ADOBE® CREATIV Suite® 4

Enterprise Deployment Toolkit Guide

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1 Using the Enterprise Deployment Toolkit

Introduction

This document tells you how to create Adobe® Creative Suite® 4 deployment packages with the Creative Suite 4 deployment toolkit. In the remainder of this document, Creative Suite 4 is abbreviated to “CS4” and the Adobe Creative Suite 4 deployment toolkit is called “the CS4 deployment toolkit, the “deployment toolkit” or simply “the toolkit” as context allows.

This document is written for administrative users whose task it is to create the necessary deployment packages for an enterprise. These users may not necessarily be the same people who did any of the other steps of the deployment process, as described in the Enterprise Deployment Guide.

What is the Toolkit?

The Adobe CS4 deployment toolkit is an efficient, easy-to-use, and reliable application that packages an Adobe Creative Suite 4 product install folder for an enterprise install. Its Adobe® AIR™-based graphical user interface allows you to easily and quickly create deployment packages without laborious hand-editing and placement of configuration files. CS4 applications installed from a deployment package are fully serialized.

CS4 deployment packages and their related product install folders can be copied to multiple computers in a single operation using compatible tools such as Apple Remote Desktop (ARD) and Microsoft® Systems Management Services (SMS).

How the Toolkit Fits into the Overall Deployment Process

Using the CS4 deployment toolkit to create deployment packages is just one step in the greater process of deploying CS4 products in an enterprise environment. The entire process is shown below:

Before you are ready to run the toolkit and create packages, some important planning (step 1) and preparation (step 2) needs to be done. These activities may or may not be done by the same person who creates the packages, so the planning decisions are captured on worksheets, some of which are used during package creation in step 3. After packages are created, a package is tested (step 4) and then
deployed to the target systems where it is executes an enterprise install (step 5). You can use a third party tool such as ARD or SMS to deploy your packages.

This document describes step 3 of this process. The other steps are described in the Enterprise Deployment Guide.

This document is one of a set of documents described below:

- **Deployment and Provisioning Concepts** — Defines Adobe product and enterprise deployment process terms used throughout the document set. These definitions may include terms familiar to you, but they may be used in a sense that you are unfamiliar with. Other terms used in the document set may be unfamiliar to you. If you are unfamiliar with or unsure of how a term is used in this document, look it up in the Concepts document.

- **Enterprise Deployment Guide** — Identifies the main characteristics of and assumptions about enterprise deployment and gives you the information you need to plan for and deploy Adobe Creative Suite products. It briefly describes Adobe deployment packages. It explains how you can use ARD and SMS to deploy these packages. It tells you how to set configuration options after an install.

- **Enterprise Deployment Toolkit Guide** — This is the document you are reading now. It tells you how to use the Adobe CS4 deployment toolkit to create deployment packages that enable you to easily do enterprise installs of CS4 products.

- **Enterprise Deployment Reference** — Contains detailed information about the structure and operation of Adobe packages; details of how the Adobe install program, Setup, works; and guidance on how to do an enterprise install without an Adobe package.

- **Enterprise Deployment Planning Sheets** — A collection of worksheets you can use to plan, communicate, and record your deployment decisions. You will use planning sheets #2 and #3 while creating packages with the toolkit.
How to Get the Toolkit

The CS4 Deployment Toolkit is available on both Windows® and Mac platforms. Packages created by the Windows version of the toolkit can be deployed only on Windows machines. Packages created by the Mac version of the toolkit can be deployed only on Mac machines. If you plan to install CS4 software on both platforms, you need both versions of the toolkit.

The CS4 Deployment Toolkit has been tested on Windows server 2003 and 2008 as well as Apple Mac OS X server. You can receive the toolkit in one of two forms: on DVD or via Electronic Software Download (ESD).

The following table explains how to get a copy of the toolkit and how it is supported.

<table>
<thead>
<tr>
<th>Customer Type</th>
<th>Source</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractual Licensing Program (CLP)</td>
<td>Complimentary with any CS4 software purchase. Available for download with product.</td>
<td>Free via Adobe Option Options (AOO) Licensing Program. Contact Adobe support for details about other product support options.</td>
</tr>
<tr>
<td>Transactional Licensing Program (TLP)</td>
<td>Available for purchase. Contact your local Adobe channel partner or account manager.</td>
<td></td>
</tr>
</tbody>
</table>

The table on page 16 shows the system requirements the toolkit needs to run successfully.

Creating Deployment Packages

This section walks you through the creation of a single package. When you reach the end of this process, you can either exit the toolkit or return to the beginning and create another package. The instructions in this section assume:

▶ Someone has completed the planning described in the first chapter of the Enterprise Deployment Guide and you have worksheets #2 and #3 for each package you are going to create in front of you.

▶ The deployment toolkit is installed on your admin system.

▶ The product install folders for the products you are going to package are accessible from your admin system, either copied to a local disk or mounted from another system, and you know the path to them.

The table beginning on page 17 contains a list of toolkit error messages, what they mean, and how to recover from the errors.

1. **Invoke the toolkit.**

Start the toolkit on your system by clicking a desktop icon for it, or by invoking it on a command line. The default installation location for the CS4 deployment toolkit is as follows:

- **On Windows:** `<system drive>:\Program Files\Adobe\Adobe CS4 Deployment Toolkit`
- **On Mac:** `/Applications/Adobe CS4 Deployment Toolkit`
The first thing you see is a Welcome screen.

![Welcome Screen](image)

The second sentence refers to the install and application options in the Options section of planning sheet #2. The third sentence means that once you have saved the package you are about to create, you will be ready to test the package and deploy it to your target machines.

Click Start Configuration.
2. **Identify the package.**

The Create Package screen appears. The next few screens require information recorded on planning sheet #2.

Here you enter the values from the **PACKAGE NAME** and **PACKAGE DESCRIPTION** fields on the planning sheet. Then use the **Browse** button to locate the product install folder for the product you are packaging. The path you select will show in the **MEDIA FILES LOCATION** field. Then click Next. You will see a screen that says “Analyzing ....”. This is a progress screen that is shown while the toolkit reads the contents of your product install folder to build the list of applications and components for you to choose from.
3. Enter configuration information.

After the analysis screen goes away, you will see the “Installation Settings” screen.

On this screen, enter the following values from the planning sheet:

- **SERIAL NUMBER** — After you enter a serial number, the toolkit verifies it against the installer locale. If the locales match, the locale is displayed in the INSTALLATION LANGUAGE field. Note the language that is set; you may want to make note of it on planning sheet #2. If the serial number you supplied is valid, a green check appears to the right of the number field. If the serial number is not valid, a red X appears. You will not be able to proceed with package creation until you provide a valid serial number.

- **INSTALLATION LOCATION** — You can accept the default location. If a different path is specified on the planning worksheet, select Set Custom Path and enter that path.

- **APPLICATION OPTIONS** — On the right side of the screen, the application options are the three above the line. Set these options to match the choices on the planning sheet.

- **INSTALL OPTIONS** — On the right side of the screen, under the line, you will see two or three options. The screen shot above shows all three. The INSTALL OPTIONS area of the planning sheet shows the values you need to select for these options.

You will see the first option (64-bit configuration) only if you are running the toolkit on Windows AND the product you are packaging contains Photoshop®. If you see this option, you want to turn it off if the Configure for 64-bit option is marked No on the planning sheet. If, however, it is marked Yes, leave this option turned on; you will use the sub-options on the worksheet on a later screen.

When you have entered all this information, click Next.
4. **Choose components to include in the package.**

The Product Options screen appears.

NOTE: If you are running the toolkit on Windows and you chose the 64–bit configuration option, the screen title will be “Product Options 32–bit”.

The list consists of three parts: the first part lists the primary applications contained in the product you are packaging; the second and third parts list shared and supporting components which may be required or optional for one or more of the primary applications.

If you create packages for multiple products, you will notice that this list varies depending on the product you are packaging. For example, if you are packaging Adobe® InCopy® CS4, the only primary application choice will be InCopy. If you are packaging the Adobe CS4 Master Collection, every application included in that suite appears in the scroll list.

Each item in the list is preceded by a check box; by default, everything is checked. As you deselect primary applications, items in the components lists may be deselected. A check box can be in one of three states:

<table>
<thead>
<tr>
<th>State</th>
<th>Meaning</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empty</td>
<td>Item not selected.</td>
<td>You have deselected the item OR Item is not an option for any primary applications that are currently chosen.</td>
</tr>
<tr>
<td>Gray Check Mark</td>
<td>Item selected and cannot be directly deselected.</td>
<td>Item is required for one or more other items that are chosen. It can be deselected only by deselecting all items that require it.</td>
</tr>
<tr>
<td>White Check Mark</td>
<td>Item selected, but can be directly deselected.</td>
<td>Item is optional and can be deselected.</td>
</tr>
</tbody>
</table>
Creating Deployment Packages

Deselect items on this list as follows:

- **Primary Applications** — For the first part of the list, consult the list of names in the PRIMARY APPLICATIONS portion of planning sheet #2, and deselect all applications not on that list. Only applications listed on the worksheet should be checked when you are done.

- **Shared Components** — The middle part of the list contains the shared components. Find the optional components (bright white check marks) and deselect the ones that are not listed in the OPTIONAL SHARED COMPONENTS list on the planning sheet.

- **Supporting Components** — The bottom part of the list contains the supporting components. Find the optional components (bright white check marks) and deselect the ones that are not listed in the OPTIONAL SUPPORTING COMPONENTS list on the planning sheet.

The Total Size, displayed above the top right corner of the scroll list, displays the free space required on the target machine to install the components you have currently selected. The size adjusts as you select and deselect items.

Once all your choices are made, if you are running the toolkit on Mac, or if you are running on Windows and you chose No for the 64–bit configuration option, click Next now and go on to step 5.

If you are running on Windows and you chose Yes for the 64–bit configuration option, when you click Next you will see the same Product Options screen, but this time it will say "Product Options 64–bit".

- **Primary Applications** — Choose the same set of applications you chose on the 32–bit screen, but notice that you now have two Photoshop choices: the 64–bit Photoshop choice is the primary choice, and the 32–bit Photoshop choice is indented below it. Keep the 64–bit Photoshop choice selected, but set the 32–bit choice to whatever is indicated on the planning sheet.

- **Shared Components** — Make the same shared component choices as you did on the 32–bit screen. There are no 64–bit versions of any of the shared components. However, one of them, Adobe Drive, has both 32–bit and 64–bit components, and the 64–bit one, as well as the 32–bit one, is required on a 64–bit machine. when you chose the 64–bit version of Photoshop, this 64–bit component shows up as required on the supporting component list.

- **Supporting Components** — On the supporting component list, notice that all the 64–bit versions are required except for Adobe Fonts All. Make your choice for both versions of Adobe Fonts All as you specified on your planning sheet.

When you are finished selecting components, click Next.
5. **View a summary of the package.**

The Summary screen displays the package name, the Adobe CS4 product you used to create the package, the installation language, and the amount of space needed to install the applications and components you have selected. If you chose both 32-bit and 64-bit applications, two sizes will be given here, one for 32-bit and one for 64-bit. Record both sizes on your planning sheet.

![Summary Screen](image)

This is where you tell the toolkit where to save the package. In the edit field, specify the path from the PACKAGE LOCATION field on the planning sheet.

At this point, you have two choices:

- If you click Back, you can go back and change anything you have specified on previous screens.
- If you click Finish, the toolkit saves your package to the location you specified and displays the “Thanks!” screen.
This screen verifies where your package has been saved. At this point, you have two choices: if you click Done, you quit the toolkit. If you click “Create Package” the toolkit returns you to the “Create Package” screen so you can create another package.
The Anatomy of a Package

When you are finished creating and saving your packages, look in one of the package folders to acquaint yourself with what a package contains. You will see four things:

- An AdobeUberInstaller executable;
- An AdobeUberInstaller.xml file;
- An AdobeUberUninstaller executable;

What you have just created is a package that can both install and uninstall the applications and related components you selected in the toolkit interface.

The AdobeUberInstaller.xml file captures the information you entered and the option choices you made in the toolkit GUI. When you run AdobeUberInstaller on your target systems:

- It uses the information in this XML file to construct files that Setup uses when it runs;
- It adds or modifies system configuration files that Setup uses when it runs;
- It invokes the Setup executable in the product install folder with appropriate command line arguments so that the installation happens silently and as you configured it in your package.
- When Setup completes, the AdobeUberInstaller cleans up after itself and terminates. If you chose the “Delete the installer after completion” option for a package, it removes the product install folder before it terminates.

The following table briefly explains the element hierarchy in the AdobeUberInstaller.xml file and tells you where the information you entered in the toolkit GUI is recorded.

<table>
<thead>
<tr>
<th>Element</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>InstallInfo</td>
<td>This is the outermost element that contains everything else. It contains six elements, listed below in this table.</td>
</tr>
<tr>
<td>PackageDescription</td>
<td>This element stores your package description (PACKAGE DESCRIPTION field).</td>
</tr>
<tr>
<td>InstallerLocation</td>
<td>This element stores the location of the product install folder that you chose (MEDIA FILES LOCATION field). This is the package’s pointer to the folder containing the Setup executable that the AdobeUberInstaller executable invokes, as well as the application files that Setup will copy onto the target systems.</td>
</tr>
<tr>
<td>TargetOS</td>
<td>This element specifies whether this is a Mac or Windows package.</td>
</tr>
</tbody>
</table>
The AdobeUberUninstaller.xml file contains a subset of this information, just what is needed to uninstall applications.

If you are still curious at this point, take a look at the AdobeUberInstaller.xml file for one of the packages you have created. Choose an editor that can display the XML code in indented form.

<table>
<thead>
<tr>
<th>Element</th>
<th>Contents</th>
</tr>
</thead>
</table>
| DeploymentInfo | The values for your installation options (INSTALL OPTIONS: Suppress updates and Ignore client processes) are captured in two attributes for this element.

There are always two of these elements in a package. The first one specifies the payloads (application files) to be installed on a 32-bit system; the second one specifies the payloads to be installed on a 64-bit system. Only one of these is used during deployment on a given system.

(MAC) The distinction between 32-bit and 64-bit is not made, so the first DeploymentInfo element information is used.

(WINDOWS) If the package was made with the 64-bit configuration option turned off, the contents of the two DeploymentInfo elements are identical, except for value of the processorFamily attribute. If the package was made with the 64-bit configuration option turned on, the only difference between the two elements will be the payloads chosen for installation; the extra 64-bit payloads will be listed in the second element. When this package is deployed, which element is used is determined by the operating system on the target machine.

This element contains a single Deployment element described below.

| Deployment | This element contains two other elements:
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Properties element contains three Property elements that capture your planning sheet values for the INSTALLATION LOCATION, INSTALLATION LANGUAGE, and SERIAL NUMBER fields.</td>
</tr>
<tr>
<td></td>
<td>The Payloads element contains many Payload elements, each of which correlate to an application, a piece of an application, a shared component, or a supporting component. The value for each of these Payload elements is either install or donotinstall, depending on which components you selected when you created the package.</td>
</tr>
<tr>
<td></td>
<td>NOTE: The Payload identifiers are long strings of digits and numbers, not readable product names. This is why you wrote the application and component names on your planning sheets.</td>
</tr>
</tbody>
</table>

| Overrides | This element contains a Configuration element that captures your option choices for the APPLICATION OPTIONS on the package specification. These values are inside another Payload element. |

The AdobeUberUninstaller.xml file contains a subset of this information, just what is needed to uninstall applications.

If you are still curious at this point, take a look at the AdobeUberInstaller.xml file for one of the packages you have created. Choose an editor that can display the XML code in indented form.
# System Requirements for the Toolkit

The system on which you run the CS4 Deployment Toolkit must meet the following requirements.

<table>
<thead>
<tr>
<th></th>
<th>WINDOWS</th>
<th>MAC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Processor Speed</strong></td>
<td>1 GHz or faster</td>
<td>PowerPC G5 or multicore Intel® processor</td>
</tr>
<tr>
<td><strong>Operating System</strong></td>
<td>Microsoft® Windows® XP with Service Pack 2 (Service Pack 3 recommended) or Windows Vista® Home Premium, Business, Ultimate, or Enterprise with Service Pack 1 (certified for 32-bit Windows XP and Windows Vista)</td>
<td>Mac OS X v10.4.11–10.5.4</td>
</tr>
<tr>
<td><strong>Hard Disk Space</strong></td>
<td>25 MB space available for installation</td>
<td>70 MB available for installation</td>
</tr>
<tr>
<td><strong>RAM</strong></td>
<td>512 MB</td>
<td>512 MB</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>1,024 x 768 (minimum) or 1,280 x 800 (recommended) with 16-bit video card.</td>
<td></td>
</tr>
<tr>
<td><strong>Peripherals</strong></td>
<td>DVD-ROM drive if you use product media to install CS4 products</td>
<td></td>
</tr>
</tbody>
</table>
## Toolkit Error Messages

<table>
<thead>
<tr>
<th>Error Message</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>On / After Create Package Screen</td>
<td>Package name is required to continue</td>
<td>You forgot to enter a package name.</td>
</tr>
<tr>
<td></td>
<td>Package name does not permit special characters.</td>
<td>You have used characters in the package name that are not supported in folder names on Windows or Mac.</td>
</tr>
<tr>
<td></td>
<td>A valid installer could not be found.</td>
<td>The toolkit did not find the files and executables for a valid CS4 product install folder at the location you entered in Media Files Location.</td>
</tr>
<tr>
<td></td>
<td>The installer could not be parsed correctly.</td>
<td>The product install folder has something wrong with it.</td>
</tr>
<tr>
<td>On / After Installation Settings Screen</td>
<td>The serial number does not match the product or language selected, or it is not a volume serial number.</td>
<td>You have typed the serial number incorrectly, or you have the wrong serial number.</td>
</tr>
<tr>
<td></td>
<td>The system root drive can’t be selected for installation. Please enter a folder name.</td>
<td>The System Drive option is selected in the Installation Location field, but no path is specified. Product installation is not allowed in the system drive.</td>
</tr>
<tr>
<td></td>
<td>The location path for installation has not been specified.</td>
<td>You have not entered or selected a valid path in the Installation Location field.</td>
</tr>
<tr>
<td></td>
<td>The Installation Location path is not valid.</td>
<td>You have entered a path name in the Installation Location edit box that contains characters that Windows or Mac does not support in path names.</td>
</tr>
<tr>
<td>On / After Summary Screen</td>
<td>There was an error copying PackageName. Make sure the disk is not full or write protected.</td>
<td>The toolkit cannot save the package to your system, either because the disk is full, or the location you specified is not write accessible.</td>
</tr>
</tbody>
</table>
## Toolkit Error Messages

<table>
<thead>
<tr>
<th>Error Message</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>This location already contains a folder named <code>PackageName</code>. If the files in the existing folder have the same names as files in the folder CS4 Deployment Toolkit is creating, they will be replaced. Do you still want to continue?</td>
<td>You have inadvertently created a new package using an already existing package name.</td>
<td>Choose a different location to save this package, or use the Back buttons to go back to the Create Package screen and rename the package.</td>
</tr>
<tr>
<td></td>
<td>You are changing the definition of an existing package and saving that new definition.</td>
<td>Select Yes in the error dialog to overwrite the existing package.</td>
</tr>
</tbody>
</table>

### The Help Menu

<table>
<thead>
<tr>
<th>Error Message</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS4 Deployment Toolkit Help file is not available. Reinstall the application to fix the issue.</td>
<td>Ensure that the Help file is available in the ...Adobe/Adobe CS4 Deployment Toolkit/Resources/Documents/en_US folder. If necessary, reinstall the toolkit or copy the Help PDF file from the product CD to the .../Adobe CS Deployment Toolkit/Resources/Documents/* folder.</td>
<td>Ensure that the Help file is available in the ...Adobe/Adobe CS4 Deployment Toolkit/Resources/Documents/en_US folder. If necessary, reinstall the toolkit or copy the Help PDF file from the product CD to the .../Adobe CS Deployment Toolkit/Resources/Documents/* folder.</td>
</tr>
<tr>
<td>Help could not be launched. Adobe Reader is required to view Help. You may download it from localized URL.</td>
<td>The Adobe PDF reader is not available on the system.</td>
<td>Install Adobe Reader.</td>
</tr>
<tr>
<td>Error occurred in opening help.</td>
<td>The Help file is available but an error occurs upon opening it.</td>
<td>Reinstall Adobe Reader.</td>
</tr>
<tr>
<td>Unable to find utilities at installation location. Reinstall the application to fix the issue?</td>
<td>The Utilities folder is not present or has been renamed.</td>
<td>Click OK to reinstall Creative Suite 4 Deployment Toolkit.</td>
</tr>
</tbody>
</table>
Creating a Product Install Folder from DVDs

Creating a Product Install Folder from DVDs

If you have received DVDs with your CS4 product purchase and do not have access to the product ESD, you must copy the install files from your DVD or DVDs into a single folder on your admin system. The following steps guide you through this process.

1. **Create a folder for the product install folder.**

   Create this folder on your admin system or staging area into which you will copy the CS4 product install folder. You can name this folder anything you like.

2. **Copy the contents of the first product DVD.**

   Insert the first product disk into your disk drive. Copy the entire contents of the disk to the folder you made in step 1. When the copy is complete, remove the disk from the drive.

   If your product came with only one DVD, you are done. Ignore the succeeding steps in this section. If your product came with more than one DVD, go to the next step.

3. **Copy the contents of the second product DVD, if you have one.**

   Insert the second product disk into your disk drive. Notice the size of the disk’s contents. If the size is large (it probably is), this step will take quite a bit of time. You may want to start this copy off and do something else for a while.

   First, open the Payloads folder in the product install folder on your hard disk.
   In another window, open the Payloads folder on the second DVD. This folder is full of Payload folders. Copy all of these folders to the Payloads folder on your hard disk (the first window you opened). When the system asks you if you want to overwrite existing files, choose Yes to All.

   Now, open the Extensions folder in the product install folder on your hard disk.
   In another window, open the Extensions folder on the second DVD. Copy the entire contents of the Extensions folder from the DVD to the one on your hard disk. When the system asks you if you want to overwrite existing files, choose Yes to All.

   When the copy is complete, remove the disk from the drive.

4. **Copy the contents of any additional DVDs, if you have them.**

   If you received more than 2 DVDs, repeat step 3 for each additional DVD.