

WHITE PAPER

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Compaq Guide to PC Deployment

Network Installation of Microsoft Windows NT Workstation 4.0 Using LANDesk Configuration Manager on Compaq Deskpro EP and Deskpro EN Series of Personal Computers

This paper provides information useful to departments charged with initial deployment of Microsoft Windows NT Workstation 4.0 over the network to Compaq Deskpro EP and Deskpro EN Series of Personal Computers having network boot firmware and an LCM server using the Configuration Service Manager (CSM) application within Intel's LANDesk Configuration Manager (LCM) suite.

This paper and other relevant documents may be located at <http://www.compaq.com/im/change>.

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Compaq Guide to PC Deployment
Network Installation of Microsoft Windows NT Workstation 4.0
Using LANDesk Configuration Manager on
Compaq Deskpro EP and Deskpro EN
Series of Personal Computers

North America First Edition (October, 1998)

ASSUMPTIONS

The following assumptions are made in this paper:

- You know how to create operating system installation services within the CSM application.
- You understand or can locate information on how to configure the non-hardware specific portions of Microsoft Windows NT Workstation 4.0 for your specific installation (i.e. networking configuration, optional components, etc.)
- You know what hardware must be supported.
- You know how to access the Web and download the appropriate SoftPAQs containing the device driver software.
- The deployment team has access to the *Microsoft Windows NT Workstation 4.0 Resource Kit*.

CONVENTIONS

This notation \\SERVER_NAME\... refers to the network shares that are created by LCM. For example, in this document, \\SERVER_NAME\PROGRAMS refers to D:\ProgramFiles\Intel\lcm\server\public\programs directory on the LCM server. (Actual mapping of the shares depends on the installation options selected during LCM server setup.)

REFERENCES TO COMPAQ, INTEL AND MICROSOFT DOCUMENTATION

Use the following resources to help you deploy Microsoft Windows NT Workstation 4.0 on Compaq Deskpro EN or Deskpro EP Series client systems:

- The Compaq Guide to PC Deployment white paper entitled “Network Installation of Microsoft Windows NT Workstation 4.0 on Compaq Deskpro EP and Deskpro EN Series of Personal Computers Using Microsoft Tools.”
- The Intel support page for LANDesk Configuration Manager, located on the Web at <http://support.intel.com/support/landesk/configmgr/index.htm>. It contains FAQ's, technical notes, and a troubleshooting guide.
- The *Microsoft Windows NT Workstation 4.0 Resource Kit*. It is very useful for understanding the deployment strategies described in this paper. It gives specific information on the options used to automate the installation of Windows NT Workstation 4.0.
- Microsoft's Knowledge Base, located on the Web at <http://support.microsoft.com/support>, contains articles describing known installation issues and solutions.
- Microsoft Windows NT Workstation Deployment Resource documents, located at <http://www.microsoft.com/ntworkstation/ntwnew/info/deployguide.htm>.

HARDWARE PREPARATION

Ensure that all factory-installed Compaq hardware is properly connected in each target computer. Refer to the *Guide to Features & Upgrades* included with the Compaq Deskpro EP Series and Deskpro EN Series computers if you have any questions regarding how the hardware is installed in the system.

LCM SUPPORT UTILITIES

This section describes utilities provided by Compaq to enhance the LANdesk Configuration Manager's ability to set up and maintain Compaq Deskpro EP and Deskpro EN Series Personal Computer systems.

The LCM ROM Flash Tools

This section describes the procedure for creating a CSM service to upgrade the ROM on Compaq Deskpro EN or EP Series Personal Computers. The DOS-based Remote ROM Flash Utility will be used for this procedure. To illustrate, the following steps will assume that the client system to be flashed is a Compaq Deskpro EN Series, Small Form Factor.

NOTE: The only difference between the steps described for the Compaq Deskpro EN Series, SFF, and other systems, is that you must obtain the SoftPAQ appropriate for the computer, then change the name of the directory and service created by this procedure to match that system.

1. Obtain the latest version of the Remote ROM Flash Utilities for Deskpro EN Series SFF (686T5 ROM) from the Compaq Software Support pages, located on the Web at <http://www.compaq.com/support>.
2. Create a directory under the \\SERVER_NAME\PROGRAMS share on the LCM server named for the client system containing the ROM you will be flashing. For this example, we'll use **686T5**.
3. Copy all the files from the Remote ROM Flash Utilities for Deskpro EN Series SFF SoftPAQ to the newly created **686T5** directory on the LCM server.
4. Start the LCM Configuration Services Manager console and create a service that has only the "Setup Applications and Run Programs" option selected.
5. The ROM for Compaq Deskpro EN and EP Series Personal Computers includes a ROM-based F10 Setup. A Language Module option allows the user to select a language other than English that can be used in F10 Setup. Languages that are supported include: Danish, Dutch, Finnish, French, German, Italian, Norwegian, Portuguese, Spanish, or Swedish. Language modules are flashed separately from the main ROM flash. In order to flash both the main ROM image and the language option, you will need to add two program entries to the current flash service.
 - To update the main ROM, the program to run is \\SERVER_NAME\PROGRAMS\686T5\flshlite.exe. The associated command line is:
`/f flsh.cpu default`
 - To update the F10 Setup language option, the program to run is \\SERVER_NAME\PROGRAMS\686T5\flshlite.exe. The associated command line is:
`/l:ln /f lang.opt default`where the supported values for ln are the following:

FR	French
GR	German
IT	Italian
SP	Spanish
NL	Dutch

SE	Swedish
DK	Danish
FI	Finnish
NO	Norwegian
PT	Portuguese

Creating and Formatting the Operating System OS Partition

This section describes the procedure for creating a CSM service that will create and format an operating system partition on Compaq Deskpro EN or EP Series client computers using the Operating System Installation Readiness Utility for EN/EP/SB Systems.

1. Obtain the latest version of the Operating System Installation Readiness Utility for EN/EP Series Products from the Compaq Software Support pages, located on the Web at <http://www.compaq.com/support>.
2. Create a directory under the \\SERVER_NAME\PROGRAMS share on the LCM server named **OSIRU98**.
3. Copy all the files from the Operating System Installation Readiness Utility SoftPAQ to the **OSIRU98** subdirectory that you just created.
4. Start the LCM Configuration Services Manager console and create a new service that only has the "Setup Applications and Run Programs" option selected. The program to run should be \\SERVER_NAME\PROGRAMS\OSIRU98\osiru98.exe and the command line options should be:

-p 1000 FAT
5. Refer to the documentation that is delivered with the Operating System Installation Readiness Utility to understand what these options mean and which are appropriate for your installation. **NOTE:** The OSIRU98 utility supports the creation of FAT32 partitions; however, this option cannot be used with the current version of LCM. Installing to FAT32 partitions is currently not supported by the CSM application. Please contact your LCM supplier to find out when FAT32 support will be added to the CSM application.
6. Complete the definition of the service through the CSM console. This service can now be utilized to partition and format the hard drive.

WINDOWS NT WORKSTATION 4.0 CLIENT INSTALL

This white paper details CSM-unique changes from the general network installation process described in the Compaq Guide to PC Deployment white paper entitled "Network Installation of Microsoft Windows NT Workstation 4.0 on Compaq Deskpro EP and Deskpro EN Series of Personal Computers Using Microsoft Tools" (network installation white paper). The following sections will describe the necessary changes to the LCM server and a CSM Windows NT installation service to accomplish a Compaq-style network installation.

Operating System File Layout

The Microsoft Windows NT Workstation 4.0 setup files should be placed on the LCM server within the \\SERVER_NAME\OS\ share in the Windows NT directory. The Compaq drivers and software should be integrated into this same installation share. For illustration, the following section assumes that Compaq-supplied drivers will be copied to the \\SERVER_NAME\OS\WinNT\I386 directory and that Compaq software will be copied to individual subdirectories underneath the \\SERVER_NAME\OS\WinNT\I386\SOEM\$\c directory. NA140A/1098

: Refer to the network installation white paper for instructions on obtaining the necessary Compaq
: SoftPAQs and expanding them onto the LCM server.

: **Installation Files Related Changes**

: The UNATTEND.TXT file that was created by the processes described in the network installation
: white paper must be copied to the \\SERVER_NAME\OS\AnsFiles directory. This file also must
: be selected as the answer file for the Windows NT Workstation installation service using the
: “Windows NT Answer File” page of the service wizard.