ACP ThinManager Tech Notes

ThinManager Overview

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

Visit www.thinmanager.com/technotes/ to download the manual, manual chapters, or the ThinManual.

This document gives an overview of Terminal Services computing and explains how ThinManager software from ACP increases the value of Terminal Services computing.

What is Terminal Services?

Terminal Services is a Microsoft® Windows Server service that brings centralized computing (the mainframe architecture) to Windows servers. A terminal server allows many users to login and run an independent session on the server, each with its share of the server resources. Terminal Services can be activated on any Windows 2000, 2003, or Windows 2008 Server.

Note: Microsoft requires a Terminal Server/Remote Desktop Services Client Access License for any device that connects to a terminal server.

Client/Server Relationship

Each client connects to a terminal server, starts a session, and sends its mouse and keystrokes to the session on the terminal server. The terminal server processes the commands and generates the graphic screen update, which is passed back to the client. The client then displays the changing graphics. This makes the terminal server session virtually indistinguishable from a PC session.

When the client is a full-blown PC it is called a "fat client". Fat clients require an operating system, maintenance, security patches and updates.

Thin Clients

Thin clients are special computer devices without hard drives that can connect to a terminal server and use a terminal server session. Because thin clients lack a hard drive they don't need the maintenance, patching, and updating that fat clients require.

Centralized Computing Benefits

Terminal Services makes maintenance easier. Because the applications are running on the terminal server and not on the clients, the terminal server is maintained, not the clients. Applications that are installed once on the server are available to all the clients. Patches and upgrades are done on the terminal servers and not the clients.

Windows Environment for Existing Apps

Although terminal services use a mainframe architecture, it is a Windows environment so users can use familiar Windows applications.

What does ACP Add?

ACP is the software company that developed the ThinManager® thin client management software to enhance Microsoft Terminal Services.

Some of the benefits of ThinManager are detailed here.

Centralized Client Configuration

ThinManager allows ThinManager Ready® thin clients to be configured in a central location instead of individually at each client.

Centralized Management

ThinManager allows the monitoring of the thin client from a central (or remote) location. ThinManager shows what thin clients are on or off, what terminal servers they are assigned to, whether they are logged in, and even what applications they are running.

Quick Replacement

ThinManager Ready thin clients can be replaced with a single click of the mouse, with the new unit assuming the old units identity and displaying the old unit's session.

Failover

ThinManager allows the thin client to be assigned to several terminal servers. If the terminal server fails, the thin client will detect it and switch to a backup terminal server, preventing downtime.

Instant Failover

ThinManager allows the thin client to logon to two terminal servers at once. The primary session will be displayed while the session from the backup terminal server is hidden. If the primary terminal server fails, the thin client will simply switch to the backup session, providing immediate failover.

Reliability

ThinManager Ready thin clients are more reliable due to the lack of a hard drive or other moving parts.

A ThinManager Ready thin client can be replaced with a single click, while a PC or fat client requires hours of installation and configuration. With failover, even it the terminal server fails, the thin client will continue to function, increasing uptime and reliability.

Shadowing

ThinManager allows ThinManager Ready thin clients to be "shadowed" from within ThinManager. This allows the administrator to see exactly what is being run on the thin clients.

ThinManager also allows the administrator to see what user is logged into a session and what applications and processes they are running.

SmartSession (Load Balancing)

ThinManager allows thin clients to connect to groups of terminal servers. ThinManager will poll the servers and determine their load based on CPU usage, memory usage and number of sessions. The thin client will then connect to the terminal server with the lightest load.

MultiSession (Multiple Session Support)

ThinManager allows ThinManager Ready thin clients to connect to multiple terminal servers and run multiple sessions. These sessions are cascaded on the thin client and can be accessed with a hot key or a selector bar.

AppLink (Application Publishing)

ThinManager allows terminal servers to be configured so that only one application runs in the session. This can be used as a security tool to limit access to unwanted programs. AppLink, in combination with the MultiSession functionality, allow a ThinManager Ready thin client to connect to sessions that each has a specific application.

This simplifies the terminal server configuration. Instead of installing every application on every terminal server, terminal servers can be configured to concentrate on running fewer applications, reducing complexity and limiting conflicts between programs.

Multiple Monitors

Several ThinManager Ready thin clients are available with multiple video ports allowing up to five monitors to be connected to one thin client. These monitors can run individual sessions or can be configured to be merged into double-wide and triple-wide sessions.

Share Keyboard and Mouse

ThinManager allows a single keyboard and mouse to be shared among as many as 5 Thin Clients. The user is then able to slide the mouse off the screen of one client and have it move onto the screen of another, saving desk space.

E-mail Event Notification

ThinManager can be configured to send e-mails or a local message to a designated operator's console when the specified event occurs.

Support for both RDP and ICA

ThinManager Ready thin clients can use the native Microsoft RDP protocol or the Citrix ICA protocol to communicate with the Terminal Servers.

ThinManager Ready Hardware

ThinManager Ready thin clients are available from a number of manufacturers. Each unit, whether an office unit or an industrial unit, is able to connect to ThinManager right out of the box.

ThinManager software is needed to use ThinManager Ready thin clients.

ThinManager Capable Hardware and PXE Boot

ThinManager 5.0 and later has a PXE server that can be activated to let many common thin clients connect and be managed by ThinManager.

A ThinManager XLi license is needed to boot ThinManager Ready thin clients.

ThinManager Windows Client

ACP has a Windows client, WinTMC, for installation on PCs that will allow the PC to become a fat client. This Windows client supports ThinManager features such as failover, SmartSession, and AppLink.

Virtual Machine Support

ThinManager can connect and manage a VMWare ESXi server. This allows you to deploy virtual desktops to the thin clients, backup virtual servers using a snapshot, or power on or off the virtual machines from within ThinManager.

Summary

Microsoft's Terminal Services centralizes computing into a main frame-style architecture. This simplifies installation and management, leading to lower costs.

ACP ThinManager software allows the use of thin clients, devices that lack a hard drive and a maintenance-requiring operating system, increasing the savings in maintenance and increasing reliability.

ACP ThinManager adds functionality to Microsoft Terminal Services by providing centralized configuration; load balancing across multiple terminal servers, failover during terminal server malfunctions, quick replacement of thin clients, terminal shadowing, application deployment, and event notification.