



Making the case for ThinManager



The Key to your Solution

Almost ten years ago now ACP started out to develop a terminal services thin client configuration and management tool that would be highly reliable, easy to use, yet robust enough to work in the most difficult of environments. We envisioned an interface that gave every user the control required to support clients and servers from a centralized location without the need to physically access terminals in what might be a very large geographical area. Our vision netted the core ThinManager configuration and management technologies and the efforts of our sales channel have rewarded us with numerous successful installations around the world. Partnerships with client manufacturers have resulted in a large pool of available client hardware devices covering a wide range of customer needs from limited size models to explosion proof devices and lower cost office clients.

Over the past four years ACP has worked to extend the market for ThinManager technologies by adding functionality that falls outside of configuration and management. New features like MultiSession, TermSecure and MultiMonitor extend the usefulness of ThinManager Ready terminals and provide out of the box solutions to some common application needs without the necessity for complex and time consuming coding.

Our goal for the Integration Partners Program is to introduce you to what we call the "Integrated In" ThinManager technology "Tools". Features that extend beyond the computing platform and link directly into you applications to provide better application access and more security for users, greater screen real estate, secure authentication that can pass directly into your existing application or kiosk style access for multiple users from a single terminal. By maintaining greater control of the computing platform we have been able to create "shrink wrapped" solutions to some of our customer's most pressing needs. Our goal is to give you the tools required to create better solutions with configuration in place of code.





SmartSession

In those midsize to large environments where more than one terminal server is required to support the processing of your connected terminals, care must be taken to distribute terminal sessions across available servers such that no single server becomes overburdened while others remain underutilized. Determining where to direct terminals for their sessions can be configured within ThinManager in a predetermined static manner by first assigning each application group a single terminal server and then dividing application groups and servers across the required terminal configurations. In this manner application A running from terminal server 1 can be applied to 5 terminals while application A running from terminal server 2 can be applied to 5 other terminals. In theory terminal servers 1 & 2 would both be supporting an equivalent number of terminals and utilizing approximately the same amount of resources. In reality, however, this does not take into account a number of important factors including, but not limited to; other processes like data acquisition drivers that might be running on the servers, differences in server hardware like amount of memory or speed of processor, other terminal server sessions that might exist for processing of unrelated sessions and applications, or differences in user interaction and default visible screen within application A.

To get the best use of available resources in a dynamic terminal server processing environment you need to balance terminal session processing across terminal servers dynamically taking into account the realities of an ever changing environment. SmartSession is a tool that can be applied to provide real-time intelligence to the terminal server selection process. By weighing the current resource allocations of terminal servers in operation SmartSession can make an educated decision as to which terminal server should receive the next terminal session.



TermSecure and the TermMon ActiveX Control

TermSecure security features lay on top of Microsoft security to provide greater protection for your data and applications. Think of TermSecure security as a locked gate between your terminal users and the Windows environment. Authentication through the TermSecure gate does not mean you have carte blanche access to terminal servers, instead it provides access only to those application groups configured for and applied to a TermSecure user from within ThinManager. Using added features like username and password obfuscation or badge plus password authentication tightens up your secure environment and lessens the risk associated with a Windows only security model.

Beyond security you also extend your platform features with "User Context". Terminals most often represent the locations where they reside and the applications that run on them tend to correspond to the functions that are common to their location or their operators. Users however, can be mobile and their functions might be required across a number of terminal locations. Take supply or maintenance personal for example. A single user from the maintenance department might require access to a work order system from any location within a facility. TermSecure can link a user to their context or application set from any terminal within an environment. This context technology can allow a user to roam from location to location where their services are required using the closest terminal to reconnect to their applications for job functions like work order entry or job related materials like support documents.

With configurable features including manual or card reader based username and password entry TermSecure offers a prepackaged technology that can be linked through to your application platforms providing a very manageable solution for user authentication without the difficulties of coding. ACP offers an ActiveX control that can be dropped into any application container and used to pass properties and events to and from ThinManager and terminal clients.



MultiMonitor

Both Arista and Advantech now offer ThinManager Ready terminal clients with 3 or 5 VGA connectors. When configured with MultiMonitor, these clients support session spanning and MultiSession screening technologies.

Spanning provides greater real estate for a single terminal server session covering multiple monitors in layouts with resolutions up to 4096x2048 pixels. This allows existing PC-based multi-monitor HMI applications to translate directly a ThinManager Ready thin client platform without changes. MultiSession screening provides simultaneous visibility for up to 5 application groups from one MultiMonitor terminal. Screening provides this access to more than one application through ThinManager configuration settings and without the need to merge application source. These two technologies can also be used simultaneously from one terminal configuration.



MultiSession and Session Tiling

MultiSession is a core technology in ThinManager and understanding how it works is a prerequisite to working with MultiMonitor, TermSecure, and Terminal to Terminal Shadowing. Beginning with ThinManager version 3.2 the MultiSession "application group" becomes a superset of the grouping theory with new categories within groups added to represent new technologies. Where ThinManager versions 2.5 through 3.1 had a single "terminal server" group type, version 3.2 now adds the "terminal shadow" group. Later releases will include "video capture" and "terminal recording" groups. Once defined, application groups can be applied to terminals and TermSecure users and displayed using techniques like MultiMonitor MultiSession screening, MultiSession screen saver or SessionTiling. As part of an "Integrate It In" solution, MultiSession can provide simultaneous access to disparate application platforms for one or more users through one terminal client without the need to integrate systems together with code. Imagine bringing together two HMI applications on one terminal, each running on different vendor platforms without writing code.



WinTMC 2.0

In cases where your customer has recently purchase workstation PC's for the plant floor you might find yourself tied to a PC computing platform while secretly wishing for the manageability of a ThinManager based solution. Perhaps you might even be able to mix a few ThinManager Ready devices into the platform in the near term with hopes that you can prove the ROI of a ThinManager based solution and then migrate the PC's to thin clients over time. WinTMC provides a near term ThinManager based manageability to PC's with a 60 second migration to ThinManager ready thin clients for the future.



Control Room Terminal to Terminal Shadowing

Control Room and Terminal to Terminal Shadowing

In the past year ACP has added a number a features to the ThinManager platform that make it an excellent solution for control rooms. ThinManager Ready terminals now come with up to five VGA connectors and when configured with MultiMonitor and MultiSession terminals can provide greater screen real estate or multiple visible application sessions. Configurations can be set to switch between sessions at intervals or even display and interact with multiple sessions on a single monitor. Using the new Terminal to Terminal Shadow feature a single terminal can be used to shadow every other ThinManager Ready terminal in your plant, one at a time, simultaneously on one screen, or across multiple monitors.