software on multiple machines. Load and start ThinManager wherever you need to be able to keep up with the system status.



- **Support for new Hardware** - Added a number of new industrial ThinManager Ready Thin Clients.
- **ThinManager Configuration Import and Export** - Multiple ThinManager Servers can work together by allowing for the export and import of the configuration of all managed Thin Clients. Along with this comes the ability to backup and restore ThinManager configurations.
- **Assign names to Servers** - Even users who are not using a network with DNS can assign names to the ThinManager Servers and Terminal Servers on the network.
- **Create lists of available ThinManager Servers and Terminal Servers** - Easy and automatic creation of server lists to cut down on confusion during initial system configuration and updates.