PeopleSoft

EnterpriseOne B73.3.1
Managing OneWorld Client Installations Using Tivoli TME 10 PeopleBook

June 1999

J.D. Edwards World Source Company
One Technology Way
Denver, CO 80237

SKU B7331CEATI

Welcome

About This Guide

This guide documents how to use Tivoli Management Environment (TME 10) Software Distribution to distribute OneWorld client installations. This document is limited to the definition of the OneWorld/TME 10 FilePack, but not the actual distribution. In general, the document applies to all TME 10-managed distributions.

TME 10 is extremely flexible and offers a number of configuration options. This document presents only one simple solution for distributing OneWorld packages. Numerous advanced issues are intentionally excluded from this document, such as design and configuration of distribution repeaters, limiting network load, and scheduling of distribution. A TME 10 administrator should control these issues for the particular environment. The distribution solution documented in this guide is a universal starting point and the underlying principles should be maintained regardless of the advanced management features used.

This guide contains the following sections:

- TME 10 overview
- Getting started
- Working with TME 10

Audience

This document assumes you are familiar with both OneWorld and TME 10. If you are unfamiliar with both OneWorld and TME 10, this document may still convey the concepts of managing OneWorld client installations using TME 10. The following references may be also helpful:

- *TME 10 Software Distribution User's Guide Version 3.1*
- *TME 10 Framework User's Guide Version 3.1*
- *TME 10 Software Distribution Reference Guide Version 3.1*
- *TME 10 Framework Reference Guide Version 3.1*

- *TME 10 Framework Planning and Installation Guide Version 3.1*
- OneWorld *Installation Guide*
- OneWorld *Configuration Planning and Setup*
- OneWorld *Software Modification Deployment*

Table of Contents

Index

TME 10 Overview

This section provides the following introductory information about TME 10:

- ❑ Understanding the distribution solution
- ❑ Benefits of using TME 10 for OneWorld client installations
- ❑ Challenges of using TME 10 for OneWorld client installations
- ❑ System requirements
- ❑ OneWorld distribution requirements

Understanding the Distribution Solution

The requirements for a distribution solution include:

- Reuse of current code
- Coexistence in an environment where non-TME 10 managed distributions are occurring
- Ability to use the same controls as traditional OneWorld installations

This list of requirements narrows the possibilities of how you can use TME 10 for OneWorld distribution to essentially two approaches, script the installation using operating system commands, or use the existing setup.exe.

Scripting the install is not feasible for two reasons. The command processor for Windows NT or Windows 95 is not powerful enough to write the required batch files. Scripting the installation is similar to completely rewriting the current setup.exe and does not fulfill the requirement of reusing existing code.

There are two ways to use setup.exe in a TME 10-managed OneWorld distribution. The first is simply to execute setup.exe once for each workstation and allow setup.exe to perform everything, including the file copy. The other is to use setup.exe only to perform the logical functions, such as registry updates and license validation and allow TME 10 to manage the distribution of files to the clients. By using setup.exe to execute everything including the file copying, you loose the ability to balance the load across network segments without creating numerous distribution servers and managing numerous unique setup.inf files.

For these reasons, the only acceptable solution is to use TME 10 to manage a process that copies the appropriate files for each workstation and executes setup.exe with the no copy option.

Benefits of Using TME 10 for OneWorld Client Installations

TME 10 satisfies the following basic requirements for managing OneWorld distribution:

- Coexistence with current installation code and controls
- Scheduled push installations
- Configurability
- Improved scalability

Coexistence with Current Installation Code and Controls

Because TME 10 can coexist with OneWorld's current software installation controls, you can choose to use TME 10 exclusively or use both TME 10 and OneWorld installation controls. Coexistence with the current installation code allows J.D. Edward to maintain coexistence of controls and minimizes the effort required for integration.

Scheduled Push Installations

The current installation strategy for OneWorld requires the user to initiate an installation. TME 10 reduces the need for user involvement by scheduling installations and enabling an administrator to push an installation, rather than depending on the user to initiate the action.

Configurability

Because OneWorld is highly configurable, the installation utility must also be configurable. TME 10 allows you choose how to best accomplish the installation. For example, you can specify installation from different environments, such as pristine, development, production.

Improved Scalability

TME 10 is designed to be network-aware and is scalable to large enterprises. Any distribution strategy or method that uses TME 10 can take advantage of this scalability. TME 10 allows you to spread the load of distribution across numerous workstations and network segments without unnecessarily impacting them.

Challenges of Using TME 10 for OneWorld Client Installations

TME 10 presents certain challenges for managing OneWorld distribution:

- Subscription groups of workstations
- Complex management system
- Expense of TME 10

Subscription Groups of Workstations

The TME 10 strategy for standard distribution is based on subscription groups of workstations. Standard OneWorld distributions relate to users rather than workstations. TME 10 supports complex querying which can bridge the gap between subscription groups and user installations, and TME 10 also includes products that administer databases and user accounts. These tools, however, substantially increase the level of complexity and cost of using TME 10. Rather than trying to bridge the gap programmatically, J.D. Edwards relies on the administrator to create and maintain subscription groups.

Complex Management Systems

TME 10 is a complex management system with a fairly steep learning curve.

Expense of TME 10

TME 10 is an expensive product. Unless you have already installed TME 10, it may not be logical to use TME 10 to distribute OneWorld. The value gained by using TME 10 to distribute OneWorld may not justify the cost.

System Requirements

The following are required to distribute any software using TME 10:

- TME 10 Agent on each client workstation
- TME 10 FrameWork on at least one server in the enterprise (any supported platform)
- TME 10 Distribution server on at least one server in the enterprise (any supported platform)

OneWorld Distribution Requirements

To distribute OneWorld, the primary OneWorld distribution server must:

- Be an Intel-based server running Windows NT Server
- Store the OneWorld Packages in an uncompressed format
- Have directories containing setup.exe, DLLs, and other files; these directories must be shared
- Have TME 10 Agent installed, and be configured as a Managed Node or as a Distribution Server

Additional servers or machines configured as managed nodes may be necessary depending on the scope of the enterprise. If additional machines are necessary to balance the load of the distribution across machines and the network, those additional distribution machines are not required to be Windows NT servers.

Getting Started

To work with TME 10 for distributing OneWorld packages, you must accomplish the following tasks:

- ❑ Reviewing the OneWorld setup executable
- ❑ Understanding the OneWorld program flow for client installation
- ❑ Creating an after-distribution batch file

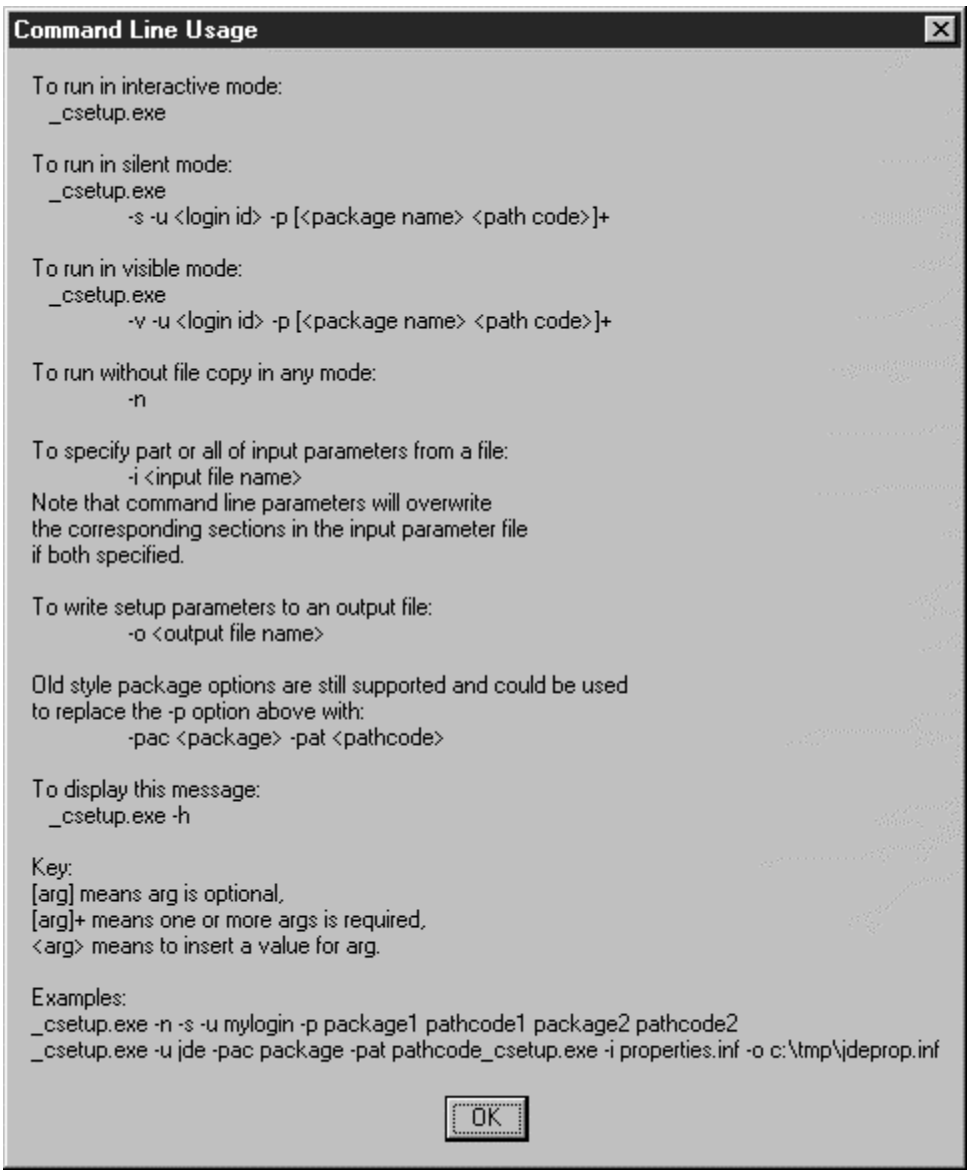
Reviewing the OneWorld Setup Executable

In comparison with many installation programs, the OneWorld setup executable is complex. This is because OneWorld clients must be integrated in a complex operating environment. TME 10 Software Distribution can simplify installation for the clients. However, the TME 10 administrator must have a good understanding of setup.exe for success.

To display the command line options for setup.exe, enter the following command from a Windows command line:

```
_csetup.exe -h
```

The example on the following page illustrates the command line options for setup.exe.


Command Line Usage
To run in interactive mode:
_csetup.exe
To run in silent mode:
_csetup.exe
-s -u <login id> -p [<package name> <path code>]+
To run in visible mode:
_csetup.exe
-v -u <login id> -p [<package name> <path code>]+
To run without file copy in any mode:
-n
To specify part or all of input parameters from a file:
-i <input file name>
Note that command line parameters will overwrite
the corresponding sections in the input parameter file
if both specified.
To write setup parameters to an output file:
-o <output file name>
Old style package options are still supported and could be used
to replace the -p option above with:
-pac <package> -pat <pathcode>
To display this message:
_csetup.exe -h
Key:
[arg] means arg is optional,
[arg]+ means one or more args is required,
<arg> means to insert a value for arg.
Examples:
_csetup.exe -n -s -u mylogin -p package1 pathcode1 package2 pathcode2
_csetup.exe -u jde -pac package -pat pathcode_csetup.exe -i properties.inf -o c:\tmp\jdeprop.inf
OK

Understanding the OneWorld Program Flow for Client Installation

The OneWorld client installation program, setup.exe, consists of the following two programs:

- setup.exe
- _csetup.exe

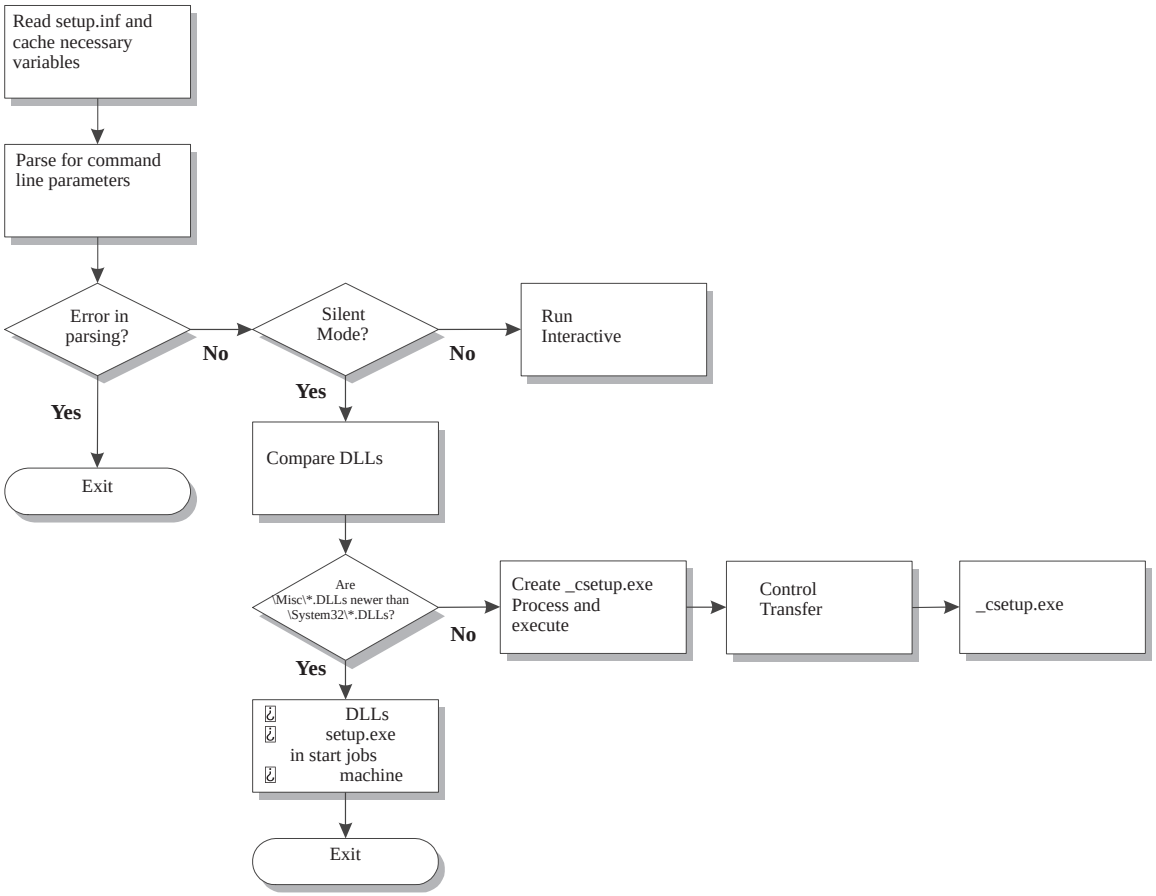
You must understand how these programs work to distribute OneWorld to clients.

setup.exe

Setup.exe is a short program. Regardless of command line options, when executed setup.exe performs the following:

- Verifies that the proper version of several shared DLLs are installed on the client machine
- Executes _csetup.exe

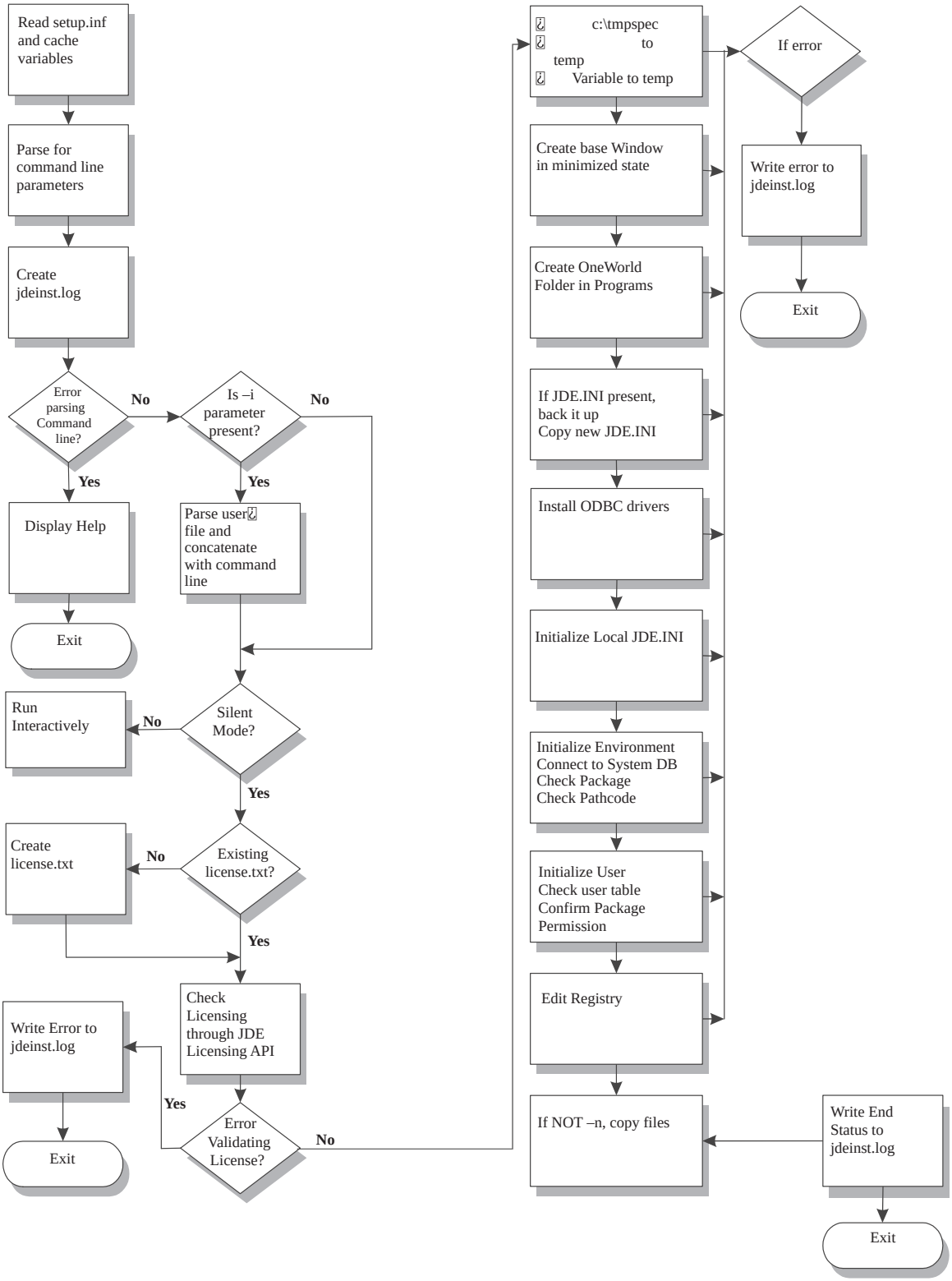
The following graphic illustrates the internal processes and program flow for setup.exe:



_csetup.exe

_csetup.exe performs most of the client installation. _csetup.exe can be executed directly from a command line, or _csetup.exe can be called by setup.exe. The same command line options apply in either case.

The following graphic illustrates the internal processes and program flow for _csetup.exe.



Creating an After-Distribution Batch File

For this approach you must run a batch file after distribution that runs setup.exe for each of the endpoints. The batch file must accomplish two basic tasks:

- set a path to where setup.exe is located
- execute setup.exe with the appropriate parameters

Setup.exe performs a number of processes that include verifying licenses, updating registries, setting paths, and checking dates of shared DLLs. You can execute setup.exe with parameters that cause TME 10 to copy all appropriate files to the client, or use the -n parameter to specify no file copy. This document demonstrates the use of the -n parameter. The purpose of running the setup.exe is to complete all of the background processing that occurs during a client installation, and to return the final status of the installation.

Setup.exe links to multiple DLLs and other files during the installation. However, the required DLLs and other files that are necessary to run setup.exe are not defined in the TME 10 FilePack. To overcome this you must map a drive to where the components for setup.exe reside.

OneWorld.Bat Commands

There are numerous ways to accomplish these tasks in a batch file. This document presents only one simple batch file example. More extensive precondition testing can be done, and more sophisticated error trapping is also possible. As long as the two basic tasks are accomplished, then license can be taken. The following presents each command line of an example OneWorld.bat file.

Command Line	Explanation
@echo off	Turns echoing to screen off
net use Z: /DELETE	Removes any drive connection associated with Z:
net use Z: \\OSSEH\Tivoli	Maps a network drive designated as Z: to the Windows NT share where setup.exe and it related components reside.
if not errorlevel 0 goto MAP-FAIL	Checks for an error in mapping the drive. If a failure occurred, the program will continue at :MAPFAIL
set path=Z:\client;%path%	Sets a path to Z:\Client where the setup.exe is located

if not errorlevel 0 goto PATHFAIL	Checks for an error in setting the path. If a failure occurred, the program continues at PATHFAIL
@echo Path set successfully	Message echoed to the screen indicating success to this point
goto DOIT	Program instruction to go to :DOIT, where execution of setup.exe will occur
:MAPFAIL	Section label associated with failure to map a drive.
@echo Failed to map drive	Failure message printed to the screen
goto END	Instruction to go to :END label
:PATHFAIL	Section label associated with failure to set a path
@echo Failed to set path	Failure message printed to the screen
goto END	Instruction to go to :END label
:DOIT	Label for the section where execution of setup.exe will take place if the drive has been mapped, and the path set.
z:\client\setup.exe -s -n -i -p PROD_A PROD	Command line to execute setup.exe with a possible parameter set. Parameters indicate a silent install with file copies, read jdeinst.inf from client machine, and that the OneWorld package and Pathcode are PROD_A and PROD respectively. (A complete discussion of setup.exe command line parameters is found in a later section).
type jdestat_0.log	Check for existence of successful log file from setup.exe
wseterr errorlevel	TME 10 client command to set Tivoli error 'wseterr' = errorlevel. This is necessary to pass the return code from the execution of setup.exe on to TME 10 Software Distribution.
if not errorlevel=0 goto FAIL	If there was an error, as indicated by the value of errorlevel go to the :FAIL label
:SUCCESS	Label where program continues in the case of no error having occurred.
@echo It Worked! >c:\success.log	Success message written to a success.log on the client machine
goto END	Instruction to go to :END label
:FAIL	Label where program continues if setup.exe failed

@echo Setup failed, check c:\jdeinst.log	Failure message written to client screen indicating that the jdeinst.log may have further information
:END	Label for end of program, where regardless of the error condition, the program exits. The error condition at this point will be read by TME 10 Software Distribution , and the appropriate action, as defined by the administrator will be taken.

Working with TME 10

To work with TME 10 for distributing OneWorld packages, complete the following tasks:

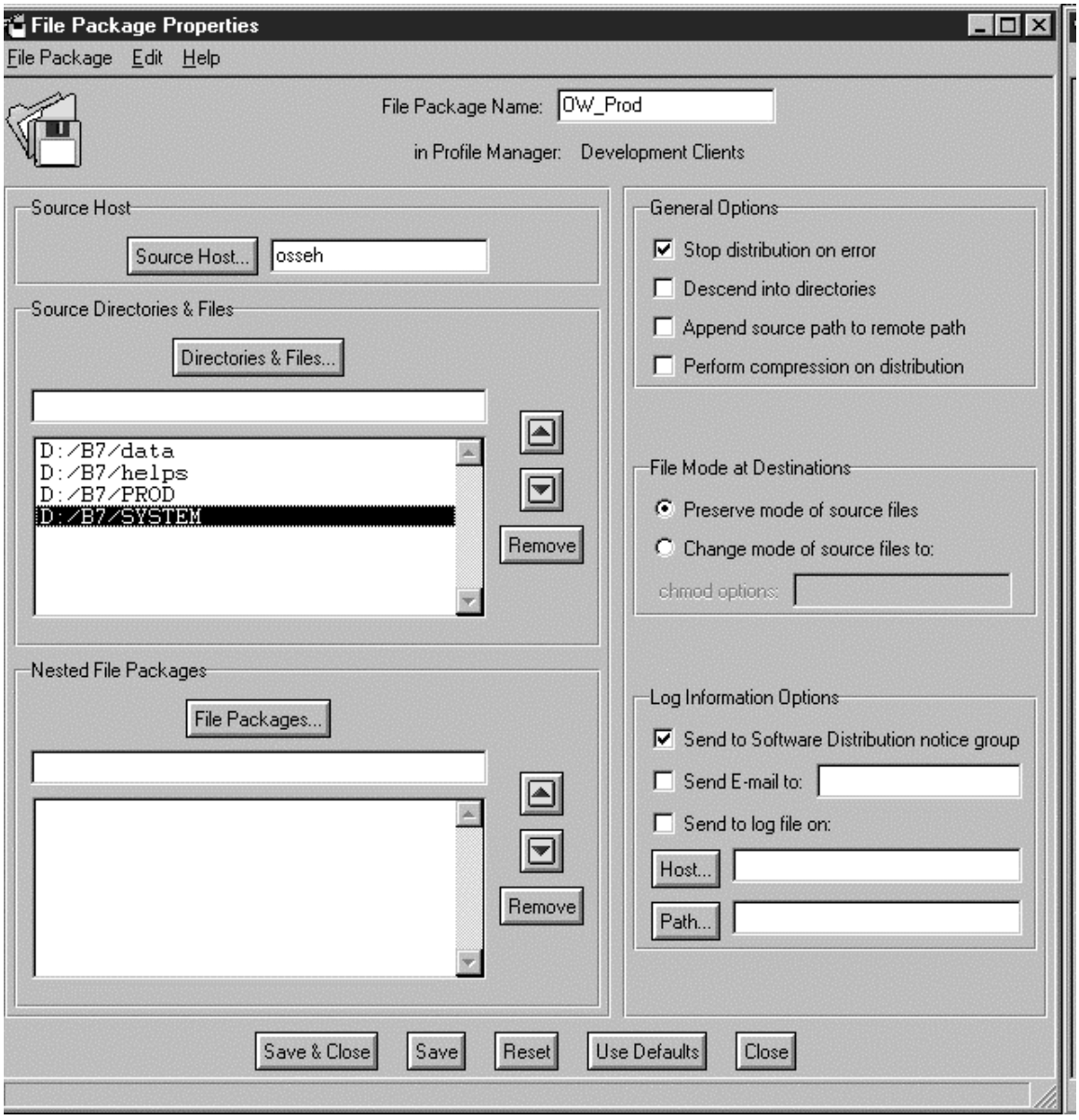
- ❑ Specifying file package properties
- ❑ Selecting file package options

Specifying File Package Properties

File Package properties are critical to the distribution of a OneWorld package. File packages contain the source directories and files and define how to distribute the directories and files. Define a file package on the File Package Properties form.

▶ To specify the package properties

On File Package Properties



1. Complete the following options:

   - File Package Name

   Enter a unique name that is brief and meaningful to identify the package.

   - Source Host

   The source host must be running Windows NT that is set up as a managed node or server, on which the OneWorld package resides in an uncompressed format.

2. Click the Directories & Files button to select a path or enter the appropriate path.

   Four directories make up the entire contents of the OneWorld package: data, helps, system and package. In this example, the package directory is D:\B7\PROD.

3. Click the File Packages button to select from available packages or enter a File Package.

   Nested file packages contain other file packs. For example, you can define one file pack for each OneWorld directory (data, helps, system, and package) and nest the file packs into one file package.

   Nested file packages are optional for OneWorld package distribution.

4. Select one or more of the following general options:

   - Stop distribution on error
   - Descend into directories
   - Append source path to remote path
   - Perform compression on distribution

   General options provide additional control parameters, such as stopping on errors, descending into directories, appending source to destination paths, and compressing files on distribution. J.D. Edwards recommends that you enable compression on distribution and stop on errors.

   General options are optional for OneWorld package distribution.

5. Select the options for the file mode at destination for UNIX machines. Your options are:

   - Preserve mode of source files
   - Change mode of source files to:

   The mode of the file determines the action a user may take on a file. Changing or preserving the file mode may apply in certain situations.

   File Mode at Destinations are optional for OneWorld package distribution.

6. Select from the following log information options:

   - Send to Software Distribution notice group
   - Send e-mail to:
   - Send to log file on:

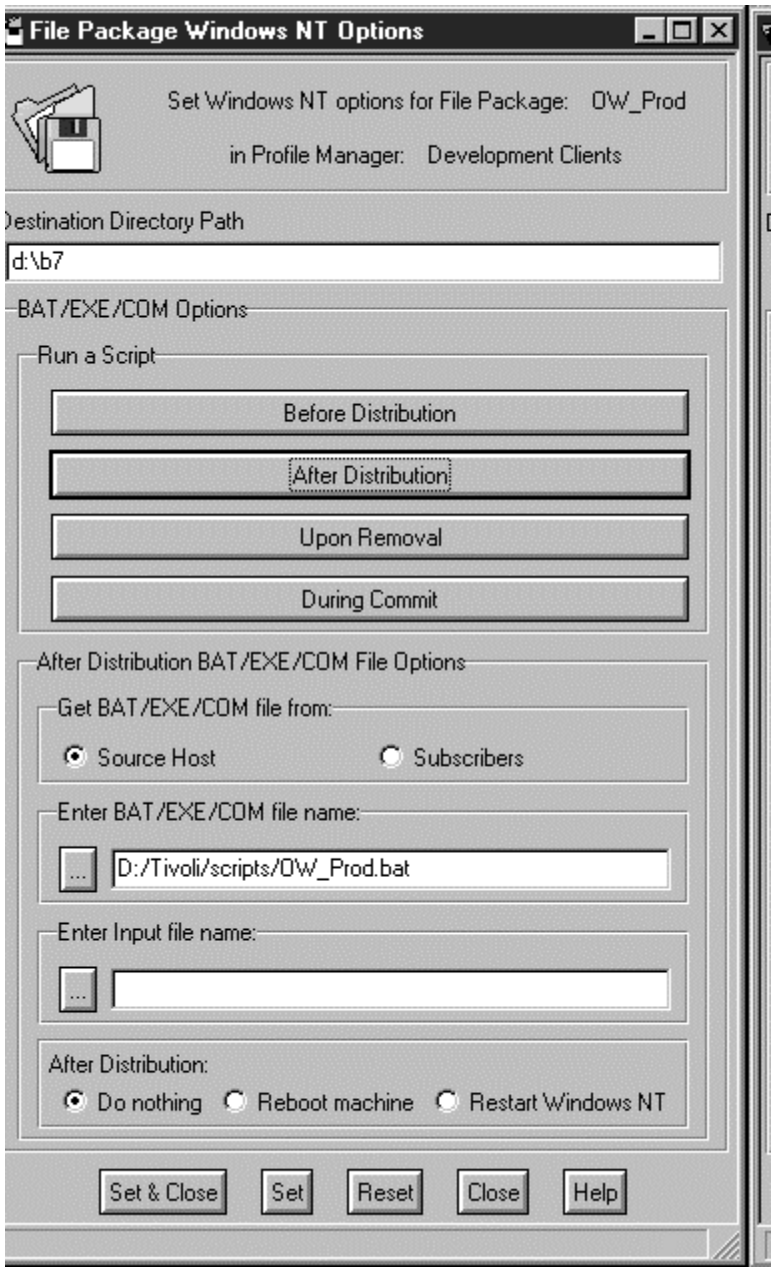
   In testing, J.D. Edwards sent the results to a log file. Log Information Options are optional for OneWorld package distribution.

Selecting File Package Options

In addition to copying files and directories to multiple machines, File package properties include platform-specific options. Platform specific options allow different actions to be taken when a FilePack is distributed to multiple platforms. If the same actions are appropriate for each of the platforms, then that information must be entered for each platform type. In the case of a OneWorld package distribution, the target platforms are Windows NT and Windows 95, and the same actions are appropriate for each. Not all options are required.

▶ To select file package options

On File Package Windows NT Options



1. Complete the following required field:

   - Destination Directory Path

   This is the drive and directory to which the files and directories are copied. This is an absolute path. Subscribers to this FilePack must have the same destination directory path. If multiple paths are required, then you must create multiple FilePacks that reflect the appropriate path.

2. Click one of the following buttons to indicate when the script file should run:

   - Before Distribution
   - After Distribution
   - Upon Removal
   - During Commit

   The scripts may be preprocessing scripts that determine the readiness of the endpoint for the receiving package, or the scripts may be a configuration program that are necessary to complete the distribution. For a OneWorld package installation, you must run a batch file that completes the installation after the distribution.

3. Indicate the source of the script file. Although TME 10 allows you to select whether the source of the script file is the source host or the subscribers, you must select Source Host because this is where setup.exe resides.
4. Enter the BAT/EXE/COM file name or file names you want to run. You can enter multiple files for the FilePack, Before Distribution, After Distribution, Upon Removal, or During Commit. For multiple batch files, separate them with a comma. J.D. Edwards recommends that you use a single batch file for the OneWorld package. In our example, the file is named OneWorld.bat. The content and purpose of this file are discussed in *Creating an After-Distribution Batch File.*
5. Enter the Input file name of the script file. For multiple script files, separate each file name with a comma. The Input file name is optional for OneWorld package distribution. .
6. Select one of he following After Distribution options:

   - Do nothing
   - Reboot machine
   - Restart Windows NT

Index

Index

Symbols

A

B

C

F

O

P

R

S

T

U

NOTES