WHITE PAPER

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COMPAQ

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Rapport Administrative Software for Compaq Thin Clients, Version 3.01

Abstract: Historically, network administrators managed clients by physically visiting users and their computers to reconfigure or update existing software – undermining the inherent advantages of the network. Using Rapport™ Administrative Software for Compaq Thin Clients, Version 3.01, administrators can now centrally manage a complete Compaq thin client network from one management server using the familiar Microsoft Windows Explorer interface.

This paper discusses the features and benefits of the Rapport Administrative Software for Compaq Thin Clients, Version 3.01.

This paper also identifies the hardware, software, and knowledge base required for the successful installation of Rapport as well as guidelines to ensure proper installation of the application.

Notice

Rapport Administrative Software for Compaq Thin Clients, Version 3.01

INTRODUCTION

Rapport Administrative Software for Compaq Thin Clients, Version 3.01 is an intuitive graphic management tool that enables network administrators to control and upgrade Compaq thin clients with minimum time and effort.

Features

Features of the software include:

- IP based discovery

- Deletes old license keys via License Key Wizard

- Improved *typical* and *custom* installs

- Centralizes control over all Compaq thin clients

- Scales up to tens of thousands of devices

- Configures and updates thin-client settings

- Distributes software and firmware

- Enables simultaneous scheduling of software and client configuration updates

- Allows flexible grouping of thin clients

- Provides software, hardware, and usage tracking through asset management and reporting

- Delivers an intuitive GUI through MMC

- Integrates Virtual Network Computing (VNC)[1] for remote shadowing

[1] VNC is available for NTE devices only

Benefits

Benefits of the software include:

- The computer support team never needs to touch a thin client again to add, delete, or change software and configuration

- The administrator can manage thousands of thin clients across multiple geographically disparate networks

- The network administrator can easily detect and reset client network settings from their desk

- The administrator can install new versions of client software from a central site

- The administrator can schedule software and configuration updates to occur at any time to avoid disturbing users

- Grouping gives the administrator control over device configurations according to departmental responsibilities

- The management team can track hardware, software, and device usage through logging and reporting features

- Administrators can learn to use thin client management quickly with the simple GUI

- The support team can remotely view user's desktops, enabling simplified training and support

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Rapport Versions

Rapport is offered in two versions:

- **Workgroup**—this version allows customer access to basic management and TCO benefits on up to 1500 Compaq Thin Clients.

- **Enterprise**—Enterprise comes in two versions: Seat and Site. Enterprise Seat is recommended for large environments with between 1,500 and 8,000 users. Enterprise Site is recommended for environments with greater than 8,000 users. The customer can upgrade from the Workgroup Edition to either an Enterprise Seat or Enterprise Site license.

Table 1 provides a quick comparison between Workgroup and Enterprise:

Table 1. Workgroup and Enterprise Comparison

Primary Feature Differences	Rapport Workgroup	Rapport Enterprise
Hierarchy groupings	3	3
Clients that can be reflashed or updated simultaneously	5	20
Ability to schedule updates at various times	Limited	Advanced
Setup to automatically confirm image and update clients as necessary	Limited	Advanced
Reporting and database management of clients, their images, and updates	Limited	Advanced

Maintenance/Upgrade packages are available that will provide support and entitle the customer to free upgrades. Please note that Maintenance/Upgrade packages must be purchased at the same time as the purchase of Enterprise licenses, and within 90 days of acquiring a copy of Workgroup.

Power Functionality

Updating a client's software configuration is as easy as drag and drop. The Rapport Windows Explorer Interface enables powerful client management functionality with just a few mouse clicks. Rapport empowers administrators to:

- Manage clients on any number of subnets from any Windows NT or Windows 2000-equipped workstation on the network.

- Achieve immediate and scheduled software distribution.

- Distribute complete client images via built-in client utilities.

- Group clients according to your organizational structure, such as geographic location, department, and so on.

- Customize client software and settings using the Rapport innovative scripting language.

Familiar Windows Explorer Interface

The Rapport user interface is an MMC snap-in that provides the look and feel of Windows Explorer. Managing one or more client networks is as easy as file management on a PC. Administrators can transfer complete applications, configuration settings, or even entire client images using the familiar Windows Explorer tree control while maintaining a comprehensive view of each client on the network.

Rapport allows administrators to organize clients into a user-configurable hierarchy of groups. For example, the hierarchy can be defined such that all clients in the Sales department on the second

floor of the Houston office running NT Embedded are grouped together. Grouping greatly simplifies tasks and report generation. Also, Rapport is easy to learn thanks to Wizards that quickly and easily guide administrators through device management tasks.

Complete Device Manageability

Rapport provides administrators:

- **Complete Client Reconfiguration**—Rapport guarantees fast and reliable reconfiguration of a client's entire flash file system. With the powerful yet easy to use Rapport scripting language, administrators can simply reimage software from a central location on the network.

- **Fast Operating Systems Deployment**—Rapport allows immediate operating system deployment.

- **Centralized Device Management**—Rapport provides access to local and remote client information via one or more SQL databases. Rapport uses distributed software repositories, reducing network traffic.

- **Extensible Tool-building Capabilities through Microsoft Management Console (MMC)**—By integrating Rapport with other snap-ins, administrators can create MMC tools that enhance device management functionality (such as individual Rapport managers, anti-virus software, asset management, fault and performance tools, and so forth).

DEVICE MANAGEMENT USING RAPPORT

Rapport delegates client management tools among five information managers. Each Rapport manager allows administrators to accomplish various management tasks, access specific client information, and track client update activities.

Client Manager

An administrator uses the Client Manager to organize, manage, and control clients. Client Manager functionality includes:

- Automatic client organization

- Organizing clients into groups and hierarchies

- Creating different views of client groups and hierarchies

- Retrieving client information such as:

    - Hardware and software configuration

    - Configuration history

    - Log history

    - Diagnostics

- Quick Commands such as:

    - Refreshing client information

    - Remotely shadowing clients using Virtual Network Computing (VNC)

    - Changing client information (such as its computer name)

    - Rebooting a client

- Shutting down a client

- Waking a client (Wake On LAN)

Software Manager

An administrator uses the Software Manager to create, organize, store, and then distribute software to clients. Software Manager functionality includes:

- Adding software packages to the Master Software Repository

- Drag-and-drop software package distribution to multiple clients

- Immediate and scheduled software distribution

Update Manager

An administrator uses the Update Manager to track client updates scheduled for distribution. Through Update Manager the administrator has the option to reschedule or delete pending updates.

Report Manager

An administrator uses Report Manager to easily create, save, and print the following types of reports:

- Client listings

- Log reports

Configuration Manager

The administrator uses Configuration Manager to:

- Organize and edit client group types

- Create new and edit existing client views

- Setup default client software settings

- Manage Rapport licenses

- Configure Rapport preferences

- Define remote software repository locations and assign them to subnets (Enterprise Edition Only)

- Create and edit subnets

- Configure permissions for Rapport users

RAPPORT SYSTEM REQUIREMENTS

- Microsoft Windows NT® 4.0 or Windows 2000

- Minimum 200MB free disk space

- DHCP Server (for re-imaging purposes only)

KNOWLEDGE BASE AND NETWORK ACCESS REQUIREMENTS

You will need the following technical knowledge and network privileges to properly install the Rapport™ Administrative Software:

- A working knowledge of computer networks, database administration, network maintenance and support.

- A firm understanding of TCP/IP and DHCP.

- Domain administrator access. For example, be able to set up and configure user accounts on the network.

HARDWARE REQUIREMENTS

Rapport and related software packages require a minimum of 200 MB of server hard disk space. If you have not installed MSDE or SQL Server and an FTP Server, you will need an <u>additional</u> 100 MB of disk space.

SOFTWARE REQUIREMENTS

Rapport is supported on the following operating systems:

- Microsoft Windows NT® 4.0 Server w/Service Pack 5 or higher

- Microsoft Windows NT® 4.0 Terminal Server w/Service Pack 5 or higher

- Microsoft Windows NT® 4.0 Workstation w/Service Pack 5 or higher

- Microsoft Windows 2000 Advanced Server w/Service Pack 1 or higher

- Microsoft Windows 2000 Server w/Service Pack 1 or higher

- Microsoft Windows 2000 Professional w/Service Pack 1 or higher

NOTE: Microsoft Windows 2000 Datacenter Server is not supported.

Rapport must be installed on an NTFS drive.

The following applications must be installed prior to installing Rapport:

- The SNMP Service must be installed and running. Microsoft recommends updating your service pack after installing any services.

- For Windows NT 4.0 Terminal Server, either Microsoft-SQL Server or Microsoft Data Engine (MSDE) must be installed. MSDE is not installed as part of Rapport, but MSDE 7 is provided on the Rapport Installation CD in the Applications folder. For all other supported operating systems, Rapport installs MSDE 2000, which is also available on the Rapport Installation CD in the Applications folder.

NOTE: MSDE 2000 does not work on Windows NT 4.0 Terminal Server.

- An FTP Server such as Microsoft Internet Information Services (IIS) must be installed. If you do not have IIS installed, Rapport will prompt you for your operating system CD during the installation process, except when running Windows NT 4.0 Workstation.

NOTE: Do not install Rapport where a TFTP service or PXE/Proxy service is already installed.

INSTALLATION METHODS

Rapport offers two installation methods: Typical and Custom. A Custom installation allows for more flexibility in configuring the installation of Rapport. To determine which install method best fits your business needs, refer to Table 2.

Table 2. Typical and Custom Install Comparison

	Typical Install	**Custom Install**
Rapport Installation	All components are installed on the same system.	For the Workgroup Edition, all components are installed on the same system.
		For the Enterprise Edition, all components can be installed on the same system **OR** individual components can be installed on separate systems.
Rapport Components	▪ Rapport GUI ▪ Shared Software Repository ▪ Rapport Service ▪ Import Local Database	▪ Rapport GUI ▪ Shared Software Repository ▪ Rapport Service ▪ Import Local Database
Rapport User Account	The user account is created automatically.	The user account is created automatically **OR** you can manually create your own.
FTP Server	Rapport detects whether IIS FTP Server is installed. If IIS FTP Server is installed, Rapport automatically configures the FTP Server. If IIS is not installed, Rapport prompts you to install IIS and restart the Rapport installation.	Rapport detects whether IIS FTP Server is installed. If IIS is installed, Rapport gives you the option to select IIS FTP Server, **OR** select a different existing FTP Server. If IIS is not installed, Rapport prompts you to install IIS or use another existing FTP Server. • Rapport configures IIS only.

Table 2. Continued

	Typical Install	**Custom Install**
SQL Server	Rapport determines if SQL is installed.	Rapport determines if SQL is installed.
	If SQL is installed, Rapport prompts you to select SQL or SQL 2000 and installs your selection and a Rapport instance of SQL 2000 called "Rapport DB."	If SQL is installed, Rapport prompts you to install a Rapport instance of SQL 2000 called "RapportDB," **OR** use an existing SQL Server instance.
	If SQL is not installed, Rapport automatically installs a Rapport instance of SQL 2000 called "RapportDB."	**NOTE:** The SQL Server Administrator's Username and Password is required.
	NOTE: To use an existing SQL instance, you must use Custom Install.	If SQL is not installed, Rapport automatically installs a Rapport instance of SQL 2000 called "RapportDB."

THIRD PARTY SOFTWARE CONFIGURATION

During the installation of Rapport, third party software must be installed and configured for Rapport to function properly. Tables 3 and 4 identify the third party software that Rapport will automatically configure during a Typical or Custom installation.

Table 3. Typical Install - Configuration

Typical Install – Configuration						
	FTP			MDAC 2.6	MS SQL Database	
	IIS		Personal Web Server		MSDE 2000	
	Install	Config	Install	Config	Install	Install	Config
Windows NT 4.0 Workstation	No	No	Yes	Yes	Yes	Yes	Yes
Windows NT 4.0 Server	No	Yes	No	No	Yes	Yes	Yes
Windows NT 4.0 Term Server	No	No	No	No	No	No	No
Windows 2000 Professional, Server, and Advanced Server	No	Yes	No	No	Yes	Yes	Yes

NOTE: A Typical Install on Windows NT 4.0 Terminal Server is not allowed.

Table 4. Custom Install - Configuration

Custom Install - Configuration									
	FTP				MDAC 2.6	Database			
	IIS		Personal Web Server			MSDE 2000		SQL Server	
	Install	Config	Install	Config	Install	Install	Config	Install	Config
Windows NT 4.0 Workstation	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes
Windows NT 4.0 Server	No	Yes	No	No	Yes	Yes	Yes	No	Yes
Windows NT 4.0 Term Server	No	Yes	No	No	No	No	No	No	Yes
Windows 2000 Professional, Server, and Advanced Server	No	Yes	No	No	Yes	Yes	Yes	No	Yes

INSTALLATION GUIDELINES

Once you have met the requirements stated above, refer to the guidelines below to begin the installation of Rapport.

- Close all persistent drive mappings to the system on which Rapport will be installed and reboot the system. This allows Rapport to use the proper security tokens and prevents any credential conflicts during the Rapport install process.

- Make sure you have the following information available:

  - The username and password Rapport will use to log on to the FTP Server.

  - The FTP root folder that the Rapport user logs on to.

  - The FTP Server name you are using for Rapport.

  - The SQL Server username and password.

  - The SQL Server Data folder location.

  - The computer name of the system Rapport will be installed on.

> △ **CAUTION:** The Rapport installation program must REBOOT the system in order to successfully complete the installation process. If this is a production server, be sure that no other applications or users will be affected by the reboot.

- Log on as administrator to the target domain, and then install Rapport on that domain. For security reasons, Rapport must be installed on a domain.

    > **NOTE:** It is recommended that you do NOT install Rapport on a primary domain controller (PDC). If a domain is not available, install Rapport then contact technical support for information on how to properly configure Rapport.

- Enter the Rapport Sale Key, when prompted; otherwise, use the default Workgroup Sale Key.

- Install the Visual Basic Scripting Host (Windows Script Host) provided on the Rapport Installation CD in the Applications folder. Some systems may already have this application installed as a standard component of Internet Explorer.

- Installation notes:

    - If you are installing Rapport on Windows NT Workstation 4.0 or Windows 2000 Professional, you are limited to 10 connections (for example, re-imaging clients at the same time, using multiple Rapport GUIs, etc.) If you exceed this limit you will receive a share connection error. To obtain a maximum of 254 concurrent connections, you must install Rapport on Windows NT Server 4.0 or Windows 2000 Server.

    - If you are installing Rapport on Windows NT Terminal Server 4.0, you must have Microsoft Data Access Components (MDAC) version 2.6 or greater installed. MDAC 2.6 is provided in the Applications directory on the CD. Alternatively, you can download it from http://www.microsoft.com/Data. For all other operating systems, Rapport installs MDAC 2.6 if it does not find an existing MDAC installation or an earlier version.

POST-INSTALLATION

Once Rapport is successfully installed, if you have NTe-based clients, you may need to upgrade each NTe client with the latest Rapport agent. Visit www.compaq.com/support to check the availability of the latest agent.

If a newer agent is available, using Rapport, register the agent software package and distribute it to each client.

SUMMARY

The combination of Rapport Administrative Software for Compaq Thin Clients, Version 3.01, Compaq servers, and Compaq Thin Clients provide administrators with a powerful, complete thin client solution.

The ability to centrally manage your end users is vital to reducing Total Cost of Ownership. Offering a feature-rich thin client management tool like Rapport, will add additional value to the Compaq Thin Client solution.

APPENDIX

UNDERSTANDING RAPPORT SQL DATABASES

All of the information Rapport manages (client information, software packages, subnet locations, logs, and so on) is located in a SQL compliant database. Each database included in the Rapport snap-in's tree control contains the five Rapport image managers: Client Manager, Software Manager, Update Manager, Report Manager, and Configuration Manager.

Rapport Database Facts

- The Rapport database is an ODBC-compliant database.

- You must have either Microsoft SQL Server or Microsoft Data Engine (MSDE) installed prior to installing Rapport. MSDE is not installed as part of Rapport but is provided on the Rapport installation CD-ROM.

- Multiple databases are only available with Rapport Enterprise Edition. You can configure multiple Rapport databases in a variety of ways to suit your company's needs. To configure multiple databases, you must first install the database with its Rapport components on one or more computers located on the network.

- The number of allowable Rapport databases is determined by the Rapport edition installed:

  - Rapport Workgroup Edition allows one local SQL database (either MS-SQL Server or MSDE). This database is configured during the Rapport install and resides on the same system as the Rapport MMC GUI.

  - Rapport Enterprise Edition allows multiple remote SQL databases. Using the Rapport install CD-ROM, databases may be imported on one or more remote computers separate from the Rapport MMC GUI.