POSITIONING PAPER

Compaq SmartStart

An overview of the features, use and benefits of the Compaq SmartStart for Servers integration tool

CONTENTS

COMPAQ

NOTICE

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EXECUTIVE OVERVIEW

SmartStart is Compaq's intelligent integration tool that simplifies the process of installing and configuring Compaq systems. SmartStart for Servers is the surest way to set up proven and reliable server platforms. SmartStart for Servers also enables innovative Integration Management capabilities which extend the benefits of SmartStart for consistent and efficient deployment and maintenance of servers in the distributed enterprise.

Compaq developed SmartStart to assist users and resellers in successfully setting up new servers. SmartStart incorporates the integration knowledge gained through thousands of hours of testing of Compaq hardware with our partners' software products. A graphical tool, it provides intelligent configuration and software installation and tuning assistance, ensuring streamlined, optimized and reliable setup of Compaq servers.

As networks have grown, minimizing implementation and support costs of distributed systems has become increasingly important. MIS managers need greater consistency in how their systems are set up and maintained, as well as assistance in developing internal standards for systems software and hardware. Compaq addresses these customer requirements through a process called "Integration Management." The Integration Management features of SmartStart enable the setup of an Integration Server - a network-based repository for tested, approved versions of system software. The Integration Server facilitates the establishment of internal software standards and enables the efficient implementation of those standards.

Employing an Integration Server, Compaq's Integration Management process enables the customer to:

- Efficiently deploy new systems, based on internal standards and proven, reliable server configurations, using the SmartStart integration tool.

- Preserve both consistency and system integrity as requirements change, using new server-based Integration Maintenance Utilities, delivered with SmartStart.

- Access the latest system software updates from Compaq and easily determine what updates are appropriate to a specific environment using the Integration Server Maintenance feature of Compaq Insight Manager.

- Achieve greater efficiency, and maintain consistency in the update of distributed and remote servers, using leading third-party software distribution tools.

The SmartStart application provides a Windows 95 interface, offering an industry standard look and feel with navigation and information aids for maximum ease of use. A summary screen tracks details on how the system will be configured. This is viewable at any time during the process and is saved as an invaluable permanent record of system configuration.

In summary, Compaq SmartStart, the intelligent integration tool, provides the shortest path to a proven and tested server configuration. And Integration Management ensures these benefits can be applied easily to distributed systems – throughout the life of the systems.

WHAT IS COMPAQ SMARTSTART?

SmartStart delivers Compaq integration expertise and experience in one easy-to-use program which eliminates guesswork and streamlines system setup. The SmartStart for Servers integration tool assists users and resellers in building proven and reliable server platforms with the leading software in the industry. Innovative Integration Management capabilities extend SmartStart benefits to ensure consistent, efficient deployment of servers in the distributed enterprise, and provide integration over the life of servers.

SmartStart is packaged on CD-ROM in every Compaq server. SmartStart supports the integration of third party software products from Compaq - delivered in the Software Products pack shipped with Compaq servers or available by request - as well as selected "off-the-shelf" versions of server software. Supported software includes leading server operating systems, database, backup and Internet server software from companies like Microsoft, Novell, SCO, Netscape, Oracle, Sybase, IBM and Raptor… and the list continues to grow. SmartStart also ensures a fully manageable server, with automated installation and configuration of Compaq Insight Manager agents along with the other system software.

Why was SmartStart Developed?

SmartStart was developed to ease the process of building complex server platforms. It is the culmination of years of Compaq partnering with leading software vendors.

As the computer industry has moved away from a model in which one vendor provides a complete customer solution and toward a model which allows customers to choose the best from a selection of vendors in each product category, new challenges have emerged. Customers are faced with the questions of how to ensure that the "best of breed" choices that they make actually work together, and where to turn for support for a solution built from multiple vendors' products.

Compaq has addressed these challenges by forming partnerships with industry leaders to provide the assurances that customers are seeking - that they can truly build viable, well-supported solutions with products from Compaq and its software partners.

Compaq's work with its partners spans product development, testing, implementation and support of both hardware and software. As a result of these joint efforts, Compaq and its partners:

- make design adjustments to prevent integration issues at release time;

- identify and build the hardware/software linkages (e.g. device drivers) required to yield peak performance;

- determine how to tune hardware and software at installation time to ensure top performance and supportability;

- address customer support issues in a coordinated and effective manner.

In the first years after Compaq introduced its first server product, the Compaq Systempro, Compaq found that the majority of support calls on servers involved the initial setup of the server. Setup of a server was seldom straightforward: the correct versions of hardware, utilities, drivers, operating system and other server software had to be assembled; the hardware configured correctly for the operating environment; the software and drivers installed correctly and in the proper order; and finally, parameters set correctly to achieve optimum performance.

In 1991, Compaq began publishing Integration ToolKits and TechNotes as a means to convey the benefits of Compaq partnerships to customers. These step-by-step guides documented the results of thousands of hours spent by Compaq and its partners in joint development and testing of Compaq servers with partner hardware and software. SmartStart evolved from the Integration

ToolKits as a more direct way to deliver Compaq integration expertise. Instead of reading a ToolKit to determine what to do, a user could simply make use of a tool.

So Compaq developed SmartStart as an integration tool - to deliver the benefits of the experience and knowledge gained in its work with software partners. In SmartStart Compaq integration knowledge is provided in a form that customers and resellers can use to achieve reliable and high performance server platforms.

SmartStart has further evolved to respond to new customer needs which arise as organizations increasingly move to a distributed computing model. In this model, larger numbers of business critical application servers, located in decentralized departments or business units, are being deployed. The success of this model depends not only on the performance and reliability of the systems implemented but also on the organization's ability to proactively manage those systems. Compaq introduced the Integration Management process to address a critical aspect of the systems management process. Integration Management - enabled through Compaq SmartStart and Compaq Insight Manager - is designed to provide the mechanisms for deploying and maintaining large numbers of distributed systems efficiently, reliably, and consistently.

SmartStart Benefits

Reliability: Using the SmartStart process, the user can build a proven configuration which can be confidently deployed. All of the work behind SmartStart contributes to this confidence: the extensive testing of hardware and software performed by Compaq and its partners; the matching of software versions known to work together and to support the Compaq hardware; the safeguards built into the SmartStart integration tool. The new Integration Maintenance Utilities delivered with SmartStart help to ensure successful updates of Compaq servers for increased reliability over the life of the system.

Optimization: Compaq has optimized drivers to achieve the maximum performance from Compaq servers; SmartStart installs the appropriate drivers automatically when the operating system is installed. Plus, SmartStart sets operating system and database parameters to take full advantage of the hardware and software.

Consistency: SmartStart provides a consistent, repeatable process that facilitates the standardization of server setup. SmartStart provides a summary of the completed configuration which can be saved for reference in setting up subsequent servers. An Integration Server provides a single, network-based source for approved versions of software enabling consistency across the distributed enterprise as new systems are set up and existing systems are updated.

Efficiency: SmartStart streamlines the process and eliminates the guesswork so you can set up a server right the first time… and every time. Software is provided on CDs or over the network from an Integration Server; hardware and software configuration are combined into a unified process guided by an easy-to-use wizard-style program.

HOW SMARTSTART WORKS

Shipped Standard With Every Server

SmartStart ships with all Compaq ProSignia and ProLiant servers and is part of the standard set of tools and documentation provided for the server. The SmartStart and Support Software CD can be found in the Server Setup and Management pack.

The **Server Setup and Management Pack** contains the essential components you need to set up a reliable and well-integrated server. It typically holds the SmartStart and Support Software CD ,the Management CD, the SmartStart and Compaq Insight Manager Installation guides, the Integration Server Users Guide, and a SmartStart flyer:

- **SmartStart and Support Software CD:** Contains SmartStart and Compaq system utilities and operating system support software for servers:

    SmartStart integration tool - an easy-to-follow Windows-based program, provided in English, French, German, Italian, Spanish and Japanese, that guides the user through server configuration, software installation and optimization. Comprehensive context-sensitive online help assists the user throughout the SmartStart program.

    Compaq Integration Maintenance Utilities - for NetWare and Microsoft Windows NT. Utilities which run in the local server operating environment that assist the user in the update of Compaq support software and management agents and selected SmartStart enabled third party software. These utilities can access software from SmartStart enabled CDs or from an Integration Server.

    Compaq system utilities - including the System Configuration Utility, ROMpaq and Diagnostics.

    Compaq support software - optimized drivers for each operating system supported on Compaq servers.

    Diskette Builder - a Windows application (which may be run during the SmartStart process or from a workstation) which allows the user to create diskette images of the utilities, support software and Compaq Insight Manager software.

- **Compaq Management CD:** Contains the Compaq Insight Manager application and Management Agents for each supported operating system, Compaq Insight Manager documentation, the Compaq Survey Utility and Compaq TechNotes on key management topics.

- **SmartStart and Insight Manager Installation Guides:** Explain the installation processes for SmartStart and Compaq Insight Manager.

- **Integration Server User Guide:** Provides the information needed to setup and maintain a NetWare or Windows NT based Integration Server for a customer network. Describes how to install and use the Integration Maintenance Utilities.

- **SmartStart flyer:** Summarizes the benefits of using SmartStart and gives a brief overview of the SmartStart Activation Key process. Also, indicates how SmartStart keys can be obtained under various partner volume licensing agreements.

Also distributed with most Compaq Servers, the **Software Products Pack** contains SmartStart enabled systems software CDs containing third party software products from Compaq. This pack also includes a Program License Diskette, and Activation Key Order Forms for software that can be purchased from Compaq:

- **Software Product CDs**: media containing encrypted copies of operating system and other system software from Compaq. (See appendix for details on current offerings.)

- **Program License Diskette**: a serialized diskette used in combination with an activation key code to unlock software products from Compaq for which licenses have been purchased.

- **Activation Key Order Forms**: Instructions for ordering licenses for system software, descriptions of SmartStart Programs, and Product and Customer Order Forms.

In addition to the Setup and Management and the Software Products Packs, Compaq servers typically include a **Reference Information Pack** which contains the Systems Reference Library CD, the Customer Registration brochure and diskette, the appropriate hardware setup guide, and other server documentation:

- **Systems Reference Library CD -** Online reference information including the full text of Compaq TechNotes, reference documentation on Compaq Servers and Insight Manager, and information on Compaq products. Full search capabilities are provided for the documents included on the CD.

- **Customer Registration Brochure and Diskette -** Customers may register their Compaq server through SmartStart. When configuring a server using SmartStart, all relevant hardware configuration information will be saved to a diskette; if system software is installed through SmartStart, the software information will be collected as well. The information will be displayed so the user can view what will be submitted to Compaq. The user will then have the option of either sending the diskette in the pre-paid mailer or via electronic mail to ord@compaq.com. This is a quick and simple way to register a new server with Compaq.

Steps to Using SmartStart

Server Setup: The SmartStart and Support Software CD is intended for use in configuring all Compaq servers, whether or not the full SmartStart integration process will be used.

Path Selection: The server setup process is started by booting the server from the SmartStart CD. Following a series of screens which allow selection of language, country, keyboard and time/date (local) preferences while using the SmartStart program, an installation path screen appears. At this point, the user selects either:

- Assisted Integration Path

- Manual Configuration Path

The *Assisted Integration* path provides the full hardware and software integration benefits of SmartStart. This path guides the user through the collection of information needed for configuring the hardware and installing the system software, providing validation, online help, and recommended defaults along the way. A summary is available at any time to review the installation settings and is saved for later reference. Using this path will also allow the user to set up an Integration Server. To take advantage of the benefits provided by this path requires media for software which is SmartStart enabled (see below).

The *Manual Configuration* path allows the user to run the System Configuration Utility manually and follow the installation procedures of the software manufacturer to install the software. In some cases, the Compaq drivers and Management Agents will be automatically loaded. However, full integration benefits are only achieved with the Assisted Integration path. This path may be used to install an operating system using CDs which are not SmartStart enabled. It may also be used for installing software from the Compaq-Software Product CDs, if more flexibility with the installation settings is desired.
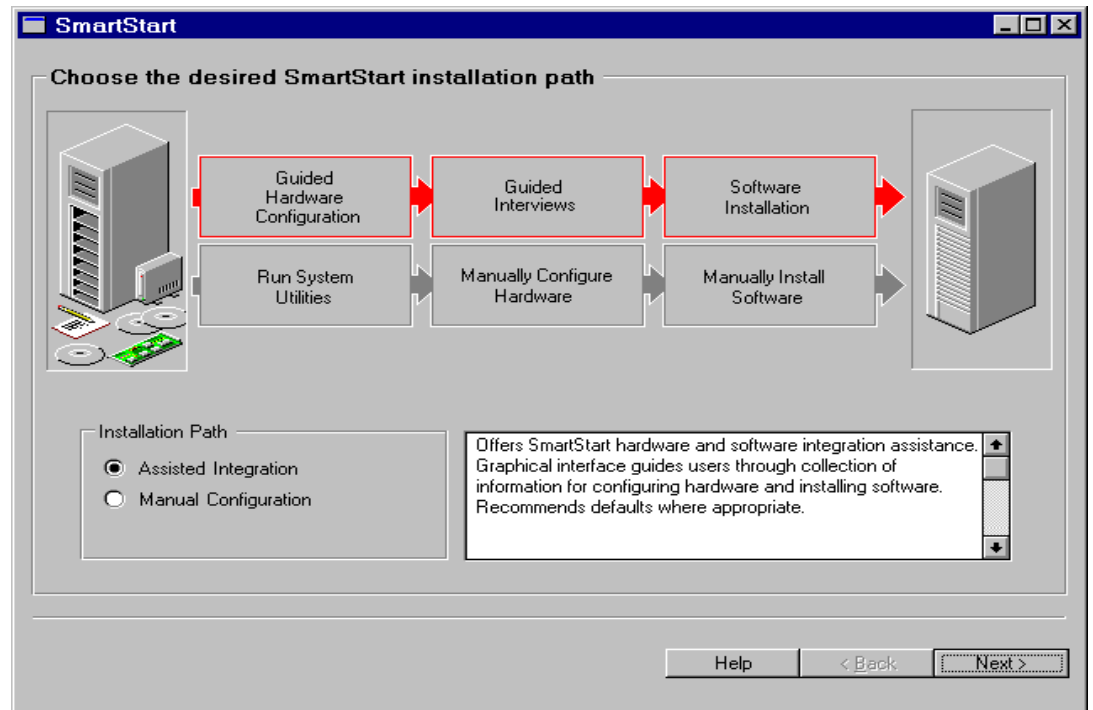
SmartStart Enabled Software: To take full advantage of SmartStart using the Assisted Integration path for server setup, the user will need 1) media for SmartStart enabled software and 2) a valid license for each software product to be installed. Media for a range of SmartStart enabled software products from Compaq are provided in the Software Products Pack. In order to secure a valid license for one of these products, the user obtains activation keys to unlock the software. Activation Key Order Forms are provided for this purpose. These are completed and processed through an Authorized Compaq Reseller. (Refer to the Appendix C for more information. Arrangements may be made with the reseller to order the activation keys and deliver them when the server is delivered to the customer).

Selected software products have been SmartStart enabled in their "off-the-shelf" versions, that is, the media distributed by the software vendor can be recognized by the SmartStart process to install the software. In order to use off-the-shelf SmartStart enabled software, the user should have already obtained a valid license for the software (e.g., by purchasing retail packaged product or through a volume licensing agreement with the software vendor).

Overview of the SmartStart Integration Process: When the Assisted Integration Path is selected, a series of questions will be presented to determine how the operating system and other system software should be set up. Questions will be asked concerning:

- what operating system software and other software will be installed

- whether the source of the software is an Integration Server or CDs

- if the server being setup will be an Integration Server

- options for Automatic Server Recovery from specified fault conditions; configuration of pager, remote session options

- configuration of certain hardware options, for example, the Remote Insight board

- how to configure the disks for the selected operating system

- configuration of the network interface card(s)

- settings specific to other system software being installed, for example, database tuning parameters

- customer registration

Once the required questions have been answered, the user may review a summary of the settings. When satisfied that the server will be set up as desired, the user may proceed with installing the selected operating system and other system software.

Easy to Use Interface: As evidenced in the example of a SmartStart screen below, SmartStart has an industry standard look and feel -- designed to function like a Windows 95 wizard. A progress bar at the bottom of the screen indicates what tasks have been performed and what tasks remain. By clicking anywhere on the progress bar or by clicking on the Navigation button, a Navigation screen, showing a more detailed list of steps in the SmartStart installation process, is displayed. By selecting a step already completed, parameters can be reset. By clicking on the Summary button, a text screen, showing a detailed list of hardware and software and the parameters that will be used to configure it, is displayed. The summary text is saved in a file for later access.

KEY FEATURES OF SMARTSTART

Integration Management Capabilities

Compaq introduced Integration Management features for more efficient and consistent deployment and maintenance of distributed systems using SmartStart and an Integration Server. An Integration Server is simply a repository of software images - a dedicated share or volume on a server on which approved versions of system software can be stored. An Integration Server establishes a centralized, network-based source for SmartStart installations of new servers and updates of existing servers.

An Integration Server can be set up when using the SmartStart CD to install a new server. The *Assisted Integration Path* in SmartStart provides an option to designate the new server as an Integration Server. The user is then presented with a list of software available for storing on an Integration Server. Once the operating system is installed on the server, SmartStart sets up the appropriate directory structure and copies the selected software images to the Integration Server.

Alternatively, the user may enable an existing server as an Integration Server by setting up the appropriate share or volume, directories and access rights, then using the Integration Server Maintenance task in Insight Manager to add software to the newly created Integration Server.

Any Compaq server running Windows NT Server 3.51, Windows NT Server 4.0, IntranetWare, NetWare 3.12 or NetWare 4.1 can be used as an Integration Server. NetWare Integration Servers can be used to install NetWare servers and Windows NT Integration Servers can be used to install Windows NT servers. Using an Integration Server will assist network administrators in ensuring consistency among distributed systems and further streamlines the integration process provided by SmartStart.

Integration Server Maintenance

To maintain the software on the Integration Server, the *Integration Server Maintenance* function in Compaq Insight Manager is used. It reports what software is currently resident on the Integration Server, what updated software is available from Compaq and then allows a choice of those updates to be downloaded. Software can be downloaded via an Internet or modem connection to a dedicated Compaq Support Software Server, or from an updated SmartStart or software product CD. As part of the process, information is provided that details the reasons for the update, allowing informed decisions to be made on which updates are appropriate to the environment.

A key benefit of using the Integration Server Maintenance function is instant access to the latest software updates directly from Compaq.

For more information on the *Integration Server Maintenance* function, refer to the Insight Manager White Paper (Doc # 170A/0696) or the Compaq Integration Management White Paper (Doc #169A/0696.)

Updating Servers From The Integration Server

Once an Integration Server has been updated with the latest software, those updates can be applied to production servers by using either the Compaq Integration Maintenance Utility for Windows NT or the Compaq Integration Maintenance Utility for NetWare. These utilities operate at the production server to <u>pull</u> updates from the Integration Server, for those who prefer a fully attended process when updating their servers. For more automated updates, Compaq has developed scripts for leading software distribution packages including Microsoft Systems Management Server and Symantec Norton Administrator for Networks. These scripts allow users to <u>push</u> Compaq driver,

management agent and Survey Utility updates for Windows NT from the Integration Server to production servers.

Updating Servers From SmartStart enabled CDs

The Compaq Maintenance Utilities also allow update of servers from SmartStart enabled CDs.

For additional information on Integration Management, the Integration Server and Integration Maintenance Utilities, refer to the *Compaq Integration Server and Compaq Maintenance Utilities User Guide* included in the Server Setup and Management Pack in each server or the Compaq Integration Management White Paper (Doc #169A/0696).

Integrated Setup

By using the SmartStart *Assisted Integration* path, the user achieves an integrated setup of the server and key server software. All of the software associated with a specific release of SmartStart has been tested and is known to work together. During the interview process, SmartStart presents default parameter settings based on Compaq's knowledge of what will work best for the hardware detected and the software selected to be installed. SmartStart performs dependency and validity checks to ensure that all software required to support the desired configuration can be installed and that the final parameters selected fall within functional limits. By asking key questions up front, SmartStart allows issues or conflicts to be resolved before the software is actually loaded on the system. SmartStart automatically installs the appropriate Compaq drivers (and some third-party drivers), as the operating system is being installed. SmartStart also installs the appropriate Compaq Insight Management Agents on the server automatically; the Compaq Insight Manager application can then be installed on the management workstation directly from the Management CD or from an Integration Server.

Optimizing NetWare on Compaq Servers

SmartStart NetWare Optimization

SmartStart creates the NetWare STARTUP.NCF and AUTOEXEC.NCF files, and automatically installs Compaq disk drivers, Compaq and selected third-party NIC drivers, and loads other required third-party drivers available on the NetWare CD.

SmartStart loads and configures Compaq Insight Management Agents and enables the Automatic Server Recovery options specified during the SmartStart interview.

SmartStart tunes the NetWare installation for optimum performance on Compaq servers, using the knowledge gained through Compaq integration testing. Taking into account factors such as anticipated number of users, type and number of network interface cards installed in the server, SmartStart

- *determines ranges or specific values for NetWare SET parameters such as cache buffer size, service processes, packet receive buffers and concurrent disk cache writes*

- *optimizes configuration of the boot disk, improving disk performance by up to 40%, by*

    - *ensuring that the size selected for the DOS partition falls within an acceptable range,*

    - *sizing and creating stripe-aligned NetWare partitions on all logical drives,*

    - *setting an optimum value for the hot fix area.*

- *Sets parameters to improve the performance of Novell Directory Services communications based on the number of users.*


Database Performance Tuning

With SmartStart installing and configuring the hardware, operating system, and database all at the same time, a *top-to-bottom* well integrated, tested, optimized and supported application server is achieved. Given the characteristics of the intended application SmartStart will recommend operating system and database parameter settings. Acceptance of these recommendations will result in a server which has been tested and proven to be reliable and well tuned from its beginning, resulting in reduced training and support requirements.

Based on:

* How many users will concurrently access the database;

* The projected sizes of the database tables (log, data, index, dump);

* Disk fault sensitivity (RAID configuration),
the hardware, operating system, and database software are tuned together to best match the user's requirements. This tuning goes beyond what would normally be done if the hardware, operating system, and database software were configured and installed as independent steps.
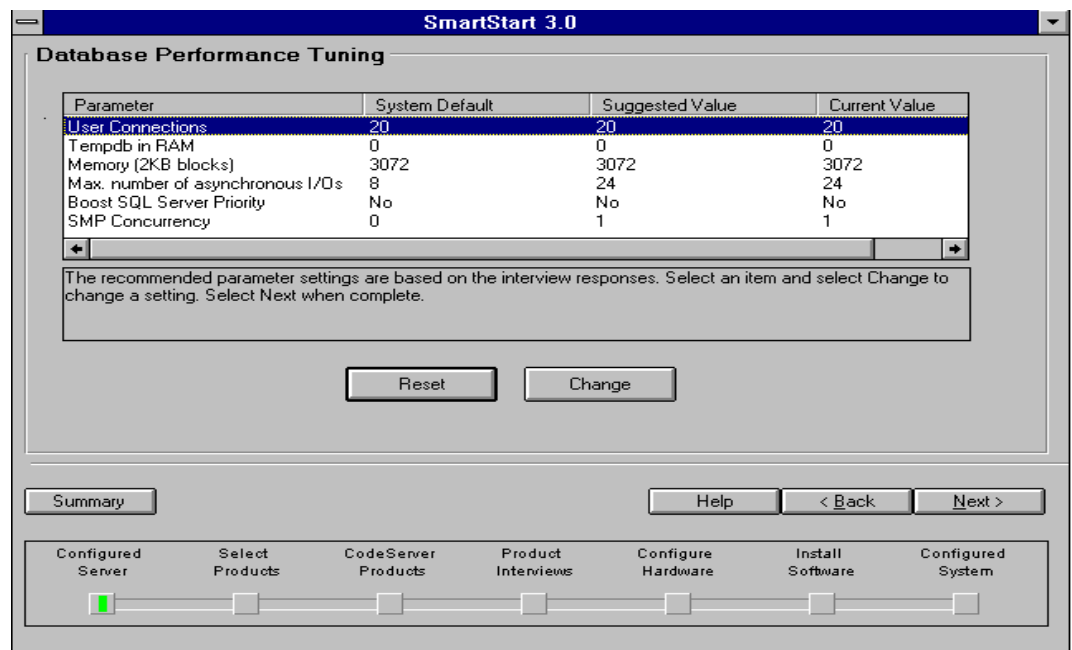
Enhanced NetWare Integration

SmartStart delivers the additional benefit of optimizing the total platform when used to install NetWare applications along with the operating system. For databases, backup software and other NetWare applications, SmartStart uses the information provided in the interview process to simultaneously tune the application and NetWare for optimal performance, given the hardware configuration. For example, when you install NetWare 4.1 and Oracle, SmartStart uses your hardware configuration along with information you provide to customize NetWare SET parameters, disk configuration, and Oracle tuning parameters to provide the highest level of performance for your application environment.

This high degree of integration is not limited to just Oracle, but is provided for the NetWare operating system and any of the other products delivered with SmartStart including:

* Oracle Workgroup Server

- Cheyenne ARCserve for NetWare

- Cheyenne JETserve for NetWare

- Compaq Insight Management Agents

- NetWare Web Server

Optimizing Microsoft Windows NT on Compaq Servers
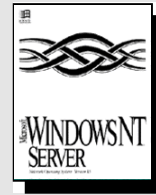
SmartStart Microsoft Windows NT Server Optimization

SmartStart automatically installs Compaq drivers and selected third-party NIC drivers and loads any other required third-party drivers which are available on the Windows NT CD.

SmartStart also installs the Compaq Hardware Abstraction Layer (HAL) to take full advantage of Compaq features when running Windows NT. The Compaq HAL provides

- *full support for Compaq Insight Management Agents,*

- *mechanisms for enhanced problem resolution, and*

- *features for improved performance such as support for distributed interrupts on Compaq multiprocessor servers.*

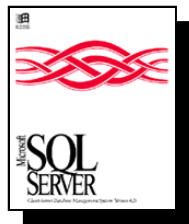*SmartStart automatically installs and configures Compaq Insight Management Agents and enables the Automatic Server Recovery options specified during the SmartStart interview.*

Beyond Windows NT Server

SmartStart adds additional value to server installation and configuration by helping to install and optimize selected applications that run on top of Windows NT. By understanding which applications are going to be installed before the Windows NT installation program runs, Compaq is able to modify disk configuration and other parameters at the time of Windows NT installation, thereby producing a well tuned and configured Windows NT platform time and time again. As an example, for Microsoft SQL Server, based on anticipated number of user connections and the intended use of the database (OLTP, Decision support etc), SmartStart will recommend fault tolerant levels and database parameters to yield the best performance.

Additional software installation/configuration/optimization functionality for Windows NT Server includes:

- Integrated installation and configuration of Cheyenne ARCserve for Windows NT

- Integrated installation and configuration of Compaq Insight Management Agents

- Integrated installation and intelligent configuration and tuning of Oracle7 for Windows NT

- Integrated installation and intelligent configuration and tuning of Oracle Workgroup Server for Windows NT

- Intelligent configuration and tuning of Microsoft SQL Server 6.5 (included in BackOffice)

- Selectable install of either Microsoft Internet Information Server or NetScape FastTrack

- Aided Microsoft BackOffice 1.5 and 2.x installation including integrated installation of Windows NT Server and Microsoft SQL Server 6.5

Modular and Open

SmartStart enables Compaq to work with a range of software partners to provide integration knowledge and tools for building a broad set of solutions. The more modular and open architecture introduced with SmartStart 3.0 enables Compaq to offer SmartStart benefits for "off-the-shelf" versions of software as well as for software products distributed by Compaq. Compaq will continue to expand its partnerships with leading ISVs for SmartStart enabling of their products. This ensures that customers will be able to take advantage of SmartStart and Integration Management features to achieve consistent processes for configuration and on-going maintenance of their system software..

SUMMARY

Working from a base of strong partnerships and extensive systems engineering and testing, Compaq has built a unique integration tool -- SmartStart is unparalleled in the level of integration support provided and the breadth of software supported. For those seeking a streamlined and simplified process for ensuring a tested, proven and optimized server configuration, SmartStart, and Compaq servers, are the answer. SmartStart is no longer just for server setup, but with the Integration Management capabilities built into SmartStart, users can accomplish more consistent and efficient deployment and maintenance of servers in the distributed enterprise.

Appendix A

The chart below illustrates which software products are included with Compaq servers and how all SmartStart-enabled software can be obtained.

SmartStart Enabled Product	Included with ProSignia 200 and ProLiant 800	Included with all other Compaq Servers	Included with Compaq Request, Replacement, and Subscription Packs	Available from Third Party Vendor (Off-the-shelf integration)
Compaq Software				
Compaq Insight Manager	X	X	X	
Insight Manager Agents	X	X	X	
Compaq Insight Asynchronous Management for NetWare	X	X	X	
Operating Systems				
Windows NT Server 3.51		X	X	
Windows NT Server 4.0				X
Novell IntranetWare	X	X	X	
Novell NetWare 3.12	X	X	X	
SCO OpenServer Release 5.02		X	X	
SCO OpenServer Release 5 Utilities and Options		X	X	
SCO UnixWare 2.1			X	
SCO UnixWare 2.1 Utilities and Options			X	
IBM OS/2 Warp Server 4.0			**X** *	
IBM OS/2 Warp Server Advanced 4.0			**X** *	
IBM OS/2 Warp Server Advanced 4.0 with SMP			**X** *	
Databases				
Microsoft SQL Server 6.5				X
Oracle7 Server 7.3				X
Sybase System 11 for Windows NT				X
Internet Products				
Netscape FastTrack Server 2.0		X	X	
Netscape Enterprise Server 2.0		X	X	
Netscape Mail Server 2.0		**X** *	**X** *	
Netscape News Server 2.0		**X** *	**X** *	
Raptor Eagle NT 3.06		X	X	
Backup & Recovery Software				
ARCserve 2.01 for Windows NT		X	X	
ARCserve 6 for Windows NT	X	X	X	
InocuLAN 4.0 for Windows NT	X	X	X	
Protection Suite for Windows NT	X	X	X	
ARCserve 6 for NetWare	X	X	X	
JETserve 3.3 for NetWare	X	X	X	
ARCserve 5.01 for NetWare	X	X	X	
ARCserve Database Agents for NetWare & Windows NT	X	X	X	
Server Suite 2.0 for NetWare	X	X	X	
InocuLAN 4.0 for NetWare	X	X	X	
FAXserve 3.01 for NetWare	X	X	X	
Server Suites				
Microsoft BackOffice 2.0				X

X * - These products will be included in SmartStart 3.21, available in February 1997 from Compaq.

Appendix B

Hardware Support

Table 1. Compaq Options

The following Compaq devices will be automatically installed when using the SmartStart installation program; that is, the device drivers will be automatically installed and the operating system automatically configured to recognize these boards. Other Compaq devices are supported but may require additional installation or configuration steps after the SmartStart installation is complete.

Device	NetWare	Windows NT	SCO Open Server	IBM OS/2	SCO UnixWare
Compaq 32-Bit Dual Speed Token Ring		X[2]	X[2]	X[2]	X [2]
Compaq 32-Bit Fast SCSI-2	X	X	X	X	X
Compaq 6260 SCSI-2		X [1]	X [1]		X [1]
Compaq DualSpeed Token Ring Module	X	X	X	X	X
Compaq Integrated 32-Bit Fast-SCSI-2	X	X	X	X	X
Compaq Integrated NetFlex-L ENET	X	X	X	X	X
Compaq Intelligent Drive Array-2	X	X	X	X	X
Compaq NetFlex ENET-TR	X	X	X	X	X
Compaq NetFlex-2 DualPort ENET	X	X	X	X	X
Compaq NetFlex-2 DualPort TR	X	X	X	X	X
Compaq Netflex-2 ENET-TR	X	X	X	X	X
Compaq NetFlex-2 TR	X	X	X	X	X
Compaq NetFlex-3/E	X	X	X	X	X
Compaq NetFlex-3/P	X	X	X	X	X
Compaq SMART SCSI Array	X	X	X		X
Compaq SMART-2/E Array	X	X	X	X	X
Compaq SMART-2/P Array	X	X	X	X	

[1] ISA boards must be manually configured to be installed by SmartStart.

[2] The desired network media interface (AUI, RJ45, or DB-9) must be manually configured at the Review/Modify configuration selection of the System Configuration Utility in SmartStart for proper operation of these NICs.

Appendix C

How to order SmartStart Activation Keys

SmartStart Activation Keys are ordered using the SmartStart Activation Key Order Forms which are included with the software CDs in the Software Products Pack.

Activation Keys must be ordered through a Compaq Authorized Reseller or Dealer. To order SmartStart Activation Keys, complete the following steps:

1. Verify that the serial number labels enclosed in the Software Products Pack match the serial number on your SmartStart Program License Diskette.
- Activation Keys are customized to the unique serial number on the Program License Diskette

2. Decide which software you would like to install and read the Program Agreement information applicable to that software to determine whether you are eligible to obtain Activation Keys under any of the special SmartStart Programs.

3. Complete the Product Order Form(s):
- Place the serial number label, or print your Program License Diskette Serial Number, in the box at the top of the page
- Place an X, or indicate quantity, in the box next to the product(s) to be purchased *Note. If the product that you want to order is not included on your SmartStart CDs, check with your reseller to verify that you have the most current SmartStart release. Your reseller can provide you with the latest SmartStart release through the Replacement Pack process.*

4. Complete the appropriate sections in the Customer Information Order Form
- Place the serial number label, or print your Program License Diskette Serial Number, in the box at the top of the page
- Section A identifies the person to whom the activation key(s) will be faxed. This person could be the installer or the owner of the software license: an End User, a Reseller/Dealer or a Distributor/Channel
- Section B identifies the Reseller/Dealer and applicable purchase order
- Section C identifies the Distributor/Channel (if applicable) and purchase order
- Section D identifies the End User and MUST be completed to :
    - Register the operating system software purchase
    - Purchase the SmartStart Subscription Service (which is mailed directly to End Users/Subscribers)
    - Obtain products subject to SmartStart Program Agreements
- Section E requests an End User Signature and Proof of Purchase for compliance with the SmartStart Program Agreements

5. Fax the Customer Information Order Form **and** the Product Order Form(s) (with a purchase order if applicable) to your Compaq Supplier

- If you are an End User, fax the Customer Information Order Form **and** the Product Order Form (with a purchase order if applicable) to a Compaq Authorized Reseller.
- If you are a Reseller/Dealer, add your details, and fax the Customer Information Order Form **and** the Product Order Form(s) (with a purchase order if applicable) either to your normal Compaq Supplier, a local Compaq Office or a Compaq Channel/Distributor.

SmartStart Activation Key(s) or purchase confirmation are faxed to the contact(s) identified in Section A, B and C of the Customer Information Order form.

For more information on SmartStart Programs and on ordering SmartStart Activation Keys, please refer to the SmartStart 3.20/3.20A/3.21 Quick Reference Guide.

Appendix D

SmartStart Programs

Upgrades/Trade-ins

If you already own a license to the software, you may be able to purchase a discounted upgrade to a different user level or version available on SmartStart. You must provide End User Information, proof of purchase as requested, and an End User signature indicating acceptance of the Agreement terms for the Upgrade or Trade-In.

Partner Programs

SmartStart Activation Keys are currently available through the following partner programs
- Microsoft Select Volume License Agreement (MVLP)
- Microsoft Multiple Open License Pack (MOLP)
- NetWare Master License Agreement (MLA)
- NetWare Education License Agreement (ELA)
- IBM Software Advantage Volume Discount Program

Contact your reseller or local Compaq Office for details of how to obtain non-chargeable SmartStart keys under these partner programs. ***Note.*** *Some of the programs require you to complete a program-specific form in addition to SmartStart Activation Key Order Forms.*

NetWare 4.1 Additive Licensing

In response to customer demands for more flexibility in licensing of NetWare 4.1, Compaq has included support for Additive Licensing with NetWare 4.1. Additive Licensing allows any NetWare 4.1 license to be added to any other NetWare 4.1 license that may already exist on a server. This effectively allows NetWare 4.1 customers to create any user count on any server in 5-user increments. All versions of SmartStart NetWare 4.1 (English, French, Italian, German, Spanish and Japanese) offered on SmartStart versions 2.30, 2.40, 2.50/2.50A and 3.0, 3.10, and 3.10A are enabled for Additive Licenses. (Additive licensing may be performed without taking the server down.) ***Note:*** *The NetWare policy manager will not allow a duplicate license with the same software serial number to be installed on any one server, or on any other server across the network. Each NetWare 4.1 license and software serial number must be unique on that server and across the network.*

IntranetWare Additive Licensing

IntranetWare from Compaq was introduced with SmartStart 3.20. To support Additive Licensing for IntranetWare, Compaq will offer specific 10, 25, and 50-user Additive License part numbers. Purchasing and installing an IntranetWare Additive License allows the customer the ability to add user licenses in 10, 25, or 50-user increments to an existing IntranetWare server. Additive Licensing can be performed without taking the server down.
Note: Customers should purchase only one IntranetWare Base Product or Additive License per SmartStart serial number. The IntranetWare policy number to be installed on any one server, or on any other server across the network.

Media Exchange/Conversion

If you have already purchased a Microsoft, Novell, SCO UnixWare 2.1, SCO OpenServer Release 5, or Cheyenne ARCserve license and would prefer to use SmartStart to install the software, you can use the Media Exchange or Media Conversion Programs to acquire a SmartStart Activation Key at no additional charge. Use the SmartStart Customer Information and relevant Product Order Forms; simply check the appropriate box on the Product Order Form and provide End User Information and signature with the requested Proof of Purchase on the Customer Information Order Form. Details of the Media Exchange and Media Conversion Programs are

included in the SmartStart 3.0 Quick Reference Guide and the SmartStart Version 3.0 Activation Key Order Forms.

IntranetWare and NetWare 4.1 MLA Process

Allows IntranetWare and NetWare 4.1 MLA customers to install multiple IntranetWare and NetWare 4.1 servers using a single SmartStart pack. IntranetWare and NetWare 4.1 MLA customers may use the MLA license diskette in place of the SmartStart Program License Diskette to install and configure multiple IntranetWare and NetWare 4.1 servers using SmartStart NetWare media. A SmartStart Activation Key is <u>not</u> required in the installation process. NetWare 3.12 MLA customers may also choose to install NetWare from SmartStart, but a separate SmartStart Pack and activation key is required for each server. SmartStart Packs and Keys are available to MLA customers at no additional charge. *Note: NetWare 4.1 was replaced by IntranetWare with the SmartStart 3.20 release.*

Compaq Insight Agent Volume Licenses

The Insight Agent Volume License entitles a customer who owns a single license for Compaq Insight Manager to extend that license to use Insight Agents on additional servers and to upgrade that license to any version of Insight Management Agents valid and effective for one year from the date of purchase of the Insight Agent Volume License. Customers who provide End User Information will also receive a complimentary One Year SmartStart Subscription.

SmartStart Subscriptions

Purchase a One Year Subscription to SmartStart by providing a SmartStart Program License Diskette Serial Number and checking the part number (195654-001) on a Product Order Form included in the Software Products Pack. Subscriptions are mailed directly to End Users, so you must also provide complete and accurate End User Information on the Customer Information Order Form.

A SmartStart Subscription provides all new SmartStart releases and interim releases of the Compaq Support Software CD issued during the one-year term of the Subscription Service. Each time there is a new release of SmartStart, subscribers will automatically receive a new SmartStart package with an updated version of the original Program License Diskette. Activation Keys purchased on the original program license diskette serial number can be used to re-install software or to install any updates that are included in the subscription fee.

Subscription benefits include::
- Updated versions of Compaq Insight Manager and Insight Management Agents
- New localized versions of software (varies by vendor)
- Intermediate software release (varies by vendor)
- New and updated hardware drivers, patches and bug fixes
- Interim releases of Compaq Support Software CD
- Updated information on Compaq products and services

Customers who have previously purchased the One Year SmartStart Subscription Service may extend the active Subscription term for one additional year at a discounted price. (SmartStart Subscription Renewal part number 195654-002)

For more information on SmartStart Programs and on ordering SmartStart Activation Keys, please refer to the SmartStart 3.20/3.20A/3.21 Quick Reference Guide.